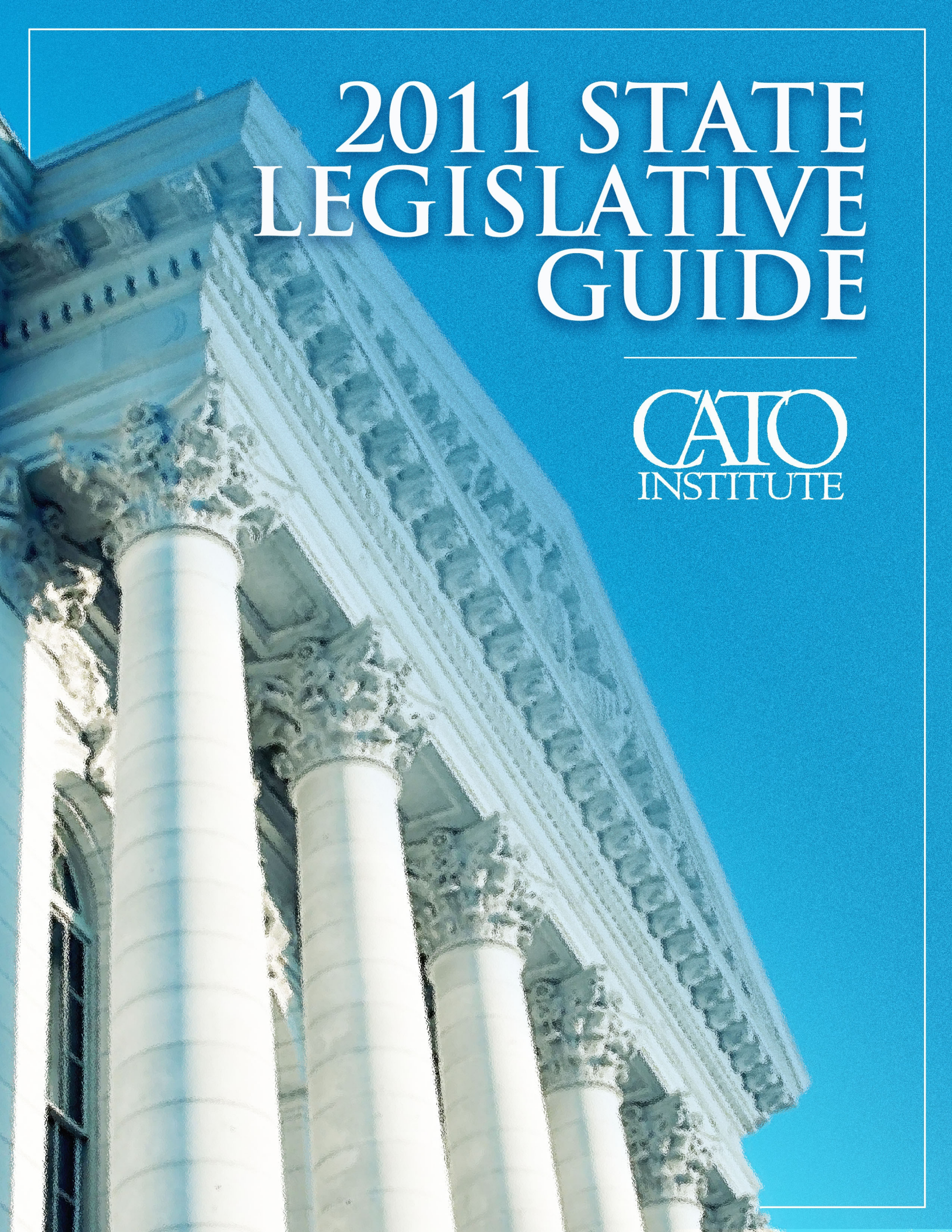
2011 STATE LEGISLATIVE GUIDE



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LETTER FROM CATO

In 2011, nearly one of every five state legislators is a freshman. The November 2010 mid-term elections saw 19 state chambers switch party control -- bringing fresh faces and new ideas to state capitals throughout the U.S.

New and veteran lawmakers alike are now facing critical issues: **unfunded pension liabilities, ballooning Medicaid enrollment, massive budget gaps, and failing education systems,** to name a few.

The Cato State Legislative Guide is designed to help state policymakers address these and other important issues and free their constituents from the burden of overextended government.

Broken down into **five core policy areas** -- education, transportation, tax and budget, health care, criminal justice -- each section provides:

- Specific **policy ideas** from Cato Institute experts on how legislators can put their states back on a fiscally sustainable path that maximizes freedom;
- A “best of” list of **Cato publications** in each subject area, offering in-depth analysis and data in support of our recommendations;
- **Contact information** for the Cato scholars in each area of research.

Our hope is that the ideas in this guide will help state policymakers tackle the key issues facing their states in a manner that expands individual liberty, promotes free markets, and reduces the size of government.

Sincerely,

Caitlyn Korb
Manager of External Affairs
Cato Institute

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EDUCATION

STATE LEGISLATORS SHOULD:

- Create a system of nonrefundable education tax credits for both parents' education costs for their own children and taxpayer donations to nonprofit scholarship funds to expand educational freedom and lower education costs;
- Encourage local education providers in the state to create and maintain a searchable expenditure and revenue website (model legislation provided in Appendix B of "They Spend WHAT? The Real Cost of Public Schools");
- Resist national curriculum standards and accountability systems that allow the federal government to usurp state and local authority over education.

CATO RESOURCES:

- "The Public Education Tax Credit," by Adam B. Schaeffer, Policy Analysis 605 (December 5, 2007) (includes "The Public Education Tax Credit Act" model legislation) 3
- "Choosing to Save: The Fiscal Impact of Education Tax Credits on the State of Nevada," by Andrew J. Coulson (January 12, 2009) (includes the "Fiscal Impact Calculator") 47
- "They Spend WHAT? The Real Cost of Public Schools," by Adam B. Schaeffer, Policy Analysis 662 (March 10, 2010) (includes "Financial Transparency in Education Act" model legislation) 70
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CONTACT AN EXPERT:

- Andrew Coulson, Director, Center for Educational Freedom
  - Email - acoulson@cato.org
  - Phone - 360-394-9535

- Adam Schaeffer, Policy Analyst, Center for Educational Freedom
  - Email - aschaeffer@cato.org
  - Phone - 202-789-5212

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Policy Analysis

No. 605 December 5, 2007

Routing

The Public Education Tax Credit

by Adam B. Schaeffer

Executive Summary

Public education is an end, not a means. For a democratic nation to thrive, its schools must prepare children not only for success in private life but for participation in public life. It must foster harmonious social relations among the disparate groups in our pluralistic society and ensure universal access to a quality education. Unfortunately, the American school system has long fallen short as a means of fulfilling these purposes.

This paper offers a more effective way of delivering on the promise of public education, by ensuring that all families have the means to choose their children's schools from a diverse market of education providers. All education providers—government, religious, and secular—can contribute to public education because all can serve the public by educating children.

Educational freedom can most effectively be realized through nonrefundable education tax credits—for both parents' education costs for their own children and taxpayer donations to nonprofit scholarship funds. This paper argues that tax credits enjoy practical, legal, and political advantages over school vouchers. These advantages are even more important for choice programs that target low-income children, as tax credits mitigate some disadvantages inherent to targeted programs. It also contends that broad-based programs are superior to narrowly targeted ones, even when the goal is specifically to serve disadvantaged students. Targeted programs are fundamentally inferior—in both practical and strategic terms—to broad-based programs that include the voting middle class. Finally, accountability in education means accountability to parents and taxpayers. Education tax credits afford this accountability without the need for intrusive government regulations that create political and market liabilities for school choice policies.

To date, school choice policy has spread and grown only slowly, in part because of inadequate legislation. Existing school choice laws fall short in terms of both market principles and political considerations. Pursuing a policy that follows more closely what works economically and politically should increase the likelihood of long-term legislative success, program success, program survival, and program expansion.

Model legislation derived from the policy and political principles detailed below is presented in Appendix B of this paper, and real-world examples of how the legislation would work are given in Appendix A.

Adam Schaeffer is a policy analyst with the Cato Institute's Center for Educational Freedom.

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The pursuit of highly regulated and targeted programs impedes the rise of a competitive education industry.

Introduction

Formidable obstacles to spreading educational freedom abound. Powerful teachers' unions and a huge government education industry want to preserve their prerogatives; and a broad range of middle-class parents are eager for reform but anxious about major changes to a system they often believe performs adequately in their own communities.[1] These are daunting hurdles for any policy to clear, but most school choice reform efforts to date have taken forms that put them at a disadvantage to these status-quo forces.

Policy elites play a large role in setting the agenda: they produce the articles, papers, arguments, and ideas that legislators draw on when writing legislation. Long before any model legislation is drawn up, policy researchers produce the ideas and strategies that legislators read or talk about with members of the policy elites. Considering the limited time legislators have for exploring policy alternatives, those who go looking for a school choice proposal will likely be influenced by the dominant policy discussion. Therefore, the school choice policy discussion must reflect the best ideas available.[2]

School choice efforts will more likely succeed if greater attention is paid to principles of good policy and politics in the design of legislation.[3] More than 50 years have passed since the birth of the modern school choice idea in America. Serious political efforts have been under way for over a quarter century. And for perhaps 15 years America has enjoyed what can properly be called an organized and active school choice movement. School choice policy during this period has been driven by certain implicit preferences that are, on closer examination, inimical to effective educational choice reform. Specifically, the pursuit of highly regulated and targeted voucher programs impedes the rise of a competitive education industry and creates unnecessary political disadvantages for school choice supporters. A new approach that rests on timeless principles, empirical research, and polling data can move the school choice movement into a new and more successful phase.

This study begins with a detailed analysis of the two most powerful kinds of school choice reform: education vouchers and tax credits. The national discussion on private school choice is dominated by talk of vouchers. However, tax credits have clear advantages over vouchers on many levels. Tax credits are more popular with the public and politicians, less likely to be challenged in court, and more likely to survive most court challenges. They create powerful, positive political dynamics that strengthen the policy over time and make defense and expansion more likely.

The school choice movement's focus on targeted programs is not a helpful short- or long-term strategy, regardless of whether the goal is specifically to serve disadvantaged children or children from all families. Broad-based programs are more likely to lead to long-term legislative success, program success, program survival, and program expansion.[4] And yet, targeted programs dominate the discussion and legislative agenda. Also, under targeted programs, special regulations are often imposed on schools that accept students supported through school choice programs. Such regulations limit those programs' effectiveness in delivering choice and increased student achievement, and sideline many of the most natural allies of school choice reform. Nonetheless they are a common feature of legislation.

The discussion that follows explains these policy issues in detail as well as the considerations that underpin the structure of the model legislation presented in this paper. No existing model legislation is structured in a way that addresses all of these concerns. The Public Education Tax Credit model legislation embodies the principles of good policy and good politics described here.

Toward that end, this paper

- Explains why nonrefundable personal use and donation education tax credits are preferable to vouchers;
- Explains the importance of passing broad based rather than narrowly targeted school choice programs;

- Illustrates why education providers, in addition to parents and children, need to be free of burdensome regulations;
- Summarizes the model tax credit legislation presented in Appendix B in accessible, layman's terms, and gives examples in Appendix A of how it would work in the real world; and
- Presents model tax credit legislation that provides for educational freedom by funding choice through personal use and donation tax credits on state individual and corporate income taxes, state sales taxes, and property taxes.

Why Tax Credits Are Preferable to Vouchers

Supporters of educational freedom, perhaps not surprisingly, sometimes disagree about what constitutes the ideal school choice policy. The late Milton Friedman, among many others, viewed his original proposal for a voucher system as the best practical reform for the public education system. Other supporters of educational freedom prefer education tax credits. Most school choice supporters have little or no preference between these alternatives.[5] They see any expansion of public-private educational choice as a good thing. However, while vouchers and tax credits are both improvements on the status quo, each has particular strengths and weaknesses.

This section explains why education tax credits are preferable to vouchers for both practical and political reasons. This does not mean the current system is preferable to a voucher system—quite the contrary. But school choice reformers face a tremendously difficult task, which can be eased by focusing on the policy with the greatest advantages.[6]

This discussion considers personal use and donation tax credits as two sides of the same coin; personal use credits are helpful to higher-income taxpayers with children who can use them to offset their tax liability, while donation credits create a pool of funds that lower-income families can access for the education of their children. Together, these personal use and donation tax credits can create the most successful system of educational freedom currently possible. This discussion focuses on the inherent advantages of tax credits relative to vouchers, not on the relative limitations or advantages of existing voucher and tax credit programs. All existing voucher and tax credit programs are seriously compromised and limited. Vouchers and tax credits are, however, very different mechanisms for delivering school choice and it is those differences that will be analyzed below. The analysis reveals that tax credits are inherently preferable to vouchers across at least five dimensions.

Legal Considerations

One of the most important advantages tax credits have over vouchers is a legal distinction of great consequence. Courts do not consider tax credits to be government money, whereas vouchers are considered government money.[7] This legal issue has a number of political ramifications. Political concerns, however, are difficult to separate from purely legal ones because the interpretation of the law is often driven by the political dispositions of judges and the legal profession as a whole.[8]

The fact that the courts and the public generally regard vouchers as government funds and tax credits as private funds has a number of important consequences. It means that tax credits are less likely to be challenged in court, less likely to be overturned by a court, less likely to come with burdensome regulations, and less likely to accumulate regulations over time. The most important implication is this: tax credits are a viable option in many states where effective voucher programs are likely to be struck down on state constitutional grounds.

State courts have repeatedly ruled that vouchers are government funds.[9] The disbursement of government funds to religious schools is expressly prohibited in most states by turn-of-the-century anti-Catholic "Blaine" amendments that were meant to keep public funding in Protestant-influenced public schools and away from Catholic parochial schools. Many states also have what are called

Tax credits are less likely to be challenged in court, less likely to be overturned by a court, less likely to come with burdensome regulations, and less likely to accumulate regulations over time.

"compelled support" clauses, which get the same result through different language, precluding any citizen from being compelled to support religious institutions or activities through their taxes. Eliminating religious schools from choice programs excludes around 90 percent of current private schools, which renders any such program largely ineffectual, at least in the short term. These religious provisions are the highest profile threats to voucher programs, but vouchers are vulnerable to many other common state constitutional clauses regarding education.

Prohibitions against the use of government funds to support religious organizations are not the only serious legal threats to vouchers. Recent defeats in court have been based upon seemingly innocuous education clauses common in state constitutions. In Colorado, vouchers were brought down by a clause mandating local control over local revenue, and in Florida they were overturned on the basis of a clause mandating a "uniform" system of education. Neither of these rulings had anything to do with religion, but both were possible because vouchers are considered government funds.[10]

Two state courts—Wisconsin and Ohio—have ruled that because parents, not the government, spend the government dollars, vouchers do not conflict with the constitution. Three other state courts—Vermont, Colorado and Florida—have found that voucher programs use government funds in ways that violate state constitutional restrictions and have therefore struck them down. Thus, although the use of government funds does not automatically cause vouchers to run afoul of state constitutional restrictions, it does open up myriad avenues of attack—to which nonrefundable tax credits are not vulnerable.

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The legal status of voucher funding makes it difficult for an effective voucher program to survive in many states. University of North Texas professor Frank Kemerer reviewed each state's case law and judicial climate in order to characterize the likely orientation of the courts if a voucher law were to be challenged. He concluded that 17 states have a restrictive orientation toward vouchers, 19 states have a permissive orientation, and 14 states have an uncertain orientation.[11] After the publication of Kemerer's paper, voucher laws were found to violate state constitutions in two of the states (Colorado and Florida) that he had categorized as "uncertain."[12]

The Institute for Justice, a libertarian public interest law firm that has defended many school choice programs in court, comes to a similar, if more optimistic, conclusion in a recently completed comprehensive study of state constitutions and legal precedent.[13] The institute recommends that tax credits, but not vouchers, be pursued in 32 percent of states and that either policy can be pursued in most of the other states. This analysis likely underestimates the legal difficulties vouchers can face in states without restrictive Blaine or compelled support precedents because such amendments are not the only sources of legal trouble for vouchers. The decisions in Florida and Colorado overturning their voucher laws vividly illustrate that courts disposed against vouchers can find creative ways to overturn the programs, relying upon vouchers' status as government funds as well as other constitutional provisions.

Furthermore, the degree of *perceived* legal jeopardy to which a controversial policy is subject, regardless of legal precedent specific to the issue, has been shown to dampen consideration by the legislature in the first place.[14] Politicians and other political actors consider the disposition of the courts and are much less likely to fight for and pass controversial legislation that has a high probability of being voided by the courts. Survey data show that "state legislators admit they write laws in anticipation of responses from the state supreme court," and statistical evidence derived from actual legislative activity supports the conclusion that policymakers respond to "perceived threats or opportunities shaped by the ideological complexion of state supreme courts."[15] The general legal difficulties that vouchers face, in other words, can significantly dampen political and legislative support relative to tax credits.

Perhaps of even greater concern is the possibility that both liberal and conservative judi-

cial predispositions may be equally threatening to voucher legislation.[16] Liberal courts such as Florida's Supreme Court are disposed to discover language or principles in state constitutions that will disqualify the law, regardless of whether or not the constitution prohibits vouchers according to a strict constructionist reading. Conservative courts, which will adhere more closely to a strict reading of the letter and intent of the constitution, may feel constrained to rule against voucher legislation to the extent that the state constitution contains language intended to prevent government funds flowing to religious or private institutions for education. This problem can be mitigated by arguments that funds flow to families, not organizations; however, states with particularly restrictive clauses, precedents, and conservative courts may still face difficulties.

Education tax credits attenuate or avoid many of these legal difficulties because of their status as private, rather than government, funds. The record of court challenges proves the point. The courts have never overturned modern education tax credits or deductions—they have been upheld in all state and federal legal challenges. The Arizona Supreme Court held that tax credits did not violate either the federal Establishment Clause or the state's Blaine amendment against the public support of sectarian institutions.[17] In addition, the U.S. Supreme Court declined to review the decision, possibly because it had already upheld as constitutional Minnesota's state income tax deduction for education in 1983.[18] And in 2004, the latest First Amendment suit brought by the American Civil Liberties Union against a tax credit program was dismissed from federal court.[19] The Illinois Court of Appeals also ruled that the state's weak tax credit program did not violate the federal Establishment Clause, the state's Blaine amendment, or the state constitutional prohibition against compelled support for churches and religious institutions; and the Illinois Supreme Court declined to review the decisions.[20] School choice opponents have thrown everything at education tax credits, as yet to no avail.

Other states are expected to follow suit in dismissing legal challenges to tax credits. People working on the school choice issue overwhelmingly agree that tax credits are more legally viable than vouchers.[21] Sixty-seven percent of respondents in a survey of organizations working on school choice think vouchers are more likely to be challenged in court, compared to just 3 percent who anticipate more challenges on tax credits. By a margin of 53 points, respondents also believe that tax credits are more likely to survive a court challenge. Opponents of school choice also agree that tax credits are more viable than vouchers. Marc Egan, director of the Voucher Strategy Center for the National School Boards Association, has written extensively on the best strategy for defeating school choice efforts. The NSBA is as committed in its opposition to school choice as is the National Education Association. Egan describes vouchers as "cash government payments," but agrees that education tax credits are "technically not government dollars." This leader in anti–school choice strategy describes tax credits as "bullet-proof on constitutional issues" because they have survived every legal challenge to date.[22] People on both sides of the school choice issue agree that tax credits are likely to put legal fears and problems to rest. The record of failed court challenges suggests they are correct.

Education tax credits are viable in every state except Michigan (whose constitution specifically prohibits education vouchers and tax credits) and are less likely than vouchers to face significant legal challenges in the future. Neither Florida nor Pennsylvania, the states with the two largest programs, has been sued over its tax credit program. Thus, an income tax credit for individuals is a viable policy option in the 38 states with personal income taxes; a credit for sales tax is an option in the 44 states with a sales tax; a credit for corporations is an option in the 45 states with corporate income taxes; and a tax credit for property tax payers is an option in all 49 states where private choice is possible. That bears repeating. Education tax credits of some sort are possible in 49 states and the

The courts have never overturned modern education tax credits or deductions.

In New Jersey, a strong center-left coalition that supports tax credits includes many prominent African American Democratic politicians—most notably, Newark Mayor Cory Booker.

District of Columbia. Vouchers are possible in perhaps 32 states and would face serious and uncertain legal battles in at least 12 of those. Education tax credits, because they come with little of the legal baggage under which vouchers currently strain, are the most legally certain route to school choice.

Regulatory Threats

The fact that tax credits, unlike vouchers, are not government funds is important in other ways. School choice opponents have a more politically and legally compelling case for burdensome regulations on voucher-redeeming schools than they do for schools that benefit only indirectly from tax credit programs. Under most voucher programs, participating private schools must accept students through a random lottery or on a first-come basis. Voucher schools in Cleveland's program, for example, must be "chartered" by the state in order to accept voucher students, and the requirements for chartering can be changed at any time. And although the Milwaukee program was expanded to include religious schools (therefore providing an effective number of choices), the participating schools cannot require religious participation or accept payment above the voucher amount. School choice opponents can be expected to call for many onerous restrictions regardless of the program design. Thus, voucher programs often begin in a weakened position while current tax credit laws place few restrictions on school autonomy. Even where expenses for religious education do not qualify for the tax credit, schools are able to itemize tuition costs and their autonomy remains uncompromised.[23]

One of the driving factors in increasing government control of the economy is the call for government to remedy perceived problems in the functioning of markets.[24] But consider this example: in the case of a Florida school that had a close relationship with a terrorist-connected professor, Sami al-Arian, individual donors and scholarship organizations were able to judge the situation for themselves and take what action they felt was appropriate. For one scholarship organization that meant ending its support of the school.[25] This situation illustrates what is at the very heart of a free-market system: the noncoercive interaction of individuals and organizations within civil society. In a voucher system, taxpayers have no direct control over how their money is spent. It all goes into one pot and is distributed according to the single set of rules on which a majority of legislators could agree. Those who see the government-funded system as inefficient have no alternative but to keep paying into it. In a tax credit system, taxpayers direct their own money to the programs they support.

In a voucher system, the decision on whether or not to continue funding students at any particular school is made by government actors through the political and legal process, not by individuals through market interactions within civil society. If vouchers are pulled from a controversial school, then legal action challenging the decision will likely result. If the funding remains, then public demand for more restrictive or prescriptive rules will build: many people who pay the taxes that directly fund the school will demand that their money not be used for a purpose they oppose. Over time, such regulations, added in response to periodic difficulties, accumulate until little freedom remains for education service providers. Under vouchers, any case of dissatisfaction must engage the political process and coerce an outcome. In contrast, tax credits allow the free exchange of funds and services within civil society and an education market without the need for coercion.

Clearly, tax credit programs, which do not involve government money, have a theoretical advantage over vouchers in regard to their vulnerability to excessive regulation. This theoretical advantage has so far been borne out in practice.[26]

Coalitional Support

Tax credits command support from a larger coalition of conservatives, free market advocates, and private schools than do vouchers, for many of the reasons discussed above: they are not government funds, they are more viable legally, and they pose less danger to the autonomy of private schools that accept them. Tax credits are therefore preferred by many private

school, homeschool, and religious organizations that oppose or only weakly support vouchers. The Home School Legal Defense Association, the lead lobbying organization for homeschoolers, published an issue paper titled "Reasons Home Schoolers Should Avoid Government Vouchers" but actively supports education tax credits.[27] Likewise, many religious conservatives are more supportive of tax credits than vouchers. For instance, Maureen Wiebe, legislative representative for the American Association of Christian Schools, said her organization is uncomfortable with vouchers as a vehicle for school choice but wholeheartedly supports education tax credits.[28] These and other organizations fear that vouchers, as general revenue from government coffers, will bring increased regulation and control of private education. Homeschool supporters and social conservatives are a well-organized and successful political constituency with a proven track record of effective grassroots mobilization for policy reform. The school choice movement would be well advised not to emphasize vouchers, which alienate such potentially powerful natural allies.

The concern about government funds bringing government control is not exclusive to religious conservatives. The National Association of Independent Schools, the largest association for non–religiously affiliated private schools, does not take a position for its autonomous member schools. However, NAIS director of legislative affairs Amy Sechler says the association recognizes that vouchers often bring more challenges to private school autonomy than do tax credits.[29] And although still low, opposition to vouchers among organizations working on school choice is more than double the opposition to tax credits (13 percent and 5 percent, respectively). Thus, vouchers begin with a serious coalition deficit of otherwise natural allies that tax credits secure.[30]

Furthermore, there seems to be more support and less opposition to tax credits among Democratic political leaders. Arizona, Rhode Island, and Iowa passed tax credit programs last year, and Pennsylvania expanded its existing business-tax credit program. The Arizona, Iowa, and Pennsylvania bills became law with Democratic governors, and the Rhode Island business-tax credit was born in a legislature controlled by Democrats. In New Jersey, a strong center-left coalition that supports tax credits includes many prominent African American Democratic politicians—most notably, Newark Mayor Cory Booker. Finally, Democratic Gov. Eliot Spitzer in deep-blue New York proposed an education tax deduction in his first state budget but opposes vouchers for school choice. Most opponents of vouchers oppose tax credits as well, but some political opposition to tax credits is weakening whereas opposition to vouchers remains relatively solid.

The concept of school choice incites bitter resistance from one of the largest, most politically potent, and well-financed interest groups in the nation: the public school employee unions. To counter that resistance, school choice supporters—even if they doubt the danger that vouchers pose to private schools—need the most powerful coalition they can muster to pass and defend school choice legislation. Indeed, coalitional support is perhaps even more important than popular support when dealing with a divisive issue about which the public knows little.[31]

The vast majority of political and ideological support for school choice resides on the right side of the political spectrum, and the vast majority of opposition comes from the left. When elite opinion on an issue is polarized along ideological lines, mass opinion will move along similar lines as elite messages about the issue become salient.[32] This is not surprising, but it is often overlooked by school choice supporters; as school choice becomes a live issue in a state, liberal elites will tend to drive up liberal and Democratic opposition to school choice, and conservative leadership will drive up conservative and Republican support. Voucher legislation, however, eliminates and enervates large, politically active blocks of the private school, homeschool, and general conservative movements. Education tax credits unify the largest possible coalition while inspiring no more, and possibly less, resistance than vouchers.

The lead lobbying organization for home schoolers published an issue paper titled "Reasons Home Schoolers Should Avoid Government Vouchers" but actively supports education tax credits.

In public opinion polls, education tax credits generally command 5–10 percent more support than do vouchers.

Popular Support

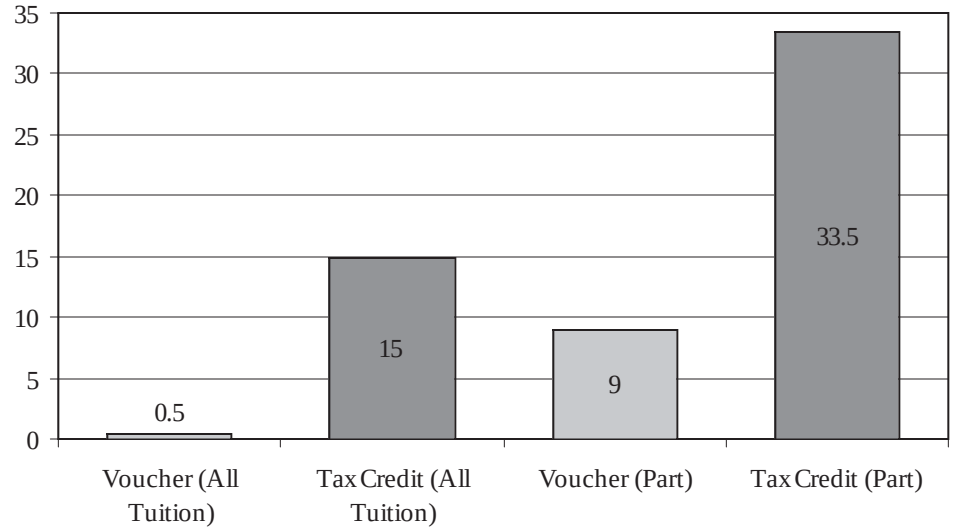
Surveys demonstrate that tax credits are significantly more popular than vouchers among the general population. Although they are subject to some of the same wild swings in support or opposition depending on how the question is asked, education tax credits generally command 5–10 percent more support than do vouchers—in the mid-50 to mid-60 percent range.[33] These poll findings are consistent across multiple years and diverse states for similar questions—that is, when comparing targeted vouchers to targeted tax credits or universal vouchers to universal tax credits. A 2006 poll of leaders in the school choice movement supports these robust findings: respondents chose tax credits over vouchers as the school choice policy most popular with the public by a margin of 38 points (53 percent to 15 percent).[34]

There are very few surveys that ask respondents about both vouchers and tax credits in the same instrument, but these provide our most direct evidence that the public prefers education tax credits over vouchers. The yearly Phi Delta Kappa/Gallup poll on education, perhaps the most widely read survey on this subject, asked about tax credits for only two years in 1998 and 1999, and included multiple questions on vouchers in those years as well.[35] These surveys found major differences in support for and opposition to tax credits and vouchers, with credits significantly outperforming vouchers (Figure 1 and Table 1).

The survey asks respondents about their support for vouchers and tax credits that cover full tuition and vouchers and tax credits that cover only part of a child's tuition. In both cases, public support is much greater for partial tuition programs than full. And in both cases the dominance of the public's preference for tax credits is striking; the margin of support for full-tuition credits is 30 times that for vouchers, and the margin for part-tuition credits is 3.7 times that of vouchers. Voucher support averages 48 percent for full tuition and 52 percent for partial. Tax credit support averages 57 for full tuition and 66 percent for partial. This tax credit dominance in popularity holds for both parents and those without school-aged children, who are an extremely important two-thirds of the electorate.

This greater support for tax credits may result from the many years and significant sums that teachers unions have spent attacking vouchers. However, support for vouchers

Figure 1
Average Margin of Support over Opposition for All Respondents (1998–99)



Source: Lowell C. Rose and Alec M. Gallup, "The 30th Annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes toward the Public Schools," September, 1998, and "The 31st Annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes toward the Public Schools," September, 1999.

Table 1
Average Margin of Support over Opposition (1998–99)

Variable	All Tuition		Part Tuition	
	Voucher	Tax Credit	Voucher	Tax Credit
All Respondents	0.5	15	9	33.5
No Children in School	-7.5	5.5	2.5	22
Children in Public School	12.5	28	20	54

Source: Lowell C. Rose and Alec M. Gallup, "The 30th Annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes toward the Public Schools," September, 1998, and "The 31st Annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes toward the Public Schools," September, 1999.

doesn't appear to have declined much over the past 20 years. One well-known poll by Phi Delta Kappa/Gallup showed a significant drop in voucher support, but that decline was likely due to a change in the wording of the question that biased respondents toward negative answers by including "at public expense" instead of a more neutral description. The bulk of well-worded and unbiased voucher poll questions show, if anything, a slight increase in public support for vouchers over the years.[36]

Most recently, a large academic poll conducted by the magazine *Education Next* and the Program on Education Policy and Governance at Harvard University showed significantly more support for tax credits (53 percent) than for vouchers (45 percent), even though the possibly tainted word "voucher" does not appear in the question.[37] This poll also showed much greater opposition to vouchers (34 percent) than to tax credits (25 percent), leaving a 28 point margin of support for tax credits compared to just 11 points for vouchers. Most remarkable, however, is the fact that support for education tax credits among current and former public school employees outweighs opposition by a margin of nearly two to one (50 percent to 28 percent). Vouchers, by contrast, are opposed by public school employees by a two-point margin. Clearly, the use of tax credits to effect school choice is much more popular and less objectionable to the general public, and even to public school employees, than vouchers. It also seems that the word "voucher" appears to have relatively little to do with the tax credit advantage in public support.

One possible reason for the higher popularity of tax credits is that the majority of Americans are familiar with and well-disposed toward tax credits, a common policy vehicle. The Hope Scholarship tax credit and child tax credits, for instance, are widely recognized and popular tax breaks. Various kinds of college tax credits regularly garner over 80 percent support, and popular tax breaks for children and mortgage payments add to the appeal of tax credits generally.[38] Some critics have lamented the proliferation of special interest tax credits and deductions, but they are proliferating for a reason. Tax credits are a popular and relatively easy way to provide benefits for particular kinds of activities. Credits for education expenses have the same advantages. Education tax credits are more popular than vouchers among the general public and lawmakers, and this popularity advantage will likely persist.

Post-Passage Political Dynamics

Tax credits establish a self-implementing form of school choice that relies on the private sector alone. Voucher laws must establish a new government apparatus to implement school choice or rely on a state education system that is generally hostile to school choice. Regardless of the procedure, the need for this apparatus increases costs and significantly complicates implementation. It also establishes an additional venue for undermining school

Most remarkable is the fact that support for education tax credits among current and former public school employees outweighs opposition by a margin of nearly two to one.

Scholarship organizations that arise under donation tax credits form a new and powerful block of political interests that do not exist under vouchers, and they have proven effective advocates for choice programs in Arizona and Pennsylvania.

choice and an additional issue on which to attack the policy.[39] Tax credits are more certain in their translation from bill to practice because they require minimal participation from intervening government agencies.

Experience reveals how implementing authorities can thwart policy objectives, and recent studies have identified significant costs associated with voucher program implementation. Paul T. Hill, director of the University of Washington's Center on Reinventing Public Education and a prominent school choice supporter, published an illuminating report in 2003 titled "The Administrative Costs of Education Voucher Programs."[40] Although the report estimates and highlights the monetary costs associated with implementing a voucher program, the more interesting and serious problems have nothing to do with dollars.

In voucher programs, the state must disburse government funds, which means that they "will be administered by state agencies or joint public-private task forces, which will provide program information and application packets, accept and verify family applications, conduct admissions lotteries, and construct lists of private schools eligible to admit voucher students."[41] This description sounds like a new public school administration, and it highlights once again many of the fears that vouchers elicit among some school choice supporters. Worse still, "all voucher plans are likely to require local public school officials to provide information that they alone have, and to exercise leadership to ensure that school staff and subordinate administrators cooperate fully with the voucher program."[42] Voucher programs must rely, to an alarming degree, on government agencies and on politically controlled school systems that are hostile to educational freedom.

The political advantages of tax credits after passage include more wide-ranging benefits. Because individual taxpayers direct their money to the kind of education they want to support, they become invested in their chosen school or organization. A woman who takes advantage of a tax credit benefits both directly and personally from the policy, even if she doesn't use the tax credit for her own child, because she can enjoy spending her money on a child or educational mission she supports. In a similar fashion, businesses that claim tax credits on donations benefit from and have a stake in the law.

Perhaps the most important post-passage effect of tax credits compared with vouchers is that tax credits create a new and permanent institutional support system for the choice program. The scholarship organizations that arise to administer the donation tax credit form a new and powerful block of political interests that do not exist under a voucher program, and they have already proven effective advocates for the defense and expansion of choice programs in Arizona and Pennsylvania. These organizations can quickly disseminate information to and mobilize parents, businesses, and schools; and they have the funds and financial interests to do so. Everyone who participates—individuals, businesses, and scholarship organizations—has personally invested in the tax credit program and will have a strong and direct interest in defending and expanding the law. Vouchers simply do not create that kind of communitywide, direct, and personal investment because it is the government that decides how and where to allocate funds.

In Pennsylvania, for instance, scholarship organizations funded through the donation tax credit program have become a serious political force. They act as an institutional base for supporters and beneficiaries, translating this constituency into a mobilized political force. Andrew LeFevre, executive director of the REACH Alliance, a Pennsylvania school choice activist organization founded in 1991, describes the role of his organization and that of the scholarship organizations in the state:

> Upon passage of the EITC program in 2001, REACH made a strategic decision to work on helping to set up a scholarship organization (SO) in as many of the 67 counties as possible in order to begin the process of connecting the people involved with the program—most importantly the parents and children—with their elected offi-

cials. As we enter the 2007–08 school year, there are now approximately 180 SOs (as well as over 300 EIOs and 80 Pre-K SOs) that have been created all across the Commonwealth. These groups serve as a vital link between the families that they serve and the legislators that have been responsible for more than doubling the program cap over the past six years.

REACH works with the participating SOs to help them better understand the importance of maintaining that personal relationship with their elected officials and the media to show the tremendous positive impact that the program has on children and families in their local districts. Many SOs now require their families who receive scholarships to write to their elected officials to thank them for their support of the program; generating thousands of letters a year to Harrisburg on behalf of the EITC program."[43]

A similar dynamic has helped solidify and expand school choice policy in Arizona, where one scholarship organization boasts a state legislator as its president. Churches and other influential community institutions have become invested in the program and eager for its expansion. A former executive director of a major Arizona school choice organization calls scholarship organizations "the critical constituency that protects the program."[44] Tax credits, in other words, create interest groups with a direct interest in defending and expanding the program. In turn, scholarship organizations use their resources to overcome collective action problems and mobilize individuals who benefit from the program.[45]

The Florida tax credit program, in contrast to Arizona and Pennsylvania, has produced relatively few scholarship organizations because they are required to disperse 100 percent of donated funds in the form of scholarships, which means that they must raise money for operating costs from other sources. Arizona allows scholarship organizations to keep up to 10 percent and Pennsylvania sets the limit at 20 percent, thus ensuring quick growth in the number of such institutions. Voucher programs do not create these connective institutions and thereby leave program beneficiaries and supporters with a more difficult organizational task. This disadvantage is compounded in the case of voucher programs targeting low-income families, who have few resources with which to mobilize in any case.

Practical Considerations

Voucher programs do have some practical advantages over tax credits in terms of the simplicity of the concept and its enabling legislation. Vouchers are easier for the public and politicians to understand and therefore potentially easier to sell to both. That advantage, however, is tempered by the considerations laid out above; and tax credits have practical advantages of their own.

Most prominent among these practical advantages is that credits maximize direct payment of education expenses by parents, a factor strongly correlated with academic achievement and efficiency.[46] Non-refundable personal use tax credits are simply targeted tax cuts that allow parents to spend more of their own money on their children's education. Allowing taxpayers to direct their own money where they choose puts the decisionmaking power at the source of the funds, with the individuals most interested in ensuring that it is well spent. In addition, every scholarship organization has large incentives to encourage direct payment by parents, as much as they are able, so that the organization itself can support more families in need. Sometimes, as is the case with the scholarship program administered by the Black Alliance for Educational Options in Philadelphia, volunteering at the school of choice is used as an alternative or addition to parents' direct payments. In all cases, parents are more directly involved and invested in their children's education.

Taxpayers' direct control over their own money also translates into less distortion of cit-

Tax credits maximize direct payment of education expenses by parents, a factor strongly correlated with academic achievement and efficiency.

Education tax credits reduce coercion and market distortion below the level found under voucher programs.

izen behavior with tax credits than with vouchers.[47] Generally, fiscal conservatives oppose the government encouraging or discouraging behavior through the tax code. However, the current system massively distorts behavior by taxing the public and disbursing money directly to district schools, affording neither taxpayers nor educational consumers any control over the use of those funds. In such a system, allowing parental choice alone, as vouchers do, helps because some market forces are introduced. The actual taxpayers, however, are still allowed no discretion over where their money goes under government voucher programs.

Education tax credits minimize coercion and market distortion by allowing taxpayers to spend their money wherever they like, as long as it is on education. The government still distorts taxpayer behavior, but taxpayers directly control where their money goes within the education sector of the economy. Health care reform offers a useful comparison. The general hierarchy of free-market health care reform preferences looks like this: *worst*—direct government, single third-party-payer system (vouchers); *better*—tax subsidized, employer third-party-payer system; *much better*—tax subsidized, individual-payer system (tax credits); *best*—unsubsidized free-market system. Health care reform does not begin with a fully state-financed and state-run medical system, but education reform does begin with a state monopoly. Vouchers are therefore viewed by many school choice supporters as a major step forward. Tax credits, however, are an even better market reform. They are less economically distorting than direct government payments because they allow discretion on the part of the taxpayer within an economic sector. Short of a policy under which the government shuts down all of its schools and no longer assesses education taxes, tax credits offer the minimum amount of behavior distortion.

In the many states with high individual and corporate income taxes, the tax burden will be sufficient to support school choice for higher-income individuals through personal-use credits and low-income families through donation tax credit programs. Since the state share of education funding typically covers more than half of total per pupil spending and the average private school tuition is about half of public school per-pupil spending, there is more than enough money available to support a system of educational freedom through tax credits.

States with no income taxes generally rely on sales taxes for the bulk of the government's revenue and the state's share of education funding. The model legislation presented here provides an easy way for individuals to claim a credit on sales taxes for either direct spending on education services for their children or donations to scholarship organizations. All states with a sales tax can use the tables already developed by the federal government to determine the amount a taxpayer can deduct on their federal taxes[48] for sales tax paid to their state government.[49] Furthermore, as presented in the model legislation, every state can offer credits (for educational expenses) on property taxes, which are the second largest source of education funds. Concern about the sufficiency of funds is thus not an issue for a properly designed tax credit program.

In some cases, complications may arise when executing a property tax credit at the state level because of variations in the collecting entities, tax rates, and purposes to which the revenue is directed. These issues can be overcome; however, a simpler and perhaps politically more palatable approach is to pass state legislation *authorizing,* rather than requiring, counties and other municipalities to give property tax credits for education expenses. Although this option has the disadvantage of kicking the issue down the road to other levels of government, it has the advantage of allowing counties with special need and support for school choice to enact a program first and provide a political base and policy example to the rest of the state. Furthermore, because local officials will retain power over the property tax issue, it will likely incite less opposition and more support from these local officials.

Regardless of the taxes tapped for credits, low-income families typically cannot claim a personal credit large enough to cover the cost of their own children's education because they owe little in

taxes. Two solutions present themselves: donation tax credits and refundable tax credits. Donation tax credits have already been described. Refundable tax credits mean that families with little or no tax liability are given government funds to pay for an education of their choice. Unfortunately, making a tax credit refundable is legally equivalent to folding a voucher program in with a tax credit program. The primary legal distinction between tax credits and vouchers is that vouchers are government funds and tax credits are a taxpayer's own money. When a tax credit is made refundable, this distinction is eliminated, leaving the refundable credit program vulnerable to the same legal attacks that have overturned some voucher programs.

The need for families to rely on scholarships will be mitigated by the enactment of sales tax credits, as even low-income families pay a substantial sum in sales tax, especially where this constitutes a major source of government revenue. Nonetheless, low-income children must largely be supported through scholarship organizations that collect money from individual and/or corporate donors who receive tax credits for their donations.

Pennsylvania, Florida, Arizona, Iowa, and Rhode Island all have limited donation credit programs.[50] The states with established programs—Pennsylvania, Florida, and Arizona—demonstrate that a diversity of scholarship organizations, from religious to secular, arise to meet the demand of those who give and those who receive the scholarship money. Many of these organizations provide additional benefits to the families who apply, working to get them placed in schools and helping the often single parents make sure that their children are achieving academically and in the best environment. A diversity of scholarship organizations ensures that schools, parents, and donors all have the flexibility to find the partners that work for them. Donation tax credits have been working particularly well for many years in Pennsylvania, which allows the scholarship organizations to use a portion of donations for operating expenses. The state now has 183 scholarship organizations serving almost 33,500 children. The demand for the donation credits far outstrips the supply of money, capped at $35.9 million, and each year that cap is quickly reached by the many businesses eager to fund the program.[51]

Education tax credits are most frequently criticized on the basis of two practical concerns.[52] For one, critics have argued that credits are incapable of providing sufficient financial assistance to produce meaningful, universal school choice. Clearly, however, a system of educational freedom can be supported through personal use and donation credits against income, sales, and property taxes for both individual and corporate taxpayers. This is particularly true when all taxpayers are able to take advantage of these credits; extended families, friends, and communities can pool their resources to support the education of many children in families that might not have a very high tax burden. These multiple sources of state and local revenue provide a huge reservoir of funds.[53]

Second, some critics of tax credits express concern that using donation tax credits to fund low-income children unfairly subjects these families to the dictates of scholarship organizations. Current donation tax credit programs, however, demonstrate that a diverse range of scholarship programs arise to meet the demands of both donors and parents. Only education tax credits provide a civil-society mechanism for balancing the needs and prerogatives of parents and taxpayers. By contrast, voucher programs subject all recipient families and all participating schools to a single set of government-imposed constraints. That scenario provides low-income families no escape from restrictions they find onerous, and provides taxpayers no escape from the compulsion to fund education they find morally objectionable.[54]

Final Assessment: Tax Credits Are the Best Policy

All of the factors discussed above make tax credits more likely than vouchers to be passed, sustained, and expanded, especially if they are initially small. Greater legal viability makes tax credits more likely than vouchers to be passed in more states, more likely to avoid litigation, and more likely to be sus-

Tax credits provide a mechanism for balancing the needs and prerogatives of parents and taxpayers.

tained when they are challenged in court. The fact that tax credits are not government funds makes them less likely to come with burdensome regulations on private schools and leaves participating schools less vulnerable to added regulation in the future.

These facts bring together a coalition for tax credits that is larger and more energetic than the constituency for vouchers, which suggests a greater chance of passage and sustainability. The self-implementing nature of tax credits ensures that families and private organizations are the chief actors in the marketplace, eliminating both the cost and potential trouble that a government voucher authority creates. These factors also build a larger and more powerful political constituency for the program than can be built through vouchers, establishing a diverse range of institutions and individuals directly invested in the program. Finally, education tax credits are simply more familiar, less threatening, and more popular than vouchers. Education tax credits are the preferable vehicle for educational freedom wherever they are feasible.[55]

Narrowly Targeted versus Broad-Based Programs

Many school choice supporters prefer targeted programs over broad-based programs for one, or both, of two reasons. Some believe that starting with targeted programs is the best or only way of getting bigger, more inclusive programs in the future. Others support targeted programs because they are concerned only with helping those who have the fewest options and are served most poorly under our government-run school system. Still others hold some combination of these views, desiring bigger programs but convinced that helping low-income families first through targeted programs makes political and moral sense. Principles of politics, common sense, and real-world experience show that supporting targeted choice programs for these reasons is not advantageous.

For over a decade and a half the school choice movement has followed what has been called the "toe-hold strategy," focusing primarily on programs that target special segments of the public. But toe-holds are short-term tactical positions, made only to move on quickly to the final objective. If you stay in a toe-hold too long, your foot will cramp and you will fall.

Passage of the Milwaukee Parental Choice Program was a landmark success, crystallizing and energizing the school choice movement in 1990. After 17 years, however, this first targeted program still covers less than a quarter of all low-income Milwaukee children and serves none of the children trapped in failing schools elsewhere across the state. It took five years for the program to grow from 1.5 percent of Milwaukee students to 15 percent. It took another 11 years to expand the cap to cover 20 percent of Milwaukee students, 22,500 students total. At this rate, it will take at least another 4 years—or 21 years from the program's inception—before all low-income Milwaukee children have school choice. Even then, the Milwaukee voucher program would do nothing for the rest of Wisconsin's needy children or for the middle-class families who struggle to find and finance a good education for their children.

Targeted voucher programs in other states have spread slowly as well, and most of them cover very specific student populations, such as children with disabilities or children in foster care. Obviously, these programs do not cover all the children who would benefit from the injection of market forces into education. These narrowly targeted programs are unlikely to bring good choices to all the children they propose to help, and most in principle exclude the middle class.[56] Programs that target only low-income families or children in failing schools do not create the market forces or build the political power necessary to transform our education system.

The following section explains why broad-based choice programs are preferable to targeted choice programs, regardless of the target population. It also explains how tax credits mitigate some of the political problems related to targeted choice programs. As an old social science say-

Programs that target only low-income families or children in failing schools do not create the market forces or build the political power necessary to transform our education system.

ing goes, "programs solely for the poor are poor programs." Broad-based programs can be implemented in increments through various phase-ins or a reduction in the benefits to families. These options are mentioned below and in the model legislation as possible political concessions. In terms of both market and political dynamics, however, programs narrowly targeted to special populations lack the power that broad-based school choice policies promise.

Addressing Common Criticisms of the Broad-Based Strategy

This call for broad-based programs may find a tough audience among many school choice supporters, even among some of those who wish to eventually have broad or universal coverage. It is, after all, at odds with perceptions and theories regarding the politics of school choice which are deeply engrained in the history and structure of the school choice movement. This section attempts to answer some of the most common objections to broad-based programs, and subsequent sections lay out the reasons for pursuing such programs.

Thomas Kuhn's *The Structure of Scientific Revolutions,* a classic in the philosophy of science, describes the progress of science as one of revolutionary shifts in theoretical paradigms.[57] During periods of "normal science," the professional community works with a set of shared assumptions: received theories, facts, methods, values, and goals that compose their discipline's paradigm. During periods of scientific revolution, this paradigm is undermined by anomalous new facts, and new theories are put forth to explain them. Ultimately, a new dominant paradigm emerges and another period of normal science is ushered in. At any given moment, the reigning paradigm enjoys enormous intellectual inertia. Scientists naturally resist the overturning of a paradigm, knowing full well the measurable progress it has allowed them to make.

At the risk of stretching an analogy too far, the school choice community is working under what might be called the "Milwaukee paradigm," wherein the pursuit of targeted vouchers and the cultivation of their constituency is viewed as the best strategy to achieve widespread school choice. Many choice advocates see the targeted-first approach as incontrovertibly superior to the broad-based approach; targeted programs, they claim, have been enacted while broad-based programs have not. Our political system encourages, and possibly requires, incremental rather than revolutionary reform, the argument goes. By this logic, choice supporters should pursue incremental reform, starting with choice programs that target small and sympathetic portions of the population such as special needs children, foster children, and children from low-income families. Furthermore, many critics argue, targeted programs have brought increasing legislative success over the years in many states. Some claim the only broad-based program to have passed thus far was enacted this year in Utah by a razor-thin majority before being overturned in November by a ballot initiative. Targeted programs, it is thus believed, will lead to increasing success, while broad-based programs simply haven't been successful at all.

A number of problems arise from this argument, both factual and theoretical. First is a major factual problem: five broad-based programs have been passed and four have been implemented. Some confusion of terms adds to this problem. Programs can be targeted, broad-based, or universal in their coverage, and programs can also be either generous or limited in the size of the benefit that a typical family obtains. The recent Utah voucher program was universal and relatively comprehensive in its benefits. Arizona's original personal donation tax credit is likewise universal, as it has no eligibility restrictions, but it is limited by the donation cap and prohibition against scholarship trading.[58] It is certainly a broad based program in the sense used in this paper, as it covers and currently benefits many middle-class families who bring political and other resources to the defense and expansion of school choice. The Minnesota tax credit is likewise broad-based, if limited in benefit, as is Iowa's personal tax credit and the Illinois tax credit.[59]

The potential of these programs is often overlooked, perhaps in part because the school choice movement has put most of its resources

The school choice community has been working under what might be called the "Milwaukee paradigm," wherein the pursuit of targeted vouchers and the cultivation of their constituency is viewed as the best strategy.

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behind targeted voucher programs. Tax credit programs that are small and incremental but broad based are largely ignored by school choice supporters. Another, more important, reason for the lack of emphasis on these programs is that they are hobbled by certain deficiencies—chief among them the insufficient value of the benefit they currently provide.

Though seldom discussed today, the federal tax credit proposals of the late 1970s and early 1980s were all broad based, explicitly meant to cover the middle class.[60] For example, in taking up a proposal for a federal education tax credit, President Nixon framed the issue as a matter of fiscal prudence in support of middle-class families, placing "particular emphasis on the dire fiscal consequences should the nonpublic sector be allowed to collapse."[61] Some of these tax credit proposals came very close to passing in the House, did pass the Senate, and drew much more support than the targeted programs that followed.[62] The primary reasons these did not pass is that the teachers unions began a serious lobbying effort. Also, such programs are nearly a straight revenue loss for the federal government because it spends relatively little on education. The latter point is certainly not the case at the state and local level.

Beyond the factual problems with the "targeted success" argument, too few cases of legislative success and too little data on the number of bills introduced exist for a valid comparison between targeted and broad-based programs. How many expansive school choice laws have been proposed in the past 50 years? Data are extremely difficult to gather and have never been marshaled, which means a definitive answer is impossible. Clearly, however, targeted voucher programs have been the focus of the school choice movement, so it seems reasonable to conclude that more targeted than broad-based proposals have been floated.

If both broad-based and targeted programs had a 1 percent chance of passing, and 100 and 500 bills, respectively, were introduced, the result should be 5 targeted programs and only 1 broad-based program passed. Consider another scenario, in which the success rate of targeted bills was 1 percent and that of broad-based bills was double that, at 2 percent. If 500 targeted bills were introduced over the years, 5 bills should have passed. If only 25 broad-based bills were introduced, none would be expected to have passed. In this scenario, broad-based bills were twice as likely to pass, but none would likely have passed to date.

Obviously the number of targeted and broad-based bills passed says little about their respective political potential without knowing the number of each that has been introduced. If very few bills have been introduced, then few if any conclusions can be drawn from the number that have actually been enacted. For the same reason, a statistical analysis cannot be run with data that provide little variation on the relevant variables. There's nothing to analyze if nothing varies. Targeted programs have been the overriding focus of the choice movement for 17 years. It is problematic to claim that broad-based programs are more difficult to pass when they have not received similar attention.

Not only have relatively few broad-based bills been introduced over the years, but most bills, regardless of breadth of coverage, have been voucher programs. As argued in this paper, vouchers, regardless of their scope, are less likely to pass and survive than tax credits. And even if they are broad based, many potential allies are nonetheless lost; many religious conservatives, homeschoolers, and private schools that serve the middle class but value their autonomy too much to risk vouchers only weakly support such legislation or refuse to support it at all. Any analysis that seeks to compare targeted and broad-based legislation will be compromised by the fact that vouchers have political and legal problems that undermine the political advantages of broad-based programs. Examining the political dynamics of targeted and broad-based programs is useful, but any such study must consider the implications of coverage levels for vouchers and credits separately to determine real-world political viability.

The school choice movement's focus, rhetorically and legislatively, on targeted vouchers has had implications beyond the

straightforward ones mentioned above. The movement has spent the past 17 years trying to mobilize the constituency for targeted vouchers, not broad-based credits. That means more groundwork must be done up front for broad-based credits, because the issue needs to be redefined and the constituency needs to be mobilized. These considerations, however, do not speak to the inherent political potential of broad-based versus targeted programs. A better way to evaluate the two approaches might be to promote broad-based credits with middle-class arguments for 17 years and see where we stand. That would at least moderate some of the differences in groundwork.

Another common concern is that the American political system allows for only incremental gains. This is certainly true most of the time, although the role of incrementalism in public policy is still much disputed, with much evidence suggesting the system is instead subject to long periods of relative stasis punctuated by nonincremental changes in government structure and power relations (punctuated equilibrium).[63]

As it happens, the model tax credit legislation presented here *is* incremental; it allows individuals and business to opt into the program, provides only a percentage of per-pupil spending, and leaves the government system entirely unchanged and intact (at least initially). Of course, what is considered incremental versus nonincremental policy change can be difficult to determine because the distinction is one of degree, not kind. Is it incremental or revolutionary to allow private investment of 2 percent of an individual's social security payments? What about welfare reform in the 1990's? How about Health Savings Accounts? Whether or not a policy change counts as incremental is to a large extent in the eye of the beholder. However, voters will likely perceive tax credits as less radical than vouchers, whether or not that is in fact the case, because credits are a common and unremarkable method of encouraging certain types of spending. In the event that too many legislators see this model legislation as unacceptably nonincremental, it can be further "incrementalized" through various phase-ins or by reducing the benefits to families which are proposed in the model legislation as possible political concessions.

Finally, many supporters of targeted programs claim that such programs soften the legislative ground and make expanding choice programs and broadening their reach easier in the future. This is a possible outcome; however, focusing on targeted programs first runs the risk of compartmentalizing school choice as a special solution to special problems for special populations. A targeted focus encourages legislators and voters to think of choice as a stop-gap solution that should only be used on a small scale, rather than a general education reform. That approach runs the risk of increasing the difficulty of convincing legislators and voters to support a broad-based program after choice supporters have worked for years to advance the targeted argument and mobilize the targeted rather than broad constituency. Serious institutional and conceptual lock-in effects can make it difficult to switch some paths once taken; politics is very often path-dependent.[64]

Wisconsin and Ohio, host states to the oldest modern voucher programs, certainly don't suggest that targeted choice programs lead to more expansive ones. Arizona, arguably the state with the widest range of choice options, was put on the path to targeted programs by broad-based programs like charter schools, open enrollment, and a universal donation tax credit. The targeted programs came only after a middle-class constituency and institutional base had been built through the tax credit and middle-class constituencies became familiar with choice through these other programs that benefited them. Similarly, the Maine and Vermont "tuitioning" programs that have targeted vouchers to students in small towns without their own public schools have not expanded beyond that initial niche, despite being popular with participants and having been in existence for more than a century. In fact, both programs have actually narrowed in scope over the years, eventually eliminating

Institutional and conceptual lock-in effects can make it difficult to switch policy paths once taken.

religious schools from eligibility to redeem the tuition vouchers.[65]

One possible reason that targeted programs are passing now with greater frequency is that more people have come to see them precisely in the severely constrained terms that they advance. Even outright opponents of choice and opponents of broad-based choice see that the challenge these programs pose to the status quo is negligible.

The legislative success of some targeted programs in recent years may also have a very dark side; choice supporters may have walked down a seemingly easier path, only to find that it leads to a dead end, or at least a cliff they must scale. Certain kinds of choice not only fail to beget more choice but may actually make expanding choice in a meaningful way more difficult. Targeted programs have proven easy to contain both programmatically and conceptually, as Wisconsin and Ohio appear to demonstrate. Where is the rising demand for broad-based choice coverage in these states? Shouldn't it be evident by now, after 17 and 12 years of targeted programs, respectively? If not, why not? After years of arguing for choice in targeted terms, mobilizing the targeted constituency, alienating middle-class interest groups and constituencies, releasing some pressure from the system by opening an escape valve for those served most poorly by the system, why expect it to be easier, rather than more difficult, to expand choice to the middle class or even to all of the working poor? Is a legislator who grudgingly supported a tiny, inexpensive targeted charity program more likely to support covering all low-income families or the middle class? The arguments and calculus that led a reluctant legislator to support a targeted program are likely to be very different from those necessary to secure a vote for broad-based programs.

In the meantime, few arguments have been formulated or constituencies mobilized to convince legislators to come along with a broad-based program. What has been gained long-term? What has the effort built? What opportunity costs has the choice movement paid? *Some* choice doesn't necessarily beget choice on a *meaningful scale*.

Targeted school choice programs cannot create effective markets in education services.

Market Considerations

Targeted school choice programs cannot create effective markets in education services.[66] In the worst case scenario, small numbers of eligible children are scattered all over a state, creating so little new demand, and at so low a concentration, that the program would not lead to the creation of even a single new school. This was the case with Florida's A+ voucher program prior to its invalidation by the state Supreme Court in January 2006. More generally, the tiny customer base created by most targeted choice programs means that few new providers will arise, and those that do will have little ability or incentive to invest in research and innovation. Heavy research and development investment presupposes the prospect for substantial market growth if effective new techniques and products are developed. Narrowly targeted programs provide no such growth potential, and hence, at the outset, eliminate the core mechanism by which markets drive costs down and quality up.

Market efficiency relies on the informed choices of consumers compelling producers to offer better and better services at lower and lower costs. Any given consumer may be ill-informed about some, most, or even all details about the quality or cost-effectiveness of a particular provider's services. But in large markets, the effect of these limits on individual consumers' knowledge is modest, because enough consumers know enough about some providers' services to pressure all providers to raise quality and lower costs. The larger the number of consumers in a given market, the less any one consumer needs to know about quality and cost-effectiveness in order to be assured of receiving a good service at a good price. Limiting school choice programs to a small fraction of the population thus undermines a key benefit of markets. Limiting choice programs to subpopulations who themselves have less educational experience than the public at large (a likely effect of programs targeted at disadvantaged children) may be particularly harmful, robbing them of the beneficial market effects that result from the choices of highly educated consumers.

Choice programs of limited size also allow little room for schools to specialize and tailor their educational environment to students with particular needs. The demand for specialized services in any category is always smaller than the demand for general services. And because the overall customer base under targeted programs is already very small, it is unlikely that there will be enough customers with the same specialized demands to support schools that cater to those special needs. Specialization and the division of labor are essential elements of markets, so suppressing these factors will impede or prevent the development of effective markets.

With few new schools created and limited prospects for specialization, competitive pressures on education service providers remain weak, necessarily reducing any performance improvements that would result from competition. Government schools may respond to private-sector competition, but their response is attenuated to the extent that competition is attenuated.[67] A drastically limited market in education can have, by definition, only a limited impact on the overall educational system and student performance.

These policy problems lead directly to political problems. The public and politicians may easily but mistakenly come to think of severely restricted school choice programs as examples of true education markets. The sometimes underwhelming effects of targeted programs can thereby undermine support for large-scale programs and impede the prospects for the expansion of targeted programs themselves. A number of additional serious political problems with targeted school choice programs are discussed in detail below.

Political Considerations

Targeted school choice programs do not build a politically effective constituency for school choice. The importance of this consideration should not be underestimated. Opponents of school choice are powerful, and success requires the largest possible pool of support. In addition, the passage of legislation is only the end of a battle, not the end of the war.[68] An organized and politically powerful constituency is vital for the defense and expansion of a program after its initial passage.

These principles are particularly relevant to reform efforts, broadly speaking, which attempt to significantly change existing power and institutional structures. The opposition to such reform is well-organized, well-provisioned, and deeply entrenched, with massive influence in the legislature that passes or repeals the policy and in the agencies that implement the policy. When the opposition is defeated in the legislature, they can regroup to persuade lawmakers to roll back the legislation, work to prevent expansion in future sessions, appeal for relief in other venues such as the courts or the agencies overseeing the policy, or undermine the policy through the agency responsible for implementation.[69]

Because the school reform opposition is the status-quo power, its representatives have long-standing relationships with individuals in all of the relevant venues: the legislature, courts, and government agencies. School choice opponents are typically better organized and funded than reformers. Following the passage of legislation, they can therefore mount a counter-attack that is difficult if not impossible for reform elements to match in the aftermath of a hard-fought victory. To counter such long-standing strengths, school choice proponents need to build permanent institutions with a direct and powerful interest in defending and expanding reform. This is necessary for successful implementation, survival, and expansion. Targeted vouchers do not encourage the development of these institutions.

Furthermore, the only individuals directly benefiting from most targeted voucher policies are low-income parents and their children. These individuals have the fewest resources to spare for political activity and therefore have a low degree of political influence. The political disadvantages of low-income parents are also massively compounded by the existing interest group structure.[70] The organizations most active in representing the interests of low-income and urban individuals and communi-

The sometimes underwhelming effects of targeted programs can undermine support for better-designed large-scale reforms.

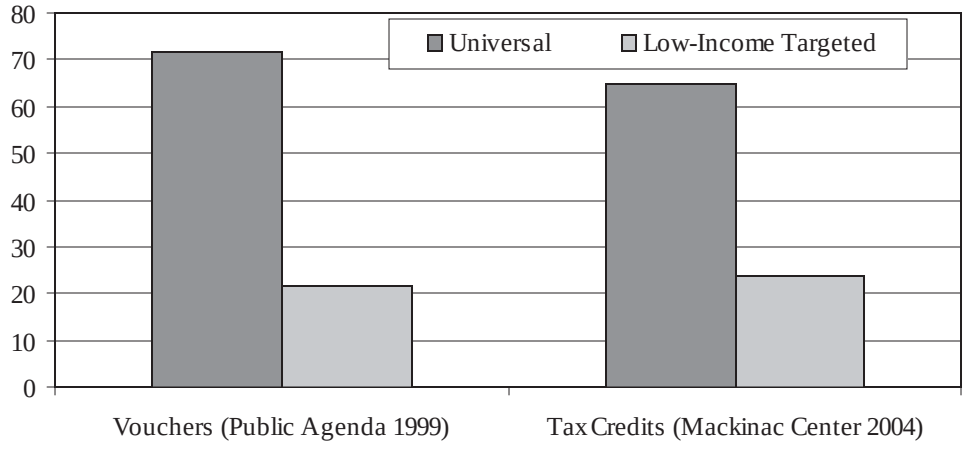
ties are typically the most active opponents of school choice.[71] The Urban League, the NAACP, much of the Democratic Party establishment, and other organizations with a reputation for and an organizational focus on low-income, urban, and minority issues are staunch foes of private school choice—despite the overwhelming support for school choice among the populations for whom they claim to speak.[72] In addition, the organizations that support school choice do not typically have a reputation for or an organizational focus on low-income, urban, and minority issues.

A 2003 survey found that 65 percent of the public preferred a universal tax credit program over one targeted to low-income children.

In terms of passing school choice legislation in the first place, the benefits to backing targeted programs for political expediency are uncertain at best. Many potential allies are lost when a targeted program is pursued, while a larger program will drive off few or no allies. Low-income families receive benefits in both targeted and broad-based programs. A large number of private schools, private-school parents, and homeschoolers, however, receive no direct benefits from targeted programs and so will only weakly support targeted choice efforts, if they support them at all. Promises of future expansion and the "camel's nose under the tent" theory are abstract and distant promises that ring increasingly hollow with each passing year. Furthermore, much of the energy and enthusiasm of the core school choice supporters will be dissipated, as they strongly prefer broad-based coverage.

Programs covering all children are much more popular among school choice supporters and the general public than are those that cover only low-income children (Figure 2). The principle of universality permeates America's political culture, and universal school choice programs are consistently much more popular with the general public than are targeted programs. The margin of preference is often huge—two or three to one in favor of universal programs—and the results have proven consistent over the years, across states, and even across different political dispositions.[73] Head-to-head comparisons are dramatic; a survey conducted for the Mackinac Center in 2003 found that 65 percent of the public preferred a universal tax credit program over one targeted to low-income children, whereas only 24 percent preferred the targeted program. Targeted vouchers were opposed by the public by a margin of 22 points, while universal vouchers enjoyed a 7-point margin of support.[74] These numbers confirm a 1999 survey by Public Agenda that showed a heavy

Figure 2
Percent Support for Universal versus Targeted Choice Programs



Source: Steve Farkas, Jean Johnson, and Anthony Feleno, "On This Ice: How Advocates and Opponents Could Misread the Public's Views on Vouchers and Charter Schools," Public Agenda, 1999; and Andrew J. Coulson, "Forging Consensus: Can the School Choice Community Come Together on an Explicit Goal and a Plan for Achieving It?" Mackinac Center for Public Policy, 2004.

preference for universal choice; 72 percent of the public supported universal vouchers while only 22 percent support a program targeted to low-income families.[75] Republicans, Democrats, and Independents all prefer universal programs to targeted ones.[76] In addition, the margin of support for universal programs is 25 points higher than it is for targeted programs among organizations already involved in supporting school choice efforts.[77] Controversial reform issues like school choice require the largest and most energized coalition possible. Targeted programs needlessly shrink and enervate the school choice coalition.

The most comprehensive analysis of voucher opinion to date, Moe's *Schools, Vouchers, and the American Public,* nonetheless concludes that targeted programs are politically most viable.[78] His recommendation is based primarily on the response to one question that asks respondents to choose one of two arguments: "In order to promote the greatest reform and include the most children, vouchers should be made available to all children in the state," or, "Because a voucher plan would be such a big change, it is better to start with a smaller plan that is limited to children whose educational needs are the greatest." Respondents chose the targeted first argument by an 8-point margin of 48 to 40 percent. It should be noted that the implication in the targeted choice is that a universal program would follow, but we know from the history of targeted voucher programs that this is not the case. A more typical method of limiting the initial impact of a major policy change is to phase in the implementation of the change over a number of years to allow adjustments and assessments. Unfortunately, this choice was not given to respondents.

Moe's data on the public's general and overwhelming preference for universal programs over targeted is consistent with all other surveys, showing a 28-point margin of support for universal over targeted even after the survey introduces through earlier questions a number of arguments in favor of targeted programs and numerous arguments against universal ones. For instance, one question asks respondents to agree or disagree with this statement: "I worry that a large-scale voucher plan might be too risky and experimental to try out on all of our kids." The question is problematic for at least two reasons. First, it suggests that small-scale programs have not been tried already and that further such programs are therefore necessary—certainly a very arguable point given the research conducted on existing targeted voucher programs. Second, it introduces significant negative considerations into the survey with no equivalent negative considerations for targeted programs, such as that they may never be expanded to include all families, since the statement arguing for a targeted-first approach implies that broad-based programs will necessarily follow successful targeted programs.

We are therefore left with a few facts from Moe's and other surveys. The public overwhelmingly prefers universal to targeted programs. Even opponents of vouchers, when forced to choose one kind of program over the other, choose universal over targeted by a 10-point margin.[79] When asked how to *implement* what is *implied* to be a universal program, people support what sounds like a low-income-first implementation rather than an immediate full-coverage program by an 8-point margin. Moe takes this rather thin support for gradual implementation to mean that there is significantly more support for targeted programs and that targeted voucher programs are the most politically viable policy. Although he recognizes that the "vast majority of people are universalists and believe that a voucher system should be broadly based," school choice supporters, Moe argues, "should start with programs for needy kids."[80] The survey questions on which Moe relies do not support the conclusions he draws.

Broad-based programs can certainly raise concerns among legislators about the potential impact of large programs, but these can be addressed without eliminating allies or permanently hobbling the program. The easiest and most effective way to address these concerns is by pointing out the savings involved with the switch of each student from government-run to independent schools.[81] Fiscal worries that make targeted programs seem less risky can be turned to advantage. The more students enrolled in a

Republicans, Democrats, and Independents all prefer universal programs to targeted ones.

Education tax credit programs have expanded much more rapidly than vouchers despite how recently most were passed.

choice program, the more the state saves by avoiding the need for new or expanded schools, allowing school staff reductions, or avoiding tax increases while class sizes and per-pupil spending increase. Staff reductions, it seems reasonable to speculate, most likely will be concentrated among the ballooning administrative ranks in the government system—which act as a drag on performance—rather than among teachers who directly provide the service. Independent schools on average have far fewer administrators but more teachers per student than government schools.

Another way of addressing concerns regarding the effect of a broad-based program is to phase it in by grade level, so that the change occurs gradually over a number of years. This allows more time for the system to adjust and makes short-term effects more predictable, although it also leaves the program itself more vulnerable. A school choice program can also be steeply means-tested in initial years (or indefinitely, like the recently defeated universal voucher law in Utah), with full low-income coverage effective immediately and a gradual increase in middle-class coverage over time. These modifications will ensure active and widespread support by middle-class interests while also guaranteeing that the program has a benign budgetary impact even in its early stages.

Finally, a school choice program can be permanently means tested, reducing the benefits to wealthy families and the overall cost of the program. This is good policy as well as good politics. The goal of a universal school choice program is to enable universal freedom of choice in education, and that is not the same thing as universal participation in an education tax credit or voucher program. Individuals are most careful with their own money, and markets work best when people spend their own income on a service.[82] The model tax credit legislation presented here therefore recommends that high-income families be allowed to direct their education dollars where they choose through donations but gradually phases out personal tax benefits for their own children's education. This provision can ensure universal choice in education without extending tax benefits to those who already have ample access to the educational marketplace.

There is, it must be noted, a political trade-off between the number of families covered and the size of vouchers or tax credits. The politically savvy choice is usually to err on the side of reducing the size of a benefit rather than the number of eligible families in order to build a wider constituency of supporters. The limit to this logic is the benefit floor below which the amount becomes too small to matter. That amount will be quite low relative to the overall costs of education: $500 is a substantial sum to middle-class and lower-income families, but it's only about 5 percent of the average per-student spending in the government system (or about 10 percent in the private sector). In addition, according to a well-known principle, prospective losses are more noticeable and much more important to individuals than are prospective gains.[83] The rollback of even relatively small benefits will be noticed by the beneficiaries, making politicians reluctant to reverse them once established. A small benefit is also an important symbol of progress and momentum. Incremental victories, as long as they are structured correctly and build political capital, can be used by school choice organizations to encourage participation in the movement and to make future victories seem more plausible and participation more attractive.[84]

Targeted vouchers occasionally get passed, but they expand slowly and with difficulty because they do not bring on board organized and powerful political constituencies with an interest in fighting for expansion. In targeted voucher programs, individual low-income parents apply through a governmental body to receive checks, just as with public housing vouchers. This is a tenuous political base for defending, let alone expanding, a policy.

Education tax credit programs have expanded much more rapidly and cover far more children than vouchers despite how recently most were passed; they already support about eight times as many children as do voucher programs. Among the state choice programs that target low-income families or children in failing schools, tax credit pro-

grams support nearly 3.5 times the number of students that vouchers support using about the same amount of money.[85] This obviously means that the scholarship going to each child is smaller in tax credit programs than it is in voucher programs; some find this concerning, but it is a strength of tax credits that they do not set an artificial price for education or a scholarship. Scholarship organizations are able to work with families and schools to determine the amount necessary to get a child the education she needs, and that amount is usually far less than government per-pupil spending or even many set voucher amounts. This flexibility in funding levels means that tax credit programs can respond more precisely to a family's needs and are able to assist many more families than voucher programs with the same amount of funding. Tax credits are more cost-effective and build a larger customer base for choice, both of which are politically very helpful.

Not surprisingly, targeted tax credits cover more children from low-income families than do targeted vouchers. Even targeted tax credit programs still require the involvement of taxpayers, businesses, and scholarship organizations, which then provide crucial organizational and political support for the programs and their expansion that compensate in part for a constituency that is small and commands few financial or political resources.

Expanding Tax Credits to State-Run Schools

Expanding the school choice coalition by expanding coverage to the broad middle class is the best option. Reformers, however, often attempt to reduce opposition and expand the supporting coalition by including provisions allowing tax credits for educational expenses incurred in or donations to the government system. Public school provisions are typically viewed as a political compromise necessary for passing school choice legislation, but they are in fact a counter-productive policy feature.

The goal of a school choice program should be to bring educational freedom to the current monopoly system. Public schools are already fully and directly funded through government funds at a level well above per-pupil spending in the private sector, putting independent schools at a severe disadvantage. Allowing tax credits for education expenses outside of the government-funded system expands educational options for all families by providing a new avenue for pursuing public education. Adding additional private funding streams to the government system through tax credits reduces the beneficial competition between the sectors and exacerbates the existing financial discrimination against independent schooling. That reduces the incentives for public schools to improve and the ability of private schools to serve families. The Pennsylvania tax credit program, for instance, allows tax credits for donations to Educational Improvement Organizations that fund "innovative programs" in public schools. Although this is preferable to unrestricted donations, the schools are still getting additional funding for additional services and are therefore given even greater advantages over the independent sector.

Supporters of educational freedom need to consider these compromises very carefully and structure any such policy compromises to ensure they do as little as possible to undermine the choice law. One way to include parents of children in public schools in the tax credit program, without adding funding directly to the government system, is to allow parents to opt for tutoring services provided *outside* the government system *in place of* class time for the particular subject. In other words, parents would be authorized by the legislation to have their children opt out of a subject, such as mathematics, and provide for their education in math through an independent school or tutoring service.

This approach expands options for children in public schools without sending additional funds directly to those schools. The schools will, of course, benefit from reduced class sizes in those subjects with which parents are dissatisfied. Parents, in turn, will be introduced to the services offered by independent education providers and to the concept of

Adding more private funding streams to the government system through tax credits reduces competition between the sectors and exacerbates financial discrimination against independent schooling.

being education consumers with expanded options. A political compromise such as this is preferable to adding a new funding stream to support the government system. Still, expanding coverage to include the middle-class is best.

Final Assessment: Broad-Based Policy Is the Best

To provide the neediest children with access to a good education, a powerful political constituency must be brought to bear. No school choice program should eliminate the broad middle class in deference to political expediency or arguments about incrementalism, toeholds, or providing for the needy first. Such compromises are no bargain and may well be a dead-end for school choice reform. Low-income children are best served by a large, vigorous, and free education market, and the only way to get that is to include the broad middle class.

Policies that provide for universal school choice are overwhelmingly more popular with important coalition members and the general public than the targeted programs that are usually pursued. A program may have to be steeply means-tested at first, but the principle of inclusive coverage should be established from the start. The voting middle class must see some real benefits and have a stake in expanding the policy. Their inclusion will help ensure a program's survival and growth. Finally, when a targeted program is pursued, education tax credits can substantially mitigate the problems inherent to limited policies.

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Regulatory Issues

A properly designed school choice program should keep regulations on education service providers and consumers to a minimum, relying on existing regulations for similar nonprofit organizations. Proponents of school choice must keep the focus on direct accountability to parents and taxpayers and point out the ineffectiveness of accountability to bureaucrats. Many of the most common and seemingly benign school choice regulations seriously compromise choice programs both politically and functionally.

Market Considerations

For a market to operate effectively, both consumers and producers must be free of undue regulation. Consumer freedom is an explicit part of the school choice concept and readily understandable by most supporters.

Producer freedom is equally necessary for a well-functioning school choice program but is largely overlooked or misunderstood. The primary problem with the regulations most commonly seen in school choice programs is that they limit the size and diversity of supply in educational choices. Producer freedom means allowing education providers to offer a diverse menu of options from which consumers can choose. This is essential to meaningful consumer choice.

Specialization and the division of labor are the core attributes of free markets, and without these any market will be crippled. If the government mandates that all schools supported by vouchers or tax credits must follow a particular curriculum, for instance, then in practice parents have only one curriculum to choose from and therefore little effective freedom of choice. Likewise, if all schools supported by vouchers or tax credits are required to admit students on a first-come or random lottery basis (such as in the Milwaukee voucher program), then the schools will be incapable of tailoring their mission and pedagogy to serve students with particular needs, characteristics, or interests. The result will be a lack of diversity in the kinds of schools from which parents can choose.

Children do not all learn in the same way; some, for instance, may thrive in an environment of self-direction while others need a more structured environment to succeed. Many schools help children excel through immersion in an environment animated by a particular religion, philosophy, or mission. If schools have no control over their admissions policies, and hence are unable to ensure the commitment of their students to the institution's values and mission, their ability to shape their environments and character is impeded. While every child must be served by the education

system as a whole, it is unrealistic to imagine that every child can be well served by every school within that system. Even the traditional public school system sends hundreds of thousands of children with special needs to the private sector to be educated because it is unable to serve these students itself.[86] The notion that every public school must and can serve every student is a myth.

Parents overwhelmingly share a deep concern about a core set of academic outcomes—reading, writing, arithmetic, and social studies—and schools will be forced to compete with each other on the basis of those results. Some parents might demand test results in particular grades for comparison, and some might demand real-world evidence of success such as student admission rates to competitive high schools from a particular grade school, or to competitive colleges from a high school. Most parents are interested in all of these measures. The overwhelming majority of parents want their children to succeed and will hold schools more broadly and meaningfully accountable for that success than any suite of state-mandated tests.[87] A school choice program arms parents with the freedom to leave a school if they are dissatisfied, and that is the most effective accountability system of all.

Political Considerations

Many common choice program regulations are debilitating to school choice efforts for political reasons as well. Many independent schools are unwilling to submit to these regulations, and that means the mobilized constituency for choice will be restricted from the beginning. Most independent schools are defined by a particular mission. The mission might be to serve low-income families or the wealthy, Catholics, Jews, or Protestants, children with disabilities or gifted children; that is, most independent schools are likely to have an identity and a market niche. Both are compromised or destroyed by many of the most common school choice program regulations.

Lottery admissions policies eliminate a school's prerogative to admit the children that fit the school's mission, and the school thereby loses its ability to control that mission. As noted above, diversity of missions provides consumers with real choices. Also, devotion to a particular mission underlies the devotion of many good teachers to their work. Any regulation that undermines a school's autonomy undermines its incentive to support or participate in a school choice program.

Not surprisingly, many schools refuse to participate in programs with lottery admissions. One study notes that "the more regulation, the less likely it is that independent schools will participate. In Florida, only 23 of 1,603 independent schools statewide signed up to participate in a voucher scheme requiring lottery admissions."[88] Regulations are especially concerning for strongly religious schools when participation requirements restrict their religious character, such as through mandates that all children be allowed not to participate in religious instruction or that the school not discriminate in admissions or hiring on the basis of religion.

Independent school organizations, schools, and parents who are otherwise supportive of school choice will only weakly support, and may even oppose, school choice policies that undermine independent school autonomy. Writing in 2001, then-president of the National Association of Independent Schools Peter Relic commented, "I have not yet seen a single local or state voucher plan in which I would recommend independent school participation, because of the governmental intrusion into the schools' admission policy and judgment of applicants."[89] The private education industry has a direct stake in the school choice debate and is a natural ally of the reform effort. Policies that discourage or eliminate these coalition partners debilitate the choice reform effort.

Final Assessment: Parents Are the Best Regulators

Choice opponents have had considerable success framing the debate over accountability, defining it as accountability to government bureaucrats. But there is no greater accountability than for schools to be directly accountable to parents armed with freedom of choice. As for accountability to taxpayers, tax credits are better than both voucher programs and the status quo

Independent school organizations, schools, and parents who are otherwise supportive of school choice will only weakly support, and may even oppose, school choice policies that undermine independent school autonomy.

in making schools more accountable to taxpayers without school-aged children, because those taxpayers can direct their money to scholarship organizations of their choosing. If they become dissatisfied with the results, they can shift their money elsewhere. A tax credit system thus makes public education accountable to both parents and taxpayers in a way that is impossible in a government system or voucher program. The public and politicians will understand these considerations, even if it takes time and education. Conceding the argument that accountability means accountability to bureaucrats is a recipe for continually increasing regulations and an end to the independent school system. Accountability means accountable to parents and taxpayers.

Although many school choice supporters are reluctant to pass judgment on the relative merits of various choice proposals, the movement for educational freedom can ill afford such niceties.

Conclusion: Broad-Based Tax Credits Are the Best Policy

Although many school choice supporters are reluctant to pass judgment on the relative merits of various choice proposals, the movement for educational freedom can ill afford such niceties. Beneficiaries of the government education monopoly are powerful and determined, and have the easier task of defending the status quo with the many checks and vetoes our political system provides. School choice reformers must identify and advance the very strongest policy and couple that with the strongest message possible. The discussion above leads to two solid conclusions: tax credits are preferable to vouchers and broad-based programs are preferable to targeted programs.

Because tax credits are not government funds they are less likely to be challenged in court and more likely to survive when challenged. Because tax credits are not government funds, they make unwarranted government regulation of participants less likely, thus bringing more support to the coalition from conservative individuals and interest groups. Tax credits are also more popular with the general public and incite less unified opposition from Democratic politicians. Perhaps most important, tax credits directly involve higher-income individuals and businesses in the program. These groups have more to gain with the passage of tax credits than with vouchers, and their organized support and resources make tax credit programs more likely to survive and expand after passage.

In addition, short- and long-term success in establishing true school choice is more likely when the broad middle class is included than when a program narrowly targets a special population. In school choice as in other areas of reform, low-income citizens are most likely to get the help they need when the middle class is included in the program. Broad-based school choice programs command much more support from political elites, interest groups, and the general public than programs targeted to special populations. Although a choice program may need to be introduced incrementally by phasing in the program, heavy means-testing, or reducing the size of the benefit, the breadth of coverage should not be limited in an attempt at political compromise. Targeted programs cut away powerful coalition partners and are left vulnerable. Tax credits mitigate many problems inherent to targeted programs because tax credits require the participation of resource-rich individuals and organizations. A broad-based strategy that argues for a choice program with wide coverage as a general education reform is most likely to lead to freedom in education.

The Public Education Tax Credit Act, model tax credit legislation that embodies these principles and conclusions, is presented in Appendix B. This bill provides a comprehensive framework for transforming a state's education system from a government monopoly into a system of educational freedom for all citizens. Because it is comprehensive and attempts to address all known problems with existing programs, the legislation can appear complicated at first glance. Extensive endnotes to Appendix B explain the purpose and meaning of many provisions, and Appendix A provides examples that should help clarify how the individual provisions will make the program as a whole work seamlessly.

The model legislation attempts to balance political and market concerns in a way most

likely to produce a free and vibrant system of public education characterized by choice and progress. This comprehensive education reform may look daunting in its complexity but is in fact quite simple. The Public Education Tax Credit Act allows all taxpayers, businesses, and individuals to claim dollar-for-dollar credits on their state sales and income taxes and the education portion of local property taxes for education expenses, both for personal use on their own child or for donations to support children who need financial aid to get a good education. Fortunately, good policy is often good politics.

Notes

1. James E. Ryan and Michael Heise, "The Political Economy of School Choice," *Yale Law Journal* 111, no. 8 (June 2002): 2043–2136.

2. See John W. Kingdon, Agendas, *Alternatives, and Public Policies* (New York: Longman, 2003), chaps. 6, 8; Donald E. Abelson, *Do Think Tanks Matter? Addressing the Impact of Public Policy Institutes* (Ithaca, NY: McGill-Queen's University Press, 2002).

3. Many of the issues discussed in this paper have received detailed treatment in Andrew J. Coulson's "Forging Consensus: Can the School Choice Community Come Together on an Explicit Goal and a Plan for Achieving It?" Mackinac Center for Public Policy, 2004, http://www.educationreport.org/article.aspx?ID=6517. See also George Clowes and Jay Greene, "Forging Consensus Comments," Mackinac Center for Public Policy, 2005, http://www.educationreport.org/article.aspx?ID=7328.

4. Section 2 will address in detail the shortcomings of narrowly targeted programs.

5. See Adam B. Schaeffer, "School Choice Snapshot: A 2006 Survey of U.S. Policy Organizations" Mackinac Center for Public Policy, 2006. This survey of organizations involved in school choice showed a bare majority, 50 percent, has no preference between vouchers and tax credits, whereas 32 percent prefer tax credits to vouchers and 17 percent prefer vouchers to tax credits.

6. Again, the reader is encouraged to explore these issues in more detail by referring to Coulson's "Forging Consensus."

7. For an extensive discussion of the legal issues in each state, with relevant case law, see Richard D. Komer and Clark Neily, "School Choice and State Constitutions: A Guide to Designing School Choice Programs," Institute for Justice and American Legislative Exchange Council, April 2007, http://www.ij.org/publications/other/sc50_state_report.html.

8. David O'Brien, *Storm Center: The Supreme Court in American Politics* (New York: Norton, 1986).

9. *Colorado Congress of Parents, Teachers and Students v. Owens,* 03SA364 (Col. 2004); *Holmes v. Bush,* 04-2323 (Fla. 2006); *Jackson v. Benson,* 97-0270 (Wis. 1998); *Simmons-Harris v. Goff,* 97-1117 (Ohio 1999). The courts in *Jackson v. Benson* and *Simmons-Harris v. Goff* did not dispute that the voucher funds were public funds, but ruled that they did not violate the constitutional provisions under consideration because the parents rather than the state were the recipients of those funds.

10. *Holmes v. Bush,* 04-2323 (Fla. 2006). The Florida Supreme Court ruling has been rightly criticized as an exercise in unalloyed political activism from the bench and demonstrates that some courts will find little restraint in the letter and intent of state constitutional provisions. Tax credits are therefore not exempt from such misuses of judicial authority. The ruling under consideration here, however, relied on the status of vouchers as "public funds" in overturning the Florida Opportunity Scholarship program. In order to overturn tax credits, the court would need to find, contrary to widespread legal precedent, that they are "public funds" or develop an even more novel objection. The following excerpts have italics added for emphasis. The summary of the ruling stated: "The issue we decide is whether the State of Florida is prohibited by the Florida Constitution from *expending public funds* to allow students to obtain independent school education in kindergarten through grade twelve, as an alternative to a public school education." The court ruled that the program is a violation of the uniformity provision because "it diverts *public dollars* into separate private systems parallel to and in competition with the free public schools that are the sole means set out in the Constitution for the state to provide for the education of Florida's children. This diversion not only reduces money available to the free schools, but also funds independent schools that are not "uniform" when compared with each other or the public system. Many standards imposed by law on the public schools are inapplicable to the independent schools receiving *public monies*." The legal distinction between public and private funds is central to this ruling overturning vouchers just as it has been central in rulings upholding tax credits in other states.

11. Frank R. Kemerer, "The U.S. Supreme Court's Decision in the Cleveland Voucher Case: Where to from Here?" Occasional Paper no. 51, National Center for the Study of Privatization in Education, July 2002.

12. Voucher laws in Colorado and Florida have been overturned, whereas programs in Wisconsin

and Ohio were upheld. Colorado Congress of Parents, Teachers and *Students v. Owens,* 03SA364 (Col. 2004); *Holmes v. Bush,* 04-2323 (Fla. 2006); *Jackson v. Benson,* 97-0270 (Wis. 1998); and *Simmons-Harris v. Goff,* 97-1117 (Ohio 1999).

13. Komer and Neily.

14. Laura Langer and Paul Brace, "The Preemptive Power of State Supreme Courts: Adoption of Abortion and Death Penalty Legislation," *Policy Studies Journal* 33, no. 3 (2005): 317–40.

15. Ibid., p. 331.

16. O'Brien.

17. *Kotterman v. Killlian,* 972 P.2d 606 (Ariz.), cert. denied, 528 U.S. 921 (1999).

18. *Mueller v. Allen,* 463 U.S. 388 (1983).

19. *Hibbs v. Winn,* (02-1809) 542 U.S. 88 (2004).

20. *Griffith v. Bower,* 319 Ill. App. 3d 993 (5th Dist.), app. denied, 195 Ill. 2d 577 (2001); and *Toney v. Bower,* 318 Ill. App. 3d 1194 (4th Dist.), app. denied, 195 Ill.2d 573 (2001).

21. Schaeffer, "School Choice Snapshot."

22. Telephone interview, October 4, 2005.

23. Minnesota and Iowa exclude expenses for religious instruction from their tax credit programs (as well as Minnesota's tax deduction) but allow religious schools to itemize expenses to allow parents to claim benefits on the nonreligious portion of instruction.

24. F. A. Hayek, *The Road to Serfdom,* 50th anniversary ed. (Chicago: University of Chicago Press, 1994).

25. Kimberly Miller, "Money to Terror-Tied School Halted," *Palm Beach Post,* July 19, 2003. See also Coulson, "Forging Consensus," p. 55.

26. The historical record of various school choice arrangements has been investigated in detail by Andrew J. Coulson in *Market Education: The Unknown History* (New Brunswick, NJ: Transaction Publishers, 1999). The evidence reviewed in this work suggests that vouchers accumulate more and more onerous regulations over time than do less direct forms of support for education. See also Coulson, "Forging Consensus."

27. See the HSLDA position at http://www.hslda.org/docs/nche/Issues/E/EducationTaxCredit_State.asp.

28. Telephone interview, November 1, 2005.

29. Telephone interview, October 6, 2005.

30. Schaeffer, "School Choice Snapshot."

31. For detailed poll results regarding the public's awareness of school choice politics, see Terry M. Moe, *Schools, Vouchers, and the American Public* (Washington: Brookings Institution Press, 2001).

32. John A. Zaller, *The Nature and Origins of Mass Opinion* (New York: Cambridge University Press, 1992).

33. See Coulson, "Forging Consensus." These data are confirmed by a review of all tax credit and voucher polls in the iPOLL databases of opinion polling, http://www.ropercenter.uconn.edu/data_access/ipoll/ipoll.html, and in unpublished data collected in research conducted by Adam B. Schaeffer for a dissertation in the politics department of the University of Virginia.

34. Schaeffer, "School Choice Snapshot."

35. Lowell C. Rose and Alec M. Gallup, "The 30th Annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes toward the Public Schools," September 1998, and "The 31st Annual Phi Delta Kappa/ Gallup Poll of the Public's Attitudes toward the Public Schools," September 1999.

36. See Moe, pp. 198–205.

37. William G. Howell, Martin R. West, and Paul E. Peterson, "What Americans Think about Their Schools," Education Next, Summer 2007, http://www.hoover.org/publications/ednext/8769517.html.

38. See iPOLL databases of opinion polling, http://www.ropercenter.uconn.edu/data_access/ipoll/ipoll.html, for multiple polls on this topic.

39. Frank R. Baumgartner and Bryan D. Jones, *Agendas and Instability in American Politics* (Chicago: University of Chicago Press, 1993).

40. Paul T. Hill, "Administrative Costs of EducationVoucher Programs," University of Washington Center on Reinventing Public Education, 2003, http://www.crpe.org/pubs/pdf/AdminCostsVouchers_web.pdf.

41. Ibid., p. 17.

42. Ibid.

43. Personal communication, August 9, 2007.

44. Personal communication, August 2, 2007. The speaker requested anonymity.

45. For information regarding the pervasive problems for collective action in politics, see Mancur

Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Cambridge, MA: Harvard University Press, 1971); Sydney Tarrow, *Power in Movement: Social Movements, Collective Action and Politics* (Cambridge, MA: Cambridge University Press, 1998); and Kristin A. Goss, *The Missing Movement for Gun Control in America* (Princeton, NJ: Princeton University Press, 2006).

46. See Andrew J. Coulson, "How Markets Affect Quality," *Educational Freedom in Urban America:* Brown v. Board *after Half a Century* (Washington: Cato Institute, 2004), pp. 265–364; and Coulson, "Forging Consensus."

47. See Coulson's "Forging Consensus" for a lengthier discussion of why tax credits are less distorting of citizen behavior than vouchers.

48. The question of whether or not state education tax credits should be permitted as a federal deduction is left open here. The tax credits can be used or directed by the taxpayer but only to advance what has been deemed a public good: education. This is, in any case, an issue for the federal government.

49. Internal Revenue Service, *State and Local General Sales Taxes,* http://www.irs.gov/publications/p600/index.html.

50. The powerful political benefits that flow from donation tax credits minimize many of the problems associated with targeted programs, which are discussed below.

51. Milton and Rose D. Friedman Foundation, *The ABCs of School Choice, 2006–2007 Edition,* p. 40, http://www.friedmanfoundation.org/friedman/downloadFile.do?id=102.

52. For a concise overview of these points, see Joseph L. Bast, "Tax Credits versus Vouchers: Time to Decide," *Heartlander,* March 2002, http://www.heartland.org/Article.cfm?artId=10705.

53. For further discussions of the criticisms of tax credits, see Joseph L. Bast, "Why Conservatives and Libertarians Should Support School Vouchers," and Andrew J. Coulson, "Giving Credit Where It's Due: Why Tax Credits Are Better Than Vouchers," *The Independent Review* 7, no. 2 (Fall 2002). See also Coulson, "Forging Concensus," and Mackinac Center, "Forging Consensus Comments."

54. Coulson, "Forging Consensus," pp. 57–58, 62–65.

55. See endnote 15 in Appendix B for a discussion of a potentially serious difficulty for some tax credits and a mechanism for addressing it. Tax credits may not be feasible for reasons such as the particular political actors involved at the state level or, in the case of Michigan, a specific state constitutional prohibition of education vouchers and tax credits.

56. Voucher programs targeting special needs students typically include the middle class but are limited to an even smaller population than low-income targeted programs.

57. Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1970).

58. Families donating money to scholarship organizations are prohibited from donation-swapping: earmarking a donation for a particular student and having his family in turn support the first family's child. The donations, in other words, cannot be used to ensure that one's own child or any other specific child receives a scholarship. This limits the freedom of taxpayers and families and the effectiveness of the program by eliminating personal relationships and interests from the program.

59. For a good overview of school choice program details, see Friedman Foundation.

60. Martin R. West, "The Future of Tax Credits," in *The Future of School Choice,* ed. Paul E. Peterson (Stanford, CA: Hoover Institution Press, 2003).

61. Ibid., p. 161.

62. James Catterall, "Politics and Aid to Private Schools," *Education and Policy Analysis* 6, no. 4 (Winter 1984): 435–40.

63. Baumgartner and Jones.

64. Paul Pierson, "Increasing Returns, Path Dependence, and the Study of Politics," *American Political Science Review* 94, no. 2 (June 2000): 251–67, http://links.jstor.org/sici?sici=0003-0554%28200006%2994%3A2%3C251%3AIRPDAT%3E2.0.CO%3B2-Z.

65. Joan Biskupic, "Maine School Voucher Law Stands," *Washington Post,* October 13, 1999, p. A2. See also David M. Ackerman, "Education Vouchers: Constitutional Issues and Cases," CRS Report for Congress no. RL30165, Congressional Research Service, 200, http://carper.senate.gov/acrobat%20files/rl30165.pdf.

66. The market problems inherent to targeted school choice programs have been explored in detail elsewhere. See Andrew J. Coulson, "The Cato Education Market Index," Cato Institute Policy Analysis no. 585, December 13, 2006, for a thorough discussion of the necessary components of a

competitive education market and the way in which programs and states can be measured according to market standards. See also John Merrifield and David Salisbury, "The Competitive Education Industry Concept and Why It Deserves More Scrutiny," *Cato Journal* 25, no. 2 (2005), for a more general treatment of the concept.

67. Small, targeted programs do have a positive impact on public schools and their student achievement, but the effect, like the programs, is limited. See Jay P. Greene, *Education Myths* (New York: Rowman & Littlefield, 2005); and Frederick M. Hess, *Revolution at the Margins* (Washington: Brookings Institution Press, 2002).

68. Eric Patashnik, "After the Public Interest Prevails: The Political Sustainability of Policy Reform," *Governance: An International Journal of Policy, Administration, and Institutions* 16, no. 2 (April 2003): 203–34.

69. Frank R. Baumgartner and Bryan D. Jones, eds., *Policy Dynamics* (Chicago: University of Chicago Press, 2002).

70. See Patrick J. McGuinn, "Race, School Vouchers, and Urban Politics: The Disconnect between African-American Elite and Mass Opinion," paper delivered at the 2001 Annual Meeting of the American Political Science Association, San Francisco, August 30–September 2, 2001; and Jeffrey R. Henig et al., *The Color of School Reform: Race, Politics, and the Challenge of Urban Education* (Princeton, NJ: Princeton University Press, 1999).

71. This is not to say that the interests of low-income individuals are best served by the policy positions of these organizations. The interests of low-income families are best served by pro-growth economic policies, low urban tax burdens and regulations, and school choice—all of which provide greater economic, social, and educational opportunities. It is a fact, however, that these organizations are seen by most of the media, public, and low-income individuals themselves as their representatives and are trusted as such.

72. See Moe, p. 211, for a discussion of minority support for vouchers; see also David Bositis, "Diverging Generations: The Transformation of African American Policy Views," Joint Center for Political and Economic Studies, 2001. For polling data on the opposition of the black leadership to vouchers, see David Bositis, "Changing of the Guard; Generational Differences among Black Elected Officials," Joint Center for Political and Economic Studies, 2001, p. 19. The traditional black leadership's opposition to vouchers may arise for a variety of reasons, from the use of school choice to maintain segregated schools in the South to the financial interests of the urban middle class, for which the public school system is a very significant employer. Whatever the specific reasons, the cluster of history, politics, and interests ensure that the opposition is stable and strong.

73. Coulson, "Forging Consensus."

74. Ibid.

75. Steve Farkas, Jean Johnson, and Anthony Foleno, "On This Ice: How Advocates and Opponents Could Misread the Public's Views on Vouchers and Charter Schools," Public Agenda, 1999.

76. Unpublished data collected in research conducted by Adam B. Schaeffer for a dissertation in the Department of Politics of the University of Virginia.

77. Schaeffer, "School Choice Snapshot."

78. Moe, *Schools, Vouchers, and the American Public.*

79. Ibid., p. 323.

80. Ibid., pp. 342–43.

81. The cost of educating each student in the private system is much less than in the government-run system, approximately one-half to two-thirds the cost. There is a large and growing number of school choice fiscal impact studies that demonstrate very small costs and in many cases very substantial savings from school choice programs. For a comprehensive assessment of most of these programs, see Susan L. Aud, *Education by the Numbers: The Fiscal Effect of School Choice Programs, 1990–2006,* (Indianapolis: Milton and Rose D. Friedman Foundation, 2007).

82. See Coulson, *Market Education,* and "How Markets Affect Quality."

83. David Kahneman and Amos Tversky, "Prospect Theory: An Analysis of Decision under Risk," *Econometrica* 47 (1979): 263–91. See also David Kahneman and Amos Tversky, "Choices, Values, and Frames," *American Psychologist* 39 (1984): 341–50.

84. For a discussion of how incremental policy victories are beneficial to the success of social movements for reform, see Goss.

85. This analysis was conducted by the author using data on existing school choice programs found on the Milton and Rose D. Friedman Foundation and the Alliance for School Choice websites.

86. Janet R. Beales and Thomas F. Bertonneau,

"Do Private Schools Serve Difficult-to-Educate Stu-dents?" Mackinac Center for Public Policy, October 1997, http://www.mackinac.org/article.aspx?ID=982.

87. For evidence of parental interest in academic quality and competence as evaluators see Coulson, Market Education, p. 260, and Caroline M. Hoxby "If Families Matter Most," in *A Primer on America's Schools*, ed. Terry M. Moe (Stanford, CA: Hoover Institution Press, 2001), p. 117.

88. Richard D. Kahlenberg, "Socioeconomic School Integration through Public School Choice: A Progressive Alternative to Vouchers," *Howard Law Journal* (Winter 2002): 7.

89. Peter Relic, "Independent Perspective: Independence, A Concerted Effort," *Independent School,* Spring 2001.

Appendix A: How the Public Education Tax Credit Act Works

The Public Education Tax Credit Act allows all taxpayers, individual and corporate, to claim education tax credits for direct payment of educational expenses and for contributions to organizations that provide educational scholarships to lower-income families. Taxpayers can claim these credits against their state income, sales, and local property taxes where these are applicable.

All education providers—government, religious, or secular—constitute public education because all serve the public by educating children. Expanding the embrace of "public" education is an overdue recognition of educational reality, not political semantics. This model legislation presents a more effective way of fulfilling the ideals of public education, by ensuring that all families have the means to choose their children's schools from a diverse market of education providers.

The act is designed to provide universal access to the educational marketplace, not to create unnecessary dependence on third-party education funding or government programs. It therefore limits access of higher-income individuals to the scholarships funded by donation tax credits and phases out personal-use credits at the highest income levels. All individuals, regardless of income, can claim credits for education donations.

This proposal is the most comprehensive and broad-based tax credit model legislation yet developed. It offers the strongest prospects for creating a public education system that is dynamic, productive, and driven by freedom rather than coercion. Although this model tax credit legislation combines many aspects of previous proposals, it breaks new ground in the following five crucial respects.

1. Taxpayers are allowed to take credits against all three primary sources of non–federal government revenue: state income taxes, state sales taxes, and property taxes. This will ensure that the tax liabilities are sufficient to underwrite universal educational freedom.

2. The program is not capped at an arbitrary dollar amount. Each child is eligible to receive tax-credit-derived funds up to an amount that is less than current per pupil spending in government schools. Taxpayers may donate all of their tax liability for education; the total amount will be limited by the needs of each scholarship organization, which must use the funds for scholarships based on need and return any funds in excess of a 25 percent reserve. Therefore, money will be saved—as is the case in current choice programs—with each student's switch from the government system to the tax credit system.

3. Scholarship eligibility is not capped at an arbitrary income level. Families can secure scholarship assist-ance on a sliding scale relative to their tax liability. As family income increases, so does the tax liability against which it can claim personal-use credits. And as this personal-use credit increases, the amount of scholarship funds for which they are eligible decreases correspondingly.

Every family will have a "child credit cap" for each child, with the amount varying by family income. For example, say one family's child credit cap is $3,000 and they have one child. If that family pays enough taxes to claim $1,000 in personal-use credits, then it is eligible to use up to $2,000 in scholarship funds derived from donation tax credits. If it can claim $2,000 in personal-use credits, it can use only $1,000 in scholarship funds.

This formula will ensure that there is no coverage gap or unfair penalty for middle-class families who are able to pay for a significant portion of their education expenses but still need assistance.

4. The tax credits cover all education expenses, not just tuition. This aspect of the legislation ensures that parents have the greatest flexibility in choosing the best education possible for their child. It will enable the use and encourage the development of educational services such as distance learning, tutoring, and education support networks such as those for home schooling. It will produce the most dynamic education market choice for families possible.

5. Anyone can directly donate money for the education of a child. Grandparents, uncles and aunts, other relatives or friends, and even businesses can all pitch in together to help educate a child. This provision will ensure that friends and families take responsibility for a child's education before strangers do, helping to strengthen family and community bonds.

Although the concepts presented here are similar to ones contained in other model legislation and existing law, a number of innovations may require additional explanation. The extensive endnotes explain important provisions in the model legislation and are crucial to understanding the legislation.

The legislation can appear more complicated than it is, and the need to spell out in technical detail all provisions can make it difficult to see the big picture. The examples below show how the act would work for a variety of families and businesses. Two short scenarios and a few longer examples highlight the flexibility and comprehensive coverage of the Public Education Tax Credit Act.

Lower-income family—short example. Nancy Williams just moved to a new city to look for work. She found a job right away but isn't earning much money, doesn't have a partner, and has no family in the area. The biggest worry for Nancy is her son, John, who's in the sixth grade and not doing well. John is getting in trouble at school and falling behind academically.

Nancy knows she has to get John out of the failing school he's assigned to but can't imagine how she would pay for tuition, even at the Catholic school down the street which costs only $2,500. Luckily, Nancy's neighbor tells her about a scholarship organization that helps out with his daughter's tuition.

Nancy calls the school the next day at lunch, and they tell her that she clearly qualifies to get John a scholarship. The scholarship organization will cover $2,340—all but $160 for the year. She knows that saving even that small portion of the tuition will take an effort, but the scholarship organization promises to help her with financial planning. Nancy is relieved to know that John will be in a safe, disciplined environment next year with a solid academic reputation, and she's proud to be supporting her son's education as much as she can right now.

Middle-Income Family—Short Example. Mr. and Mrs. Jones have a four-year-old daughter, Emily, and an income of $45,000. They have been thinking about preschool and would love to send her to a great Montessori school down the street, but the $4,800 tuition is out of their price range.

The Joneses started asking some friends with older kids about preschool options, and one couple told them that they should take a look at the state education tax credit program, which lets them keep their money to spend on education instead of sending it to the state in taxes. It sounded too good to be true, but Mr. Jones looked at an information page online and saw that they could use the $3,100 they owed in combined state income and local property taxes to help pay for the Montessori school.

That weekend, the Joneses took a look at their budget and saw that they could pay the $1,700 left on the tuition after claiming their tax credits if they made some changes to their budget. The Joneses quickly signed Emily up for the next year and started telling all of their friends about the great tax credit program that let them control their own education funds.

Lower-Income Family. Mr. and Mrs. Smith have one child, Joe, and a family income of $27,000. They live in a state that spends $10,000 per student in the government system (the national average). Because they qualify for the Free or Reduced-Price Lunch Program, they can use Public Education Tax Credits worth 80 percent of government school per-student spending, which means $8,000 (that limit is called the "child credit cap").

During the summer, the Smiths aren't sure what they are going to do, but they know they need to get Joe into a better school. The one he's assigned to just isn't working for him. They've talked to friends and neighbors and have heard about a state program to help parents do exactly what they want to: choose another school for Joe. When they ask friends

from their church, they discover that it actually runs a scholarship program to help parents choose a school. The church established its own scholarship organization a few years back by filing an application with the state, an easy process since it was already a registered nonprofit. The Smiths get some pamphlets the next Sunday and set up an appointment with an administrator to talk about their options.

At the meeting, Sue, from the church's scholarship organization, explains the program and gets them started. The Smiths have a small state sales tax credit that they can claim for education expenses. But that only comes to about $500 for the year. They are going to need a lot of help to get Joe into a better school.

Sue tells the Smiths that they can use up to $8,000 total under the tax credit program. Of that amount, they can get $7,500 in scholarships and claim the remaining $500 in credits from their own tax liability. Sue says that the church will be happy to give Joe scholarship money to go to a good school, but she reminds them to ask relatives if they can help out too. She explains that Joe's grandparents or uncle, or even a family friend or employer, can help pay and claim tax credits for Joe's education expenses (thanks to the credit, their contributions may cost them little or nothing).

Sue gives the Smiths a few forms and helps fill them out. She also gives them a list of schools in their area to ask around about. Then she sets up another meeting so they can see how much scholarship money Joe will need to go to the school his parents choose.

At their next meeting, the Smiths tell Sue that Apple Elementary looked great, and that Joe's grandparents filled out their form to claim $1,000 in tax credits on their taxes that year and write a check to the school. Since Apple Elementary costs $3,000, Sue files the church scholarship application for $1,500, along with a $500 loan that will let Mr. and Mrs. Smith pay their share up front, and tells them that they will have their confirmation letter in a week. The Smiths file their application with Apple Elementary and hear back in a few weeks that Joe has been accepted for the fall.

Middle-Income Family. Mr. and Mrs. Johnson have two children, Jack and Jill, and a family income of $58,000. They live in a state that spends $10,000 per student in the government system. Because their income is more than 1.5 times the Free or Reduced-Price Lunch Program but less than 3 times that limit, they can use Public Education Tax Credits worth 50 percent of government school per-student spending, which means $5,000 for Jack and $5,000 for Jill (the child credit cap).

During the summer, the Johnsons made a tough decision. Their daughter Jill is doing well at the government school she's assigned to, but Jack is really struggling. They know Jack needs to go to a school that has more structure and discipline but don't know how they can pay for tuition at Maple Middle School, a school they know has done wonders with a boy who used to play soccer with Jack.

Mrs. Johnson remembers reading something in the newspaper about a state program that gives parents a tax break to help pay for education expenses, just like their mortgage tax deduction helps them with house payments. Mrs. Johnson calls Maple Middle School to ask about applying to the school and to find out more about the education tax break. She sets up a meeting for the next week. In the meantime, Mrs. Johnson looks at the Public Education Tax Credit information website the man at the school recommended.

The Johnsons find that they can claim a sizeable amount of money in tax credits. Between their property taxes that fund local schools, sales taxes, and income taxes, they can claim $2,000. Mrs. Johnson also finds out that her employer has an employee donation policy and will pay $2,500 for each child of every employee—because they can adjust their tax payments and claim a tax credit for the donation, it only costs them a little paperwork. Also, Mr. and Mrs. Johnson discover they can adjust their state income tax withholding according to the state sales and income tax credits they will claim at the end of the year. That way they won't have to pay everything out-of-pocket before they file their return.

The Johnsons are excited but still a bit concerned because Maple Middle School costs $5,500 and they only have $4,500 in credits so far. They speak with the school admissions advisor, and he informs them that the school has a scholarship fund supported by former students and community businesses which can be used to help fill the gap. The Johnsons are eligible for up to $3,000 in scholarship funds, because their tax liability is only $2,000 and their child credit cap for each child is $5,000. Since Mrs. Johnson's employer gave them $2,500, they can use $500 in scholarship funds. The Johnsons and the admissions advisor work out a plan whereby the school scholarship fund will give Jack $500 and the Johnsons will pay the last $500 out of their own pocket without a credit.

The school advisor gives them a few papers to fill out, and the Johnsons rest easy knowing that Jack will be in a school that's a better fit this year. And they now know they can get more help for Jill if she needs to switch schools later on. Mrs. Johnson's employer would donate another $2,500 in credits if Jill needed to find another school, and they would be eligible to get Jill another $2,500 in scholarship funds since they used all of their personal tax credits on Jack. The school advisor assures them that they can work out a combination of scholarships and payments if they find that Maple Middle School or Oak High School is where Jill would do best.

Upper-Income Family. Mr. and Mrs. Garcia have one child, Isabel, and a family income of $200,000. They live in a state that spends $10,000 per student in the government system. Because their income is more than six times the Free or Reduced-Price Lunch Program, they can't use any Public Education Tax Credits for Isabel. But they can claim credits on 100 percent of their state tax liability for donating money directly to another family or to a scholarship fund.

Mr. Garcia heard about the state education tax credit program on a radio news program and talked about it with a friend and business colleague over lunch. His friend said he'd learned about it through his accountant and business manager, who recommended it as a good option for his business and for him personally—it's a great way to help people and donate money instead of letting it be wasted by the government school bureaucracy, he said.

Mr. and Mrs. Garcia spoke about it that night, and the next day Mr. Garcia met with his accountant. The Garcias can claim credits on $22,000 of sales taxes, property taxes that fund local schools, and income taxes. They decided they want to divide the credits among a few different scholarship organizations: $15,000 would go to a scholarship organization that works with schools that have tremendous success raising achievement levels of children from lower-income families in the city; $5,000 would go to a scholarship organization at a school that specializes in science and math (since Mr. Garcia is an architect and Mrs. Garcia is a biologist); and $2,000 would go to the scholarship organization to help families at the school where Isabel is enrolled.

The Garcias are excited to be able to spend their money directly on schools that work and the kinds of education that they personally find important. Finally, with the Public Education Tax Credit, they are able to see their money make a difference rather than send it to disappear in the bureaucratic maze of the government school system.

Business. The scenario for businesses is much the same as the example for a high-income family, because most businesses are S-Corps or LLCs, where business income is in many ways equivalent to individual income. All corporations are allowed to claim tax credits for donations to scholarship organizations and expenses incurred in support of a qualifying student's education expenses.

The Public Education Tax Credit Act is model legislation that doesn't address each state's specific taxes. Businesses should, however, be allowed to claim tax credits against any state business taxes in addition to property and income taxes. In addition, businesses could donate directly to employees or other parents needing aid for the education of their eligible children.

Appendix B: The Public Education Tax Credit Act (Donation and Family-Use Education Tax Credits)

Summary: This legislation creates an education tax credit for direct payment of educational expenses and for contributions to organizations that provide educational scholarships to eligible students in order to allow all parents to choose the best education for their children.

Section 1: Title

The Public Education Tax Credit Act[1]

Section 2: Definitions

A) "Program" means the program established by the Public Education Tax Credit Act.

B) "Department" means the state Department of Revenue.

C) "Educational expenses" means tuition at a qualifying school; transportation related to educational activities; tutoring services; educational association membership or testing fees; and educational materials such as books, school supplies, and academic lessons and curricula. Educational expenses for students taught in a nonpublic home-based program do not include expenses for tutoring or academic lessons if the parent conducts them. Educational expenses for a student who is enrolled in a public elementary and/or secondary school in our state, but who is not a resident of that school district include only transportation and out-of-district tuition expenses. Educational expenses do not include athletic fees or expenses.[2]

D) "Eligible student" means a student who:

1) is a resident of the state no less than age 5, is no more than age 18, and has not graduated from high school; and

2) was eligible to attend a government school in a preceding semester or is starting school for the first time, and is not enrolled in a public elementary or secondary school;[3] or

3) is not a resident of the school district of the public school in which the student is enrolled.

The eligible student must otherwise be in compliance with state education law.[4] Notwithstanding the above, the student for whom someone is claiming a credit against property taxes must be a resident of the school district in which that person is claiming the credit.[5]

E) "Scholarship organization" means an organization that receives donations from taxpayers and gives educational scholarships to eligible students.

F) "Parent" includes a guardian, custodian, or other person with authority to act on behalf of the student.

G) "Educational scholarships" means grants to students to cover part or all of the educational expenses of an eligible student.

H) "Funding benchmark" means the dollar amount equal to the average per-pupil expenditures for public schools from both state and local government sources during the year of enactment, with this amount adjusted each year in the same manner that brackets are adjusted in Section 1(f) of the Internal Revenue Code.

I) "Child credit cap" means the percentage of the funding benchmark a family is eligible to use for each eligible student as determined in Section 5.

J) "Government school" means a public government school as defined in Section x of state law.

Section 3: Basic Elements of the Public Education Tax Credit Act[6]

A) Individuals and corporations may claim a Public Education Tax Credit (donation) against relevant taxes detailed in Section 4 by contributing to scholarship organizations or by contributing directly to the payment of an eligible student's educational expenses.[7]

B) Parents may claim a separate Public Education Tax Credit (personal use) for the educational expenses of each child who is an eligible student.

C) Public Education Tax Credits are nonrefundable.[8]

D) Scholarship organizations may solicit contributions from individuals and corporations and provide educational scholarships to eligible students.

E) A corporate taxpayer, an individual taxpayer, or a married couple filing jointly may carry forward unused Public Education Tax Credits (for donation and personal use) for three years.[9]

F) For corporations, the amount of the Public Education Tax Credit (donation) shall equal any contributions to scholarship organizations during the taxable year for which the credit is claimed, up to 100 percent of the taxpayer's tax liability.[10]

G) For parents, the total amount of the Public Education Tax Credit (personal use) claimed for their eligible children shall equal no more than their total direct payments for educational expenses for all of their dependent eligible children, up to the child credit cap for each child or their total applicable tax liability, whichever is less, during the taxable year for which the credit is claimed.

H) For parents, the total amount of the funds used for their eligible children which is derived from scholarship organizations cannot exceed the total amount of their child credit caps minus their total tax liability against which a Public Education Tax Credit can apply (total amount available for personal use).

I) For an individual taxpayer or a married couple filing jointly, the amount of the Public Education Tax Credit claimed shall equal the total direct payments for educational expenses of eligible students (personal use credit) plus any contributions to scholarship organizations (donation credit) during the taxable year for which the credit is claimed, up to 100 percent of the taxpayer's tax liability.[11]

Section 4: Application of Tax Credits to Income, Sales, and Property Taxes[12]

A) Tax credits may be claimed against a taxpayer's full income tax liability in accordance with Sections 3 and 5.

B) Tax credits may be claimed against a person's full sales tax liability in accordance with Sections 3 and 5. The state sales tax liabilities against which individuals may claim credits will be determined according to tables produced by the Internal Revenue Service in accordance with the Tax Relief and Health Care Act of 2006, *Publication 600, State and Local General Sales Taxes* for the most recent year available.[13]

C) Tax credits may be claimed against a taxpayer's full property tax liability,[14] in accordance with Sections 3 and 5, to the extent that it derives from property taxes imposed for school operating purposes but not from property taxes levied for bonded indebtedness or payments pursuant to lease-purchase agreements for capital construction.[15] The eligible student for whom the person is claiming the credit must be a resident of the school district in which the person is claiming the credit.

1) The department shall develop forms for administering and claiming the credit for property tax purposes. The person or person's agent must use these forms to claim the credit. Tax collecting entities shall make the forms available at offices and locations where tax information is distributed.
2) The person shall claim the credit for

property tax purposes at the time payment is made and shall furnish the collecting entity a completed form, a copy of the receipt, and payment for the amount due, if any, after application of the credit.

Section 5: Determining the Child Credit Cap[16]

A) An eligible student's family can use a combination of Public Education Tax Credits up to the total amount of the child credit cap for each dependent eligible student.[17]

B) Notwithstanding the above, an eligible student's family can use educational scholarships derived from Public Education Tax Credit donations that amount to no more than the total of all child credit caps for all dependent eligible students minus the family's total tax liability for which a tax credit is available during the taxable year in which the scholarship is claimed.[18]

C) The child credit cap is:[19]

1) 80 percent of the funding benchmark for each dependent eligible student in a family with a current-year taxable income not exceeding the family size and income standards used to qualify for a reduced-price lunch under the national Free or Reduced-Price Lunch Program (42 USC Section 1751 et seq.).
2) 70 percent of the funding benchmark for each dependent eligible student in a family with a current-year taxable income not exceeding 1.5 times the family size and income standard used to qualify for a reduced-price lunch under the national Free or Reduced-Price Lunch Program (42 USC Section 1751 et seq.).
3) 50 percent of the funding benchmark for each dependent eligible student in a family with a current-year taxable income not exceeding *3.0 times* the family size and income standard used to qualify for a reduced-price lunch under the national Free or Reduced-Price Lunch Program (42 USC Section 1751 et seq.).[20]
4) 25 percent of the funding benchmark for each dependent eligible student in a family with a current-year taxable income not exceeding 6.0 times the family size and income standard used to qualify for a reduced-price lunch under the national Free or Reduced-Price Lunch Program (42 USC Section 1751 et seq.).
5) 0 percent of the funding benchmark for each dependent eligible student in a family with a current-year taxable income that is *more than 6.0 times* the family size and income standard used to qualify for a reduced-price lunch under the national Free or Reduced-Price Lunch Program (42 USC Section 1751 et seq.). These families *are* still able to claim credit for donations to scholarship organizations or direct payment of educational expenses for nondependent eligible children.[21]

D) Notwithstanding the above, each family that makes use of a combination of both donation and personal use credits must ensure that the total used does not exceed the total in child credit caps for which they are eligible according to the guidelines in section 5C above. If a family overestimates the scholarship funds for which they are eligible, the taxpayer must adjust downward the personal tax credit claimed on their income tax return for the current year.

Section 6: Responsibilities of Parents Claiming or Using Public Education Tax Credits[22]

A) Parents may claim the Public Education Tax Credit only for expenses they actually paid.

B) On a form prescribed by the department, parents will provide a detailed listing of the educational expenses for each child for whom they claim or have used a tax credit. They will attach to the form all receipts necessary to document these expenses.

C) On a form prescribed by the department,

parents will provide a detailed listing of all taxpayers claiming tax credits for the educational expenses of the parents' dependent children and/or all scholarship organizations providing funds for the educational expenses for each dependent child. For each taxpayer and/or scholarship organization, parents will list the full name, address, total funds provided, and date of funding.[23]

Section 7: Responsibilities of Taxpayers Claiming Tax Credits

A) On a form prescribed by the department, taxpayers will provide a detailed listing of the scholarship organization(s), child or children, and family or families to which they provided funds. In each case, taxpayers will list the full name, address, total funds provided, and date of funding.

Section 8: Responsibilities of Scholarship Organizations[24]

A) Each scholarship organization shall:[25]

1) notify the department of its intent to provide educational scholarships to eligible students;
2) demonstrate to the department that it has been granted exemption from federal income tax as an organization described in Section 501(c)(3) of the Internal Revenue Code;
3) distribute periodic scholarship payments to parents or education providers serving specified parents for the specified educational expenses;
4) provide a department-approved receipt to taxpayers for contributions made to the organization;
5) ensure that at least 85 percent of revenue from donations is spent on educational scholarships, and that all revenue from interest or investments is spent on educational scholarships;
6) verify annually by written and signed statement from each family or guardian the total scholarship amount for which each child is eligible according to Section 5;
7) demonstrate its financial accountability by:

a. submitting a financial information report for the organization, conducted by the certified public accountant, that complies with uniform financial accounting standards established by the department; and
b. having the auditor certify that the report is free of material misstatements.

8) file with the department prior to the start of the school year financial information that demonstrates the financial viability of the scholarship organization if it is to receive donations of $50,000 or more during the school year.[26]

B) Notwithstanding the above, each scholarship organization may keep no more than 25 percent of total revenue from the previous fiscal year unused in a reserve fund. Any unused revenue in excess of this amount must be remitted to the taxpayer on or before a date one month prior to the tax filing deadline.[27]

Section 9: Responsibilities of the Department of Revenue[28]

A) The department shall develop a standardized form for education service providers to document the amount paid by a parent for qualified educational expenses.

B) The department shall ensure that parents are aware of the Public Education Tax Credit and that all procedures for claiming the credit are easy to follow.

C) The department shall establish guidelines for parents to easily assign their tax credit to their student's qualifying school and to easily adjust their state income tax withholding to reflect tax credit claims.[29]

D) The department shall require all scholarship organizations to register and annually report the information the department

needs to carry out its responsibilities.

E) The department shall adopt rules and procedures consistent with this act as necessary to implement the Public Education Tax Credit Act.

F) The department shall annually report to the legislature on the number of parents claiming the tax credit, the dollar amount of the credits claimed by parents, the number of schools accepting eligible students who received a tax credit or educational scholarship, the number of scholarship organizations, the number and dollar amount of contributions to a scholarship organization, and the number and dollar amount of educational scholarships given to eligible students.

G) The department shall have the authority to conduct either a financial review or audit of a scholarship organization if possessing evidence of fraud.

H) The department may bar a scholarship organization from participating in the program if the department establishes that the organization has intentionally and substantially failed to comply with the requirements in Section 8.

I) If the department decides to bar a scholarship organization from the program, it shall notify affected scholarship students and their parents of this decision as quickly as possible.

J) The department shall allow a taxpayer to divert a prorated amount of state income tax withholdings to a scholarship organization of the taxpayer's choice up to the maximum credit allowed by law, including carry-over credits. The department shall have the authority to develop a procedure to facilitate this process.[30]

K) A qualifying school is autonomous and not an agent of the state or federal government. Neither the department nor any other state agency may regulate the educational program of a provider of educational services that accepts payments from eligible students under this program. The creation of the Public Education Tax Credit program does not expand the regulatory authority of the state, its officers, or any local school district to impose any additional regulation on education service providers.

Section 10: Effective Date

The Public Education Tax Credit may first be claimed in the next calendar year.[31]

Notes on the Public Education Tax Credit Act

These notes are intended to provide guidance to legislators on some of the key policy questions they will encounter in drafting and debating school choice tax credit legislation.

1. The model legislation has been drafted to make the tax credits for tuition and scholarship assistance immediately available in the next tax year. This may represent too great a transition for the state to make at one time. To increase competitive density and help maintain fiscal neutrality, both the personal use and donation credits can be phased in by age group, starting with the youngest children. It is important to use students' age rather than school grade as a phase-in metric, since some schools do not use a rigid age-based grading system.

2. The definition of "educational expenses" has been left intentionally broad. Parents should be allowed to choose the combination of educational products and services that best serves their children. Limiting education tax credits to tuition at a traditional brick-and-mortar school significantly compromises consumer freedom, inhibiting the use of alternative educational services and the development of a truly innovative education market. It is particularly important to allow room for, rather than to discourage, the further development of educational services such as distance learning, tutoring, and education support networks such as those for home schooling. Legislators should clearly define categories of expenses that they wish to allow because experience has shown that some hostile revenue agencies have disallowed legitimate homeschooling expenses such as music and language lessons. When enumerating such legitimate expenditure categories, the legislation should note that such lists are not meant to be exclusive, using language

such as "eligible expenses include, but are not limited to, the following...."

This model legislation allows students to use a scholarship to attend a government school outside their district as well as a nongovernment school. Parents should have the widest possible array of choices so that they can choose the school that best meets their child's needs. Making sure parents can choose either a public or nongovernment school is not only the right policy but also the best legal strategy. The U.S. Supreme Court and various state courts have all cited this broad array of choices as an important part of the reason they have found school choice programs constitutional. In addition to ruling that tax credits are not "public money," the courts have reasoned that these tax credit and scholarship programs are not an inappropriate subsidy of religious institutions because the purpose was secular (the education of children) and the parents were given many options including government schools, charter schools, nonpublic secular schools, and nonpublic religious schools. If a state already has open enrollment or some other form of government school choice, then this legislation should be made consistent with the existing program. In fact, if a state already has a broad array of school choice options available to parents, then a state may be able to add an option for nongovernment schools without encountering constitutional questions.

3. Provisions that allow tax credit donations to government schools are typically viewed as a political compromise necessary for passing school choice legislation, but it is a counter-productive policy feature. Adding additional private funding streams to the government system through tax credits reduces the beneficial competition between the sectors, exacerbates the existing financial discrimination against independent schooling, and thereby reduces the benefits of the program to the educational system.

If a government school compromise must be made, it could include a provision allowing parents of children in government schools to opt for tutoring services provided *outside* the government system *in place of* class time for the particular subject and claim tax credits for those expenses. In other words, parents would be authorized by the legislation to have their children opt out of a subject, such as mathematics, and provide for their education in math through an independent school or tutoring service such as the increasingly popular Kumon chain. This approach expands options for children in government schools without sending additional funds directly to those schools. The schools will, of course, benefit from reduced class sizes in those subjects with which parents are dissatisfied. Parents in turn will be introduced to the services offered by independent education providers and to the concept of being education consumers with expanded options.

4. This provision is meant to allow the greatest flexibility possible in a child's education while requiring that parents adhere to state laws regarding compulsory education and homeschooling. The definition for an eligible student in this model legislation includes students already enrolled in government schools outside their districts and in nongovernment schools. As a result, some families presently sending their children to schools of their choice will qualify for Public Education Tax Credits. This may reduce initial savings from the program. As more former or prospective public-school students opt for private education services, however, the program will become a large source of net savings to taxpayers. A fiscal analysis demonstrating these savings is forthcoming.

5. Note that this requires that the property tax credit claimed must go to a child who *resides* in the school district where the property tax credit is claimed. This will ensure that the district that forgoes the tax revenue will be the same one that benefits from a student transfer out of the government system. The child using the credit funds can attend school at any location.

6. Government school spending should be tied to enrollment and calculated on a per-pupil basis so that government schools are funded only for the children they actually enroll. In states where this is not the case, legislators should consider passing legislation for this purpose first or incorporating such changes into the Public Education Tax Credit Act. This will prevent what could become a rapid build-up of per-pupil funding to astronomical levels in the government system as kids leave for the private sector, which would put independent schools at an even greater disadvantage. In the event of such a process, however, the rapidly building independent education sector and the scandal of massively increased funding for decreasing student populations should provide political leverage for changes to the education funding formula.

7. To create the most robust education market possible, all taxpayers must be allowed to pay for a student's education directly. Extended family members, friends, and employers may thereby assist parents by directly paying for some or all of the student's educational expenses rather than routing such funds through scholarship organizations. This flexibility in funding streams will ensure a strong, personal network of support for education and foster widespread community involvement in education. Organizations such as community groups and churches will be able to act as scholarship organizations, and individual members will be able to support fellow members directly as well.

8. Tax credit refundability is a tempting method of providing more education funds to low-income families who lack a tax liability sufficient to cover their educational costs, but this mechanism makes a tax credit bill vulnerable to the same kinds of legal challenges that have successfully been used to overturn many voucher programs. A key legal strength of education tax credits is their legal status as private, rather than public funds. Numerous state and federal court decisions have ruled that tax credits do not constitute "public funds" and therefore cannot violate any of the numerous state constitutional provisions prohibiting the use of government funds at religious schools. This bill provides for the support of low-income children through tax credits donated to scholarship organizations as well as for direct support of children by family members, friends, and employers.

9. Individual incomes and corporate profits are often quite volatile. As a result, taxpayers may not have a liability against which to claim a credit in certain years. Yet a student's need for tuition payments or scholarship assistance is likely to be relatively constant. Therefore, taxpayers should be allowed to carry forward unused tax credits into other tax years to ensure that parents eventually receive the financial assistance for their child's tuition and that contributors have an incentive to continue contributing to scholarship organizations even in years when they have no tax liability.

10. Some tax credit proposals cap the total spending for the program at a dollar amount, and others limit the percentage of tax liability that can be claimed. However, because some taxpayers will be eager to participate in the education tax credit program and some will not wish to participate at all, it is essential to allow those who are interested in participating to claim all of their tax liability in order to provide a ready and reliable flow of funds. The total cost of the program will instead be controlled through the child credit cap defined in Section 5(C), as well as by the stipulation that scholarship organizations may not carry a reserve account larger than 25 percent of the scholarships awarded in the past year.

11. If a family has an income tax liability greater than the amount they claim for any dependent children, they may claim the balance in donation tax credits to scholarship organizations or in direct payment of education expenses for eligible students who are not claimed as dependents. This allows higher-income families to support their own child's education and still support lower-income children through donation tax credits. See note 10 above for fiscal and other concerns.

12. There is often a wide range of additional state taxes specific to businesses. These taxes should be added to the bill language in each state to allow businesses to claim credits against them.

13. See http://www.irs.gov/publications/p600/index.html for the main site, and for the 2006 tables see http://www.irs.gov/pub/irs-pdf/p600. pdf.

14. Property taxes can be complicated and vary greatly across the country and within states. An alternative approach to instituting a state property tax credit is to pass state legislation allowing municipalities to enact property tax credits of their own. This would allow local and county governments to control revenue that is raised locally, and thus reduce the complexity that can compound at the state level.

15. In some states, most notably Pennsylvania where the courts have prohibited tax breaks for any subset of taxpayers, "uniformity" clauses in the state constitution can make constructing a viable tax credit program more difficult. Such interpretations require that all individual taxpayers be taxed at the same rate, not simply that they are all able to take advantage of a tax benefit. This means that tax credits and deductions for individuals are prohibited. In Pennsylvania, the state Supreme Court has ruled that tax credits and deductions for any subset of taxpayers are unconstitutional but allows these for corporations (Pennsylvania has a thriving corporate donation tax credit program). Other states have similar restrictions on the taxation of property, thus making property tax credits more difficult to implement.

One way to address these "uniformity" restrictions is to provide automatic tax credits to all individual taxpayers, at the same rate, for education expenses. The tax credit can be claimed by tax filers who submit receipts of their education expenses. The credit allocated to taxpayers who do not claim the credit for expenditures listed in their tax return will be automatically deposited by the state into an "Education Trust Fund," created by the same statute, dedicated to funding the government education system. A check box might be used on state tax forms requiring the taxpayer to check either "Education Trust Fund" or "Other Educational Expenses," with the latter requiring the submission of receipts for donations or tuition against which to claim the credit. A similar system could be established to avoid uniformity problems with property tax credits.

Choice provisions with solid court precedent in support of their constitutionality are often challenged as a matter of course by choice opponents. Any program like the one described here will likely be challenged on the grounds of uniformity and other provisions. This approach has not been tried in any state, and its constitutionality under a strict "uniformity" precedent therefore remains an open question. Its constitutionality does, however,

appear probable under such restrictive rulings.

16. This legislation addresses variations in family need only in terms of income. Many school choice bills in recent years have addressed the more complicated, personal, and specific requirements of special-needs students. The programs, such as Florida's John M. McKay Scholarship for Students with Disabilities (Title XVI, Chapter 229.05371), require that the special-needs student have an Individualized Education Plan and have been enrolled in government school in the prior year. Because of these additional complications and the special character of the targeted student population, we recommend drafting separate legislation to address the needs of students with disabilities.

17. This provision ensures that a family can claim no more than the child credit cap allowed under the program, regardless of any combination of scholarships or personal use tax credits.

18. This provision ensures that families will only be able to use scholarships to fill the gap between what they can pay through their own funds and the total allowed child credit cap. This will prevent unwarranted "double-dipping" by families claiming tax credits on their own liabilities and also using scholarships. Because families are the consumers of educational services and the unit that qualifies for the benefits of various tax credits, it is most efficient and effective for each family to determine and document its own eligibility. A family's eligibility is determined by family income and the number of eligible dependent students. Family income determines the level of the child credit cap and, therefore, the dollar amount they are able to use for each dependent eligible student. Any amount left between their own tax liability and the total child credit cap is the scholarship amount for which they are eligible.

The goal of this legislation is to give all parents the opportunity to send their children to the schools that best meet their needs, regardless of family income. The need for scholarship assistance is obviously greatest among low-income families. This requirement ensures that scholarship assistance is targeted to the families who need it. Direct payment of educational costs by parents is the ideal funding mechanism, associated with greater school efficiency and responsiveness, and so third party payment should be limited to an as-needed basis.

19. Most tax credit legislation uses a total dollar cap on the donations that can be made. In contrast, this model legislation caps the total benefit on a per-child basis, using a means-tested percentage of per-pupil spending in government schools. This is more equitable because it adjusts the cap according to both family need and state budget considerations, allows all taxpayers the opportunity to donate as much of their tax liability as they desire, and eliminates the need for an arbitrary cap on the dollar amount of the tax credit program. Because the credit cap is always less than per-pupil spending in government schools, it also ensures that taxpayers are saving money on education whenever parents use tax credits to switch their child from public to independent education. Using a percentage of per-pupil spending in government schools as the basis of the credit cap also helps reveal the falsehood of claims that choice programs drain money from government schools.

The exact amount of the tax benefit and the income cut-offs given here is a best estimate of how to balance the concern with eliminating the tax penalty incurred when a family sends their child to an independent school and the concern with ensuring that parents directly support their child's education with the minimum tax benefit possible. Many choice supporters will come to different conclusions depending on their concerns and political necessities.

20. In the interest of keeping costs down and encouraging direct, non-tax-credit parental financial contributions to their child's education, and also in recognition of the lower average cost of private education, middle-class families are limited by a child credit cap of only 50 percent of the funding benchmark. Individuals take the most care with decisions that involve personal direct payments. The relatively modest child credit cap will therefore strengthen consumer responsibility. The child credit cap for family use is phased out at higher income levels, first reduced and then eliminated. In recognition of the greater needs of children in lower-income families, the larger child credit cap of 70–80 percent is warranted.

The Free and Reduced-Price Lunch standard is used here for several reasons: 1) the program is familiar to both schools and many parents; 2) the verification procedures are simple and familiar to school administrators; 3) the income guidelines are used for a number of existing state and federal programs; 4) the federal government annually adjusts the income guidelines; and 5) the income guidelines are adjusted for family size.

The 50 percent credit cap for the middle-class makes sense because states *on average* cover about one-half of per-pupil education spending. This means that even if state taxes alone are tapped for the credit program, switches from government to independent schools will be approximately revenue-neutral on average for the state. Since local dollars are retained when a student leaves the government school system, school districts will have more money per pupil for each family that opts for private providers. These savings at the local level will substantially ease pressure for increased spending at the state level and will help offset any temporary

losses due to private-school families claiming tax credits and variations in the state-funded portion of per-pupil spending across districts. Determining the credit cap through a single function of income that would produce a continuous and decreasing curve would provide a more concise but potentially more difficult approach to means-testing.

Concern over the fiscal impact of tax credits used for children already in independent schools should be addressed first by reducing the credit cap amount across the board rather than excluding families already in the private sector. This is first a matter of fairness, as these families deserve education tax benefits as much as anyone. It is also a matter of coalitional politics, as families already in the independent education sector are the strongest base of support for school choice and will help ensure the program's success and defense in early years. Cost could also be minimized and adjustment time maximized by phasing in the program according to the age of the child, as discussed in note 1.

21. This legislation should be considered a universal school choice program because all families will be ensured freedom of choice in education and allowed to participate in the program. Although it is recommended that this tax incentive for family consumption of education services be phased out entirely at higher income levels in order to reduce the financial impact of the program and encourage responsible consumption of education services, all families regardless of income are allowed to claim education tax credits for donations and direct payments for eligible nondependent children up to 100 percent of their tax liability. This will ensure that wealthy individuals with an interest in advancing the ideals of public education will be able to do so.

22. Unlawful behavior is an unfortunate but inevitable problem, and all laws are subject to some level of abuse. To discredit the program, choice opponents often portray abuse as peculiar to the school choice program, rather than as an unavoidable problem in a free society (and in conventional government schooling). The simple record keeping required here will reduce the temptation among criminals to abuse the program and will provide schools, taxpayers, and government officials with an easy method for resolving many questions and conflicts without the need for a full audit. Although ideally, it would be preferable to have no government-imposed record-keeping requirements, the real-world potential for abuse makes necessary some mechanism for dissuading and discovering such abuse. Record keeping that allows quick and comprehensive follow-up to any complaints will help preempt calls for tighter restrictions on consumer and producer freedom and help prevent the accumulation of burdensome regulations that are portrayed as attempts to eliminate program abuses.

23. Because families are the consumers of educational services and the unit that qualifies for the various tax credits, it is most efficient for each family to determine and document its own eligibility. Requiring families to list identifying information for any scholarships and donations for which tax credits were claimed will ensure that a simple and easily cross-referenced record is available in the event that fraud is alleged.

24. The model legislation requires the establishment of scholarship organizations to protect and inform scholarship recipients, frustrate attempts at fraud, and measure the effect of the program without heavy government regulation of private contributions and independent schools. Incentives for rigorous self-regulation are preferable to intrusive and often counterproductive government regulation.

25. Legislators and the public generally seek more regulation of programs directly funded by the government than of tax credit programs because, according to legal precedent and common perception, tax credits are private funds kept by taxpayers rather than public funds expended by governments. Markets are most effective when they can operate freely; however, insufficient accountability can produce situations that undermine public and legislative support for a program. Thus, this proposal recommends minimal state regulations for scholarship organizations and individual participants in the tax credit program. These regulations should, at most, reflect general state standards for nonprofits and the requirements for claiming other tax credits or deductions. These regulations should rely to the greatest extent possible on basic record keeping for reference in the event that fraud is suspected.

Some critics of school choice programs will demand that participating schools comply with all of the regulations placed on government schools in order to ensure "academic accountability" for taxpayers. The effect of such restrictions would be to either kill the program by diminishing school participation rates, or to eliminate its ability to produce market benefits by stifling specialization and the division of labor. Parental and taxpayer accountability and transparency are the most effective accountability provisions and these are ensured in the legislation—to a far greater extent than exists under current government monopoly school systems.

26. Surety bonds can be expensive or intrusive for some institutions, so the legislation allows these organizations to demonstrate by some other means that they have the financial wherewithal to fulfill their scholarship obligations. This might include personal guarantees, reserve accounts, or escrow accounts.

27. Because tax credits can be carried forward for up to three years, a person filing taxes early who is refunded a donation by a scholarship organization that is over its limit may attempt to donate the credit again the next year or include the amount in the total tax liability owed in the next year.

28. Substantial savings should result from this program, however if a fiscal analysis shows that the savings would be distributed unevenly between the state and local level, a savings-sharing provision could be included in the legislation to ensure that savings are enjoyed at by both state and local governments. One major component of other model bills has been left out of this legislation: mandated external program evaluation. Additional evidence that school choice results in greater student achievement and parental satisfaction at a lower cost per pupil is potentially helpful for encouraging program support. But such additional evidence will not likely prove decisive in expanding or reducing support after passage. The cost of the program will be easily determined through the state Department of Revenue. A mandate for studying program effectiveness imposes additional costs on the program while providing little or no data to support the effectiveness of the program during the crucial first years of implementation.

In addition, school choice programs need time for schools and market mechanisms to mature before the full benefits are seen. Premature evaluation may result in premature judgments of the program's effectiveness. The recent furor over the general absence of statistically significant academic gains in the Washington, D.C., voucher program after children had been enrolled in schools of choice for an average of only seven months is a case in point. (See Amit R. Paley and Theola Labbé, "Voucher Students Show Few Gains in First Year," *Washington Post,* June 22, 2007, B1.)

Furthermore, by requiring such studies the government would be imposing a de facto standardized test on the independent schools by defining the parameters of success rather than relying on the judgment of parents, taxpayers, and scholarship organizations. That is a dangerous precedent with which to begin a school choice program.

More important to the long-term survival of the program is the diverse and widespread participation of individuals, families, community associations, scholarship organizations, and businesses. Any additional state money would be better spent on advertising the existence of the program and publishing brief guides to individual and organizational involvement in the tax credit program. Academic institutions, state policy organizations, and other interested parties are likely to study the effects of the tax credit program without a state-mandated project.

29. Parents may wish to assign their anticipated Public Education Tax Credit to their child's qualifying school, which allows them to effectively pay part or all of their tuition in the fall by promising the tax credit to the school. The cash flow challenge is thus shifted from the family to the school (and, if necessary, schools would be able to borrow funds using the assigned tax credits as collateral). The department will therefore facilitate any such arrangements by providing the necessary guidelines and documentation.

30. The legislation allows the department to establish a mechanism that facilitates regular contributions from a taxpayer's income tax withholdings to a scholarship organization in anticipation of the taxpayer claiming a tax credit. This would likely encourage greater contributions to scholarship organizations.

31. It is fairly common for legislators to consider including severability clauses in new legislation. Legislators should make sure that if such clauses are included and exercised, the remaining legislation produces a program that is workable and achieves the original intent of the bill.

Acknowledgements

The general structure and much of the language for this model legislation was adapted from model legislation developed by the Education Task Force of the American Legislative Exchange Council. The author thanks ALEC and all who contributed to its model legislation for their work. A special thanks to those who reviewed drafts and provided invaluable feedback.

Choosing to Save

The Fiscal Impact of Education Tax Credits on the State of Nevada

Andrew J. Coulson
Director, Center for Educational Freedom
ACoulson@Cato.org

January 12, 2009

Prepared for the Nevada Policy Research Institute

The author would like to thank economist Joshua Hall, Beloit College, for his thoughtful peer review comments on the marginal cost analysis.

1. Executive Summary

This study analyzes the net fiscal impact that a large-scale education tax credit program would have on the state of Nevada. It does so by estimating the number of students who would migrate from public to independent schools as a result of lower effective tuition costs, and then calculating the impact that such migration would have on both districts and the state treasury. The impact of tax credits claimed on behalf of students already enrolled in private schools is also taken into account.

The particular education tax credit program evaluated here combines credits for donations to non-profit scholarship organizations serving low-income families with credits for parents who directly assume the cost of their own children's education (both of which already exist, separately, in several states). In other words, the program will cut taxes on any individual or business that pays for the independent schooling of an eligible child. This program, developed by the Washington, D.C.-based Cato Institute, is known as the Public Education Tax Credit Program.

In order to calculate the district-level impact of the program, it is necessary to know the marginal cost of a public school student. The marginal cost is the additional spending required to serve one additional student, and also the savings from having to serve one fewer student. Nevada's marginal cost of public schooling was not previously available in the literature and so it has been calculated for the present study by analyzing public school data for the nine most recent years available.

Total per-pupil spending in Nevada public schools is roughly $10,019, and the marginal cost is estimated here at $8,576. This figure, roughly 85 percent of average spending per pupil, is comparable to the 80 percent figure arrived at in a 2006 analysis of South Carolina.

Assuming that students already enrolled in private schools become eligible gradually over the first seven years of the program, the Public Education Tax Credit is estimated to save nearly $1 billion in its first 10 years. Because the marginal cost on which that savings calculation is based is itself only an estimate, it is preferable to consider the total program savings as a spectrum rather than a point. Taking the lower and upper bounds of the 95 percent confidence interval around the estimated marginal cost, total tax credit program savings are expected to be between $590 million and $1.3 billion over the first 10 years. This study's conclusion that the PETC would generate substantial savings is shown to be robust to a variety of alternative assumptions in the model.

While the PETC program is confidently estimated to yield substantial long-term savings, its impact during the first few years after implementation is more sensitive to the particular parameters of the legislation and to the assumptions made in the model. To ensure savings during these first few years, eligibility for students already enrolled in private schools can be phased in gradually over time, and the rate of that phase-in monitored and adjusted by the legislature, if necessary, based on real-world conditions.

2. The "Public Education Tax Credit" Program

Though the terms "Public Education" and "Public Schooling" have come to be treated as synonymous, it makes sense to draw a distinction between them. Public schooling refers to a particular institution: a district-based system of government-owned, tax-funded schools. That institution exists for a purpose: to serve our individual educational needs and to advance our shared educational goals. Americans want their schools to prepare children not just for success in private life but also for participation in public life. We want all children to have access to a good education, regardless of family income. And we expect schools to help foster harmonious social relations among the many different groups that constitute our pluralistic nation — or at a minimum to not cause tensions between them. It's useful to have a name for that set of goals and ideals, and it seems reasonable to call them the aspirations of public education.

Seen this way, "public schooling" is a means and "public education" is an end. The first is nothing more nor less than a tool for trying to fulfill the second. The Public Education Tax Credit program analyzed in this paper is simply an alternative tool for advancing the ideals of public education. It does this by offering tax credits that provide all families with an easy choice of district or independent schools, religious or secular schools, traditional or progressive schools.[1] Public Education Tax Credits reduce the state and local taxes owed by anyone who pays for the private schooling of an eligible child. Parents can claim credits for their own children's educational costs, and other taxpayers (including businesses) can claim credits when they pay for the education of someone else's child, either directly or by donating to a nonprofit, scholarship-granting organization.

Both kinds of credits already exist, separately, in various states. Arizona, Florida, Georgia, Iowa, Pennsylvania and Rhode Island all provide tax credits for donations to non profit, scholarship-granting organizations (SGOs). Individuals or businesses donate money to the SGOs, and receive tax credits (essentially a tax cut) covering most or all of that amount. The SGOs, in turn, distribute the money as independent school tuition assistance to families who need it. Illinois and Iowa have "personal use" tax credits, which allow parents to receive a credit when they directly assume the cost of their own children's education. The Public Education Tax Credit act combines both scholarship donation and personal use credits, to ensure that all families have access to real educational choice. The total benefit that any child may enjoy from the program (any personal use credits claimed by their parents plus any scholarship funds received from an SGO) is capped based on family income. Children from the lowest-income families are eligible for the largest benefit, and those of progressively wealthier parents are eligible for a progressively smaller total benefit. This scaling of the benefit is both to ensure fiscal soundness and because the goal of the program is to ensure universal access to the educational marketplace, not to create universal dependence on a state program.

The PETC has been presented in detail by the Cato Institute's Adam Schaeffer, and readers are encouraged to refer to his treatment for the specifics of the legislation and the rationale behind it.[2] In

the case of Nevada, it is assumed here that the PETC would apply to state sales taxes and local property taxes already committed to education.

3. Methodology

[Author's Note: This section was adapted from Andrew J. Coulson and Anca M. Cotet, "The Fiscal Impact of a Large-Scale Education Tax Credit Program," Cato Institute Policy Analysis no. 618, July 1, 2008.]

Outline of the Model

The fiscal impact of the Public Education Tax Credit act will depend on the extent to which credits lead to migration of public school students to independent schools, the extent to which existing private school families claim credits, and the effect that each of these has on tax revenues and public school spending.

When a student uses a credit (or a credit-funded scholarship) to leave the public sector for an independent school, the state can retain the funds that it would otherwise have allocated to that student's public school district. So raw state savings are equal to the average state-level per-pupil allocation times the number of migrating students. Conversely, every time a credit is claimed against state taxes — either for a migrating student or a student who had already been enrolled in private school — state tax revenues are reduced. The net *state-level* fiscal impact is thus the sum of savings from migration and revenue reductions due to credit claims against state taxes.

In order to calculate the *total* fiscal impact of education tax credits, however, it is necessary to look beyond the state level. If we are to compare savings and losses under the program with the figures that would exist without the program, we must also consider the impact on school districts. Districts will see their state funding reduced in direct proportion to the number of migrating students. This reduction will be exactly equal to the state-level savings from migration, because every dollar saved by the state is a dollar no longer received by the district. District revenues will be further reduced by credits claimed against local property taxes that would otherwise have gone to fund public school operations.[3]

Note that when computing these district revenue reductions it is important to separate out federal funding. That is because the Elementary and Secondary Education Act allocates funding based on a district's school-age population and poverty ratios rather than its public school enrollment. Hence, federal funding will not decline in proportion to migration of students to the private sector.

On the other side of the ledger, school districts will have to serve fewer students, and will thus see their costs reduced. To estimate the amount that public school districts will save, we must multiply their marginal cost by the number of students who migrate to the private sector. A district's marginal cost is the extra amount it must spend to serve one additional student, and, consequently, also the savings that

it enjoys from serving one fewer student. The marginal cost of public schooling can be estimated from available data, and this is done for the state of Nevada in Appendix A.

This study assumes that marginal cost will remain constant as district enrollment falls. In other words, the savings from serving one fewer student in a district enrolling 30,000 children will be the same as those from serving one fewer student in a district enrolling 15,000 children. That is not a problematic assumption so long as migration happens gradually over time, because, in the long run, costs that we currently think of as "fixed" (i.e., independent of enrollment) become "variable" (i.e., tied to enrollment). For example, when enough children have migrated that entire school facilities can be closed and sold off, the formerly "fixed" costs of heating, cooling and maintaining those schools go away and in fact new revenue is generated by the sale.

Importantly, the fiscal impact calculation presented in this paper does *not* take into account such long-term savings from the recoupment of formerly "fixed" costs, so its savings estimates are to be considered conservative lower bounds when looking at the medium to long term. There would be plenty of time to recoup such costs, though, since experience with other school choice programs both in the United States and abroad indicates that migration to the private sector is indeed a gradual process. Families have to become aware of the program, existing private schools need time to expand their facilities, and educational entrepreneurs need time to create new schools.

Estimating Total Migration Using Elasticity of Demand

To this point we have discussed how to figure savings and revenue reductions due to the PETC program based on migration from public to private schools. But we have yet to discuss how to estimate the total amount of migration likely to occur. This study determines the propensity to migrate based on the increased attractiveness of enrolling in an independent school as a result of the PETC program reducing the out-of-pocket cost of private schooling. The lower the net private school tuition, the higher the expected migration will be. According to the Public Education Tax Credit act, the extent to which tuition is reduced by the credits depends on family income. Evaluating families' response to lower tuition rates is equivalent to measuring consumers' response to a change in the price of any other good or service and is generally measured by the price elasticity of demand. Elasticity tells us how much demand is likely to rise as price falls, and how much demand will ebb as price rises.

For example, an elasticity of demand for private education of -1 indicates that for a one percent decrease in the net tuition in private schools, there is a 1 percent increase in enrollment in those schools. There are numerous published estimates of the elasticity of demand for private education in the United States, and this paper uses the average of those figures, which is -1.1.[4] Note that the use of a substantially smaller elasticity figure, such as Chiswick and Koutroumanes' -0.48, does not alter the central conclusions of this study, as is explained in the Results and Discussion section.

This analysis predicts the total expected migration under the PETC based on the relationship between tuition after credits are taken into account and migration, given the legislation's provisions regarding the availability of tax credits and their impact on net tuition.

Calculating migration on the basis of the estimated elasticity of demand assumes that the demand function has the same elasticity at every price (Chiswick and Koutroumanes, for instance, use this assumption to estimate the elasticity of demand[5]). Quantity demanded, q, is expressed as a function of price, P (tuition in this case):

$q = \alpha P^{\varepsilon}$,

where ε is the estimated elasticity of demand, ε = -1.1, and α is a scaling variable that depends on demographic characteristics.[6] If the tuition changes from P_0 to P_1, the resulting change in quantity demanded Δq may be expressed as

$\Delta q = \alpha P_1^{\varepsilon} - \alpha P_0^{\varepsilon}$

where P_0 is the existing tuition in private schools and P_1 is the net-of-tax-credit tuition. The scaling variable α is calculated for each income category of students (see the preceding endnote), but the elasticity ε is assumed to be the same for all families. To predict the total amount of migration, a forecast of the impact of the education tax credits on net tuition is made for each income class (this is done in row 126 of the accompanying Fiscal Impact Calculator spreadsheet file).

It is conventionally assumed that any good with a constant, negative price elasticity will be consumed by everyone if its price reaches zero. In plain English this means that consumers will consume any good about which they are price-sensitive if it becomes free — hence the ubiquitous use of "free" in advertising slogans. So, if the effective price of private schooling is reduced to zero, and it has a negative, constant price elasticity of demand, then private schools will enroll all students when their price reaches zero. But is the elasticity of demand for private schooling constant with respect to price? Chiswick and Koutroumanes, as noted above, assume that it is in their elasticity computation,[7] but from an abundance of caution the present study relaxes that assumption somewhat in estimating savings from the PETC. Specifically, the present analysis does not assume that, when effective tuition falls to zero, private sector market share will rise to 100 percent.

The question then becomes: by how much should this value be lowered to inject a healthy skepticism into the model. What should we assume private market share to rise to when effective tuition falls to zero, if not 100 percent? Some guidance is afforded by the Dutch experience, in which even heavily regulated "free" private schools secure a roughly 75 percent market share despite the presence of equally "free" public schools, nearly a century after that nation's school choice program came into existence. Since it seems likely that private schools less stifled by rules and regulations could more easily differentiate themselves to appeal to varied audiences, and thus provide a greater incentive to migrate to the private sector, the corresponding number for the PETC program should be somewhere between 75 percent and 100 percent. The present study assumes a 90 percent private market share when effective tuition reaches zero, but readers should note that no value in this range will reverse the general conclusion of this study, as will become evident from the robustness calculations presented in the Results and Discussion section. Readers wishing to explore the impact of alternative assumptions

may change this 90 percent value in the "Constants" section of the Fiscal Impact Calculator Excel spreadsheet.

Estimating the Rate of Migration

While elasticity of demand allows us to estimate the *ultimate* amount of migration to independent schools, it does not tell us the duration of the migration process. Determining the rate at which the predicted migration takes place is admittedly somewhat speculative, but there is both relevant evidence and theory to guide us. Both the Netherlands and Chile have large-scale school choice programs that substantially reduce the perceived cost of private schooling. A key difference between those programs and the PETC is that the foreign programs impose considerable restrictions on participating private schools. In the Netherlands, for instance, teacher salaries, teacher training, curriculum, testing, and even school mission are constrained by the state. Participating schools must also be organized as non profits. These sorts of restrictions serve to reduce the degree of specialization and differentiation possible under the Dutch and Chilean programs, and thus the incentive families have to opt for private schooling. Because the design of the PETC makes schools and scholarship organizations directly accountable to parents and taxpayers, there is no need for intrusive regulation of the content and management of schools and thus greater opportunity for differentiation. This, in turn, will increase the perceived value-added of opting for an independent school, due to the greater likelihood of finding something other than what is already offered in the government schools. With greater justification for migration, the rate of migration would likely be faster.

In the Netherlands, private sector share had reached 70 percent by 1982 (and had been close to that level for some time), 65 years after enactment of its national school choice program.[8] Today, more than a quarter century later, private sector enrollment stands at close to 75 percent. In Chile, majority private enrollment was reached in roughly 20 years, though the pace of that growth has slowed somewhat in recent years. If these experiences are any guide, private sector enrollment growth seems to continue over the long term when the financial advantage enjoyed by "free" public schools is reduced or eliminated, but it does so at a slowing rate after the first few decades.

This is consistent with the business literature on the rate of diffusion of new options in the marketplace, which tends to follow an s-shaped (or "sigmoid") curve. Adoption is initially somewhat slow, as information about the product or service has not yet been widely disseminated. Adoption then accelerates as people who are interested come to know about it, and finally, adoption slows as most of those who are interested have already adopted it.[9] The Fiscal Impact Calculator spreadsheet accompanying this report includes a graph and set of constants depicting the particular migration curve used here. Its constants were chosen so that 90 percent of total predicted migration would be reached by year 20, while beginning with a modest level of migration in year one (less than 2 percent of public school enrollment). The precise slope of this curve is determined by a set of constants that are presented and explained in the spreadsheet, and readers wishing to explore alternative assumptions may modify those constants accordingly. (Note that we are dealing here only with the *rate* at which

predicted migration will take place, not the total amount of migration, which was the subject of the preceding section.)

Now that we have both an estimate of the total ultimate migration and a curve describing the rate at which that migration is expected to occur, we can compute an estimate for the number of students who will have migrated by the n^{th} year after passage of the PETC. This allows the fiscal impact of the program to be estimated year by year, and that is how the results are presented later in this report and in the accompanying spreadsheet file.

Phase-In

To ensure a conservative savings estimate, it is best to assume that every family with children already enrolled in private school will claim a credit as soon as it is eligible to do so. This assumption, coupled with the gradual migration from public to private schools predicted by the model, could result in net losses during the first few years of operation if nothing is done to avoid that eventuality.

It is possible to eliminate this potential problem by phasing in eligibility of students already enrolled in private schools over several years. In the simplest example, it might be decided that, in year one of the program, existing private school students are eligible to participate only if they are in elementary school, while all existing private school students would become eligible in year two of the program. This concept can be generalized so that existing private school students gradually become eligible to benefit from the tax credits over any number of years — based on their age or grade. In this way, the fiscal impact of their credit claims can be spread out over a sufficient number of years to be more than offset by savings from students migrating from public to private school.

To account for this policy option, the Fiscal Impact Calculator spreadsheet allows the input of a number from 1 to 10, indicating how many years over which eligibility of existing private school students will be phased in. A value of 1 implies that all existing private school students are immediately eligible from the first year the program is enacted, while a value of 10 implies a 10-year phase-in. The "Savings(Loss) Calculations" section of the spreadsheet indicates, for each year of operation, the grade range of existing private school students who are eligible to participate (see also Table 1 in the Results and Discussion section of this paper).

The inclusion of this phase-in parameter is not meant to prejudge legislators' decisions. Some legislatures, under certain economic conditions, might decide that it is proper to allow all children to participate in the program immediately, even if this leads to net losses in the first three or four years. Alternately, lawmakers may decide that any negative fiscal impact is unacceptable, and hence opt for a phase-in sufficiently long to ensure savings from the first year of the program.

General Notes on the Spreadsheet File

The PETC Calculator spreadsheet accompanying this report uses a basic feature of Excel known as "cell names." A cell name is a user-defined term that refers to a particular cell in the spreadsheet.

Names are used in Excel formulas in place of normal cell references (such as “B2”), so that the purpose of the formulas can more easily be understood.

You can see whether or not a given cell has a name by selecting that cell and then looking at the “name box” just to the left of the Excel formula bar. This is where the cell’s name will appear, if it has one. If it is not named, a normal cell reference will be displayed.

To make matters easier, the PETC Calculator spreadsheet lists the cell name for each entry field in parentheses and italic font. For example, the very first entry field in the spreadsheet, cell E14, is named *Private_Phase_In*.

For further guidance on how to easily trace what is going on in Excel formulas, please search Excel’s built-in help facility for the terms “trace dependents,” “trace precedents” and “evaluate formula.”

4. Results and Discussion

The most recent audited figures available for spending and enrollment in Nevada public schools are for the 2006-07 school year. Summing total district spending across all 17 districts ($4,025,166,998), dividing it by enrollment (425,872), and adjusting the quotient for inflation to 2008 dollars, yields a total per-pupil value of $10,019.[10] The marginal cost of a Nevada public school student is estimated in Appendix A as $8,576, with a 95 percent confidence interval of $7,996 to $9,147. Private school enrollment for the state, extrapolating from historical data, is estimated to have been 30,745 students in 2008. Median Nevada private school tuition in that year is estimated at $5,965.

Plugging these values into the Fiscal Impact Calculator spreadsheet file, along with family income distribution and state tax data, allows us to estimate the impact of the PETC program, were it to be implemented today. That impact, over the first 25 years of the program, is presented in Figure 1 and Table 1. Note that "year 0" in Table 1 refers to present conditions, prior to the enactment of the PETC, and that a seven-year phase-in of existing private school students is assumed.

Figure 1.
Net Fiscal Impact of PETCs on Nevada, by Year

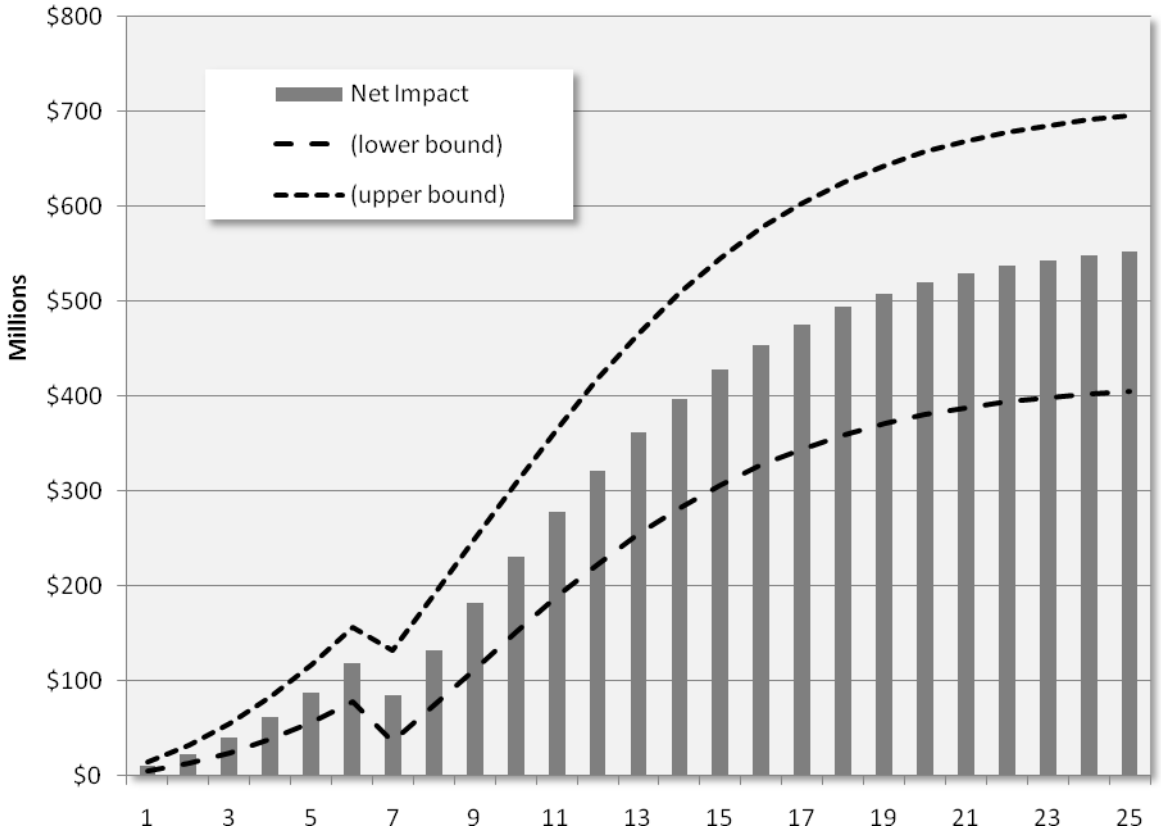


Table 1.

Net Fiscal Impact of PETCs on Nevada, by Year

(Positive impact numbers equal savings)

Year	Net Fiscal Impact	Total Public School Spending per Pupil	Private School Enrollment	Public School Enrollment	Existing Priv. Students Eligible if prev. year grade <=
0	0	$10,019	30,745	425,872	N/A
1	$9,398,565	$10,105	38,217	418,400	Kindergarten
2	$21,839,268	$10,208	46,788	409,829	1
3	$38,725,997	$10,336	56,966	399,651	2
4	$60,300,016	$10,493	68,838	387,779	3
5	$86,552,205	$10,686	82,402	374,215	4
6	$117,142,801	$10,917	97,534	359,083	5
7	$83,723,768	$11,192	113,974	342,643	12
8	$131,741,506	$11,513	131,331	325,286	12
9	$180,922,914	$11,879	149,108	307,509	12
10	$229,757,936	$12,286	166,760	289,857	12
11	$276,778,346	$12,729	183,756	272,861	12
12	$320,728,025	$13,195	199,642	256,975	12
13	$360,682,852	$13,672	214,085	242,532	12
14	$396,099,637	$14,145	226,886	229,731	12
15	$426,797,480	$14,599	237,983	218,634	12
16	$452,892,091	$15,024	247,415	209,202	12
17	$474,709,114	$15,409	255,301	201,316	12
18	$492,698,393	$15,750	261,803	194,814	12
19	$507,362,544	$16,046	267,104	189,513	12
20	$519,204,957	$16,297	271,385	185,232	12
21	$528,696,613	$16,506	274,815	181,802	12
22	$536,258,177	$16,679	277,549	179,068	12
23	$542,253,093	$16,820	279,716	176,901	12
24	$546,987,769	$16,933	281,427	175,190	12
25	$550,715,826	$17,024	282,775	173,842	12

These numbers are of course only estimates, depending on, among other things, the marginal cost calculation in Appendix A. To make that caveat more concrete, Figure 1 displays the expected program savings under both the lower and the upper bounds of the 95 percent confidence interval around the estimated marginal cost. The conclusion that Public Education Tax Credits would save a substantial amount of taxpayers' money is robust to any marginal cost figure within that range.

A further test of the robustness of these findings is to drop the magnitude of the elasticity figure used in the calculations from the average of published estimates (-1.1) to the modest Chiswick and Koutroumanes estimate (-.48). To make the scenario still more conservative, we can further lower the

estimate of ultimate private school enrollment at zero tuition from 90 percent (already below the default 100 percent assumption) down to 75 percent (a level already achieved in the Netherlands, even with very heavily regulated private schools). If we couple these two assumptions with the use of our lower bound for the marginal cost of public schooling, and plug all three into the Fiscal Impact Calculator spreadsheet, we can compute a very conservative lower bound estimate on the program's 10 year savings. That value is roughly $225 million. By year 18 of the program, under all of these hostile assumptions, the *annual* savings would reach $229 million. The ability of Public Education Tax Credits to generate substantial savings thus appears highly robust to alternative assumptions.

Note that the one-time decline in expected savings shown in Table 1 from year six to year seven is due to the jump in eligibility of existing private school students. As shown in the right-most column of the table, eligibility of existing private school students is phased in gradually based on their grade in the previous year. In year six, only private school students who were enrolled in grades k-5 in the preceding year would be eligible for credits. In year seven, all private school students would become eligible, and would be expected to have credits claimed on their behalf in that year, hence the hiccup in the otherwise monotonically increasing savings chart.

By year 25 after program passage, the model estimates that 62 percent of all students would be enrolled in independent schools. This seems reasonable given the international experiences discussed earlier for programs that offer less scope for schools to differentiate themselves and cater to different audiences (and hence less incentive for families to choose independent schools).

Another important result is that per-pupil spending in public schools is estimated to rise steadily along with migration from public to independent schools. That is the natural result of using marginal cost as the basis for calculating savings. For each student who migrates, districts are expected to reduce spending by the marginal cost of the student, which is only 85 percent of the average total per-pupil cost. As more students migrate, and as that migration overwhelms revenue reductions due to credits for pre-existing private school students, the public school system enjoys a higher and higher level of per-pupil funding.

Legislators should be aware that the savings from Public Education Tax Credits will not automatically be evenly allocated between the district and the state level. As can be seen in the accompanying spreadsheet (rows 86 and 87), the state would, by default, enjoy considerable savings in each year of the program while the districts would suffer smaller losses. In order for districts to be "held harmless" by the PETC program, it would be necessary for the legislature to transfer to them a portion of its savings equal to the districts' losses. The net savings reported in the Table and Figure above are the savings left over *after the state has transferred the funds to hold districts harmless*. In the end, the districts would be left with rising per-pupil funding, and the state would be left with the *net* savings depicted in Table 1.

Summing the predicted savings over the first 10 years of the program yields an estimate of $960 million, with lower and upper bounds (based on the 95 percent confidence interval of the marginal cost) of $590 million and $1.3 billion, respectively. Readers should recall, of course, that in the long term

most currently "fixed" costs will become "variable," and hence the total long-term savings from the program will likely be considerably larger than those estimated here using a marginal cost that is constant over time and does not capture these ultimately variable costs.

Because of the above observation and the demonstrable robustness of the long term savings to alternative assumptions, the chief concern for legislators should thus be the program's first few years of implementation. If savings are sought right from the first year of the program, it will be necessary to phase-in eligibility of families whose children are already enrolled in private schools over several years, as was assumed in this analysis.

Indeed legislators may wish to take advantage of the flexibility conferred by a gradual phase-in of existing private school students to respond to the actual impact of the program as it progresses. Consider two scenarios. First, based on the model and assumptions presented here, a seven year phase-in of eligibility for existing private school students would ensure savings in every year of the program. If, in practice, the early savings turn out to be greater than those predicted by this study, legislators could shorten the phase-in period so that all students would become eligible more quickly than initially planned. On the other hand, if actual savings are lower than those predicted here, the planned phase-in process could be slowed to ensure continued savings until migration numbers rise to predicted levels and continued savings are assured. The gradualness and flexibility of PETC phase-in thus provides a budgetary safety net.

5. Conclusions

It is apparent from the results of this study that a Public Education Tax Credit program would generate very substantial savings for Nevada, and that these savings are robust to a variety of alternative assumptions. The expected savings are centered on roughly one billion dollars over the program's first 10 years, and the annual savings figure is expected to rise substantially over time, reaching $229 million in year 10, $426 million in year 15, and $520 million in year 20.

At a time when most states, including Nevada, face significant challenges in order to balance their budgets, the Public Education Tax Credit act presents an attractive alternative. It would not only save taxpayers a considerable sum of money but would actually *expand* the range of educational options available to Nevada families.

Appendix A:
Marginal Cost of a Nevada Public School Student

Full and detailed explanations regarding the method of estimating the marginal cost of education in public schools are already available.[11] The starting point for the approach taken here is the work of Lindsay, 2005, and that of Grecu and Lindsay, 2006.[12] Lindsay originally estimated the marginal cost of

public schooling in South Carolina by pooling three years worth of school-level data in an Ordinary Least Squares regression. He regressed school-level spending against school enrollment, enrollment squared, and enrollment cubed, with period effect dummy variables for the first and second years as well as controls for cost factors such as the grade range of the school and the average teacher salary. The marginal cost was thus obtained from the coefficients of the enrollment terms.

One concern with Lindsay's original model is that teacher salary might well be endogenous — which is to say that if teacher salaries and school spending are linked, it may be as a result of intrinsically higher spending districts choosing to spend more on salaries and not simply that a more expensive local teaching workforce exogenously drives up the cost of public schooling. In other words, the causality explaining the relationship may go both ways, which violates an assumption of OLS regression. Such endogeneity can be dealt with using Two Stage Least Squares (2SLS) regression in which an "instrument" (i.e., proxy variable) is developed that is exogenous but also highly correlated with the endogenous independent variable.

Because of the endogeneity issue apparent in the South Carolina data, Grecu and Lindsay (2006) took a 2SLS approach to deal with teacher cost. In the Nevada data, this step is unnecessary since there is no statistically significant correlation between salaries and spending, once other variables are taken into account (as the reader will see below). Not only is there no problematic two-way causal relationship, there is no significant relationship at all, and hence no need for instrumentation of the salary variable.

The other notable difference between the original Lindsay study and the Grecu and Lindsay follow-up is that the latter analysis adds a control variable based on student test scores. This variable is included for consistency with the economic cost function literature, in which it is assumed that quality and cost are related, and so, to isolate the true relationship between cost and other variables, it is necessary to control quality.

There is, regrettably, no entirely suitable quality measure available for the nine-year span of Nevada data used in the present study. The potentially suitable test score data, Nevada's High School Proficiency Exam and its criterion-referenced tests in the earlier grades, are either not available for the entire span of years or were altered at one or more points during that span in ways that do not guarantee year-to-year comparability.[13] Is this a problem? It appears not. As Grecu and Lindsay found, their educational quality control variable had "no significant effect on marginal cost."[14] This is consistent with the literature.[15] There is no consistent statistically significant correlation between per-pupil spending in public schools and student achievement after controls for student and family characteristics. Furthermore, reviewing Grecu and Lindsay's results, we find that their marginal cost estimates are insignificantly *higher* when their quality control variable is included. So if the absence of such a control biases the present Nevada marginal cost estimate at all, it likely makes it lower and hence more conservative. Some may find the insignificance of the quality control term surprising, but in the context of a public school cost function it makes good theoretical sense.[16]

An additional concern expressed by Lindsay (2005), but not addressed in his subsequent work with Grecu, is that the use of school-level data makes it impossible to capture enrollment-related changes in spending that occur at the district level. To remedy that shortcoming, the present study of Nevada uses the school district as the subject of analysis. The use of district-level data in Nevada introduces its own problem, however: the limited number of observations in any given year. There are only 17 public school districts in the state, one for each county. Therefore, to obtain a sufficient number of observations to achieve meaningful regression results and precise estimates, this study analyzes nine years of data (from 1998-99 through 2006-07, inclusive).

The dependent variable used here is total district expenditures, adjusted for inflation to constant 2008 dollars. The key explanatory variable is district enrollment, and controls (also adjusted for inflation, where applicable) are included for a variety of factors that might affect spending independently of enrollment: average teachers' salaries, median house asking price from the 2000 Census (a measure of local willingness/ability to spend money on education), the percentage of students with special needs (who often require additional spending), the percentage of students in "gifted" programs (who may also engender higher costs), the percentage of Hispanic students (as a proxy for any added costs due to second-language instruction), and a set of dummy variables indicating the year in which the observation was made (to control for period effects — policy and other changes that may have induced spending changes across districts in a particular year).

What regression technique should be applied to these data? Lindsay applied OLS, while Grecu and Lindsay applied 2SLS to deal with the endogeneity issues in their model (which are not present here). Neither approach, however, takes advantage of the additional information contained in our deeper longitudinal data set: we not only have information on how separate districts differ from one another, we have information on how individual districts differ over time. To make use of that additional information, it is customary to apply "panel" or "time-series" regression.

Consider the OLS regression:

$$Y_{it} = \beta X_{it} + \varepsilon_{it},$$

Where Y_{it} is total spending in district i at time t, X_{it} is an array of independent variables for district i at time t, β is an array of coefficients of those variables, and ε is the error term. If we assume that ε has an unobserved district-specific component that is constant over time (μ_i), and a unique district-year component (e_{it}), the above equation can be rewritten as:

$$Y_{it} = \beta X_{it} + \mu_i + e_{it},$$

The OLS estimate of β will be biased if μ_i is correlated with any of our independent variables. To control for that possibility, we can add dummy variables to X for the first n-1 districts (where n is the number of districts). The resulting equation is called a "fixed-effects" panel model, because the μ_i error terms are fixed with respect to time. It is also known as a "within-effects" model because it examines only those changes that occur within districts, over time — ignoring information about variation between districts.

One shortcoming of the fixed-effects model is that it cannot explore the significance of explanatory variables that do not change over time. Variations in urbanicity from one district to the next, for example, might have some effect on spending and would not vary substantially within districts over a nine-year period. Similarly, our median house asking price control variable, coming as it does from the 2000 census, is invariant over time and is automatically dropped from a fixed effects model. Variations of these kind are called "between" variations, since they are constant over time, but vary between districts.

The "random-effects" panel regression model is designed to deal with situations in which there are both "within" and "between" effects. There are, furthermore, tests to determine the preferability of one model over the other. These tests, conducted in Appendix B, indicate that the random-effects model is preferred. After applying a log-log transformation[17] to the data to normalize the residuals (a requirement of linear regression), the regression results are as shown in Table A1.

Table A1.
Random Effects Panel Regression

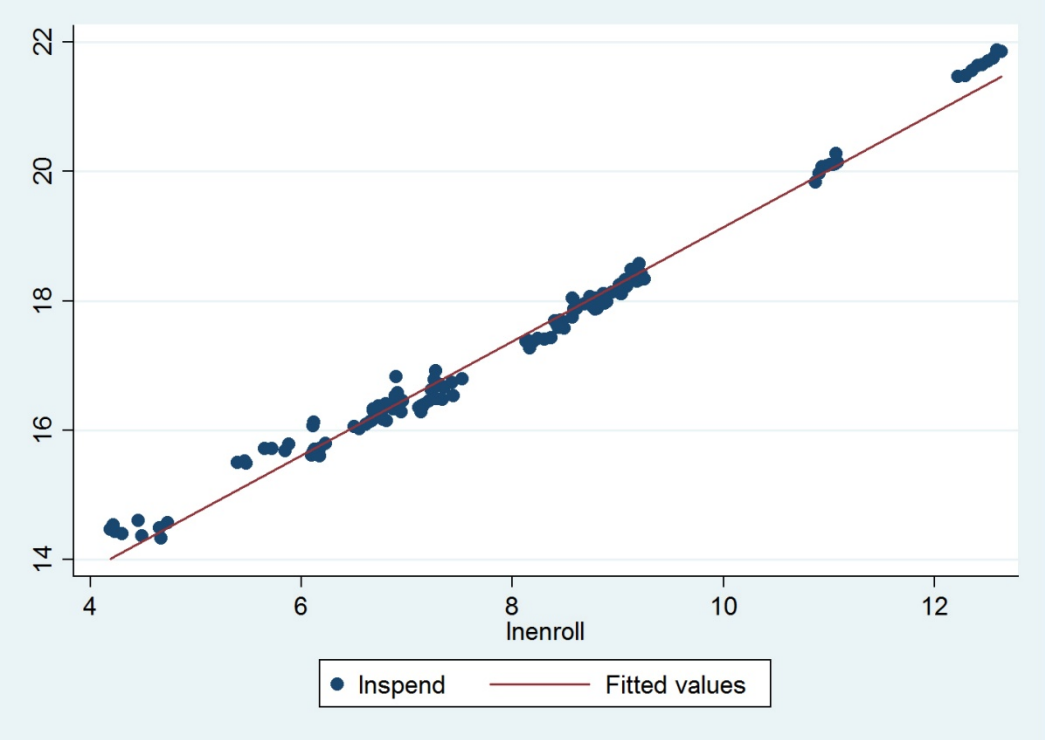
Dependent Variable: Log Total District Spending, Constant 2008 Dollars

lnenroll	0.856	Log of district enrollment
	(29.19)**	
lnsal	0.174	Log of average teacher salary
	(0.65)	
lnhouse	0.118	Log of median house asking price
	(0.66)	
lnpctdis	0.554	Log of (pct disabled/special needs students +1)
	(1.96)*	
lnpctgift	-0.926	Log of (pct "gifted" students + 1)
	(1.24)	
lnpcth	0.145	Log of (pct Hispanic students + 1)
	(0.38)	
Y0	-0.161	Year 1998-99
	(4.34)**	
Y1	-0.163	Year 1999-00
	(4.63)**	
Y2	-0.126	Year 2000-01
	(3.62)**	
Y3	-0.093	Year 2001-02
	(2.81)**	
Y4	-0.090	Year 2002-03
	(2.82)**	
Y5	-0.091	Year 2003-04
	(2.96)**	
Y6	-0.056	Year 2004-05
	(1.82)	
Y7	-0.024	Year 2005-06
	(0.73)	
Constant	7.260	
	(2.13)*	

Observations: 151
Number of DistrictID: 17
Absolute value of z statistics in parentheses
* significant at 5%; ** significant at 1%

Note that the enrollment squared and enrollment cubed terms used in Grecu and Lindsay are dropped automatically from the model after the log-log transformation due to collinearity, since log(x^b) is equal to b*log(x), a linear multiple of log(x). This does not appear to be problematic given the quite linear relationship between the log of district spending and the log of district enrollment (see Figure A1).

Figure A1.
Scatter of Log Spending on Log Enrollment



To test for multicollinearity among the independent variables we can compute each of their tolerances (i.e., the proportion of the variance for the variable in question that is not due to other independent variables, which is 1 minus the R-squared value resulting from the regression of the independent variable of interest on the remaining independent variables). These tolerances, along with their corresponding Variance Inflation Factors (equal to 1/Tolerance), are presented in Table A2.

Table A2.
Test for Multi-collinearity

Variable	Tolerance	VIF
Lnhouse	0.362	2.76
Lnenroll	0.380	2.63
y0	0.541	1.85
y1	0.550	1.82
y2	0.553	1.81
y4	0.554	1.81
lnpctgift	0.555	1.80
y7	0.556	1.80
y3	0.558	1.79
y5	0.569	1.76
y6	0.569	1.76
Lnpcth	0.666	1.50
Lnpctdis	0.731	1.37
Lnsal	0.798	1.25

VIF values above 10 are generally considered problematic, and all VIFs in the model are well below that level.

In addition to normalizing the residuals, the log-log transformation allows for the straightforward interpretation of coefficients. If β_1 is the coefficient of the *lnenroll* term, then a 1 percent increase in enrollment produces a β_1 percent increase in spending.[18] Based on the regression results in Table A1, a 1 percent increase in enrollment leads to a .856 percent increase in spending, so the marginal cost of public schooling in Nevada would be roughly 85 percent of the average per-pupil cost — with a 95 percent confidence interval of between 80 and 91 percent of average cost. This is consistent with Grecu and Lindsay, who estimate marginal cost in South Carolina at roughly 80 percent of average cost.[19]

To obtain the Nevada marginal cost estimate in dollars, we multiply the coefficient of *lnenroll* by the average total per-pupil spending at the district level ($10,019, in 2008 dollars, for the 2006-07 school year — the most recent available).[20] So the marginal cost would be roughly $8,576, with a 95 percent confidence interval of $7,996 to $9,147.

These estimates, as well as those of Grecu and Lindsay and others, suggest that public schools do amend their spending levels in response to even relatively small changes in enrollment. As a result, we can be confident that they will be able to do the same with larger shifts in enrollment such as those expected under an education tax credit program, which give greater scope for realizing savings. These findings contradict the belief, posited by some,[21] that public school costs are largely fixed and hence not conducive to savings from falling enrollment.

Appendix B:
Fixed vs. Random Effects Panel Models

The Hausman test is the principal means of determining the preferability of fixed or random effects models. Fixed effects models produce consistent estimates, while random effects models produce efficient estimates. So, if the coefficients for the two models are sufficiently similar overall, it is preferable to use the random effects model, which offers more precise estimates. A Hausman test can be run in Stata by first running the two models and then the "Hausman" command. Tables B1 and B2 present the regression results and Figure B1 presents the Hausman test results.

Table B1. Fixed Effects Panel Regression

```
Fixed-effects (within) regression               Number of obs      =       151
Group variable (i): districtid                  Number of groups   =        17

R-sq:  within  = 0.5261                         Obs per group: min =         7
       between = 0.9897                                        avg =       8.9
       overall = 0.9877                                        max =         9

                                                F(13,121)          =     10.33
corr(u_i, Xb)  = 0.9438                         Prob > F           =    0.0000

------------------------------------------------------------------------------
     lnspend |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    lnenroll |   .6291436   .0756869     8.31   0.000     .4793015    .7789858
       lnsal |   .1697405   .2980799     0.57   0.570    -.4203872    .7598682
     lnhouse |  (dropped)
    lnpctdis |   .6034166   .2744698     2.20   0.030     .0600312    1.146802
   lnpctgift |  -1.104291   .7354481    -1.50   0.136    -2.560304    .3517227
      lnpcth |   .2301655   .4320077     0.53   0.595    -.6251076    1.085439
          y0 |  -.1368292   .0383985    -3.56   0.001    -.2128492   -.0608093
          y1 |   -.149089   .0357812    -4.17   0.000    -.2199273   -.0782508
          y2 |   -.115564   .0349184    -3.31   0.001    -.1846942   -.0464338
          y3 |   -.088761   .0328014    -2.71   0.008    -.1536999    -.023822
          y4 |   -.094163   .0307611    -3.06   0.003    -.1550628   -.0332633
          y5 |  -.0958973   .0294896    -3.25   0.001    -.1542799   -.0375148
          y6 |  -.0579346   .0294228    -1.97   0.051    -.1161847    .0003156
          y7 |  -.0200911   .0324456    -0.62   0.537    -.0843258    .0441435
       _cons |   10.48348   3.362436     3.12   0.002     3.826646     17.1403
-------------+----------------------------------------------------------------
     sigma_u |  .52985031
     sigma_e |  .08103527
         rho |  .97714399   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(16, 121) =    39.41                 Prob > F = 0.0000
```

Table B2. Random Effects Panel Regression

```
Random-effects GLS regression                   Number of obs      =       151
Group variable (i): districtid                  Number of groups   =        17

R-sq:  within  = 0.5147                         Obs per group: min =         7
       between = 0.9894                                        avg =       8.9
       overall = 0.9876                                        max =         9

Random effects u_i ~ Gaussian                   Wald chi2(14)      =   1779.88
corr(u_i, X)       = 0 (assumed)                Prob > chi2        =    0.0000

------------------------------------------------------------------------------
     lnspend |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    lnenroll |   .8555619   .0293137    29.19   0.000      .798108    .9130158
       lnsal |   .1736086   .2672788     0.65   0.516    -.3502482    .6974654
     lnhouse |   .1175186   .1782384     0.66   0.510    -.2318222    .4668594
    lnpctdis |   .5541809   .2825033     1.96   0.050     .0004847    1.107877
   lnpctgift |  -.9256805   .7468685    -1.24   0.215    -2.389516     .538155
      lnpcth |   .1451643   .3859962     0.38   0.707    -.6113745     .901703
          y0 |   -.160724   .0370325    -4.34   0.000    -.2333065   -.0881416
          y1 |  -.1634268   .0352738    -4.63   0.000    -.2325622   -.0942915
          y2 |  -.1256321   .0347452    -3.62   0.000    -.1937315   -.0575327
          y3 |  -.0933045    .033236    -2.81   0.005    -.1584459   -.0281631
          y4 |  -.0898823   .0318193    -2.82   0.005    -.1522471   -.0275176
          y5 |  -.0909924   .0307651    -2.96   0.003     -.151291   -.0306938
          y6 |  -.0557744   .0306684    -1.82   0.069    -.1158833    .0043346
          y7 |  -.0242939   .0331597    -0.73   0.464    -.0892858     .040698
       _cons |   7.260422   3.403355     2.13   0.033     .5899691    13.93087
-------------+----------------------------------------------------------------
     sigma_u |  .15691115
     sigma_e |  .08103527
         rho |  .78944619   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

Figure B1. Hausman Test of Fixed Versus Random Effects

```
                 ---- Coefficients ----
             |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
             |       fe           re         Difference          S.E.
-------------+------------------------------------------------------------
    lnenroll |    .6291436     .8555619       -.2264182        .0697797
       lnsal |    .1697405     .1736086       -.0038681        .1319608
    lnpctdis |    .6034166     .5541809        .0492356               .
   lnpctgift |   -1.104291    -.9256805       -.1786102               .
      lnpcth |    .2301655     .1451643        .0850013        .1940039
          y0 |   -.1368292     -.160724        .0238948        .0101506
          y1 |    -.149089    -.1634268        .0143378        .0060042
          y2 |    -.115564    -.1256321        .0100681        .0034735
          y3 |    -.088761    -.0933045        .0045435               .
          y4 |    -.094163    -.0898823       -.0042807               .
          y5 |   -.0958973    -.0909924       -.0049049               .
          y6 |   -.0579346    -.0557744       -.0021602               .
          y7 |   -.0200911    -.0242939        .0042028               .
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                 chi2(13) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       11.87
                Prob>chi2 =      0.5381
                (V_b-V_B is not positive definite)
```

These results indicate that we should prefer the more efficient random effects model because we cannot reject H_o of the Hausman test.

A further test of the appropriateness of the random effects model is to test its null hypothesis that the variance in u_i across districts (σ_u^2) is equal to zero. This can be done with the Breusch and Pagan Lagrangian multiplier test presented in figure B2 (the "xtest0" command in Stata).

Figure B2. Breusch Pagan Test for Random Effects

```
lnspend[districtid,t] = Xb + u[districtid] + e[districtid,t]

Estimated results:
                 |       Var     sd = sqrt(Var)
         ---------+-----------------------------
          lnspend |   2.823349       1.680282
                e |   .0065667       .0810353
                u |   .0246211       .1569112

Test:   Var(u) = 0
                         chi2(1) =   338.06
                      Prob > chi2 =   0.0000
```

Since we can reject the null hypothesis that the variance of u_i is equal to zero, it is clear that there are random effects present in the data and we must therefore use the random effects panel model rather than a fixed effects or simple OLS model.

Endnotes

[1] For an international and historical discussion of the relative merits of market versus monopoly school systems in satisfying the goals of public education, please see: Andrew J. Coulson, *Market Education: The Unknown History* (New Brunswick, NY, Transaction Books: 1999). A recent discussion of the relative social effects of alternative school systems in the United States is offered in Neal McCluskey, "Why We Fight: How Public Schools Cause Social Conflict," Cato Institute Policy Analysis no. 587, January 23, 2007. http://www.cato.org/pub_display.php?pub_id=7040. For a recent worldwide survey of the scientific evidence comparing academic achievement, efficiency, parental satisfaction and other outcomes between market and monopoly school systems, see: Andrew J. Coulson, "Markets vs. Monopolies in Education: A Global Review of the Evidence," Cato Institute Policy Analysis no. 620, September 10, 2008. http://www.cato.org/pub_display.php?pub_id=9634.

[2] Adam B. Schaeffer, "The Public Education Tax Credit," Cato Institute Policy Analysis no. 605, December 5, 2007. http://www.cato.org/pub_display.php?pub_id=8812

[3] Since PETCs can be applied to both state and local taxes, and since we cannot know in advance exactly what share of total credits will be applied to taxes at each level of government, we must come up with a working assumption about this distribution. In this analysis we assume that the proportion of all credits that would be claimed against state (as opposed to local) taxes will equal the ratio of revenues generated by the state-level taxes to which PETCs can be applied to the total revenue generated by all taxes to which PETCs can be applied. This approximation works very well if there is no difference in the cost (to taxpayers) of claiming a credit at the state versus the local level. In other words, it works well if it is just as easy to claim a credit against state taxes as it is to claim a credit against local taxes. The validity of that assumption depends on how the state chooses to implement the legislation.

[4] Erekson, Homer O. 1982. "Equity Targets in School Finance, Tuition Tax Credits, and the Public-Private Choice." Journal of Educational Finance 7:436-449; West, Edwin G. and Halldor Palsson. 1988. "Parental Choice of Schooling Characteristics: Estimation Using State-Wide Data." Economic Inquiry 26:725-740; Megna, Richard and Tong Hun Lee. 1990. "Estimation of the Demand for Local Public Education under a Kinked Budget Constraint." The Review of Economics and Statistics 72(4):596-602; Lankford, Hamilton and James Wychoff. 1992. "Primary and Secondary School Choice among Public and Religious Alternatives." Economics of Education Review 11:317-337; Keeler, Andrew and Warren Kriesel. 1994. "School Choice in Rural Georgia: An Empirical Analysis". Journal of Agriculture and Applied Economics. 26. 526-534; Chiswick, B.R. and S. Koutroumanes. 1996. "An Econometric Estimate of the

Demand for Private Schooling." Research in Labor Economics 15:209-237; Keeler, Andrew, Warren Kriesel, and Marc White. 1996. "School Choice Policy- Estimates of Supply and Demand Response in Private Education". Southern Rural Development Center. April; Gwartney, James D. and Richard L. Stroup. 1997. Economics: Private and Public Choice (8th edition). Dryden, New York.

[5] Chiswick and Koutroumanes.

[6] Alpha can be obtained algebraically by solving the migration equation, $\Delta q = \alpha P_1^{\varepsilon} - \alpha P_0^{\varepsilon}$, for alpha, where delta q is the change in quantity demanded (i.e., the change in private school enrollment), and then plugging in prior data for private school tuition and enrollment. Hence, $\alpha = \Delta q / (P_1^{\varepsilon} - P_0^{\varepsilon})$, and, assuming that enrollment went from zero at some initial time to its present value, we can say that initial price was infinity (i.e., that there was no price high enough at that time to allow consumption of private schooling). Since infinity to a negative power (the value of Elasticity is negative) is zero, the P_0 term drops out of the equation and we are left with

α = current enrollment / (current price)$^{\varepsilon}$

Current enrollment for each income bracket is then calculated as total private school enrollment times the share of families in the given income bracket. Note that if the delta q calculation shown above generates a number larger than current public school enrollment in the given bracket, all public students in that bracket are expected to migrate to the private sector.

[7] Barry Chiswick and Stella Koutroumanes, "An Econometric Analysis of the Demand for Private Schooling," *Research in Labor Economics* 15 (1996): 209–37.

[8] Alex Heard, "Vouchers in Holland Have Led to Control of Private Schools," *Education Week*, April 28, 1982. http://www.edweek.org/ew/articles/1982/04/28/02230049.h01.html

[9] See, for instance: Vijay Mahajan, Etan Muller, and Frank M. Bass, "Diffusion of New Products: Empirical Generalizations and Managerial Uses," *Marketing Science*, vol. 14 (1995), no. 3, part 2 of 2.

[10] See note 19 for sources.

[11] Alex Grecu and Cotton M. Lindsay, "Cost Savings from Pupil Migration to Private Schools," Clemson University (2006), http://ssrn.com/abstract=1027763; and Cotton M. Lindsay, "The Marginal Cost of a Student: A further Analysis," working paper, Clemson University, 2005, "http://www.scpolicycouncil.com/publications/61.pdf."

[12] Cotton M. Lindsay, "The Marginal Cost of a Student: A Further Analysis," research report, The South Carolina Policy Council Education Foundation, 2005. http://www.scpolicycouncil.com/publications/61.pdf. And,

Alex Grecu and Cotton M. Lindsay, "Cost Savings from Pupil Migration to Private Schools," Social Science Research Network, SSRN abstract no. 1027763. http://ssrn.com/abstract=1027763

[13] "In the 1999 Session, the Legislature... required that the HSPE be revised to measure the performance of students on the academic standards starting with the class graduating in 2003." Carol M. Stonefield, ed., "2007 Nevada Education Data Book," Research Division, Legislative Counsel Bureau of Nevada & Fiscal Analysis Division, Legislative Counsel Bureau of Nevada, February 2007, section VIII, p. 137. http://www.leg.state.nv.us/lcb/research/EducationDataBook/2007EDB.cfm

[14] Grecu and Lindsay, p. 5.

[15] See, for instance: Eric A. Hanushek, Steven G. Rivkin and Lori L. Taylor, "Aggregation and the Estimated Effects of School Resources," The Review of Economics and Statistics, v. 78, no. 4 (November 1996), p. 626. And,

Stephen Childs and Charol Shakeshaft, "A Meta-Analysis of Research on the Relationship Between Educational Expenditures and Student Achievement," Journal of Education Finance, vol. 12, no. 3 (1986): 260. And,

Eric A. Hanushek, "The Economics of Schooling: Production and Efficiency in Public Schools," Journal of Economic Literature, v. 24 (September 1986), pp. 1141-1177. And,

Richard Vedder, Joshua Hall, and Michael Melander, "Determinants of Ohio Student Performance," working paper (Athens, Ohio: Department of Economics, Ohio University, January 15, 1998).

[16] The economic cost function literature developed to study situations in which cost and quality *should* be related. In competitive markets, producers can generally sell higher quality goods at a premium. Because higher quality thus means higher revenue, it makes sense, up to a point, to spend more on the production of higher quality goods. Based on the market's incentive structure, there *should* be a relationship between cost of production and

product quality. But is the same true in public schooling? To answer in the affirmative it would be necessary to show that public school revenues are related to school quality, controlling for other factors.

But the revenue generation mechanisms and funding formulae of public school systems have no consistent relationship with anyone's perception of quality. While districts with higher test scores are sought-after by homebuyers, driving up housing prices and thus local property tax receipts, it is also the case that low quality is often (and successfully) used as an argument to justify higher spending by public school officials. Furthermore, state school funding formulae are usually designed to compensate districts with relatively low local property tax revenue. Finally, even in very high-spending and high-scoring suburban districts it is not clear that high scores are caused by the higher spending, or are simply the result of the most affluent and well-educated parents moving to these areas and their children being relatively advantaged in their educational performance due to their home environment. It is therefore not at all clear that there *should* be relationship between quality and cost in public schooling. The empirically demonstrated absence of such a relationship is thus eminently reasonable.

[17] This implies taking the log (natural, in this case) of the terms on both sides of the equation.

[18] William H. Crown, *Statistical Models for the Social and Behavioral Sciences* (Westport, Connecticut: Greenwood Publishing Group, 1998), p. 61.

[19] Alex Grecu and Cotton M. Lindsay, "Cost Savings from Pupil Migration to Private Schools," Clemson University (2006), http://ssrn.com/abstract=1027763.

[20] Summing up total district spending for the 2006-07 school year yields $4,025,166,998, which, divided by that year's total enrollment of 425,872, yields a per-pupil expenditure of $9,452. Adjusted for inflation into 2008 dollars using the average of the BLS inflation adjustments for 2006 and 2007 yields $10,019. Source for the expenditure data: Nevada Department of Education fiscal accountability director, Bill Arensdorf, via Geoffrey Lawrence of the Nevada Policy Research Institute. Source for enrollment data: "Nevada Department of Education Research Bulletin: Student Enrollment and Licensed Personnel Information," 2007 edition, Nevada Department of Education. http://nde.doe.nv.gov/Resources/Bulletin-FY2007.pdf

[21] For instance, Harry Miley, "Marginal Cost and the Fiscal Impact of a Proposed Tuition Tax Credit in South Carolina," working paper prepared for The South Carolina School Boards Association and The South Carolina Association of School Administrators, Miley & Associates, 2005, http://www.scsba.org/acrobat/050207_mileystudy/050207_mileystudy_complete.pdf

Policy Analysis

No. 662 March 10, 2010

They Spend WHAT?
The Real Cost of Public Schools

by Adam Schaeffer

Executive Summary

Although public schools are usually the biggest item in state and local budgets, spending figures provided by public school officials and reported in the media often leave out major costs of education and thus understate what is actually spent.

To document the phenomenon, this paper reviews district budgets and state records for the nation's five largest metro areas and the District of Columbia. It reveals that, on average, per-pupil spending in these areas is 44 percent higher than officially reported.

Real spending per pupil ranges from a low of nearly $12,000 in the Phoenix area schools to a high of nearly $27,000 in the New York metro area. The gap between real and reported per-pupil spending ranges from a low of 23 percent in the Chicago area to a high of 90 percent in the Los Angeles metro region.

To put public school spending in perspective, we compare it to estimated total expenditures in local private schools. We find that, in the areas studied, public schools are spending 93 percent more than the estimated median private school.

Citizens drastically underestimate current per-student spending and are misled by official figures. Taxpayers cannot make informed decisions about public school funding unless they know how much districts currently spend. And with state budgets stretched thin, it is more crucial than ever to carefully allocate every tax dollar.

This paper therefore presents model legislation that would bring transparency to school district budgets and enable citizens and legislators to hold the K–12 public education system accountable.

Adam B. Schaeffer is a policy analyst with Cato's Center for Educational Freedom and author of "The Poverty of Preschool Promises: Saving Children and Money with the Early Education Tax Credit," Cato Institute Policy Analysis no. 641, August 3, 2009.

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A sobering 27 cents of every dollar collected at the state or local level is consumed by the government-run K–12 education system.

Introduction: Why Education Spending is THE State Budget Issue

State and local budgets are in sorry shape. Collectively, the states came up more than $158 billion short of projected tax revenue when planning their budgets for 2010 in 2009.[1] In response, more than 30 states raised taxes and 43 reduced services.[2] As the economy deteriorated and tax revenue plummeted more quickly than expected, 39 states discovered additional budget shortfalls of nearly $34 billion.[3] Together, these shortfalls add up to the largest gap on record, 28 percent of the general fund budgets for 2010.[4]

The near future looks even bleaker than the present. As unemployment remains high and home prices fall or stagnate, states are facing an even larger estimated shortfall of $180 billion for 2011 and another $120 billion for 2012.[5] Compounding the growing problems at the state and local levels, federal stimulus funds used this year and next year to close shortfalls will evaporate, and most states' reserves were tapped long ago. The worst, in other words, is yet to come.

So what is to be done? Where can we cut unnecessary programs or increase efficiency in core services? Where can we save the most money? The answer is education.

K–12 schooling is the biggest item on state and local budgets. How big? Based on the 2005–2006 totals from the National Center for Education Statistics updated to 2009 dollars, state and local governments are spending well over $500 billion on public K–12 education. The Bush and Obama administrations have overseen a startling increase in the federal involvement in and funding of K–12 education, but state and local governments still provide the vast majority of funds. The federal government provides just 9 percent of education funds, compared to 44 percent from local sources and 47 percent from states.[6]

The National Association of State Budget Officers reports that state governments spent 35 percent of their general funds on K–12 education in 2007.[7] In contrast, Medicaid, continually singled out as a problematic state budget item, accounted for just 17 percent of general-fund expenditures.[8] The majority of Medicaid funds, however, come from the federal government. Looking at all state-derived funds, we find 25 percent devoted to K–12 education and 13 percent going to Medicaid.[9] The comparison is even more dramatic when we consider local funds in the equation. A sobering 27 cents of every dollar collected at the state or local level is consumed by the government-run K–12 education system, while only 8 cents support Medicaid.[10]

The amount we spend on education has increased dramatically and consistently over the past century, with a 25 percent increase in per-pupil expenditures, in constant dollars, between 1995 and 2005.[11] This upward trajectory shows no sign of flagging, with total state education spending increasing even during this serious recession and amidst plummeting tax revenue, with the assistance of federal stimulus funds. The White House reports that elementary and secondary education spending at the state level increased from over $228 billion in 2007–2008 to $236 billion the next, leveling off at $235 billion for 2009–2010.[12] Education spending is the single most serious burden on state budgets, and it will remain the most delicate and important state spending item with which tax and budget reformers must contend.

As this fiscal crisis continues to unfold, revenues continue to decline, federal stimulus funds run dry, and state and local governments will find themselves at the bottom of a deep financial hole. Local governments, already hit with huge declines in tax revenue from property taxes and other sources, will add to the state burden by falling short on their close to equal share of education funding, leading to calls for even more state aid. Since runaway education spending is a major cause of current and future budget problems, it is the best place to look in state and local budgets for serious savings.

But it is currently far too difficult for taxpayers and political representatives to get a

handle on school finances. Without a clear idea of current spending levels in public and private schools, it is hard for the public and policymakers to know whether the current system is cost-effective or to assess the fiscal impact of expanding families' options with private school choice programs. To redress that knowledge gap, the final section of this paper presents model legislation requiring districts to publish up-to-date spending figures, fully inclusive of every dollar spent on behalf of K–12 education.

Step One for Saving Money: Know How Much You Spend

It's so simple as to seem trivial. To get control of a budget, you need to know how much you make, how much you spend, and what you're spending it on. Every financial planner starts with these basics, which provide the keys to fiscal responsibility. If you're not able to afford the rent that consumes half of your income, you can reap savings from renting a cheaper apartment. We know that K–12 education is the biggest single cost to state and local governments, eating up close to a third of their revenues. And yet most citizens and politicians have little or no idea how much we are spending on education at a per-pupil level.

Each year, the National Center for Education Statistics publishes public-school spending data for the nation. However, the data they publish is three or four years out of date. More recent national data are unavailable. To make matters worse, many education analysts pay less attention to the *total* spending figures than to what are called "current" expenditures. In this context, "current" has nothing to do with the timeliness of the data. Instead, it refers to a subset of school spending that excludes whole categories of expenditures that are necessary for schools to function, such as capital costs, debt service, and employee benefits. Knowledge of what is spent at the local level tends to be even more skewed and less widespread, even among "experts." And the general public is, according to national surveys, completely in the dark about such facts.

Most citizens don't have any idea how much is spent per child in public schools. When asked how much was spent in their state, only about 7 percent of Floridians guessed a figure that was close to or higher than the NCES figure of about $9,800 for that year. *Sixty-three percent* thought their state was spending $6,000 or less.

This information gap isn't limited to citizens of the Sunshine State. In Idaho, only 26 percent of citizens picked the answer closest to or higher than the NCES figure of about $7,800; in Illinois, only 11 percent answered close to or higher than the NCES figure of about $10,600; and in Maryland, only 8 percent answered close to or higher than the NCES figure of about $13,000.[13]

So the public doesn't know how much is spent to educate children in their state. And for good reason: it's very difficult to find good, up-to-date information on how much public school systems are spending per child. And it's most difficult at the district level.

States collect information on district expenditures, but the level of detail, clarity, and availability varies widely from state to state. The federal government collects information as well, but it doesn't provide timely or well-publicized data on individual districts, the most important level of information for taxpayers to know about. And as noted above, the out-of-date "current" spending figures from official federal and local sources do not represent the total spending per child.

The best place to look for timely information on *total* spending at the district level is in individual school district budget documents. Unfortunately, these documents suffer from many of the same problems found in state and federal data, while adding a few of their own. Some district budgets are not published online, and hard copies are usually difficult to secure. The budgets are complex and often confusing, and it can be a time-consuming challenge to find an official who is both capable and willing to help decode them.

It's very difficult to find good, up-to-date information on how much public school systems are spending per child.

Table 1
Arlington County Public School District Expenditures for 2008, as Reported by the District, State, and Regional Organizations

	District	State	Regional
Total Expenditures	$425,864,361	$436,223,759	$444,105,215

Source: Arlington Public Schools, "School Board's Adopted Budget Fiscal Year 2009," FY2008 School Board's Appropriated Budget, p. 5, http://www.apsva.us/15401081151845893/lib/15401081151845893/FY_2009_Final_Adopted_Budget_FINAL.pdf; Virginia Department of Education, "2007-08 Superintendent's Annual Report," Table 15: State figure, http://www.doe.virginia.gov/VDOE/Publications/asrstat/2007-08/asrbook.html; Washington Area Board of Education, "WABE Guide FY2008," November 2007 Chart: FY2008 Approved Fund Expenditures, pp. 23, 24. Regional figure, Fairfax County Public Schools, "WABE Guide 2008," Washington Area Board of Education, November 2007, http://www.fcps.edu/fs/budget/wabe/2008.pdf.

Sometimes it's necessary to triangulate the correct number by comparing district, state, and even regional budget figures for a district. Typically, each level of government and department will use slightly different formulas for tallying "funds" (i.e., budget categories), including or excluding different expenses for different reasons.

For instance, Table 1 displays the reported total actual spending figures for Arlington, Virginia, in 2008 according to the school district's own budget document, a state document on total district spending, and a document on D.C. metro districts published by the Washington Area Boards of Education. There is more than a $10 million increase from the district to the state spending figure, and an approximately $8 million additional increase to the regional total spending figure for Arlington. In other words, there's an $18 million difference between regional and district figures.

Citizens need to know how much is being spent per child in order to judge whether the district has enough money to educate a child.

School districts typically account for funds and spending differently than you and I account for our household budget or the way that a business keeps its books. What is most important to school budget directors is accounting for and tracking the kaleidoscope of revenue streams and program funds, *not* the total amount that is spent in a given year. From a district administrator's perspective, she just needs to know if the funding streams and individual program budgets line up. Do we have enough money coming in from grants and transfers for remedial reading programs to cover the expected budget for this year? Is the health and retirement fund receiving the amount of operating fund revenue required by statute? These are important things to know. But this is not all that the public, or, for that matter, school bureaucrats, *should* know.

Citizens need to know how much is being spent per child, regardless of where the dollars come from or are going to, in order to judge whether the district has enough money to educate a child. If a district is spending $30,000 per child, surely that is enough to ensure a high-quality education. If the school buildings are nonetheless in disrepair and the kids can't read, then there is good reason to suspect that a massive share of that money is being wasted.

Discovering the real cost of education requires a significant time commitment for each individual school district. That presents an even bigger problem: there are 13,862 regular school districts in the United States. That's about 277 per state. Even if one were able to fully document the real per-pupil spending for each district with just one day of work—which is typically *not* the case—it would mean that determining real costs for each state would take more than a full year of

work days. And documenting spending for every district in the country would take 50 *work-years*. Needless to say, that's prohibitive.

Since it is impractical to calculate real, up-to-date per-student spending for every district, this paper focuses on five of the nation's largest metropolitan areas, looking at their central city districts as well as two other districts in their immediate vicinities.[14] We looked at the five biggest metro areas, plus Washington, D.C., and then at the closest K–12 districts with the highest and lowest per-capita income levels according to the census, for a total of 18 public school districts.[15]

Through these examples, we demonstrate that the most widely reported per-pupil spending figures give a grossly inaccurate impression of the resources that Americans devote to public education. The low-income Lawrence Union Free School District in New York, for instance, spends about $30,000 per student. That certainly seems like far more money than is needed to provide a child with a good K–12 education.

Citizens respond to new information, and even moderately accurate information on education spending changes their policy preferences significantly. A survey by *Education Next* and the Program on Education Policy and Governance at Harvard University found that support for increased education spending dropped by 8 percentage points (46 to 38) for respondents who were told what their district's per-pupil spending figure was compared to respondents who were not given the spending figure. Among African American respondents, support fell dramatically, from 82 to 48 percent. And these drops occurred *despite* the fact that the per-pupil spending figure given to respondents was from 2005–2006 and counted only *current*, rather than *total* expenditures.[16]

Total expenditures per pupil run about 16 percent higher on average than current expenditures, which don't include things like transportation, capital expenses, and debt service. Correcting commonly cited spending figures to represent total expenditures and current-year dollars raises the average per-pupil spending figure by nearly 25 percent.[17]

American citizens are being kept in the dark on education spending, and this imposed ignorance affects the policy and political environment.

Findings

In this section, we turn to our findings for the five largest metro areas and the nation's capital. A few of the 18 school districts report information in a relatively accessible form, and one even reports an up-to-date total spending per-pupil figure that comes fairly close to the real value (real spending is a mere 3 percent higher than its reported figure, a modest difference compared to other districts). Most, however, fall far short of the mark. The overviews below illustrate how misleading are the most widely available spending figures for school districts, and demonstrate the need for a clearer, more transparent system.

We also review the financial situation in each state and metropolitan area in order to provide additional context for the district spending figures and to demonstrate the urgent need for increased budget transparency. A comparison of public per-pupil spending with an estimate of what a median private school spends in each metro area is also provided.

Phoenix, Arizona, Metro Area

Although the Phoenix area schools spend less than many other big-city districts, the average real per-pupil spending figure of $11,800 is 27 percent higher than the average $9,300 the Phoenix districts claim to spend.[18] In addition, real public school spending is more than 75 percent higher than the estimated median private school spending of just under $7,000.[19]

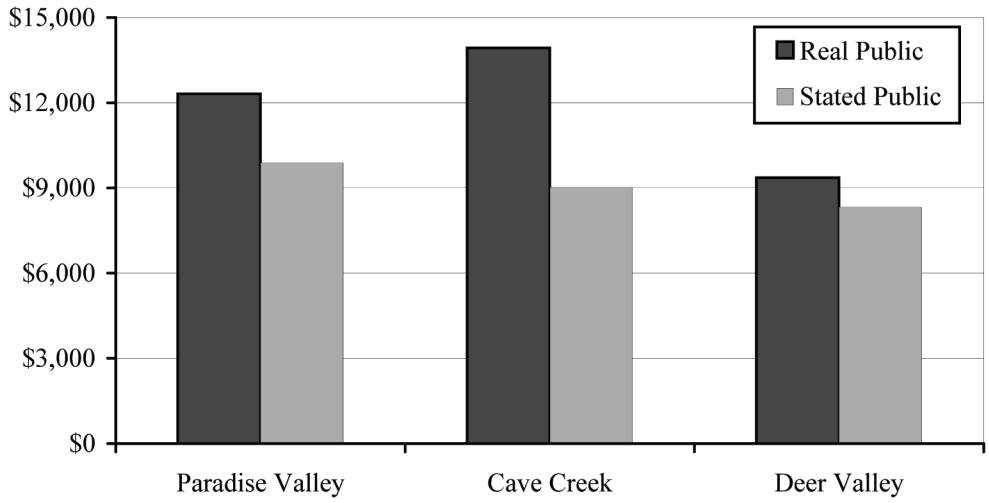
Cave Creek, with per-pupil spending just shy of $14,000 (Figure 1), has the highest spending of the three Phoenix-area districts we examined. This real spending figure is 54 percent higher than the official figure—the largest gap of the three districts in this metro area. Paradise Valley comes in second place, spending over $12,300 per student. And Deer

American citizens are being kept in the dark on education spending, and this imposed ignorance affects the policy and political environment.

Valley spends the least of the three, at over $9,300 per pupil (Table 2).

This fiscal year, Arizona has grappled with a budget that fell $4.7 billion short—nearly 50 percent of the total general fund. Next year looks difficult as well, with projected revenues falling short of projected spending by $2.5 billion.[20]

Figure 1
Real Spending Per Pupil Compared with Figure Provided by Public Schools



Source: Notes for the figure are in Table 2 below, and full references are in Appendix A.

Table 2
Per-Pupil Spending in the Phoenix, Arizona Metro Area

District	Real Public	Stated Public	NCES	Estimated Private	Higher than Stated	Higher than NCES	Higher than Private
Paradise Valley (city district)	$12,312	$9,883	$8,777	$6,770	25%	40%	82%
Cave Creek (high-income district)	$13,929	$9,024	$7,895	$6,770	54%	76%	106%
Deer Valley (low-income district)	$9,365	$8,323	$7,515	$6,770	13%	25%	38%

Source: Cave Creek and Deer Valley budget information is from fiscal year 2008, and Paradise Valley budget information is from fiscal year 2009. National Center for Education Studies (NCES) figures are from the most recent year available, the 2005–2006 total expenditures per pupil. The stated public school expenditure is taken from figures posted on the district website or budget documents if available, from state websites or documents if not available from the district, or directly from district officials if not available to the public in print or on an official website. All budget figures are in unadjusted dollars for the year in which the information was reported, as these unadjusted figures are what reporters and officials use. Full citations for district calculations are detailed in Appendix A. The private school spending figure is an estimate of FY2009 total spending per student based on NCES median highest private school tuition for 2003–2004, updated for cost trends per year and inflation, increased by 25 percent to account for spending from nontuition sources, and adjusted for relative per-capita income in the metro area.

On the heels of a $270 million, 22 percent budget cut, Phoenix still faces an almost $100 million shortfall this year and possible tax hikes on top of service cuts.[21] "We have to ask residents: Do they want these draconian cuts?" said Mayor Phil Gordon. "Do they want to be understaffed in fire and police? I, for one, think our residents would want to continue the way of life in this city."[22] Like most of the country, the Phoenix area is facing another year of seriously constrained revenue and continuing budget pressures.

Los Angeles, California, Metro Area

Although California is considered a relatively low-spending state when it comes to education, the Los Angeles metro area comes in third place for average real spending in our study.[23] The average real per-pupil spending figure of $19,000 is a stunning 90 percent higher than the $10,000 the districts claim to spend. In addition, real public school spending is 127 percent higher than the estimated median private school spending of $8,400.

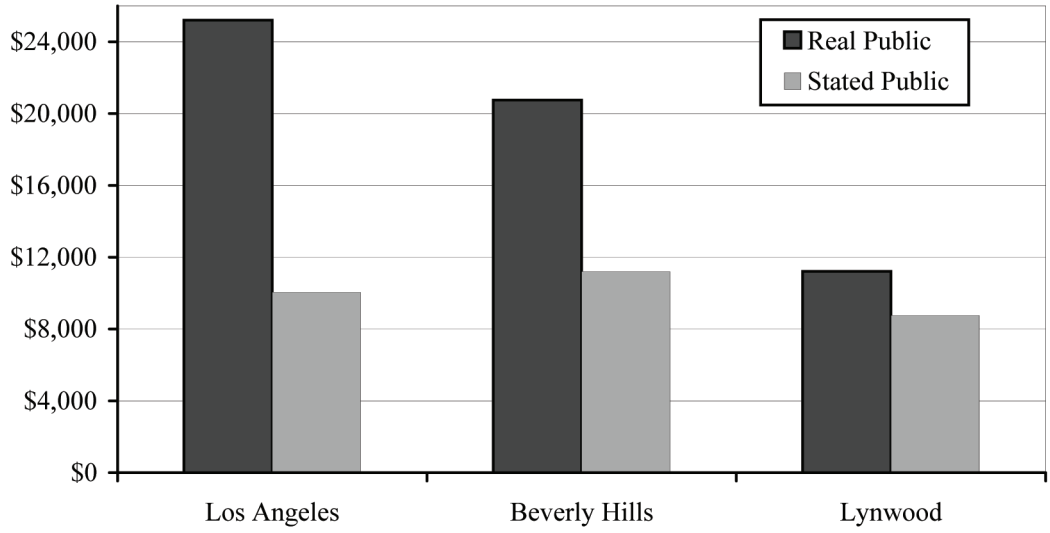
Los Angeles, spending just over $25,000 per student, is the highest spending of the three LA-area districts we examined (Figure 2). This real spending figure is 151 percent higher than the official figure—the largest gap of any district in this metro area and the largest gap of any district in our study. Beverly Hills comes in second place, spending over $20,500 per student. And Lynwood spends the least of the three, at just over $11,000 per pupil (Table 3).

The California budget has been the focus of much media attention, with the state actually running out of cash and issuing scrip to some businesses in lieu of payment this summer.[24] In fiscal year 2010 California has continued to wrestle with a shocking $46.6 billion gap in its budget, a sum that is over 50 percent of the total general fund budget. Next year looks difficult as well, with the state $7.4 billion off in revenues for projected spending in FY2011—and the revenue environment likely to worsen.[25]

Los Angeles has also been hit with significantly decreased tax revenue by the economic downturn, with battles erupting over tax hikes and cuts to services such as the police. The city is still grappling with a $405 million shortfall in this year's budget, and the next year is unlikely to bring any relief from the pressure.[26]

The average real per-pupil spending figure of $19,000 is a stunning 90 percent higher than the $10,000 the districts claim to spend.

Figure 2
Real Spending Per Pupil Compared with Figure Provided by Public Schools



Source: Notes for the figure are in Table 3 below, and full references are in Appendix A.

Table 3
Per-Pupil Spending in the Los Angeles, California, Metro Area

District	Real Public	Stated Public	NCES	Estimated Private	Higher than Stated	Higher than NCES	Higher than Private
Los Angeles (city district)	$25,208	$10,053	$13,341	$8,378	151%	89%	201%
Beverly Hills (high-income district)	$20,751	$11,205	$18,394	$8,378	85%	13%	148%
Lynwood (low-income district)	$11,215	$8,761	$10,816	$8,378	28%	4%	34%

Source: Los Angeles and Lynwood budget information is from fiscal year 2008. Beverly Hills budget information is from fiscal year 2007. National Center for Education Studies figures are from the most recent year available, the 2005–2006 total expenditures per pupil. The stated public school expenditure is taken from figures posted on the District website or budget documents if available, from state websites or documents if not available from the district, or directly from district officials if not available to the public in print or on an official website. All budget figures are in unadjusted dollars for the year in which the information was reported, as these unadjusted figures are what reporters and officials use. Full citations for district calculations are detailed in Appendix A. The private school spending figure is an estimate of FY2009 total spending per student based on NCES median highest private school tuition for 2003–2004, updated for cost trends per year and inflation, increased by 25 percent to account for spending from non-tuition sources, and adjusted for relative per-capita income in the metro area.

Washington, DC, Metro Area[27]

The Washington metro area comes in second highest in spending for our study at an average $22,400 per pupil (Figure 3). Only New York tops that figure.[28] This real per-pupil spending figure is 34 percent higher than the average of $16,700 stated by the school districts. Real public school spending is also more than double the estimated median private school spending of $11,000.

The District of Columbia, at over $28,000 per student, has the highest spending of the three DC–area districts we examined. This real spending figure is 61 percent higher than the official one—the largest gap of any district in the area. Arlington comes in second place, spending just under $24,000 per student. And Prince George's spends the least of the three, at just over $15,000 per pupil (Table 4).

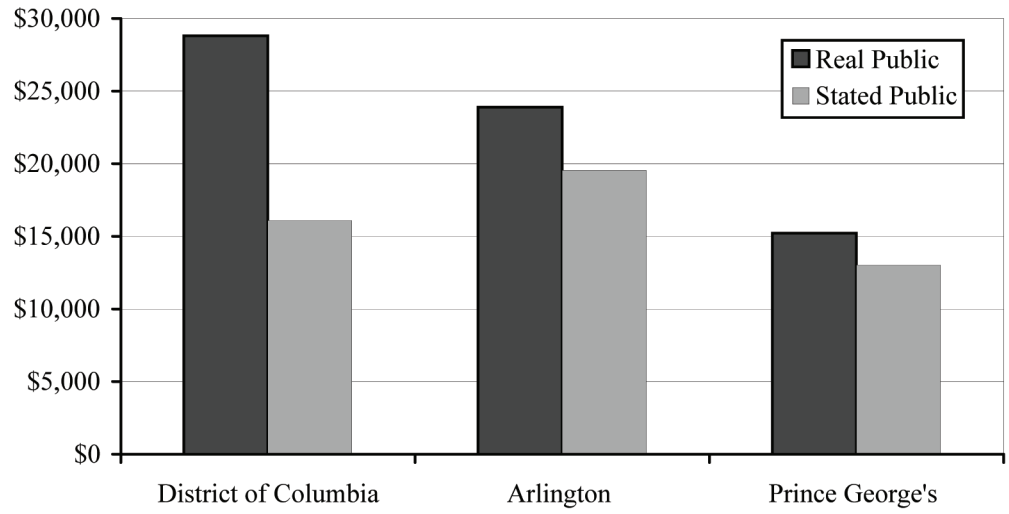
The Washington metro area comes in second highest in spending for our study, at an average $22,400 per pupil.

Washington, DC and the surrounding metro area were spared the depths of the economic downturn that many other regions suffered in 2009, but revenues have dropped nonetheless and local and state governments in Virginia and Maryland have struggled with cuts to their planned budgets as a result.

In Washington, mid-year revenue projection revisions exposed a $190 million gap in the 2009 budget after already closing an $800 million shortfall earlier in the year, a $150 million shortfall for 2010, and a total of $340 million shortfall over the next two years. "The recession we have is the deepest, widest, in 70 years," Chief Financial Officer of the District of Columbia Natwar M. Gandhi, said. "It's an economic tsunami out there, and it has caught up with us." Gandhi expected the economic situation to remain grim through at least 2012.[29]

Virginia is also wrestling with budget problems, with $5.6 billion in revenue shortfalls addressed after the 2010 budget took effect, and another $1 billion in shortfalls appearing soon thereafter.[30] In Arlington, officials have announced that cuts in services and tax increases are on the table to close to an $80 million to $100 million gap in the 2010 budget.[31] And in Maryland's Prince George's

Figure 3
Real Spending Per Pupil Compared with Figure Provided by Public Schools



Source: Notes for the figure are in Table 4 below, and the full references in Appendix A.

Table 4
Per-Pupil Spending in the Washington, DC, Metro Area

District	Real Public	Stated Public	NCES	Estimated Private	Higher than Stated	Higher than NCES	Higher than Private
District of Columbia (city district)	$28,170	$17,542	$15,847	$11,032	61%	78%	155%
Arlington County (high-income district)	$23,752	$19,538	$19,892	$11,032	22%	19%	115%
Prince George's County (low-income district)	$15,225	$13,025	$11,818	$11,032	17%	29%	38%

Source: District of Columbia, Arlington, and Prince George's County budget information is from fiscal year 2009. National Center for Education Studies figures are from the most recent year available, the 2005–2006 total expenditures per pupil. The stated public school expenditure is taken from figures posted on the District website or budget documents if available, from state websites or documents if not available from the district, or directly from district officials if not available to the public in print or on an official website. All budget figures are in unadjusted dollars for the year in which the information was reported, as these unadjusted figures are what reporters and officials use. Full citations for district calculations are detailed in Appendix A. The private school spending figure is an estimate of FY2009 total spending per student based on NCES median highest private school tuition for 2003–2004, updated for cost trends per year and inflation, increased by 25 percent to account for spending from nontuition sources, and adjusted for relative per-capita income in the metro area.

County, budget shortfalls led to a prolonged battle over a hiring freeze, layoffs, a furlough plan that a federal judge ruled unconstitutional, and calls for tapping into the reserve

The City of Chicago, which spends over $15,800 per student, has the highest spending of the three Chicago-area districts we examined.

fund.[32] Despite the relative good fortune of the DC metro area, it is clear that budget issues are likely to cause significant problems in the years ahead.

Chicago, Illinois, Metro Area

The Chicago metro area comes in fourth in average per-pupil spending, and, although it is still quite misleading, has the most accurately reported per-pupil spending figures in our study.[33] The average real per-pupil spending figure of nearly $14,800 is about 23 percent higher than the metro average of $12,000 that the districts claim to spend. In addition, real public school spending is about 67 percent higher than the estimated median private school spending of just under $9,000.

The City of Chicago, which spends over $15,800 per student, has the highest spending of the three Chicago-area districts we examined (Figure 4). This is 38 percent higher than the official spending figure—the largest gap of any district we examined. Elmhurst comes in a close second, spending about $15,200 per student and 30 percent more than the stated figure. North Chicago spends the least of the three districts, at over $13,300 per pupil, which is just 3 percent higher than the official spending figure. This 3 percent disparity is the smallest difference we found in any metro-area district in this study (Table 5).

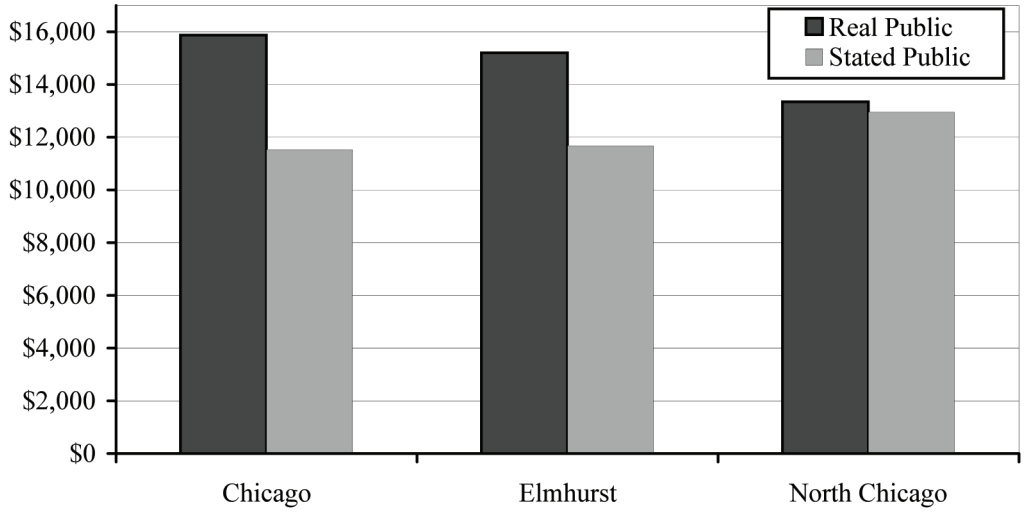
This fiscal year 2010, Illinois has grappled with a budget that fell $13.2 billion short, nearly 38 percent of the total general fund budget. Next year looks extremely difficult as well, with another $11.7 billion deficit based on projected revenues and spending.[34]

Chicago Mayor Richard Daley has been looking for ways to avoid tax and fee increases amid a worsening budget climate and economy. Facing a $520 million budget gap, the mayor has proposed raiding the city's reserve fund created by selling long-term leases on its parking meters and the Chicago Skyway.[35]

New York, New York, Metro Area

The New York metro area has the highest average real per-pupil spending among the metro areas in this study, and the average real per-pupil spending figure of more than $26,900 is 44 percent higher than the average of $18,700 that the districts claim to spend (Figure 5).[36] Real public school spending is almost 155 percent higher than the estimated

Figure 4
Real Spending Per Pupil Compared with Figure Provided by Public Schools



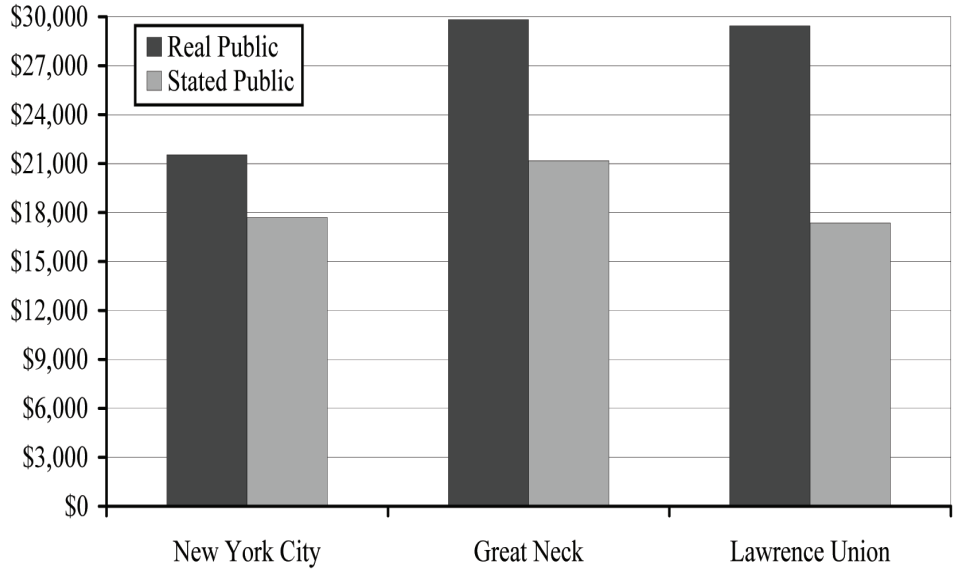
Source: Notes for the figure are in Table 5 below, and the full references are in Appendix A.

Table 5
Per-Pupil Spending in the Chicago, Illinois, Metro Area

District	Real Public	Stated Public	NCES	Estimated Private	Higher than Stated	Higher than NCES	Higher than Private
Chicago (city district)	$15,875	$11,536	$11,051	$8,849	38%	44%	79%
Elmhurst (high-income district)	$15,205	$11,679	$14,191	$8,849	30%	7%	72%
North Chicago (low-income district)	$13,348	$12,959	$12,163	$8,849	3%	10%	51%

Source: Chicago, North Chicago, and Elmhurst budget information is from fiscal year 2008. National Center for Education Studies (NCES) figures are from the most recent year available, the 2005–2006 total expenditures per pupil. The stated public school expenditure is taken from figures posted on the district website or budget documents if available, from state websites or documents if not available from the district, or directly from district officials if not available to the public in print or on an official website. All budget figures are in unadjusted dollars for the year in which the information was reported, as these unadjusted figures are what reporters and officials use. Full citations for district calculations are detailed in Appendix A. The private school spending figure is an estimate of FY2009 total spending per student based on NCES median highest private school tuition for 2003–2004, updated for cost trends per year and inflation, increased by 25 percent to account for spending from nontuition sources, and adjusted for relative per-capita income in the metro area.

Figure 5
Real Spending Per Pupil Compared with Figure Provided by Public Schools



Source: Notes for the figure are in Table 6 below, and the full references are in Appendix A.

median private school spending average of just over $10,600—the largest difference by far in our study.

Great Neck, at more than $29,800 per student, has the highest spending of the three New York–area districts we examined. This

Table 6
Per-Pupil Spending in the New York, New York, Metro Area

District	Real Public	Stated Public	NCES	Estimated Private	Higher than Stated	Higher than NCES	Higher than Private
New York City (city district)	$21,543	$17,696	$19,497	$10,586	22%	10%	104%
Great Neck (high-income district)	$29,836	$21,183	$25,659	$10,586	41%	16%	182%
Lawrence Union (low-income district)	$29,451	$17,359	$27,278	$10,586	70%	8%	178%

Source: New York City budget information is from fiscal year 2008 and Great Neck is from FY2009. Lawrence budget information is from 2009, though stated spending is from 2007 (see Appendix A for details). NCES figures are from the most recent year available, the 2005–2006 total expenditures per pupil. The stated public school expenditure is taken from figures posted on the district website or budget documents if available, from state websites or documents if not available from the district, or directly from district officials if not available to the public in print or on an official website. All budget figures are in unadjusted dollars for the year in which the information was reported, as these unadjusted figures are what reporters and officials use. Full citations for district calculations are detailed in Appendix A. The private school spending figure is an estimate of FY2009 total spending per student based on NCES median highest private school tuition for 2003–2004, updated for cost trends per year and inflation, increased by 25 percent to account for spending from nontuition sources, and adjusted for relative per-capita income in the metro area.

real spending figure is 41 percent higher than the district's stated figure. Lawrence, however, spends nearly the same amount at just over $29,400. This is 70 percent higher than the stated figure and the largest gap of any district examined in this area. New York City spends the least of the three, at about $21,500 per pupil, 22 percent higher than stated (Table 6).

New York state has been through prolonged budget turmoil this year, struggling to close a $21 billion budget gap, which is nearly 38 percent of the total general fund budget. Nonetheless, Governor David Paterson announced in November that the state could go bankrupt by Christmas without an additional $3.2 billion cut.[37] New York is facing another budget gap of $6.8 billion for the next fiscal year, and if past is prologue, it stands to be even larger.[38]

In New York City, the economic downturn and increased taxes have ravaged the tax base and created huge budget pressures. Mayor Michael Bloomberg has discussed cuts to the police department and other services to deal with the $1.3 billion shortfall this year and the city's projected $5 billion gap for next year.[39] Like other cities, the problem of falling local revenue is compounded by cuts in funding from a state government facing the same declines in tax revenue.[40]

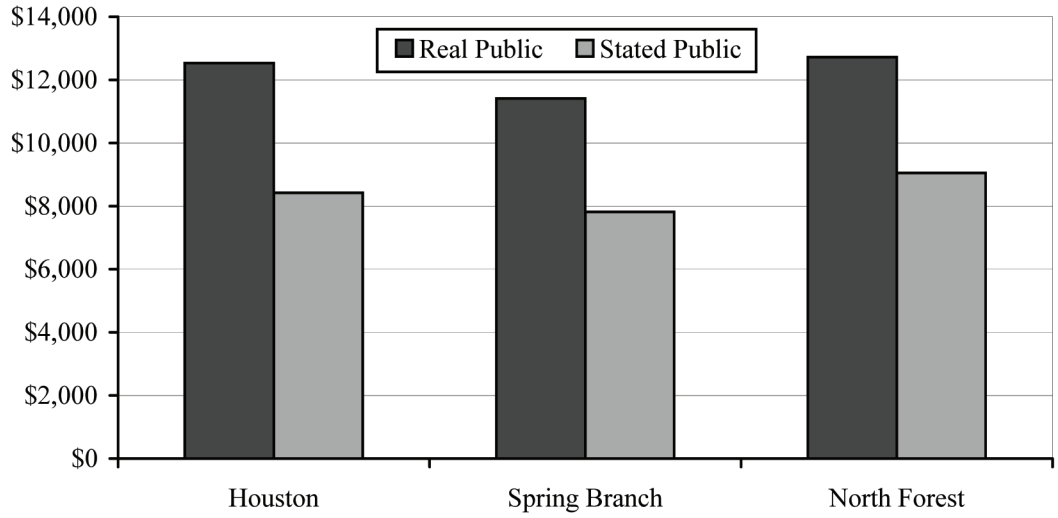
The average real per-pupil spending figure of over $12,200 is 49 percent higher than the $8,200 the districts claim to spend.

Houston, Texas, Metro Area

The Houston metro area comes in second-lowest in average, real per-pupil spending, although its per capita income level is much higher than lowest-spending Phoenix.[41] Nonetheless, the average real per-pupil spending figure of over $12,200 is 49 percent higher than the $8,200 the districts claim to spend. Real public school spending is 30 percent higher than the estimated median private school spending average of $9,400 (Figure 6).

North Forest spends about $12,700 per student, the highest spending of the three Houston-area districts we examined. This real spending figure is 41 percent higher than the official figure. Houston comes in second place, spending over $12,500 per student, 49 percent higher than the stated district figure

Figure 6
Real Spending Per Pupil Compared with Figure Provided by Public Schools



Source: Notes for the figure are in Table 7 below, and the full references are in Appendix A.

Table 7
Per-Pupil Spending in the Houston, Texas, Metro Area

District	Real Public	Stated Public	NCES	Estimated Private	Higher than Stated	Higher than NCES	Higher than Private
Houston (city district)	$12,534	$8,418	$9,829	$9,421	49%	28%	33%
Spring Branch (high-income district)	$11,412	$7,816	$10,032	$9,421	46%	14%	21%
North Forest (low-income district)	$12,719	$9,050	$10,891	$9,421	41%	17%	35%

Source: All budget information is from fiscal year 2009. National Center for Education Studies (NCES) figures are from the most recent year available, the 2005–2006 total expenditures per pupil. The stated public school expenditure is taken from figures posted on the district website or budget documents if available, from state websites or documents if not available from the district, or directly from district officials if not available to the public in print or on an official website. All budget figures are in unadjusted dollars for the year in which the information was reported, as these unadjusted figures are what reporters and officials use. Full citations for district calculations are detailed in Appendix A. The private school spending figure is an estimate of FY2009 total spending per student based on NCES median highest private school tuition for 2003–2004, updated for cost trends per year and inflation, increased by 25 percent to account for spending from nontuition sources, and adjusted for relative per-capita income in the metro area.

and the largest difference among the three districts. Spring Branch spends the least of the three, at about $11,400 per pupil (Table 7).

This fiscal year, Texas has done well relative to other states, closing a budget gap of just $3.5 billion, about 10 percent of the total general fund budget. There is no projected budget gap for next year, although with unemploy-

This disconnect raises troubling questions regarding democratic control of public institutions and whether or not citizens are getting what they are paying for.

ment still growing and many states finding their forecasts too optimistic, this does not rule out continuing trouble.[42]

Like Texas overall, Houston is doing better than much of the country during this recession. It is, however, facing declining revenue and economic realities that are worse than previously projected, finding an estimated $103 million shortfall for this year.[43]

Conclusion

Public K–12 education consumes a larger chunk of each state and local taxpayer dollar than any other expense. More than one out of four tax dollars collected goes to the government-run K–12 education system. However, despite the importance of educating children and the huge expense it currently entails, there is a troubling lack of transparency in school budgets.

A typical citizen, even a relatively engaged and determined one, will have a difficult time discovering how much his local school district spends to educate each child under its care. Most school districts do not publish readily accessible information on per-pupil spending. And if a taxpayer is lucky enough to find a section on the school district website that states what is spent per child, it is likely that the figure will be misleading in the extreme.

We found that real per-pupil spending was on average 44 percent higher than the figure obtained from district publications or personnel. On average, the districts we studied spent nearly $18,000 per student, and yet claimed to spend just $12,500.

This disconnect between official accounting and reality raises troubling questions regarding democratic control of public institutions and the ability of citizens to determine whether or not they are getting what they are paying for. Especially during times of economic hardship, we must ensure that every dollar is accounted for and used efficiently. Citizens are losing their jobs and their homes, government services are being cut, and taxes are being raised. This is no time to lose track of how more than one-quarter of all state and local tax dollars are spent. There is no excuse for opaque and unaccountable public institutions in times of plenty, but our current economy makes this issue urgent.

We must demand a significant increase in school district budget transparency. Citizens and politicians deserve up-to-date access to basic information on school district spending. That might sound like a simple thing to achieve. But determining such basic facts as the total spending per-pupil in a district for the most recent school year often takes days or even weeks of persistent digging, calling, and calculating. Identifying fraud and general mismanagement of funds is even more difficult given the complexity of district budgets and the profusion of funds, funding sources, and programs.

We can, however, easily ensure that citizens and politicians have access to all the financial information necessary to ensure that government schools are financially accountable to the public. We can bring more light and clarity to district school budgets and provide the raw material for oversight, and empower citizens and their representatives, by mandating that school financial information be made clearer and more accessible via a standardized, searchable database at the level of every district and every state.

Toward that end, Appendix B presents model legislation for fiscal transparency in public K–12 education.

Appendix A: Notes on the Per-Pupil Spending Calculations

This section provides the sources and method used to obtain a figure for the stated and real total expenditures per pupil in each district. The "stated" figure is the one that a citizen, journalist, or politician is most likely to find (or be officially presented with) at the district level. Often, school districts publish per-pupil expenditure figures in one of their financial documents, available either online or in hard copy from the district. Many times, however, there are no published per-pupil spending figures at all, and district personnel must be asked to provide an official number. We have indicated below how we obtained the figure for each district in the subsections that follow.

Ascertaining the real spending figure is more challenging. Districts publish financial material in very different formats with different labels and categories. Since there is no common standard for reporting expenditures at the district level, our real expenditure calculations could not be uniform across districts. In every case, however, we closely examined district budget documents, tallying fund totals or using reported summary figures, subtracting expenses for adult education and community services and backing out fund transfers when required. Where possible, we also eliminated both preschool expenses and enrollment from our calculations. Sometimes this was not possible, however, because either preschool spending was not itemized, enrollment was not itemized, or both. In these cases, we left both preschool expenses and enrollment in the calculation of total expenditures per student. This will result in a more conservative (lower) per-pupil spending figure, as per-student spending for preschool tends to be much lower than for K–12. We have used the most recent, comprehensive, official budget documents available for matching real and stated district spending.

District spending documents are often confusing and difficult to decipher, and we have therefore often relied on the assistance of district budget officials. We have taken every reasonable precaution to ensure that we have correctly tallied total expenditures. However, district officials often object to total expenditure calculations—not due to mistakes in calculation, but because they believe certain expenditure categories should not "count" toward the total per-pupil figure. As noted in the paper, such categories often include capital expenses, debt service, and health and retirement benefits. We argue that these are expenses borne by the taxpayer that are used to support the K–12 education system, and as such must be included, by definition, in a *total* spending calculation. In fact, the identification and inclusion of these often-hidden expenses is a key purpose of our calculations.

Phoenix, Arizona, Metro Area Data Sources and Notes

Table A1
Paradise Valley

Stated Spending	Published pre-K–12 per-pupil spending is 2009 All Funds Expenditure per Pupil, from "Summary of School District Annual Financial Report," provided by e-mail from Vanessa Shapiro, Paradise Valley Unified School District, November 13, 2009, http://cmweb.pvschools.net/siteweb/pdfs/BudgetSummary0910.pdf.
Real Spending	Total FY2009 budgeted pre-K–12 expenditures calculated as the sum of all accounting funds from "Summary of School District Proposed Expenditure Budget," p. 2, http://cmweb.pvschools.net/siteweb/pdfs/BudgetSummary0910.pdf.
Enrollment	2009 pre-K–12 enrollment is 2009 Average Daily Membership—Attending from "Summary of School District Proposed Expenditure Budget," p. 1.

Table A2
Cave Creek

Stated Spending	Published pre-K–12 per pupil spending is 2008 Total Expenditures per Average Daily Membership from "Fiscal Year 2007–2008 Annual Report for the Arizona Department of Education," p. III-9, http://ade.az.gov/AnnualReport/AnnualReport2008/Vol1.pdf.
Real Spending	Total 2008 pre-K–12 budgeted expenditures calculated as the sum of appropriations for every accounting fund except Community Education, from "07–08 All Funds Summary," http://www.ccusd93.org/education/sctemp/dc7d2f64681f6bfdcc77fcec3b23e0ad/1257805240/All_Funds_Summary.pdf.
Enrollment	2008 pre-K–12 enrollment is Average Daily Membership, from "Fiscal Year 2007–2008 Annual Report for the Arizona Department of Education," p. III-9, http://ade.az.gov/AnnualReport/AnnualReport2008/Vol1.pdf.

Note: 2008 information was used because our contact in the district finance department said that she did not know of a published 2009 per-pupil spending figure and seemed to think that the district does not publish such a figure.

Table A3
Deer Valley

Stated Spending	Published 2008 Pre-K–12 per-pupil spending is Total Expenditures per Average Daily Membership from "Fiscal Year 2007–2008 Annual Report for the Arizona Department of Education," p. III-9, http://ade.az.gov/AnnualReport/AnnualReport2008/Vol1.pdf.
Real Spending	Total FY2008 budgeted pre-K–12 expenditures calculated as the sum of budgeted expenditures for all accounting funds, from "Budget Summary 2009-09.pdf," p. 2, https://www.dvusd.org/budget411/Budget_Summary_2008-09.pdf.
Enrollment	FY2008 pre-K–12 enrollment is Average Daily Membership from "Fiscal Year 2007–2008 Annual Report for the Arizona Department of Education," p. III-9, http://ade.az.gov/AnnualReport/AnnualReport2008/Vol1.pdf.

Note: FY2008 information was used because we were directed by Paulette Roberts of the district office to the 2008 state annual report for the published per-pupil spending figure.

Los Angeles, California, Metro Area Data Sources and Notes

Table A4
Los Angeles

Stated Spending	Published K–12 per-pupil spending is FY2008 Current Expense per Average Daily Membership from "Comprehensive Annual Financial Report for Fiscal Year Ended June 2008," p. 126, http://notebook.lausd.net/pls/ptl/docs/PAGE/CA_LAUSD/LAUSDNET/OFFICES/CFO_HOME/LAUSD%20CAFR%20FY2007-2008WO.PDF.
Real Spending	Total FY2009 K–12 budgeted expenditures calculated as the sum of expenditures for every accounting fund minus Adult Education from "Superintendent's 2008–2009 Final Budget," p. I 53 (sic), http://notebook.lausd.net/pls/ptl/docs/PAGE/CA_LAUSD/LAUSDNET/OFFICES/CFO_HOME/ALL%20SECTIONS%20091108.PDF.
Enrollment	FY2009 K–12 enrollment is Average Daily Attendance from "Superintendent's 2008–2009 Final Budget," p. VII 13, http://notebook.lausd.net/pls/ptl/docs/PAGE/CA_LAUSD/LAUSDNET/OFFICES/CFO_HOME/ALL%20SECTIONS%20091108.PDF.

Table A5
Beverly Hills

Stated Spending	Published K–12 per pupil spending is 2006–2007 Current Expense of Education per Pupil Total Unrestricted and Restricted spending plus per pupil spending for categorical, special education, and support programs for the district as a whole, reported in "Beverly Hills Unified School District El Rodeo School 2007–2008 Annual School Accountability Report Card," p. 8, http://www.beverlyhills.k12.ca.us/ourpages/accountability/el_rodeo/2007-2008.pdf?rn=2879456.
Real Spending	Total 2007 budgeted pre-K–12 expenditures calculated as the sum of expenditures for every accounting fund except the Adult Education fund from "Beverly Hills Unified School District Annual Financial Report, June 30, 2007," p. 10, http://www.beverlyhills.k12.ca.us/ourpages/departments/ESD-BS/Fiscal%20Services/Annual_Financial_Report_June_30_2007.pdf?rn=1595781.
Enrollment	2007 K–12 enrollment is Revised Annual Report Average Daily Attendance from "Beverly Hills Unified School District Annual Financial Report, June 30, 2007," p. 50.

Note: 2007 information was used because we were not able to reach a school district employee with the authority to provide more recent information than that available on the website.

Table A6
Lynwood

Stated Spending	Published K–12 per-pupil spending is Expenses per Student from "Lynwood Unified School District: District Accountability Report, 2007–2008," p. 20, http://lynwood.schoolwisepress.com/reports/2008/pdf/lynwood/DARC_en_Lynwood.pdf.
Real Spending	Total 2008 estimated actual K–12 expenditures calculated as the sum of Total Expenditures of each accounting fund in FY2009 from "July 1 Budget (Single Adoption)" PDFs provided in an August 4, 2009 e-mail from Crystal Heggins, Fiscal Services Department, Lynwood Unified School District.
Enrollment	2008 K–12 enrollment is Total, K–12 Annual Average Daily Attendance from FY2009 "July 1 Budget (Single Adoption)" PDFs provided in an August 4, 2009, e-mail from Crystal Heggins, Fiscal Services Department, Lynwood USD.

Note: 2008 information was used because the e-mail request to Crystal Heggins for a 2009 published per-pupil spending figure was unanswered.

Washington, DC, Metro Area Budget Calculations

Table A7
Washington, DC

Stated Spending	Stated pre-K–12 per-pupil spending is taken directly from a calculation made by district personnel in an excel file e-mailed by Rita Gibson, Executive Assistant, Office of the CFO for DC Public Schools, on November 13, 2009. File available on request.
Real Spending	Total 2009 budgeted K–12 expenditures calculated as the sum of Gross FY2009 Appropriated Funds for District of Columbia Public Schools minus line items related to early childhood education and intra-district transfers from the Office of the State Superintendent

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Table A7 ***Continued***

	of Education; FY2009 Proposed Operating Budget of the Office of the State Superintendent of Education, minus line items related to adult and career education, DC Tag, early childhood and pre-kindergarten education, and charter schools; FY2009 Proposed Operating Budget for the Office of the Deputy Mayor for Education; FY2009 Proposed Operating Budget for the Office of Public Education Facilities Modernization; FY2009 Proposed Operating Budget for Non-Public Tuition; and FY2009 Proposed Operating Budget for Special Education Transportation from "Government of the District of Columbia FY2009 Proposed Budget and Financial Plan Agency Budget Chapters Part 2," [which is also the Adopted Budget], pp. D-1–D-78; http://cfo.dc.gov/cfo/frames.asp?doc=/cfo/lib/cfo/budget/2009/agency_budget_chapters_-_part_2_of_2.pdf. To this total was added the FY2009 Proposed Total Funding for capital expenditures for DCPS, OSSE, and the Office of Public Education Facilities Modernization from "Government of the District of Columbia FY2009 Proposed Budget and Financial Plan FY2009–FY2014 Capital Appendices," p. GA0-1, GD0-1, and GM0-1; http://cfo.dc.gov/cfo/frames.asp?doc=/cfo/lib/cfo/budget/2009/fy_2009_-_fy_2014_capital_appendices_-_part_2_of_2_revised.pdf.
Enrollment	2009 pre-K–12 enrollment is the sum of Audited Enrollment Totals for noncharter school types minus preschool (n.b.: not the same as pre-K) and adult enrollment from "Attachment 1 Summary of Audited Enrollment by School Type and Grade.pdf," http://www.osse.dc.gov/seo/frames.asp?doc=/seo/lib/seo/Package1-4.pdf. To this figure is added the number of students placed in county and non-public schools from "District of Columbia Public Schools and Public Charter Schools Enrollment Census Report October 6, 2008," p.4, http://www.osse.dc.gov/seo/frames.asp?doc=/seo/lib/seo/Final_report_Oct_6_2008.pdf.

Note: The DC Public Schools was contacted multiple times with a request for more detailed information regarding the grades and programs included in their official per-pupil expenditure figure, which appears to include preschool and possibly adult program enrollment and may include expenditures for these programs as well. No response to our inquiries has been received as of publication.

Table A8
Arlington

Stated Spending	Published K–12 per pupil spending is FY2009 adopted cost per pupil, Washington Area Boards of Education methodology from "School Board's Adopted Budget, Fiscal Year 2009," p. 53, http://www.apsva.us/15401081151845893/lib/15401081151845893/FY_2009_Final_Adopted_Budget_FINAL.pdf.
Real Spending	Total 2009 budgeted K–12 expenditures calculated as the total expenditures for all funds from "School Board's Adopted Budget, Fiscal Year 2009," p. 41; minus the sum of budgeted expenditures related to preschool and adult education, from "School Board's Adopted Budget, Fiscal Year 2009," pp. 269, 429, and 430.
Enrollment	2009 K–12 enrollment is FY2009 projected enrollment from "School Board's Adopted Budget, Fiscal Year 2009," p. 116.

Table A9
Prince George's County

Stated Spending	Published K–12 per-pupil spending is FY2009 Projected Cost Per Pupil from "Superintendent's PROPOSED Annual Operating Budget for Fiscal Year 2010," p. 20.

Continued next page

Table A9 ***Continued***

Real Spending	Total 2009 budgeted K–12 expenditures calculated as the sum of appropriations for operating and non-operating expenses from "Superintendent's PROPOSED Annual Operating Budget for Fiscal Year 2010," p. 27, http://www1.pgcps.org/uploadedFiles/Offices/Business_Management_Services/Budget/FY_2010_Proposed_Budget/FY%202010%20Superintendents%20PROPOSED.pdf and approved capital improvement program funding from "Board of Education Approved FY-2009 Annual Operating Budget," p. 43, http://www1.pgcps.org/WorkArea/showcontent.aspx?id=70198), minus the sum of budgeted expenditures related to early childhood education from "Board of Education Approved FY–2009 Annual Operating Budget," pp. 107, 116, and 257, http://www1.pgcps.org/WorkArea/showcontent.aspx?id=70200; alternative education from "Board of Education Approved FY-2009 Annual Operating Budget," pp. 94, 107, and 267, http://www1.pgcps.org/WorkArea/showcontent.aspx?id=70200; and community services from "Superintendent's PROPOSED Annual Operating Budget for Fiscal Year 2010," p. 22.
Enrollment	2009 K–12 enrollment is FY2009 Actual headcount on September 30, 2008, from "Board of Education Approved FY–2009 Annual Operating Budget," p. 36, http://www1.pgcps.org/WorkArea/showcontent.aspx?id=70200.

Chicago, Illinois, Metro Area Budget Calculations

Table A10
Chicago

Stated Spending	Published K–12 per-pupil spending is FY2008 Per Capita Cost for Actual Operating Expense, from "Chicago Public Schools FY2010 Budget Book," p. 74, http://www.cps.edu/About_CPS/Financial_information/Documents/0910ProposedBudget/0910_Budget.pdf.
Real Spending	Total 2008 budgeted K–12 expenditures calculated as total for FY2008 Resource Summary by Governmental Fund Type, from "The Chicago Public Schools FY2008 Budget Book," p. 14, http://www.cps.edu/About_CPS/Financial_information/Documents/FY08_Online_Budget_Book.pdf, minus the sum of budgeted expenditures related to early childhood and adult education (pp.18, 21).
Enrollment	2008 K–12 enrollment is FY2008 Average Daily Attendance, from "Chicago Public Schools FY2010 Budget Book," p. 102, http://www.cps.edu/About_CPS/Financial_information/Documents/0910ProposedBudget/0910_Budget.pdf.

Table A11
North Chicago

Stated Spending	Published pre-K–12 per-pupil spending is 2008 Operating Expenditure per Pupil, from "Interactive Illinois Report Card," District Finances, http://iirc.niu.edu/District.aspx?source=Finances&districtID=34049187026&level=D.
Real Spending	Total 2008 budgeted pre-K–12 expenditures calculated as the sum of Total Disbursements/Expenditures of each accounting fund, minus line item expenditures for Adult Education and Community Services, from "School District Budget Form July 1, 2007–June 30, 2008," pp. 2, 11, 12, and 17, http://www.nchi.lfc.edu/about/budgets/SDB2008FORM.pdf.
Enrollment	2008 pre-K–12 enrollment is 2008 District Enrollment from "Interactive Illinois Report

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Table A11 ***Continued***

	Card," About Students, Enrollments, http://iirc.niu.edu/District.aspx?source=About_Students&source2=Enrollments&districtID=34049187026&level=D.

Note: 2008 information was used because the district official consulted said that the most recent published per-pupil figure available would be for 2008 in the district's 2009 state report card.

Table A12
Elmhurst

Stated Spending	Published K–12 per-pupil spending is 2009 Estimated Operating Expense Per Pupil from "2009 Annual Financial Report," p. 28.
Real Spending	Total 2009 budgeted K–12 expenditures calculated as the sum of expenditures of every accounting fund, minus line items for pre-K and Adult Education, from "2009 Annual Financial Report," pp. 15–22, http://links.schoolloop.com/link/rd?href=736c5f6c696e6b66663031636330656232666874747 03a2f2f656c6d6875727374637573643230352d696c2e7363686f6f6c6c6f6f702e636f6d2f66696c652f313233393638363233373638372f31323337303830313135353037 2f323639383930303730373935313833353734312e706466.
Enrollment	2009 K–12 enrollment is 9-Month Average Daily Attendance, from "2009 Annual Financial Report," p. 28.

New York, New York, Metro Area Budget Calculations

Table A13
New York

Stated Spending	Published K–12 per-pupil spending is Actual FY2008 Average expenditure per student, from "Mayor's Management Report," FY2009 Department of Education section, p. 17, http://www.nyc.gov/html/ops/downloads/pdf/_mmr/doe.pdf.
Real Spending	Total 2008 budgeted pre-K–12 expenditures calculated as the sum of the Current Modified Budget for FY2008 Total Department of Education appropriations, from "The City of New York Adopted Budget Fiscal Year 2009: Expense, Revenue, Contract," p. 55E, http://www.nyc.gov/html/omb/downloads/pdf/erc6_08.pdf; and appropriations for fringe benefits, judgment and claims, and legal services from "The City of New York Adopted Budget Fiscal Year 2008: Expense, Revenue, Contract," p. 55E, http://www.nyc.gov/html/omb/downloads/pdf/erc6_07.pdf; and appropriations for GO and Lease Debt Service, GO Debt Service, Pensions, TFA debt services, and TFA BARBS (figures in Department of Education budget document provided in an October 22, 2009 e-mail from Marc Alterman, Assistant Director for Revenue Budget Preparation and Analysis, NYC Department of Education Division of Revenue Operations; and Capital Project Fund Total Expenses for the New York City School Construction Authority for 2008 (provided October 27, 2009 by John Hepburn, Controller for the School Construction Authority), minus the FY2008 Current Modified Budget appropriations for Charter/Contract/Foster Care and Non-Public Schools and the Fashion Institute of Technology, from "The City of New York Adopted Budget Fiscal Year 2009: Expense, Revenue, Contract," p. 54E and p. 55E, http://www.nyc.gov/html/omb/downloads/pdf/erc6_08.pdf.
Enrollment	2008 pre-K–12 enrollment is the FY2008 Total Enrollment from "Mayor's Management

Continued next page

Table A13 ***Continued***

	Report," FY2009 Department of Education section, p. 15, http://www.nyc.gov/html/ops/downloads/pdf/_mmr/doe.pdf.

Table A14
Great Neck

Stated Spending	Stated total K–12 per-pupil spending is for FY2009, as reported over the phone by district official Jessica Vega, Office of Public Relations.
Real Spending	Total FY2009 budgeted K–12 expenditures calculated as the sum of expenditures for the 3-Part Budget (p. 11), plus Prop 3 (p. 115), Building (p. 115), and Capital Projects (p. 112); minus Community Services, pre-K, and Adult Education, from "Great Neck Union Free School District Final Budget Book 2008–2009," received in printed form from district official Diana O'Connell.
Enrollment	2009 K–12 enrollment is the projected total enrollment from "Great Neck Union Free School District Final Budget Book 2008–2009," p. 93, received in printed form from district official, Diana O'Connell.

Table A15
Lawrence

Stated Spending	Published K–12 per-pupil spending is calculated as the weighted average of 2007 Instructional Expenditures per Pupil for General Education students and for Special Education students, from "Lawrence Union Free School District 2009–2010 Budget Statement," p. 26.
Real Spending	Total 2009 budgeted K–12 expenditures calculated as Adopted BUDGET 2008–09 Total, minus budgeted expenditures for Evening School and pre-K, from "Lawrence Union Free School District 2009–2010 Budget Statement, pp. 5, 11, 12, and 16, http://www.lawrence.org/Assets/District/budget_statement2009_2010.pdf.
Enrollment	2009 pre-K–12 enrollment is Enrollment as of March 2009, from "2009–2010 Proposed Budget March 24, 2009," slide 6, http://www.lawrence.org/Assets/District/2009-10Budget For5-6-09_BOE_.ppt.

Note: 2007 information was used for the published per-pupil spending figure because the official consulted in the district business office said that the district did not publish a per-pupil spending figure, and said that we would have to file a Freedom of Information Act (FOIA) request to obtain older budgets.

Houston, Texas, Metro Area Budget Calculations

Table A16
Houston

Stated Spending	Published pre-K–12 per-pupil spending is Total Expenditures Per Pupil, from "2009 Facts and Figures about HISD," General Fund Summary, http://www.hisd.org/HISDConnectDS/v/in

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Table A16 ***Continued***

	dex.jsp?vgnextoid=62c6757761efc010VgnVCM10000052147fa6RCRD&vgnextchannel=2e2b2f796138c010VgnVCM10000052147fa6RCRD.
Real Spending	Total 2009 budgeted pre-K–12 expenditures are Total expenditures for All Governmental and Proprietary Funds, from "Houston Independent School District District Budget Adopted 2008–2009," p. 65, http://www.hisd.org/BudgetingFinancialPlanning/Home/District%20Budget%20Books/2008-2009_Financial_Section.pdf.
Enrollment	2009 pre-K–12 enrollment is Total Enrollment from "Houston Independent School District District and School Profiles," p. 17, http://dept.houstonisd.org/profiles/2008-2009%20HISD%20District%20and%20School%20Profiles_reduced.pdf.

Table A17
Spring Branch

Stated Spending	Published pre-K–12 per-pupil spending is 2009 Cost per Student from "Financial Overview and Budget Summary," p. A-1.
Real Spending	Total 2009 budgeted pre-K–12 expenditures were calculated as the sum of expenditures for each accounting fund minus expenditures for community services, from "Financial Overview and Budget Summary," p. B-12, http://www.springbranchisd.com/admin/finance/budget/BUDGET-FY2009.pdf.
Enrollment	2009 pre-K–12 enrollment is 2009 Peak Enrollment, from "Financial Overview and Budget Summary," p. A-1.

Table A18
North Forest

Stated Spending	Published 2009 pre-K–12 per-pupil spending is the sum of Per Pupil Expenditures for Instruction, Instructional Support, Central Administration, District Operations, Debt Service, and Other funds from "1-Budgets summary0910.pdf"; provided in an October 15, 2009 e-mail from Tangela Boyd, Budget Specialist, North Forest Independent School District.
Real Spending	Total 2009 budgeted pre-K–12 expenditures were calculated as the sum of expenditures of all accounting funds, from "08-09 FYExpense 08-31-09.pdf," provided in a September 2, 2009 e-mail from Tangela Boyd, Budget Specialist, North Forest Independent School District.
Enrollment	2009 pre-K–12 enrollment is Average Daily Attendance, provided September 3, 2009 by Dr. Veronica Sharp, North Forest Independent School District.

Calculation of Median Private School Expenditure Estimates

The most recent estimates of national private school tuition come from the National Center for Education Statistics Schools and Staffing Survey, National Median Highest Tuition Paid in Private Schools 2003–2004.

Because the average is skewed by the existence of elite schools with often lavish and extensive grounds and facilities, as well as extremely expensive schools offering exceptional services to children with severe disabili-

ties, I use the median rather than the average private school tuition figure: $3,500. Adjusting the median highest tuition figure of $3,500 to 2009 dollars brings the figure to $4,100. Since no historical median data are available to establish a median tuition trend over time, I use a trend in the inflation-adjusted average tuition and apply that to the inflation-adjusted median tuition value (calculated by Andrew Coulson).[44]

Average tuition has been rising by roughly $347 per year in constant 2009 dollars. The 2009 national median private school tuition of $6,182 is then adjusted upward, by a likely overestimate of 25 percent, to $7,728, based on findings in Arizona that tuition covers approximately 80 percent of private-school expenditures (determined by Andrew Coulson).[45] This figure is then adjusted using metro-area-specific, per-capita personal income data from the Census to obtain a localized estimate of median private school costs in each metro area.

Table A19
Full Data Table

State	District	Real Public	Stated Public	NCES	Estimated Private	Higher than Stated	Higher than NCES	Higher than Private
AZ	Paradise Valley Unified	$12,321	$10,734	$8,777	$6,770	15%	40%	82%
AZ	Cave Creek Unified	$13,929	$9,024	$7,895	$6,770	54%	76%	106%
AZ	Deer Valley Unified	$9,365	$8,323	$7,515	$6,770	13%	25%	38%
CA	Los Angeles Unified	$25,208	$10,053	$13,341	$8,378	151%	89%	201%
CA	Beverly Hills Unified	$20,751	$11,205	$18,394	$8,378	85%	13%	148%
CA	Lynwood Unified	$11,215	$8,761	$10,816	$8,378	28%	4%	34%
DC	District of Columbia	$28,170	$17,542	$15,847	$11,032	61%	78%	155%
VA	Arlington County	$23,892	$19,538	$19,892	$11,032	22%	20%	117%
MD	Prince George's County	$15,225	$13,025	$11,818	$11,032	17%	29%	38%
IL	City of Chicago, District 299	$15,875	$11,536	$11,051	$8,849	38%	44%	79%
IL	Elmhurst, District 205	$15,205	$11,679	$14,191	$8,849	30%	7%	72%
IL	North Chicago, District 187	$13,348	$12,959	$12,163	$8,849	3%	10%	51%
NY	NYC-Chancellor's	$21,543	$17,696	$19,497	$10,586	22%	10%	104%
NY	Great Neck Union	$29,836	$21,183	$25,659	$10,586	41%	16%	182%
NY	Lawrence Union	$29,451	$17,359	$27,278	$10,586	70%	8%	178%
TX	Houston Independent	$12,534	$8,418	$9,829	$9,421	49%	28%	33%
TX	Spring Branch Independent	$11,412	$7,816	$10,032	$9,421	46%	14%	21%
TX	North Forest Independent	$12,719	$9,050	$10,891	$9,421	41%	17%	35%
	City Average	$19,275	$12,663	$13,057	$9,173	56%	48%	109%
	High-Income Average	$19,171	$13,408	$16,011	$9,173	46%	24%	107%
	Low-Income Average	$15,221	$11,580	$13,414	$9,173	28%	15%	62%
	Overall Average	$17,889	$12,550	$14,160	$9,173	44%	29%	93%

Appendix B: Financial Transparency in Education Act[46]

Summary

The Financial Transparency in Education Act would require each local education provider in the state to create and maintain a searchable expenditure and revenue website that includes detailed data on revenues and expenditures. It also would require each local education provider to maintain the data in a format that is easily accessible, searchable, and downloadable, and to prominently post comprehensive figures on total expenditures and per-pupil spending. The Act also requires that each local education provider submit the summary data to the state to be aggregated and made available online by the state.

Model Legislation

Section 1. {Title} The Financial Transparency in Education Act

Section 2. {Legislative Declaration}

(A) The Legislature finds that:

(1) Taxpayers should have easy access to the details of public school district spending; and that
(2) Easier access to and storage of electronic data would increase transparency in public school financial matters; and that
(3) It is neither difficult nor prohibitively expensive to make such data available to the public via the Internet

(B) Therefore, it is the intent of the Legislature to direct all local education providers to create and maintain a searchable expenditure and revenue website database detailing financial activities.[47]

Section 3. {Definitions} As used in this Act, unless the context otherwise requires:

(A)

(1) "Entity" means a corporation, association, union, limited liability company, limited liability partnership, grantee, contractor, local government, other legal entity including a nonprofit corporation, or an employee of the local education provider.
(2) "Entity" shall not include an individual recipient of public assistance.

(B) "Local education provider"[48] means:

(1) a school district organized and existing pursuant to law;
(2) a board of cooperative services or intermediate school district;
(3) a publicly funded agency established by the state for the express purpose of authorizing charter schools;[49] or
(4) a public charter school authorized pursuant to state statutes.

(C) "Public record" shall have the same meaning as set forth in state open records laws.

Section 4. {Creation of Searchable Expenditure and Revenue Website Databases}

(A) No later than one year[50] from the enactment of this legislation, each local education provider shall develop, maintain, and make publicly available a single, searchable expenditure and revenue website database that allows the public, at no cost, to review information concerning moneys collected and expended by the local education provider.

(B)

(1) The website shall include the following data for each fiscal year, using budgeted numbers no more than one week following the adoption of a budget for the most recent fiscal year, and actual audited spending figures no more than one week after official figures have been accepted, concerning all expenditures made by the local education provider:

(a) A comprehensive total for all moneys expended directly by the local education provider and any subsidiary under its direction, as well as all expenditures made on behalf or for the benefit of the local education provider or any subsidiary by any governmental or non-governmental entity;
(b) A total for all moneys expended on adult education programs, not including expenses for GED or alternative high school diploma programs;
(c) A total for all moneys expended on community services, which are defined as expenditures used exclusively for non-K–12 purposes;
(d) A total for all moneys expended on preschool and early childhood services, defined as all services provided to children younger than the age required by the local education provider for enrollment in kindergarten;
(e) The name and principal location or address of the entity receiving moneys, except that information concerning a payment to an employee of the local education provider shall identify the individual employee by name and business address or location only;
(f) The amount of expended moneys;
(g) The funding source(s) of the expended moneys;[51]
(h) The date of the expenditure;
(i) The name of the budget program, activity, or category supporting the expenditure;
(j) A description of the purpose for the expenditure;[52]
(k) A unique identifier for each expenditure on adult education as described in (b) and community services in (c) of this section, and for all other expenditures to the extent possible;[53]
(l) Copies of all credit card statements, identified by department responsible for each credit card; and
(m) The database will include and retain both the budgeted and audited actual expenditure figures for each fiscal year and ensure each set of figures can be identified as budgeted or audited figures.

(2) The expenditure data shall be provided in an open structured data format[54] that:

(a) May be downloaded by the user; and
(b) Allows the user to systematically sort, search, and access all data.[55]

(3) The website shall contain only information that is a public record or that is not confidential or otherwise protected from public disclosure pursuant to state or federal law.

(C) The local education provider shall:

(1) Update the financial data contained on the website at least monthly;[56]
(2) Archive the financial data, which shall remain accessible and searchable on the website;
(3) Post total expenditures as defined in Section 4(B)(1)(a), (b), (c), and (d) on the home page of the local education provider's website no more than one week after the official budget is adopted for the latest fiscal year and no more than one week after final, audited actual expenditure figures are produced. In the same section, post the estimated K–12 and pre-K if applicable average daily attendance figure for the most recent fiscal year budget and the audit actual K–12 and pre-K average daily attendance for the most recently audited fiscal year. Finally the per-pupil spending figure will be posted, as derived by the following formula, using figures, both the budgeted and audited, described in Section 4 (B)(1)(a), (b), (c), and (d): (Total Expenditures - Adult Expenditures - Community Services - Preschool Services) / K–12 Average Daily Attendance;

(4) Make the website easily accessible from the main page of the local education provider's website; and
(5) Create and make easily accessible an automated Really Simple Syndication (RSS) feed to which users of the Website database may subscribe for notification of updates to the website database.[57]

Notes

1. Elizabeth McNichol and Nicholas Johnson, "Recession Continues to Batter State Budgets; State Responses Could Slow Recovery," Center on Budget and Policy Priorities, December 18, 2009, p. 5, http://www.cbpp.org/files/9-8-08sfp.pdf.

2. Ibid., p. 7.

3. Ibid., p. 3.

4. Ibid., p. 3.

5. Ibid., p. 4.

6. Thomas D. Snyder, Sally A. Dillow, and Charlene M. Hoffman, "Table 171: Revenues for Public Elementary and Secondary Schools, by Source of Funds: Selected Years, 1919–20 through 2005–06," *Digest of Education Statistics 2008*, March 18, 2009, http://nces.ed.gov/programs/digest/d08/tables/dt08_171.asp?referrer=list.

7. National Association of State Budget Officers, "2007 State Expenditure Report," Figure 6, p. 5, http://www.nasbo.org/Publications/PDFs/FY07%20State%20Expenditure%20Report.pdf.

8. Ibid.

9. U.S. Census Bureau, Government Divisions, "State and Local Government Finances by Level of Government and by State, Table 1, July 1, 2008, http://www.census.gov/govs/estimate/0600ussl_1.html.

10. U.S. Census Bureau, Government Divisions, "State and Local-Government Finances by Level of Government and by State, Table 1, July 1, 2008, http://www.census.gov/govs/estimate/0600ussl_1.html.

11. U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "State Nonfiscal Survey of Public Elementary/Secondary Education," 1993–94 through 2006–07; "National Public Education Financial Survey," 1993–94 through 2005–06; National Elementary and Secondary Enrollment Model, 1972–2006; and Elementary and Secondary Education Current Expenditures Model, 1969–70 through 2005–06, http://nces.ed.gov/programs/projections/projections2018/xls/table_34.xls (this table was prepared December 2008).

12. Domestic Policy Council, Executive Office of the President in cooperation with the U.S. Department of Education, "Educational Impact of the American Recovery and Reinvestment Act," October 19, 2009, p. 8, http://www.whitehouse.gov/assets/documents/DPC_Education_Report.pdf.

13. Greg Forster, "Florida's Opinion on K–12 Public Education Spending," Friedman Foundation, January 2006, http://www.friedmanfoundation.org/research/ShowResearchItem.do?id=10073; Paul DiPerna, "Idaho's Opinion on K–12 Education and School Choice," Friedman Foundation, March 2008, http://www.friedmanfoundation.org/research/ShowResearchItem.do?id=10093; unattributed, "Illinois' Opinion on K–12 Education and School Choice," Friedman Foundation , December 2007, http://www.friedmanfoundation.org/research/ShowResearchItem.do?id=10086; Paul DiPerna, "Maryland's Opinion on K–12 Education and School Choice," Friedman Foundation, September 2008, http://www.friedmanfoundation.org/research/ShowResearchItem.do?id=10098. As education spending typically increases at a rate much higher than inflation, this should produce conservative estimates of contemporary spending.

14. Where possible, we have calculated the K–12 per-pupil spending figure alone. Sometimes, however, school district records do not separate either preschool enrollment, preschool spending, or both. In those cases, where we were unable to back out both preschool spending and enrollment, we have left both in, resulting in a preschool–12 spending figure. Preschool spending is invariably far less per-pupil than K–12 spending, so the figure obtained in these cases will be lower than K–12 spending alone.

15. U.S. Department of Education, NCES Map Viewer, http://nces.ed.gov/surveys/sdds/#.

16. William Howell, Martin West, and Paul Peterson, "The Persuadable Public," *Education Next* (Fall 2009), p. 27, http://educationnext.org/files/fall09-persuadable-public.pdf.

17. Thomas D. Snyder, Sally A. Dillow, and Charlene M. Hoffman, "Table 181, Total and Current Expenditures per Pupil in Public Elementary and Secondary Schools: Selected Years, 1919–20 through 2005–06," *Digest of Education Statistics 2008*, March 18, 2009, http://nces.ed.gov/programs/digest/d08/tables/dt08_181.asp.

18. Full citations for the budget calculations are in Appendix A.

19. A full explanation of the method used to estimate this figure, along with citations, is found in Appendix A.

20. Elizabeth McNichol and Nicholas Johnson, "Recession Continues to Batter State Budgets; State Responses Could Slow Recovery," Center on Budget and Policy Priorities, December 18, 2009, p. 6, http://www.cbpp.org/files/9-8-08sfp.pdf.

21. Ronald J. Hansen and Matt Wynn, "Stimulus Job Impact Detailed," *The Arizona Republic*, October 31, 2009, http://www.azcentral.com/arizonarepublic/news/articles/2009/10/31/20091031stim-arizona1031.html.

22. Scott Wong, "Temporary Tax Hike is Floated by Major Gordon," *The Arizona Republic*, October 30, 2009, http://www.azcentral.com/arizonarepublic/local/articles/2009/10/30/20091030phoenixtax1030.html.

23. Full citations for the budget calculations are in Appendix A.

24. Stephanie Simon, "Cash-Strapped California's IOU's: Just the Latest Sub for Dollars," *Wall Sreet Journal*, July 25, 2009, http://online.wsj.com/article/SB124846739587579877.html.

25. McNichol and Johnson.

26. David Zahniser, "Accord Will Keep LAPD Staffing at Current Levels, Villaraigosa Says," *LA Times*, October 30, 2009, http://www.latimes.com/news/local/crime/la-me-cops13-2009oct13,0,1600478.story.

27. Our estimate of median private school spending per pupil in the DC area is 12 percent lower than the $12,500 that Andrew Coulson estimated from private school data collected by the *Washingtonian* for private schools in the metro area (http://www.cato-at-liberty.org/2008/04/07/the-real-cost-of-public-schools/). We should expect that two different methods of estimating total private school expenditures per pupil for a metro area will differ, and we should be encouraged that the two estimates, utilizing very different approaches, are as close as they are to each other. Furthermore, both estimates use conservative assumptions that lean toward inflation of estimated expenses and, therefore, should provide figures more likely to overstate the actual median expenses.

28. Full citations for the budget calculations are in Appendix A.

29. Tim Craig, "One-Two Punch for D.C. Budget," *Washington Post*, June 23, 2009, http://www.washingtonpost.com/wp-dyn/content/article/2009/06/22/AR2009062202861.html.

30. Bob Lewis, "Population, Inflation Fuel Virginia Budget Growth," *Washington Post*, November 10, 2009, http://www.washingtonpost.com/wp-dyn/content/article/2009/11/10/AR2009111012758.html.

31. Yamiche Alcindor, "Arlington Tax Bill Might Grow Heftier," *Washington Post*, November 1, 2009, http://www.washingtonpost.com/wp-dyn/content/article/2009/10/31/AR2009103101700.html.

32. Jonathan Mummolo, "Pr. George's Cuts Stir Debate: When to Break the Piggy Bank?" *Washington Post*, September 25, 2009, http://www.washingtonpost.com/wp-dyn/content/article/2009/09/25/AR2009092502306.html.

33. Full citations for the budget calculations are in Appendix A.

34. McNichol and Johnson.

35. Fran Spielman, "Daley Rules Out Property Tax Increase to Close Budget Gap," *Chicago Sun-Times*, October 14, 2009, http://www.suntimes.com/news/cityhall/1823078,CST-NWS-proptax14web.article.

36. Full citations for the budget calculations are in Appendix A.

37. Marcia Kramer, "Paterson: NYS Will Be Broke Before Christmas," CBS 2 *News This Morning*, November 10, 2009, http://wcbstv.com/cbs2crew/david.paterson.special.2.1300362.html.

38. McNichol and Johnson.

39. James Doran, "New York Fears Return to Dark Days of Seventies as Financial Crisis Bites," *Observer* (London), November 23, 2008, http://www.guardian.co.uk/world/2008/nov/23/new-york-crime-rates.

40. Associated Press, "Paterson Pitches $5 Billion Reduction Plan," *New York Post*, October 15, 2009, http://www.nypost.com/p/news/local/paterson_pitches_billion_deficit_HyLsi2GkWB8IOMryK5WebN.

41. Full citations for the budget calculations are in Appendix A.

42. McNichol and Johnson.

43. Bradley Olson, "Budget Shortfall has City Hall Looking for Cuts," *Houston Chronicle*, August 31, 2009, http://www.chron.com/disp/story.mpl/me

tropolitan/6595746.html.

44. Andrew J. Coulson, "Choosing to Save: The Fiscal Impact of Education Tax Credits on the State of Nevada," Nevada Policy Research Institute, research report, January, 2009, http://www.npri.org/docLib/20090113_Choosing_to_Save.pdf.

45. Andrew J. Coulson, "Arizona Public and Private Schools: A Statistical Analysis," Goldwater Institute, Policy Report no. 213, October 17, 2006, http://www.goldwaterinstitute.org/file/3258/download/3258.

46. This model legislation has taken as its base state and education fiscal transparency model legislation adopted by the American Legislative Exchange Council. We would like to thank them for their work on this issue and generosity in sharing their materials and ideas.

47. As an alternative, states may consider the adoption of a single central database with the state department of education, to which local education providers would submit revenue and expenditure data.

48. All local education providers should be covered by the mandate. However, exemptions could be considered for smaller providers that allow them to not maintain a full-scale, comprehensive, searchable database, but instead use the district webpage to grant complete and unrestricted access to internal financial data as used by the provider itself, so long as it is accompanied by a plain-language description of all terminology and codes used in said financial documents. Website technology is sufficiently advanced in ease of use and sufficiently modest in cost to ensure that the simple maintenance of a website is not beyond the means and abilities of even a single, small, and modestly funded school. It is suggested that school district personnel intimidated by this modest mandate might turn to its students for assistance rather than incurring the more substantial costs of Internet technology professionals.

49. Sponsoring lawmakers also may consider including other specific charter school authorizing agencies under the definition of "local education provider." Some states permit municipal governments, universities, or private nonprofit organizations to authorize charter schools. Only the specific department within any of these respective organizations that is responsible for charter school authorization should be subject to the mandate.

50. At the discretion of sponsoring lawmakers in their respective states, local education providers should be required to comply within a reasonable amount of time. The specified target date for compliance (e.g., January 1, 2010) ideally should be included in the legislative language. A staggered system of delayed opt-in deadlines also may be considered for smaller local education providers or for providers that do not currently have a website.

51. All sources of revenue (federal, state, and local tax revenue, as well as private donations and fees) should be included.

52. If local education providers or lobbying organizations argue that providing descriptions of expenditures would be too difficult, sponsoring lawmakers may consider setting up a delayed deadline for providers to comply with Section 4 (B)(1)(e). Still, it should be pointed out that a clear description of the purpose of an expenditure works to the benefit of the local education provider by forestalling confusion that may lead to public relations difficulties.

53. A unique identifier with each expenditure would make the data more functional. However, not all local education providers may use unique identifiers in their expenditure records. Without the qualifying phrase, it could create a costly and time-consuming mandate for providers.

54. "Open" denotes that the format is accessible by users through the use of free software. Local education providers can easily comply by exporting from Microsoft Excel or Quickbooks into an XML (Extensible Markup Language) or a CSV (Comma-Separated Values) file. The removal of the word "open" would allow providers to post an Excel or Quickbooks file directly to the website. Users then would be required to have a purchased copy of that software in order to use the database.

55. As written, local education providers are given the option to build their own database interface or to allow third parties to build an interface using the provider's data. The addition of the phrase "via a web-based graphic user interface" at the end of the clause would create a costly and time-consuming mandate for providers. While the addition of the phrase would ensure each provider had its own usable interface, it also would provide no guarantee of quality in comparison to interfaces that may be created by private third-party groups or individuals.

56. Ideally, data reports should be updated at least once per month, but states should have the discretion to adjust the frequency if necessary. In many cases, technology allows for the information to be easily updated on a daily basis.

57. An RSS feed is a simple and inexpensive tool to which parents, taxpayers, and other interested groups can subscribe in order to track updates to the local education provider's website in a convenient and timely manner.

WORKING PAPER

No. 1 October 4, 2010

Do Vouchers and Tax Credits Increase Private School Regulation?

Andrew J. Coulson

Cato Institute
1000 Massachusetts Avenue, N.W.
Washington, D.C. 20001

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CATO
Working Paper

Do Vouchers and Tax Credits Increase Private School Regulation?

A Statistical Analysis

By Andrew J. Coulson[1]
October 4, 2010

Abstract

School voucher and education tax credit programs have proliferated in the United States over the past two decades. Advocates have argued that they will enable families to become active consumers in a free and competitive education marketplace, but some fear that these programs may in fact bring with them a heavy regulatory burden that could stifle market forces. Until now, there has been no systematic, empirical investigation of that concern. The present paper aims to shed light on the issue by quantifying the regulations imposed on private schools both within and outside school choice programs, and then analyzing them with descriptive statistics and regression analyses. The results are tested for robustness to alternative ways of quantifying private school regulation, and to alternative regression models, and the question of causality is addressed. The study concludes that vouchers, but not tax credits, impose a substantial and statistically significant additional regulatory burden on participating private schools.

[1] Andrew J. Coulson directs the Cato Institute's Center for Educational Freedom and is author of the *Journal of School Choice* study: "Comparing Public, Private, and Market Schools." He blogs at www.Cato-at-Liberty.org.

Introduction

Over the past quarter century, scores of studies have compared the outcomes of public and private schooling. In a 2009 review of this empirical literature,[1] I found that the statistically significant results favor the private sector by a margin of eight to one. More interestingly, when the findings are winnowed down to only comparisons between minimally regulated education markets and conventional (monopolistic and heavily regulated) public school systems, the results are starker, favoring markets by a margin of 15 to one. Findings of a positive education market effect also outnumber insignificant findings by more than four to one.

One implication of this large body of empirical evidence is that, on the whole, government regulation of private schools seems, at best, to be irrelevant to their performance and quite possibly harmful to it. Indeed the superiority of minimally regulated over heavily regulated school systems extends beyond traditional educational outcomes and cost-effectiveness. When Patrick Wolf reviewed the literature comparing civic values and engagement between students in public schools and those in private (and occasionally, charter) schools, he found the same phenomenon.[2] The freely chosen, less regulated schools were clearly superior in their civic outcomes.

Whether one accepts or finds fault with this literature, whether or not one believes that some particular combination of regulations might be beneficial, it is undeniable that the overall level of regulation imposed on private schools has become a key concern among education economists, researchers, and reformers. The view that "markets replace [ineffective] top-down accountability through regulation with [effective] bottom-up accountability to consumers"[3] is not uncommon, and it is in part because of such views that school voucher and education tax credit programs have been enacted around the United States.

But some scholars fear a Catch-22: that the very policies intended to liberalize and expand the education marketplace may ultimately lead to its regulatory suffocation. Economists Carlisle Moody and Jerry Ellig, for example, worry that "state regulation would almost certainly follow the expenditure of state funds.... Such regulation is subject to political pressure and the public school interest groups may press the state to enforce regulations that interfere with the operation of the private school[s]."[4] When I reviewed the worldwide historical evidence on this question a decade ago, I was unable to find a single large-scale system of government funding of private elementary or secondary schooling that had escaped heavy regulation.[5]

Absent any contemporary U.S. research, however, the validity of this concern has been open to question. Some education policy experts have written that "it is wrong to suggest [school] vouchers would open to government regulators doors not currently open to them,"[6] and that "voucher programs do not increase the likelihood or severity of regulation of private schools."[7]

The policy community has also failed to reach consensus on a related question: do vouchers and tax credits differ systematically in the overall regulatory burdens they impose on participating private schools? Moody and Ellig contend that education tax credits create "less pressure for regulation," since "no state money is directly expended on the schools." [Tax credit programs can either offset parents' educational costs for their own children or can offset donations to nonprofit k-12 tuition-assistance organizations serving low-income families.[8]] I have made this argument as well, also on purely theoretical grounds.[9] To date, there has been no empirical research comparing the regulatory effects of vouchers and tax credits.

Not surprisingly, the tax credits vs. vouchers question is also contentious. Disputing the view just presented, Australian economist John Humphreys wrote in 2002 that "it seems unlikely that there would be any stricter standards under a voucher system than a tax credit system, or under the current system. Indeed, in the United States, restrictions on the Milwaukee voucher programme have actually decreased and attempts to increase them again have been defeated."[10] Though Humphreys' latter statement was true at the time he made it, it should be noted that a set of additional regulations was imposed on the Milwaukee program in 2009.[11]

Clearly, there is a need for a systematic empirical investigation of these questions. While the amount of data available for study is regrettably small, that cannot be helped. Policy decisions are being made regarding private school choice programs every year, and many interested parties wish to know whether or not they will lead to regulatory proliferation and whether one policy would bring with it more regulation than another. Our only alternatives are to continue to fumble in the dark on these questions, or to inform ourselves as best we can with the available data. The present study attempts to do the latter.

Data and Methods

As of late September 2010, 20 voucher and tax credit programs have been enacted in 15 states and the District of Columbia to defray private school tuition for a general student population (see Table 1). These programs are the focus of the present analysis. Excluded from this study are education tax deductions and tax credits limited to non-tuition expenses. This is to avoid biasing the results in favor of conventional tax credits, since it is reasonable to expect that deductions and non-tuition credits will precipitate less regulation than full-fledged tax credits that defray tuition costs at private schools. Since there are only two such programs (both from Minnesota and both lightly regulated) they cannot be analyzed separately.[12]

Also excluded from this analysis are tax credit and voucher programs exclusively serving special needs populations, such as disabled students. Due to the highly varied circumstances of special needs children, it is effectively impossible to develop a single curriculum or testing regime that could serve them all, and hence there is substantially less political pressure to impose curriculum and testing regulations on schools serving them.

For example, Florida's tax credit program requires participating schools to administer a norm-referenced test of their choosing, but only to their non-disabled students. Disabled students are exempt from the requirement.[13] The Florida Opportunity Scholarships voucher program required participating students to take the same test as public school students, but the public school assessment system includes alternative testing arrangements or the waiving of tests for disabled children.[14] Similarly, Florida's McKay voucher program exclusively targeted at disabled students is exempt from any testing requirement. Clearly, serving special needs students has a distinct causal effect on regulation, independent of program type.

This puts special needs programs into a separate category from programs serving a broader student population, and at present there are too few special needs programs to allow for separate statistical analysis. Neither is it possible to combine special needs programs with the more general programs into a single analysis, for two reasons. First, doing so would require comparable data for the regulatory burdens imposed by both types of programs. But because special needs programs do not serve non-special-needs students, the level of regulation that they

would impose on the education of such students is undefined. There is thus no way to directly compare the regulatory burdens imposed by these different types of programs.

Table 1. U.S. Private School Choice Programs
(Excluding those Limited to Special Needs Students)

Legislature	Type	Enacted	Ended
Arizona	scholarship donation credit (indiv.)	1997	
Arizona	scholarship donation credit (bus.)	2005	
Colorado	voucher	2003	2003
Florida	scholarship donation credit (bus.)	2001	
Florida	voucher (failing schools, statewide)	1999	2006
Georgia	scholarship donation credit	2008	
Illinois	personal credit	1999	
Indiana	scholarship donation credit	2009	
Iowa	scholarship donation credit (indiv.)	2006	
Iowa	personal credit	1987	
Louisiana	voucher (New Orleans)	2008	
Maine	voucher (small town)	1873	
National	voucher (Washington, DC)	2004	
Ohio	voucher (Cleveland)	1995	
Ohio	voucher (failing schools, statewide)	2005	
Pennsylvania	scholarship donation credit (bus.)	2001	
Rhode Island	scholarship donation credit (bus.)	2006	
Utah	voucher	2007	2007
Vermont	voucher (small town)	1869	
Wisconsin	voucher (Milwaukee)	1990	

Second, even if we could devise a single regulation metric encompassing both special needs and broader programs, there is only a single special needs tax credit program in existence; an insufficient basis for apportioning the variance in regulation among such programs between their special needs status and their program type (i.e., credit or voucher). As a result, even if it were possible to include special needs programs in a single combined analysis, doing so would impede rather than aid our effort to determine the relative regulatory impacts of generally available voucher and tax credit programs. Statistical analysis of the regulatory effects of special needs programs must therefore wait until additional data are available and a separate study can be undertaken.

To determine the regulatory impact of these programs, we begin by collecting background data on the regulations applying to all private schools in each of the states in which they operate. The chief source for these data was Christopher Hammons' very useful 2008 paper for the Foundation for Educational Choice.[15] Next we collected data on the additional regulations, if any, imposed on private schools participating in voucher or tax credit programs (by consulting the relevant enabling legislation).

To permit analysis, all of these regulations must be categorized and then quantified according to their intensity using a single set of coding rules. Those rules are laid out in Appendix A, and the corresponding data are presented in Table 2 (lower numbers and lighter colors indicate less regulation). A breakdown of the specific regulations responsible for each of

these ratings, with source citations, can be found in the Excel spreadsheet file accompanying this paper.

There are, of course, many possible ways of quantifying regulatory burden. So, to ensure that the results of this study are not simply artifacts of the particular quantification we have chosen, intensive robustness testing with alternative regulation weightings is carried out in Appendix D.

Table 2. Regulation Index Values,
by Program Participation and Category

State	Program	Barr. to Entry	Deliv.	Staff.	Price	Relig.	Curri.	Test.	Finan.	Admis.
Arizona	Indiv. Sch. Don.	0	2	0	0	0	0	0	0	0
Arizona	Corp. Sch. Don.	0	2	0	0	0	0	2	0	0
Florida	Corp. Sch. Don.	1	0	1	0	0	0	3	1	0
Georgia	Sch. Don.	2	2	0	0	0	2	0	0	0
Illinois	Personal Use	0	2	0	0	0	5	0	0	0
Indiana	Sch. Don.	2	3	1	0	0	3	2	0	0
Iowa	Sch. Don.	4	2	5	0	0	5	0	0	0
Iowa	Personal Use	4	2	5	0	2	5	0	5	0
Pennsylvania	Corp. Sch. Don.	3	2	0	0	0	2	0	0	0
Rhode Island	Sch. Don.	1	0	0	0	0	6	0	0	0
Ohio	Cleveland Vchr	2	2	6	3	0	2	6	0	4
Colorado	Voucher	1	4	0	0	0	2	4	1	6
National	DC Voucher	2	1	1	0	0	2	5	0	6
Florida	Voucher	2	0	1	6	3	2	4	1	6
Louisiana	Voucher	6	2	5	6	0	6	6	1	6
Maine	Voucher	2	2	6	6	6	6	4	3	0
Wisconsin	Milwaukee Vchr	4	6	1	6	3	4	4	2	6
Ohio	State Vchr	2	2	6	6	0	2	6	0	0
Utah	Voucher	0	4	1	0	0	0	3	1	0
Vermont	Voucher	3	3	4	6	6	2	4	1	0
Arizona	None	0	2	0	0	0	0	0	0	0
Colorado	None	0	2	0	0	0	2	0	0	0
Florida	None	0	0	1	0	0	0	0	0	0
Georgia	None	0	2	0	0	0	2	0	0	0
Illinois	None	0	2	0	0	0	5	0	0	0
Indiana	None	0	0	0	0	0	1	0	0	0
Iowa	None	0	2	5	0	0	3	0	0	0
Louisiana	None	0	0	4	0	0	6	0	0	0
Maine	None	0	0	0	0	0	1	0	0	0
National	None	2	1	1	0	0	2	0	0	0
Ohio	None	0	2	1	0	0	2	0	0	0
Pennsylvania	None	3	2	0	0	0	2	0	0	0
Rhode Island	None	1	0	0	0	0	6	0	0	0
Utah	None	0	0	0	0	0	0	0	0	0
Vermont	None	3	0	0	0	0	2	0	0	0
Wisconsin	None	0	2	0	0	0	2	0	0	0

A rough first estimate of the regulatory premia imposed by private school choice programs can be obtained by subtracting the default level of regulation pertaining to all private schools in a

given state from the level of regulation imposed on private schools participating in a choice program. The results of that operation can be seen in Table 3.

Table 3. Regulation Premia, by Program and Category

State	Program	Barr. to Entry	Deliv.	Staff.	Price	Relig.	Curri.	Test.	Finan.	Admis.
Arizona	Indiv. Sch. Don.	0	0	0	0	0	0	0	0	0
Arizona	Corp. Sch. Don.	0	0	0	0	0	0	2	0	0
Florida	Corp. Sch. Don.	1	0	0	0	0	0	3	1	0
Georgia	Sch. Don.	2	0	0	0	0	0	0	0	0
Illinois	Personal Use	0	0	0	0	0	0	0	0	0
Indiana	Sch. Don.	2	3	1	0	0	2	2	0	0
Iowa	Sch. Don.	4	0	0	0	0	2	0	0	0
Iowa	Personal Use	4	0	0	0	2	2	0	5	0
Pennsylvania	Corp. Sch. Don.	0	0	0	0	0	0	0	0	0
Rhode Island	Sch. Don.	0	0	0	0	0	0	0	0	0
Ohio	Cleveland Vchr	2	0	5	3	0	0	6	0	4
Colorado	Voucher	1	2	0	0	0	0	4	1	6
National	DC Voucher	0	0	0	0	0	0	5	0	6
Florida	Voucher	2	0	0	6	3	2	4	1	6
Louisiana	Voucher	6	2	1	6	0	0	6	1	6
Maine	Voucher	2	2	6	6	6	5	4	3	0
Wisconsin	Milwaukee Vchr	4	4	1	6	3	2	4	2	6
Ohio	State Vchr	2	0	5	6	0	0	6	0	0
Utah	Voucher	0	4	1	0	0	0	3	1	0
Vermont	Voucher	0	3	4	6	6	0	4	1	0

At first blush, the voucher programs (bottom half of the table) seem to impose substantially more regulation than do the tax credit programs, across virtually all categories. The average regulation premium imposed by tax credits amounts to 3.8 (out of a possible 54), while vouchers impose an average regulation premium of 21.5—five times greater.

But what if programs tend to accumulate regulation over time and voucher laws are, on average, older than tax credit laws? What if legislatures that approved vouchers in the past happened to be more prone to regulation in general, merely by coincidence? There is no way to address these questions without employing multiple regression techniques.[16] To isolate school choice program effects, we must control for any other variables that might also affect private school regulation. Eight such variables were identified by the author and independent reviewers, and these are enumerated in Table 4 and explained further below.

Table 4. Control Variables for Regulation under Choice Programs

Var. Name	Description
Age	Program age in years
lnAge	Natural log of Age (to see if the effect of increasing Age diminishes over over time)
DemControl	Measure of Democratic Party control of state government in the year in which the program was passed [0-3 | +1 each for Democratic control of: house, senate, governorship]
PctPrivate	Percent of students in subject state who attend private schools
RegulationRank	*Forbes'* ranking of the subject state's regulatory climate (1 = least regulation)
TotVal	Total value of the school choice program, in dollars
AvgValPerPupil	Average per-pupil benefit value, in dollars
Enrollment	Number of students participating in the program

Given that regulations can be added to a program at any time, and not simply at the time of its initial enactment, it is reasonable to expect a positive relationship between program age and degree of regulation. Program age in years is thus a plausible control variable for the level of regulation imposed on private schools. It is also plausible, however, that once a school choice program has been in existence for a certain time, it begins to be taken for granted as is, and pressure to add further regulations may thus abate in the long term. To capture this possibility, it makes sense to include the log of the program age in years as a control.

To control for the possibility that Democrats are more or less likely than Republicans to impose regulations on private school choice programs, we include a variable for party control at the time of legislative enactment. The DemControl variable ranges from zero to three, with its value increasing by one for Democratic Party control of each of the state house, state senate, and governorship. These three measures of party control could be included separately in the model, but this would increase the likelihood of "overfitting" (see discussion below) and, at any rate, testing revealed the three separate measures to be less significant individually than collectively (as one would expect given the need for any law to pass both legislative houses and be signed by the governor). A significant positive value would indicate that Democrats are more prone to regulating private school choice programs than are Republicans, a significant negative value would indicate the reverse, and an insignificant value would indicate no noticeable difference.

Since states that have a greater percentage of children already in private schools may be more or less prone to regulating schools participating in choice programs, we include PctPrivate among our control variables.

Another reasonable control is the general propensity for a state to enact regulations, which we measure using the *Forbes* ranking of states by regulatory climate (with 1 being the least regulated state).

On the presumption that pressure to regulate a program might be related to some measure of its magnitude, we round out our set of control variables with measures of the total amount of funding it can/does marshal (TotVal), the average size of its financial benefit per pupil (AvgValPerPupil), and the number of students it enrolls.

Table 5 shows the Regulation Index values for three groups of private schools: those in a voucher program (IsVoucher = 1), those in a tax credit program (IsCredit = 1), and those not

participating in a choice program (IsVoucher = IsCredit = 0). The same table shows the values for each of the control variables listed in Table 4. Of these, only PctPrivate and RegulationRank are defined for private schools that are not participating in a choice program, because all the other controls are characteristics of choice programs.

How to analyze these data? First, we note that each of the 36 rows in Table 2 describes a particular group of private schools operating within a particular state. This hierarchical structure—groups of private schools within states—lends itself to a family of statistical analysis techniques known as multilevel modeling. In a multilevel model, we can determine how the level of regulation of private schools varies within a given state based on whether or not they participate in a school choice program, and also how the regulation of private schools in a given type of program (or outside of any program) varies between states.

This approach allows us to take maximum advantage of the fact that some states have more than one school choice program, isolating the effect of program type on regulation *within* states from confounding factors that vary *between* states. Differences in the regulation levels of the voucher and tax credit programs in Florida, for example, cannot be the result of variation in state-level causal factors, because both programs were created and operate *within* the same state. So, to the extent we have multiple program observations per state, a multilevel model removes state-level bias as a potential problem—*even bias from state-level variables that we cannot measure and do not include in the model*.

For this and other reasons,[17] the best approach to identifying the regulatory effects of vouchers and tax credits is to apply multilevel regression (see Appendix B for details) to the equation

$$Regulation_{sp} = \gamma + \alpha_0 \times IsVoucher_{sp} + \alpha_1 \times IsCredit_{sp} + \beta \times X_{sp} + \mu_s + \varepsilon_{sp}$$

where $Regulation_{sp}$ is the Regulation Index value for private schools p in state s, γ is a constant, α_0 and α_1 are coefficients, β is an array of coefficients, X_{sp} is an array of control variables, μ_s is a state-specific error term, and ε_{sp} is an observation-specific error term. In this equation, the values of α_0 and α_1 will tell us whether and to what extent participating in voucher or tax credit programs is associated with increased private school regulation.

Table 5. Private School Regulation and Control Variables

Legislature	Is Credit	Is Voucher	Reg. Index	Age	lnAge	Dem. Cntl.	Dflt. Reg.	Pct. Private	Reg. Rank	Tot. Val.	Avg. Val. / Pupil	Enroll.
Arizona	1	0	2	13	2.64	0	2	6	38	$54,068,817	$1,909	28,324
Arizona	1	0	4	5	1.79	1	2	6	38	$7,516,746	$2,533	2,967
Arizona	0	0	2					6	38			
Colorado	0	1	18	0	0.00	0	4	8.1	22	$0	$6,261	0
Colorado	0	0	4					8.1	22			
Florida	1	0	6	9	2.30	0	1	14.7	18	$91,873,050	$3,950	23,259
Florida	0	1	25	7	2.08	0	1	14.7	18	$3,087,204	$4,206	734
Florida	0	0	1					14.7	18			
Georgia	1	0	6	2	1.10	0	4	9.5	5	$4,700,000	$4,700	1,000
Georgia	0	0	4					9.5	5			
Illinois	1	0	7	11	2.48	1	7	14.8	28	$71,014,500	$387	183,500
Illinois	0	0	7					14.8	28			
Indiana	1	0	11	1	0.69	1	1	10	15	$2,500,000	$0	0
Indiana	0	0	1					10	15			
Iowa	1	0	16	4	1.61	1.5	10	9.9	22	$7,478,872	$856	8,737
Iowa	1	0	23	23	3.18	2	10	9.9	22	$15,136,400	$79	191,600

Legislature	Is Credit	Is Voucher	Reg. Index	Age	lnAge	Dem. Cntl.	Dflt. Reg.	Pct. Private	Reg. Rank	Tot. Val.	Avg. Val. / Pupil	Enroll.
Iowa	0	0	10					9.9	22			
Louisiana	0	1	38	2	1.10	2	10	20.2	43	$4,890,912	$3,919	1,248
Louisiana	0	0	10					20.2	43			
Maine	0	1	35	137	4.93	0	1	10.8	32	$110,447,821	$8,039	13,739
Maine	0	0	1					10.8	32			
National	0	1	17	6	1.95	0	6	12	25	$11,325,600	$6,600	1,716
National	0	0	6					12	25			
Ohio	0	1	25	15	2.77	0	5	13.1	10	$17,448,704	$2,782	6,272
Ohio	0	1	24	5	1.79	0	5	13.1	10	$50,219,915	$3,959	12,685
Ohio	0	0	5					13.1	10			
Pennsylvania	1	0	7	9	2.30	0	7	18	31	$53,580,000	$1,410	38,000
Pennsylvania	0	0	7					18	31			
Rhode Island	1	0	7	4	1.61	2	7	19.1	49	$1,710,789	$5,879	291
Rhode Island	0	0	7					19.1	49			
Utah	0	1	9	0	0.00	0	0	3.6	19	$0	$2,000	0
Utah	0	0	0					3.6	19			
Vermont	0	1	29	141	4.96	0	5	13.4	33	$24,031,807	$9,773	2,459
Vermont	0	0	5					13.4	33			
Wisconsin	0	1	36	20	3.04	2	4	15.8	37	$128,268,298	$6,607	19,414
Wisconsin	0	0	4					15.8	37			

Note that, in the multilevel regression model, only the PctPrivate and RegulationRank control variables can be employed. If any of the other controls are included, the observations for private schools not participating in a choice program will automatically be dropped from the regression, because the values for those controls are only defined for school choice programs. Losing those observations eliminates the hierarchical structure of the data (because we would be left with only a single observation for most states), making multilevel analysis—and the advantages that it confers—impossible.

To determine if the multilevel model is biased by the omission of these controls, we perform a second analysis: a conventional multiple regression looking only at the choice programs themselves. While reducing the size of our dataset from 36 to 20 observations, this allows us to include all the controls listed above plus an additional one: DefaultReg, which corresponds to the Regulation Index for private schools not participating in a choice program.[18] That second equation can be expressed as

$$\text{Regulation}_i = \gamma + \alpha \times \text{IsVoucher}_i + \beta \times X_i + \varepsilon_i$$

Whereas the first model compared the level of regulation under voucher and tax credit programs to the level imposed on private schools not participating in any choice program (hence measuring the regulatory premium of each program), this second model compares the level of regulation between vouchers and tax credits (holding constant the default level of regulation on private schools). Here, the coefficient α tell us if vouchers are associated with significantly more or less regulation than tax credits.

With this new model comes a new problem: including nine control variables when we are reduced to just 20 observations (one per choice program) would guarantee "overfitting." Overfitting occurs when more variables are included in a model than are necessary to adequately predict the dependent variable, particularly when the ratio of the number of predictors to the number of observations is high. A model that is overfit may produce a high R-squared value on the available data set, but will usually be inferior to a more parsimonious (i.e., simpler) model in fitting new data.[19] In the context of this study, an overfit model would yield a deceptively high

R-squared while reducing our confidence that it would accurately predict the level of regulation imposed by future school choice programs.

To minimize this problem, we must identify the smallest subset of the theoretically plausible predictor variables that adequately explains the level of regulation of private school choice programs, weeding out those predictors that add little or no explanatory power to the model. The most thorough way to do this is to evaluate every possible regression equation made up of five or fewer predictors, chosen from our set of ten[20] (a process that can be easily automated using modern statistical analysis software). From the resulting 637 possible models, we identify the one that has the best combination of explanatory power and parsimony, as measured by a statistic known as Mallow's C_p.[21]

To validate the model thus identified, we also calculate two alternative measures of power and parsimony for the top three models in the Mallow's ranking just obtained. Both alternative measures, Akaike's Information Criterion (AIC) and the Bayesian Information Criterion (BIC),[22] agree with the Mallow's ranking that the optimal model is comprised of just four variables: IsVoucher, lnAge, DemControl, and RegulationRank—the other theoretically plausible control variables listed in Table 4 turn out to be poor predictors of private school regulation. Our parsimonious OLS regression equation is thus:

$$Regulation_i = \gamma + \alpha \times IsVoucher_i + \beta_0 \times lnAge_i + \beta_1 \times DemControl_i + \beta_2 \times RegulationRank_i + \varepsilon_i$$

This model was tested to determine if it satisfies the assumptions of OLS, and the results of those tests are provided in Appendix C. The only OLS assumption that is clearly violated is the independence of the observations from one another. As already noted, several states have more than one school choice program and there may be state-specific factors affecting regulation that we have not observed and hence cannot control for with a simple OLS approach. Failing to control for the violation of this OLS assumption could lead to incorrect standard errors and confidence intervals for our explanatory variables, undermining tests of statistical significance. To deal with this issue, we produce Huber White robust standard errors, clustering our observations by state (Stata command "cluster(StateID)").[23]

Causality

Even if the coefficients on either of our key explanatory variables (IsVoucher and IsCredit) turn out to be statistically significant, we will be left with the question: is the relationship between program type and degree of private school regulation causal? In theory, there could be an unmeasured independent variable that both causes states to prefer one type of program over the other *and* causes them to increase regulation of private schools participating in school choice programs. If so, the IsVoucher or IsCredit variables would be said to be "endogenous," and their coefficients would no longer measure their own unique causal impact on private school regulation.

As already noted in the preceding section, our use of multi-level modeling minimizes the possibility of a confounding state-level variable that simultaneously determines both the type of program selected and the degree of regulation it imposes. That is because several states have more than one school choice program. The relationship between the level of private school regulation that these programs impose cannot be affected by variation in an unmeasured state-level variable, because the given programs are within the same state. Florida, as noted earlier,

has enacted both a voucher and a tax credit program and imposed very different levels of regulation on them. That is inconsistent with the endogeneity theory, which posits that some unmeasured variable simultaneously determines both propensity to regulate choice programs *and* the type of choice program enacted.

In principle, we could also test for endogeneity by using a two-stage-least-squares model with instrumental variables, but this method is discouraged for small sample sizes such as we are faced with here.[24] Moreover, even if we had more observations, no obvious instrumental variables for program type present themselves, making this test impossible. Fortunately, there is considerable additional evidence that endogeneity is unlikely to be a problem.

First, consider that a state's general proclivity to regulate is captured by the RegulationRank variable, and this variable is controlled for in the OLS model. Furthermore, RegulationRank's correlation with IsVoucher is very small and negative (-0.07). So a state's general proclivity to regulate is associated with *neither* higher regulation of school choice programs *nor* the selection of one program type over another. It thus cannot be a source of endogeneity.

Second, consider that DefaultReg (the default level of regulation imposed on all private schools in a given state) is not a statistically significant predictor of choice program regulation (and it was dropped from our parsimonious OLS regression for that reason). Furthermore, its level of correlation with IsVoucher is also small and negative (-0.16). So even *the specific proclivity to regulate private schools* is insignificantly (and negatively) correlated with choosing vouchers over credits, and is irrelevant to how heavily regulated a choice program is. So it, too, cannot be a source of endogeneity.

Third, Illinois came very close to passing a voucher bill in May 2010 that would have imposed some extra regulations on private schools, but that state already has a tax credit program that does *not* impose any additional regulations. As with the Florida example given above, this is inconsistent with the endogeneity of IsVoucher or IsCredit.

Fourth, Arizona enacted two special needs voucher programs within a few years of enacting its tax credit programs. This suggests that the state shows no particular favoritism for one type of program over another, contrary to what we would expect under the endogeneity hypothesis.

Fifth, the DemControl variable is a significant predictor of higher program regulation, but is only very weakly (and *negatively*) correlated with IsVoucher (-0.26). This is inconsistent with the endogeneity hypothesis—even more so given the results reported in the following section.

Together, these facts and the resistance of our multilevel model to state-level omitted variable bias militate against the likelihood of endogeneity of IsVoucher and IsCredit. To the extent that IsVoucher or IsCredit is a significant predictor of private school regulatory burden, it therefore seems reasonable to conclude that the relationship is causal, though we cannot remove all uncertainty on this point.

Findings and Discussion

The detailed results of the multilevel and robust OLS regression analyses appear in appendices B and C, respectively, and are summarized in Table 5. Each row reports the coefficient value for the given variable and, in parentheses, its standard error.

Table 5. Summary Regression Results

	Multilevel (fixed effects)	OLS (robust)
IsVoucher	21.62*** (2.20)	18.85*** (2.20)
IsCredit	3.45 (2.28)	.
PctPrivate	(dropped)	.
lnAge	.	3.63** (.93)
DemControl	.	7.99*** (1.26)
Reg.Rank	(dropped)	-.24* (.086)
N	36	20
R-squared	.84	.90

* p <.05, ** p < .01, *** p < .001

In the multilevel model, the coefficient of the IsVoucher variable is highly significant ($p < .001$) and approximately equal to 22. Nineteen times out of twenty, participation in a voucher program is expected to be associated with a private school regulatory burden that is 17 to 26 points higher on the Regulation Index than the burden imposed on schools not participating in a choice program.

To put that in perspective, the average Regulation Index value for private schools not participating in a choice program is 4.6, and the standard deviation is 3.1. The IsVoucher coefficient is thus not simply highly significant, it is also large relative to the default level of regulation applying to private schools as a whole.

By contrast, the IsCredit coefficient is small and statistically insignificant at any conventional level in the multilevel regression, so we have no evidence that tax credits systematically lead to increased regulation on private schools.

When we compare the regulatory burdens associated with voucher and tax credit programs to one another, via the OLS regression, participation in a voucher program is once again found to have a large, highly statistically significant effect. This, it should be remembered, is after the consideration of a variety of theoretically plausible control variables (most of which were found to add little to the explanatory power of the model), and the inclusion of the three important controls (lnAge and DemControl and RegulationRank). The slight difference in the IsVoucher coefficient between the two models is primarily accounted for by the fact that, in the multilevel model, vouchers are being compared to private schools not participating in a choice program, and in the OLS model vouchers are compared to tax credits.

To make the meaning of IsVoucher comparable across the two models, we can subtract the (insignificant) OLS IsCredit coefficient from the IsVoucher coefficient in the multilevel model. Doing so, we are left with 18.2, which is quite close to the OLS coefficient of 18.9. This level of consistency indicates that our estimate of the regulatory impact of vouchers is "sturdy" in the face of alternative statistical techniques and model specifications, bolstering our confidence in it.

As noted earlier, all of these results are based on the regulatory burden index developed in Appendix A. It is important to determine, therefore, whether or not they are robust to alternative measures of regulation. Do the results just reported still hold if we weight curriculum regulations up to four times less heavily than price controls? If we weight them up to four times more heavily? These questions are addressed in Appendix D, and the conclusion of that investigation is that our regression results are highly robust to wide variations in the calculation of the Regulation Index. IsVoucher remains statistically significant ($p < .01$) across every one of 2,000 different randomly weighted versions of the Regulation Index for both the OLS and multi-level models, whereas IsCredit rises to statistical significance ($p < .05$) in only 15 of those 2,000 randomized weightings—less than one percent of the cases. In other words, the results reported in this paper are almost entirely immune to wide variations in the way that regulatory burden is quantified.

Conclusion

Because of the limited number of observations available for analysis (and associated methodological considerations), we cannot be certain that the findings just described will be replicated in other states that choose to enact private school choice programs. Nevertheless, there is reason to expect our findings to generalize. Within our sample at least, the variation in regulation *within* states is much greater than the variation *between* states. Within-state factors, most notably whether or not private schools are participating in a voucher program, explain the vast majority of the variance in private school regulation in our sample. It is possible that, in states that have not yet enacted vouchers or tax credits, there could be large, new state-level effects that do not exist in our current sample and that would significantly alter the regression results. There is, however, no obvious reason to expect such effects.

In any event, to the extent that our findings can be generalized, they suggest that:

- Voucher programs are associated with large and highly statistically significant increases in the regulatory burden imposed on private schools (compared to schools not participating in choice programs). And this relationship is, more likely than not, causal.
- Tax credits do not appear to have a similar association.

These results are robust to widely differing ways of quantifying private school regulation, as demonstrated in Appendix D. Even if some kinds of regulations are viewed as much less or much more important than others, the regulatory impact of participating in a voucher program remains significant and the regulatory impact of participating in a tax credit program remains (in over 99 percent of cases) insignificant. As new programs are enacted, and existing programs are modified, these questions should of course be revisited.

In light of these findings, tax credits seem significantly less likely than vouchers to suffer the Catch-22 described in the introduction—less likely to suffocate the very markets to which they aim to expand access. But several caveats are in order. There is variation in regulatory burden within each type of program as well as between them—so it is important to evaluate programs individually.[25] And while market freedom is a very important consideration in weighing school choice policies, it is not the only consideration. Other factors, from social effects to growth rates to state constitutional hurdles, must also be considered.[26]

Appendix A. Quantifying Private School Regulation

Table A1 presents the quantification system for our Regulation Index variable. Table 2, in the body of the text, presents the Regulation Index category values for each group of private schools, by program participation and state, based on the relevant legislation.

For each of nine categories, values between 0 and 6 are assigned based on the severity/number of the corresponding regulations. Some categories, such as Price Controls, are presented as a simple list of descriptions and their scores, while others are presented as a combination of base scores and score modifiers. These two presentations are functionally equivalent, and the latter approach is used merely to save space (because, otherwise, we would have to list all the combinations of the base scores and the modifiers as separate rows in the table). A discussion of the rationale for including each regulation category in the index follows the table.

Table A1. Regulation Index Scoring, by Category

Price Controls	
No price controls	0
Partial controls	3
Fixed price, no co-pay	6
Admissions Controls	
Unfettered	0
Must use random lottery or first come first served for some grades	3
No autonomy (random lottery or FCFS admissions for all students)	6
Cannot cater to specific religious constituencies	+1
Some form of enrollment cap	+2
Curriculum Regulations (base score)	
No curriculum guidelines	0
Limited general framework	2
Extensive or detailed framework	4
Extensive and detailed framework	6
Curriculum Regulations (mod factors--min total = 0)	
Some exemptions (e.g., rules only apply > enrollment)	-1
Instruction must be in English	+1
Testing Requirements (base score)	
No testing requirement	0
Some testing required, but schools choose tests	2
Some specific tests required	4
Specific high-stakes tests required	6
Testing Requirements (mod factor--max total = 6)	
School must publish results	+1

Barriers to Entry (base score)	
No barriers to entry	0
Must be accredited/chartered by one of sev. bodies	2
Must be accredited/chartered by a single state body	4
New schools may not enter program	6
Barriers to Entry (mod factors--max total = 6)	
Simple, inexpensive government registration	+1
Moderately complex/expensive government registration	+2
Very complex/expensive government registration	+3
Local education authorities enforce rules	+1
Restrictions of Religious Freedom (base score)	
No restrictions	0
Devotional instruction cannot be required	3
School must be secular	6
Religious Restrictions (mod factors--max total = 6)	
Vouchers/credits may not defray devotional instruction costs	+2
Staffing Regulations (base score)	
No restrictions	0
College degree	1
One year of government-mandated training	3
Full teaching degree from government-accredited program	5
Staffing regulations (mod factors--max total = 6, min = 0)	
May not consider candidates' religion	+2
Mandatory collective bargaining	+3
All regulations apply only to management, not teachers	-2
Must have special skills if no college degree	+1
Maximum pupil/teacher ratio	+1
Minimum size	+1
Staffing requirements based on school size	+1
Financial Regulations (base score)	
No financial regulations	0
Subsidies discriminate against for-profit schools	2
Cannot be operated for profit	5
Financial regulations (mod factors--max total = 6)	
Surety bond or equivalent required	+1
Basic audit or equivalent required	+1
Extensive audit or equivalent required	+2
Delivery/Facilities Regulations (base score)	
No delivery/facilities regulations	0
Minimal/non-specific facilities rules	1
Modest facilities rules or some limits on virtual schools	2
Expensive/extensive facilities rules or no virtual schooling	4
Delivery/Facilities Regulations (mod factors--max total = 6)	
Loose guidelines on the number of hours per day of class time	+1
Tight rules on the number of hours per day of class time	+2

The ultimate Regulation Index value for a given group of private schools is simply the equally weighted sum of all its category scores. Any such index is necessarily arbitrary, and readers may feel that some categories should be weighted more heavily than others. To test whether or not alternative weightings affect the central results of this paper, intensive robustness testing was undertaken and its findings are reported in Appendix D. The rationales for including each category are described below.

Prices determined by supply and demand are an essential feature of market systems. They communicate to producers what consumers want and provide incentives for producers to supply

the most sought-after goods and services. Without the information and incentives provided by freely determined prices, the market's operation is grossly impeded.

Specialization and the division of labor are also core features of markets. It is no coincidence that they are the first topic of extended discussion in Adam Smith's *The Wealth of Nations*. Without them, the development of specialized expertise is hobbled, and along with it efficiency and innovation. Admissions regulations that force every school to accept students on a random lottery basis when oversubscribed interfere with the ability of schools to tailor their services to particular audiences. This is, moreover, a more severe regulatory burden than that obtaining within conventional public school systems. Contrary to the common statement that "public schools accept all comers," public school systems frequently place students that they are unable to serve in private schools that specialize in educating children with their particular needs. Hundreds of thousands of students are so placed every year.[27] Even in the case of students without special needs, schools in a given district need not accept any student outside their catchment area. What the public school system guarantees is thus that every child will be served *somewhere*, not that every school will (or will be able to) serve every child.

Curriculum regulations are an obvious further imposition on specialization and the division of labor. They also undermine the power of consumer choice—if all the instructional offerings in the marketplace are homogenized, parents no longer have meaningful choice (evoking Henry Ford's: "any color you want, so long as it's black"). What is less often recognized is that state-mandated testing also exerts a homogenizing pressure on what is taught. Reporting poor results on an official test—even one that does not well reflect a school's mission—would put it at a competitive disadvantage. So an art-centric school that posts poor science scores is under pressure to increase the time and intensity of its science classes in order to avoid a black eye on official tests, which thereby takes away from its core mission. Though language learning occurs most easily in younger children, a school that opted to focus on foreign languages and history in the early grades and then turn to mathematics in the later grades would be at a grave disadvantage on official mathematics tests in the early grades, creating pressure for it to abandon its pedagogical mission.

The entry of new firms into a marketplace is a lynch-pin of innovation and productivity growth, both directly and indirectly. New firms that survive their initial start-up phase are usually better able to use the latest technology and thus to enjoy higher productivity growth than established firms. And, as Schumpeter argued[28] and subsequent research has confirmed,[29] the entry of these new firms—and even the mere threat of their entry—is enough to drive existing firms to pursue innovation and seek productivity growth internally. Those existing firms that are unable to keep up the pace of improvement are supplanted by their competitors—a process Schumpeter termed "creative destruction." Regulations inhibiting entry of new schools are thus inimical to innovation and efficiency improvements.

There is unquestionably very substantial demand for religious schooling in the United States, and religious (particularly Catholic) schools are generally found to be more efficient, have equal or better academic achievement, and have higher attainment than public schools. James Coleman[30] and later Bryk, Lee and Holland[31] ascribe some of these advantages to the ability of religious schools to create institutional cohesion and a sense of community based around their faith. Inhibiting religious freedom in education is thus not only deleterious to parental choice, it is also likely to be injurious to school effectiveness and efficiency.

A key tool that employers have for securing the faithful execution of the firm's mission is the ability to hire and retain employees who share that mission. Conversely, one of the most commonly cited reasons for the failure of pedagogical reforms to scale up within the public school sector is the inability of the reformers to ensure that principals fully understand and agree with their approach, and the inability of principals to exclusively hire and retain teachers committed to pursuing that approach.[32] Regulations that inhibit the freedom of school managers to select and retain whatever employees they deem most capable of undertaking the work at hand necessarily impede institutional success.

The profit and loss system is central to the operation of markets. The ability to distribute profits to shareholders is essential to raising investor capital for expansion, research, and development. High levels of profitability attract new entrepreneurs into a field, expanding the availability of the most valued products or services and ultimately driving down prices, raising quality or both. Forbidding profit-making schools is thus apt to inhibit the growth and dissemination of the best educational services. The imposition of other financial regulations on schools participating in choice programs—regulations to which private schools are not otherwise subject—consume resources that schools could spend in the pursuit of their mission.

Finally, regulations on the manner in which schooling is delivered—e.g., length of school days and years, permissibility of virtual schooling—circumscribe the range of offerings available to families and inhibit the development of potentially highly efficient new education delivery mechanisms.

Appendix B. Multilevel Regression Results

Multilevel generalized least squares (GLS) regressions can be performed assuming either "fixed effects" or "random effects." A fixed effects model looks only at the variation in regulation within states and ignores variation between states, while a random effects model considers variation both within and between states. The coefficients of fixed effects models are consistent but not necessarily efficient (i.e., they may have unnecessarily wide confidence intervals), while the coefficients of random effects models are efficient (narrower confidence intervals) but not necessarily consistent (i.e., possibly biased).

To minimize the risk of bias, we must use the fixed effects model unless it can be shown that the coefficients produced by the random effects model are satisfactorily similar (e.g., via a Hausman test) and also that there are indeed random effects to measure (e.g., via a Breusch and Pagan Lagrangian multiplier test). The null hypothesis of the Breusch and Pagan test is that the variance of the group error, μ_i, is equal to zero—that there are in fact no state-level ("random") effects. Tables B1 through B4 present the results of both regressions and both tests. Note that the PctPrivate and RegulationRank control variables are automatically dropped from the fixed effects regression since they do not vary within states.

Table B1. Fixed Effects Regression Results

```
xtreg regindex isvoucher iscredit pctprivate regulationrank, i(StateID) fe

Fixed-effects (within) regression               Number of obs      =        36
Group variable (i): StateID                     Number of groups   =        16

R-sq:  within  = 0.8433                         Obs per group: min =         2
       between = 0.4128                                        avg =       2.3
       overall = 0.6872                                        max =         3

                                                F(2,18)            =     48.44
corr(u_i, Xb)  = -0.0759                        Prob > F           =    0.0000

------------------------------------------------------------------------------
    regindex |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   isvoucher |   21.61746   2.203911     9.81   0.000     16.98721     26.2477
    iscredit |   3.453145   2.284079     1.51   0.148    -1.345528    8.251818
  pctprivate |  (dropped)
regulation~k |  (dropped)
       _cons |   4.674832   1.217232     3.84   0.001     2.117523    7.232142
-------------+----------------------------------------------------------------
     sigma_u |  4.9948269
     sigma_e |  4.8328722
         rho |  .51647494   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(15, 18) =     1.69              Prob > F = 0.1440
```

Table B2. Random Effects Regression Results

```
xtreg regindex isvoucher iscredit pctprivate regulationrank, i(StateID) re

Random-effects GLS regression                   Number of obs      =        36
Group variable (i): StateID                     Number of groups   =        16

R-sq:  within  = 0.8424                         Obs per group: min =         2
       between = 0.6293                                        avg =       2.3
       overall = 0.7514                                        max =         3

Random effects u_i ~ Gaussian                   Wald chi2(4)       =    117.41
corr(u_i, X)       = 0 (assumed)                Prob > chi2        =    0.0000

------------------------------------------------------------------------------
    regindex |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   isvoucher |   21.25085    2.02224    10.51   0.000     17.28734    25.21437
    iscredit |    4.12928   2.051409     2.01   0.044     .1085928    8.149968
  pctprivate |   .5939145   .2820513     2.11   0.035     .0411041    1.146725
regulation~k |   .0281553   .1081711     0.26   0.795    -.1838562    .2401668
       _cons |  -3.513944   3.642051    -0.96   0.335    -10.65223    3.624344
-------------+----------------------------------------------------------------
     sigma_u |  3.0678432
     sigma_e |  4.8328722
         rho |  .28721836   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

Table B3. Hausman Test Results

```
                 ---- Coefficients ----
             |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
             |     fixed        random       Difference          S.E.
-------------+------------------------------------------------------------------
  isvoucher  |    21.61746     21.25085        .3666048        .8762247
   iscredit  |    3.453145      4.12928       -.6761351        1.004361
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(2) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =         0.53
                Prob>chi2 =       0.7676
```

Table B4. Breusch and Pagan Test Results

```
regindex[StateID,t] = Xb + u[StateID] + e[StateID,t]

Estimated results:
                    |       Var     sd = sqrt(Var)
            ---------+------------------------------
            regindex |   116.6373       10.79988
                   e |   23.35665       4.832872
                   u |   9.411662       3.067843

Test:   Var(u) = 0
                            chi2(1) =     3.48
                         Prob > chi2 =     0.0623
```

Though the Hausman test would allow us to use the random effects model (because we cannot reject its null hypothesis) the Breusch and Pagan test does not allow us to reject the possibility that there are in fact no random effects to measure (because we cannot reject its null hypothesis that the variance of $\mu_i = 0$). Hence we are left with the coefficients and the confidence intervals of the fixed effects model.

Appendix C. Robust OLS Regression Results

The results for the regression with robust standard errors of the parsimonious OLS model appear in Table C1.

Table C1. Robust OLS Regression Results

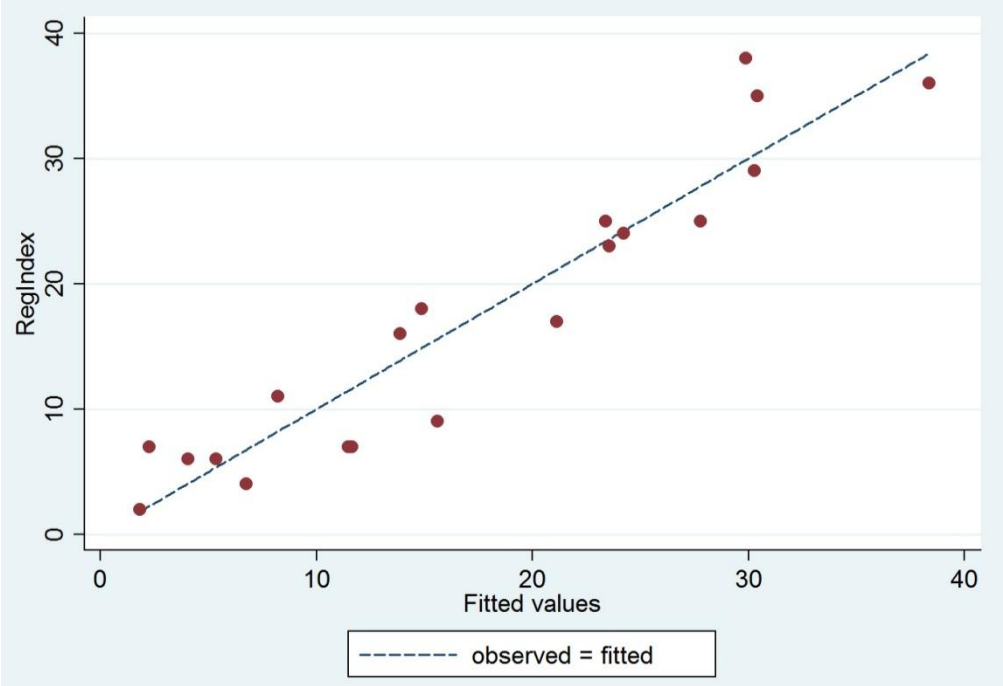
```
reg regindex isvoucher lnage demcontrol regulationrank, cluster(StateID)

Linear regression                                       Number of obs =      20
                                                        F(  4,    15) =   40.91
                                                        Prob > F      =  0.0000
                                                        R-squared     =  0.8955
Number of clusters (StateID) = 16                       Root MSE      =  4.1899

------------------------------------------------------------------------------
             |               Robust    Beta
    regindex |      Coef.   Std. Err.  Coef.    t     P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   isvoucher |   18.84905   2.207913   0.79   8.54   0.000       14.143    23.55511
       lnage |   3.631224   .9259558   0.44   3.92   0.001     1.657596    5.604852
  demcontrol |   7.994318   1.259135   0.62   6.35   0.000     5.310537     10.6781
regulation~k |   -.237059   .0857815   -.26  -2.76   0.014    -.4198979   -.0542202
       _cons |   1.253603   2.403601   0.08   0.52   0.610    -3.869552    6.376759
------------------------------------------------------------------------------
```

The OLS regression reveals that vouchers are associated with a significantly higher level of private school regulation than are tax credit programs ($p < .001$). IsVoucher is in fact the most statistically significant variable in the model (having the highest t-score). Furthermore, as the Beta coefficients[33] make clear, IsVoucher also has the largest *magnitude* of any explanatory variable. And, despite its parsimony, this model produces a good fit, with an R-squared value of nearly 0.9 (the customary "adjusted R-squared" figure cannot be computed when robust standard errors are used, but with only four variables in the model, R-squared itself is a reasonable measure of goodness of fit). To illustrate, a plot of the observed versus fitted regulation index values appears in Figure C1.

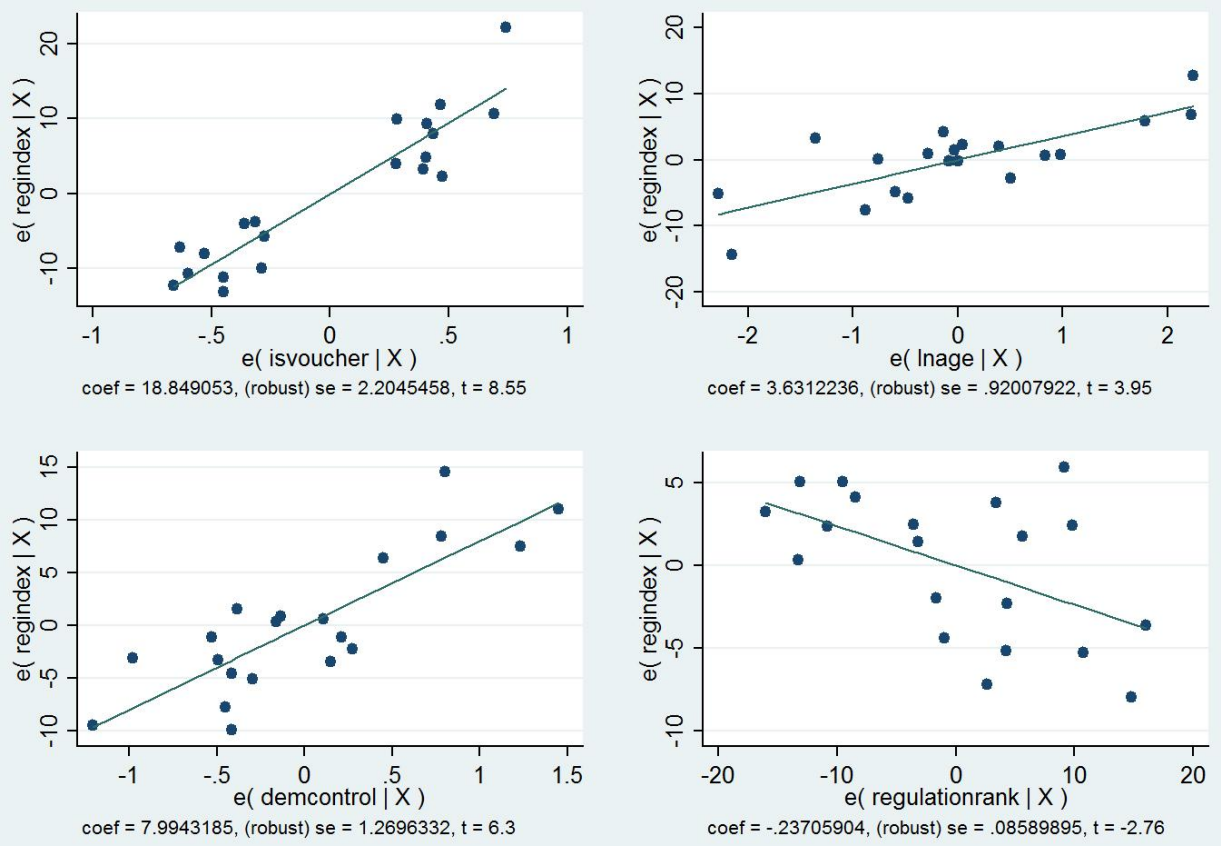
Figure C1. Observed Versus Fitted Values



The estimates in Table C1 of course depend on the validity of the assumptions of OLS regression, including: linearity of the relationships between the predictors and the dependent variable, little multicollinearity among the predictors, normality of the residuals, and lack of omitted variable bias. A scatter plot of residuals versus fitted values shows little heteroskedasticity, but we omit that plot here because the homoskedasticity assumption of OLS is relaxed when robust standard errors are used, as in the present case.

To verify the linearity of the relationships of the predictors to the dependent variable, we generate added variable plots for each of them (see Figure C2).[34] No non-linearity problems are evident.

Figure C2. Added Variable Plots



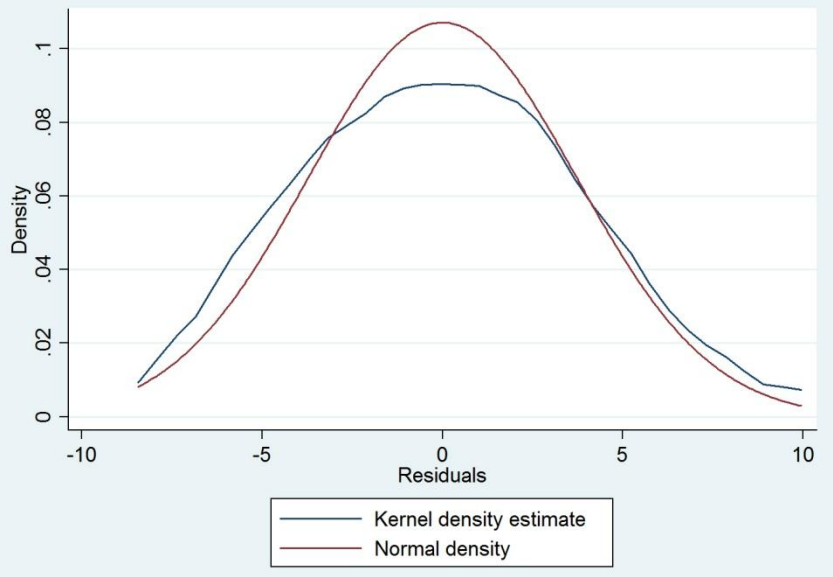
To test for multicollinearity among the predictors, we compute each of their tolerances (the proportion of their variance that is not due to other predictors, calculated as 1 minus the R-squared value resulting from the regression of the predictor of interest on the remaining predictors). These tolerances, along with their corresponding Variance Inflation Factors (equal to 1/tolerance), are presented in Table C2. Clearly, our predictors are substantially linearly independent of one another.

Table C2. Test of Multicollinearity

Variable	VIF	1/VIF
demcontrol	1.49	0.669531
regulation~k	1.49	0.671526
lnage	1.13	0.886587
isvoucher	1.10	0.912988
Mean VIF	1.30	

To test the normality of our residuals, we compute a kernel density function for them and then compare it against a normal curve (see Figure C3), finding them to conform relatively well.

Figure C3. Test for Normality of Residuals



While there is no conclusive test for the absence of omitted variable bias, two common tests are available that can detect its presence. Linktest adds the square of the predicted values as a new explanatory variable, which should not be statistically significant. If it is, we cannot reject the null hypothesis that a significant predictor has been omitted. The linktest results, given in Table C3, suggest that we can reject the null hypothesis that there are omitted variables at any conventional level of significance.

Table C3. Linktest for Omitted Variable Bias

```
      Source |       SS       df       MS              Number of obs =      20
-------------+------------------------------           F(  2,    17) =   76.95
       Model |  2269.09816     2  1134.54908           Prob > F      =  0.0000
    Residual |  250.651837    17  14.7442257           R-squared     =  0.9005
-------------+------------------------------           Adj R-squared =  0.8888
       Total |     2519.75    19  132.618421           Root MSE      =  3.8398

------------------------------------------------------------------------------
    regindex |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        _hat |   .7197678   .3128792     2.30   0.034     .0596503    1.379885
      _hatsq |   .0076645   .0082669     0.93   0.367    -.0097771     .025106
       _cons |   1.688627   2.449259     0.69   0.500    -3.478858    6.856111
------------------------------------------------------------------------------
```

A more rigorous form of linktest is the Ramsey Reset Test, which adds several higher power terms of the predicted values as test predictors. Its results are given in Table C4.

Table C4. Ramsey Reset Test for Omitted Variable Bias

```
Ramsey RESET test using powers of the fitted values of regindex
       Ho:  model has no omitted variables
                  F(3, 12) =      2.79
                  Prob > F =      0.0862
```

Once again, we can reject the null hypothesis that there are omitted variables in our model at any standard level of statistical significance.

Appendix D. Robustness Testing

The results reported elsewhere in this paper depend on the Regulation Index described in Appendix A, which weights all nine categories of regulation equally. But some types of regulation are arguably more onerous than others, in which case varying weights should be assigned to each regulation category when the overall Index value is computed. To test whether or not this paper's findings are robust to such alternative weightings, Stata's programming language was used to create 2,000 different random weightings, compute the resulting new regulation index values for each observation, and then apply both regression models to each of the randomized runs.

These randomized runs allowed each category of regulation to receive a weight between 0.5 and 2 times the default value—so that the highest possible weight is four times the magnitude of the lowest possible weight. For example, on any given run, the weight assigned to the Barriers to Entry regulation category could be one half (or twice) the size of the weight given to the Admissions category. The results are reported in Table D1.

Table D1. Number Of Statistically Significant Findings,
by Confidence Level and Program Type
(2,000 Randomized Runs, Regulation Category Weight Range = .5 to 2)

	IsVoucher		IsCredit	
	0.01	0.05	0.01	0.05
multilevel, fixed effects	2,000	2,000	0	15
OLS, robust	2,000	2,000	N/A	N/A

The results in Table D1 demonstrate that this paper's findings are highly robust to a wide range of alternative weightings. The IsVoucher variable is highly statistically significant for all 2,000 runs at even the relatively stringent ($p < .01$) level, whereas the IsCredit variable is insignificant across 99 percent of runs at even the loose ($p < .05$) level.

---

[1] Andrew J. Coulson, "Comparing Public, Private, and Market Schools," *Journal of School Choice*, vol. 3 (2009), no. 1, pp. 31-54. http://www.cato.org/pubs/articles/coulson_comparing_public_private_market_schools_jsc.pdf
[2] Patrick J. Wolf, "Civics Exam: Schools of Choice Boost Civic Values," *Education Next*, vol. 7 (2007), no. 3 (Summer), pp. 66–72. http://educationnext.org/files/ednext_20073_66.pdf
[3] Herbert J. Walberg and Joseph Lee Bast, *Education and Capitalism: how Overcoming Our Fear of Markets and Economics Can Improve America's Schools* (Stanford, California: Hoover University Press, 2003), p. 221.
[4] Moody and Ellig, "The Universal Tuition Tax Credit: Achieving Excellence in Education without a Tax Increase," http://www.virginiainstitute.org/tax.html

[5] Andrew J. Coulson, *Market Education: The Unknown History* (New Brunswick, NJ: Transaction Books, 1999).
[6] Bast and Walberg, p. 262.
[7] Bast and Walberg, p. 326.
[8] Examples of the former type of program can be found in Illinois and Iowa, and of the latter can be found in Florida and Pennsylvania.
[9] Coulson, *Market Education: The Unknown History*. And:
Andrew J. Coulson "Toward Market Education: Are Vouchers or Tax Credits the Better Path?," Cato Institute Policy Analysis no. 392, February 23, 2001. http://www.cato.org/pubs/pas/pa392.pdf. And:
Andrew J. Coulson, "Giving Credit Where It's Due Why Tax Credits Are Better Than Vouchers," *The Independent Review*, vol. 3 (2002), n.2 (fall), pp. 277-287. http://www.independent.org/pdf/tir/tir_07_2_coulson.pdf
[10] John Humphreys, "Funding School Choice. Vouchers or Tax Credits: A Response to Buckingham," Center for Independent Studies, *Policy*, vol. 18 (2002), no. 1 (autumn). http://www.cis.org.au/Policy/aut2002/polaut02-3.pdf
[11] Lisa Kaiser, "The School Accountability Moment. Milwaukee's choice program gets guidelines," *Express Milwaukee*, July 29, 2009. http://www.expressmilwaukee.com/article-7439-the-school-accountability-moment.html
[12] The K-12 Education Subtraction and the K-12 Education Credit. See: Minnesota Statutes, section 290.0674. http://www.taxes.state.mn.us/taxes/individ/credits_subtractions_additions/education_credits_subtractions/educ_credit_sub.shtml
[13] Florida bill SB 2126, lines 548-553, 2010. http://myfloridahouse.gov/Sections/Documents/loaddoc.aspx?FileName=_s2126er.DOCX&DocumentType=Bill&BillNumber=2126&Session=2010
[14] See the OSP legislation: Florida Statutes 1002.38, http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch1002/Sec38.HTM. Also see the public school testing regulations: Florida Statutes 1008.22, http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch1008/Sec22.HTM
[15] Christopher Hammons, "Fifty Educational Markets: a Playbook of State Laws and Regulations Governing Private Schools," The Friedman Foundation for Educational Choice, *School Choice Issues in Depth*, April 2008. http://www.edchoice.org/downloadFile.do?id=295
[16] One anonymous reviewer commented that applying sophisticated regression models to such a small dataset is overkill, and that a few simple descriptive statistics would suffice. This is mistaken. The possibility of bias being introduced by confounding variables is independent of sample size, and so the use of multiple regression analysis is just as essential with small samples as with large ones. While the "statistical power" of regression models is reduced with smaller data sets, this simply makes it more difficult to detect weak effects. If, using proper regression techniques, we detect significant effects with the present limited number of observations, it is clear that those effects will be substantial in magnitude.
[17] Multi-level regression also addresses a problem that we would face with Ordinary Least Squares: the lack of independence of observations from states that have more than one choice program. OLS assumes that observations are independently and identically distributed, and the independence assumption is violated when multiple observations come from the same state, potentially throwing off the standard errors for the regression coefficients. We can address this problem within OLS by using robust standard errors, but this is convincingly argued to be inferior to multi-level modeling in: Ban Chuan Cheah, "Clustering Standard Errors or Modeling Multilevel Data?," Columbia University Department of Statistics, research note, May 2009. http://www.stat.columbia.edu/~cook/movabletype/mlm/RevisitMoulton_2.pdf

Additionally, multi-level modeling allows us to parcel out the variance into its within-state and between-state components, and determine how substantial each is as a share of the total variance. The standard test for determining the importance of between-state variance in panel regression is Breusch and Pagan's Lagrangian multiplier test, which is used to determine whether there is sufficient between-state variance to warrant a random-effects model or, if not, that the within-state ("fixed effects") model should be employed. In the present study, we find that the within-state model is preferred by the Breusch and Pagan test, because the between-state variance is not substantial. This, in turn, bodes well for the generalizability of the findings because, at least for our observations, state-level effects matter far less than within-state variables like program type.

Finally, multi-level modeling plays a role in helping to determine causality, as discussed in the following section of the paper.

[18] The DefaultReg variable cannot be included in a regression in which the data set includes observations of private schools not participating in choice programs, because doing so would violate the recursivity rule of OLS regression—the dependent variable would be identical (and causally linked) to the DefaultReg values for all the no-choice-program observations.
[19] Douglas M. Hawkins, "The Problem of Overfitting," *Journal of Chemical Information and Computer Sciences*, Vol. 44(2004), No. 1, pp. 1–12.
[20] The predictor of interest, IsVoucher, plus the nine control variables.
[21] For a discussion of Mallow's Cp, see: J. D. Dobson, *Applied Multivariate Data Analysis. Volume I: Regression and Experimental Design* (New York: Springer-Verlag, 1991), p. 268-69.
[22] For a brief explanation of these criteria, see: Christopher F. Baum, *An Introduction to Modern Econometrics Using Stata* (College Station, Texas: Stata Press, 2006), p. 79.
[23] For a discussion of the Stata "cluster()" command, see: "Stata Library: Analyzing Correlated (Clustered) Data," http://www.ats.ucla.edu/stat/stata/library/cpsu.htm.
[24] See, for instance, McFadden (1999, p. 6): "the 2SLS estimator is also biased if we let the number of instruments grow linearly with sample size. This shows that for the IV [Instrumental Variable] asymptotic theory to be a good approximation, n must be much larger than j [where j is the number of predictors in stage 1]. One rule-of-thumb for IV is that n - j should exceed 40, and should grow linearly with n in order to have the large-sample approximations to the IV distribution work well." Daniel McFadden, *Economics 240B Course Reader*, Chapter 4, Department of Economics, University of California at Berkeley. http://elsa.berkeley.edu/~mcfadden/e240b_f01/ch4.pdf
[25] Opposed by the Obama administration and by all but a handful of Democrats in Congress, funding for this program was sunset in 2010, and the program will cease to operate when its existing students have graduated.
[26] See, for instance: Adam B. Schaeffer, "The Public Education Tax Credit," Cato Policy Analysis no. 605, December 2007. http://www.cato.org/pub_display.php?pub_id=8812. And,
Andrew J. Coulson, "Forging Consensus: Can the School Choice Movement Come together on an Explicit Goal and a Plan for Achieving It?" Mackinac Center for Public Policy, Research report, April 30, 2004. http://www.mackinac.org/6517
[27] Janet R. Beales and Thomas F. Bertonneau, "Do Private Schools Serve Difficult-to-Educate Students?," Mackinac Center for Public Policy, research report, October 1, 1997. See also: "Jay P. Greene and Greg Forster, "Effects of Funding Incentives on Special Educaiton Enrollment," Manhattan Institute Civic Report no. 32, December 2002.
[28] Joseph Schumpeter, *Capitalism, Socialism and Democracy*, (New York: Harper and Brothers, 1950).
[29] See, for example, Eric Bartelsman, John Haltiwanger and Stefano Scarpetta, "Microeconomic Evidence of Creative Destruction in Industrial and Developing Countries," World Bank working paper, October 2004. http://siteresources.worldbank.org/INTWDR2005/Resources/creative_destruction.pdf
[30] See, for instance: James S. Coleman, *Equality and Achievement in Education* (Boulder, Colorado: Westview Press, 1990).
[31] Anthony S. Bryk, Valerie E. Lee, and Peter B. Holland, *Catholic Schools and the Common Good* (Cambridge, Massachusetts: Harvard University Press, 1993).
[32] Andrew J. Coulson, "With Clear Eyes, Sincere Hearts and Open Minds: A Second Look at Public Education in America," research report, Mackinac Center for Public Policy, Michigan, July 27, 2002. http://www.mackinac.org/4447
[33] In order to assess the relative magnitude of the explanatory variable coefficients, all of the variables can be standardized prior to performing the regression, so that they have a mean of 0 and a standard deviation of 1. The coefficients thus produced are called beta coefficients, and can be interpreted as follows: a one standard deviation increase in the standardized explanatory variable is associated with an increase of <beta coefficient> standard deviations in the dependent variable (which, in this case, is the level of regulation on private schools as measured by our regulatory index).
[34] A good brief explanation of added variable plots can be found in: Alan Heckert, "Partial Regression Plot," *Data Plot Volume 1*, National Institute of Standards and Technology, April 4, 2003. http://www.itl.nist.gov/div898/software/dataplot/refman1/auxillar/partregr.htm.

THE WALL STREET JOURNAL.

Florida's Unheralded School Revolution

by Adam B. Schaeffer

This article appeared in The Wall Street Journal *on April 30, 2010.*

Two weeks ago Florida Gov. Charlie Crist vetoed a bill that would have ended teacher tenure and established merit pay. His action was widely criticized and effectively ended his primary race for the U.S. Senate as a Republican.

And yet last week, Mr. Crist signed an education bill that will dramatically expand the Florida Tax Credit Scholarship Program. It has attracted little attention, but this legislation could revolutionize K-12 education in the Sunshine State.

The tax credits support private school choice for low-income children by encouraging businesses to donate money for their education. A business's tax liability is cut by a dollar for every dollar it donates to a nonprofit scholarship organization. The nonprofits use the funds to help poor families pay private school tuition.

Currently, there is a $118 million cap on the program. This year nearly $100 million was donated in the program, which as of February translated into scholarships for 27,700 students. But the new law raises the caps on the value a scholarship (eventually to $5,500) and on the total amount of money that can be donated in the program to $140 million in fiscal year 2011.

It also allows the program to rise 25% annually and expands the tax base against which credits can be taken. That used to be limited to corporate income and insurance premium taxes. Now credits can be taken against taxes on oil and gas production, self-accrued sales tax liabilities of direct pay permit holders, and alcoholic beverage taxes on beer, wine and spirits.

This change could prove dramatic: In 10 years the program could raise $1.3 billion and support over 8% of Florida's students. In 15 years it could approach $4 billion and support more than a quarter of the state's students. A girl born in Florida today might find that a third or more of her peers are being educated in private schools by the time she sets foot in high school.

But will the state's politicians and special interests allow that transformation to take place? Looking at how the reform legislation fared in the state's Republican controlled legislature, it seems the answer is already in. The bill passed both houses overwhelmingly, including support from 42% of Democrats and 52% of the legislative black caucus. (Nearly every Republican voted yes.) That is a remarkable turnabout for a program that received one Democratic vote when it was created in 2001. Why the shift?

Money is part of the answer. On average, public schools in the state spend over $11,000 per student, far more than the scholarships. Therefore the state gains $1.49 in savings for every $1 it loses in tax revenue in the program, according to a 2008 fiscal analysis by the state Office of Program Policy Analysis & Government Accountability. The state Senate Ways and Means Committee estimated the program's expansion will save $20 million over the next four years.

But money is far from the only reason Democrats support this program. State Rep. Bill Heller, the top Democrat on the House Education Policy Council, wrote recently in the *St. Petersburg Times*, "To me, a scholarship option for poor, struggling schoolchildren is in the greatest tradition of our collective commitment to equal educational opportunity."

There is also clear evidence that many private schools outperform public schools academically. The first children to enter the Washington, D.C., voucher program, for example, now read more than two grade levels above students who applied for the program but didn't win the voucher lottery.

Researchers from Northwestern University will soon release a study on how competition from Florida's education tax-credit program is impacting the performance of children who remain in public schools. The preliminary evidence is that school choice lifts the performance of public-school students significantly.

Florida's scholarship program appears to be the first statewide private school choice program to reach a critical mass of funding, functionality and political support. As an ever increasing number of students in Florida take advantage of the scholarship program, other states will find it hard to resist enacting broad-based school choice.

Adam Schaeffer is a policy analyst with the Cato Institute's Center for Educational Freedom.

This article is available online at http://www.cato.org/pub_display.php?pub_id=11734.

Policy Analysis
No. 661 February 17, 2010

Behind the Curtain
Assessing the Case for National Curriculum Standards

by Neal McCluskey

Executive Summary

The argument for national curriculum standards sounds simple: set high standards, make all schools meet them, and watch American students achieve at high levels. It is straightforward and compelling, and it is driving a sea change in American education policy.

Unfortunately, setting high standards and getting American students to hit them is extremely difficult. Politically powerful interest groups must be overcome. Crippling conflicts between different religious, ethnic, and ideological factions must be avoided. And a culture that is generally averse to an intense focus on academics must be transformed. These challenges help to explain why the research on national standards is both very limited and inconclusive.

But what if the research were to clearly show that having national standards leads to superior performance on international tests? Still, there would not be compelling evidence that national standards produce optimal outcomes; economic growth, as well as personal fulfillment, could very well require an education focused on much more than just high test scores.

It appears that the route to successful education goes in the opposite direction of national standards; it goes toward universal school choice. Only a free market can produce the mix of high standards, accountability, and flexibility that is essential to achieving optimal educational outcomes.

Neal McCluskey is associate director of the Cato Institute's Center for Educational Freedom and author of the book Feds in the Classroom: How Big Government Corrupts, Cripples, and Compromises American Education *(Lanham, MD: Rowman and Littlefield, 2007).*

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The argument seems compelling: if you want all students to do well you simply need to set a high national bar. Political and educational reality, however, are hardly so simple.

Introduction

Since at least the publication of *A Nation at Risk* in 1983, theories have abounded about what ails American elementary and secondary education.[1] One of the major contentions has been that the nation's public schools simply have not been held to high enough standards, that students are not required to clear sufficiently high bars of knowledge and understanding.

To remedy this situation, advocates of "standards-based reform" have tried to prod states to set high standards for themselves. More recently, they have championed federal efforts meant to force states to establish standards and tests. The No Child Left Behind Act requires all states to set standards in reading, mathematics, and science, test student mastery of those standards, and get all students to reading and mathematics "proficiency" by 2014.

The effect of these reforms has been spotty at best. On their own, states have set standards of widely varying—but generally low—quality. NCLB arguably made matters worse, giving states powerful incentives to set low standards and simply label poor performance "proficient." That has helped to keep states and districts out of trouble under the law, but has defeated NCLB's supposed intent: to push standards and performance to much higher levels.

Confronted with implacable state-level resistance to high standards, as well as the perverse incentives of NCLB, many standards-based reformers have moved to a new model: national standards. In defense of their proposal, some advocates argue that, in a "flat world" of global competition, it is nonsensical for a single nation to have 50 standards. Two plus two equals four whether a child lives in California, Iowa, or New York. Moreover, they argue that almost every country that outpaces the United States on international assessments has national standards. Finally, they assert that national standards will introduce desperately needed transparency in American elementary and secondary education. If all states have the same standards, then the determination of a child's proficiency will not be based on where he lives, but what he actually knows.

These arguments seem compelling, centering on the idea that if you want all American students to do well you simply need to set a high national bar and get them over it. Political and educational reality, however, are hardly so simple. Examining those realities reveals why states have proven so unfriendly toward high standards on their own, and why the empirical evidence on national and sub-national standards is essentially inconclusive.

What Is Happening Now

Because of growing frustration with NCLB and escalating concerns about the nation's economic competitiveness, momentum to establish national curricular standards has markedly increased over the last few years. Several organizations have published reports calling for national standards, and many high-profile education leaders have advocated them.[2] Recommendations about the forms that national-standards regimes should take have varied markedly—for instance, common standards voluntarily adopted by states; standards adopted with monetary incentives from Washington; or standards with or without accompanying tests—but the unifying thread has been to have a single standard applicable nationwide.

The most concrete action has been undertaken by the National Governors Association and the Council of Chief State School Officers, which launched their Common Core State Standards Initiative in April 2009. As of September 2009, 51 states and territories had agreed to support the development of "internationally benchmarked" English and mathematics standards. If such standards are completed and states choose to adopt them, states will have to agree to make the standards at least 85 percent of their over-

all English and mathematics standards. The CCSSI released draft "college and career readiness standards" in September 2009, and draft standards for grades K–12 are scheduled to be published in early 2010.[3]

President Obama's administration has offered both strong rhetorical and monetary support for adopting CCSSI standards. Well before there were publicly available drafts of the standards, U.S. Secretary of Education Arne Duncan suggested that states that adopt them would put themselves in a better position to get part of the $4.35 billion "Race to the Top Fund"—a chunk of the massive 2009 "stimulus" bill—that he controls. He also announced that up to $350 million of the fund would be used to develop assessments aligned with the standards.[4] And this is to say nothing of how the standards would be integrated into reauthorization of NCLB—the core of federal K–12 policy—a process that is currently three years overdue.

Why National Standards?

National-standards advocates offer several theoretical arguments for their proposals, but almost all boil down to the same proposition: setting clear, high standards would create a simpler, more coherent, and ultimately more effective education system. As a result of having uniform national standards, the argument goes, all students, schools, districts, and states would be evaluated on the same metric, and the ability to hide failings by altering standards or tests, as is pervasive under NCLB, would disappear. A second major argument furnished by proponents is that in the modern world, with its increasingly integrated, globalized economy, it makes no sense to continue having multiple standards within one country.

Those arguments notwithstanding, it is possible that standards advocates could have been satisfied with state-level control. Until recently, states have, in fact, been the primary focus of standards-based reforms, and it is generally acknowledged that most authority over education resides at the state level.[5] Similarly, NCLB was intended to push states to set their own standards and tests, not to have them designated nationally. But "standards and accountability" advocates have become increasingly disappointed by states' standards—and efforts to have all children meet them—leading many to conclude that states simply will not force themselves to perform. As analysts from the pro–national standards Thomas B. Fordham Foundation have written:

> The state standards movement has been in place for almost fifteen years. For almost ten of those years, we . . . have reviewed the quality of state standards. Most were mediocre-to-bad ten years ago, and most are mediocre-to-bad today. They are generally vague, politicized, and awash in wrongheaded fads and nostrums. With a few exceptions, states have been incapable (or unwilling) to set clear, coherent standards, and develop tests with a rigorous definition of proficiency. By our lights, you can count on one hand the number of states with clear proficiency standards in reading and math and expectations even approaching those of the National Assessment of Educational Progress.[6]

States, as the passage suggests, have tended to set standards low, at least compared to what groups like the Fordham Foundation hope for. It is a situation that has been exacerbated by NCLB, which leaves it to states to write their own standards, prepare and administer their own tests, and define proficiency for themselves. The result has been that most states, to comply with the letter of the law while keeping out of trouble, have set their standards very low.

A 2009 analysis that correlated state test scores with performance levels on the National Assessment of Educational Progress—a regime of federal exams used to gauge American students' knowledge and skills in several subjects—made clear how low and variable state standards are. On fourth-grade mathematics,

Secretary of Education Duncan suggested that states that adopt standards would be in a better position to get "Race to the Top" funds.

only one state out of the 48 with available data had set its proficiency level on par with NAEP's proficiency level; the rest had set it either at or below NAEP's "basic" level. This was repeated on eighth-grade mathematics, where only two of 47 states set their proficiency level at NAEP proficiency. On fourth-grade reading, zero states out of 48 had set their proficiency levels equivalent to NAEP's; a large majority had set it below NAEP's basic level. The results were just slightly better in eighth-grade reading; again, no states set their proficiency on par with NAEP, though more set it equivalent to the basic level.[7]

States' failure to independently set high standards, and the often huge difference in the definition of "proficiency" between states, are pushing standards-based reformers to focus on the national level. By ending what Secretary of Education Duncan characterizes as the craziness "of having 50 states designing their own standards," states would lose their ability to "game" accountability by making their standards easier to meet.[8]

In addition to improving clarity and coherence for state-to-state and district-to-district comparisons, many in the national-standards camp argue that we must be able to compare American students internationally. To do that, we must benchmark the achievement of all students in all states against international standards. As argued in a recent report from the National Governors Association, the Council of Chief State School Officers, and Achieve, Inc., "if state leaders want to ensure that their citizens and their economies remain competitive, they must look beyond America's borders and benchmark their education systems with the best in the world."[9] To compete in an integrated world economy, they argue, we must hold all students to "world-class" standards.

Most appeals have been couched in superficial assertions about a modern nation needing uniform standards and have stopped there.

The First Blush Fades: The Weak Theoretical Case for National Standards

On a very basic level, the argument appears to make sense: set national standards, hold schools accountable for meeting them, and educational excellence will ensue. One problem with this logic, however, is that it fails to tackle the bedrock question of how to design, implement, and enforce *high* standards. After all, it is getting high standards for all children—not national standards *per se*—that is the ultimate goal of standards-based reformers. But as constant state-level failures to create and meet rigorous standards have made clear, getting high standards is a very challenging undertaking. Perhaps because of that, most appeals for national standards have been couched in superficial assertions about a modern nation needing uniform standards—or algebra being the same in Maine as it is in Mississippi—and have stopped there.

That said, a few analysts have attempted to give more rigorous theoretical arguments for centralized standards and testing—though not national standards alone—than have its leading proponents.

Economist Robert Costrell has mathematically modeled the potential effects of centralized education standards. Assuming that (a) the standard is "defined as the required level of proficiency for a binary credential, such as a high-school diploma"; (b) centralized standards-setters are motivated to "maximize their conception of social welfare"; (c) "utility-maximizing students choose whether to meet the standard"; and (d) all districts are identical, Costrell asserts that standards will be more demanding if they are set at a higher, more central level than the district. He argues that in a decentralized system, without a way to compare districts or schools, districts would gain no advantage in the marketplace by setting higher standards because high school diplomas would not be valued differently by employers.[10] In a subsequent analysis, Costrell adds that a hybrid system of centralized minimum standards and a decentralized ability to set higher standards would maximize social welfare, leading to an optimal societal combination of leisure and income.[11]

Of course, modeling is not the same as testing with real-world data, so Costrell's analysis is primarily theoretical. More importantly,

some of his foundational assumptions are faulty. Costrell is incorrect, for instance, in assuming that employers, as well as colleges, cannot and do not compare districts or job applicants' skills in a decentralized system. In a recent survey of over 400 employers in the United States, almost 45 percent of respondents reported that they tested or screened "recent high school and college graduate applicants to determine proficiency in some specific basic knowledge/skills (i.e., *Math*, *Reading*, *Writing*, *Spoken English*, or *Other*)."[12] Similarly, while the college admissions process is often opaque and numerous variables are taken into account for each applicant, some colleges do systematically track the performance of specific high schools' graduates to assess the standards and performance of those schools (and, by extension, their districts).[13]

What appears to be missing is not an ability of employers and colleges to differentiate between districts, but an incentive for districts to change. Whether they perform well or not, districts typically receive uninterrupted taxpayer funding. The only methods parents and taxpayers have for punishing unsatisfactory districts, as a result, is moving to better districts or changing authority through school-board elections. But neither of these mechanisms can exert much pressure. For the former to work, dissatisfied constituents must move to a better district—a costly and inefficient way to exercise choice. And the latter?

Political realities make it very difficult to use school-board elections to induce change. Consider, for instance, the politicians who would adopt standards. These actors are as self-interested as anyone else, and as such their first concern is not to maximize student achievement or social welfare, but to win reelection. And which groups involved in education are most likely to help the politicians achieve that goal? While parents and taxpayers are certainly numerous, few are single-issue education voters. Most are either concerned with a variety of political issues or are not very politically engaged. In contrast, teachers and administrators whose livelihoods depend on public schooling are highly motivated to focus on education, and so exert outsized power over politicians on education issues. And because employees are naturally averse to management raising the standards for their performance, it is unsurprising that teachers' unions and administrators' associations use their political influence—which goes far beyond just voting—to keep standards low.

In looking past the inherent standards-minimizing pressure of democratic control, Costrell is joined by historian Diane Ravitch. Ravitch asserts in *National Standards in American Education: A Citizen's Guide* that clear standards are necessary so that everyone involved in the education process will know what their end goals and measures of success are. She also argues that national standards must be established by some government entity lest textbook and test-writing companies set standards by default. Finally, she contends that national standards would help eliminate discriminatory expectations for students based on race or income level.[14] She writes all this, despite acknowledging the huge strength of political forces arrayed against high standards. As she wrote of President Clinton's failed national standards effort:

> I came to realize even as I was writing that the seemingly straightforward idea of national standards was falling victim to a tortuous political process. Other agendas became attached to the basic idea of standards, as legislators and lobbyists from various interest groups saw an opportunity to hang their favorite causes onto the legislation. The measure placed unnecessary restrictions on how states could use their tests; dictated to states the composition of their standards-setting body, ensuring the representation of every professional group and mandating affirmative-action criteria for selection; insisted on vague and controversial opportunity-to-learn standards; and required that any state educational plan encompass all social services, not just academic standards. . . . Yet I continue to believe that the idea of

What is missing is not an ability to differentiate between districts, but an incentive for districts to change.

national standards has remarkable validity.[15]

The asymmetry of political influence between the public and public-school employees is manifested in the physical presence of education groups in Washington, DC, and state capitals. Just in and around the District of Columbia, the National Education Association has a headquarters building, and in fiscal year 2008 employed 896 people on its national staff; the American Federation of Teachers has a headquarters, and in FY 2009 employed 409 staffers; and groups such as the American Association of School Administrators, National Association of Elementary School Principals, and the Council of Chief State School Officers also have headquarters.[16] In contrast, the only group ostensibly representing parents, the National Parent Teacher Association, is headquartered in Chicago and has only its lobbying arm in Washington. And the PTA is hardly representative of most parents; it is largely controlled by the NEA and has suffered years of declining membership.[17]

The asymmetry of political influence between the public and public-school employees is manifested in the physical presence of education groups in Washington.

These groups, their state affiliates, and their members have been very influential in fighting efforts to implement rigorous standards and accountability. In FY 2008, the NEA reported spending almost $30 million on "political activities and lobbying," as well as delivering over $82 million in "contributions, gifts, and grants" to such groups as the Democratic Leadership Council and the Ballot Initiative Strategy Center.[18] The latter describes itself as the "nerve center for progressive ballot initiative campaigns across the country."[19] In FY 2009, the AFT spent over $24 million on politics and lobbying and made about $6 million in gifts. Included among the AFT's gift recipients was the Economic Policy Institute, whose "Broader, Bolder" accountability initiative proposes that states undertake "qualitative evaluation of school quality and do not rely primarily on standardized test scores to judge the success of schools."[20]

Education policy is still, though, primarily made below the federal level, and state and local NEA and AFT affiliates are both numerous and well-funded. In FY 2008, Illinois' NEA affiliate spent more than $1 million on lobbying and other overtly political activities. In roughly that same time, the New York State United Teachers—which is affiliated with both the NEA and AFT—spent about $4.7 million. The Ohio Education Association expended almost $3.4 million. The Michigan Education Association spent about $2.5 million. In the previous year, the Pennsylvania State Education Association expended nearly $1.9 million on political activities and $372,713 on gifts, including $5,000 to Fairtest, an organization that opposes the use of "test scores to make critical educational decisions about students or schools," and on its website features endorsements from unions around the country.[21]

Going beyond teachers' unions, groups representing numerous other public school employees actively oppose connecting standards to strong accountability based on test performance. In 2000, Paul Houston, executive director of the American Association of School Administrators, stated that "testing should be a *part* of how schools measure student performance; however, educating students . . . cannot be measured by *one* test alone."[22] In November 2006, the executive directors of the National Association of Elementary School Principals and the National Association of Secondary School Principals issued an open letter to Congress arguing that school and student progress must be measured "based on the results of multiple assessments and multiple opportunities to retake the test."[23] Finally, in 2000, the National Council of Teachers of English published a resolution stating that "the use of any single test in making important decisions . . . is educationally unsound and unethical."[24]

In addition to powerful resistance from special interests, when accountability measures threaten to keep poorly performing children back a grade or from graduating high school, significant pressure to keep standards low or easily evaded comes from students, families, and sympathetic members of the public. In 2007, for instance, when it appeared

that a large percentage of students would not graduate, Washington State eliminated a pending high school graduation requirement that students pass the mathematics section of the Washington Assessment of Student Learning. That same year, the Maryland State School Board approved an alternate evaluation—a project instead of a test—to enable those who had failed the High School Assessment to graduate.

In the end, all of these political forces have rendered state standards an unappetizing hash. In 2006, analysts at the Thomas B. Fordham Foundation gave standards across the 50 states an average grade of C-minus. Only three states—California, Indiana, and Massachusetts—received As. The problem, they acknowledged, has been that the political system is stacked against high standards and tough accountability. Nonetheless, seemingly because they could think of no other option, the Fordham writers endorsed national standards:

> We understand that national standards would face the same perils as state standards. If written by committee, or turned over to K–12 interest groups, they could turn out to be vague, politically correct, encyclopedic, and/or fuzzy. If linked with real consequences for schools, they could be pressured downward. They could even wind up doing more harm than good.
>
> But if done right, they could finally put the entire country on the sturdy path of standards-based reform. And if great standards can be written in Sacramento or Indianapolis or Boston, perhaps they could be created in Washington, DC.[25]

Maybe It's Not the Structure, But the Culture

A major factor behind low standards and poor test results is the great power that those who would be held to high standards have over the American education system. But a general American discomfort with centralization and easily tested knowledge also plays a part—not something, as will be discussed later, that is necessarily bad.

Many Americans simply do not subscribe to centralized government control of institutions, including education, or of test-driven, fact-and-skill-centered learning. Testament to these proclivities are the popularity of child-centered Montessori and other pedagogically progressive schools, the nation's long tradition of "local control" in education, and, arguably, the general unpopularity of the No Child Left Behind Act.[26] It is, in fact, quite possible that centralized control of education, desire to perform well in easily tested subjects and on standardized tests, and focusing on academic pursuits at all are broadly at odds with American culture. Centralized control of education, for instance, goes against the grain of what sociologist Seymour Martin Lipset famously labeled "American exceptionalism"—a culture grounded in individual liberty and laissez-faire governance.[27] Similarly, the hard-work but anti-academic ethos of the colonist, frontiersman, and entrepreneur are central to the American narrative.

Just as culture in the United States might be generally averse to centralization and standardized education, other cultures might gravitate heavily in the opposite direction. This seems very much the case for East Asian nations, which typically dominate international tests.

Historian J. M. Roberts notes that in China "an enlarged bureaucracy was to survive many periods of disunity . . . and remained to the end one of the most striking and characteristic institutions of imperial China." And how did one enter the bureaucracy? "The officials were in principal distinguished from the rest of society only by education." Roberts also reports that despite "rich variety in culture and custom . . . all the East Asian peoples are similar in seeming to show great industry and enterprise, and a willingness to accept a marked subordination of the individual to the group."[28]

There is evidence within education that there is, indeed, a significant cultural difference between American and other students.

Many Americans simply do not subscribe to centralized government control of institutions.

On the 2007 eighth-grade Trends in International Mathematics and Science Study (TIMSS) mathematics assessment, 11 of the 12 lowest performers had national standards.

American schools and students tend to focus more on "critical thinking" and other less-concrete and measurable outcomes than mathematical and scientific skills and knowledge. Americans also tend to put much less emphasis on schooling and academics than the people of other industrialized nations, and much greater emphasis on extracurricular activities and part-time employment.[29]

Specifically looking at elementary and secondary education, Stevenson, Chen, and Lee examined the attitudes toward education of children and parents in Minneapolis, Minnesota, Sendai, Japan, and Taipei, Taiwan, in 1980, 1984 and 1990. In all three years, despite significant publicity about the high achievement of Japanese and Chinese students and the low standing of Americans, the researchers found that Chinese and Japanese parents were much less satisfied with their schools than were their American counterparts. Similarly, they found that Chinese and Japanese parents and students stressed the importance of hard work to achieve academic success, whereas Americans attributed academic excellence much more to innate ability.[30]

Finally, there is the difference in academic performance between Asian students in the United States and other U.S. racial/ethnic groups. Understanding that "Asian" is a designation that includes people as diverse as ethnic Japanese and Hmong, Asian students outperform all other U.S. students by sizable margins, even after adjusting for socioeconomic status, on mathematics assessments.[31] And since all these groups are in the same education system, this strongly suggests that culture is a powerful force regardless of the educational structure.

Paltry Direct Empirical Evidence

As the Fordham Foundation admits, there is little theoretical reason to believe that national standards will be any better insulated against downward political pressures than state standards. Still, national-standards advocates frequently suggest that, theory or no theory, national standards are achievable and will work. After all, as American Federation of Teachers president Randi Weingarten has written, "the countries that consistently outperform the United States on international assessments all have national standards."[32]

Unfortunately, this "all who beat us have national standards" factoid is close to the only empirical support that national-standards advocates typically offer for their cause. As a result, one cannot help but conclude, as shall soon be seen, that the scientific evidence on national standards is thin and furnishes insufficient support for the notion that strong national standards are either achievable—or desirable—in the United States.

Before addressing the empirical literature, it is worth dismissing the factoid. It is true that most nations that have outperformed the United States on such tests as the Trends in International Mathematics and Science Study and the Program for International Student Assessment have national standards, *but so do most nations that have done worse*. To illustrate, on the 2007 eighth-grade TIMSS mathematics assessment, the eight countries that outperformed the United States had national standards. But, then, so did 33 of the 39 nations that scored lower. Moreover, 11 of the 12 lowest performers had national standards.[33] When looking only at countries belonging to the Organization for Economic Cooperation and Development—generally, economically advanced nations—the same noncorrelation holds: four OECD members outperformed the United States, six did worse, and all but the United States and Australia had national standards. All of this holds true for the 2007 TIMSS eighth-grade science assessment, on which all 10 nations that outperformed the United States had national curricula—but so did 33 of the 37 lesser performers and the 9 *lowest* performers. Among OECD members, five posted better scores than the United States, five did worse, and only the United States and Australia did not have national standards.

The most recent TIMSS to include the

final year of secondary school—essentially, high school seniors—was the 1995 administration. Very few countries of the 21 participating had adequate student samples to reach firm conclusions, but the results again suggest that having national standards does not correlate strongly with performance. The United States finished poorly—fourth from last on the combined mathematics and science literacy scale—but the three nations it outperformed all had national standards. Meanwhile, among the top five finishers, three did not have national standards, including the top-finishing Netherlands.[34]

The 2006 Programme for International Student Assessment science exam results, which tested 15-year-olds, exhibit similar patterns. In 2006, 57 nations participated in the exam, and PISA reported whether 56 had national, regional, or fully decentralized science standards and testing (France had insufficient data). Of the 27 nations with sufficient data that outperformed the United States, 17 had national standards and examinations, 3 had external standards and examinations in some regions, and 7 had no centralized standard—very much a mixed bag. The same was true for the 28 nations that did worse, though there were proportionately more countries without national standards: 12 had national standards and tests, 3 had regional, and 13 had no centralized standards and tests.[35]

Importantly, few of the nations in the bottom half of the PISA standings were developed nations. How did the OECD-only breakdown look? Of the 19 OECD nations with available data that outpaced the United States, 11 had national standards and tests, 3 had regional, and 5 had no centralized standards. Of the 9 that did worse than the United States, 4 had national standards and tests, 1 had regional, and 4 had none. Clearly, having national standards is no guarantee of superior performance.

What about the influence of socio-economic status, which is a very powerful predictor of academic success? Of the five nations highlighted by PISA for having above-average performance in science coupled with below-average impact of socioeconomic background, three had national standards and tests, while two—Australia and Canada—had regional standards like the United States.[36]

All of this said, we have testing and standards data for a relatively small number of nations, and this has made it difficult to draw universally applicable conclusions from comparing nations with and without such standards. However, some recent empirical work has been interpreted as supporting national standards.

The first major such analysis was conducted by economist John H. Bishop in 1996, though, importantly, he looked at national standards for secondary students coupled with "curriculum-based external examinations" (CBEEs) that students must pass in order to graduate.[37] So far, such testing has not been proposed under leading national standards efforts in the United States. In addition, Bishop explored the effect of these exams for *secondary* students on the standardized testing results of 13-year-olds, probing for a systemic effect of CBEEs.

After controlling for such factors contributing to academic achievement as the number of books in students' homes, number of siblings, and socioeconomic status in 15 countries, Bishop found that non-CBEE nations performed worse on the 1991 International Assessment of Educational Progress than CBEE nations. Non-CBEE nations had mathematics scores about two U.S. grade levels below CBEE countries, and the results were statistically significant. Science results were not statistically significant. (Bishop also included results for geography, which are not discussed here because that subject is not a focus of U.S. national standards efforts.)[38]

There were numerous problems with Bishop's study—indeed, Bishop himself stated that "the power" of his test was "very low."[39] For one thing, only for the United States and Portugal, and only in mathematics, did Bishop find lower performances that were statistically significant for specific non-CBEE countries, and that significance was at the borderline 10-percent level.[40] Perhaps

Among the top five finishers, three did not have national standards, including the top-finishing Netherlands.

more importantly, Bishop acknowledged that his findings could be spurious, indicating not that CBEEs drive higher achievement, but that nations with CBEEs might have cultural or ideological predispositions that make them both more likely to have CBEEs and to do well on achievement tests:

> Causation is not proved . . . because other explanations for the U.S., Spanish, and Portuguese lag can no doubt be proposed. Other sources of variation in curriculum-based exams need to be analyzed. *Best of all would be studies which hold national culture constant*. [Italics added.][41]

Lending credence to the possibility that culture drives both centralization and performance, Bishop found that the positive effect of being from an Asian nation was typically greater than the effect of having a CBEE.

In 1997 Bishop released a new study that included his IAEP findings. He added an analysis using 1994–1995 TIMSS mathematics and science data for 13-year-olds in 37 nations.[42] Regressing participating nations' TIMSS scores against per capita gross domestic product, a dummy variable for East Asian nations, and a dummy variable for CBEE, Bishop found that the presence of a CBEE was associated with superior performance of one U.S. grade level in mathematics and 1.2 grade levels in science. Both findings were statistically significant, though the former was only at the 10 percent level.

Though more extensive than his 1996 work, Bishop's 1997 findings suffer from the same problems. Again, Bishop looked not at the effect of national standards, but standards coupled with high-stakes tests. And again, aside from creating a dummy variable for East Asian nations, Bishop did not control for cultural or other unobserved variations. That said, there was very suggestive evidence that culture might be a highly significant force behind both the creation of national standards and achievement: in both the IAEP and TIMSS mathematics results, being from an East Asian nation had a greater positive impact than having a CBEE. Indeed, on TIMSS the effect was almost three times more powerful.

In a 1999 study Bishop again attempted to determine the effect of national standards and CBEEs on academic outcomes, this time looking at the effect of tests controlled at national and "provincial" levels.[43] The study included TIMSS data for two more nations than in 1997. Bishop found that the presence of high school CBEEs improved scores about one grade level for 13-year-olds in math and 1.3 grade levels in science. Bishop also used scores on the 1990 International Association of the Evaluation of Educational Achievement literacy test, which included 25 nations, and the 1991 IAEP tests of 15 nations. Those, too, showed a sizable CBEE advantage, though it was only statistically significant in math for the IAEP.

In the 1999 study, Bishop attempted to more directly address the question of whether culture might drive both the establishment of CBEEs and higher achievement, and potentially create the spurious impression that CBEEs improve achievement. Unfortunately, he only tried to control for culture in analyzing Canadian provinces, which is not directly applicable to *national* standards. Moreover, he argued only that because provinces with CBEEs did not have lower rates of disciplinary problems or absenteeism, they likely did not have greater inherent interest in education than non-CBEE provinces. But provinces in which citizens have a greater focus on education might demand more forcefully that schools fully report problems, and those provinces might do better academically despite having just as many kids causing trouble. That is likely one reason Bishop conceded again that studies adjusting for national culture were needed.[44]

Following Bishop, economist Ludger Woessmann tackled the effect of standards coupled with high-stakes assessments. Like Bishop, Woessmann found a strong relationship between the presence of CBEEs and superior results on TIMSS for 13-year-olds.

Nations with curriculum-based external examinations (CBEEs) might have predispositions that make them both more likely to have CBEEs and to do well on achievement tests.

Using 39 countries that participated in the 1995 TIMSS; 38 countries that participated in the 1999 repeat test; identifying whether the nations had CBEEs in mathematics and/or science; and controlling for 48 "family, resource, teacher, and institutional control variables," Woessmann found that students in CBEE nations scored about 43 percent of a standard deviation better in math and almost 36 percent of a standard deviation better in science.[45]

Woessmann's findings were similar to Bishop's, but so were his study's shortcomings. Most importantly, Woessmann did not control culture adequately to rule it out as a major unobserved driver of both CBEEs and high achievement. Arguing that "concerns about cultural differences generally arise in cross-regional comparisons . . . but should not be as large within regions," Woessmann created dummy variables for regions of the world to isolate effects within regions.[46] However, it is a questionable assumption that the differences among nations within a region are not nearly as great as those between regions. Looking at the variation among nations within a region suggests potentially large gulfs. Iran and Israel hardly have the same culture, but they are both in the Middle East. Japan and the Philippines are both in Asia. Spain and Denmark are both in Europe. Finally, for all intents and purposes when looking at TIMSS data, many of the "regions" identified by Woessmann are just a few nations. While his Middle East consists of 4 nations, Asia 9, Eastern Europe 13, and Western Europe 20, North America, South America, Oceania, and North Africa consist of only 2 nations, and South Africa only 1.[47]

That said, in a working paper very similar to his published analysis (with similar data, controls, and findings), Woessmann listed the coefficients for each region (he did not publish them in his final version). Those coefficients indicated that there very well could be a cultural effect. Like Bishop, Woessmann's data showed a very strong, positive Asian effect in math, with the Asia dummy variables providing a boost more than twice as large as having a CBEE. The Eastern European dummy variables also had a sizable positive effect, coming close to being twice as large as the CBEE effect. There were no statistically significant positive regional effects found in science, but there were significant *disadvantages* in science for the Middle East and Southern and Northern Africa.[48]

In 2004, German researchers Hendrik Jürges and Kerstin Schneider attempted to determine the causes of big differences in academic achievement between otherwise similar nations, and included an analysis of CBEEs. Where they differed from Woessmann and Bishop was in using only nations belonging to the OECD. In so doing, they got results very much at odds with Bishop's and Woessmann's: CBEEs had negligible effects on TIMSS math achievement.

Why the difference? For one thing, the authors note, Bishop included greater numbers of less-developed nations in his analysis than they did. In addition, Bishop included some highly distorting outliers, especially the CBEE-less Philippines, which Jürges and Schneider found to be "a highly influential observation." After adjusting for outliers, Jürges and Schneider concluded that "central exit examinations do not have a significant impact on the achievement of middle-school students."[49] Jürges and Schneider did, however, find one thing that was very similar to Bishop's results: a highly positive effect for Asian nations, suggesting, once again, that culture could have a powerful influence on achievement.

The most recent study touting national standards comes from the Thomas B. Fordham Foundation.[50] In it, Michigan State University professor William H. Schmidt and his coauthors argue that several countries have instituted national standards—including Germany, which the paper dubiously states has a federalist tradition like the United States—and that the United States could, too. The paper offers no systematic evidence that as a result of having national standards countries with such standards outperform the United States, but asserts it

After adjusting for outliers "central exit examinations [did] not have a significant impact" on achievement.

nonetheless. This despite Schmidt having conceded, when asked at a conference preceding publication of the paper what empirical evidence demonstrates the beneficial achievement effects of national standards, that "it is very difficult to establish that, because virtually everybody in the world has national standards."[51]

Thin Indirect Empirical Evidence

The scientific literature on national standards simply does not demonstrate that national standards drive superior performance.

The scientific literature on national standards is too thin to support any U.S. policy move in that direction. Moreover, what research does exist is handicapped by the potentially confounding effects of unobserved variables such as culture, and focuses not just on national standards, but on standards coupled with high stakes for students. It simply does not demonstrate that national standards drive superior performance on standardized tests. Perhaps, though, the research on sub-national standards is more illuminating.

Bishop supplements his analysis of national-level data with comparisons of academic outcomes in Canadian provinces, which, like U.S. states, have autonomy to set (or not set) their own standards. This is important because, with no national standards, Canada has done very well on international comparisons, especially PISA. In 2006, Canadian 15-year-olds finished third out of 57 nations in scientific literacy, fourth in reading, and seventh in mathematics.[52] Of course, this does not prove that *lacking* national standards drives superior performance any more than high-performing countries having national standards proves the opposite. It is also important to remember that performance data come from specific tests, and strictly speaking demonstrate only the correlation between having standards and performance on those tests. And, as shall be discussed further, test results do not capture all, or perhaps even most, desired educational outcomes.[53]

In his 1996 work, Bishop compared the IAEP scores in nine Canadian provinces and the entire United States, adjusting for several variables, including the presence of a CBEE. Four provinces—Alberta, British Colombia, Newfoundland, and Quebec—had a CBEE, while the remaining five and the United States did not. Bishop again found that having a CBEE led to superior performance, on the magnitude of between two-thirds and four-fifths of a U.S. grade-level in mathematics (depending on whether some variables were counted as influenced or not influenced by CBEEs) and two-thirds of a grade-level in science.[54] Bishop reiterated the findings in his 1997 and 1999 work.

Despite his findings, Bishop's analysis of Canadian provinces and the United States failed again to demonstrate that centralized standards drive superior academic performance. Once again, he assessed the effect not just of centralized standards, but standards attached to exams with high stakes for students. And once again, Bishop did not control for differences in culture, attitudes toward education, or other potentially confounding variables.

Along the lines of Bishop's provincial assessment, several researchers have tried to determine the impact of state-level standards and tests on academic outcomes within the United States. The results, however, have been as problematic as the evaluations of Canadian-province and national-level standards.

Perhaps the most publicized research on state standards was a series of studies by Arizona State University professors Audrey Amrein and David Berliner. Looking at state standards and testing coupled with high-stakes for either schools, students, or both, Amrein and Berliner determined that high-stakes accountability in elementary and middle schools was associated with no systematic increase or decrease in academic achievement as measured by NAEP. At the high school level, implementation was associated with *decreasing* ACT, SAT, and Advanced Placement scores.[55]

Amrein and Berliner's results garnered significant attention, but suffered from serious

methodological flaws. University of Illinois education professor Barak Rosenshine noted, for instance, that Amrein and Berliner compared results in states with high-stakes systems against national averages—a mistake given that national averages included high-stakes states. Instead, comparing the performance of high-stakes states against low- or no-stakes states, Rosenshine found that high-stakes accountability had a moderate-to-large positive effect. He also noted that Amrein and Berliner considered smaller than national-average *increases* on state NAEP scores to be *decreases*. Looking at absolute changes, Rosenshine found that only two high-stakes states saw scores declines, versus 10 low-stakes states.[56]

In response to Rosenshine, Amrein and Berliner compared high-stakes to non-high-stakes states and found that high-stakes states were outperforming low-stakes states. However, the results were only statistically significant on fourth-grade mathematics, not fourth-grade reading or eighth-grade mathematics. They also argued that students were being exempted from tests at greater rates in states with high stakes than those without, and that that was a greater explanation for rising scores than the presence of high-stakes tests.[57]

Around the time of Rosenshine's exchange with Amrein and Berliner, Hoover Institution researchers Margaret Raymond and Eric Hanushek published a blistering treatment of Amrein and Berliner's study. They lodged the same complaints as Rosenshine, but also took issue with Amrein and Berliner's disregarding score increases in states in which exclusion rates increased, something Amrein and Berliner did on the premise that exclusion contaminated the results. Reassessing the findings, Raymond and Hanushek found that high-stakes accountability had a significant, positive effect.[58] However, they provided no state-by-state data to support their findings, nor did they control for unobserved variables such as culture, ideology, or potential "shocks" such as sobering reports about academic outcomes that might have changed people's attitudes toward education.

In 2002, economists Martin Carnoy and Susanna Loeb released a study on the effect of external accountability on student outcomes. Comparing changes in the percentage of students scoring "basic" or above on NAEP to the strength of accountability (roughly, the degree to which stakes were attached to testing outcomes), the authors found that states that had implemented stronger accountability in the early 1990s saw greater fourth- and eighth-grade mathematics gains between 1996 and 2000. They also provided a glimpse into the possibility that variables such as culture or ideology might drive both centralization of accountability and achievement. Concerning centralization of standards and accountability, they reported that more governmentally centralized states, especially in the South, tended to have higher-stakes accountability, as did "more populous states with correspondingly larger absolute numbers of disadvantaged minorities, larger school systems, and larger cities."[59] Concerning achievement, they found "no relationship between test-score gains prior to implementation and the strength of accountability," hinting that a cultural or ideological proclivity toward high achievement did *not* drive scores. The period "prior to implementation," however, was just a few years—too short to reliably identify a state's culture or potential effects of changing attitudes toward education.[60]

Perhaps the most important data in Carnoy and Loeb's study were not central tendencies, but graphs of state-by-state results for eighth-grade mathematics. Though "tougher" accountability (measured on a 0 to 5 scale) was correlated with better outcomes, the variation from state to state was considerable, illustrating the pitfalls of assuming that central tendencies are universally applicable. For white students, while the 14 lowest-stakes states (out of 37 total) tended to have the smallest gains, three of those states outpaced five higher-stakes states and tied five more. And the overall outcomes for states in the three highest accountability levels were heavily influenced by just two very high perform-

Outcomes for states in the highest accountability levels were heavily influenced by just two very high performers.

Except for Bavaria, all of the German states with central exit exams were in the former East Germany.

ers: Louisiana and North Carolina, which saw 15 and 14 percentage-point increases, respectively. (There were also two states in the highest accountability levels—California and New Mexico—that saw *zero* gains.) Were Louisiana and North Carolina eliminated, the change in the percentage of white students scoring "basic" for states in the top three levels would drop from 6.5 points to 5.2. Meanwhile, the average increase for states between 1 and 3 on the accountability scale was 5.4 percent. Results for black and Hispanic students were similarly volatile.[61]

In January 2004, again expanding on the work of Amrein and Berliner, education analyst Henry Braun examined changes in NAEP scores for states with and without high-stakes standards and tests. He found, as others had, that high-stakes states showed greater grade-level improvements on NAEP than did states with lesser stakes. However, when Braun looked at improvements for specific cohorts of students, such as between 1996 fourth-grade scores and 2000 eighth-grade scores, low-stakes states had an advantage. He also reiterated a very important caveat: "conclusions from analyses concerning the effects of testing or, more generally, accountability policies must be tentative, based as they are on highly aggregated, observational data."[62]

In a 2005 article, researchers Hendrik Jürges, Kerstin Schneider, and Felix Büchel attempted to determine the effect of central exit exams while better controlling for variables such as culture. They did so through a difference-in-differences framework that looked at the differential for vocational-track students between TIMSS mathematics and science scores in German states with and without centralized exit exams. This helped to estimate the effect of unobserved variables because no states with central exams required vocational-track students to take them in science, while all required mathematics. If the exams drove performance, one would expect to see bigger math-science differentials in exit exam than non-exam states.

Jürges, Schneider, and Büchel did have some concerns. First, if improving mathematics skills also improves science outcomes, the effect of exit exams could be understated, with science scores keeping up with math in part because of the math exams. This did not greatly concern the authors, however, because only a small fraction of TIMSS science questions called on math skills. On the flip side, testing math could "crowd out" science instruction, overstating the effect of exit exams. In an attempt to control for this, the authors included as an independent variable the number of hours students reportedly spent studying science outside of school. Finally, it is important to keep in mind that "college-prep" students were not included in this study, limiting the applicability of its findings to those students.

The authors found that their analysis dramatically cut the "raw" exit examination advantage: from about 1.25 school years to an estimated one-third of a year, bolstering the culture theory while suggesting that exams have some independent positive effect.[63] The study also provided another indication that differing cultures and ideologies might affect where centralized exams would be found and, perhaps, be more effective: except for Bavaria, all of the German states with central exit exams were in the former East Germany.

In the same year that Jürges, Schneider, and Büchel's work was published, Hanushek and Raymond attempted to identify the effect of imposing state standards and tests by comparing states' NAEP score growth from fourth to eighth grade, which would include a single cohort of students. Looking at scores between 1992 and 2002, they found that state accountability systems had a positive effect on achievement. They also provided potential insight into the culture question with their own difference-in-differences design, which controlled for unobserved state variables "that exert a constant influence on state performance over the relevant observation period."[64] This could have controlled for culture, but the period covered—essentially, the early 1990s is the entire no-standards period—is too short to reach any firm conclusions about

changing culture or attitudes. In addition, although the authors provided an analysis without four outliers—California, North Carolina, Texas, and Washington, DC—and found that the outliers had little effect on overall results, they offered no data broken down by state showing how individual states differed from overall averages.

The Research Summarized

Having reviewed the extant comparative research on standards set both at national and subnational levels, it is clear that the empirical support for national standards is weak. First, there simply has not been much comparative research done. Second, what little has been done has typically focused not simply on national standards, but standards coupled with high stakes for students, something not contemplated, at least publicly, under the Common Core State Standards Initiative. Finally, the research does not control adequately for unobserved variables, especially culture or changes in attitudes, that could drive both centralization and a focus on easily tested academic achievement.

Problems beyond the Weak Research Base

The first question that needs to be answered before fundamentally altering the status quo is whether a given reform will work. The existing national-standards research provides no conclusive answer. Beyond the huge deficiencies in the empirical case, however, there are other important objections to imposing national standards on American education.

Federal and Involuntary

Many national standards advocates are quick to point out that the CCSSI—the leading national standards effort—involves states cooperatively determining standards and voluntarily adopting them, not federal control. As the CCSSI website explains: "Governors and state commissioners of education from across the country committed to joining a state-led process to develop a common core of state standards in English-language arts and mathematics for grades K–12."[65]

There is a sound political reason for emphasizing state control: citizens and state officials are loath to have standards imposed on them by Washington, and previous efforts to create standards at the federal level failed miserably.[66] Moreover, many people fear that having the federal government set standards and write tests would make it easy for special-interest groups like teacher unions and administrator associations to keep standards low. They would essentially have "one-stop shopping," a single power center on which to focus all of their energies. As Sandy Kress, a chief architect of the No Child Left Behind Act, has stated, "the process [of setting standards] will be hijacked by [interest] groups if the process is federal."[67]

That said, despite national–standards supporters emphasizing that the CCSSI is state-led and that adoption of its standards is technically voluntary, adoption will almost certainly be de facto involuntary, and the standards themselves ultimately federal. Already, as previously noted, Secretary of Education Duncan has made clear that it would behoove states to sign on to the CCSSI if they wish to compete for a share of the $4.35 billion "Race-to-the-Top" fund. Duncan has also said that the federal government would furnish $350 million to develop tests tied to the standards. Finally, it would be very difficult to conceive of a reauthorized No Child Left Behind Act, especially in light of what Duncan is currently pushing, that would not mandate adoption of national standards and ultimately lead to federal control of those standards. Of course, states could "voluntarily" turn down the billions of federal dollars attached to NCLB, but even in that unlikely case there would still be absolute compulsion involved: state citizens would continue to have no choice about paying federal taxes.

Beyond the huge deficiencies in the empirical case, there are other important objections to imposing national standards.

Constitutionality

The federal government has only been heavily involved in education since 1965, when the Elementary and Secondary Education Act was passed, because for most of the nation's history it was understood that federal involvement would be unconstitutional. The Constitution makes no mention of "education" or "schooling" among the specific, enumerated powers it gives to the federal government, and outside of controlling the District of Columbia and military educational activities, Washington has no authority to be involved in education.[68]

To justify its growing involvement, federal policymakers have typically argued that Washington does not force states and schools to do anything, but only attaches rules and regulations to federal money that states and districts may turn down. By essentially demanding that all states and districts adopt specific standards, however, Washington would be exceeding even the unconstitutional power it has accumulated under ESEA, violating a stipulation that has been in federal education law—including NCLB—since day one: "Nothing in this Act shall be construed to authorize an officer or employee of the Federal Government to mandate, direct, or control a State, local education agency, or school's curriculum, program of instruction, or allocation of State or local resources."[69]

Measurement

There is a great deal of debate within the education community over the importance of "hard" learning, such as memorizing facts or being able to complete mathematical operations, and "soft" learning of such skills as creativity and critical thinking. Most standardized tests, by their very nature, primarily measure the former. But there is no convincing evidence that such hard learning is necessarily the most important outcome of an education system.

Given that all people are unique, the goals that they have for their education and that of their children is potentially as varied as the people themselves. Assume, though, that the end goal for all people is happiness, whether achieved through a well-paying job, doing something that is intellectually fulfilling, or just sitting on a couch watching television all day. Taking happiness maximization as a reasonable final aim for education, it appears at least on the surface that international academic assessments are poor measures of whether or not people are getting what they want out of education. Of the 10 top-finishing countries on the 2007 TIMSS eighth-grade mathematics exam, only four—South Korea, Singapore, Japan, and the United States—ranked among the top 50 in "subjective well-being," and among those the United States ranked the highest by far on happiness.[70] Of course, a lot beyond education goes into happiness, and measuring that feeling is a tricky and imperfect undertaking, but these results at least plausibly suggest that an education system focused on achievement demonstrable by standardized test scores might not be optimal.

Coping with Diversity

A major roadblock for establishing centralized standards in any political system other than a dictatorship is getting enough people to agree on their substance. What should they include? What shouldn't they include? Who should write them? This becomes increasingly difficult the more linguistically, religiously, ideologically, and ethnically diverse a nation's population. With that in mind, it should be no surprise that many of the nations that have national standards and tend to perform best on international exams also tend to be highly homogeneous.

Consider Finland, the top-place finisher on the 2006 PISA assessment. With only about 5 million people, it has a population less than 2 percent that of the United States. In terms of mobility, it has net migration of 0.68 immigrants per 1,000 people, versus 4.31 per 1,000 Americans. It only has two major ethnic groups—Finns are roughly 93 percent of the population and ethnic Swedes about 6 percent—while the United States has a population that is predominantly "white" but 13 percent

By demanding that all states adopt specific standards, Washington would be exceeding even the unconstitutional power it has accumulated under ESEA.

African-American, 15 percent Hispanic, and 4 percent Asian. Religiously, about 83 percent of Finns belong to the Lutheran Church of Finland and most of the rest profess no religion. In contrast, about 51 percent of Americans are Protestant—which includes many denominations—24 percent Roman Catholic, 12 percent unaffiliated, 1.7 percent Jewish, and the rest members of several smaller religious groups. Finally, roughly 91 percent of Finns speak Finnish, 6 percent speak Swedish, and there are small Sami- and Russian-speaking minorities. In the United States, about 82 percent of people speak English, 11 percent Spanish, and the rest many other languages.[71]

How about South Korea, another regular top-place finisher? Its total population is 48.5 million people, about 16 percent the size of the United States. Rather than gaining migrants, South Korea is losing them. Ethnically, South Korea is almost completely homogeneous. Linguistically, everyone speaks Korean. The only way in which South Korea is remotely similar to the United States is in religious diversity, with about one-quarter of its people Christians (with significant numbers of Protestants and Roman Catholics among them), about 23 percent Buddhists, and half claiming no religious affiliation.[72]

Finally, consider Germany, which although not a high-flyer on international assessments, is the nation that William Schmidt points to as proof that the United States can create and adopt coherent, rigorous national standards.

With about 82 million people, Germany's population is roughly a quarter the size of the United States' but bigger than South Korea's and much larger than Finland's. It has 2.19 immigrants per 1,000 people, a number about half that of the United States but much larger than Korea and Finland. Ethnically, about 92 percent of Germany's population is German, 2.4 percent Turkish, and the rest a smattering of other groups. This could be considered on par with Finland, although the gulf between ethnic Finns and Swedes is not as large as between Germans and Turks. The population of the United States, however, is much more diverse than that of Germany. Religiously, about one-third of Germans are Protestants, one-third Roman Catholics, 3.7 percent Muslim, and the rest unaffiliated—diversity that is close to the United States and much greater than Finland. Finally, the only native language spoken in Germany is German, another significant departure from the U.S. experience but also less diverse than Finland.[73]

Clearly, two of the top performers on international assessments are very homogeneous, and Germany—which performs roughly on par with the United States and is moving toward national standards—is more diverse than the top performers but appreciably more homogeneous than the United States. This suggests that diversity militates against establishing national standards and, perhaps, high performance on standardized tests. Because people of different backgrounds often have different priorities and demands for education, it is logical to expect that the greater the diversity of the people falling under a single schooling authority, the greater the conflict, the less coherent the curriculum, and the worse the outcomes.

Beyond just logic, while there is no systematic empirical support for the assertion above, some broad evidence is highly suggestive. Political scientist Robert Putnam has found that greater social capital—essentially, the bonds of trust between people—is correlated with better academic outcomes, and that greater social capital is found in areas with *less* diversity.[74] Similarly, sociologist James Coleman has reported that after controlling for variables such as students' socioeconomic status, Roman Catholic schools have better academic outcomes because they are "closed" systems in which all actors—students, parents, and school employees—share important norms and values.[75]

What Can Be Done?

Culture, politics, diversity—all of these forces militate against the success of national standards in the United States. But if not

Culture, politics, diversity—all of these forces militate against the success of national standards.

national standards, what is the solution to our educational woes? We have tried local control of public schools. We have tried state control. What else can be done?

The question, ultimately, is what type of reform can both successfully navigate the cultural, political, and diversity shoals on which so many public-schooling reforms have run aground and deliver optimal educational outcomes? The answer is to replace public *schooling*—in which government not only ensures that all children can access education, but also provides the schools—with true public *education*. Let parents control education funds either through vouchers or, preferably, personal and donation tax credits, and let them freely choose among autonomous schools and other educational options.[76] Let education work as a free market, in which consumers purchase services and products according to their individual needs and desires, and suppliers compete through quality, specialization, price, and innovation.

The first argument for educational freedom is that the evidence supporting it is broad and convincing.

The Empirical Support for Educational Freedom

The first argument for educational freedom is that, unlike national standards, the empirical evidence supporting it is broad and convincing.

For one thing, there is a wealth of evidence showing that free markets, overall, meet the needs and desires of people much better than command economies, which is essentially what public schooling is.[77] Free markets foster competition that drives innovation and improvement, all while enabling consumers with unique needs to seek out producers that are willing and able to meet those needs.

In education, the research is also deep and convincing; including evidence based on standardized achievement tests. Ten prominent empirical studies have analyzed voucher programs using the "gold-standard" social science technique of randomly assigning subjects to "treatment" or "control" groups. Nine of those studies found that at least one subgroup of students receiving vouchers did better on academic assessments than those who applied for but did not receive vouchers, while in no subgroup did voucher students do worse. In the tenth study, the results were a wash.[78]

Comparing the outcomes of education systems around the world based on how freely consumers and providers can interact also bears this out. Reviewing 65 studies that reported over 156 separate statistical findings, Andrew Coulson found that findings favoring free-market provision of education outnumbered those favoring government-monopoly provision by a ratio of 15-to-1.[79] Notably, virtually all of these studies compared school systems in close proximity to one another *within* individual nations, which would mitigate the potentially confounding effects of cultural and other difficult-to-observe variables. Similarly, education professor James Tooley has found low-cost private (often for-profit) schools to be ubiquitous in many of the world's poorest slums, and that they regularly outperform "free" government schools on assessments of such things as native-language mastery, English, and mathematics.[80]

Going Beyond What Is Testable

So choice produces better results on achievement assessments. However, allowing people *not* to fixate exclusively on easily tested outcomes might also enable them to focus on other pursuits or skills best suited to their abilities and ultimate desires. As already discussed, Americans typically express a greater degree of happiness than their peers in nations with more centralized, test-driven education systems. If enabling people to maximize their happiness is the end goal of education—and anything else we do, for that matter—then allowing students to freely pursue their own educational interests (with the guidance of parents or other advisers) would likely produce the best educational outcomes, if not necessarily the best test scores.

Recent actions in countries that often do quite well on international examinations—nations that many national–standards advocates hope to emulate—suggest that they are, perhaps, coming to believe that education

cannot and should not be reduced simply to test scores. For instance, although Japan has recently retrenched somewhat, as early as the 1970s its education ministry started encouraging schools to put more emphasis on such soft skills as "critical thinking." In 2002, Japan shrank its school week from six days to five, and reduced the content of its national curriculum by about 30 percent. It also introduced a class called "Integrated Studies" that features more independent, student-driven work.[81]

Starting in 1999, Singapore, another top performer, reduced its national curriculum by about a third, doing so in order to "provide room for teachers to implement the key initiatives announced in 1997, namely the infusing of thinking skills and integrating the use of Information Technology in lessons."[82] In 2001, Singapore further reformed its curriculum, focusing it even more on teaching students to "think creatively and apply knowledge innovatively." It also introduced ability-based tracking.[83] Finally, funded in part by Korean education ministries, Korean teachers have been regularly coming to the United States to learn how to teach creativity and critical thinking in their schools.[84]

Does this mean that easily tested subjects have been deemed irrelevant in these high-flying nations? And couldn't administrators, teachers, and other interest groups just be trying to make their lives easier with these reforms, just as they do in the United States?

Movement away from strict standards and testing does not prove anything, of course. These nations probably still strongly support centralized standards and testing, and parents might vehemently object to softening curricula. Still, that these nations with long, proven track records of supporting tough centralized standards and testing have moved to loosen their systems must not be ignored—it could mean that they have recognized real shortcomings of their systems.

Japan, for instance, suffered the "lost decade" of the 1990s: a long period of economic malaise that many experts have at least partially attributed to the nation's lack of creative thinking and hidebound social structures.[85] Bolstering this is the fact that Japan has not been outpacing the United States economically, its significantly higher test scores notwithstanding. In 1980, Japanese GDP per capita, adjusted for purchasing power, was $8,901. In the United States it was $12,255. Since then, per capita Japanese GDP has grown about $855 per year, versus almost $1,180 in the United States.[86]

Minimizing Poisonous Politics

In addition to enabling individuals to pursue educational options best suited to their desires and needs, free-market education avoids the political fighting that has often doomed standards-based reforms. By taking control of education away from government, much of the politics that handicaps the delivery of education would automatically be removed.

Currently, because all taxpayers have to support government schools, almost every school or district decision is politicized. District budgets constantly spark conflict. There are incessant curricular and pedagogical battles over everything from the grade at which students start to use calculators to what reading programs schools employ.[87] And of course there is the asymmetrical power problem, in which the people employed by the public schools have disproportionate power compared to those people whom the schools are supposed to serve.

Give parents control over education dollars and let them choose among autonomous schools, and these problems would diminish considerably. District budgets would be irrelevant because schools would be funded based on their ability to attract customers, not their allocations of public dollars. Curricular and pedagogical battles would peter out as schools independently chose the curricula they thought best and parents selected the schools with programs they thought most effective for their children. Finally, no longer would going through a labyrinthine and stacked political process be

Free-market education avoids the political fighting that has doomed standards-based reforms.

No one person or group has a monopoly on truth or understanding.

the only avenue through which "customers" could try to fix education problems; they would be able to execute immediate accountability by taking their children and the money to educate them out of unsatisfactory schools and putting them elsewhere.

Even with full choice, it should be noted, there would still be politics in education. For one thing, there would no doubt always be people calling for greater or less regulation of schools. In addition, what the minimum educational requirements should be for all children would likely be a contested question. Finally, depending on the mechanism used to deliver school choice, there would no doubt be recurring disputes about the maximum voucher or tax credit size, as well as eligibility criteria.

Even with those lingering problems, however, the amount of education subject to public-policy decisions would be much smaller than under the status quo. And as Andrew Coulson has empirically demonstrated, if choice is delivered through tax credits rather than vouchers—meaning no tax dollars go through government and the money heads to recipients according to the free choice of the sender—onerous regulation is much less likely.[88]

Dealing with Diversity

Finally, the last great stumbling block that makes improving government schooling very difficult is diversity—ethnic, religious, and ideological. It has led to the neutering of public school curricula and the removal of potentially contentious—but also important and interesting—content from the nation's schools. As Ravitch has documented, drives to eliminate objectionable content from curricula have come from all parts of the social and political spectra, with conservatives generally attacking morally objectionable, or insufficiently "American," content and liberals decrying anything that could be considered critical or insensitive to various minority groups. This has resulted in textbooks that are devoid of engaging content and curricula designed to skirt controversy.[89] And this curricular denuding is not just demonstrated in overt actions. Based on widespread anecdotal evidence, it appears that to avoid conflict many teachers skip over controversial topics such as evolution even when state standards require that they be taught.[90] Perhaps that is why, despite religious instruction having long been banished from public schools, close to half of all Americans believe that human beings and other living creatures were created, most likely by God, in their present forms.[91]

How would school choice negotiate these treacherous shoals? In the same way it would avoid so many political fights: by letting people select educational options compatible with their diverse norms and backgrounds rather than requiring them to fight for control of a single system. Parents who want their children to learn religious explanations for human origins would be able to patronize like-minded schools, as would the strictest atheists. Hispanic families that desire instruction in Hispanic history and language could seek schools that teach them. Libertarians who want their children taught that the New Deal prolonged the Great Depression could look for schools that taught that. Then, rather than militating against any and all children hearing things that are potentially controversial, diversity would be fully accommodated and children would be able to get coherent instruction.

With Choice, Would There Be Standards?

One of the most common objections to choice—and one that is especially germane to the topic of national standards—is that free-market delivery of education would result in an absence of standards. It would create a state of relativistic, educational anarchy, according to critics.

It is true that choice would potentially let "a thousand flowers bloom" and that ideas and knowledge that might turn out to be incorrect would and could be taught. This latter possibility is something that national–standards advocates implicitly assert that they could prevent by choosing the "best" curriculum for everyone. But no one person

or group of people has anything close to a monopoly on truth or understanding, and the best system to deal with such imperfection is one in which power is diffuse, not concentrated. It allows ideas to compete, and those that turn out to be wrong would not have been imposed on everyone.

That said, it is inaccurate to assert that widespread standards could not and would not be adopted in a laissez-faire education system. Consider the long period of American history—from the arrival of the first British colonists to the common-schools movement in the mid-1830s—during which most education was delivered in homes, by churches, and in other nongovernmental arrangements. During that time the very "American" language that we speak was standardized by just a few commercially available tools. Noah Webster was explicit in his aims to create a standard American language and forge a unique American culture with his *American Spelling Book* and *American Dictionary of the English Language*, and he achieved great success in that endeavor. Indeed, he had sold 20 million copies of his speller by 1829, although by 1830 the total U.S. population was less than 13 million. Several other people also wrote and sold readers during this time, and the renowned and ubiquitous *McGuffey's Reader* was published in 1836.[92]

Today we have countless examples of nongovernmental standardization both inside and outside of education. Millions of students around the country take the SAT or ACT, as well as Advanced Placement or International Baccalaureate tests, for the most part by choice. Similarly, *U.S. News and World Report*, *Forbes*, the Princeton Review, and numerous other organizations provide guides and rankings to colleges, which unlike K–12 schools, are chosen by students. Outside of education we have Underwriters Laboratory, *Consumer Reports*, franchising, and sundry other mechanisms setting standards for innumerable items and services we use every day. Standards are ubiquitous in free markets.

Conclusion

The argument on behalf of national education standards is alluringly simple: set high standards that all American schools and students must meet, and all students will achieve at high levels. But actually setting high standards and getting students to meet them is extremely difficult. The opposition of the most politically powerful interests in education must be overcome. Crippling conflicts between groups with different religious, ethnic, and ideological concerns must be avoided. And finally, a culture that is averse to intense focus on academics and the kind of "hard," largely mathematical and scientific knowledge that is easy to capture on a test must be transformed.

Much of this explains why what little comparative research there is on national standards is inconclusive. Nations vary markedly not just in terms of economics and politics, but culture and other variables that are extremely difficult, if not impossible, to cleanly control for in social research. The same applies to subnational political units, such as U.S. states and Canadian provinces. And it is hardly a settled question that test scores such as those used in standards research even encompass all the most desired educational outcomes.

For all of these reasons, the road to successful education reform appears to go in the opposite direction of greater top-down control. The key appears to be to give education funding to parents, allow schools autonomy, and as a result make schools respond to the needs and demands of parents and children. That would solve the asymmetrical power problem, forcing educators to satisfy customers rather than use politics to get their way. It would prevent paralyzing political, cultural, religious, or ethnic conflicts that force lowest-common-denominator standards. And it would lead to standards that would be meaningful, but also sufficiently flexible so that unproven ideas could compete, and inevitable human failures would not be inflicted on everyone. In other words, rather than centralizing crippling govern-

Standards are ubiquitous in free markets.

ment power even further, it would truly reform the education system.

Notes

1. U.S. Department of Education, *A Nation at Risk*, archived information, April 1983, www.ed.gov/pubs/NatAtRisk/risk.html.

2. Among several major reports calling for national standards over the last few years are Chester E. Finn Jr., Liam Julian, and Michael Petrilli, *To Dream the Impossible Dream: Four Approaches to National Standards and Tests for America's Schools* (Washington: Thomas B. Fordham Foundation, 2006); The Commission on No Child Left Behind, *Beyond NCLB: Fulfilling the Promise to Our Nation's Children* (Washington: The Aspen Institute, 2007), p. 127; and National Governors Association, Council of Chief State School Officers, and Achieve, Inc., *Benchmarking for Success: Ensuring U.S. Students Receive a World-Class Education* (Washington: National Governors Association, 2008). Among recent high-profile individual endorsers of national standards have been former U.S. secretaries of education Rod Paige and William J. Bennett, "Why We Need a National School Test," *Washington Post*, September 21, 2006; and American Federation of Teachers president Randi Weingarten, "The Case for National Standards," *Washington Post*, February 16, 2009.

3. Council of Chief State School Officers and National Governors Association, "Common Core State Standards K–12 Work and Feedback Groups Announced" press release, November 10, 2009.

4. Alyson Kline, "To Duncan, Incentives a Priority," *Education Week*, January 30, 2009, www.edweek.org/ew/articles/2009/02/04/20duncan.h28.html?r=2063662804; U.S. Department of Education, "Duncan Offers Stimulus Funds for States to Develop Rigorous Assessments Linked to Common Standards" (press release, June 15, 2009).

5. Constitutionally, it is clear that states have authority over education. Article I, Section 8, of the U.S. Constitution gives the federal government no power to govern American education, and the 10th amendment reinforces that in stating that "the powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." In addition, even analysts who reject this interpretation of the Constitution typically acknowledge that education has traditionally been the domain of state governments, not Washington.

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7. Victor Bandeira de Mello, Charles Blankenship, and Don McLaughlin, *Mapping State Proficiency Standards Onto NAEP Scales: 2005–2007* (Washington: National Center for Education Statistics, October 2009).

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9. National Governors Association, Council of Chief State School Officers, and Achieve, Inc., p. 7.

10. Robert M. Costrell, "A Simple Model of Educational Standards," *American Economic Review* 84, no. 4 (1994): 957–64.

11. Robert M. Costrell, "Can Centralized Educational Standards Raise Welfare?" *Journal of Public Economics* 65 (1997): 271–93.

12. Conference Board, Corporate Voices for Working Families, Partnership for 21st Century Skills, and Society for Human Resource Management, *Are They Really Ready to Work: Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce,* 2006, www.21stcenturyskills.org/documents/FINAL_REPORT_PDF09-29-06.pdf.

13. Andrew Flagel, "Admission to College: Does My High School Matter?," Not Your Average Admissions Blog, notjustadmissions.com/2007/11/01/admission-to-college-does-my-high-school-matter/, November 1, 2007.

14. Diane Ravitch, *National Standards in American Education: A Citizen's Guide* (Washington: Brookings Institution Press, 1995), pp. 25–27.

15. Ibid., pp. xxiii–xxiv.

16. NEA and AFT headquarters employment count derived from the U.S. Department of Labor's union "Officer/Employee Search" database at kcerds.dolesa.gov/query/getOfficerEmployeeQry.do. Searching under the name of the union and "national headquarters" generates an employment report for each "employee" or "officer" employed by the union during a given fiscal year. This likely overcounts the total number of employees at any given time during the year due to normal employee turnover, but it nonetheless provides a general sense of both unions' national presence.

17. For an excellent discussion of the history of the PTA and de facto NEA control over the group, see Charlene K. Haar, *The Politics of the PTA* (New Brunswick, NJ: Transaction Publishers, 2002), pp. 67–84.

18. LM-2s are available at the U.S. Department of Labor, "Officer/Employee Search" database, kcerds.dol-esa.gov/query/getOfficerEmployeeQry.do.

19. Ballot Initiative Strategy Center, "What We Do," www.ballot.org/pages/what_we_do.

20. Economic Policy Institute, "A Broader, Bolder Approach to Education" (report summary, June 25, 2009), www.boldapproach.org/report_20090625.html.

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22. Paul Houston, American Association of School Administrators, "High-Stake Testing Overwhelmingly Gets an 'F'" press release, June 19, 2000.

23. Vincent L. Ferrandino and Gerald N. Tirozzi, "Principals' Perspective: An Open Letter to the 110th Congress," www.principals.org/s_nasspbin.asp?CID=1237&DID=55577&DOC=FILE. PDF.

24. National Council of Teachers of English, "Resolution on Urging Reconsideration of High Stakes Testing" (position statement), www.ncte.org/positions/statements/highstakestestrecons.

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30. Harold W. Stevenson, Chuansheng Chen, and Shin-Ying Lee, "Mathematics Achievement of Chinese, Japanese, and American Children," *Science* 259, no. 5091 (January 1, 1993): 53–58.

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35. Scores from Organization for Economic

Cooperation and Development, *PISA 2006 Science Competencies for Tomorrow's World*, Executive Summary, p. 22, www.oecd.org/dataoecd/15/13/39725224.pdf. Standards-based external examinations data are from *PISA 2006 Science Competencies for Tomorrow's World*, Table 5.2, www.oecd.org/dataoecd/30/63/39704360.xls.

36. *PISA 2006 Science Competencies for Tomorrow's World*, Table 5.22.

37. John H. Bishop, "The Impact of Curriculum-Based External Examinations on School Priorities and Student Learning," *International Journal of Educational Research* 23, no. 8 (1996): 653–752. In "The Effect of National Standards and Curriculum-Based Exams on Achievement," *The American Economic Review* 87, no. 2 (1997): 260, Bishop refers to "Curriculum-Based External Exit Examinations," but both that and "Curriculum-Based External Examinations" refer to standards-and-testing regimes with high-stakes consequences for secondary students.

38. Bishop, "The Impact of Curriculum-Based External Examinations," pp. 698–99.

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40. Ibid., pp. 697–99.

41. Ibid., p. 699.

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47. Assignment of countries to regions provided in an e-mail to the author by Ludger Woessmann.

48. Ludger Woessmann, "How Central Exams Affect Educational Achievement: International Evidence from TIMSS and TIMSS-Repeat," publication number PEPG/02-10 (Cambridge, MA: Program on Education Policy and Governance, Harvard University, 2002).

49. Hendrik Jurges and Kerstin Schneider, "International Differences in Student Achievement: An Economic Perspective," *German Economic Review* 5, no. 3 (2004): 371.

50. William H. Schmidt, Richard Houang, and Sharif Shakrani, *International Lessons about National Standards* (Washington: Thomas B. Fordham Institute, 2009), p. 29.

51. William H. Schmidt, "Panel 1: National Standards in Other Nations," (remarks at Fordham Foundation conference on national standards, May 5, 2009), www.edexcellence.net/detail/event.cfm?event_id=4&id=317.

52. Organization for Economic Cooperation and Development, "The Programme for International Student Assessment (PISA)," 2007, www.oecd.org/dataoecd/15/13/39725224.pdf.

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Richmond Times-Dispatch

Virginia’s Right to Resist National Standards

by Neal McCluskey

This article appeared in The Richmond Times-Dispatch *on August 21, 2010.*

There's a revolution happening, and you probably don't even know it. While you've been worrying about wars, spills, and bailouts, Washington has been taking over schools nationwide. So far, Virginia has resisted, but already more than 30 states have capitulated to national mathematics and language arts standards. And amazingly, almost no one's heard about this. But that's exactly what standardizers, who know national standards' fatal flaws, want.

The immediate impetus for this has been the Race to the Top (RTTT), a competition for $4.35 billion in federal funds. Adopting standards created by something called the Common Core State Standards Initiative is crucial for states to compete.

In an impressive defense of state sovereignty, Virginia stayed out of the most recent round of RTTT, taking itself out of the federal bribery scheme. But many national-standards aficionados have been rhetorically abusing the commonwealth ever since, trying to get it blindly to follow the crowd.

Despite this, national standards have probably been flying almost as far under the radar in the commonwealth as elsewhere. Which raises the question: Why the secrecy?

The answer is that keeping this all hush-hush has been the key to national-standards proponents getting their way.

The last national standards push — which included history, English, science, and other subjects — was in the 1990s, and it disintegrated almost the moment the first proposed standards were released. Everyone, it seemed, was paying attention, and every diverse American found something in the very detailed standards to hate.

Avoiding a similar public outcry explains why today the CCSSI has furnished only mathematics and language arts standards, and why the latter identify almost no specific works students must read. Math is relatively uncontroversial, as is English — if you don't prescribe any actual readings.

The problems, of course, are that focusing on just two subjects threatens to narrow the curriculum, while dodging essential reading would hollow it out. Do more, though, and Americans might have something of substance to grab onto.

Another reason for keeping things muted has been, it seems, to deceive the public about what — and who — is driving the standards. Contrary to proponents' incessant refrain, standardization has been neither "state led" nor "voluntary," and it's been the heavy hand of Washington that's been shoving everything along.

While creation of the Common Core was spearheaded by associations of governors and state education chiefs, those groups do not represent individual states. Meanwhile, the National Conference of State Legislatures opposes national standards.

Of course, many state school boards have adopted the standards, but they might just be happily passing the standards buck. Much more important, thanks to RTTT and Obama administration plans to connect national standards to even bigger piles of money — the latter will be the next honey-pot offered to Virginia — adoption is no more "voluntary" than adhering to the No Child Left Behind Act or the minimum drinking age. If states want federal dollars — which were taken from their citizens to begin with — they must do as they're told.

Finally, national standardizers have almost certainly tried to keep their efforts muffled because there is simply no meaningful evidence that national standards work. Despite proponents' superficial claims about needing national standards to compete in the world economy, or all countries that outperform us having such standards, the research reveals that, all else equal, countries with national standards do no better than those without. Research also reveals that the freer the education system — the more autonomous schools and consumers are — the better.

It's not hard to understand why. Government schooling is almost always controlled by the people it employs because they are the most motivated to be involved in education politics. And like most people, they would prefer as little outside accountability as possible. Conversely, more freedom means more competition, and that means real accountability — answering to customers — as well as constant innovation.

So why are national curriculum standards the biggest federal takeover you've never heard of? Because they need silence to win. And here's another big secret: Should Virginia ever succumb to national standards, national tests are likely coming next.

Neal McCluskey is associate director of the Cato Institute's Center for Educational Freedom.

This article is available online at www.cato.org/pub_display.php?pub_id=12086.

TRANSPORTATION

STATE LEGISLATORS SHOULD:

- Privatize all state-owned transportation systems.

Failing that, legislators should:

- Fund transportation investments out of user fees;
- Require that federal and state spending on transportation be cost-effective at reducing congestion and meeting other goals;
- Create a citizen-enforcement process to ensure cost-effectiveness;
- Allow unlimited use of road tolls;
- Avoid earmarks;
- Promote competition in urban transit services;
- Encourage local transit agencies to fund transit out of fares.

CATO RESOURCES:

- "Fixing Transit: The Case for Privatization," by Randal O'Toole, Policy Analysis 670 (November 10, 2010) 157
- "High-Speed Rail Is Not 'Interstate 2.0'," by Randal O'Toole, Briefing Paper no. 113 (September 9, 2009) 183
- "Surface Transportation Policy," by Randal O'Toole, Chapter 24 of the *Cato Handbook for Policymakers*, 7th ed. (2009) 193
- "Getting What You Paid For -- Paying For What You Get: Proposals for the Next Transportation Reauthorization," by Randal O'Toole, Policy Analysis 644 (September 15, 2009) 203
- "Roadmap to Gridlock: The Failure of Long-Range Metropolitan Transportation Planning," by Randal O'Toole. Policy Analysis 617 (May 27, 2008) 216
- *Gridlock: Why We're Stuck in Traffic and What to Do About It*, by Randal O'Toole (2010) 244

CONTACT AN EXPERT:

- Randal O'Toole, Senior Fellow
  - Email - rot@ti.org
  - Phone - 541-595-1460

CATO INSTITUTE

Policy Analysis

No. 670 November 10, 2010

Fixing Transit
The Case for Privatization

by Randal O'Toole

Executive Summary

America's experiment with government ownership of urban transit systems has proven to be a disaster. Since Congress began giving states and cities incentives to take over private transit systems in 1964, worker productivity—the number of transit riders carried per worker—has declined by more than 50 percent; the amount of energy required to carry one bus rider one mile has increased by more than 75 percent; the inflation-adjusted cost per transit trip has nearly tripled, even as fares per trip slightly declined; and, despite hundreds of billions of dollars of subsidies, the number of transit trips per urban resident declined from more than 60 trips per year in 1964 to 45 in 2008.

Largely because of government ownership, the transit industry today is beset by a series of interminable crises. Recent declines in the tax revenues used to support transit have forced major cuts in transit services in the vast majority of urban areas. Transit infrastructure—especially rail infrastructure—is steadily deteriorating, and the money transit agencies spend on maintenance is not even enough to keep it in its current state of poor repair. And transit agencies have agreed to employee pension and health care plans that impose billions of dollars of unfunded liabilities on taxpayers.

Transit advocates propose to solve these problems with even more subsidies. A better solution is to privatize transit. Private transit providers will provide efficient transit services that go where people want to go. In order for privatization to take place, Congress and the states must stop giving transit agencies incentives to waste money on high-cost transit technologies.

Randal O'Toole is a senior fellow with the Cato Institute and author of Gridlock: Why We're Stuck in Traffic and What to Do about It.

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Urban transit is the most expensive way of moving people in the United States.

Introduction

The term "socialism" has been much abused in recent years, with people applying it to bailouts, regulation, and other government activities that fall short of actual government ownership. But one industry has unquestionably been socialistic for decades: urban transit, more than 99 percent of which is today owned and operated by state and local governments.

The results have not been pretty. Since 1964, the year Congress began giving states and cities incentives to take over private transit companies, worker productivity—the number of transit trips carried per operating employee—has fallen more than 50 percent.[1] After adjusting for inflation, operating costs per rider have nearly tripled, while fare revenues increased by a mere 8 percent.[2] "It's uncommon to find such a rapid productivity decline in any industry," the late University of California economist Charles Lave observed of U.S. transit in 1994.[3]

Today, urban transit is the most expensive way of moving people in the United States. Airlines can transport people at a cost of less than 15 cents per passenger mile, barely a penny of which is subsidized.[4] Driving costs less than 23 cents per passenger mile, which also includes about a penny of subsidy.[5] Socialized Amtrak costs close to 60 cents per passenger mile, about half of which is subsidized.[6] But urban transit costs nearly one dollar per passenger mile, with fares covering only 21 cents per passenger mile and subsidies paying for the rest.[7]

These horrendous financial results are obscured by the mountains of propaganda issued by the Federal Transit Administration, individual transit agencies, the American Public Transportation Association, and various other transit advocates claiming transit saves people money, saves energy, and protects the environment. In fact, it only saves people money by imposing most of their transport costs on other taxpayers. Nor is transit particularly energy efficient or environmentally friendly, as the average transit system uses about the same amount of energy and emits about the same amount of pollution per passenger mile as the average car. In fact, a majority of transit systems use far more energy and pollute far more per passenger mile than the average car.[8]

The fact that more than three out of four transit dollars come from taxpayers instead of transit users has several negative effects on transit programs. For one, transit agencies are more interested in trying to get dollars out of taxpayers, or federal and state appropriators, than in pleasing transit riders. This leads the agencies to focus on highly visible capital improvements, such as rail transit projects, dedicated bus lanes, and supposedly multimodal transit centers, that are not particularly useful to transit riders. Moreover, the agencies neglect to maintain their capital improvements, partly because most of the taxpayers who paid for them never ride transit and so do not know about their deteriorating condition.

Further, dependence on tax dollars makes transit agencies especially vulnerable to economic downturns because the sources of most of their operating funds—generally sales or income taxes, but in some cases annual appropriations from state legislatures—are highly sensitive to the state of the economy. Sales and income taxes are particularly volatile, while property taxes are less so.[9] Yet property taxes provide only about 2 percent of transit operating funds, while sales and income taxes provide more than a quarter of operating funds.[10]

Privatization of public transit systems would solve all of these problems. Private operators would have incentives to serve customers, not politicians, with cost-effective transport systems. The few examples of private transit operations that can be found show that private operators are more efficient and can offer better service than government agencies.

History

In 1964, the vast majority of the nation's transit systems were privately owned and profitable.[11] In that year, Congress passed the

Urban Mass Transit Act, promising capital grants to public agencies that operate transit. Within a decade, almost all transit systems had been taken over by cities or state-chartered public agencies.

Many people believe Congress began supporting transit to help low-income people who lacked access to automobiles. In fact, the real goal was to support wealthy property owners in the downtowns of a few large metropolitan areas. Railroads that offered commuter-train service in Boston, Chicago, New York, and Philadelphia had proposed to discontinue these money-losing trains.[12] Since Manhattan and other downtown areas were not designed to handle the influx of automobiles needed to replace these trains, and since many of the trains crossed state lines, Congress decided to use federal funds to support public takeover of these commuter lines.

Politically, Congress could not limit the program to just four metropolitan areas. So the law allowed any public agency to apply for federal capital grants, which led to the near-complete socialization of the transit industry.

"Federal policy started out with the notion of a one-shot injection of capital to rejuvenate the aging physical plant of our transit systems," observed Lave. No doubt many members of Congress who voted for the 1964 law expected that, since private transit companies had covered their operating costs before 1964, public transit agencies would continue to do so. But because of the political nature of public agencies, "it didn't work out that way," said Lave.[13]

The Transit Productivity Crisis

While private transit operators had a simple goal—earn a profit by providing transit where people would pay for it—Lave pointed out that public agencies were expected to reach a "complex and nebulous" set of goals, including "solve urban problems, save the central city, provide cheap mobility for the poor, transport the handicapped, and so on."[14] Perhaps just as important, public agencies cast their tax-collecting nets wide, charging sales, property, or income taxes over as broad an area as possible. But this left them obligated to provide transit service to many areas that had few transit customers.

Whether it was to meet nebulous goals or to justify broader taxation, "routes were extended into inherently unprofitable areas," noted Lave.[15] One result is that the average number of people on board an urban transit bus declined from 12 in 1977 (the earliest year for which data are available) to 9 in 2008, while the number of people boarding a bus, per bus mile, declined by nearly 40 percent from 1964 to 2008.[16]

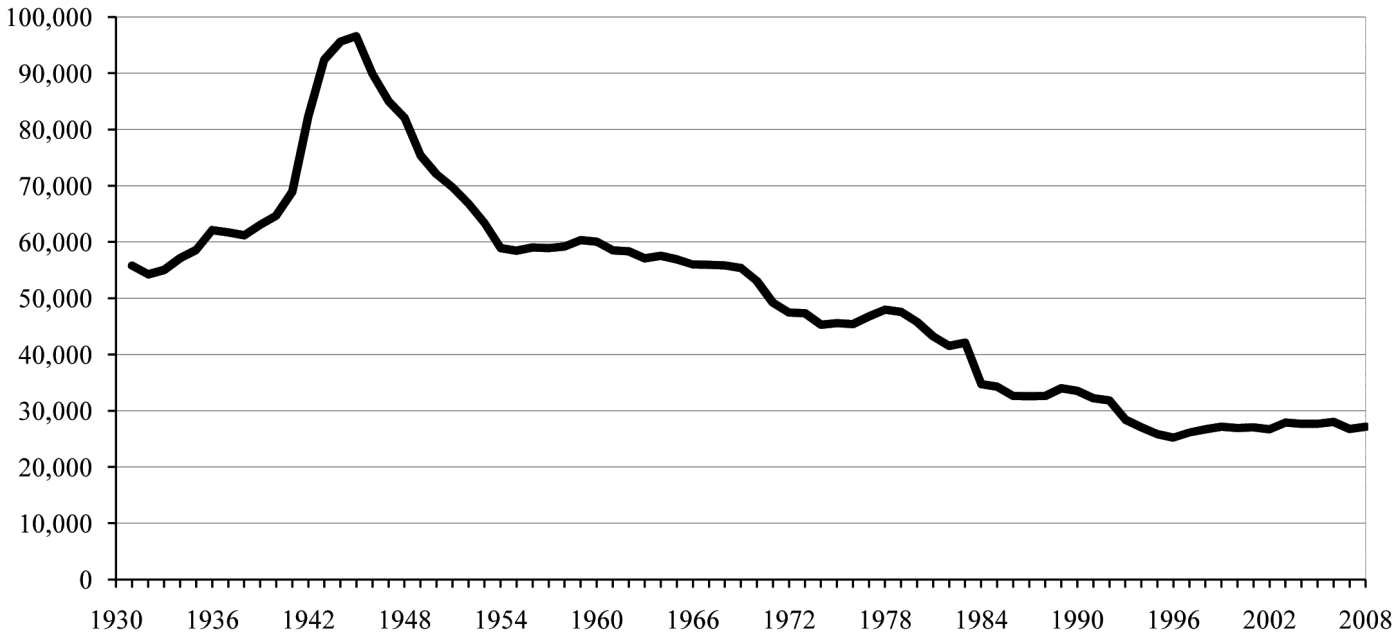
The number of transit riders carried per transit worker declined even more. Figure 1 shows the number of annual trips carried by America's transit systems for every operating employee for the years 1931 (the earliest year for which data are available) through 2008. The figure shows that transit carried about 60,000 people per employee during the 1930s, surging to more than 90,000 during the war years when gas rationing forced many people to take transit instead of driving, then falling back to around 60,000 trips per worker after the war. While worker productivity then remained constant for a decade, once government took over it declined by more than 50 percent.[17]

After government took over transit systems, transit worker productivity declined by more than 50 percent.

Far from being an environmental panacea, transit energy efficiencies have also dramatically declined. Between 1970 and 2008, the amount of energy used to move a passenger one mile by automobile declined by nearly 30 percent, but the amount used by transit buses increased by 76 percent and the amount by light- and heavy-rail transit increased by 17 percent.[18] In 2008, transit used an average of 3,360 British thermal units (BTUs) per passenger mile, while passenger cars used an average of 3,440.[19] This is hardly a big enough difference to justify huge subsidies to transit on the basis of energy savings, especially since auto energy efficiencies are rapidly improving.

While worker productivities and energy efficiencies declined, costs rose. From 1965, when

Figure 1
Transit Trips per Operating Employee



Source: *2010 Public Transportation Fact Book*, Appendix A: Historical Tables, Tables 1 and 12 (Washington: American Public Transportation Association).

the federal government began subsidizing transit, through 2008, the latest year for which data are available, adjusting for inflation using the consumer price index (CPI), fares collected per trip declined by nearly 24 percent, while operating costs per trip rose by 125 percent. When adjusting for inflation using gross domestic product deflators, fares per trip declined only 4 percent but costs per trip rose 184 percent. Total operating subsidies have grown from $0.6 billion in 1965 to $24.5 billion in 2008 (adjusted using GDP deflators).[20]

One reason for the rise in costs is that Congress required transit agencies whose employees were represented by labor unions—meaning most of them—to obtain union support to be eligible for federal grants. As Charles Lave noted, the unions used this as leverage to win generous pay and benefit contracts.[21]

The *New York Times* reports that more than 8,000 of the New York Metropolitan Transportation Authority's 70,000 employees earned more than $100,000 in 2009, with one commuter-train conductor collecting nearly $240,000. One locomotive engineer earned a $75,000 base salary, $52,000 in overtime, and $94,600 in "penalty payments," extra pay for driving a locomotive outside of the yard in which he worked. Engineers would earn two days pay for driving two different kinds of locomotives—electric and diesel—in one day.[22]

Overtime alone costs the MTA $560 million a year.[23] That includes $34 million in "phantom" overtime paid to workers while they were on vacation.[24] When Los Angeles' transit agency attempted in 2000 to save money by, among other things, hiring more employees to reduce overtime costs, union workers went on strike for 32 days until the agency backed down.[25]

The MTA is not alone; tales of bus drivers earning more than $100,000 per year can be found throughout the United States. The highest-paid city employee in Madison, Wisconsin, is a bus driver who earned nearly $160,000 in 2009.[26] San Francisco Muni paid

nearly 20 percent of its employees more than $100,000 (including benefits) in 2009.[27]

Another reason costs have increased is that transit agencies have invested heavily in high-cost transit systems when lower-cost systems would work as well. Between 1992 and 2008, more than 35 percent of transit capital investments have been spent on commuter- and light-rail systems. In 2008 these modes accounted for more than 15 percent of operating costs, yet carried only 9 percent of transit riders.[28]

Since 1965, federal, state, and local taxpayers have provided more than $500 billion (inflation-adjusted) in operating subsidies to transit. Complete data on capital funding are not available before 1988, but evidence suggests that capital subsidies typically equal about 60 percent of operating subsidies.[29] Thus, it is likely that taxpayers have provided more than $800 billion (inflation-adjusted) in subsidies to transit since 1965.

At best, all this money has done is arrest the decline in transit ridership. In 1944, about 84 million Americans lived in urban areas, and they rode transit an average of 275 times a year. Since that year, per capita urban ridership declined steadily to 60 trips per year in 1965 and less than 50 trips per year in 1970. Since then, it has fluctuated—mainly in response to gasoline prices—between about 40 and 50 trips a year, settling at 45 trips per year in 2008.[30]

Although the national average is 44 trips per urban resident, fewer than two dozen urban areas out of the more than 320 that provide transit service exceed this average. Transit systems in nearly half of all urban areas with transit service attract fewer than 10 rides per resident per year.

As Table 1 suggests, urban areas with high rates of transit ridership tend to have large concentrations of jobs at the urban core (such as New York City; San Francisco; and Washington, DC) or are college towns (as in State College, Pennsylvania; Ames, Iowa; and Champaign–Urbana, Illinois). The presence or absence of expensive rail transit does not seem to be an important factor in the overall use of transit.

Transit agencies have invested heavily in high-cost transit systems when lower-cost systems would work as well.

Table 1
Top 50 Urban Areas by 2008 Per Capita Transit Trips

Urban Area	State	Transit Trips	Population	Per Capita Trips
New York*	NY	3,982,936,323	18,395,242	217
San Francisco–Oakland*	CA	434,655,224	3,266,471	133
Washington*	DC	489,483,961	4,205,492	116
Honolulu	HI	71,309,970	745,763	96
Boston*	MA	376,529,314	4,125,435	91
State College	PA	6,559,617	75,053	87
Ames	IA	4,646,554	55,022	84
Chicago*	IL	609,080,503	8,466,375	72
Champaign–Urbana	IL	9,605,069	134,584	71
Philadelphia*	PA	351,752,800	5,193,443	68
Davis	CA	4,688,300	74,682	63
Seattle*	WA	183,588,167	2,931,544	63
Portland*	OR	111,693,176	1,807,054	62
Los Angeles*	CA	698,339,657	12,175,434	57

Continued next page

Table 1 *Continued*
Top 50 Urban Areas by 2008 Per Capita Transit Trips

Urban Area	State	Transit Trips	Population	Per Capita Trips
Bellingham	WA	5,130,053	91,728	56
Gainesville	FL	9,043,242	172,389	52
Baltimore*	MD	111,243,038	2,138,711	52
Livermore	CA	4,564,865	89,159	51
Denver*	CO	101,312,011	2,101,519	48
Eugene	OR	11,587,710	242,297	48
Springfield	MA	26,733,542	577,810	46
National total/average		*233,505,871*	*10,256,681,637*	*44*
Las Vegas	NV	66,168,163	1,512,119	44
Santa Barbara	CA	8,283,975	191,536	43
Salt Lake City*	UT	41,713,708	971,263	43
Pittsburgh*	PA	69,399,410	1,673,551	41
Durham–Chapel Hill	NC	12,839,863	312,364	41
Milwaukee	WI	53,702,791	1,331,111	40
Ann Arbor	MI	12,025,530	301,638	40
Madison	WI	13,719,186	348,208	39
Atlanta*	GA	163,066,276	4,171,166	39
Lansing	MI	11,370,744	294,212	39
Minneapolis–St. Paul*	MN	94,799,207	2,459,603	39
Lafayette	IN	5,028,088	131,412	38
San Diego*	CA	104,805,966	2,743,739	38
Austin	TX	37,399,219	1,072,865	35
Cleveland	OH	57,681,474	1,688,665	34
San Antonio	TX	48,349,481	1,455,487	33
Spokane	WA	11,851,256	357,750	33
Miami*	FL	172,464,050	5,237,997	33
Syracuse	NY	12,658,913	393,841	32
Olympia	WA	5,141,672	169,765	30
Bloomington	IN	2,861,499	97,045	29
Bremerton	WA	5,375,564	184,191	29
San Jose*	CA	45,700,017	1,595,153	29
Fresno	CA	17,148,254	604,971	28
Buffalo*	NY	26,173,336	925,606	28
Duluth	MN	3,244,277	116,315	28
Rochester	NY	17,652,858	679,487	26
Tri-Cities	WA	4,894,190	189,089	26
St. Louis*	MO	53,675,790	2,102,409	26

* Urban areas with rail transit in 2008.
Source: Transit ridership from *2008 National Transit Database*, "agency UZAs" and "service" spreadsheets; urbanized area populations from *2008 American Factfinder*, table B01003 for all urbanized areas, tinyurl.com/23s25bj.

While per capita ridership may have remained steady at about 40 to 50 trips per year, transit's share of travel has declined as per capita urban driving has grown. From 1970 through 2008, per capita transit ridership stagnated, but per capita driving of personal vehicles grew by 120 percent.[31] As a result, transit's share of motorized urban travel fell from 4.2 percent in 1970 to 1.8 percent in 2008.[32]

The Transit Tax Crisis

The Great Recession has not treated transit riders well. A group called Transportation for America has documented that well over 100 major transit agencies cut or proposed to cut service or raised fares in response to the recession in 2009.[33] The American Public Transportation Association (APTA) estimates that more than 80 percent of transit agencies have raised fares and/or cut services.[34] By reducing tax support for transit, the recession has left many agencies with a "budget gap" equal to the shortfall in funds required to maintain transit service at previous levels. These agencies have taken some dramatic steps to close the shortfalls:

- New York's MTA closed part of a $1.2 billion budget gap in 2009 by raising fares up to 30 percent and eliminating 2 subway and 35 bus lines, yet it still expects a $1 billion budget gap in 2010.[35]
- One MTA proposal to help close the shortfall sparked especially strong opposition: the transit agency proposed to start charging full fares to schoolchildren.[36] Historically, free and discounted fares to schoolchildren have saved New York City the cost of a separate school bus service. The agency dropped this proposal after strong protests.[37]
- New Jersey Transit responded to a $300 million budget gap by raising fares as much as 25 percent.[38]
- The Chicago Transit Authority laid off 1,100 workers, or about 10 percent of its work force.[39]
- Despite a sales tax increase aimed at eliminating a $160 million deficit in 2010, Boston's Massachusetts Bay Transportation Authority (MBTA) expects a $73 million budget gap in 2011.[40]
- Clayton County, Georgia, completely terminated its suburban Atlanta bus services in March 2010.[41]

Transportation for America and APTA use these cuts to argue for more subsidies to transit. In particular, these groups would like to see Congress allow transit agencies to spend a larger share of federal funds on operations instead of just capital improvements. Those groups overlook an important lesson about the costs of relying on taxes to fund most of their programs: revenue from such taxes can vary dramatically with the economy, leaving transit agencies highly vulnerable to economic downturns.

Transit agencies spend about $36 billion a year on operations. Of this, slightly less than a third comes from transit fares, while slightly more than a third comes from state or local taxes—mostly sales taxes—dedicated to transit. Only about 7 percent comes from federal funds, and most of the rest, or about a quarter of operating costs, comes from annual or regular appropriations by state legislatures or local city or county commissions.

Some transit agencies, such as the Washington Metropolitan Area Transit Authority and Philadelphia's Southeastern Pennsylvania Transportation Authority, have no sales or other taxes dedicated to their programs and rely on annual appropriations by state legislatures or local municipalities. Because appropriators are fickle, these agencies look enviously on other agencies that do receive dedicated sales or other taxes.

Taxes, however, can also vary widely in response to economic cycles. Few agencies build up a reserve fund during boom years, partly because they fear if they have a large reserve then some other government body will either cut its contribution to the agency or demand a share of the agency's revenue.

Revenue from taxes can vary dramatically with the economy, leaving public transit agencies highly vulnerable to economic downturns.

For example, when Capital Metro, Austin's transit agency, built up a $200 million reserve fund, the city of Austin demanded that the agency yield some of its revenue to the city. Capital Metro built a rail line to use up that reserve fund, and now is deep in debt.[42]

With little reserves, most agencies are forced to cut transit service during recessions, and the cuts often result in significant declines in transit ridership. For example, during the dot-com crash, San Jose, California, saw a 15 percent decline in jobs, but the region's transit agency was forced to cut bus service by 19 percent. The combination of job losses and reduced transit service resulted in a 34 percent decline in transit ridership.[43]

To avoid deficits, transit agencies are in a constant hunt for new tax dollars. For example, the New York MTA enjoys dedicated subsidies from New York City bridge tolls, a share of state gas taxes, corporate taxes, a local sales tax, and a real estate transfer tax.[44] Yet the agency recently sought a so-called congestion toll (actually a fee charged to anyone who drives a car into Manhattan).[45] When that idea failed, the MTA proposed a "millionaire's tax" on all New Yorkers who earn more than a million dollars a year.[46] While the legislature failed to pass either of those taxes, it did approve five others, including a payroll tax, for transit. Yet even with the new taxes, MTA had nearly a billion dollar gap in its 2010 operating budget.[47]

Or consider Portland, Oregon. In 1998, Portland-area voters rejected a property tax increase to fund a new light-rail line. Portland's transit agency decided to build the line anyway, financing it partly by deferring replacement of its buses. A decade later, the agency has one of the oldest bus fleets in the nation, so now it plans to ask voters to raise property taxes so it can replace the buses.[48]

Transit agencies are in a constant hunt for new taxes to support deficit-ridden operations.

While many transit agencies have responded to the recession by raising fares, this is often considered to be an option of last resort. In New York City, fares cover around 40 percent of operating costs, so an increase in fares can do much to close budget gaps. But in most other cities, fares cover a much smaller portion of operating costs: just 12 percent in Phoenix, 15 to 20 percent in Cleveland, Houston, Salt Lake City, and San Francisco (Muni), and 20 to 30 percent in Atlanta, Denver, Pittsburgh, Portland, and St. Louis. Raising fares in these cities does little to close budget gaps, especially considering that fare increases inevitably reduce ridership, so that a 10 percent fare increase produces less than a 10 percent increase in revenues.

Raising fares can also have as great political repercussions as raising taxes, especially since transit riders are easily identified as "victims" while taxpayers tend to be nebulous. When New York's MTA raises fares in 2007, U.S. congressman Anthony Weiner (D–New York) lamented, "middle-class New Yorkers and those struggling to make it are bearing the cost" of transit, while Transit Workers Union official Roger Toussaint worried that "straphangers are left to foot a bill that isn't theirs." Both believed filling the agency's budget gaps was somehow the responsibility of the state, not the people who actually ride transit. State assemblyman Richard Brodsky (D-Westchester) vowed, "The burden of funding mass transit would not be borne solely by riders," adding, "everyone in the region should share the cost."[49]

The Transit Debt Crisis

Transit agencies that have invested heavily in rail transit are especially vulnerable to economic downturns because of their debt load. Bus-only agencies rarely need to borrow money, partly because buses are inexpensive compared with trains and partly because federal grants provide much of the funding for bus purchases. But agencies that build new rail lines, or need to rehabilitate old ones, almost always go heavily into debt to do so, particularly because the federal government usually pays no more than half the cost of the rail lines.

For every $3 spent on operations, Boston's Massachusetts Bay Transportation Authority (MBTA, sometimes known as "the T" for

short) spends more than $2 on principal and interest on its debt.[50] According to a recent report published by the MBTA, the agency "is mired in a structural, ongoing deficit that threatens its viability." Until recently, the agency has maintained service only by refinancing its debt at lower interest rates, but interest rates are not likely to get much lower than they are today. "No amount of reorganization, reform, or efficiencies can generate the $160 million needed to close the FY10 budget gap," says the report, "let alone the even larger deficits projected in the future. Until the MBTA's underlying debt and financing weaknesses are addressed, all such changes, at best, will only delay the T's day of reckoning."[51] Ironically, the agency reached this condition several years after the Massachusetts legislature first dedicated a share of state sales taxes to transit, thus showing that having a dedicated tax does not insulate transit agencies from financial problems.

The MBTA may have the heaviest debt load of any major transit agency, but others are nearly as bad. For every $5 spent on operations, St. Louis Metro spends more than $3 servicing its debt. Salt Lake City's Utah Transit Authority and San Francisco's BART spend close to a dollar on debt for every $2 spent on operations. Atlanta's MARTA, Chicago's Metra, and Los Angeles County's Metropolitan Transit Authority each spend about $1 on debt for every $3 on operations. The Chicago Transit Authority and TriMet of Portland have ratios of more than 1 to 4. Transit agencies this heavily in debt are especially vulnerable to downturns because small declines in tax revenues can force them to make proportionately larger cuts in service.

The Transit Pension Crisis

On top of problems with mounting debt, most transit agencies also offer workers generous health care benefits and pension plans. Transit "subsidies sent the wrong signals to management and labor," observed Lave. "Labor interpreted the message to mean: management now has a sugar daddy who can pay for improvements in wages and working conditions."[52]

TriMet of Portland agreed to a benefits package that provides 100 percent of health care costs for all employees, their families, and retirees. The package was so generous that TriMet's board president resigned in protest, calling it the "greatest coup in the history of public employment in our city." Because of this and other benefits, TriMet employees now receive $1.18 in benefits for every $1 they collect in pay.[53] Few other transit agencies are quite so generous with fringe benefits, but the Chicago Transit Authority, New Jersey Transit, San Francisco BART, and Washington Metro all pay 75 to 85 cents in benefits for every dollar in salary or wages.[54]

The big problem is not current benefits but the currently unfunded obligations to pay out pensions and health care costs in the future. New York's MTA has $15 billion in unfunded liabilities on top of close to $30 billion in debt. Portland's unfunded liabilities are more than 10 times fare revenues and two times operating costs. Other agencies with particularly heavy unfunded liabilities include the Boston MBTA, Houston Metro, Pittsburgh PATH, St. Louis Metro, and Washington Metro.

Agency managers and boards may agree to take on the unfunded liabilities because most of the costs are deferred to the future, but eventually the costs catch up to the agencies. A recent audit of the Chicago Transit Authority found that its "retiree healthcare plan is on the verge of fiscal collapse."[55]

The Transit Infrastructure Crisis

America's transit systems are suffering from an infrastructure crisis that, among other things, was responsible for an accident that killed nine people on the Washington Metrorail system in June 2009.[56] According to a 2010 report from the Federal Transit Administration, the nation's transit industry has a $78 billion backlog of work that must be done to bring transit assets into a "state of good repair."

For every $3 spent on operations, Boston's transit agency spends more than $2 on principal and interest on its debt.

Table 2
Annual Transit Fares, Costs, and Debt (millions of dollars)

Urban Area	Agency	Fares	Operating Costs	Debt	Debt Service
New York	MTA	4,350.0	10,117.4	29,600.0	1,713.0
New Jersey	NJT	754.4	1,836.7	3,820.1	294.6
Washington	WMATA	683.3	1,479.7	1,195.8	174.7
Chicago	CTA	505.7	1,251.2	4,616.8	332.5
Boston	MBTA	448.8	1,232.0	5,679.8	840.4
Philadelphia	SEPTA	404.8	1,168.3	352.4	36.9
Los Angeles	LACMTA	334.0	1,181.7	4,473.0	355.9
San Francisco	BART	318.1	572.5	1,461.9	242.5
Chicago	Metra	251.7	594.6	2,410.2	193.5
San Francisco	Muni	150.4	756.0	54.8	7.3
Atlanta	MARTA	105.2	390.9	2,050.3	130.6
Denver	RTD	96.9	388.0	1,203.6	82.3
Portland	TriMet	90.0	424.3	370.0	111.5
San Diego	MTS	85.2	208.7	241.0	30.7
Pittsburgh	PATH	78.2	362.2	374.1	44.8
Houston	Metro	67.1	417.8	337.1	11.1
St. Louis	Metro	59.4	219.6	919.4	129.2
Cleveland	RTA	47.7	252.1	205.7	20.0
San Jose	VTA	36.2	301.9	625.4	40.2
Phoenix	Valley Metro	32.5	71.5	100.1	2.6
Salt Lake City	UTA	33.5	181.0	1,655.9	82.8

Source: Comprehensive annual financial statements for the agencies indicated for 2009, except Cleveland and Pittsburgh, which are for 2008.

Note: Operating costs exclude depreciation. Debt includes capital leasing obligations. Operating costs and debt for New York MTA include only that portion relating to transit, not to bridges and tunnels. Debt service includes principal and interest for the most recent year available; depending on terms, debt service obligations may increase in the future even without added borrowing.

Portland transit employees receive $1.18 in benefits for every $1 they collect in pay.

Annual maintenance spending is less than is needed just to keep rail and bus systems in their current state of poor repair, so the overall system is deteriorating.[57]

Although much attention has been paid to a supposed infrastructure crisis involving roads and highway bridges, the truth is that there is no highway infrastructure crisis. The gas taxes, tolls, and other user fees that fund most of our highway system have been adequate, even after being raided to subsidize transit, to keep state highways in good shape. The number of bridges that are rated "structurally deficient" has declined by nearly 50 percent

Table 3
Unfunded Actuarial Accrued Liabilities (millions of dollars)

Urban Area	Agency	Unfunded Liability	Share of Operating Costs (%)
New York	MTA	15,061.50	149
New Jersey	NJT	779.8	42
Washington	WMATA	1,565.30	106
Chicago	CTA	690	55
Boston	MBTA	1,843.70	150
Philadelphia	SEPTA	406.8	35
Los Angeles	LACMTA	1,090.10	92
San Francisco	BART	460.9	81
Chicago	Metra	11.6	2
San Francisco	Muni	436	58
Atlanta	MARTA	222.9	57
Denver	RTD	85.4	22
Portland	TriMet	907	214
San Diego	MTS	86.8	42
Pittsburgh	PATH	701.3	194
Houston	Metro	476.6	114
St. Louis	Metro	223.1	102
San Jose	VTA	262.9	87
Salt Lake City	UTA	73.2	40

Source: Comprehensive annual financial statements for the agencies indicated for 2009, except Cleveland and Pittsburgh, which are for 2008.

since 1990.[58] The average "roughness rating"—which ranges from under 60, meaning "very smooth," to more than 220, meaning "very rough"—has improved from 92 to 78 in the last decade.[59] Some local highways and bridges may have problems, but our national system of interstate, U.S., and other state highways is in good shape.

The same cannot be said for the nation's transit systems, which are steadily declining. The primary culprits for this maintenance backlog are the rail systems in the 10 urban areas with rail lines more than 30 years old.[60] A 2009 FTA report found that the maintenance backlog of seven of the nation's largest transit systems, which together carry more than half of all transit trips, was $50 billion, $46 billion of which was for rail transit.[61] The 2010 report, which estimated the backlog for all of the 400 or so transit agencies in the country, found that about three-fourths of the maintenance backlog was due to rail transit.[62]

Boston, Chicago, and Washington seem to be vying for the title of the nation's worst-maintained transit system. An independent review commissioned by the governor of

The nation's transit industry has a $78 billion maintenance backlog, and annual maintenance spending is not even enough to keep systems in their current state of poor repair.

Because of inadequate maintenance, the June 2009 Washington MetroRail crash that killed 9 people was practically inevitable.

Massachusetts reported that "the outlook is bleak" for Boston's transit system because the system was deteriorating faster than the Massachusetts Bay Transportation Authority could maintain it. In 2010, the agency said that it needed $3 billion to bring the system up to a state of good repair, but it was able to find only about $200 million. Many projects estimated to be essential for safety were left unfunded. Worse, the agency estimated that it needed to spend $470 million a year—more than twice the amount it had available—just to keep the system from deteriorating further.[63]

The Chicago Transit Authority is "on the verge of collapse" both physically and financially. The train from O'Hare Airport to downtown Chicago must slow to 6 mph over part of its journey because the tracks are in such poor shape. The CTA says it needs more than $16 billion to bring the system back to a state of good repair.[64]

The National Transportation Safety Board's report on the June 2009 Washington Metrorail crash that killed nine people suggests that such an accident was practically inevitable. Nearly half of the signals that Metrorail uses to keep trains from colliding are obsolete and could malfunction at any time. In fact, the signals in the particular stretch of track where the accident occurred had not been working for several days prior to the collision. On top of that, a quarter of the railcars in Metrorail's fleet offer occupants little protection in case of collisions, and the NTSB had urged Metrorail to replace them several years before. Metrorail replied that it had budgeted only $30 million over the next three years for safety improvement, which would only be enough to replace a handful of railcars.[65]

New York City's transit system reached a nadir in the 1980s, when trains experienced one breakdown for every 6,600 miles of service. Since then, the city has invested more than $20 billion in restoring transit and now has one breakdown for every 140,000 miles of service. Still, the Metropolitan Transportation Authority estimates that it needs $16.5 billion more to bring the entire system into a state of good repair.[66]

New York has set a goal to bring its entire transit system into a state of good repair "for the first time in history."[67] Yet even if the program is fully funded, some parts of the system will not reach a state of good repair until 2028.[68] Moreover, one MTA official despairs that "there will never be 'enough money'" to bring the system into a state of good repair.[69] One reason is that the city is undertaking expensive—and some say unnecessary—expansion plans even as it lacks the funds to maintain what it has. For example, it has started construction of a new eight-mile Second Avenue subway line, located just two blocks from an existing parallel subway line, that will cost more than $16.8 billion—about the amount needed to bring the system into a state of good repair.[70]

Nationally, the problem is only going to get worse as newer rail systems age and transit agencies find they do not have the funds to maintain them. The critical time, when most of a rail line's infrastructure needs rehabilitation or replacement, is when it reaches 30 years of age. The oldest parts of Atlanta's system turned 30 in 2009. San Diego's original light-rail line, the first modern light rail in the United States, turns 30 in 2011. Rail lines in Baltimore, Buffalo, Miami, Portland, Sacramento, and San Jose will all reach 30 years of age in the next decade. Virtually none of the transit agencies that operate these rail lines have the financial resources to rehabilitate them when they are worn out, yet few will be able to make the politically tough yet financially responsible decision to cease rail service.

The Obama administration's choice to head the Federal Transit Administration, Peter Rogoff, charges that transit agency "behavior isn't responsible." He reached this conclusion after scores of meetings with agency managers that frequently followed a similar pattern. First, the managers complained that they do not have enough money to operate the systems they have. But then "the glossy brochures come out" and they ask the FTA for money to expand their rail lines.

"If you can't afford to operate the system you have," asks Rogoff, "why does it make

sense for us to partner in your expansion? . . . Might it make more sense for us to put down the glossy brochures, roll up our sleeves, and target our resources on repairing the system we have?"

Rogoff advises cities that want to build rail lines that "Paint is cheap, rail systems are very expensive." Trains may seem exciting, but "you can entice even diehard rail riders onto a bus, if you call it a 'special' bus and just paint it a different color than the rest of the fleet." He adds that cities can also paint designated bus lanes and "move a lot of people at very little cost compared to rail." What is known as "bus rapid transit," he continued, "is a fine fit for a lot more communities than are seriously considering it."[71]

The Transit Innovation Crisis

America's socialized transit industry has completely lost its ability to innovate and respond to changing times. While private transit companies in the 20th century rapidly replaced high-cost rail transit with low-cost buses, public transit agencies have gone backwards, substituting high-cost rail for low-cost buses.

The most recent real innovation in the transit industry was demand-responsive transit, sometimes called "dial-a-ride." Conceived in the 1970s, this system allowed people to schedule a pickup with a telephone or other telecommunications device. A small bus or van would arrive at or near their door and take them to their destination, stopping to pick up or drop off other passengers along the way.

The only transit agency to make a serious attempt at a broadly available dial-a-ride system was San Jose's Santa Clara County Transit District, and that experiment ended because it was too successful. Demand for the service was so high that the telephone call center was overwhelmed, and thousands of potential customers were turned away each day by their inability to schedule a pickup. Moreover, the local taxi industry successfully convinced a state court that the service infringed on its exclusive franchise to carry people door to door, and the agency was given a choice of abandoning the service or effectively buying out the taxi companies. It chose the former.[72]

Today, automation via the internet would solve the call-center problem. While most transit agencies provide a dial-a-ride service, they limit its use to disabled passengers. With such a small customer base, the average dial-a-ride bus operates at just 12 percent of capacity, and subsidies average $3 per passenger mile and $27 per trip, making it the most expensive form of transit in the country.[73] Meanwhile, private companies such as SuperShuttle profitably operate dial-a-ride services in almost every major city, but are generally limited by state or local laws to carry passengers only to or from airports.

American cities have millions of people traveling between millions of homes and millions of other destinations. Instead of relying on "small-box transit" that caters to these travel patterns, as dial-a-ride would do, many transit agencies have gone in the opposite direction and focused on big-box transit using obsolete technology that serves a very limited set of destinations. For example:

- In the 1970s, Atlanta, Washington, DC, and the San Francisco Bay Area built subway/elevated systems using technologies dating back to 1904, when New York City installed the first electric-powered subway.
- In the 1980s, San Diego, Portland, Buffalo, and other cities built light-rail systems using technologies dating to 1939, when virtually identical light-rail transit connected Oakland with San Francisco.
- In 2001, Portland started the streetcar fad, using technologies dating to 1888 when Richmond, Virginia installed the first successful electric street railway. Since then, Cincinnati, Dallas, Tucson, and numerous other cities are planning or building streetcar lines.

Since people do not live in patterns that

Instead of relying on "small-box transit," which caters to modern travel patterns, many transit agencies focus on big-box transit using obsolete technology that serves a limited set of destinations.

are conducive to successful big-box transit, transit agencies have become social engineers, trying to use the power of government to coerce people into living patterns that will lead them to ride these expensive trains more frequently. Enticements come in the form of subsidies to so-called transit-oriented developments: high-density, mixed-use developments that combine housing with shops and are usually located near a rail station.[74] Coercion comes in the form of urban-growth boundaries that drive up the cost of single-family housing, which most people prefer.[75] These policies have not been successful: despite these policies, rail transit continues to carry less than 1 percent of passenger travel in Portland, San Diego, San Jose, Sacramento, and other regions that opened their first new rail lines after 1976.[76]

The Case for Subsidies

Supporters of transit subsidies justify those subsidies by inventing and exaggerating the social benefits of transit. They imagine, for example, that transit is environmentally superior to driving, when in fact, the environmental impacts of transit are approximately equal to driving.[77] In 2008, for example, operating the average car used about 3,400 British thermal units (BTUs) per passenger mile, while the average transit bus used 4,300.[78] While rail transit operations use an average just 2,500 BTUs per passenger mile, the energy cost of building rail lines is high.[79] A complete lifecycle analysis has found that "total lifecycle energy inputs and greenhouse gas emissions contribute an additional 63% for onroad, 155% for rail, and 31% for air systems over vehicle tailpipe operation."[80] In other words, the total energy cost of driving is about 5,500 BTUs per passenger mile, while rail transit is about 6,400 BTUs per passenger mile.

Transit supporters who claim that transit saves people money conveniently ignore the subsidies that support more than three-fourths of the costs of transit.

Subsidy advocates claim that transit saves people money.[81] In making this claim they both exaggerate the cost of driving and ignore the subsidies that support more than three-fourths of the cost of transit operations and improvements. Their calculations assume that people only buy new cars, pay full finance charges for the cars, and then buy a new car as soon as the old one is paid off, resulting in an average expenditure of 56 cents per mile. In fact, the average car on the road is 9.2 years old, meaning Americans keep driving cars for an average of more than 18 years. (The average light truck is 7.1 years old.)[82] Since older cars are fully amortized, their average cost is far lower than 56 cents per mile.

According to the Bureau of Economic Analysis, Americans spent slightly less than $950 billion in 2008 buying, operating, and maintaining autos, including all related taxes and insurance.[83] For that expense, Americans drove cars and light trucks about 2.7 trillion passenger miles, for an average cost of about 35 cents a vehicle mile.[84] Since the average car carries about 1.6 people, the average cost of auto travel is about 22 cents per passenger mile.

By comparison, transit riders paid $11.4 billion in fares in 2008 to travel 53.7 billion passenger miles, for an average fare of 21 cents per passenger mile. On top of the fare revenue, transit systems received $25.0 billion in operating subsidies and $16.1 billion in capital subsidies. With the subsidies taken into account, the total cost of transit was 98 cents per passenger mile—more than four times greater than the cost of driving (Table 4).[85]

But, say supporters of transit subsidies, highways are subsidized too. To justify federal transit subsidies, they often point to the fact that the federal government paid for most of the cost of the Interstate Highway System. The difference is that interstate highways were funded out of highway user fees, primarily gasoline taxes, on a pay-as-you-go basis. This introduced positive feedback into the system: if highway planners built interstates that people wanted to use, highway users would pay the gasoline taxes needed to fund the interstates. If highway planners built roads to nowhere, people would not buy gasoline to drive those roads and—since the federal government did not allow states to borrow against their shares of future federal

gas tax revenues—state construction programs would slow down. Since transit agencies get most of their funds from taxes, not user fees, the feedback they get from users is much weaker.

If gas taxes are considered a form of highway user fee, there are almost no federal subsidies to highways and few state subsidies. In 2007, highway users paid $39.5 billion in federal highway user fees, of which $33.5 billion was actually spent on highways. Highway users also paid $78.4 billion in state highway user fees, of which $60.7 billion was actually spent on roads. Much of the rest of the user fee money was used to subsidize mass transit. Offsetting those diversions, the federal government spent about $2.5 billion in general funds on roads, while the states spent about $16.2 billion on roads. The net effect is that federal and state highway subsidies were virtually nil.[86]

There were subsidies at the local level, mainly because most localities do not collect highway user fees. While local governments collected about $5.1 billion in user fees (about $1 billion of which was diverted to mass transit), they spent $35.4 billion in general funds on roads. The net subsidy of about $34.4 billion works out to less than a penny per passenger mile.[87]

The situation changed slightly in 2008. When Congress passed the sexennial surface transportation reauthorization bill in 2005, it authorized more spending out of highway user fees—including billions of dollars diverted to mass transit—than highway users are paying. The Highway Trust Fund—an imaginary account that keeps track of fund balances—ran out of money in 2008. To keep revenues flowing to the states, Congress appropriated $6 billion to highways and $2 billion to mass transit.[88] This is less a subsidy

Unlike transit, interstate highways were funded out of user fees, creating a feedback loop: if planners built interstates that people wanted to use, users would pay the taxes needed to fund the roads.

Table 4
Sources of 2008 Transit Funds (millions of dollars)

	Operating	Capital	Total
Federal	2,568	6,419	8,986
State	9,405	1,984	11,389
Local	10,756	7,589	18,345
Other	2,307	110	2,417
Fares	11,378	0	11,378
Total	**36,414**	**16,101**	**52,515**
Subsidies	25,036	16,101	41,137
Cost per passenger mile	0.68	0.30	0.98
Cost per trip	3.55	1.57	5.12
Subsidy per passenger mile	0.47	0.30	0.77
Subsidy per trip	2.43	1.56	3.99

Source: "2008 National Transit Profile," Federal Transit Administration, 2009, p. 1, tinyurl.com/2cmnujk.
Note: Transit carried 10.3 billion trips, traveling 53.7 billion passenger miles in 2008.

Table 5
Highway Subsidies in 2008

	General Funds (millions)	Diversions (millions)	Net Subsidy (millions)
Federal	11,049	5,623	5,426
State	13,828	16,865	–3,037
Local	36,286	1,069	35,217
Total	**61,163**	**23,557**	**37,606**
Vehicle miles of travel			2,793,509,000,000
Subsidy in cents per vehicle miles of travel			1.3
Passenger miles of travel			4,871,683,000,000
Subsidy in cents per passenger mile			0.8

Source: *Highway Statistics 2008* (Washington: Federal Highway Administration, 2009), tables HF-10 and VM-1.
Note: "General funds" are nonhighway user fees spent on highways. "Diversions" are highway user fees spent on transit and other nonhighway programs. Note that highways carried nearly 100 times as many passenger miles as transit, yet transit subsidies were significantly larger than highway subsidies even in a year of unusually large highway subsidies.

to highways than a consequence of irresponsible spending. Even if considered a subsidy, total subsidies to highways in 2008 still add up to less than a penny per passenger mile, while transit subsidies averaged 77 cents per passenger mile.[89]

Other reasons often given for subsidizing transit are just as invalid. Critics of transit subsidies are accused of being heartless to the low-income people who heavily patronize transit.[90] But if the goal of transit is to help people who cannot drive or cannot afford a car, that goal would be better served by giving those people transportation vouchers they can apply to any public conveyance than by creating government monopolies that focus more on pleasing elected officials than users.

If the goal of transit is to help people who cannot drive or cannot afford a car, that goal would be better served by giving those people transportation vouchers they can apply to any public conveyance.

In general, the goals that transit supposedly contributes to, whether congestion relief, reduced air pollution, or offering mobility to low-income people, can invariably be achieved at a far lower cost using tools other than socialized transit systems. One of those tools is a private, market-driven transit system.

The Case for Privatization

All the problems identified in this report are a direct result of public ownership of transit systems:

- Transit productivity has declined because transit managers are no longer obligated to ensure that revenues cover costs. In fact, in the world of government, agency managers are respected for having larger budgets, which leads transit managers to use tools and techniques that actually reduce productivity.
- Transit's tax traumas during the recession are typical of government agencies that create new programs during boom peri-

ods that are not financially sustainable in the long run. Private businesses do the same thing, but are able to slough off marginal operations during recessions. Public agencies have a difficult time doing so because each program and each transit line has a built-in political constituency demanding continued subsidies.

- Public agencies are also more likely to run up debt because political time horizons are so short: what an agency provides today is much more important than what that service will cost tomorrow. This is especially true when it comes to pensions and other worker benefits whose true costs can be postponed to the politically distant future.
- The tendency to build expensive infrastructure whose maintenance cannot be supported by available revenues is a particular government trait. As one official at the U.S. Department of Transportation says, politicians "like ribbons, not brooms." In other words, they like funding highly visible capital projects, but they gain little from funding the maintenance of those projects.
- The failure to innovate and the tendency to turn to social engineering when people will not behave the way planners want are inconsistent with the values of a free society.

Ironically, the real problem with public transit is that it has too much money. The addition of tax dollars to transit operations led transit agencies to buy buses and other equipment that are bigger than they need, to build rail lines and other high-cost forms of transit when lower-cost systems would work as well, to extend service to remote areas where there is little demand for transit, and to offer overly generous contracts to politically powerful unions.

Privatizing transit would solve these problems. Private transit operators would have powerful incentives to increase productivity, maintain transit equipment, and avoid transit systems that require expensive infrastructure and heavy debts. While private transit systems would not be immune to recessions, they would respond to recessions by cutting the least-necessary expenses. In contrast, public agencies often employ the "Washington Monument Syndrome" strategy: they threaten to cut highly visible programs as a tactic to persuade legislators to increase appropriations or dedicate more taxes to the agency, such as New York MTA's proposal to eliminate discounted fares for students.

Despite the almost complete socialization of America's transit industry, there remain a few examples of private transit. Though most states have made public transit agencies legal monopolies, there have also been a few new private start-ups in places where private transit is permitted.

The Atlantic City Jitney Association is a group of private bus owners that operate scheduled service on eight routes in Atlantic City. Four of the routes connect the New Jersey Transit rail station with hotels and, being subsidized by the hotels, charge no fares. The other four routes charge fares of $2.25.[91] The jitneys are all 13-passenger minibuses, individually owned by their operators, which run 24 hours a day. The association was first created in 1915 and claims to be "the longest running nonsubsidized transit company in America."[92]

A more extensive jitney or shared taxi service is provided by the *públicos*, or public cars, of Puerto Rico. Like the Atlantic City jitneys, they tend to be individually owned and most are 17-passenger vans. Routes and fares are fixed by a public service commission, and the *públicos* travel both within and between cities. Although San Juan has its own public bus and rail system and several other Puerto Rico cities have public buses, the *públicos* carry more people more passenger miles each year than all the public transit services combined. *Público* fares average $1.02 per trip, about twice the fares on San Juan's public buses.[93] Similar services operate in many other countries going by such names as *colectivo* (Chile, Columbia, and Nicaragua); *alternativo* (Brazil); *combi* (Argentina); and, when not legally sanc-

The real problem with public transit is that it has too much money, leading it to overspend on equipment and be overly generous with politically powerful unions.

Private jitney services operate without subsidies in New York, New Jersey, Florida, and Puerto Rico.

tioned, *taxi pirata* (Costa Rica and Mexico).

Indeed, similar jitney services have appeared in Miami, New York City, and northern New Jersey. Sometimes called dollar vans, many are registered with state public utility commissions, but some operate illegally. They tend to mainly serve recent immigrants and other minority populations.[94] More than a dozen different jitney companies serve the Miami-Dade County area, for example, often competing directly with, and charging lower fares than, the publicly subsidized Miami-Dade bus service.[95]

One line that is more upscale is the Hampton Jitney, a bus service that has connected Manhattan with wealthy Long Island enclaves for more than 30 years. Offering comfortable long-distance buses, some of which have two-and-one seating and chef's galleys, and charging around $24 per one-way trip, the Hampton Jitney attracts 600,000 passengers per year, belying the claim often made by rail advocates that well-off people will only ride trains, not buses.[96]

Another private transit service in the New York–New Jersey area is the NY Waterway system of ferryboats and buses. With the construction of bridges, highway tunnels, and trans-Hudson subways, ferry service across the Hudson River ceased in the 1960s, and no public agency considered restarting the service. But truck company owner Arthur Imperatore, who owned land on both the Manhattan and New Jersey sides of the river, started a ferry service in 1986. Fares included bus service to destinations throughout midtown and downtown Manhattan. The initial operation was so successful that NY Waterway eventually added more than two dozen more routes.

The system was almost too successful for its own good. After the September 11, 2001, destruction of the World Trade Center interrupted Port Authority of New York and New Jersey (PATH) subway service. NY Waterway borrowed heavily to add enough boats to its fleet to meet the increased demand for ferry service. When subway service was restored at the end of 2003, the decline in ferry patronage almost bankrupted the company. It was saved by selling some of its routes to BillyBey Ferry Company.

In addition to borrowing money after 9/11, NY Waterway received several million dollars in Federal Emergency Management Agency (FEMA) subsidies to provide an alternative to the shutdown subways.[97] When PATH wanted to start new ferry routes, it provided terminal space to NY Waterway. Otherwise, NY Waterway has been entirely unsubsidized.

The *National Transit Database* reports that, in 2007, NY Waterway earned $33 million in fare revenues and spent $21 million on operations; in 2008, it earned $35 million in revenues and spent $25 million on operating costs.[98] BillyBey reported $7.6 million in fares and the same amount in operating costs in 2007, and $8.4 million in revenues and $7.3 million operating costs in 2008.[99] Debt service is not included in operating costs or reported in the *National Transit Database*, so it is unknown how much of a profit NY Waterway actually made. But it is clear that NY Waterway is doing well, despite facing competition from subsidized buses and PATH subway trains.

At least two private transit services have started in the last year. The Washington Wave, a new jitney service in Houston, is aiming for a more upscale clientele than the one served by New York–New Jersey dollar vans. The jitneys are mainly serving the entertainment districts that are growing around the downtown Houston area. Unlike most cities, Houston has legally allowed jitneys for years, but this is the first time in more than a decade that someone has started such a service.

Clayton County, Georgia, is the previously mentioned county that completely terminated all public bus service in 2010. In response, a private individual purchased buses and is offering service on some of the routes formerly subsidized by Clayton County.[100] The new service charges $3.50 per ride (with discounts for seniors, children, and the disabled), compared with average fares of $1.10 for the subsidized buses.[101]

Although not true privatization, many transit agencies save money by contracting out

transit services to private operators. The success of such operations demonstrates how much more efficient private companies are than public agencies. The Colorado legislature requires that Denver's Regional Transportation District (RTD) contract out half of its bus service to private operators. Despite having to pay taxes and fees that RTD is exempted from, the private operators billed taxpayers $5.01 per bus mile in 2008, which was just 52 percent of the $9.65 per bus mile spent by RTD on the buses it operates itself. Nationally, about 16 percent of bus operations are contracted out, at an average cost of $6.34 per bus mile compared with $9.80 for in-house operations.[102]

While not urban transit, intercity buses provide a private transportation success story whose lessons are useful for public transit. Beset by competition from subsidized Amtrak and discount airlines, intercity bus service declined steadily through about 2005. But since then it has staged a revival, particularly in well-traveled corridors of the Northeast, Midwest, and California.

The revival actually began in 1998, when a Chinese immigrant named Pei Lin Liang started a discount bus service called Fung Wah ("magnificent wind") between New York and Boston. With the Internet as its reservations clerk, drivers selling tickets to walk-ons, and curbsides serving as bus stations, Fung Wah kept its overhead low and charged half the fares then being charged by Greyhound for the same route. Soon, other individuals and companies imitated Fung Wah's success, and such "Chinatown buses" were seen as attractive, low-cost alternatives for travel in the Northeast.[103]

Eventually, Greyhound and Peter Pan Bus Company formed a joint venture, Bolt Bus, to compete with the Chinatown buses. A British company, Stagecoach, also stepped in with its double-decked Megabuses. Bolt and Megabus offer free wireless Internet service, leather seats, extra legroom, and fares starting as low as $1.50 and averaging about $15 for travel from New York to Washington or Boston. Today, around a dozen different companies offer bus service in the Boston-to-Washington corridor, charging fares that are typically about one-third of Amtrak's conventional trains and one-tenth of Amtrak's high-speed Acela trains. While exact ridership numbers are not available, the American Bus Association reports that the average intercity bus fills about two-thirds of its seats.[104] Even if Boston-to-Washington buses fill only half their seats, they carry as many or more riders as Amtrak.

Generally, these buses run nonstop or with only one stop. For example, bus riders can take their choice of individual buses running from New York to Philadelphia; New York to Baltimore; New York to Rockford, Maryland; New York to Washington; and New York to Norfolk, Virginia. Megabus also offers service throughout the Midwest, but after a one-year experiment it left the California market in late 2008.[105] Other discount bus companies, including CABus, California Shuttle, and USAsia, operate in the Los Angeles–San Francisco and California–Las Vegas corridors, with fares starting as low as $5.[106] Chinatown-type buses can also be found in Alabama, Arizona, Florida, Georgia, Nevada, North and South Carolina, and Washington State.[107]

The American Bus Association estimates that, nationally, scheduled intercity buses carry about 15 billion passenger miles per year.[108] That's about 2.5 times as many passenger miles as Amtrak, which receives subsidies averaging nearly 30 cents per passenger mile compared with subsidies to buses that are nearly zero.

Including capital costs, transit agencies spend an average of more than $1 per passenger mile on bus service, but intercity buses earn a profit charging less than 15 cents per passenger mile.[109] They do so by going where people want to go and filling at least half to two-thirds of their seats. By comparison, the average public transit bus fills less than a quarter of its seats and, when standing room is counted, just 15 percent of its capacity.[110]

The Effects of Privatization

Private transit providers will focus on reducing costs and focusing scheduled transit

Private intercity bus service has staged a revival and private buses now carry more passengers between Boston and Washington than heavily subsidized Amtrak.

In low-density areas, private companies may replace scheduled bus services with SuperShuttle-like demand-responsive services that can take anyone door to door.

services on high-demand areas where they can fill a high percentage of seats. To reduce costs, they would employ transit technologies that have minimal infrastructure requirements, use the appropriate size of vehicle for each area served, and economize on labor.

Privatization would probably improve transit service in the inner cities, where most transit patrons live, while it would reduce service in many suburbs, where most people have access to cars. Privatization would also greatly alter the nature of transit services in many cities.

Private investors would be unlikely to expand or upgrade high-cost forms of transit such as light rail, streetcars, and automated guideways. Private operators might continue to run existing rail lines until the existing infrastructure is worn out, which tends to be after about 30 years of service. Rather than rebuild the lines, private operators would probably then replace the railways with low-cost, flexible bus service.

Private operators might find it worthwhile to maintain a few heavy-rail (subways and elevateds) and commuter-rail lines in the long run. Fares cover more than 60 percent of the operating costs of subways/elevateds in New York, San Francisco, and Washington; more than half the operating costs of commuter trains in Boston, Los Angeles, New Jersey, New York, and Philadelphia; and more than half the operating costs of subways/elevateds in Boston and Philadelphia. It is possible that private operation could save enough money to cover operating costs, with enough left over to keep infrastructure in a state of good repair in many of these cities. Most other rail lines, including virtually all of the ones being planned or built today, would not pass a market test, mainly because buses can attract as many riders at a far lower cost.

Bus services would change as well under private operation. In heavily used corridors, private transit services would offer both local bus services (that stop several times per mile) as well as bus rapid transit services that connect major urban centers and rarely stop between those centers. In low-demand areas, private operators would likely substitute 13- to 20-passenger vans for the 40-seat buses currently used by most public agencies. In even lower-demand areas, private companies may elect to focus on SuperShuttle-like demand-responsive services that pick anyone—not just disabled passengers—up at their doors and drop them off at their destinations.

Private Transit Alternatives

In the era of private transit, cities gave transit companies exclusive franchises to operate on specific streets or routes. Since each route was a monopoly, city or state public utility commissions strictly regulated fares and service levels. Some people believe that such regulation hastened the decline of private transit by limiting the ability of transit companies to raise fares to keep up with inflation or cut service on nonperforming routes.[111]

Considering that its chief competition is the automobile, transit can hardly be considered a monopoly today. In contrast to the regulatory model, cities could completely open streets to any transit provider. City or state commissions might ensure that vehicles and drivers are safe, but not regulate fares, routes, or schedules. This is essentially the system used in many developing countries.

In their 1997 book *Curb Rights*, Daniel Klein, Adrian Moore, and Binyam Reja argue that the relatively unregulated model works in developing countries because auto ownership rates are low. In the United States, where demand for transit is lower, the model could fail because transit companies would attempt to pirate customers away from one another—for example by running buses a few minutes ahead of competitors' bus schedules. This would make transit uneconomical for any of the providers and many areas would be left with no service at all. Their solution is to auction transferable curb rights—the right to stop vehicles to pick up and drop off passengers—at selected locations on various routes. Fares and schedules would remain unregulated, but individual transit providers would have routes and customers secure from *taxi piratas*.[112]

America has a variety of transit markets, and it is likely that no one solution is best for all of them. New York City has enough demand for transit that the unregulated model might work fine in the absence of curb rights. The demand for transit in Los Angeles might be thin enough that the curb rights model might work best. Smaller cities and towns might prefer the franchise system. Fortunately, with more than 300 urban areas with transit service, there is room for experimentation.

More important than finding the right model at the very beginning is eliminating the current perverse incentives that promote the stultifying socialistic system. Just as the government takeover of transit resulted from actions taken by Congress, so Congress must be the first to take actions to reverse this process. It can do so in the next surface transportation reauthorization bill, which is scheduled for consideration in 2011.

A Privatization Action Plan

Instead of the "complex and nebulous" goals identified by Lave in 1994, urban transit should have a single goal: to efficiently move people who are willing to pay for that transportation. As illustrated by the large differences in costs between buses that are contracted out and buses that are directly operated by public agencies, private businesses are more efficient than publicly owned transit systems.

To achieve this goal, federal, state, and local governments should take the following steps:

1. State and local governments should stop subsidizing highways. In the decade ending in 2008, some $444 billion in general funds were spent on roads (after adjusting for inflation to 2008 dollars). This was partly offset by $234 billion in diversions from highway user fees to transit and other nonhighway programs. Even if this offset is not counted, ending the $444 billion in subsidies will not pose a hardship on drivers, as the subsidies amount to just 1.5 cents for each of the 29 trillion vehicle miles driven in those years.

At the same time, ending the subsidies will provide an important object lesson for the transit industry: transportation can and should pay for itself. Ending highway subsidies will also take away the argument of transit advocates that, since highway users receive subsidies of less than a penny per passenger mile, transit users should receive subsidies of more than 70 cents per passenger mile.

The best way to end the subsidies would be to switch from gasoline taxes to vehicle-mile fees as the basis for paying for highways. As noted by Jim Whitty of the Oregon Department of Transportation at a recent conference on mileage-based fees, electronic fees can be collected for every road, with funds going to the government agency that owns or manages that road; they can vary by the level of traffic in order to minimize congestion; and they can be charged without invading driver privacy.[113] Mileage fees will be more politically palatable to drivers provided, first, that the vehicle-mile fee is a replacement for—not an addition to—existing gasoline taxes and, second, that the collected fees are spent only on highways, roads, and streets, and not diverted to other activities.

2. Congress should phase out subsidies to transit and all other forms of transportation. To the extent that transportation is interstate in nature, Congress should ensure that transportation programs are fiscally prudent. This means that, whenever possible, they should be privately operated and always funded out of user fees, not taxes.

If there is a special need to federally fund some program, such as a program aimed at reducing air pollution, federal funds should be spent on projects that directly address that problem. The idea that funding indirect programs such as transit to reduce congestion, save energy, clean the air, and solve other problems simply leads to wasteful spending on projects that do not really address any of those problems.

3. Congress should eliminate New Starts, Small Starts, the Congestion Mitigation/Air Quality fund, and other nonformula funds. These funds have become "open buckets" that encourage transit agencies to plan wasteful

Urban transit should have a single goal: to efficiently move people who are willing to pay for that transportation.

Taxes dedicated to transit give transit agencies a license to spend on programs that have no economic or financial justification.

projects in order to get larger shares of federal funds. "Formula funds"—federal funds that are distributed on the basis of such factors as population, land area, and/or actual use—are much better because they are fairly fixed and thus state and local transportation agencies have little incentive to spend on inappropriate projects because more spending will not lead to more federal grants.

4. Congress should include user fees in the formula funds. Funds distributed on the basis of the user fees collected will give transit and other transportation agencies incentives to focus on better service to users rather than on pleasing politicians. For example, a formula that distributes funds to states based 50 percent on user fees, 45 percent on population, and 5 percent on land area initially results in a distribution similar to today's distribution of highway funds, but in the long run rewards states (and transit agencies within each state) that increase the share of their transportation systems paid out of user fees. Once transit agencies are more focused on user fees, it will be easier for them to privatize transit operations.

5. States should end diversions of gas taxes and other highway fees to transit. In 2008, California diverted more than $800 million, Pennsylvania diverted more than $600 million, and other states diverted nearly $3.7 billion in gas taxes to transit. California also diverted $1.2 billion, and other states diverted $2.6 billion, in motor vehicle registration fees to transit. New York diverted almost $500 million, and other states diverted $200 million more, in road tolls to transit.[114]

This unearned money gives transit agencies a license to spend on programs that have no economic or financial justification. They also reduce the public faith in highway user fees, making it difficult for state and local agencies to raise the fees they need to maintain and improve roads.

6. States should end other transit subsidies. In addition to highway user fees, states dedicated more than $5 billion in income, sales, property, and other taxes to transit operations. Phasing out this money would encourage transit agencies to privatize their operations.

7. States may want to provide mobility assistance to low-income, disabled, and other people who lack automobility. Instead of giving transit agencies billions of dollars and hoping they will use it to help people who cannot drive, states could give mobility vouchers to such people. These vouchers could be applied to any common carrier form of transportation: airlines, Amtrak, intercity buses, urban transit, or taxis.

8. Transit agencies should privatize their systems in ways that promote efficient services to people in their cities or districts. Where possible, privatization should encourage, or at least allow for, competition. But transit agencies should consider a variety of options (such as franchises, curb rights, and unrestricted competition) to determine what might be best for their particular urban areas.

Conclusion

Public ownership of transit is one of the least defensible government programs in the United States. It has led to a huge decline in transit productivity, a large increase in costs, and only minor increases in outputs. In addition, a powerful lobby of groups now feel entitled to government support—groups that do not include transit riders, for the most part, but instead are mainly rail construction companies and railcar manufacturers, transit contractors, transit employee unions, and the transit agencies themselves. Privatization will make transit responsive to users, not politicians, and will actually lead to better services for many transit users.

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CATO INSTITUTE BRIEFING PAPERS

High-Speed Rail Is Not "Interstate 2.0"

by Randal O'Toole

No. 113 **September 9, 2009**

Executive Summary

The administration has likened President Obama's high-speed rail plan to President Eisenhower's Interstate Highway System. Yet there are crucial differences between interstate highways and high-speed rail.

First, before Congress approved the Interstate Highway System, it had a good idea how much it would cost. In contrast, Congress approved $8 billion for high-speed rail without knowing the total cost, which is likely to be at least $90 billion.

Second, highway users paid for interstate highways, whereas high-speed rail will be almost entirely subsidized by general taxpayers who will rarely use it.

Third, interstate highways connect all 48 contiguous states and major metropolitan areas. The FRA's high-speed rail plan consists of six unconnected networks that reach only 33 states and less than two-thirds of the nation's 100 largest urban areas.

Fourth, the average American traveled 4,000 miles on interstates in 2007. High-speed rail proponents optimistically estimate that the average American would ride the FRA's high-speed rail system less than 60 miles per year.

Finally, interstate highways improved social welfare by increasing highway safety. In contrast, far from saving energy and reducing pollution, high-speed rail would actually increase energy consumption and greenhouse gas emissions.

For all these reasons, the United States government should not fund high-speed rail. The $8 billion in high-speed rail stimulus funds should be invested in safety improvements, not in new trains and new routes that will add to future taxpayer obligations.

Randal O'Toole is a senior fellow with the Cato Institute and author of The Best-Laid Plans: How Government Planning Harms Your Quality of Life, Your Pocketbook, and Your Future.

Whereas the vast majority of Americans use the interstates, use of high-speed rail would be confined to a wealthy elite.

Introduction

When President Obama announced his vision for high-speed rail in the United States, the White House stated that the plan "mirrors that of President Eisenhower, the father of the Interstate Highway System, which revolutionized the way Americans traveled."[1] A former Federal Railroad Administration official called the plan "Interstate 2.0."[2]

Yet there are several crucial differences between high-speed rail and the Interstate Highway System. Most importantly, before Congress approved the legislation that created the Interstate Highway System in 1956, it had a good idea of how much the roads would cost, how the country would pay for them, and who they would serve. In contrast, neither President Obama nor the FRA have ever offered any estimates of how much their high-speed rail plan would cost, how it would be financed, or who would ride the trains.

A close look at the data reveal that high-speed rail would not be a revolution but more of a counterrevolution: a step backwards to a time when only the wealthy had mobility and when low- and middle-class people worked hard to keep the wealthy mobile. For the mobility and other benefits it would produce, high-speed rail would be many times more expensive than the interstates. And while the vast majority of Americans use the interstates, use of high-speed rail would be confined to a few elites.

The Cost of High-Speed Rail

Although the Federal Railroad Administration has not released any estimates of the cost of high-speed rail, several states have. Cost assessments must recognize that the FRA is actually proposing two very different technologies.

In most of the country, the vision calls for "moderate-speed rail," that is, upgrading existing freight lines to allow passenger trains to run up to 110 mph. These would be conventional Amtrak trains powered largely by conventional diesel locomotives.

In 2004, the Midwest Regional Rail Initiative, a consortium of state departments of transportation, estimated that upgrading existing tracks to 110-mph standards would cost an average of $2.4 million per mile.[3] (All of these costs include locomotives, rail cars, and stations, as well as new tracks or upgrades to existing tracks.) Adjusting this amount to allow for increases in construction costs since 2004 results in an average cost of $3.5 million per mile.[4]

The entire FRA plan calls for about 8,500 miles of moderate- and high-speed rail routes in the United States. At $3.5 million per mile, this would cost nearly $30 billion. The $8 billion that Congress has already approved and $5 billion that the administration has requested over the next five years would not pay for even half of this.

In California and possibly Florida, however, the FRA plan calls for building entirely new tracks suitable for operating trains faster than 120 miles per hour. In 2005, the Florida High Speed Rail Authority estimated that construction of a rail line powered by gas-turbine locomotives would cost between $22 million and $27 million per mile.[5] Using the midpoint of this range and adjusting for increases in construction costs since 2005 brings the average cost to $31 million per mile. At this price, the entire FRA corridor from Tampa to Miami via Orlando would cost $11.1 billion.

In 2008, the California High-Speed Rail Authority estimated that a 490-mile initial segment from San Francisco to Anaheim would cost $33 billion, or about $67 million a mile.[6] California is proposing to run trains at higher speeds than Florida was considering (220 mph vs. 125 mph), but the main differences in costs are due to California's more mountainous terrain and the infrastructure needed to electrify the trains. At this price, California's San Francisco–Anaheim line, with branches to Sacramento, Riverside, and San Diego, would cost $52 billion.

The entire FRA plan, then, would cost about $90 billion. On a per-mile basis, this cost is greater than the 46,800-mile Interstate Highway System, which cost about $425 billion in 2008 dollars.[7] While true high-speed

rail would cost between $31 and $67 million per mile, the interstates cost less than $10 million per mile. While the average cost of moderate-speed rail would be $3.5 million per mile, the interstates cost just $2 million per lane mile.[8]

If Congress and the states manage to find $90 billion to build the FRA system, the costs are unlikely to stop there. The system contains important gaps, including Dallas-Houston, Jacksonville-Orlando, and Los Angeles–Las Vegas. None of the Rocky Mountain states are included, but Colorado's Rocky Mountain Rail Authority is promoting high-speed rail there. Since well over half of the $90 billion cost of the FRA plan is for California, which has less than 10 percent of the route miles, elected officials in other states are likely to demand that they get true high-speed rail, too.

One lesson that can be learned from Japan's high-speed rail system is that a politically driven transportation system ends up building far more than is economically rational. Japan's first high-speed rail line, from Tokyo to Osaka, actually made money because it connected Japan's three largest metropolitan areas, which had a combined population of more than 40 million people when the route opened in the mid-1960s (and more than 60 million today).[9] But Japanese politicians pressured the government-owned, but profitable, Japanese National Railways to build more lines into remote locations.

By 1987, the Japanese National Railways had debts of $350 billion (adjusted for inflation).[10] By comparison, General Motors' debt when it went bankrupt was only $35 billion.[11] The Japanese government absorbed the debt, privatized the railroad, and sold the high-speed lines to private companies for less than half a penny for every dollar spent to build them, even without adjusting for inflation.[12] Since then, Japan has continued to build high-speed rail and lease the lines to private railroads at rates that will never recover the construction costs.[13] The subsidy to new construction in 2008 alone was almost $30 billion.[14]

This suggests that high-speed rail is an expensive slippery slope that is hard to exit. If Texas, the Midwest, Colorado, and other states demand true high-speed rail, the same as California, the total cost of the rail system could exceed $550 billion.[15]

The Financial Plan

When Congress created the Interstate Highway System, it debated whether it should pay for highways using tolls or taxes on gasoline, tires, trucks, and autos.[16] While the latter was selected, everyone agreed that users, not general taxpayers, would pay the cost. In fact, gasoline taxes and other user fees covered 100 percent of the cost of the Interstate Highway System.

In contrast, no one expects that high-speed rail fares would come close to paying for the costs of building and operating the rail lines. The California High-Speed Rail Authority anticipates that fares would exceed the costs of operating its rail line by enough to cover 19 to 22 percent of the capital costs.[17] But this is based on an extremely optimistic projection that the lines would attract more than three times as many riders as Amtrak currently carries in its Boston-to-Washington corridor, even though the Amtrak corridor has more people than the California corridor is projected to have when the trains are in service.[18]

The Midwest Regional Rail Initiative estimates that its moderate-speed trains would eventually—though not right away—earn enough revenue to pay for their operating costs, but not enough to pay any part of the capital costs.[19] Like the California plan, the Midwest plan optimistically projects that increasing top speeds from 79 to 110 mph—which means increasing average speeds from about 45 to about 65 mph—would attract four times as many riders as Amtrak currently carries on these routes.

In actual practice, Amtrak fares cover operating costs only on its premium-priced high-speed Acela trains between Washington and Boston. Other Boston-to-Washington trains lost more than $11 per passenger in 2001, and the Boston-to-Washington corridor as a whole

High-speed rail is an expensive slippery slope that is hard to exit.

lost $2 per passenger. In that same year, 110-mph trains in other Amtrak corridors lost between $8 and $72 per passenger.[20] This suggests that California's high-speed trains might come close to covering their operating costs, but moderate-speed trains in other parts of the country are not likely to do so.

In short, while the Interstate Highway System was paid for out of user fees, all or nearly all of the capital costs and at least some of the operating costs of the FRA rail system would have to be covered out of general tax dollars. The fact that user fees are not going to cover these costs is a strong indication that the system is unnecessary and wasteful.

How Many Would Ride?

As noted by the Obama White House, the Interstate Highway System truly did revolutionize American travel. Before the interstates, Americans were already using automobiles for more than 70 percent of their travel. But the interstates allowed that travel to be faster, safer, and more wide-reaching.

In 1956, the year Congress passed the law funding the interstates, Americans drove about 3,700 miles per capita. By 2004, driving exceeded 10,000 miles per capita for the first time.[21] Today, the interstates alone carry more than one trillion passenger miles of travel per year, which is more than 24 percent of all driving and more than 20 percent of all passenger travel.[22] Highway fatality rates dropped from 60 per billion miles of driving in 1956 to less than 14 per billion in 2007, partly because the interstates are so much safer than other highways.[23]

The average American would ride high-speed rail less than 60 miles a year, which is equal to about one round trip every eight years.

The interstates also carry half of all heavy truck traffic, which means they move about 16 percent of all freight shipped in the United States.[24] In 2007, the average American traveled 4,000 miles and shipped 2,000 ton-miles of freight over the interstates.[25]

One reason why the interstates are so heavily used is that they go so many places. As of 2007, interstates directly served all 50 states and more than 330 of the nation's 440 urban areas of more than 50,000 people—not to mention thousands of smaller cities and towns. This means that well over two out of three Americans live and work within a few minutes' drive of an interstate freeway.[26]

In contrast, when combined with the existing Boston-to-Washington corridor, the FRA high-speed rail plan would reach only 33 states. Trains would stop in only 65 of the nation's 100 largest urban areas. For most people in smaller urban areas and towns, the only access to high-speed trains would be by driving to a major city. Even many people in urban areas served by high-speed rail would be closer to airports than downtown rail stations.

As a result, high-speed rail lines would move a relatively insignificant amount of passenger travel. A recent report compiling all of the often-optimistic projections of high-speed rail ridership estimated that the FRA high-speed rail lines would carry 20.6 billion passenger miles of travel in 2025—less than 2 percent of what the interstates carried in 2007.[27]

The average American would travel on the FRA system less than 60 miles a year.[28] If the average trip is 225 miles long, the average American would take a round-trip on the FRA system only about every eight years. Since California would have very-high-speed trains, Californians would ride high-speed rail more than the rest of the country, but still less than 300 miles per person per year.[29]

These low numbers are confirmed by data from France and Japan, the two nations that have invested the most in high-speed rail. Though popular with American tourists, the average residents of France and Japan ride the TGVs (*train à grande vitesse*) and bullet trains less than 400 miles per year.[30] Given the greater geographic expanse and lower population densities of the United States, it seems unlikely that the nation as a whole would ever approach that level of per-capita ridership.

Table 1 shows that, when the capital costs are amortized over 30 years at 7 percent interest, interstates are about 10 times more cost-effective than high-speed rail. The difference is even starker when it is recognized that users

Table 1
Interstate and High-Speed Rail Costs, Per Passenger Mile

	Capital Cost ($billions)	Amortized Cost ($billions)	Passenger Miles (billions)	Cost Per Passenger (cents)
Interstate highways	425	33.9	1,034.4	3.2
Moderate-speed rail	27	2.1	12.7	27.3
California high-speed rail	52	4.2	7.9	32.6

Source: See text.
Note: The interstate highways are 10 times more cost-effective at moving people than high-speed rail.

pay for the interstates while general taxpayers would pay for the rail lines.

Table 1 shows only capital costs. In 2008, a banner year for Amtrak, the railroad's operating costs averaged 58 cents per passenger mile. Passenger fares covered less than 32 cents per passenger mile. Some of the difference was covered by Amtrak's rents of its tracks and property to other railroads and commercial and retail users, but federal and state operating subsidies still amounted to 19 cents per passenger mile.[31]

By comparison, Americans spent $1.07 trillion on automotive transportation in 2007, including new and used cars, parts, repairs, maintenance, insurance, fuel, tolls, motor fuel and various transportation taxes.[32] Travel in autos, light trucks, and motorcycles totaled 4.47 trillion passenger miles in 2007, for an average cost of 24 cents per passenger mile.[33] Federal, state, and local governments spent $55.6 billion in general funds on roads in 2007,[34] along with $124 billion in gasoline taxes and other highway user fees. The public fund subsidy for roads, which is mostly to local roads and not the highway system, was partly offset by the $22.5 billion in highway user fees diverted to nonhighway purposes.[35] But even if the diversions are ignored, highway subsidies amounted to only a little more than a penny per passenger mile.

In short, passenger rail operating costs are more than twice as great as automobile operating costs, and the subsidies are more than 15 times as great. Rail proponents expect that high-speed trains would attract more riders than conventional trains, but their operating costs would also be greater, so it is likely that costs and subsidies per passenger mile would be similar to those of Amtrak today.

Who Would Ride?

Who would be among the lucky few to enjoy heavily subsidized high-speed train rides? One answer can be found by comparing fares in Amtrak's New York–Washington corridor.

At the time of this writing, $99 will get you from Washington to New York in 2 hours and 50 minutes on Amtrak's high-speed train, while $49 pays for a moderate-speed train ride that takes 3 hours and 15 minutes. Meanwhile, relatively unsubsidized and energy-efficient buses with leather seats and free Wi-Fi cost $20 for a trip that takes 4 hours and 15-minutes between the two cities. Airfares start at $119 for a 1-hour flight.

High-speed rail plans in other parts of the country propose similar fare premiums. Midwest high-speed rail fares "will be competitive with air travel," says the Midwest High Speed Rail Initiative, and will be "up to 50 percent higher than current Amtrak fares to reflect improved services."[36]

Few who pay their own way will spend five times as much for a high-speed train ticket to save less than 90 minutes of their time—and those who value their time that highly would spend another $20 for a plane ticket that would save them an additional hour. Rail advocates respond that high-speed trains have an

Amtrak's high-speed train from New York to Washington costs $99, while for just $20 you can ride a relatively unsubsidized bus with leather seats and free WiFi.

advantage over flying when adding the time it takes to get between downtowns and airports. Yet less than 8 percent of Americans work in downtowns.[37] Who are they? Bankers, lawyers, government officials, and other high-income people who hardly need taxpayer-subsidized transportation.

The Environmental Cost of High-Speed Rail

When announcing his high-speed rail vision, President Obama promised high-speed rail would provide "clean, energy-efficient transportation."[38] Many people assume that trains use significantly less energy and produce less pollution and greenhouse gas emissions than other forms of travel. In fact, passenger rail's environmental benefits are negligible and costly.

Amtrak claims its trains are more energy-efficient than driving, but it bases this claim on an assumption that the average automobile has just 1.6 occupants.[39] In fact, autos tend to carry more people in the intercity travel that would compete with high-speed rail. An independent analysis for the California High-Speed Rail Authority found that intercity autos average 2.4 people.[40] This makes Amtrak only 8 percent more energy efficient than light trucks and 15 percent *less* energy efficient than cars.

As a Department of Energy report concluded in 2000, "intercity auto trips tend to be relatively efficient highway trips with higher-than-average vehicle occupancy rates—on average, they are as energy-efficient as rail intercity trips." Moreover, the report added, "if passenger rail competes for modal share by moving to high-speed service, its energy efficiency should be reduced somewhat—making overall energy savings even more problematic."[41]

A Department of Energy report found that intercity auto trips are as energy-efficient, per passenger mile, as Amtrak.

This explains why the Florida High Speed Rail Authority's analysis of a Tampa-Orlando rail line concluded that "the environmentally preferred alternative is the No-Build Alternative" because it "would result in less direct and indirect impact to the environment."[42] An objective analysis of other high-speed rail proposals would reach the same conclusion.

Not all analyses agree with this assessment. The FRA's high-speed rail plan claims that its trains would reduce carbon dioxide (CO_2) emissions by 6 billion pounds (2.7 million metric tons) per year.[43] This was based on an analysis by the Center for Clean Air Policy that assumed that:

- Auto fuel prices would remain low, leading cars in 2025 to be only a little more energy-efficient than today.[44] Considering recent spikes in fuel prices and Obama's new fuel-economy standards, the average car on the road in 2025 is likely to be considerably more fuel-efficient than today.[45]
- The average automobile on the road carries 1.6 people.[46] As previously noted, occupancies for intercity travel are closer to 2.4.
- Airline energy efficiencies would grow by 0.6 percent per year.[47] In fact, airline energy efficiencies have grown by 3.2 percent per year since 1970.[48] Considering new technologies now in development, there is every reason to believe that aircraft energy efficiencies will grow much faster than 0.6 percent per year.[49]
- The average high-speed train in every corridor would operate at 70 percent of passenger capacity.[50] Yet, in 2008, the average Amtrak train operated at only 51 percent of capacity; Amtrak's moderate-speed trains in the Boston-Washington, Los Angeles–San Diego, and Philadelphia-Harrisburg corridors all operated at 34 to 48 percent of capacity.[51]

These are examples of what Danish planning professor Bent Flyvbjerg calls "optimism bias."[52] Such bias, says Flyvbjerg, explains why large public works projects almost inevitably cost more and produce smaller benefits than originally promised. In addition, nearly 1 billion pounds of the projected annual reduction of CO_2 were from the Boston-to-Washington Corridor, which is not part of the FRA plan.[53] That means the

plan itself is projected to save only 2.3 million metric tons per year.

Substituting more realistic assumptions greatly changes the results. In the 19 years between 1975 and 1994, automobile fuel economies increased by 33 percent and commercial airline economies increased by 44 percent.[54] If they achieve similar efficiencies in the 19 years between 2006 and 2025, and if the average auto carries 2.4 people in intercity travel and the average high-speed train fills only 51 percent of its seats, then rather than save 2.3 million metric tons of CO_2 per year, high-speed trains would instead add 220,000 metric tons of CO_2 to the atmosphere each year. Moreover, not building high-speed rail would save huge amounts of energy and millions of tons of CO_2 that would otherwise be used and released during construction.

Even if all the Center for Clean Air Policy's optimistic assumptions proved correct, high-speed rail would not be a cost-effective way of reducing greenhouse gas emissions. McKinsey and Company estimates the United States can cut its greenhouse gas emissions in half by 2030 by investing in technologies that cost no more than $50 per metric ton of abated emissions.[55] But if high-speed rail costs $90 billion, then the cost per metric ton averages well over $3,000. For every ton abated through the use of high-speed rail, more than 60 tons of abatement could have been carried out using more cost-effective programs that reduce CO_2 at a cost of $50 a ton or less.

People who truly want to save energy should focus on intercity buses, which are far more energy efficient than high-speed rail, and on improving the energy efficiency of auto driving.[56] Traffic congestion wastes nearly 3 billion gallons of fuel per year, and low-cost solutions to congestion, such as traffic signal coordination, could save far more energy at a tiny fraction of the cost of high-speed rail.[57]

Conclusion

High-speed rail is a technology whose time has come—and gone. What might have been useful a century ago is today merely an anachronism that would cost taxpayers tens or hundreds of billions of dollars yet contribute little to American mobility or environmental quality.

The most ardent supporters of high-speed rail predict that the FRA plan would carry the average American less than 60 miles per year, and in most places outside of California the average would be even less. By comparison, the average American travels by automobile more than 15,000 miles per year. The environmental benefits of high-speed rail are similarly miniscule, and when added to the environmental costs of building high-speed rail lines the net result is certainly negative.

Given high costs and tiny benefits, the real impetus behind high-speed rail for some is the desire to change Americans' lifestyles. High-speed rail is a part of the administration's "livability agenda," which involves increasing the share of families living in multi-family housing while discouraging new single-family homes, and increasing the share of travel on transit and intercity rail while discouraging driving. As Transportation Secretary Ray LaHood recently admitted, the purpose of this campaign is to "coerce people out of their cars."[58] History shows that such behavioral programs are costly and produce few environmental or social benefits.[59]

Based on these findings, states should apply for their share of the $8 billion in stimulus money solely for safety improvements to existing rail lines, such as better crossing gates. They should not plan to purchase new locomotives and railcars for passenger service that would be both expensive to operate and harmful to the environment. Nor should the Federal Railroad Administration commit the federal government to funding expensive new high-speed lines such as the proposed lines in California or Florida.

The United States can do many things to improve transportation networks in cost-effective ways that save energy, reduce accidents, and cut toxic and greenhouse gas emissions. High-speed rail is not one of those things.

Those who want to save energy should focus on intercity buses, which are far more energy-efficient than rail.

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24. Surface Transportation Policy

Congress should

- eliminate federal highway, transit, and other surface transportation programs; and
- devolve to the states and local areas full responsibility for highways and transit.

Failing that, Congress should

- fund state highways in block grants based on each state's land area, population, and road mileage;
- fund regional transit in block grants based on each metropolitan area's population and transit fare revenues;
- eliminate any conditions on the use of those funds, such as air pollution mandates or requirements for long-range planning;
- eliminate ''flexible funds,'' that is, funds that can be spent on either highways or transit;
- encourage states and local areas to rely more heavily on user fees to fund all forms of transportation; and
- ensure that any efforts to save energy or reduce greenhouse gas emissions are cost-effective, that is, that state and local governments only invest in projects that can be shown to reduce energy consumption or greenhouse gas emissions at a lower cost than alternative projects.

The Importance of Effective Transportation Policy

Efficient transportation literally provides the wheels that keep the American economy moving. More than 11 percent of our gross domestic product

consists of expenditures on personal or for-hire transportation. But without that 11 percent, much of the rest of our economy would grind to a halt as people could not get to work and manufacturers could not get raw materials or deliver their products to consumers.

In 1956, Congress decided to build an Interstate Highway System. Although this system took longer and cost more to build than originally predicted, it led to an extraordinary improvement in American mobility. For example, although interstates make up only 6 percent of state rural highway networks, they provide more than 20 percent of all intercity auto traffic and more than half of all intercity truck traffic.

The key to the success of the Interstate Highway System is that it was a user-pay system, funded exclusively by federal and state gasoline taxes and other highway user fees. This user-pay system helped ensure that interstate highways were built only where they were needed and helped keep construction costs from becoming excessive.

In recent decades, Congress has increasingly departed from user-pay systems, and instead requires users of some forms of transportation—primarily auto drivers—to pay for other forms of transportation—primarily public transit. In addition to being unjust, this policy has led to excessive construction costs and the selection of transportation projects whose costs far outweigh their benefits. One symptom of this misallocation of funds is the growing congestion in America's urban areas.

Proponents of urban transit and intercity high-speed rail are using concerns about energy and global warming to promote the diversion of even more highway user fees to their favored forms of transportation. Yet as will be shown later, these alternative forms of transportation are unlikely to save energy or significantly reduce greenhouse gas emissions.

Brief History

The Federal-Aid Highway Act of 1956 created the Highway Trust Fund to support the construction of the Interstate Highway System, and dedicated a 3-cent-per-gallon federal gasoline tax and other driving-related taxes to that fund. One problem with this law is that a cents-per-gallon gas tax does not automatically adjust for inflation. Congress raised the tax from 3 cents to 4 cents per gallon in 1959, but did not raise it again until 1983. Inflation, combined with higher-than-expected costs of construction, particularly in the 2,300 miles of urban roads that Congress added to the system in 1956, delayed completion of the Interstate System from the original projected date of 1969 to around 1991.

As the Interstate Highway System neared completion in the 1980s, Congress could have phased out the gasoline tax, or at least reduced it to an amount sufficient to maintain the existing system. Instead, the distribution of highway revenues became increasingly politicized. For example, Congress first included earmarks in a transportation bill in 1982. Since then, the number of earmarks has grown exponentially: from 10 in 1982 to 152 in 1987, 538 in 1991, 1,850 in 1998, and 6,373 in 2005. The 2005 earmarks totaled almost 10 percent of the entire six-year authorization.

Further politicization began in 1983 when Congress first diverted highway user fees to mass transit. Even more diversions were permitted in the 1991 Intermodal Surface Transportation Efficiency Act. Among other things, ISTEA allowed metropolitan areas to treat some federal funds as ''flexible,'' that is, spendable on either highways or transit.

Another ISTEA program, New Starts, encouraged transit agencies to build high-cost alternatives to bus transit. Cities that built light rail or other rail projects collected billions in federal funds, while cities satisfied with bus service received a much smaller share of federal transit grants. This circumstance led more cities to propose rail. In turn, it generated a huge rail transit lobby consisting of rail engineering and design firms, railcar manufacturers, and rail contractors.

Technical vs. Behavioral Tools

Passage of the Clean Air Act of 1970 led to a debate that continues to this day: Are technical tools such as catalytic converters or behavioral tools such as disincentives to the automobile the best way to reduce the environmental effects of driving?

Nearly 40 years of experience have shown that technical solutions to air pollution and other auto-related problems can be phenomenally successful. Between 1970 and 2002, U.S. driving increased by 157 percent. Yet thanks largely to catalytic converters and other technical improvements, total auto emissions of carbon monoxide, nitrogen oxides, particulates, and volatile organic compounds declined by more than 50 percent.

In contrast, experience has shown that behavioral tools are extremely costly yet almost completely ineffective at reducing the environmental effects of driving. For example, between 1992 and 2006, federal, state, and local governments spent more than $160 billion (in 2008 dollars) on transit capital improvements—more than one-third of the inflation-adjusted cost of the entire Interstate Highway System. Two-thirds of these transit capital funds, or nearly $110 billion, were spent on rail transit.

In exchange for this huge cost, transit usage grew by less than 15 percent compared with a 45 percent increase in urban driving over the same period. While transit carried about 50 billion passenger miles of travel in 2006, urban interstates alone carried more than three-quarters of a trillion passenger miles.

Despite the mammoth investment in rail transit, transit's share of urban travel declined from 2.0 percent in 1990 to 1.5 percent in 2006. The biggest declines were in urban areas with rail transit, partly because rail transit is so costly that transit agencies are often forced to neglect the bus systems that carry most of their transit patrons.

Nor have land-use policies aimed at creating more compact urban areas proved successful. A 1974 urban-growth boundary compacted the San Jose urbanized area from less than 3,800 people per square mile in 1974 to more than 6,000 today. San Jose also built a 40-mile light-rail system. Yet transit's share of travel declined from 1.2 percent of passenger miles in 1982 (the earliest year for which data are available) to 0.9 percent in 2006, whereas transit's share of commuting trivially increased from 3.1 percent in 1980 to 3.3 percent today.

Similarly dismal results can be found in most other regions that used urban-growth boundaries to become more compact while investing heavily in rail transit. In Portland, Oregon, transit's share of commuting declined from 9.8 percent in 1980 to 7.6 percent today; in San Diego, from 3.5 percent to 3.1 percent; in Sacramento, from 4.1 percent to 2.4 percent; and in Denver, from 6.4 percent to 4.3 percent. Meanwhile, per capita miles of driving have increased in virtually every urban area.

Based on the results, the debate between technical and behavioral tools should be over. Yet Cato's review of long-range transportation plans for the nation's 70 largest metropolitan areas found that one-third of the plans relied primarily on behavioral tools to solve transportation problems, and another one-fifth relied partially on such tools.

The Importance of User Fees

The collapse of the I-35W bridge in Minneapolis led to calls for increased gas taxes to rebuild infrastructure. In fact, preliminary reports indicate that a design flaw, rather than lack of maintenance, may have caused the collapse. But even if more money is needed for highway infrastructure, it would be better to provide that money by ending diversions of federal and state gas taxes to nonhighway activities.

Even better would be a more sensible system of paying for infrastructure out of user fees. Gasoline taxes are not indexed to inflation and fail to account for increases in automobile fuel-efficiency. Road tolls make more sense because they provide transport agencies with accurate information about where people want to go and transport users with accurate information about how much it costs to provide road systems.

User fees such as gas taxes, highway tolls, and transit fares are a fair and equitable way of paying for transportation facilities because they ensure that the people who get the benefits are the ones who pay the costs. User fees also provide signals to users and producers about the costs and value of transportation facilities and services.

Nationally, gas taxes, tolls, and other highway user fees cover 85 to 90 percent of the cost of building, maintaining, and operating highways, roads, and streets. In contrast, transit fares cover only 28 percent of the cost of building and operating the nation's transit systems. On one hand, this means that transit riders have little sense of the real cost of their mode of travel. On the other hand, dependence on taxes encourages many transit agencies to build expensive urban monuments that please politicians, construction companies, and other powerful interests rather than provide high-quality, economical services to actual transit users.

Contrary to popular belief, transit can be funded by user fees. Atlantic City, New Jersey, has a private jitney system that runs 24 hours a day (more than most public transit systems) and is funded entirely by transit fares. In San Juan, Puerto Rico, privately owned jitneys called *públicos* carry more people than the public bus and rail systems combined, yet they are funded entirely by transit fares. Unfortunately, such private transit service is illegal in most cities in the 50 states.

Federal support for transportation, including transit, should be based on performance standards. For example, federal transit funds should be distributed to metropolitan areas based on a formula that includes the transit revenues earned by local systems. That would give transit agencies incentives to boost ridership rather than build urban monuments.

Energy and Greenhouse Gases

Rising gas prices and concerns about greenhouse gases have stimulated calls for the federal government to support more rail transit lines in urban areas and construct a large-scale intercity high-speed rail system. There are two important questions to ask about these policies (or any other

programs designed to save energy and reduce greenhouse gas emissions): Do they really work? and If so, are they worth the cost?

The second question is particularly pertinent. McKinsey & Company says that, by 2030, the U.S. can reduce its total greenhouse gas production to well below current levels by investing in technologies that cost less—sometimes substantially less—than $50 per ton of abated carbon dioxide–equivalent emissions. Any program that reduces greenhouse gas emissions at a cost of more than $50 per ton diverts resources away from programs that are more efficient.

Rail Transport Is Not the Answer

A close look at rail transport reveals that it rarely saves energy or reduces greenhouse gas emissions. To the extent that a particular rail line can do so, however, it will cost substantially more than $50 per ton.

This is partly because urban transit and intercity rail are both much more expensive and much more heavily subsidized than flying or driving (Figure 24.1).

The tremendous expense of rail transportation buys few environmental benefits. Contrary to recent media reports, rail transit is not attracting many people out of their cars even in the face of high gas prices. While urban auto usage in the first quarter of 2008 declined by 15.4 billion passenger miles from 2007, transit ridership grew by only about 450 million passenger miles. Transit thus accounted for only about 3 percent of the decline in driving.

Table 24.1
Costs and Subsidies in Cents per Passenger Mile

Mode	Cost	Subsidy
Air	13	0.1
Autos	23	0.5
Amtrak	56	22.0
Transit	85	61.0

SOURCES: *National Transportation Statistics 2008* (Washington: Bureau of Transportation Statistics, 2008), Tables 1-37, 3-07, 3-16, 3-27a, and 3-29a; 2006 National Transit Database, (Federal Transit Administration, 2007) ''Capital Use,'' ''Operating Expenses,'' and ''Fares'' spreadsheets; *National Economic Accounts* (Washington: National Bureau of Economic Analysis, 2008), Table 2.5.5; *Highway Statistics 2006* (Washington: Federal Highway Administration, 2008), Table HF10; *2006 Annual Report* (Washington: Amtrak, 2007).

NOTE: Subsidies include federal, state, and local support.

Moreover, the biggest decline in driving was in March, but in that month, transit ridership actually declined from March 2007. Transit is clearly not making a difference for most people who are affected by high fuel prices. This is because, even after decades of huge subsidies, transit systems cannot take people where they want to go, when they want to go there—which is especially a problem for inflexible rail systems.

Although rail advocates often lament that the United States is not more like Europe, huge subsidies to European rail transport have not worked there either. Nations in the European Union spend about five times as much as the United States subsidizing urban transit and intercity rail. In 2000, 84.4 percent of U.S. travel was by auto and only 0.6 percent by urban or intercity rail. In Europe, 79.2 percent of travel was by auto and 6.3 percent was by rail. These facts suggest that a quintupling of rail and transit subsidies will, at best, get less than 6 percent of travelers out of their cars and onto trains. Moreover, despite the subsidies, the percentage of European travel by rail is declining, whereas percentages of travel by auto and flying are both increasing. European planners project that the share of travel by rail and bus will continue to decline through 2030.

Even if spending billions on rail transport could attract significant numbers of people out of their cars, it would not save energy or reduce greenhouse gas emissions. Despite the apparent efficiency of steel wheels on steel rails, rail transport is very energy intensive, partly because rail vehicles are, for safety reasons, very heavy.

The Department of Energy reports that the average car on the road today consumes about 3,400 British Thermal Units (BTUs) per passenger mile. Under the Energy Independence and Security Act of 2007, that consumption is expected to decline to just 2,500 BTUs per passenger mile by 2035.

In contrast, urban transit buses use about 4,300 BTUs per passenger mile, about as much as the average sport-utility vehicle. Rail transit uses 2,800 BTUs and Amtrak uses 2,700 BTUs per passenger mile—less than today's average auto but more than the projected usage of an average auto in 2035. Although the rapid turnover of the nation's auto fleet allows auto efficiencies to quickly increase, the long-term nature of rail transit investments means that systems that are inefficient today will remain inefficient for many decades to come. People who ride transit to avoid high gas prices aren't really saving energy; they are merely passing on their energy costs to someone else.

Even when rail operations save some energy, that savings is mitigated by two related energy costs. First, the energy cost of building rail transit

is huge. Planners projected that the energy cost of building one light-rail line in Portland, Oregon, would be 172 times the annual energy savings from operating that line. Although highway construction also uses energy, highways are so much more heavily used that the cost per passenger mile is much lower.

Second, new rail transit lines do not replace buses so much as they lead transit agencies to reroute buses into feeder buses serving the rail lines. When taken as a whole, the bus-plus-rail systems often end up consuming more energy, per passenger mile, than the bus systems alone.

Nor does rail transit cost-effectively reduce greenhouse gas emissions. When the electricity needed to power rail transit is generated by fossil fuels, as it is in, for example, Baltimore, Cleveland, Denver, Miami, and Washington, D.C., rail transit often generates more greenhouse gases per passenger mile than the average sport-utility vehicle.

Rail operations generate minimal greenhouse gases where electricity comes from renewable sources, as in the Pacific Northwest. But, once again, this reduction is mitigated by the construction cost. For example, the greenhouse gas emissions from building a proposed light-rail line in Seattle are equal to 45 years of operational savings from that light rail. Cities in such areas would do better installing electric trolley buses than rail transit.

At best, then, the cost of saving a ton of greenhouse gas emissions by building new rail lines is very high. Reducing emissions through rail transit, when it reduces them at all, costs thousands or tens of thousands of dollars per ton. In contrast, making cars more fuel-efficient by using materials that are more lightweight or by improving traffic signal coordination can actually save money for every ton of greenhouse gases abated. Any policies aimed at reducing greenhouse gas emissions should ensure that investments are cost-effective.

Conclusion

Because transportation is so vital to American life, it is important to make transportation investments where they will do the most toward enhancing mobility. The best way to ensure that is to rely on user-pay systems.

There is little reason why a true user-pay system should require federal involvement. But to the extent that Congress remains involved in transportation issues, it should promote user-pay systems at the state and local level and take steps to ensure that state and local use of federal transporta-

tion funds is cost-effective. This means, among other things, distributing funds based on performance standards, eliminating earmarks, and streamlining transportation planning.

Suggested Readings

O'Toole, Randal. ''A Desire Named Streetcar: How Federal Subsidies Encourage Wasteful Local Transit Systems.'' Cato Policy Analysis no. 559, January 5, 2006.

_____. ''Does Rail Transit Save Energy or Reduce Greenhouse Gas Emissions?'' Cato Policy Analysis no. 615, April 14, 2008.

_____. ''Roadmap to Gridlock: The Failure of Long-Range Metropolitan Transportation Planning.'' Cato Policy Analysis no. 617, May 27, 2008.

_____. ''Rails Won't Save America.'' Cato Briefing Paper no. 107, October 7, 2008.

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—Prepared by Randal O'Toole

Policy Analysis

No. 644 September 15, 2009

Getting What You Paid For—Paying For What You Get

Proposals for the Next Transportation Reauthorization

by Randal O'Toole

Executive Summary

When Congress passed the Federal Aid Highway Act of 1956, it gave the Bureau of Public Roads a clear mission: oversee construction of a safe, high-speed Interstate Highway System. As that system neared completion in the 1980s, the mission of the Department of Transportation became increasingly murky. Now the department is supposed to reduce congestion; attract people out of their automobiles; clean the air; promote economic development; improve livability; create a sense of community: and accomplish a variety of other often conflicting goals—most of which are not easily quantifiable.

As the mission became muddied, each surface transportation reauthorization since 1982 has included an increasing number of earmarks, divided revenues among more and more different funds, and added lengthy rules for how those funds may be spent. Each earmark, apportionment, and rule has made transportation spending incrementally less efficient.

This increasing politicization of something that began life as a fairly efficient program is the predictable result of government involvement in what is essentially a private economic activity. The inevitability of such decline is a good argument for abolishing the U.S. Department of Transportation and devolving federal transportation programs to the states.

Short of that, Congress should make every effort to return to a system where people *get what they pay for*—that is, transportation user fees are dedicated to systems that benefit the people who paid those fees—and people *pay for what they get*—that is, people pay the full cost of the facilities they use.

As a second-best solution to abolishing the Department of Transportation, this paper offers eight proposals essential for the 2009 reauthorization to achieve these goals. These proposals include

1. Apportion funds to states based on population, land area, and user fees
2. Require that short-term plans be efficient or cost efficient
3. Create a citizen-enforcement process that will ensure efficiency and cost efficiency
4. Eliminate long-range transportation planning
5. Allow unlimited use of road tolls
6. Eliminate clean-air mandates
7. Avoid earmarks
8. Remove employee protective arrangements from transit law

Randal O'Toole is a senior fellow with the Cato Institute and author of The Best-Laid Plans: How Government Planning Harms Your Quality of Life, Your Pocketbook, and Your Future *and the forthcoming* Gridlock: Why We're Stuck in Traffic and What to Do about It.

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Interstate highways make up only 2.5 percent of road lane-miles, yet they carry 20 percent of all passenger travel and 11 percent of all freight.

Wanted: A Clear Mission

For government agencies to succeed, they need two things. First, agencies must have a clear, narrowly defined mission. "Government will malperform if an activity is under pressure to satisfy different constituencies with different values and different demands," says Peter Drucker. "Performance requires concentration on one goal. It requires setting priorities and sticking to them."[1]

Second, agencies must be supported by a funding mechanism that rewards managers for accomplishing the mission. As William Niskanen describes in *Bureaucracy and Representative Government*, government agencies try to maximize their budgets.[2] So any conflict between an agency's mission and its funding will be resolved in favor of funding.

When Congress created the Interstate Highway System in 1956, it gave a simple mission to the Bureau of Public Roads: oversee the construction of a safe, high-speed highway network throughout the United States. It reinforced this mission by funding the highways out of user fees in the form of gasoline, tire, and truck taxes. This gave the engineers who designed the system a form of feedback: if they built roads people used, they would generate the tax revenues needed to build more roads. While imperfect, it was superior to a system in which transportation planners chase after any tax dollars they can find.

The Interstate Highway System is the largest and most successful megaproject in history. Like all megaprojects, it went over budget and took longer to complete than anticipated. This was mainly due to the last-minute addition of more than 5,000 miles of expensive routes that had not been in the original plans and because the funding system created to pay for the highways failed to account for inflation.[3]

Ultimately, however, the interstates produced enormous benefits for everyone. Though interstate highways make up only 2.5 percent of the lane miles of roads in this country, they carry nearly a quarter of the highway passenger miles and more than 40 percent of highway freight.[4] Counting all forms of travel, they carry 20 percent of passenger miles and 11 percent of all freight.[5]

The increases in speed provided by interstate highways led to huge increases in America's productivity. Researchers estimate that new highways were responsible for an average of about a quarter of America's growth in productivity in the 1950s, 1960s, and 1970s. As the Interstate Highway System neared completion, this contribution tapered off, falling to just 7 percent in the 1980s.[6]

Interstate highways also proved to be far safer than other roads. Users of urban interstates suffer only half the fatalities per vehicle mile as users of other urban roads and streets, while users of rural interstates suffer well under half the fatalities per vehicle mile as users of other rural highways and roads.[7] By attracting traffic away from more dangerous roads, interstates have saved hundreds of thousands of lives.[8]

The Interstate Highway System accomplished all of this without any subsidies. Federal highway user fees paid for 90 percent of the cost of the system, and state highway user fees covered virtually all of the remaining 10 percent.

As the Department of Transportation completed its mission of building the Interstate Highway System, however, Congress failed to give it a clear, new mission. The department still collects gas taxes from the states and redistributes them to the states, but beyond that, the goal of federal surface transportation spending is unclear. Instead, Congress passed numerous laws that gave the department multiple goals that often conflict with one another.

Is the department's goal to promote mobility and relieve congestion, as stated in Congress's "declaration of policy" in 23 U.S.C. 101(b)? Is it to get urban drivers out of their automobiles, as might be inferred from the diversion of gas taxes to mass transit beginning in 1982? Is it to reduce automotive air pollution, as mandated in the Clean Air Act Amendments of 1990? Is it to promote compact urban development, inferred from some

of the requirements of the Intermodal Surface Transportation Efficiency Act of 1991?

This growing list of often incompatible goals has coincided with a severing of the incentives created by funding highways out of highway user fees. More than 15.5 percent of gasoline taxes are now automatically diverted to transit, where they are apportioned into at least 24 different funds.[9] Congress earmarks billions of dollars of other user fees, often to nontransportation projects.

The remaining revenues are apportioned into at least 10 other funds, not all of which are highway related. These include administration, interstate maintenance, the National Highway System, surface transportation, bridges, recreation trails, and metropolitan planning.[10] After deducting all diversions away from highways, as little as 61.5 percent of federal highway user fees are actually spent on highway construction and maintenance.[11] Because of this political division of funds into innumerable pots, state and local transportation planners no longer see any connection between the fees generated by transportation users and the share of federal transportation funds that they collect.

The severing of the connection between user fees and transportation planning is a predictable outgrowth of the Department of Transportation's increasingly murky mission. In 1950, University of Michigan economist Shorey Peterson warned that transportation decisions should focus on quantitative values such as safety and efficiency, and not "broad matters of public interest." Trying to account for the public interest would, he said, lead to "the wildest and most irreconcilable differences of opinion" and make transportation "peculiarly subject to 'pork-barrel' political grabbing."[12] This is exactly what has happened as the department's clear mission to build a highway network was replaced by multiple and conflicting goals.

Efficiency and Cost Efficiency

The Department of Transportation's muddy mission and lack of emphasis on user fees have led to two major problems with U.S. transportation. First, many users no longer get what they pay for. For example, large shares of highway user fees are diverted to other programs. Second, many users do not pay for what they get. For example, rail transit fares rarely cover the operating costs, much less the capital costs, of the trains.

These problems are pervasive throughout our transportation networks, and are not limited to certain modes. Some highway users are cross-subsidized by other users or subsidized by general taxpayers, while many transit users pay the full cost of their transportation.

Two fundamental concepts—*efficiency and cost efficiency*—should be at the center of a sound federal transportation policy. Unfortunately, these concepts have been neglected in recent decades. Although two of the last three transportation reauthorization bills included "efficient" or "efficiency" in their titles, the laws included no enforceable mechanisms to ensure that funds are efficiently spent. As a result, state and metropolitan transportation planners made almost no efforts to ensure that their programs are efficient or cost efficient, and in many cases it is clear that they are extremely inefficient.

Efficiency and cost efficiency are important because resources are limited. If limited resources are invested inefficiently, then public benefits will be reduced and opportunities to generate greater benefits elsewhere will be lost.

Anyone concerned about any transportation-related issues should favor policies that promote efficient and cost-efficient facilities. Worried about safeguarding the taxpayers' pocketbooks? Then you need efficient systems. Want to reduce greenhouse gas emissions? Then you need cost-efficient policies. Every ton of greenhouse gases abated by projects that cost $10,000 a ton means 999 tons are not abated by projects that cost only $10 a ton.

Efficiency and cost efficiency are two different things. *Efficiency* can be calculated only when all benefits and costs can be measured in dollars. A program or plan is efficient if all

The severing of the connection between user fees and transportation is a predictable outgrowth of the Department of Transportation's increasingly murky mission.

of the individual components or projects in the plan have benefits that are greater than their costs. If funding is limited, then only the projects with the greatest benefit-cost ratios should be funded.

Cost efficiency is calculated when some of the benefits cannot easily be measured in dollars. Those benefits might include such things as hours of congestion relief or tons of greenhouse gases abated. These benefits are estimated for each candidate project along with the dollar costs. The projects are then ranked in terms of dollars per hour of congestion relief, dollars per ton of greenhouse gases abated, and so forth. Only the projects with the highest rankings (lowest cost per unit of benefit) should be considered.

Efficiency calculations go hand-in-hand with projects that can be paid for out of user fees. If users are willing to pay for the full costs of building, maintaining, and operating a transportation facility, then that facility is efficient by definition. The weakening connection between transportation policy and user fees means that policy makers and planners have little incentive to worry about efficiency.

For many people, some parts of our transportation network have been subsidized for so long that the idea of funding transportation out of user fees seems as obsolete as letting private banks issue their own money. "Transportation is a public good," they say, meaning people benefit from it even if they don't use it.[13]

Through its orgy of earmarking and apportioning funds into dozens of ever-smaller pots of money, Congress signals that politics are more important than efficiency in allocating transportation funds.

To some degree, almost anything—food, shelter, transportation, even entertainment—can be considered a public good. But for the most part, these things are private. Nearly all of the benefits of passenger transportation go to the people who are being transported, so they should pay the cost. If society believes that low-income or disabled people need subsidies or a safety net, that is a different question and can be dealt with by the states, such as by using "transportation stamps" similar to food stamps.

Cost-efficiency calculations must be made when social concerns such as pollution or safety are paramount. To be effective, the benefits must be selected using the standards set by the Government Performance and Results Act of 1993: that is, they must be "outcome-related" and "quantifiable."[14]

Clean air, for example, is an outcome that can be quantifiably measured in pounds or tons of various pollutants. *Safety* is an outcome that can be measured in fatality, injury, or accident rates. *Reduction in vehicle miles traveled*, however, is not an outcome: it is a means to other outcomes such as clean air and safety. Since reducing the effects of driving may be more cost efficient at achieving these outcomes than reducing driving itself, reducing driving should not be a cost-efficiency goal.

The difference between efficiency and cost efficiency raises the potential for conflicts: the most efficient program may not be the most cost-efficient way of reducing pollution, and the most cost-efficient way of reducing pollution may not be the most cost-efficient way of increasing transportation safety. In practice, such conflicts are not as serious as might be thought because the most efficient programs also tend to be cost efficient in achieving various other social goals. Since reducing congestion also reduces energy consumption, pollution, and greenhouse gas emissions, projects that are cost-efficient at reducing one are often cost efficient at reducing the others.

Despite the importance of developing efficient and cost-efficient transportation programs, these concepts play very little role in transportation policymaking and planning today. Through its orgy of earmarking and apportionment of the remaining funds into dozens of ever-smaller pots of money, Congress signals that politics is more important than efficiency in allocating transportation funds.

The Department of Transportation gives minimal consideration to efficiency or cost efficiency when selecting which projects to fund. In one of the department's few token nods to cost efficiency, the Federal Transportation Administration has a "cost-effectiveness" rating requiring that, to get federal funding, transit projects must cost less than $24 per "hour of transportation user benefit."[15] This means, however, that a project that costs

$23.99 per hour is as likely to be funded as a project that costs only $0.99 per hour, even though the latter project is more than 24 times as cost efficient as the former.

To the extent that the terms "efficiency" and "cost efficiency" appear in state and metropolitan transportation planning documents, they are misunderstood or misused. For example, planners claimed that the plan for Los Angeles was cost efficient because its benefit-cost ratio was greater than 1.0.[16] This is a misuse of the term cost efficient, which is not measured in benefit-cost ratios: efficiency is. Moreover, a plan is only efficient if all projects in the plan have ratios greater than 1, yet a plan can have a benefit-cost ratio greater than 1 even if many of its projects have benefit-cost ratios less than 1. The Los Angeles plan made no effort to show that all of its projects had ratios greater than 1 (and some certainly did not).

Concerned about government waste, the Utah state legislature required Utah metropolitan planning organizations to do a cost-efficiency analysis of each project considered in their plans. After the plan for the Salt Lake City region was done, a state auditor found that planners had "cooked the books" to boost the apparent cost efficiency of certain politically favored projects.[17] Despite this public revelation, the metropolitan planning organization continued to support the politically favored, but cost-inefficient, projects.[18]

A recent review of long-range transportation plans for the nation's 70 largest metropolitan areas found that almost none of them considered efficiency or cost efficiency when preparing plans or selecting projects to be funded.[19] Many of the plans did not even mention such concepts, and those that did, other than Salt Lake City's, failed to offer any evidence that planners had given them serious consideration.

Among transportation users, too much debate over transport funding has focused on modes rather than efficiency. Is mass transit inherently superior to driving? Are trains inherently superior to buses? Should cities create auto-hostile streets in order to promote bicycling and walking?

Debates over modes are often based more on myth and fantasy than on any real evaluation of benefits and costs.[20] Rather than getting transfixed by one mode or another, federal policymakers should create systems that encourage state and local transportation planners to find the most efficient or cost-efficient modes and transportation facilities for their areas.

Congestion, Infrastructure, and Economic Stimulus

Since Congress's mission for the Department of Transportation began to lose focus in 1982, the amount of time people waste in urban congestion has quintupled and the cost of congestion has increased by 10 times. The Texas Transportation Institute estimates that the total cost of congestion to commuters was $78 billion in 2005.[21] When the cost to businesses that must, for example, purchase and operate more delivery trucks to make the same amount of deliveries is taken into account, the total cost must be more than $100 billion a year.[22] These costs directly resulted from the politicization of transportation decisions that were once made primarily on safety and efficiency grounds.

When the Interstate 35W bridge collapsed in Minneapolis in August 2007, many blamed the collapse on inadequate maintenance and infrastructure funding. "Nearly 30 percent of bridges in the U.S. are structurally deficient or functionally obsolete," CBS News breathlessly reported. "You heard that right: one-third of the bridges in the U.S. should have a sign that says, 'Use at your own risk.'"[23]

Although congestion is a real and serious problem, the infrastructure panic was largely fabricated. The National Transportation Safety Board concluded that a design flaw, not inadequate maintenance, led to the Minnesota bridge collapse. No U.S. bridge has failed due to inadequate maintenance for more than 20 years. In the 30 years prior to that, only three to four bridge collapses can be blamed on inadequate maintenance. These include Tennessee's

When a Utah state auditor found that planners had "cooked the books," Salt Lake City planners continued to support the cost-inefficient projects.

Hatchie River Bridge in 1989, New York's Schoharie Creek Bridge in 1987, and Connecticut's Mianus River Bridge in 1983.[24] The collapse of the Silver Bridge across the Ohio River in 1967 led to significantly improved maintenance procedures, but the collapse itself was mainly due to a design flaw.[25]

What about the "one-third of the bridges in the U.S." that are supposedly risky to drive upon? That's based on Department of Transportation reports that 12.1 percent of roadway bridges are *structurally deficient* and 13.3 percent are *functionally obsolete*.[26] Note that CBS News rounded up the total—less than 26 percent—to "almost 30 percent," which it immediately inflated to "one third" (which, of course, is 33.3 percent).

CBS News rounded up 25.4 percent to "almost 30 percent," which it immediately inflated to "one third"—when in fact the real number of deficient bridges was 12.1 percent.

At most, however, the real number was 12.1 percent (meaning that the CBS News report was merely 175 percent too high). The 13.3 percent of bridges that are "functionally obsolete" are not in any danger of falling: they merely have narrow lanes, inadequate overhead clearances, overly sharp on- and off-ramps, or other outdated design features. These bridges pose no risk to auto drivers unless the drivers themselves behave recklessly.[27]

The 12.1 percent "structurally deficient" bridges have suffered enough deterioration or damage that their load-carrying abilities are lower than when they were built. But that still doesn't mean they are about to fall down; although they may be closed to heavy loads, the most serious problem is that they cost more to maintain than other bridges.[28]

A close look at the data reveals that more than 90 percent of structurally deficient bridges are local—not state or federal—and more than 80 percent are rural.[29] The average structurally deficient bridge is also less than three-fourths the size of an average bridge in good condition.[30] In other words, these are not George Washington or Golden Gate bridges; the vast majority are small rural county bridges that receive little use. Moreover, far from being a growing crisis, the number of structurally deficient bridges has declined by nearly 50 percent since 1990.[31]

This should not be surprising since, as noted recently in the *New York Times*, U.S. spending on infrastructure as a percentage of our economy is greater than at any time since 1981. The real problem, the *Times* reports, is "an utter lack of seriousness in deciding how that money gets spent." The results are numerous "monuments to waste."[32]

This is exactly what happened when Congress decided to stimulate the economy by spending more money on transportation. First, the fabricated infrastructure panic led to a serious misallocation of resources. Instead of focusing funds on projects that would relieve congestion, highway funds were focused on infrastructure repair. Second, other transportation funds were dedicated to "monuments to waste": politically attractive, yet practically useless, capital projects.

The stimulus bill raised two important questions that will come up again during transportation reauthorization. First, how can Congress target funds where they are most needed? Second, how do we pay for infrastructure when the federal government is already experiencing record deficits?

The answer to both questions is simple: user fees. Infrastructure may be publicly or privately owned, but most infrastructure—including virtually all transportation infrastructure—is privately used. That means it can be funded out of user fees such as tolls and fares.

Funding infrastructure out of user fees ensures that infrastructure investments are worthwhile, because a key test of value is whether users are willing to pay capital and operating costs. Infrastructure funded out of user fees also makes no long-term contribution to federal deficits. An ideal economic stimulus, then, would be in the form of loans, not grants, to state and local governments to build infrastructure whose costs will be repaid out of user fees.

Some infrastructure may produce values that cannot be captured by user fees, such as reducing pollution or greenhouse gas emissions. Funding of such infrastructure should focus on cost efficiency. Coordinating traffic signals can save people time, fuel, and reduce greenhouse gas emissions at a cost of about

$10 per ton. Building rail transit may not even reduce greenhouse gas emissions, but when it does so, it costs more than $5,000 a ton. No new rail line should be built until all traffic signals are coordinated and other more cost-efficient solutions are fully funded.

Any efforts to use infrastructure spending to stimulate the economy, whether within or in addition to transportation reauthorization, should rely heavily on user fees and other tools to ensure that such funds are spent in a cost-efficient manner.

Finding Appropriate Federal and State Roles

The increasing numbers of earmarks in federal transportation law, the growing diversion of funds from highway users to other forms of transportation, and the apportionments of federal transportation dollars to more and more different funds are all symptoms of the politicization of surface transportation programs. This politicization, combined with the failure of transportation systems to evolve beyond technologies developed in the 1950s, are signs of the stagnation that inevitably results from government control.

The best way to fix these problems will be for Congress to abolish the Department of Transportation, eliminate federal gas and tire taxes, and allow the states to take over surface transportation programs. The states, in turn, should privatize state highways. Counties and cities should manage local roads and streets through a combination of privatization and funding through vehicle-mile charges or local gas taxes. These changes should lead to dramatic improvements in transportation productivity, safety, and speeds.

This ambitious long-term agenda is unlikely to happen in the 2009 or 2010 reauthorization of federal surface transportation programs. In lieu of such reform, the following eight proposals aim to improve the efficiency of surface transportation programs without foreclosing options to implement more dramatic reforms when the opportunity arises.

Eight Proposals

1. Apportion Funds to States on the Basis of Population, Land Area, and User Fees

Currently, complex formulas in 23 U.S.C. 104 and 49 U.S.C. sections 5336, 5337, and 5340 apportion most federal surface transportation funds into at least three dozen different accounts. These complex formulas are the result of political debates and negotiations that seek to find a "fair" allocation of revenues between modes and geographic areas. But the result may not be fair and is certainly not efficient. The current highway formula may not be fair because it takes money from densely populated states (so-called "donor states") and gives it to sparsely population states (so-called "recipient states"). The transit formulas are not efficient because they reward transit agencies that build or retain high-cost rail transit systems and penalize agencies that focus on low-cost bus systems.

These complex formulas should be replaced with a simple formula that will not dictate how funds will be spent. Instead, it should simply distribute funds to the states based on simple measures including population, land area, and the transportation user fees collected in the state. Making user fees a prominent part of the formula will give state and metropolitan planners incentives to invest in efficient transportation projects that will cover much, if not all, of their costs out of user fees. It will also discourage them from relying on general taxes to pay for transportation projects, because—unlike user fees—such taxes will not be matched by federal funds.

User fees would include gasoline taxes, motor vehicle registration fees, weight/mile taxes, tolls, transit fares, and any other fees collected by transportation agencies that are dedicated to transportation. They would not include any gasoline taxes or other fees that are spent on nontransportation purposes. Nor would they include general sales, property, or income taxes that state or local governments might appropriate to transportation.

The current formulas for apportioning

Congress should distribute funds according to a simple formula that accounts for each state's population, land area, and transportation user fees.

Rewarding states for collecting user fees will lead to a "race to the top" in which states increasingly rely on user fees rather than general taxes to pay for transportation.

highway funds use such factors as lane miles, vehicle miles, and the ratio of diesel fuel used on the highways in each state (which is apparently a proxy for truck traffic). None of these are truly goals and could be seen as creating perverse incentives, for example, to build too many lane-miles of roads. Population (the people to be served by transportation networks), land area (the area to be served), and user fees (representing how people value transportation) are much better factors that avoid such perverse incentives.

A formula that allocates 50.0 percent of the funds based on user fees, 45.5 percent based on population, and 4.5 percent based on land area produces results that are reasonably close to the current allocations. The main losers from such a formula are states that, because of low gas taxes or other factors, do not currently collect many user fees.

For example, the two biggest losers are Wyoming and Georgia, which also have two of the nation's lowest gas tax rates of 14 and 8 cents per gallon.[33] Wyoming contributes 0.5 percent of all federal highway taxes, but collects only 0.2 percent of state and local user fees, so its share of federal funds would decline by 55 percent. Georgia contributes 3.9 percent of all federal highway taxes but collects only 1.2 percent of state and local user fees, so its share of federal funds would decline by 41 percent.[34]

These and other states can increase their share of federal funds by increasing gas taxes or other transportation user fees. This would lead to a "race to the top" in which state and local areas increasingly relied on user fees rather than sales, property, or other general taxes to pay for transportation facilities.

Beyond the allocation formula, Congress may want to direct states to allocate a certain percentage of their funds to urban areas based on population, user fees, or other criteria. Congress may also want to limit federal matching funds to no more than a fixed amount—say 50 percent—for any capital project (and that fixed amount should be the same for all types of projects). Beyond this and the cost-efficiency criteria in Proposal 2, below, Congress should keep specifications for how funds should be used to a minimum.

2. Require That Short-Term Plans Be Efficient or Cost Efficient

Congress currently requires states and metropolitan areas to write short-term transportation plans, known as *transportation improvement plans*, or TIPs. However, the law contains few requirements that would ensure that TIPs are cost efficient. To make such plans cost efficient, Congress should require that planners follow a four-step process:

1. TIP planners should identify goals that are true outputs. Congress may want to specify certain goals including safety, congestion relief, clean air (in nonattainment areas), and energy efficiency. Under no circumstances should goals include such things as reduced miles of driving, population densities, or per-capita transit ridership, as these are only means to output-oriented goals.
2. Planners should identify all possible transportation projects that could achieve one or more of those goals.
3. Planners should rank all of the projects according to their efficiency and cost efficiency in achieving each of the goals. Rankings should take into account both the amortized capital cost and the operating cost of each project, including dollar, energy, and other costs. Each alternative in the plan would consist of the projects that have the highest cost-efficiency rankings in meeting one of the goals of the plan, up to the limit of available funds.
4. Based on these alternatives, planners should develop a preferred alternative that achieves some appropriately weighted average of all of the goals.

3. Create a Citizen-Enforcement Process That Will Ensure Efficiency and Cost Efficiency

Congress should place the burden of proof that transportation improvement plans are effi-

cient or cost efficient on the state agencies and metropolitan planning organizations writing the plans. To enforce this burden and to discourage state and metropolitan planners from "cooking the books" to bias the process towards politically favored projects, the secretary of Transportation should create an appeals process that citizens can use to ask the secretary to review and reject plans that may not be efficient or cost efficient.

Citizens could challenge plans based on their failure to consider a full range of projects, because they selected a project or alternative that is not cost efficient in meeting the goals, or because they fabricated data to make it appear that a project is cost efficient when it is not. States or urban areas whose plans are not cost efficient would be denied a share of their federal funds until they are made cost efficient.

Similar appeals processes already exist in many other agencies. For example, the Forest Service allows citizens to appeal its plans, and the Department of the Interior has a Board of Land Appeals. These appeals processes provide a low-cost way of settling disputes and ensuring that local officials follow national laws and policies. The Department of Transportation's appeals process would be unique in that it would focus on cost efficiency, something that has not been an enforceable standard in most other agencies.

Citizens unsatisfied with the Secretary's decision could take the plans to court. Since the efficiency and cost-efficiency criteria are clear and easily quantifiable, a minimal amount of litigation should be needed to set standards that state and metropolitan transportation agencies must follow. Once those standards are set, agencies will have an incentive to meet them in order to avoid having their plans overturned by the Secretary.

4. Eliminate Long-Range Transportation Planning

Congress currently requires states and metropolitan areas to write and regularly update long-range (20 years or more) transportation plans.[35] Yet these plans actually do more harm than good.

No one can predict transportation needs 5 years from now, much less 20 years. Yet, once written, plans often get politically locked in, no matter how actual needs or facts change.

For example, as a part of a political deal among all of Denver's local governments, Denver wrote a transportation plan that included building a commuter-rail line to the distant suburb of Longmont. When the plan was written, planners estimated it would cost $16 per trip to carry riders on the line. Since then, projected costs have increased by 59 percent and projected ridership has declined by 45 percent. The line is now projected to cost $60 per trip, while bus-rapid transit along a parallel route is projected to cost less than $10 per trip.[36] Yet neither Denver's transit agency nor Denver's metropolitan planning organization is seriously considering not building the rail line.

Since no one can accurately predict the future, Congress should not require states and metropolitan planning organizations to pretend they can. Congress should also eliminate requirements that at least 1.25 percent of federal transportation funds should be spent on planning. Beyond the steps listed in Proposal 2, Congress should not specify any detailed planning processes, such as public involvement or clean-air conformance.

5. Allow Unlimited Use of Road Tolls

As cars become more fuel efficient and alternative fuels become available, the gas tax is increasingly ineffective as a way of raising funds for transportation. In the long run, tolls are a better way of paying for major highways, especially highways that are likely to become congested.

When Congress first created the Interstate Highway System in 1956, it rejected tolls as a way of paying for roads because of the congestion and delays created at tollbooths. Today's electronic tolling systems, including automatic recording of license plates of vehicles without toll transponders, eliminates this objection. Tolls have the added advantage over gas taxes in that they can vary according to the actual cost of the road and by the amount of traffic in order to smooth out the peaks and

To ensure efficient transportation funding, citizens should be able to appeal plans that lack a full range of alternatives, that are not cost efficient, or that fabricate data.

troughs in travel demand and thereby eliminate congestion.

While Congress has removed the absolute prohibition against tolls, current law still contains several restrictions against tolls. For example, 23 U.S.C. 129 authorizes a limited number of toll projects. Beyond this, 23 U.S.C. 301 requires that all other federally funded roads be "toll-free." These limits and restrictions should be eliminated.

6. Eliminate Clean-Air Mandates

Air quality was a serious problem in most U.S. urban areas in the 1960s, and automobiles were guilty of causing much of that problem. The Clean Air Act of 1970 led to two very different approaches to solving that problem. First, the law required automakers to build successively cleaner cars. Second, the Environmental Protection Agency encouraged cities to adopt plans that would attempt to modify travel behaviors by discouraging driving and promoting mass transit.

Today, nearly 40 years later, the results of these two approaches are clear. The technical solutions to tailpipe emissions have largely eliminated air pollution in most urban areas.[37] At the same time, efforts to reduce air pollution by getting people to drive less were largely unsuccessful, and may even have done more harm than good: one popular technique to discourage driving is to increase congestion, yet cars pollute more in congested traffic.[38] As commuting expert Alan Pisarski recently told the Institute of Transportation Engineers, "the solution to air quality issues in the United States is attributable to . . . at least 95 percent technology (some say 105 percent)," while behavioral tools provided only minus 5 to 5 percent of the solution.[39]

Although air quality should be an important goal of transportation, it should not override other goals such as congestion relief or safety.

According to Harvard transportation experts Arnold Howitt and Alan Altschuler, the Clean Air Act Amendments of 1990, combined with the 1991 transportation reauthorization law, "arguably made air quality the premier objective of the nation's surface transportation programs."[40] Yet, because they focus on ineffective behavioral controls aimed at reducing per-capita driving, many of the clean-air requirements in the law are not cost efficient. Some, such as restrictions on adding highway capacity in congested areas, are actually counterproductive, because new capacity can reduce the pollution generated by cars in congested conditions.

While clean air should remain an important cost-efficiency goal of the short-term transportation plans, as described in Proposal 2, it should not be the overriding goal. Nor should Congress prescribe solutions that may not be cost-effective, or effective at all, in cleaning the air.

7. Avoid Earmarks

Congress did not include any earmarks in transportation reauthorization bills until the 1982 bill, which included 10 earmarks. Since then, they have grown exponentially: 152 in 1987, 538 in 1991, 1,850 in 1998, and about 7,000 in 2005.[41] At this rate of exponential growth, the next reauthorization, if passed in 2010, will have nearly 40,000 earmarks!

Some earmarks are clearly not cost efficient because they are not even spent on transportation purposes. For example, about 30 earmarks in the 2005 reauthorization were for visitors' centers in various national parks and other public lands. A few of these were related to transportation, but many were not.

Beyond this, earmarks are almost by definition not cost efficient, because if they were cost efficient, they would be funded by a cost-efficient planning system without the earmark. Some members of Congress may argue that the current transportation planning system is not cost efficient and the earmarks are aimed at overcoming this lack of cost efficiency. But it would be better to make the process cost efficient than to hamper it with even more earmarks.

8. Remove Employee Protective Arrangements from Transit Law

Urban mass transit is the most disappointing performer and least-productive part of the nation's transportation system. Since 1964, when Congress first passed the Urban Mass Transportation Act, transit costs have

risen far faster than either revenues or ridership. This signals a tremendous decline in productivity.

"It's uncommon to find such a rapid productivity decline in any industry," wrote University of California economist Charles Lave in 1994. "If transit productivity had merely remained constant since 1964," Lave wrote, "total operating costs would be more than 40 percent lower" in 1985, the last year for which he had data.[42] By 2006, after adjusting for inflation, operating costs per trip were 2.3 times as much as they were in 1964, while average fares had fallen by 24 percent from 1964.[43] All of this additional cost came out of taxpayers' pockets.

Thanks to this decline in productivity, transit is the most expensive form of travel in the U.S. In 2006, Americans spent about 13 cents per passenger mile flying, 23 cents driving, and 56 cents on Amtrak, but they spent 85 cents per passenger mile for public transit. While users pay nearly all of the costs of flying and driving, and 60 percent of the costs of Amtrak, taxpayers subsidize more than 70 percent of the costs of transit.[44]

One reason for transit's loss in productivity is the lack of any cost-efficiency requirements in federal transit funding. Instead, much of that funding, such as New Starts money, is distributed on a first-come, first-served basis, which actually encourages transit agencies to propose high-cost projects rather than ones that are cost efficient. Proposals 2 and 3, regarding cost efficiency, should fix this problem.

Another reason for the decline in productivity, however, is the "employee protection" requirement in federal transit law.[45] This provision effectively gives transit labor unions the right to veto any federal grants to transit agencies, forcing the agencies to agree to union demands.

For example, one way transit agencies can increase productivity is to contract out transit service to private operators such as First Transit and Stagecoach. For example, Denver contracts out about half of its bus routes and pays contractors only 53 percent as much per bus mile as it spends on its own directly operated routes.[46]

Given this cost advantage, transit agencies that now operate their own routes could almost double service to transit riders, at no additional cost to taxpayers, by contracting out. Despite this, 92 percent of transit riders in 2007 were carried by directly operated services.[47] The reason is that unions object to contracted services because the contracting companies are often nonunion. Most contracting is done in places where transit has not traditionally been unionized, such as Phoenix and Las Vegas. Denver contracts half its service only because the Colorado legislature requires it to do so, a law the unions would like to change.[48]

As a result, while the labor productivity of almost every other industry steadily increases, transit's labor productivity—the number of trips carried per employee—declined by more than 1 percent per year between 1990 and 2006.[49] Cost-efficiency requirements, combined with the repeal of the employee protection requirement, will help the transit industry to reverse this decline.

Conclusion

America's surface transportation network would be extraordinarily improved if only transportation users were able to get what they pay for and asked to pay for what they get. Getting what you pay for ensures that scarce transportation dollars are not spent on facilities that people really do not need. Paying for what you get ensures that the facilities we build are the ones that people will really use.

Achieving these twin goals means making several major changes in the next reauthorization of federal surface transportation programs. One important change is to encourage states to focus on user fees rather than taxes to pay for transportation improvements. A second important change should be to promote the cost-efficient use of transportation resources. Finally, Congress should ensure that these changes are properly implemented by directing the Department of Transportation to create a citizens' enforcement process. Mak-

Thanks to a rapid decline in productivity, urban transit is the most expensive form of travel in the United States.

ing these changes will save taxpayers billions of dollars and lead to a tremendous increase in national wealth and productivity.

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Policy Analysis

No. 617 May 27, 2008

Routing

Roadmap to Gridlock
The Failure of Long-Range Metropolitan Transportation Planning

by Randal O'Toole

Executive Summary

Federal law requires metropolitan planning organizations in urban areas of more than 50,000 people to write long-range (20- to 30-year) metropolitan transportation plans and to revise or update those plans every 4 to 5 years. A review of plans for more than 75 of the nation's largest metropolitan areas reveals that virtually all of them fail to follow standard planning methods. As a result, taxpayers and travelers have little assurance that the plans make effective use of available resources to reduce congestion, maximize mobility, and provide safe transportation facilities.

Nearly half the plans reviewed here are not cost effective in meeting transportation goals. These plans rely heavily on behavioral tools such as land-use regulation, subsidies to dense or mixed-use developments, and construction of expensive rail transit lines. Nearly 40 years of experience with such tools has shown that they are expensive but provide negligible transportation benefits.

Long-range transportation planning necessarily depends on uncertain forecasts. Planners also set qualitative goals such as "vibrant communities" and quantifiable but incomparable goals such as "protecting historic resources." Such vagaries result in a politicized process that cannot hope to find the most effective transportation solutions. Thus, long-range planning has contributed to, rather than prevented, the hextupling of congestion American urban areas have suffered since 1982.

Ideally, the federal government should not be in the business of funding local transportation and dictating local transportation policies. At the least, Congress should repeal long-range transportation planning requirements in the next reauthorization of federal surface transportation funding. Instead, metropolitan transportation organizations should focus planning on the short term (5 years), and concentrate on quantifiable factors that are directly related to transportation, including safety and congestion relief.

Randal O'Toole is a senior fellow with the Cato Institute and author of The Best-Laid Plans: How Government Planning Harms Your Quality of Life, Your Pocketbook, and Your Future.

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Sacramento's plan to spend $3 billion on transit capital improvements was projected to increase transit's share of rush-hour commuting from 2.6 percent to a mere 3.0 percent.

An Attachment to Failure

Sacramento, California's, 2006 Metropolitan Transportation Plan admitted that transportation plans written for the region "during the past 25 years have not worked out."

- Despite building light rail and making other efforts aimed at "luring drivers out of their autos," the share of transit riders who "have access to an automobile [and] can otherwise choose to drive" was decreasing.
- Despite efforts to promote alternatives to driving by discouraging sprawl and promoting high-density infill, sprawl "continues to out-pace infill . . . and businesses increasingly prefer suburban locations."
- "Even though gasoline prices are at an all-time high, the total amount of driving has more than doubled since 1980."
- Revealingly, the report added, "lack of road building and the resulting congestion have not encouraged many people to take transit instead of driving."[1]

Planners did have one piece of good news: "Total smog emissions from motor vehicles are now half what they were in 1980." However, that was not due to anything the planners had done, but because "technology has reduced auto emissions by 98 percent from 1980 models."[2]

Sacramento planners remained undaunted by those results. Their new long-range transportation plan "continues the direction of" previous plans. The new plan would use "transportation funds for community design, to encourage people to walk, bicycle, or ride transit" and give "first priority to expanding the transit system."[3] In particular, planners proposed to spend nearly $3 billion on transit capita improvements, but only $2 billion on improvements to state highways.[4] The Sacramento Area Council of Governments, which wrote the plan, also agreed to use "'smart growth' strategies" such as "mixed use and compact development, infill," and similar land-use policies—some of which would be subsidized with transportation funds—designed to "reduce the number and length of auto trips."[5]

Yet the planners' own analyses projected that the new plan would work no better than the previous ones. The huge investments in transit were expected to expand transit's share of total travel from 0.9 percent in 2005 to just 1.1 percent in 2027. Transit's share of rush-hour commuting would increase from 2.6 percent to a mere 3.0 percent.[6] Despite spending nearly $300 million on bicycle and pedestrian improvements, walking and cycling's share of travel and commuting were projected to decline. Even though "congestion will continue to worsen inside the urban area," planners predicted that per capita driving would continue to grow.[7]

Since 1962, Congress has required all metropolitan areas—regions of more than 50,000 people—to write long-range metropolitan transportation plans and to update those plans at least every four to five years.[8] Sacramento is one of a growing number of regions whose transportation plans focus on using *behavioral tools* to address congestion, toxic pollution, greenhouse gases, and other problems created by the automobile. These tools, which together are sometimes called *smart growth*, include the following:

- Making urban areas more compact (i.e., increasing population densities) by downzoning lands on the urban fringe and increasing the zoning densities of lands in developed areas, in the hope that people won't travel as far on typical trips.
- Promoting developments that mix residential with retail and commercial uses so more people will be able to walk to shops and services instead of drive.
- Encouraging more pedestrian-friendly design, such as retail shops that front on sidewalks instead of parking lots.
- Investing heavily in transit, especially rail transit, as well as bicycle and pedestrian facilities.

- Reconstructing streets and highways with the aim of slowing auto traffic and making the streets more attractive to pedestrians and cyclists.

Though only a few plans have been candid enough to admit it, many planners see increased congestion as one of the tools they use to discourage auto driving. "Congestion is our friend," says Gainesville, Florida, planner Dom Nozzi. Congestion "is a powerful disincentive for sprawl [and] creates political pressure to create a quality transit, bicycle, and walking system."[9]

Planners in Portland, Oregon, and Minneapolis-St. Paul agree. "Congestion signals positive urban development," say Portland planners, who have decided to allow rush-hour congestion on most major highways in the region to deteriorate to stop-and-go conditions.[10] In fact, they say, "transportation solutions aimed solely at relieving congestion are inappropriate" in most of the region.[11]

Minneapolis-St. Paul's 1996 transportation plan noted that the region's roads "are approaching or exceeding capacity." Yet planners decided that "expansion of roadways will be very limited in the next 25 years." "As traffic congestion builds," the plan stated hopefully, "alternative travel modes will become more attractive."[12] So when planners say they need to do regional transportation planning to reduce congestion, what they often mean is that they want to do regional planning to *increase* congestion in the unlikely hope that (as the Sacramento plan put it) the "lack of road building and the resulting congestion [will encourage] people to take transit instead of driving."[13]

These behavioral tools—congestion, rail transit, and compact development—are expensive. The Texas Transportation Institute estimates that congestion cost the nation's commuters $78 billion in 2005 and that the amount of time people waste sitting in congestion has hextupled since 1982. That has forced drivers to waste 2.9 billion gallons of fuel a year, adding 28 billion tons of CO2 to the atmosphere.[14] And that doesn't even count the cost of congestion to businesses, which some estimates indicate are comparable to the costs to commuters.

The typical light-rail line costs as much per mile as a mile of four-lane freeway, yet carries only 15 percent as many people as a single freeway lane.[15] Heavy rail, such as Washington Metro and San Francisco BART, carries more people but costs more. Commuter rail costs less but carries fewer people. Meanwhile, urban-growth boundaries and other efforts to make urban areas more compact necessarily drive up land prices and increase housing costs by two to four times.[16]

Behavioral tools are also intrusive. Instead of providing a level playing field, government must favor certain property owners, housing types, and modes of transportation over others. While no one can say that government planners are forcing them to live or travel a certain way, when planners divert highway user fees into transit with the expectation that highway congestion will increase, they are imposing huge costs on auto drivers and giving huge subsidies to transit riders. Similarly, when planners restrict low-density development and subsidize high-density housing, they are denying many families access to the form of housing that most Americans say they prefer—a single-family home with a yard.

Some people might excuse the behavioral tools their expense and intrusive nature if they worked as promised—but they do not. As Sacramento planners found, transportation plans can emphasize alternatives to the automobile, but most people still drive. Cities can subsidize the construction of mixed-use developments, but most people living in those developments will still mostly travel by car. Regions can impose more compact, higher-density development, but the percentage of travel by car will not significantly decline.

If anything, the behavioral tools make matters worse. Higher density development combined with minimal new road construction necessarily means more traffic congestion. Cars in stop-and-go traffic use more energy and emit more toxic fumes and green-

"Congestion is our friend," says one urban planner.

house gases (something that many metropolitan transportation plans fail to account for).[17] Even if residents of compact cities drive slightly less than residents of so-called sprawl, the energy and pollution costs of congestion may more than make up for any savings.

Despite those problems, the number of regions adopting these tools seems to grow each year. Part of the blame can be placed on the urban planning profession, which promotes these ideas incessantly and which is slow to learn from its mistakes.[18] But much of the blame should be placed on Congress, which effectively gave authority over the nation's urban transport systems to urban planners in the Intermodal Surface Transportation Efficiency Act of 1991.

A review of transportation plans for the nation's largest urban areas reveals that too many plans focus on behavioral tools when technical tools could solve congestion, pollution, and other problems at a much lower cost. But even if planners followed a rational process, long-range metropolitan transportation planning as mandated by Congress would fail. Long-range regional problems are simply too complex for anyone to predict or fix. Congress should repeal long-range planning requirements in federal law and replace them with a short-range planning process built around incentives and user fees.

Too many metropolitan plans focus on expensive yet ineffective behavioral tools when technical tools could solve congestion, pollution, and other problems at a much lower cost.

History of Urban Transportation Planning

The Bureau of Public Roads' 1947 proposal for an Interstate Highway System called for 37,700 miles of highways between, but not through, the nation's major urban areas. Bureau leaders believed that urban highways should be funded locally, not by federal taxes.

However, the mayors of America's big cities lobbied Congress to modify the proposal so that they could share the benefits of federal highway funding. So, when Congress created the Interstate Highway System in 1956, it added 2,300 miles of radial and ring roads through and around major urban areas.[19]

The federal government paid 90 percent of the cost of these roads out of federal gasoline taxes dedicated exclusively to this purpose. Some federal grant funds are essentially an open-access resource, meaning that the states and cities that apply for the most expensive projects tend to get the most money. But highway funds were distributed to the states according to a strict formula based on population, land area, and road mileage. Since each state knew how much money it would get, it had an incentive to spend the money effectively.

In 1962 Congress added a requirement that urban areas have "a continuing, comprehensive transportation planning process carried out cooperatively by states and local communities." This became known as the "3Cs" process, for "continuing, comprehensive, and cooperative." Congress required that between 1.5 and 2.0 percent of federal highway funds be spent on this planning process.[20]

Congress did not provide detailed guidance about what the plans should consider. But in 1963 the Bureau of Public Roads developed a planning process that included identification of local goals and objectives, forecasting future travel needs, developing and evaluating alternative transportation networks, and recommending a plan that could be funded with available financial resources. The plans, the bureau added, should cover 10 basic elements: economic factors affecting development, population, land use, transport facilities including mass transit, travel patterns, freight facilities, traffic control, zoning and land-use codes, financial resources, and social and community values such as parks and historical sites.[21]

Up to this point, nearly all federal funding for urban areas was limited to interstate freeways and a few other major roads, so plans did not need to be very complicated. In 1964 Congress passed the Urban Mass Transportation Act, providing federal funding, out of general funds, for mass transit. But initially, Congress allocated very little money to transit.[22]

In 1975, the Department of Transportation issued rules requiring joint highway and transit planning. The rules required every state to create or designate a metropolitan planning organization (MPO) for each urban area that would write the plans. While the MPOs were still expected to write long-range plans, most of the emphasis in the new rules was on short-term plans known as the transportation improvement program, or TIP, which identified the actual projects to be built in the immediate future. While long-range plans typically looked ahead for 20 or more years, the TIPs only covered the next five years. The TIPs, says one historian, "changed the emphasis from long-range planning to shorter range transportation system management, and provided a stronger linkage between planning and programming."[23]

San Francisco began operating the Bay Area Rapid Transit system in 1972. BART's planners expected that the system would lead to higher-density development in rail corridors, thus giving more people easy access to rail service.[24] But subsequent evaluations revealed that BART had little impact on local land uses. One analysis found that, if anything, population densities increased more in areas distant from BART lines than near BART stations.[25] That was partly because existing residents opposed any changes in zoning and land uses near BART stations.

In response, the Urban Mass Transit Administration (forerunner of today's Federal Transit Administration) required communities proposing to spend federal money on rail transit to commit themselves to "local supportive actions," such as rezoning areas around transit stations for higher densities, in order to increase rail transit ridership.[26] This was the first time that any federal transportation rule required cities to regulate land uses in order to be eligible for federal funding.

Through the early 1970s, federal funds for transit were so sparse that most cities spent their share on buses rather than expensive rail projects. BART, for example, had been built entirely with local funds. But in 1973, Congress allowed cities to cancel planned interstate highways and use the funds for transit capital improvements.[27] Since many inner-city residents opposed the construction of new freeways through their neighborhoods, several cities took advantage of this law. But doing so created a dilemma because the funds could only be used for capital improvements; no transit system had enough operating revenues to run all the buses that it could purchase with the cost of an interstate freeway.

Rail transit was the solution to this dilemma. Rail transit had huge capital costs, yet its operating costs were not significantly greater than operating buses. Portland and Sacramento were among the cities that decided to build new light-rail lines with freeway money precisely because rail was expensive.

When Congress created the Interstate Highway System in 1956, the Bureau of Public Roads projected that it would be completed by 1968. Yet portions of the system remained unfinished through the 1980s. A major reason was that the gas tax used to pay for the system did not automatically adjust for inflation, and a 4-cent-per-gallon tax as of 1980 was inadequate to complete and maintain the system. In 1982 members of Congress proposed to increase the tax by 4 cents per gallon, but transit supporters in Congress threatened to oppose the measure unless transit received a share of the increase. Congress agreed to increase taxes by 5 cents per gallon, dedicating 1 of those cents—the equivalent of $1.1 billion per year—to transit.[28] Since then transit has received 20 percent of most increases in highway user fees.

The Department of Transportation declared the Interstate Highway System to be completed in 1991. This led to the question of how federal gas taxes, so long dedicated to the Interstate Highway System, should be spent in the future.

Congress's answer, contained in the Intermodal Surface Transportation Efficiency Act of 1991, was muddy at best. The law created a National Highway System consisting of the interstates plus another 100,000 or so miles of major highways, and allowed states to spend federal money maintaining and expanding

Portland and Sacramento decided to build light-rail lines precisely because rail was expensive.

any of those roads. With respect to urban areas, Congress specified that a large portion of funds previously dedicated to highways was now "flexible," that is, MPOs could spend the money on either highways or transit.[29]

ISTEA also created a new pool of money called *New Starts* that would be used for new rail transit lines and other transit capital projects. Unlike highway money, which was distributed to states based on a strict formula, New Starts money was offered to urban areas on a first-come, first-served basis. This meant that MPOs that proposed expensive rail projects would get more federal funds per capita than MPOs that were satisfied with bus service. Under ISTEA, 40 percent of federal transit grants were distributed in this way. Naturally, the number of regions proposing rail lines grew rapidly.

Even though congestion is a major cause of air pollution, Congress discouraged regions from trying to reduce pollution by relieving congestion.

ISTEA also made long-range transportation planning far more important, and the requirements for it more elaborate, than ever before. Metropolitan planners were required to consider air pollution, the connections between land use and transportation, and quality of life issues.

Historically, transportation engineers had handled the highly quantitative issues involved in planning: safety, efficiency of movement, and so forth. But the broader issues raised by ISTEA were beyond the engineers' training or abilities. In fact, they were beyond anyone's training or abilities, but members of the urban planning profession believed they could handle such questions.

In short, ISTEA did two things. First, it freed up the use of federal highway user fees so that urban areas could spend them on a wide variety of activities, not just interstates. Second, it imposed a broad planning process that relied on both qualitative values, such as "quality of life," and long-range unknowns, such as future oil prices and American's responses to those prices.

Planning under ISTEA was made even more complicated by the Clean Air Act Amendments that Congress passed in 1990, the year before ISTEA. The CAAA placed severe constraints on what urban areas could do if they were rated by the Environmental Protection Agency as out of compliance with air pollution rules. Even though congestion was a major cause of air pollution, the CAAA discouraged regions with severe pollution problems from building more roads to relieve congestion, and instead encouraged them to use behavioral tools to discourage driving.

When combined with the Clean Air Act Amendments, ISTEA contrasted strongly with the planning process developed by the Bureau of Public Roads in the 1960s. The BPR process considered land uses, regional growth, and personal travel preferences to be outside of transportation planning. ISTEA regards all of those things as variables that the planners can manipulate: planners can restrict development over here, force increased growth over there, and redesign cities to shape people's future travel decisions. While the BPR goal was to provide a safe and efficient transportation system, ISTEA's goal is to promote the general welfare by reducing pollution, saving energy, improving the efficiency of land use, and taking other steps to make cities more "sustainable."

In a 1950 conference organized by the Bureau of Public Roads, economist Shorey Peterson noted that, "It is in character for the engineer to be mainly concerned, not with broad matters of public interest, but with specific relations between road types and traffic conditions." Peterson specifically warned against trying to account for the "public interest" when planning roads. "Control of road improvement through judging its relation to the general welfare is as debatable, as devoid of dependable benchmarks as deciding the proper peacetime expenditure for national defense or the right quantity and quality of public education," said Peterson. "Controlled in this way, highway projects are peculiarly subject to 'pork barrel' political grabbing."[30]

Federal transportation funding since the passage of ISTEA has proven Peterson correct. Federal transportation earmarks, unheard of before 1980, have exploded from 10 in 1982 to about 500 in 1991 to more than 6,000 in 2005.[31] Cities are competing to outdo one

another in building the most expensive rail projects. And in a growing number of urban areas, transportation planning seems to be about almost anything but transportation.

Congressional authorization for the federal gasoline tax expires every six years, so Congress has reauthorized the tax twice since ISTEA, each time preserving or adding to long-range planning requirements. The next reauthorization is scheduled for 2009, which gives Congress an opportunity to revisit this process.

Procedural Problems with Transportation Plans

Virtually all of the long-range transportation plans reviewed contained severe procedural shortcomings. To understand these flaws, it is important to know how the planning profession itself believes that such plans should be written.

The Rational Metropolitan Transportation Plan

Accepting for the moment the idea of long-range transportation planning, what should such a plan contain? The *rational planning model* is supposed to find the best way to achieve society's goals. "In this model," says one planner, "goals are first identified and priorities set among desired consequences of policy. Alternative strategies (means to the goals) are then examined and a choice made of the 'best' alternative."[32]

The process described by the Bureau of Public Roads in 1963 is based on that model, according to which planners first define their goals and criteria. At least some of those criteria should be measured in terms of quantifiable outputs so that the plan and its alternatives can be fairly evaluated. Tons of toxic air pollution is quantifiable; "sustainability" is not.

Planners should also insure that their criteria are *outputs*, not inputs. The amount of walking people do is an output; the "walkability" of a neighborhood is an input. When planners rely on vague terms like *sustainability* and *walkability*, they run the risk of writing plans that are judged on basis of their intentions, not their results. An appropriate set of criteria might include the number of transportation-related fatalities, hours wasted in congestion, tons of air pollution, and BTUs of energy consumption.

Next, planners need to forecast future travel needs and expectations. The best travel models today are based on detailed observations of how people actually live. Such observations, usually collected from thousands of people in the form of travel diaries, are used to predict how people will respond to changes in their incomes, educations, family sizes, travel costs, congestion, transportation alternatives, and urban design features such as density and mixed-use developments.

Even if the travel diaries are an accurate reflection of how people live today, many things about the future remain unknowable, including local population growth, energy prices, other transportation costs, and how people will respond to those costs. This means many of the inputs needed for future travel forecasts will necessarily be based on best guesses.

One way planners can handle this is through a *sensitivity analysis*, which asks how transportation outputs vary in response to fixed changes—say, plus or minus 20 percent—in assumed inputs. If changing a particular input does not greatly change the outputs, then the accuracy is not important. If a particular input does have a large effect on outputs, then planners should put some effort into making certain that input is as accurate as possible and in reporting to the public the effects on the plan if the assumption proves inaccurate. They could even build *feedback* into the plan to automatically change if some of the assumptions prove wrong.

The next step is to devise alternative transportation plans. To do this, planners must make a list of all possible transportation projects: new roads, new transit lines, new bicycle and pedestrian facilities, other improvements such as traffic signal coordination, and new ways of managing facilities such as high-occupancy vehicle lanes or tolling. To this list some

The planning profession developed the rational planning model, which involves setting goals, preparing alternatives, evaluating those alternatives, and developing the preferred alternative.

Plans should be transparent, that is, it should be clear to readers how planners developed their preferred alternative.

planners might add different forms of land-use regulation such as urban-growth boundaries, incentives for infill development, form-based zoning codes, and other rules designed to change people's travel preferences.

For each project, planners should estimate the cost to taxpayers, the cost to everyone else, and the benefits in terms of the criteria developed in the first step: for example, the effects of the project on fatality rates, congestion, pollution, and energy consumption. Capital costs should be annualized by amortizing them over the life of each particular project so that both benefits and costs can be compared on an annual basis. Each of the benefits can then be divided into each project's annual dollar cost to get cost per life saved; cost per hour of congestion relief; cost per ton of air pollution relief; and cost per BTU of energy saved. The projects can then be ranked using those criteria.

For the actual alternatives, many planners might develop a transit-emphasis alternative, a highway-emphasis alternative, and so forth. But that would be unnecessarily polarizing. A better way is to build alternatives around each of the major criteria: a maximum-safety alternative, a minimum-congestion alternative, and so forth. The maximum-safety alternative would include all of the projects with the highest safety rankings that the region can afford with available funds. Thus, the region might have four alternatives—safety, congestion, pollution, and energy—each of which cost the same but which produce different levels of outputs and meet the criteria in different ways.

At that point, planners could compare the projects and criteria to see which are complementary and which conflict. For example, traffic signal coordination can improve safety and reduce congestion, pollution, and energy use. But building a new highway might reduce congestion at a cost of consuming energy during construction. Planners could first ask: it is possible to redesign the project so that it produces a net energy savings? If not, then planners have to consider tradeoffs: how much energy are we willing to spend to save an hour of congestion? Some trade offs, such as people's time and energy, are easy because both can be valued, but others, such as fatalities, will require more subjective judgment.

Based on the tradeoffs, planners could design a preferred alternative that attempts to provide the best-possible balance of outputs for the fixed amount of funds that are available. The alternative should also specify where it would make sense to spend more money if more became available through, say, a local tax increase or increased federal grants.

After the plan is adopted, planners should monitor to insure that the goals are being achieved. If possible, monitoring should include feedback mechanisms so that the plan can self-correct if any of its assumptions prove wrong. For example, if a particular project turns out to cost much more than planners originally projected, the plan could provide for the substitution of alternative projects that would be more cost effective.

Each of these steps should include consultation with the public to insure first, that planners do not neglect any important criteria, potential transportation projects, or alternatives and second, that the tradeoffs planners make in developing the preferred alternative meet public approval. Moreover, the plan should be transparent; that is, it should be clear to any reader how planners made each step along the way toward development of their preferred alternative.

In sum, a rational transportation plan should include the following:

- Quantitative output criteria by which the plan can be judged;
- State-of-the-art forecasts of travel needs and travel behavior;
- Sensitivity analyses for questionable assumptions;
- A list of all possible transportation projects with projections of costs and benefits, with the benefits firmly associated with each major criterion;
- Project rankings in terms of cost per each criteria-related benefit;
- Several alternatives, consisting of vari-

ous collections of potential projects, possibly one for each major criterion;
- Estimates of the financial costs and the transportation, environmental, and other benefits of each alternative;
- A preferred alternative that proposes a list of projects in an attempt to balance the various criteria;
- Consultation with the public at key stages along the way, with efforts to make the planning process transparent so that reviewers can understand why planners made their recommendations;
- Monitoring to insure that the plan is working as intended with feedback mechanisms that would add or subtract projects if more money becomes available or if certain assumptions prove wrong.

Actual Metropolitan Transportation Plans

To compare metropolitan transportation planning with the standard rational planning model, I read the most recent plans for more than 75 regions, including plans covering the 67 largest urban areas and several smaller ones. None of the plans come close to the rational process described above or even the more basic process defined by the Bureau of Public Roads in 1963.

No plan did sensitivity analyses of critical assumptions. None bothered to project potential benefits or cost-effectiveness of projects considered. All but a handful of plans failed to include any realistic alternatives, and many failed to project the effects of the proposed plan on transportation. As a result, plans lacked transparency: taxpayers and other readers of most plans would have no idea how projects were selected, whether those projects or the plans themselves were cost effective at meeting plan goals, or even, in many cases, whether the plans met any goals.

Criteria. Most metropolitan transportation plans include goals and objectives that serve as evaluation criteria. However, most of the criteria in most of the plans are qualitative. Even when the criteria are potentially quantifiable, planners rarely list the quantitative measures they use to evaluate alternatives.

As previously noted, such factors as hours of congestion delay, tons of air pollution, or transport-related fatalities are all highly quantifiable. But many plans include such goals as:

- Promote livable communities;[33]
- Foster vibrant communities;[34]
- Build community structure;[35]
- Provide environmental justice;[36]
- Provide a multimodal transportation system;[37]
- Increase accessibility;[38]
- Create walkable districts;[39]
- Protect wetlands;[40]
- Preserve open space and agricultural land;[41]
- Discourage urban sprawl;[42]
- Plan for workforce housing;[43]
- Safeguard historical, cultural, and archeological resources:[44] and
- Support economic development.[45]

Many of those goals, such as livable communities or community structure, are not quantifiable at all. Other goals are quantifiable, but not in terms that are comparable to other goals. How many units of environmental justice are people willing to trade off for more open-space protection? How many units of workforce housing are people willing to trade off for safeguarding historical resources? How many units of economic development are people willing to trade off for adding another mode to their multimodal system? Given that most plans contain many of such goals, there is no way to find an optimum plan. The resulting decisions are necessarily political, not rational.

Some goals, such as accessibility and walkability, are really inputs, not outputs. Just because planners judge a neighborhood to be walkable doesn't mean that anyone is actually walking. One plan defines *accessibility* as "the number of opportunities (such as jobs, shopping, etc.) that can be reached from a given location within a given amount of

Nearly all of the plans reviewed used an abbreviated planning model that failed to identify or evaluate alternatives, making it impossible for people to know if the plan was the best way of achieving goals.

travel time by auto, transit, or nonmotorized modes."[46] Like walkability, this is an input, not an output.

Other terms, such as *sustainable*, *livable*, and *multimodal*, are code words, and in most cases they are codes for the same thing: alternatives to the automobile. "Sustainability" is often used to mean nonpetroleum-based transportation. "Livability" often means designing cities for pedestrians and cyclists, not autos. "Multimodalism" means spending money on any transportation mode except for autos even if most people continue to use autos.

Part of the problem is that Congress has required planners to include or consider a number of vague goals, including supporting economic vitality, enabling global competitiveness, promoting energy conservation, and accessibility.[47] Having set the precedent by requiring unquantifiable, vague, and/or conflicting goals, Congress has effectively encouraged planners to add more such goals of their own.

Most plans offer little hint as to how planners account for the tradeoffs between these goals. But the plan for Nashville includes a system of scoring projects that provides a revealing glimpse into planners' priorities. The most important scores include the following:

- Public transit capital improvements—21 points
- Has a positive impact on transit—9 points
- HOV use—4 points
- Travel demand management (carpooling, vanpooling, etc.)—9 points
- Bike/pedestrian facilities—8 points
- New highway lanes—8 points
- Congestion pricing—2 points
- Eligible for federal and state funding—50 points[48]

The Nashville plan scores transit projects four times higher than highway projects even though less than 1.5 percent of Nashville commuters take transit to work.

The Census Bureau says that nearly 97 percent of all Nashville-area commuters get to work by car, while less than 2 percent walk or bicycle and less than 1.5 percent take transit to work.[49] Yet bike-pedestrian facilities score the same as new highway lanes, and transit scores nearly four times as many points as new highway lanes. Interestingly, the highest number of points is scored by projects "eligible for federal and state funding."[50] In other words, if someone else will pay for it, it doesn't matter what the project is, Nashville will build it.

Nashville's scoring system makes the biases of regional planners readily apparent. Most transportation plans do not include such a scoring system, which helps to hide whatever biases planners may have. As will be shown below, many plans still spend far too much money on forms of transport that move very few people, indicating that the biases of Nashville's planners are shared by many other metropolitan transportation planners.

Forecasts and sensitivity analyses. Nearly all plans contain at least some forecasts of population growth and future travel demands. Few describe how reliable the travel forecasts might be. No plan reported that planners did any sensitivity analyses to deal with questionable assumptions and forecasts.

Project listings with benefits and costs. Most plans listed projects that would take place under the proposed plan. Some plans included additional projects that planners considered desirable but for which no funding was available.

Typically, the metropolitan planning organizations compiled these lists by asking state, regional, and local transportation agencies for lists of the projects they would like to complete in the next 20 years or so. The Jacksonville plan calls this the "wish list."[51] MPOs rarely, if ever, add alternative projects to the list.

In most cases, the wish lists ended up being far more expensive than the total financial resources available to the region. That puts the MPO in the position of having to determine which projects will get funded and which will not. That decision is really the essence of the long-range plan.

This process is open to abuse. If we assume that government agencies regard tax dollars as a common-pool resource, then they will have an incentive to submit lengthy wish lists and may have an incentive to propose expensive solutions (such as rail transit)

when low-cost solutions (such improvements to bus transit) would work just as well.

For example, the Ft. Collins plan used an elaborate scoring system to rank projects within several categories—highway, transit, bike/pedestrian, and so forth. When it came time to select from the high-ranking projects among those categories, the MPO essentially punted, saying it would "spend the resources that have been allocated to each project category at an equal rate."[52] In other words, if funding was available for only half of all projects, it would fund half (by dollar value) of each category's projects. This, of course, would motivate the various agencies to make their project lists as long as possible.

Transportation planning models allow planners to estimate the effects of individual projects on congestion and other outputs. Yet no plans listed any such effects, other than financial costs, for their projects. In one case, an MPO assessed the effects of individual projects on congestion, but did not include its assessment in the plan itself. For its 2025 long-range plan, the San Francisco Metropolitan Transportation Commission published a separate "evaluation report" which listed dozens of highway and transit projects.[53] The report included one set of tables listing the cost of each project and a separate set of tables estimating the number of hours of congestion relief each project would provide.

Unlike the plan itself, the report was not available for download on the Internet. But those people who obtained copies of the report could calculate the cost per delay hour and rank projects by this measure. There is no evidence that the MTC ever made that calculation itself. Its plan proposed to fund several projects that had the highest costs per delay hour saved while it did not fund many projects with much lower costs per hour, so it is clear that the MTC did not consider this to be an important criterion.

This MTC report has been used by low-income advocates in a discrimination lawsuit against the MTC charging that it is building expensive transportation facilities for high-income neighborhoods while neglecting low-cost transportation improvements that would serve low-income neighborhoods.[54] Perhaps not surprisingly, the MTC published no comparable report for its more recent 2030 plan.

Alternatives. The biggest gap in metropolitan transportation planning is the lack of alternatives. Of the more than 70 plans reviewed, only two—those for Jacksonville and Salt Lake City—included real alternatives and evaluated the effects of those alternatives.

Some plans considered no alternatives at all to the proposal. That makes it appear that the proposed plans are completely arbitrary or that they are based on some hidden (or not-so-hidden) agendas and that planners do not want to reveal to the public how badly the plans perform compared to other alternatives.

Many plans include a "no-build" alternative, meaning no new capital improvements after ones that are already in progress are finished. Planners usually project a huge increase in congestion under this alternative, which allows them to say that the preferred alternative "reduces" congestion—when in fact it merely increases it by a smaller amount than the no-build plan. In Austin, Texas, where more than 90 percent of commuters drive to work, planners predict that no-build will increase the amount of time people waste in traffic by more than 100 times, but under the proposed plan, it will increase by "only" four times.[55] Since no other alternatives were evaluated, people have no way to know whether some other plan could have prevented such an increase.

Some plans, including Portland's, add a "priority" or "needs" alternative, which could also be called the "wish-list" alternative, as it includes all of the projects submitted to the MPO by the various transportation agencies in the region. Since the total cost of all projects is, in some cases, many times the total amount of funds available, the needs alternative, like no-build, is not a realistic option.

The 2030 plan for Sacramento included the 2025 plan as an "alternative" to the proposed plan. Since part of the 2025 plan has already been accomplished and the 2030

Of the more than 70 plans reviewed here, only two included real alternatives and evaluated the effects of those alternatives.

plan extends five more years into the future than the previous plan, the 2025 plan is not a real alternative.[56]

A few plans, such as one for Pittsburgh, considered different "vision scenarios." Pittsburgh's included four visions: current trends, dispersed development, compact development, and corridor/cluster development. These are all land-use alternatives, of course, not transportation alternatives. Whatever kind of alternatives they are, Pittsburgh planners made no effort to evaluate the transportation or other effects of each scenario. Instead, they settled on a preferred scenario and based their transportation plan exclusively on that.[57]

Albuquerque's plan provides "extensive opportunities" for alternatives to driving but does not bother to estimate whether anyone will take advantage of those opportunities.

Buffalo's 2025 transportation plan considered three alternatives. Alternative A emphasized highway capacity improvements, B emphasized transit improvements, and C emphasized investments that would promote economic development. The proposed plan called for equal investments in all three.[58]

In addition to a no-build alternative, Jacksonville also considered highway emphasis and transit emphasis alternatives.[59]

Salt Lake City offered three alternatives: continuation of the previous plan; freeway emphasis, and arterial emphasis. Despite the names, however, the differences between the alternatives were actually very minor. All three alternatives included five light-rail and commuter-rail lines, as if those lines were not in question. All also included several streetcar lines, though not necessarily on the same streets.[60]

Projections of Costs and Benefits. An important step in the federally mandated planning process is insuring that the proposed plan is feasible considering available financial resources. So most plans estimated the costs of the proposed plan. But many did not bother to estimate the benefits or other effects of the plan. Will the plan lead to more or less traffic congestion? Will heavy investments in transit shift travel from automobiles? Will such shifts reduce congestion and air pollution? Planners for Boston, Ft. Lauderdale, Miami, Minneapolis-St. Paul, San Diego, the San Francisco Bay Area, and many other major urban areas could not be bothered with answering these and other questions relating to plan performance.

For example, Albuquerque's plan notes that, in 2005, 77.4 percent of commuters drove alone to work and only 1.4 percent rode transit. Their plan provides "extensive opportunity for commuters to move away from the 'Drive Alone' category to other non-'SOV' [single-occupant vehicle] modes," including commuter rail, bus-rapid transit, and bikeways. However, they did not estimate how many people would actually take advantage of such opportunity. Opportunities, of course, are inputs; actual use would be an output.

While Buffalo planners went to the trouble of identifying alternatives to its 2025 plan, they failed to estimate the effects of those alternatives.[61] Moreover, Buffalo did not include any alternatives in its more-recent 2030 plan.[62]

For each of the alternatives in the Jacksonville plan, planners estimated such things as number of hours of congestion delay, average rush-hour travel speeds, and numbers of transit riders for each of these alternatives along with the selected plan.[63] Jacksonville's plan was unusual in that it was written by outside consultants rather than in-house planning staff; perhaps other MPOs should go that route.

For each of their alternatives, Salt Lake City planners estimated such impacts as the number of hours of congestion delay, average commute speeds, tons of air pollution, and many other effects.[64] Curiously, they did not make a comparable evaluation for the preferred alternative. Though the plan devotes 65 pages to the impacts of the selected plan (compared with 17 pages for the three alternatives, 16 pages of which describe methods and 1 page of which presents results), readers will search in vain to find total hours of congestion delay, average commute speeds, tons of air pollution, or many of the other impacts estimated for the alternatives.[65] That greatly reduces the usefulness of the alternatives.

Preferred Alternative. Every plan includes a preferred alternative, though, of course,

since many present no other alternative, they simply call the preferred alternative "the plan" or the "fiscally constrained plan." Most plans included projections of the effects of the plan on future transportation: congestion, pollution, the share of travel using transit, and so forth. But without alternatives for comparison, members of the public have no way of knowing whether the selected plan is the best way deal with metropolitan transportation issues.

For example, as evidence that the draft Los Angeles metropolitan transportation plan is cost-effective, planners say that the projected benefits are slightly more than twice the expected costs.[66] But this does not prove that a plan is cost effective. Suppose a plan consists of three projects, each of which costs a dollar. One project produces $5 worth of benefits, one $0.75, and one $0.25. All three projects together earn twice the benefits of their costs, but the second and third projects are not efficient. Further, merely knowing the benefit-cost ratio of selected projects says nothing about whether potential projects that were rejected or not considered at all might have produced even greater benefit-cost ratios. If the plan could have adopted projects that cost a dollar and returned $2, but adopted the projects that returned less than a dollar instead, then it is not cost effective.

Transparency. Few of the plans are transparent to members of the public. How did planners select the projects being considered in the plans? How did they select the projects that would be funded under the proposed plan? How did they weigh the relative importance of congestion relief, safety, pollution abatement, land-use manipulation, or providing alternatives to the automobile? The plans provide few answers to these questions.

Monitoring and Feedback. Most of the plans claim that the agencies will monitor implementation. However, few include many details about how the monitoring process would work, and none included any feedback mechanisms or triggers that might require plan amendments or revisions. For the most part, it appeared that planners included language about monitoring more to meet federal planning guidelines than because they believed monitoring was important or that it could lead to improvements in on-the-ground decisionmaking.

Substantive Problems with Transportation Plans

Although less than 8 percent of Portland-area commuters take transit to work, Portland, Oregon, has become famous for its plans that emphasize compact urban development and public transit over new highways. But in January 2007, the Federal Highway Administration sent Metro, Portland's MPO, some unusually critical comments about its draft metropolitan transportation plan. Among the agency's comments:

- "It is difficult to find the transportation focus" in the plan. "The current focus is about land use and attaining land use goals through other means, specifically by controlling transportation."
- "The plan should allow for highway expansion as a viable alternative. The transportation solution for a large and vibrant metropolitan region like Metro should include additional highway capacity options."
- "The plan should acknowledge that automobiles are the preferred mode of transport by the citizens of Portland—they vote with their cars everyday."[67]

The comments also criticized Portland's zoning codes that allow unusually narrow streets; the region's failure to do anything about high crime rates on its light-rail lines; and street designs that require buses to block traffic instead of pulling into loading bays when stopping for passengers. If nothing else, the letter revealed that at least some transportation professionals in the U.S. Department of Transportation are not persuaded that behavioral solutions are the answer to Portland's transportation needs.

"It is difficult to find the transportation" in Portland's transportation plan, said the Federal Highway Administration.

Plans that spend disproportionate amounts of money on transit or focus on controlling land use are relying on behavioral tools to modify people's transportation choices.

The lack of alternatives, sensitivity analyses, and transparency in the planning process allows regional planning agencies to gloss over the fact that many plans are not really about solving transportation problems. Instead, like Portland's, too many are about social engineering—that is, changing people's behavior by artificially increasing the costs of some kinds of transport while artificially reducing the costs of others. Even if the public supported such behavioral modification, the plans provide no way of knowing whether it works, that is, whether the plans produce any meaningful changes in behavior and whether those changes are worth the cost.

Polls frequently show that urban residents consider traffic congestion to be one of the most serious problems with living in American cities.[68] As previously noted, the Texas Transportation Institute estimates that congestion costs American commuters $78 billion per year.[69] Most metropolitan transportation plans pay lip service, at least, to relieving congestion. But few end up doing anything more than slowing the rate of increase in congestion, and a few won't even promise to do that.

The presence of one or both of two indicators can reveal if transportation planners are placing undue emphasis on behavioral tools. The first is the share of the region's capital funds that planners propose to devote to transit. The second is the emphasis planners place on regulating land use to achieve transportation objectives.

An Overemphasis on Transit

New York is the only U.S. metropolitan planning area where transit carries more than 15 percent of commuters to work. In only four other regions—Boston, Chicago, northern New Jersey, and Washington—does transit carry more than 10 percent of commuters. Yet more than 30 metropolitan transportation plans—well over half of those for which data are available—propose to spend more than 20 percent of the region's capital funds on transit.

New York's plan to spend 56 percent of the region's capital funds on transit is not significantly out of line with the 40 percent of the region's commuters who use transit (Table 1). But the Twin Cities' plan to spend 70 percent of the region's capital funds on transit is far out of line with the 4.8 percent of commuters who take transit to work.

The transportation plan for St. Louis rejected the regional transit agency's proposal to spend $4.9 billion on light-rail lines and other capital improvements. The plan noted that the transit agency's projected revenues could not even cover its operating costs, much less the cost of light-rail expansion. The plan added that county voters had rejected a tax increase needed to support transit operations and that, even with that tax, the agency's revenues would be insufficient to support the proposed expansions.[70]

With the exception of St. Louis, all regions propose to spend a greater share of capital funds on transit than the share of commuting carried by transit. Transit also costs more, per passenger mile, to operate and maintain than highways. Moreover, tax subsidies are needed to cover more than 70 percent of transit capital and operating costs, while subsidies to highways total only about 12 percent of highway costs.[71] So, in one sense, all of the urban areas in Table 1 except St. Louis are spending too much on transit. But assuming that some basic level of support is needed for people who have no access to autos, the really serious problems are in regions that are spending more than about 20 percent of their funds on transit *and* are spending several times more on transit than transit's share of commuters.

In deciding to spend a large share of its funds on transit, Salt Lake City used a scoring system to rank projects on the basis of congestion relief, cost effectiveness, safety, environment, and community factors. Several rail transit projects scored very high. However, a state auditor found computational errors in the process.[72] Correcting the errors reduced the ranking of one rail project from 2 to 19 and a second project from 7 to 18, while several highway projects were pushed ahead of those rail projects. Together, the two downgraded projects absorbed 80 percent of state

Table 1
Overspending on Transit?

Metro Area	Transit's MTP* Funds (%)	Share of Commuters (%)	Metro Area	Transit's MTP* Funds (%)	Share of Commuters (%)
Minneapolis-St. Paul	70	4.8	Tucson	25	2.5
San Francisco	68	9.6	Savannah	25	2.5
Miami	68	5.5	Dallas	24	1.9
Hartford	67	3.0	Sacramento	23	2.4
Honolulu	57	8.7	Baltimore	23	7.6
New York	56	39.9	Cleveland	21	4.9
Boston	55	11.6	Little Rock	21	0.9
Philadelphia	55	9.7	Madison	19	4.9
Ft. Lauderdale	53	2.6	Portland ME	19	2.1
Springfield	49	1.5	El Paso	18	2.4
Denver	47	4.3	Tampa	18	1.4
Portland OR	43	7.6	Bridgeport	17	9.3
Atlanta	38	4.0	Jacksonville	16	1.4
Houston	37	3.2	Richmond	13	2.1
Seattle	36	7.0	Bakersfield	13	1.6
Phoenix	34	2.5	Austin	12	3.8
Albany	33	2.9	Akron	11	0.9
Durham	33	4.9	Detroit	11	1.7
Ft. Collins	32	1.0	Oklahoma City	11	0.7
San Diego	31	3.1	Charlotte	10	2.6
Washington	31	14.7	Cincinnati	10	2.8
Albuquerque	28	1.5	Las Vegas	10	3.5
Memphis	28	1.6	Milwaukee	10	3.5
Buffalo	28	3.6	Birmingham	9	3.2
Los Angeles	27	4.5	Anchorage	5	1.5
Salt Lake City	27	3.9	St. Louis	0	2.8

Source: Transit's share of metropolitan transportation plan funds from the most recent draft or final metropolitan transportation plans for each region. Transit's share of each regions' commuting from *2005 American Community Survey*, Table GCT0804, Percent of Workers 16 Years and over Who Traveled to Work by Public Transportation for urbanized areas or for counties in cases (such as New York) where metropolitan regions do not coincide with urbanized areas.
Note: Regions not shown on this list, such as Chicago and Pittsburgh, did not include enough data in their plans to calculate this number.
*Metropolitan transportation plan.

funds.[73] "Instead of providing funding for both road and transit projects which are essential to congestion relief," noted the auditor, planners "used almost all of the funds for transit projects."[74]

On reviewing the auditor's report, the council of governments decided to ignore the new ranking and continue funding the transit projects. "The reason for selecting the same projects is that transit provides a balanced transportation system," said the council.[75]

The council was also unfazed by a report issued at about the same time finding that Salt Lake City's transit agency has systematically overestimated light-rail ridership by about 20 percent.[76] If existing light-rail lines carry fewer people than the agency has claimed, then new light-rail lines are likely to

The Utah Transit Administration admitted it had overestimated transit ridership.

Increasing transit's share of travel from 2 to 3 percent is a trivial return from spending 40 to 50 percent of a region's transportation capital funds on transit.

do less to relieve congestion than planners predict.

The president of the council of governments responded by saying, "I'm satisfied that regardless of what the numbers are, UTA makes an impact." Despite the new numbers, "I only see us going forward" with transit.[77] In other words, the actual amount of congestion relief or cost-effectiveness of that relief is irrelevant despite the scoring system in the planning process. Clearly, in this case, the planning process is less important than the preconceived notions of the members of the council of governments who make the final decisions.

Those preconceived notions are often wrong. In 1979, University of California (Irvine) economist Charles Lave observed that many people assume "that public transportation is vastly more energy-efficient than automobiles" and "that investing money to improve transit facilities will attract many more passengers."[78] Both of those assumptions, Lave said, were wrong in 1979. They remain wrong today: transit is not particularly environmentally friendly, and even if it were, no U.S. region has been able to attract more than about 1 percent of commuters out of their cars by making huge investments in transit.[79] Those metropolitan transportation plans that estimate future transit usage confirm this: none project that transit will significantly gain market share over the automobile.

Transit planners prefer to compare mode shares in terms of trips, as in "transit carries 5 percent of trips and autos 90 percent." But that is misleading when dealing with congestion and mobility because transit trips tend to be slower and shorter than auto trips, and a shorter trip offers less mobility than a longer one. A 10-mile trip potentially accesses four times as much land area, and four times as many potential jobs or other destinations, as a five-mile trip. So passenger miles are a better indicator of mobility.

Portland, Oregon, planners, for example, optimistically project that their plan will increase the share of trips that use transit from 3.55 to 5.11 percent.[80] That is equivalent to increasing transit's share of passenger miles from 2.0 to 2.9 percent.[81] Similarly, the plan for Denver projects that transit's share of trips will increase from 2.3 to 3.1 percent, which is the same as increasing transit's share of passenger miles from 1.4 to 1.9 percent.[82] Such gains are a trivial return from spending 40 to 50 percent of each region's transportation capital dollars on transit. This is especially true when it is considered that growth means there will be many more cars on the road and the diversion of funds to transit means there won't be enough roads to accommodate those cars.

An Overemphasis on Land-Use Regulation

The second indicator of the excessive use of behavioral tools is an undue reliance on land-use programs to alter transportation choices (Table 2). At least 27 plans place a strong emphasis on manipulating land uses in order to promote alternatives to auto driving, and another baker's dozen place at least some emphasis on land-use manipulation. In contrast, most of the rest of the plans regard land use as something that transportation planners must respond to, but not something they can or should try to control.

"Traditionally, development patterns have been allowed to determine the distribution of travel demand, which government has then accommodated by expanding infrastructure," says Cincinnati's 2030 plan. "In contrast, growth management involves governments in influencing the timing, location, pattern, intensity, and budgeting of development so as to reduce the need for transportation facilities as well as address environmental, social, and fiscal issues."[83]

Reflecting changes in planning jargon, Cincinnati's 2004 update of its plan used identical language but substituted the words "smart growth" for "growth management."[84] Both versions "recommended that local governments adopt and implement comprehensive land use and transportation policies which support SOV alternatives."[85] Since that is only a recommendation, not a man-

Table 2
Planning Emphasis on Land-Use Regulation

Strong	Moderate	None or Minor
Albuquerque	Albany	Akron
Atlanta	Buffalo	Anchorage
Austin	Chicago	Bakersfield
Baltimore	Cincinnati	Birmingham
Boston	Cleveland	Charlotte
Bridgeport	Ft. Lauderdale	Columbus
Denver	Little Rock	Dallas
Ft. Collins	Miami	Des Moines
Hartford	Raleigh	Detroit
Honolulu	Sarasota-Manatee	Durham
Houston	Springfield	El Paso
Los Angeles	St. Louis	Fresno
Madison	Washington	Hampton Roads
Minneapolis-St. Paul		Indianapolis
Nashville		Jacksonville
Northern New Jersey		Kansas City
Orlando		Las Vegas
Philadelphia		Louisville
Pittsburgh		Memphis
Portland		Milwaukee
Sacramento		Montgomery
Salt Lake City		New York
San Diego		Oklahoma City
San Francisco		Omaha
Seattle		Phoenix
		Portland ME
		Providence
		Richmond
		Rochester
		San Antonio
		Savannah
		Tampa
		Tucson

Source: Reviews of most recent draft or final long-range metropolitan transportation plans for each region.

date, Cincinnati's plan falls in the "moderate emphasis" category.

Plans such as Cincinnati's that moderately emphasize land use may promote transit-oriented developments through subsidies, or sometimes merely by exhorting local governments to zone for such developments. They do not rely on coercive land-use measures such as growth boundaries.

The plan for St. Louis, for example, says that transportation facilities "should be supported by land use policies that harmoniously mix residential, retail, and office development near transit stations." Although a 2020

Plans with a moderate emphasis on land-use regulation rely on subsidies or other incentives.

Plans with a strong emphasis on land-use regulation rely on coercive measures.

plan considered spending up to $1.5 billion on "sustainable development," neither that nor any subsequent plan has rated this a high enough priority to reach the final projects list.[86]

Like the moderate plans, plans with a strong land-use emphasis promote transit-oriented developments, often with tax-increment financing and other subsidies. But unlike the moderate plans, strong plans also employ coercive measures such as growth boundaries. Outside the growth boundaries or some other boundary, they use large-lot zoning or other restrictions to prevent development. Inside the boundary, they promote more compact development, perhaps through minimum-density zoning or perhaps merely with subsidies to high-density infill.

"Influence land use policies to improve access to jobs, services and housing to everyone in the region by using market forces and the regulatory process," says goal 7 of Sacramento's 2006 plan.[87] The plan proposes to "rein in sprawl" and promote "compact development" by dedicating $500 million of transportation funds to subsidies to developers of high-density, mixed-use projects.[88]

The 2030 plan for the San Francisco Bay Area proposes to use land-use regulation to limit greenfield development to 15,600 acres instead of the 128,000 acres that planners project would be developed without such regulation.[89] The plan also dedicates $27 million per year to subsidize transit-oriented developments.[90]

The regulation and enforcement of land-use policies in transportation plans is eased when the same agencies plan both and when those agencies are granted strong powers by either the states or the communities within the metropolitan area. Oregon state land-use rules require every city or metropolitan planning organization in the state to draw urban-growth boundaries, so those requirements naturally were incorporated into the transportation plans for Portland and other Oregon urban areas. Cities and counties in the Denver metropolitan area have agreed to let Denver's MPO draw an urban-growth boundary, something that a majority of municipalities can impose on any dissenters by virtue of the MPO's ability to withhold federal grants from recalcitrant cities.

Denver's transportation plan includes an urban-growth boundary, restrictions on large-lot subdivisions, and financial and other incentives for transit-oriented and other high-density developments.[91] Portland's transportation plan links to the region's 2040 land-use plan.[92] The 2040 plan emphasizes "maintaining a compact urban form" through an urban-growth boundary and densification of neighborhoods within the boundary so that the region can grow with minimal expansions to the boundary.[93]

Los Angeles' transportation plan is tied to an aggressive land-use plan that focuses on transportation outcomes. While the details are somewhat vague, the plan proposes to put nearly 40 percent of all new residents in high-density infill developments in transit corridors on just 2 percent of the region's land area.

Just as spending billions on transit does little to increase transit ridership, there is little evidence that either compact urban areas or transit-oriented development will significantly reduce auto driving. Los Angeles planners project that their land-use plan, along with new rail transit lines and bike paths, will reduce average commute trip lengths by 2 percent, increase transit's share of trips from 2.1 to 3.0 percent, and increase walking and cycling's share of trips from 8.3 to 9.2 percent. The net result is a projected 3.3 percent reduction in per capita driving.[94]

That may sound small, but Los Angeles planners are more optimistic about the effects of land-use changes on transportation choices than planners in other regions. Plans for both Denver and Portland project an increase in per capita driving despite new rail-transit lines, increased population densities, and scores of new transit-oriented developments.[95]

Such predictions are not exactly a revelation to planners. Denver's metropolitan planning organization, the Denver Regional

Council of Governments (DRCOG), began assessing the viability of behavioral strategies for reducing congestion and air pollution more than three decades ago. A 1977 report found that more compact development would have little effect on driving and no effect on air pollution.

The number of trips people make by car is primarily a function of household income, noted the report, and not very sensitive to development patterns or housing types. The report cited a study in Boston that simulated the shifting of 20 percent of the region's population from the suburbs to the urban core and found it would reduce driving by only 1 percent.[96]

Even if more compact development could shorten the length of trips, noted Denver's report, it is the number of trips that count when it comes to air pollution. That is because catalytic converters only work after engines warm up to normal operating temperatures, so most pollution from today's cars comes from "cold starts." Thus, a 2-mile auto trip generates almost as much pollution as a 20-mile trip. "Cold start engines mean the number of trips is more significant than VMT" (vehicle-miles traveled), warned the report.[97]

Nor will changes in density combined with huge investments in transit make a difference. "Likely, no more than 15 percent of total personal trips can be accommodated by transit—most [estimates] see no more than 10 percent."[98] Even that is optimistic considering that, even in the New York urban area, less than 10 percent of all travel is by transit, while the number is less than 5 percent in every other U.S. urban area.

A 1979 report analyzed various strategies such as transit improvements, high-occupancy vehicle lanes, increased parking charges, and other "transportation system management strategies." Any one of these strategies had fairly insignificant effects on driving, and even when combined the strategies reduced per capita driving by less than 10 percent.[99]

Despite such findings, plans issued by DRCOG since 1977 have increasingly relied on behavioral tools to reduce driving. For example, a 1981 plan focused on promoting "activity centers" of mixed-use developments throughout the Denver region in the hope that such developments would reduce driving.[100] The most recent plan calls for building nearly 80 such transit-oriented developments throughout the Denver metro area.[101]

Why Behavioral Tools Don't Work

Since passage of the Clean Air Act in 1970, federal, state, and local governments have relied on two types of tools to reduce air pollution and other negative effects of auto driving. First, they have used technical tools such as catalytic converters, which reduce tailpipe emissions, or improved traffic signal coordination, which reduces the amount of time and fuel wasted in traffic. Second, they have used behavioral tools, such as investments in mass transit and urban designs aimed at discouraging driving.

Controlling tailpipe emissions has worked phenomenally well. Between 1970 and 2002 (the latest year for which pollution data are available), U.S. driving increased by 157 percent and driving in urban areas (where pollution problems are most serious) increased by more than 200 percent.[102] Yet Environmental Protection Agency data show that, over the same period, total auto emissions of carbon monoxide declined by 62 percent, nitrogen oxides declined by 42 percent, particulates by 58 percent, and volatile organic compounds by 73 percent.[103]

Meanwhile, behavioral tools have been a complete failure. Though urban areas in California, Oregon, and other states have emphasized transit and land-use regulation for several decades, not a single one can claim that it has reduced per capita driving by even 1 percent.

Yet plans continue to rely on behavioral tools. That appears to be due to planners' poor understanding of the relationship between land use and transportation. The Nashville plan's number one goal is to "link land use and

Since 1970, technical tools for reducing air pollution, such as catalytic converters and coordinating traffic signals, have been a phenomenal success, while behavioral tools have been a complete failure.

transportation."[104] "Transportation affects land use and land use affects transportation," says Albuquerque's plan.[105]

It is true that transportation affects land use. Development of the streetcar allowed middle-class families to move from crowded city centers to single-family homes. Development of the mass-produced automobile allowed working-class families to do the same. Both streetcars and automobiles led to reduced urban-area densities, and autos especially led to new forms of retailing that emphasized auto access and parking.

Although transportation affects land use, University of Southern California planning professor Genevieve Giuliano points out that the reverse is not true: "Land use policies appear to have little impact on travel outcomes."[106] This is partly because most urban facilities are already in place, so huge changes in density and design are needed to produce even small changes in mode shares or trip lengths. Few residents of Manhattan drive to work, but Manhattan is more than 20 times denser than most urban areas, and increasing the density of any urban area to Manhattan levels would be impossible.

Within the range of modern urban densities, the effects of land use on transportation are very limited. The 2000 census found that urban-area densities ranged from 850 to 7,000 people per square mile, a variation of more than 700 percent. Yet, outside of the New York urban area, household auto ownership rates ranged from just 82 to 97 percent, a variation of only 18 percent. Moreover, there is little correlation between density and auto ownership rates (correlation coefficient = 0.10). While only 68 percent of households in the New York urban area own autos (mainly due to low ownership rates in Manhattan), New York is not the nation's densest urban area, and ownership rates are much higher in those that are denser, including Los Angeles, San Francisco-Oakland, and San Jose.

Transportation affects land use, but land-use policies have little impact on transportation choices.

Some researchers have found that people who live in denser, mixed-use developments drive less than people who live in low-density suburbs.[107] However, that is largely the result of a self-selection process: people who want to drive less tend to locate in dense, mixed-use neighborhoods with intensive transit service. When urban areas are examined as a whole, density, transit, and design have almost no effect on the amount of driving people do. For example, one study ranked several urban areas by density, pedestrian-friendliness, and intensity of transit service. The highest ranked urban area in all three categories—San Francisco—also had the highest per capita driving.[108] That urban area might have been more convenient for those who don't want to drive, but not enough to attract significantly more people out of their cars.

Once the demand for high-density living on the part of those who want to minimize driving is met, construction of more transit-oriented developments will have little effect on driving. "If the aim is to reduce environmental damage generated by automobiles, the effective remedy is to directly price and regulate autos and their use, not land use," Giuliano concludes.[109]

What distinguishes New York (as opposed to just Manhattan) from other urban areas is not population density but job density. More than 2.5 million jobs are located in a few square miles of Manhattan, and most workers in this area walk or take transit to work. In most urban areas, however, only a small share of jobs is located downtown. Moreover, jobs are rapidly suburbanizing, further eroding downtown's share.

Forty years ago, most urban transportation plans were based on a *monocentric* model of the city, that is, on an assumption that most jobs and transportation needs were focused on downtown. But that model became obsolete as early as the 1920s, as both residents and jobs began to move to suburban areas.

Today, urban planners rely on a *polycentric* model, calling for transit services to regional and town centers as well as downtowns. But that model is just as obsolete as the monocentric model was 40 years ago. Economist William T. Bogart has shown that, in a typical U.S. urban area, no more than 30 to 40

percent of jobs are located in downtowns and suburban centers.[110]

That means the land-use and transportation plans that focus on providing transit to regional centers will serve well under half the commuters in their regions. For example, Denver has built or is planning nearly 150 miles of rail transit lines, yet after all the lines are built Denver planners project that only 26 percent of the region's jobs will be within one-half mile of a rail station.[111]

Planners offer several remedies that look attractive on paper but do not work well in practice. Among these are substituting *accessibility* for *mobility* and creating a *jobs-housing balance*.

The idea behind focusing on accessibility instead of mobility is that, if cities are designed so that people are close to shops and services, they won't need to drive as much or as far.[112] The problem with that idea is that consumers rely on a competitive market in retail and services to promote innovation and keep costs low. Consumers who are captives of one or a limited number of stores end up paying higher prices, often for lower-quality goods. Moreover, even in a world with limited energy supplies, there is no guarantee that having local stores within walking distance of residential areas is the optimal pattern. Some experts in the retail industry suggest that higher energy prices will give an advantage to big-box supercenters where people can do all of their shopping in one auto trip.[113]

The idea behind a jobs-housing balance is similar to the accessibility notion: if each community in an urban area has as many jobs as workers, then workers won't have to commute as far each day. But that assumes that people base their residential location decisions primarily on their job locations. In reality, many other factors influence residential locations, such as housing affordability, school quality, and other personal preferences. Thus it is not surprising that University of California (Berkeley) planning professor Robert Cervero found that jobs and housing in many San Francisco Bay Area communities "are nearly perfectly balanced, yet fewer than a third of their workers reside locally, and even smaller shares of residents work locally."[114]

Moreover, just as retail competition benefits consumers, a wide range of job opportunities benefits both workers and employers. One study found that a 10-percent increase in travel speeds led to a 3-percent increase in worker productivity, mainly by offering employers a larger pool of potential workers.[115] Conversely, reducing travel speeds or distances by half reduces the number of potential jobs or workers by three quarters, and so can have a dramatic effect on incomes and productivity.

Despite their negligible benefits, behavioral tools are very expensive. A mile of rail transit line typically costs more to build than a four- to eight-lane freeway and typically carries fewer than half as many people as a single freeway lane mile. Federal funding for rail transit comes out of gasoline taxes and other highway user fees, and in most cases those funds would be more cost effective if spent on other transportation facilities. Meanwhile, land-use regulations that try to influence people's housing choices drive up the cost of housing, require huge subsidies to developers of high-density housing projects, or both.

Why Long-Range Transportation Planning Can't Work

Despite the high costs and minimal benefits of behavioral tools, more than a third of the plans reviewed for this report rely heavily on such tools, and another 20 percent use them to some degree. Moreover, virtually none of the plans seriously evaluated alternatives or attempted to find the most cost-effective solutions to congestion, air pollution, and other regional transportation problems. Whether due to laziness or a desire to cover up the inefficiency of their plans, most plans used an abbreviated rational planning model that left out alternatives and other important steps.

The failure of planners to use the full rational planning model illustrates the bank-

Despite their negligible benefits, behavioral tools are very expensive, driving up the cost of both transportation and housing.

Once government has written a plan, no matter how flawed, those who benefit from it form special interest groups that view the plan as an entitlement.

ruptcy of the long-range transportation planning process required by Congress. But the problems cannot be remedied by simply insisting that planners strictly follow the rational planning model. Even if that model were followed to the letter, the process would still fail for several reasons.

First, a long-range plan requires information about the future that is essentially unknowable. Forecasts of future populations, construction costs, energy costs, travel demands, job locations, housing preferences, tax revenues, and so forth will, in many cases, be no better than guesses or, in some cases, wishful thinking. Yet, on the basis of guesses alone, many cities are committing billions or tens of billions of dollars to transportation projects that may prove to be useless.

Second, comprehensive plans that attempt to account for such diverse factors as vibrant communities, workforce housing, cultural resources, and economic development are simply too complicated to analyze or comprehend. As previously noted, many such variables are not quantifiable, and those that can be quantified cannot be easily weighed against other variables.

Third, as Shorey Peterson predicted in 1950, whenever a plan must deal with long-range unknowns or nonquantifiable benefits or costs, the final decision ends up being political rather than rational. That means that the decisions are made by politicians whose preconceived notions may be entirely at odds with reality, as in the case of the Salt Lake City commission that supported rail transit even when its corrected analysis found that rail transit was not cost effective and carried fewer passengers than the transit agency had reported. Furthermore, decisions that are entirely up for grabs and not based on any rational process give special interest groups a powerful incentive to influence the process in their favor.

Fourth, long-range planning offers planners and decisionmakers little or no incentive to make sure the decisions they make are the right ones. They are spending other people's money and the people whose money they are spending will have to live with their decisions long after the planners have changed jobs or retired and the politicians have left office.

Finally, if new information becomes available indicating that a long-range plan is flawed—if, for example, costs are higher or benefits lower than expected—it is very difficult to correct the problem even in a regularly scheduled update. Any long-range plan will stimulate special-interest groups that benefit from the plan to will work very hard to prevent any changes in the plan.

For all these reasons, Congress should abandon long-range planning requirements when it reauthorizes federal surface transportation funding in 2009. Instead, it should focus on the short term, give transportation agencies incentives to improve transport outcomes, and encourage regions and agencies to rely more on user-fee-based funding mechanisms.

What Should Be Done Instead

Peter Drucker once observed, "Any government activity almost at once becomes 'moral.'"[116] In other words, once the government begins an activity, no matter how flawed, it becomes viewed as an entitlement by those who will benefit from it. So what if costs turn out to be double the original predictions? So what if the benefits turn out to be far smaller than hoped? The plan must be carried out.

In this way, by imposing and funding long-range planning on metropolitan areas, Congress has created a special-interest coalition of government planners, private consultants, and other interest groups who work on or benefit from such long-range plans. The fact that the plans do more harm than good to many urban areas does not prevent this coalition from feeling entitled to its historic share of federal funds.

This illustrates the dangers of federal involvement in what are essentially local or regional matters. Congress should get out of the business of funding and dictating

requirements for metropolitan transportation. As a second-best solution, Congress should stop requiring—and funding—long-range transportation plans.

In place of long-range planning, Congress should do the following:

- Encourage metropolitan areas to rely on short-term (five years or less) plans that address today's problems, not future visions.
- Offer budgetary incentives to regions that meet selected goals, such as increased transit ridership or reduced congestion.
- Encourage state and local transport agencies to increasingly rely on user fees for funding rather than general taxes.

Like electricity or phone service, transportation is a marketable service, and it should act like one. Electric and phone companies do not worry about the effects of their investments on urban sprawl or livable communities. Instead, they provide services to anyone who will pay the cost. While service companies may have long-term goals, their planning horizons tend to be short, their plans are flexible, and they are often able to rapidly change directions in response to new technologies, tastes, or demands.

Electricity shortages are rare, and telephone users hardly ever get an "all-circuits-busy" message. In contrast, urban roadway congestion costs more than $78 billion a year. While aggravating, congestion has become so commonplace that Americans don't even notice that, among marketable services, it is the exception rather than the rule. This congestion is partly because transportation planning has focused more on capturing federal and other tax dollars for economic development and special interest groups than on providing effective transportation.

A short-term planning process can overcome many of the defects in long-range planning. There is no need to forecast populations, costs, or travel needs in the distant future. Congress should specify that short-term planning must focus on a few quantifiable variables, primarily safety and congestion, and possibly also air pollution and/or energy efficiency. When limited to these variables, planners can apply the Rational Planning Method, as described above, to regional transportation decisions.

To reinforce this process, Congress should offer budgetary incentives to regions that are successful in dealing with transportation issues. Federal transit funding should be based on a strict formula that includes transit ridership, so regions that increase ridership faster than the national average will be rewarded with more funds. The New Starts program and similar funds that are distributed on a nonformula basis should be eliminated because they encourage waste.

Federal highway funding formulas should also be revised to include some measure of congestion, so that regions that demonstrate reduced congestion get larger budgets. The Texas Transportation Institute has developed several measures of congestion, including the travel time index and per capita hours of delay. But those measures are based on formulas whose results are not always comparable between regions. Congress should use something that is simpler and easier to measure, such as average travel speeds or the percentage of roads that are at level of service F (a transportation engineering term for stop-and-go traffic).

Congress may also want to include safety or other factors in funding formulas. For example, urban transportation incidents led to 7.6 fatalities per billion passenger miles in 2006.[117] Congress could provide bonuses to regions that either do better than this or reduce fatalities from their historic rates.

Finally, Congress should encourage states and regions to make greater use of user-fee-based funding mechanisms. User fees give transportation providers positive feedback for promoting mobility and they give users feedback about the cost of providing transportation facilities.

For example, congestion-priced toll roads make more sense than gasoline taxes that are

Congress should encourage states and regions to make greater use of user-fee-based funding mechanisms.

Private buses, or publicos, in San Juan, Puerto Rico, are 98 percent funded out of transit fares and carry more people than the public buses and rail system combined.

not indexed to either inflation or fuel efficiency. The tolls benefit users by reducing the time they waste in traffic even as they provide the funding necessary to make worthwhile transportation improvements. Whether the roads are privately owned, franchised to private operators, or publicly owned should be more a question of finance than politics, and the benefits of toll roads should not be obscured by xenophobic demagogues who try to generate opposition to tolls by pointing to the "sale" (actually leasing) of Indiana and Chicago toll ways to foreign investors.[118]

Transit systems can also be improved by basing them more on user fees than on taxes. For example, private buses or *publicos* in San Juan, Puerto Rico, get 98 percent of their funds from transit fares and carry more riders than all other San Juan bus and rail systems combined.[119] Such private competition to public transit agencies are outlawed by most U.S. states. Even where subsidized transit is deemed to be needed, it could be provided in the form of vouchers to transit riders rather than huge grants to transit bureaucracies. This would make all public and private transit providers responsive to riders' needs rather than to appropriators' preconceived notions or desires for urban monuments.

Conclusion

In the third volume of *Lord of the Rings*, J. R. R. Tolkien wrote:

> It is not our part to master all the tides of the world, but to do what is in us for the succor of those years wherein we are set, uprooting the evil in the fields that we know, so that those who live after may have clean earth to till. What weather they shall have is not ours to rule.[120]

It comes down to this: Government planners can't accurately predict what future generations will want or need, yet long-range transportation plans can lock agencies into plans and projects that make no sense. Twenty years ago no one predicted that the Internet would lead telecommuters to outnumber transit riders in the vast majority of urban areas, or that intercity bus service (driven by online ticket sales) would be growing for the first time in decades, or that FedEx, UPS, and DHL would be making daily deliveries of online purchases on almost every residential street in America. Just as plans written 20 years ago would be wrong about those things today, plans written today for 20 years from now will also be wrong.

In short, any long-range plan is guaranteed to be wrong. Yet, as Drucker observed, that fact that it is a government plan makes it is very hard to change. That means long-range transportation plans are locking more and more urban areas into dubious programs of increased congestion (in the hope of discouraging a few vehicle miles of travel), unaffordable housing (in the hope of encouraging a few more people to crowd into transit-oriented developments), and costly rail projects the environmental and transportation benefits of which are dubious at best.

Short-term planning can focus on today's problems, including congestion, safety, and deteriorating infrastructure. Transportation agencies that solve those problems will bequeath a much better urban environment to the future than ones that ignore those problems in an attempt to create some unattainable vision. Because short-term planning is less dependent on distant forecasts, it is less likely to make mistakes that lock regions into bad plans. Short-term planning should also focus only on quantifiable values directly related to transportation, not on broader community concerns that are difficult to measure and debatable in any case.

Safe, efficient transportation literally drives our economy and has made America one of the wealthiest nations in the history of the world. The recommendations to Congress in this report—to repeal long-range transportation planning requirements, offer regions incentives to achieve transportation goals, and encourage more user-fee-based finance of new transporta-

tion facilities—will assure Americans that the fees and taxes they pay for transportation are used as effectively as possible.

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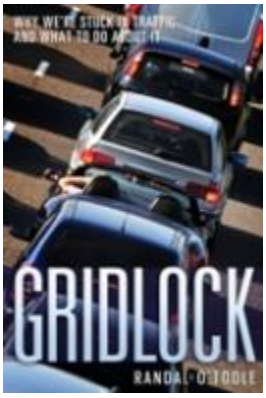
Gridlock: Why We're Stuck in Traffic and What to Do About It



By Randal O'Toole

America's transportation system is on the verge of collapse and *Gridlock* reveals how we got into this mess and how to fix it by focusing on free market improvements to methods of transportation that pay for themselves and increase everyone's mobility.

About the Book

America is the most mobile society in history, but our transportation system is on the verge of collapse. Traffic congestion is today five times greater than it was 25 years ago, yet many transportation plans and projects are making it worse. As Randal O'Toole reveals in *Gridlock*, the prime causes of our ailing system are a government transportation planning philosophy whose primary goal is to diminish auto use—hence, personal mobility—in combination with federal budget incentives that perversely encourage transportation planners to increase congestion. As a result, the automobile which is accessible to almost every family in the nation and provides unparalleled access to better housing, low-cost consumer goods, a choice-driven affordable life, and freedom—is being deliberately forced off the transportation grid by the expensive "solution" of little-used high-speed trains and urban transit lines.

Not only is this costly, illustrates *Gridlock*, it won't even accomplish the goals of saving energy and protecting the environment. "We can spend tens or hundreds of billions of taxpayer dollars on transportation projects that sound good but really only serve a small elite," writes O'Toole, "or we can restore a user-fee-driven system that will continue to improve personal mobility and reduce transportation costs for generations to come."

Gridlock presents a wide range of innovative ideas and policy recommendations for creating an effective transportation system—improvements that will increase our mobility and pay for themselves, whether it's cars, buses, planes, or trains. At the center of O'Toole's solutions are three core principles: those who use transportation facilities should pay for them; negative effects should be dealt with in a cost-efficient manner; and new technologies that will increase mobility at a low cost must be embraced. In *Gridlock*, Randal O'Toole brings energetic and unconventional thinking to transportation strategies that have, until now, only driven us into the breakdown lane.

About the Author

RANDAL O'TOOLE is a senior fellow at the Cato Institute who has written three previous books and numerous papers on transportation, urban growth, and public land issues, including his most recent book, *The Best-Laid Plans: How Government Planning Harms Your Quality of Life, Your Pocketbook, and Your Future*. Described by *U.S. News and World Report* as a researcher who "has earned a reputation for dogged legwork and sophisticated number crunching," he has been a leader in innovative thinking on environmentalism, natural resources, and urban land use.

***Contact Caitlyn Korb (ckorb@cato.org) to request a complimentary copy of* Gridlock.**

TAX & BUDGET

STATE LEGISLATORS SHOULD:

- Limit the growth in state government by instituting a stringent constitutional tax and expenditure limitation;
- Repeal the state corporate income tax;
- Resist accepting federal grants-in-aid;
- Privatize state government assets and functions, such as transportation infrastructure;
- Reform government worker compensation, including health and pension benefits; and
- Outlaw collective bargaining and forced union dues in the public sector.

CATO RESOURCES:

- "Federal Aid-to-State Programs Top 1,100," by Chris Edwards, Tax & Budget Bulletin no. 63 (February 2011) 246
- "Employee Compensation in State and Local Governments," by Chris Edwards, Tax & Budget Bulletin no. 59 (January 1, 2010) 249
- "Public-Sector Unions," by Chris Edwards, Tax & Budget Bulletin no. 61 (March 17, 2010) 252
- "State and Local Fiscal Reforms," by Chris Edwards, Testimony prepared for Federal Reserve Bank of St. Louis Conference (April 9, 2010) 255

CONTACT AN EXPERT:

- Chris Edwards, Director, Tax Policy Studies
  - Email - cedwards@cato.org
  - Phone - 202-789-5252

- Tad DeHaven, Budget Analyst
  - Email - tdehaven@cato.org
  - Phone - 717-525-9030

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Tax & Budget BULLETIN

No. 63 • February 2011

Federal Aid-to-State Programs Top 1,100

by Chris Edwards, editor of www.DownsizingGovernment.org, Cato Institute

The federal government has a large and growing presence in state and local policy activities. This rising intervention has been facilitated by "grants-in-aid," which are programs that combine federal subsidies with top-down regulations to micromanage state and local affairs.

A new analysis finds that the number of federal aid programs for state and local governments totaled 1,122 in 2010, or more than triple the number 25 years ago. Some of the most expensive federal aid programs are in the areas of education, housing, health care, and transportation.

With today's massive deficits, the federal government can no longer afford to fund all of these state and local activities. Federal lawmakers would better serve the nation by focusing on national issues rather than trying to fix potholes and run the schools. Furthermore, aid ties up the states in bureaucratic knots and reduces state policy innovation. The $646 billion aid system should be cut.

Federal Aid Undermines Freedom

Under the Constitution, the federal government was assigned specific limited powers and most government functions were left to the states. To ensure that people understood the limits on federal power, the Framers added the Constitution's Tenth Amendment: "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." The amendment embodies federalism, the idea that federal and state governments have separate policy areas and that proper federal activities are "few and defined," as James Madison said.

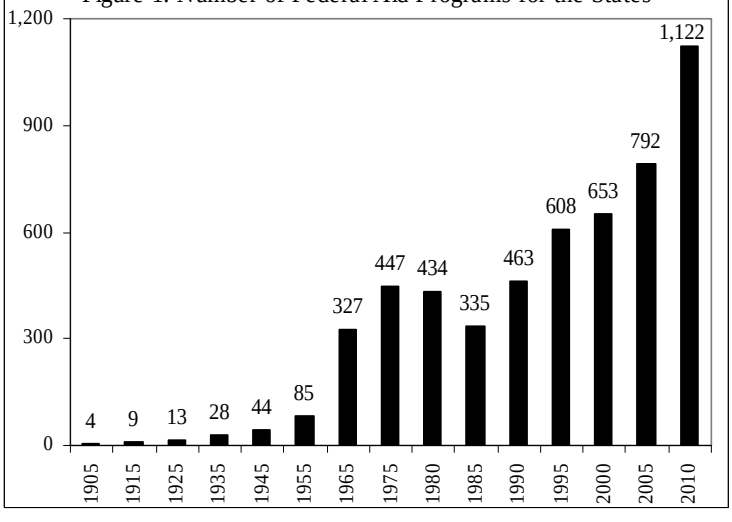
Federalism has acted as a safeguard of American freedoms. President Reagan noted in a 1987 executive order, "Federalism is rooted in the knowledge that our political liberties are best assured by limiting the size and scope of the national government."[1] Sadly, policymakers have ignored federalism in recent decades as Congress has undertaken many activities through grants-in-aid that it has no legal or practical reason to be involved in.

Rapid Aid Expansion Since the 1960s

Figure 1 shows the number of federal aid programs for state and local governments over the last century.[2] In the 19th century, federal aid to the states was very rare outside of land grants. Then the number of aid programs began growing slowly and steadily in the first half of the 20th century. The big change came in the 1960s. The aid system exploded in size under President Lyndon Johnson. He added hundreds of programs for housing, urban renewal, education, and other local activities. Policymakers at the time had great optimism that federal experts could solve virtually any local problem

That optimism did not last. President Richard Nixon lambasted "the idea that a bureaucratic elite in Washington knows best what is best for people everywhere."[3] Then President Jimmy Carter proposed a "concentrated attack on red tape and confusion in the federal grant-in-aid system."[4] President Ronald Reagan criticized the "confused mess" of federal grants, and he had some success at cutting them.

Figure 1. Number of Federal Aid Programs for the States



Unfortunately, Reagan's efforts to trim the federal aid empire were reversed after he left office, particular under Presidents George W. Bush and Barack Obama. The number of aid programs has soared from 653 in 2000 to 1,122 in 2010, based on my count of programs in the Catalog of Federal Domestic Assistance. A few dozen of the new programs are those enacted temporarily under the 2009 "stimulus" legislation, but the great majority are enacted as permanent programs.

The 2010 health care legislation was the source of about two dozen aid programs in the new program count. Other legislation of recent years added a wide range of new programs, such as specialty crop block grants, beginning farmer and rancher development grants, second-chance prisoner reentry initiative grants, clean fuel vehicle purchase grants, and America's marine highway grants.

Table 1 shows aid programs by federal department, based on the CFDA. Federal spending on these aid programs was $654 billion in fiscal 2010 and $646 billion in fiscal 2011, which is double the cost in fiscal 2001.[5]

Table 1. Aid-to-State Programs by Department, 2010

Federal Department	Number of Programs	Outlays ($ billions)
Agriculture	118	36.7
Commerce	29	0.7
Education	109	86.5
Energy	24	5.4
Health and Human Services	297	356.7
Homeland Security	27	10.9
Housing and Urban Dev.	43	42.3
Interior	163	4.8
Justice	74	5.3
Labor	38	11.8
Transportation	59	72.1
Treasury	1	8.5
Veterans Affairs	3	0.9
EPA	87	6.1
All other agencies	50	5.0
Total	1,122	653.7

Eight Reasons to Cut Federal Aid

Federal aid-to-state programs undermine constitutional federalism, and they don't make any practical sense. The theory behind aid is that the federal government can efficiently solve local problems, but decades of experience have shown that it cannot. Following are eight reasons to terminate federal aid-to-state programs.

1. No Magical Source of Federal Funds. Aid supporters bemoan the "lack of resources" at the state and local level and believe that Uncle Sam has endlessly deep pockets to help them out. But he does not—every dollar of federal aid sent to the states is ultimately taken from federal taxpayers who live in the 50 states. It's true that the federal government has a greater ability to run deficits than state governments, but that's an argument against the aid system. By pushing government funding up to the federal level, the aid system has tilted American government toward unsustainable debt financing.

2. Aid Spurs Overspending. Aid programs spur overspending by every level of government. Politicians at every level enjoy expanding programs to satisfy special interest groups, but with aid programs they rely on other levels of government to pay part of the cost. Thus, they get the political benefits of more spending but pay only part of the political cost of raising taxes. Aid programs often contain rules that encourage overspending. Some programs have a "matching" feature that rewards state politicians with more federal funds when they expand a program. Other programs have a "maintenance of effort" feature that prevents states from cutting program costs.

3. Aid Allocation Is Inefficient. The myth of aid is that impartial federal experts can rationally distribute funding to the most needy local communities and activities. But the aid system has never worked that way. A 1940 news report lamented: "The grants-in-aid system in the United States has developed in a haphazard fashion. Particular services have been singled out for subsidy at the behest of pressure groups."[6] It's the same today. Politics substantially determines the activities and congressional districts that receive the most aid. For example, states with the greatest need for highway funding may get less federal aid than less-needy states if they have weak members of Congress.

Even if politics were taken out of the equation, the federal government does not have the knowledge to efficiently plan for the education, housing, and other needs of a diverse nation of 309 million people. Such knowledge is only generated in the private marketplace, which is the mechanism that allocates most goods and services. For services that must be provided by governments, they are generally allocated more efficiently by state and local policymakers without federal subsidies and interference.

4. Aid Reduces Innovation. Federal aid reduces state policy innovation because it comes with top-down rules that encourage or mandate policy conformity. State and local governments can't be "laboratories of democracy" if they all operate under one-size-fits-all rules written in

Washington. The former 55-mile-per-hour national speed limit was the classic example of a federal mandate that ignored the states' diverse needs. More recently, the No Child Left Behind education law extended federal regulatory tentacles into local classrooms.

5. Aid Is Intensely Bureaucratic. The aid system imposes a huge paperwork burden on all three levels of government. Federal agencies that hand out state aid consume roughly 10 percent of the value of the aid in administration. That money stays in Washington. For state and local governments, each of the 1,122 aid programs involves tasks such as filling out applications, filing reports, auditing, litigation, and regulatory compliance. For each program, federal rules can run from dozens to thousands of pages in length.

6. Aid Distracts Federal Politicians. The huge scope of the aid system means that federal politicians spend much of their time on local issues. Rather than focusing on truly national issues, such as defense and security, they are busy steering funds to their districts for local projects. President Calvin Coolidge was prescient in arguing that state aid should be cut because it was "encumbering the national government beyond its wisdom to comprehend, or its ability to administer" its proper roles.[7]

7. Aid Breeds Irresponsibility. The three levels of government would work more efficiently if they resembled a tidy layer cake with separate functions. Instead, they are like a marble cake with jumbled lines of accountability, and that makes it difficult for citizens to know who is in charge of each policy activity and outcome. When every government has a hand in an activity, no government is responsible, as we saw, for example, in the disastrous lead-up to, and aftermath, of Hurricane Katrina in New Orleans.

8. Common Problems Aren't Necessarily Federal. Politicians and special interest groups often claim that certain state, local, and private activities need federal aid because they are "national" priorities. The Bush administration, for example, claimed a "compelling national interest" in providing federal aid for the K-12 schools.[8] But the schools are a "national interest" only in the sense that many families are interested in them.

In Canada, families are also interested in K-12 education. But in that nation, the federal government is generally not involved in the schools, and yet their kids do much better on international tests than do U.S. kids.[9] Thus, the desire of members of Congress to try to solve state, local, and private problems needs to be tempered with an understanding that federal involvement is usually counterproductive.

Conclusions

The federal aid system is a roundabout funding system for state and local activities that undermines frugal and accountable government. Under the aid system, federal politicians spend money on a range of special interest activities and then blame other levels of government when policy failures occur.

The aid system does not deliver efficient and high-quality public services to citizens. It delivers bureaucracy, overspending, and regulatory micromanagement from Washington. It also creates a political tug-of-war between the states over funding. By contrast, when spending and taxing decisions are made together at the state and local levels, policy tradeoffs are likely to better reflect the local preferences of citizens.

The federal aid system should be scaled back and ultimately abolished. The explosive growth in the aid system is turning once proud and diverse states into little more than regional subdivisions of an all-powerful national government. But with huge and ongoing federal deficits, there is simply no room in the budget for state and local activities. Congress should revive federalism and begin terminating its huge catalog of 1,122 aid programs.

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[1] Ronald Reagan, Executive Order 12612, October 26, 1987.

[2] The figure for 2010 is based on my analysis of the Catalog of Federal Domestic Assistance, available at www.cfda.gov. I included programs of type A, B, and C for state, local, and tribal governments, while excluding programs for private-sector recipients. Programs with zero obligations were excluded. For a discussion of data sources for the chart, see Chris Edwards, "Federal Aid to the States: Historical Cause of Government Growth and Bureaucracy," Cato Institute Policy Analysis no. 593, May 22, 2007. Thanks to Amy Mandler for her assistance.

[3] Richard Nixon, State of the Union Address, 1971.

[4] Quoted in Advisory Commission on Intergovernmental Relations, "The Intergovernmental Grant System: An Assessment and Proposed Policies," January 1978, p. 24.

[5] *Budget of the U.S. Government, FY2005, Analytical Perspectives*, p. 113.

[6] B. Putney, "Federal-State Relations Under Grants-In-Aid," *CQ Researcher*, July 30, 1940.

[7] Quoted in Charles Warren, *Congress as Santa Claus or National Donations and the General Welfare Clause of the Constitution* (New York: Arno Press, 1978), p. 103.

[8] Margaret Spellings, "10 Facts about K-12 Education Funding," Department of Education, June 2005.

[9] Nick Anderson, "U.S. Students in Middle of Global Pack," *Washington Post*, December 7, 2010.

CATO INSTITUTE

Tax & Budget BULLETIN

`No. 59 • January 2010

Employee Compensation in State and Local Governments

by Chris Edwards, Director of Tax Policy Studies, Cato Institute

State and local governments face large budget deficits as revenues have stagnated and spending has remained at high levels. To reduce deficits, large savings can be found in the generous compensation packages of the nation's 20 million state and local workers. In 2008, wages and benefits of $1.1 trillion accounted for half of total state and local government spending.[1] This bulletin examines state and local compensation costs, with a focus on the lucrative pensions enjoyed by public sector workers.

Public Sector vs. Private Sector Compensation

Table 1 shows average compensation per hour worked in state and local governments and the U.S. private sector.[2] Public sector pay averaged $39.66 per hour in 2009, which was 45 percent higher than the private sector average. The public sector advantage was 34 percent in wages and 70 percent in benefits.

Table 1. Average Compensation, 2009
Dollars per Hour Worked

	A. State and Local	B. Private Sector	Ratio A / B
Total compensation	$39.66	$27.42	1.45
Wages and salaries	26.01	19.39	1.34
Benefits	13.65	8.02	1.70
Paid leave	3.27	1.85	1.77
Supplemental pay	0.34	0.83	0.41
Health insurance	4.34	1.99	2.18
Defined-benefit pension	2.85	0.41	6.95
Defined-contribution pension	0.31	0.53	0.58
Other benefits	2.53	2.40	1.05

Source: U.S. Bureau of Labor Statistics. Data for June.

The table shows that public sector workers have the largest advantages in health insurance, defined benefit pension plans, and paid leave. Those advantages stem both from the more expensive features of public sector benefit packages and from the greater availability of benefits in the public sector, as shown in Table 2.[3]

Table 2. Share of Employees Offered Benefits, 2009

	State and Local Governments	Private Sector
Health insurance	88%	71%
Retirement benefits	90%	67%
Life insurance	80%	59%
Paid sick leave	89%	61%

Source: U.S. Bureau of Labor Statistics. Data for March.

Aside from the monetary benefits of public sector employment, government workers enjoy very high job security. During good times and bad, "layoffs and discharges" in the public sector occur at just one-third the rate of the private sector.[4] Public sector workers are rarely terminated for cost-cutting or job performance reasons.

One way to assess whether overall public sector compensation is too high is to look at voluntary job quit rates. U.S. Bureau of Labor Statistics data show that the average quit rate in the state and local workforce is just one-third the rate in the private sector.[5] That suggests that state and local pay is higher than needed to attract qualified workers.

Regional Variations in Compensation

There are large public sector pay variations between regions in the United States. Table 3 shows that average compensation per hour for government workers varies from $49.02 in the Pacific region to $30.73 in the West South Central region. Part of this variation results from general differences in pay levels, as reflected in private sector pay differences between the regions.

However, the data in the table also show that the ratio of public to private sector pay is generally higher in the high-pay regions. For example, the Pacific region has the highest public pay and a public pay advantage of 59 percent, while the West South Central region has the lowest public pay and a public pay advantage of just 26 percent.

Table 3. Average Total Compensation, 2009
Dollars per Hour Worked

	A. State and Local	B. Private Sector	Ratio A / B	Union Share
1. Pacific	$49.02	$30.78	1.59	64%
2. Middle Atlantic	$48.53	$31.69	1.53	67%
3. New England	$43.22	$33.29	1.30	57%
4. East North Central	$43.00	$26.72	1.61	47%
5. Mountain	$36.14	$26.18	1.38	21%
6. South Atlantic	$34.90	$25.33	1.38	18%
7. East South Central	$32.14	$20.76	1.55	16%
8. West North Central	$32.00	$25.35	1.26	26%
9. West South Central	$30.73	$24.35	1.26	13%

Source: Author, based on U.S. Bureau of Labor Statistics data for June. Regions include the following states: 1) AK, CA, HI, OR, WA, 2) NJ, NY, PA, 3) CT, ME, MA, NH, RI, VT, 4) IL, IN, MI, OH, WI, 5) AZ, CO, ID, MT, NV, NM, UT, WY, 6) DC, DE, FL, GA, MD, NC, SC, VA, WV, 7) AL, KY, MS, TN, 8) IA, KS, MN, MO, NE, ND, SD, and 9) AR, LA, OK, TX.

One factor driving these regional differences is the degree of unionization of the workforce. Table 3 shows that the four regions with the highest public pay have a high share of union members in their public sector workforces.[6] Also, regions with the highest public pay advantage (measured by the ratio shown) generally have the highest union shares, but with some exceptions. A related study explores public sector unions in more detail.[7]

Excessive Retirement Benefits

Table 1 indicated that state and local workers have very generous defined-benefit (DB) pension plans compared to private sector workers. These plans have been overpromised and underfunded, which has created huge long-term gaps in government budgets. Indeed, these gaps are not reflected in the Table 1 data, and thus the ultimate costs of DB plans will be higher than indicated.

According to official estimates, state and local pension plans are underfunded (or overpromised) by about $1 trillion.[8] But these estimates greatly understate the poor shape of pension plans because they rely on optimistic assumptions to value future liabilities, a practice Warren Buffett has called "accounting nonsense."[9]

A recent study by Robert Novy-Marx and Joshua Rauh found that governments are "severely underestimating" their pension liabilities by the use of high discount rates.[10] Using more realistic assumptions, the authors found that state and local pensions were underfunded by $3.2 trillion, or three times more than the officially reported amount. At more than $27,000 for every U.S. household, that indicates a huge exposure for state and local taxpayers.

In 2009, DB plans were available to 84 percent of state and local workers but just 21 percent of private workers.[11] And public sector DB plans are generally much more generous than the remaining private plans. One study found that the median public sector DB plan paid benefits more than twice as high as the median private plan.[12]

A flood of news articles has highlighted the excesses in public sector pension plans, with some cities and states providing truly outlandish benefits.[13] Some of the factors driving up costs in public DB plans include:

- *Early Retirement*. Public sector workers generally retire earlier than private sector workers and enjoy generous pension benefits for life indexed for inflation. They can typically retire at age 55 after 30 years of work, as in California's CalPERs system.[14] In CalPERs, workers receive an annual pension equal to 60 percent of final salary after 30 years. Public safety workers in CalPERs can retire at age 50 after 30 years of work with benefits equal to 90 percent of their final salary. These lucrative benefits have put CalPERs in deep financial trouble.

- *Pension Formulas*. Virtually all public sector plans calculate benefits based on pay in the last one to three years of work. Private plans are more likely to use a lower-cost approach such as the last five years of pay or career-average pay.[15] Also, public plans typically have a more generous factor to adjust pension benefits for number of years worked. In the public sector, benefits equal to about 60 percent of pay after 30 years of work is typical. In some jurisdictions, government workers inflate or "spike" their pension earnings by getting themselves big raises or working overtime in their final year or two on the job.[16]

- *Double Dipping*. In California, New Jersey, Utah, and other states, public workers can "retire" early and then either resume their existing job or take a new job, thus receiving a salary and pension at the same time.[17]

- *Disability Claims*. Excessive and fraudulent disability claims are a growing problem. In Nevada, "firemen hobbled by heart disease can collect an inflation-protected $40,000 a year for life on top of their pension. That applies even if they're healthy enough to work in another occupation."[18] *Governing* notes that "hundreds of local governments and several states are wrestling with what some view as out-of-control disability pension and health insurance systems hard-wired to allow police and fire personnel to retire early and with very generous benefits. At the same time, they may pursue other full-time careers."[19]

- *Excessive Benefits*. News articles have revealed eye-popping annual pension amounts received by civil servants in run-of-the-mill positions in cities across the nation. In California, there are 6,144 retired public employees in the CalPERS plan and 3,090 retired teachers in the state teacher's plan receiving annual pension benefits of more than $100,000.[20]

- *Pay-to-Play Scandals*. The reliance on DB plans means that governments hold huge financial portfolios. That has encouraged "pay-to-play" schemes whereby Wall Street firms bribe public officials to get a slice of the government's financial business. New York's pension fund, for example, is currently engulfed in scandal: "Money manager Elliott Broidy … admitted to making nearly $1 million in gifts to benefit four former top officials in the office that oversees New York State's pension fund, including one-time state comptroller Alan Hevesi."[21] To drain this swamp of corruption, government workers should be moved from defined-benefit to defined-contribution plans.

The excessive benefit levels of public pension plans are creating a looming crisis for government budgets and state taxpayers. To make matters worse, governments have also built up large unfunded costs in their retiree health care plans, a type of benefit that is rare in the private sector. I have estimated that these state and local health obligations are underfunded by at least $1.4 trillion.[22]

A final looming threat to taxpayers is the large amount of bond debt that governments are building up. Total state and local bond debt jumped 92 percent between 2000 and 2009—from $1.2 trillion to $2.3 trillion.[23] Governments are using debt to fund investments that used to be funded on a pay-as-you-go basis, and some governments are using debt to paper over routine budget shortfalls, which is the height of fiscal irresponsibility.

Major Cost-Cutting Needed

State and local governments across the nation face huge fiscal challenges. Spending on Medicaid is soaring, debt is rising rapidly, and many governments have massive gaps in their pension and health care funding. To solve these problems, governments need to make major budget cuts. They should privatize services, cut staffing levels, and terminate low-value programs. And with employee compensation representing half of total state and local spending, large savings could be found by freezing wages and overhauling excessive benefit packages.

[1] U.S. Bureau of Economic Analysis, National Income and Product Accounts, Tables 3.3 and 6.2D.
[2] U.S. Bureau of Labor Statistics, "Employer Costs for Employee Compensation—June 2009," September 10, 2009. Table includes full-time and part-time workers.
[3] U.S. Bureau of Labor Statistics, "Employee Benefits in the United States, March 2009," July 28, 2009. Retirement benefits include either a defined-benefit or defined-contribution plan.
[4] U.S. Bureau of Labor Statistics, "Job Openings and Labor Turnover Survey: September 2009," November 10, 2009.
[5] U.S. Bureau of Labor Analysis, "Job Openings and Labor Turnover Survey: September 2009," November 10, 2009.
[6] Public sector union share data is estimated by the author based on BLS data reported at www.unionstats.com.
[7] Chris Edwards, "Public Sector Unions and the Rising Costs of Employee Compensation," *Cato Journal*, forthcoming.
[8] Robert Novy-Marx and Joshua D. Rauh, "The Liabilities and Risks of State-Sponsored Pension Plans," *Journal of Economic Perspectives* 23, no. 4 (2009): 191–210.
[9] David Cho, "Growing Deficits Threaten Pensions," *Washington Post*, May 11, 2008, p. A1.
[10] Robert Novy-Marx and Joshua D. Rauh, "The Liabilities and Risks of State-Sponsored Pension Plans," *Journal of Economic Perspectives* 23, no. 4 (2009): 191–210.
[11] See U.S. Bureau of Labor Statistics data at www.bls.gov/ncs/ebs.
[12] Pew Center on the States, "Promises with a Price: Public Sector Retirement Benefits," 2007, p. 11.
[13] See www.pensiontsunami.com for recent articles.
[14] Arlene Dohm, "Gauging the Labor Force Effects of Retiring Baby Boomers," *Monthly Labor Review*, U.S. Bureau of Labor Statistics, July 2000, p. 21.
[15] Ann C. Foster, "Factors Affecting Employer-Provided Retirement Benefits," *Compensation and Working Conditions*, U.S. Bureau of Labor Statistics, Winter 1998.
[16] For example, see Janice Revel, "The $366 Billion Outrage," *Fortune*, May 31, 2004.
[17] Brad Heath, "States Act to Curb Double Dipping," *USA Today*, December 3, 2009.
[18] Stephane Fitch, "Gilt-Edged Pensions," *Forbes*, January 22, 2009.
[19] Jonathan Walters, "The Disability Dilemma," *Governing*, May 1, 2007.
[20] See http://californiapensionreform.com.
[21] Craig Karmin and Peter Lattman, "Hevesi Tied to Pay-to-Play as Financier Enters Plea," *Wall Street Journal*, December 4, 2009. CalPERS in California is also embroiled in a pay-to-play scandal. See Girard Miller, "California Pensions' $65 Million Middle-man," *Governing*, November 5, 2009.
[22] Chris Edwards and Jagadeesh Gokhale, "Unfunded State and Local Health Costs: $1.4 Trillion," Cato Institute, October 2006.
[23] Federal Reserve Board, "Flow of Funds Accounts of the United States," December 10, 2009, Table D.3.

CATO INSTITUTE

Tax & Budget BULLETIN

No. 61 • March 2010

Public-Sector Unions

by Chris Edwards, Director of Tax Policy Studies, Cato Institute

Labor unions play a diminishing role in the private sector, but they still claim a large share of the public-sector workforce. Public-sector unions are important to examine because they have a major influence on government policies through their vigorous lobbying efforts. They are particularly influential in states that allow monopoly unionization through collective bargaining.

Collective bargaining is a misguided labor policy because it violates civil liberties and gives unions excessive power to block needed reforms. To provide policymakers with greater flexibility and to improve government efficiency, states should follow the lead of Virginia and ban collective bargaining in the public sector.

Growth in Public-Sector Unions

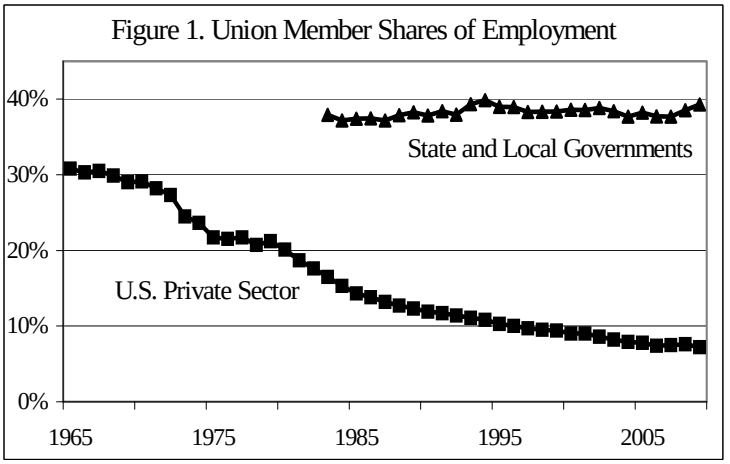
In 2009, 39 percent of state and local workers were members of unions, which was more than five times the share in the private sector of 7 percent, as shown in Figure 1.[1] About two-thirds of government fire department and education workers are members of unions.[2] If you include federal workers, the public sector accounts for more than half of all union members in the nation.

Prior to the 1960s, unions represented less than 15 percent of the state and local workforce.[3] At the time, courts generally held that public-sector workers did not have the same union privileges that private workers had under the 1935 Wagner Act, such as collective bargaining.

That changed during the 1960s and 1970s, as a flood of pro-union laws in dozens of states triggered a dramatic rise in public-sector unionism.[4] Many states passed laws that encouraged or required collective bargaining in the public sector, and states also passed laws to impose compulsory union dues and fees on government workers.

Princeton University's Henry Farber has documented the rise in public-sector unionism since the 1950s.[5] He found that the number of states allowing collective bargaining for public-sector workers jumped from just one in 1955 to 10 by 1965. New York City granted collective-bargaining privileges to most city workers in 1958.

Figure 1. Union Member Shares of Employment



Source: U.S. Bureau of Labor Statistics.

By 1970, about half of the nation's state-level workers had collective-bargaining privileges, while more than half of the states allowed collective bargaining in local governments. Pro-union legislation advanced further during the 1970s, but the advance has slowed since then.

Today, about 26 states have collective bargaining for essentially all state and local workers. A further 12 states have collective bargaining for a portion of their state and local workers. The remaining 12 or so states do not have collective bargaining in the public sector.[6]

Why has public-sector unionism thrived while private-sector unionism has shriveled? One reason is that public agencies tend to be static—once a union has organized a group of workers they tend to stay organized. By contrast, the private sector is dynamic, with businesses going bankrupt and new businesses arising all the time. Since all new businesses start out nonunion, greater organizing efforts are needed to sustain private-sector unions.

Another factor is that many government services are legal monopolies, such as police and fire. The result is that consumers don't have the option of abandoning unionized public services if they become too inefficient, as they can with unionized services in the private sector.

Finally, public-sector unions push for higher pay and higher government spending with little restraint. They don't care if the cost of government services goes up because the burden is borne by someone else. By contrast, private-sector unions are aware that higher costs for employers may result in lost sales and fewer union jobs.

Union Shares by State

Table 1 shows the shares of union members in state and local workforces.[7] These shares are strongly correlated with state rules regarding collective bargaining. The rules range from states that actively require collective bargaining, to states that allow it, to states that ban it, such as Virginia and North Carolina. In states that require collective bargaining, half or more of public workers are unionized. In states with no collective bargaining, public-sector union membership averages just 17 percent.[8]

State union shares are also correlated with "agency shop" rules. Agency shop rules require workers to either join the union or pay a fee to the union. Today, 28 states have agency shop rules, while 22 are "right-to-work" states where workers cannot be forced to join a union or pay union fees.[9] Right-to-work states generally have much lower union shares in their workforces.[10]

Some of the most pro-union states also allow public-sector strikes and some have mandatory arbitration, which usually works in favor of the unions. Note that union rules can vary within states for different types of public-sector worker. For example, teachers are more likely to be allowed to strike than police or fire department workers.

Table 1. Union Shares of State and Local Government Employment

New York	73%	Vermont	45%	New Mexico	18%
Rhode Island	71%	Ohio	44%	Utah	17%
Hawaii	67%	Montana	43%	Tennessee	17%
New Jersey	66%	Maryland	41%	North Dakota	16%
Connecticut	64%	Delaware	40%	Kansas	16%
Alaska	61%	Nevada	37%	Idaho	15%
Massachusetts	61%	Alabama	32%	Texas	14%
Washington	59%	Iowa	31%	Kentucky	14%
Michigan	58%	Nebraska	28%	Wyoming	14%
California	58%	West Virginia	27%	Louisiana	13%
Oregon	57%	Indiana	27%	Virginia	11%
Pennsylvania	55%	Florida	25%	Arkansas	10%
Minnesota	55%	Colorado	24%	Georgia	10%
Wisconsin	52%	Arizona	22%	South Carolina	9%
Illinois	50%	Missouri	19%	Mississippi	9%
New Hampshire	48%	Oklahoma	19%	North Carolina	8%
Maine	45%	South Dakota	18%		

Source: James Sherk based on Bureau of Labor Statistics data.

Unions Increase Costs and Reduce Efficiency

Unionized public sector workers have much higher average wages and benefits than nonunionized public sector workers. Bureau of Labor Statistics data in Table 2 show that union members have a 31-percent advantage in wages and a 68-percent advantage in benefits.

Table 2. State and Local Workers, Union vs. Nonunion, 2009
Average Compensation in Dollars per Hour Worked

	Union	Nonunion	Ratio
Total compensation	$47.46	$33.33	1.42
Wages and salaries	29.90	22.86	1.31
Benefits	17.57	10.47	1.68
Health insurance	5.91	3.07	1.93
Defined-benefit pension	3.98	1.94	2.05
Defined-contribution pension	0.25	0.36	0.69
Other benefits	7.43	5.10	1.46

Source: U.S. Bureau of Labor Statistics. Data for June.

However, part of this union-nonunion pay difference stems from general labor market variations across states. States with generally higher wages tend to be more unionized. Analyses that hold constant such cross-state differences find that public-sector unions increase average pay levels by roughly 10 percent.[11]

Besides raising compensation costs, unions reduce government efficiency in other ways. Unions tend to protect poorly performing workers, they often push for larger staffing levels than required, and they discourage the use of volunteers in government activities. Further, they tend to resist the introduction of new technologies and they create a more rule-laden workplace.

In the private sector, businesses can mitigate such union-caused inefficiencies. In response to union demands for higher pay, for example, businesses can substitute capital for labor. Unfortunately, public-sector managers have little incentive or flexibility to make such changes.

A final type of inefficiency created by public-sector unions is the cost of strikes. In November, for example, transit workers in Philadelphia went on a six-day strike over disagreements regarding pay.[12] The strike created chaos for the 800,000 residents of the city who rely on government subway and bus services, and it likely caused substantial damage to the local economy.

Unions and Public Policy

Public-sector unions are some of the nation's most powerful special interest groups. They generally favor increases in government spending because they personally benefit from expanded programs. The rise of public-sector collective bargaining in the 1960s and 1970s encouraged

millions of government workers to become politically active. Public-sector workers are more likely to vote than other Americans, which magnifies their power.[13]

The largest public-sector unions are the National Education Association, the American Federation of Teachers, the American Federation of State, County, and Municipal Employees, and the Service Employees International Union. These organizations have more than 7 million members combined, and they are very well financed. The NEA and AFT, for example, collect about $2 billion a year in member dues and fees, most of which is from jurisdictions with agency shop rules.[14]

With their large war chests, public-sector unions are very active in political campaigns. Over the last two decades, AFSCME was the second-largest contributor to campaigns in the United States. The NEA was the seventh largest, the SEIU tenth largest, and the AFT fifteenth largest.[15] In the first six months of 2009, the head of the SEIU was the most frequent visitor to the White House, which illustrates the group's influence.

During 2007 and 2008, public-sector unions spent $165 million on campaigns and ballot measures.[16] In states such as California and Oregon, they have spent millions of dollars on various ballot measures, nearly always favoring the side of higher taxes and spending. Public-sector unions fight against school choice, privatization, and many other policies that can improve government efficiency.

Conclusions

Like other private groups, unions have free speech rights to voice their opinions about public policy. But collective bargaining gives unions the exclusive right to speak for covered workers, many of whom may disagree with the views of the monopoly union. Furthermore, collective bargaining is inconsistent with the right to freedom of association.[17] Individuals are prevented from dealing directly with their employer and they can't choose to be represented by another organization.

Collective bargaining gives a privileged position in our democracy to government insiders who focus on expanding the public sector to their personal benefit. The special position of unions is strengthened in states that have mandatory union dues and fees. Workers can opt out of paying the portion of dues going toward union politicking, but they have to leave the union and actively solicit to get back a portion of their payments.

Monopolies in business usually create higher cost and lower quality services. Monopoly unions create similar problems in labor markets. State governments should ban collective bargaining in the public sector, following the successful policies of Virginia and North Carolina. With the many large fiscal challenges facing governments—such as huge pension funding gaps—policymakers need flexibility to make tough budget decisions. But powerful unions make budget reforms very difficult, as New Jersey Governor Chris Christie, for example, is finding out.

To put citizens and taxpayers back in control of their governments, collective bargaining and forced union dues should be outlawed in the public sector. Public employees should be free to join worker associations, but they should not be given a special legal status and handed extra power to block desperately needed fiscal reforms.

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[1] Bureau of Labor Statistics, "Union Members 2009," January 22, 2010.

[2] See Henry S. Farber, "Union Membership in the United States," Working Paper 503, Industrial Relations Section, Princeton University, September 2005, p. 5.

[3] Richard Freeman, "Unionism Comes to the Public Sector," *Journal of Economic Literature* 29 (March 1986), p. 45.

[4] Freeman, pp. 47–48.

[5] Farber.

[6] Government Accountability Office, "Collective Bargaining Rights," GAO-02-835, September 2002, p. 8. These totals have changed a bit since this 2002 study.

[7] James Sherk, Heritage Foundation, from the Bureau of Labor Statistics, Current Population Survey, 2006–2009.

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[9] See National Right to Work, www.nrtw.org/rtws.htm.

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State and Local Fiscal Reforms

by Chris Edwards, Cato Institute

Conference on State and Local Government Finance and Economic Turbulence, Federal Reserve Bank of St. Louis

April 9, 2010

The Federal Reserve Bank of St. Louis held a conference on State and Local Government Finance and Economic Turbulence on April 9, 2010. The final conference panel looked at the themes of modernizing state tax systems, possible state budget reforms, and the proper role of state and local governments in the economy.

This paper discusses four reforms for state and local governments to consider: abolishing corporate income taxes, privatizing government activities, trimming public-sector compensation, and reforming public-sector labor laws. Those may seem like disparate policy ideas, but the common theme is that governments need to be smaller, more efficient, and more flexible if America is to prosper in an age of intense global competition.

With large budget deficits and huge pension funding gaps, many state and local governments face major financial challenges. But private businesses and individuals also face financial challenges, especially in a sluggish economy. As such, policymakers should try to reduce the burdens of taxes, spending, and regulations on the private sector. I have identified four areas for improvement, and these are discussed in the following sections.

Repealing State Corporate Income Taxes

Fiscal policy is not just concerned with governments raising enough revenue to match the spending desires of policymakers. That is the case because raising revenue creates distortions

that damage the private-sector economy. Governments should try to both minimize their funding needs and raise revenues with the least damaging tax structures. Corporate income taxes are probably the most economically damaging state taxes, at least relative to how much revenue is raised. Policymakers should consider repealing these taxes to improve the efficiency of state fiscal systems.

All the states except Nevada, South Dakota, and Wyoming impose corporate income taxes or similar levies such as gross receipts taxes.[1] State corporate income taxes raised just 2.6 percent of total state revenues and 4.0 percent of state tax revenues, on average, over the last decade.[2] Thus, states receive little revenue from the corporate income tax, but the tax substantially distorts business decision making and imposes large compliance costs on firms. One study found that business compliance costs for the state corporate tax were about twice as high as for the federal corporate tax relative to tax collected.[3] *Tax Notes* editor David Brunori notes that state corporate income taxes "consume an inordinate amount of intellectual firepower and economic resources in terms of planning, compliance, and administration."[4]

The problem is that many corporations carry out production, distribution, and other activities in numerous different states and all these states want to grab a share of corporate earnings. A three-factor formula of property, payroll, and sales is generally used to "apportion" a firm's profits between state governments, but varied and inconsistent formulas are used and the definitions of the factors are subject to disputes. The complexity of state corporate taxation is magnified because of uncertainty in the rules for "nexus," or the standards for how much presence a company must have in a state before it is required to pay taxes.

Businesses must keep track of different income tax rules for every state they operate in. They must also separate out "business income" from "nonbusiness income." Business income is apportioned between the states, while nonbusiness income (such as interest) is assigned to the state of commercial domicile. This distinction is complex and is subject to legal disputes. Some states allow separate reporting for each company in a corporate group, while other states require combined reporting for the whole corporate group. States also differ on how they tax firms' foreign affiliates.

To make it all worse, state policymakers carve out preferences and loopholes in the corporate tax base so it resembles Swiss cheese.[5] Incentive packages for favored companies and fancy credits for job training and other activities have proliferated. Such narrow breaks are unfair to businesses that pay the full tax load, and they open up government officials to corruption as firms lobby for special deals. Even if state corporate taxes were a good idea in theory—and they are not—state politicians have shown that they are incapable of enacting simple corporate taxes in practice.

The other factor to consider is that there has been a revolution in corporate taxation around the world during the last three decades.[6] Following Britain's lead in the mid-1980s, all major economies have cut their corporate tax rates. Just since the mid-1990s, the average top corporate tax rate in the 30-nation Organization for Economic Cooperation and Development has fallen from 38 percent to 26 percent.[7] During the same period, the average rate in the European Union plunged from 38 percent to 23 percent.[8] Those figures include both national and subnational taxes.

In the United States, the federal corporate tax rate of 35 percent hasn't been cut in more than two decades. At the state level, the average top rate in the 43 states that currently have corporate income taxes has actually increased slightly since 1980, from 7.0 percent to 7.5 percent today.[9] The result is that America is in a very uncompetitive position of having the second-highest corporate tax rate among industrial countries at 40 percent, including the federal rate and the average state rate. The U.S. rate is 17 percentage points higher than the average rate in the EU.

As we try to revive the national economy—and as states such as Michigan try to revive their state economies—repealing state corporate income taxes and related levies would be an excellent way to encourage long-term investment and job creation. As corporate profits become more mobile in the global economy, state corporate taxes will become even more difficult to enforce. As David Brunori notes: "The only people who really make money from the state corporate income tax system are the major law firms and big accounting firms."[10]

States should repeal corporate income taxes and make up any revenue losses by repealing business subsidies and other unwarranted giveaways on the spending side of their budgets. Actually, the corporate tax base has become so responsive in the global economy that

governments may not lose any revenue in the long run from corporate income tax repeal because repeal would cause an inflow of investment, which would generate higher state revenue from other types of taxes.[11] Either way, states should throw in the towel on the corporate income tax.

Privatization

In recent decades, governments on every continent have sold major state-owned assets to private investors. Airports, railroads, energy utilities, highways, and other assets have been privatized. The privatization revolution has overthrown the belief widely held in the 20th century that governments should own the most important industries in the economy. Privatization can often reduce costs, improve service quality, and increase innovation in formerly moribund government industries.

Privatization of state government assets makes sense for many reasons. First, asset sales can help cut state debt levels. Second, privatization can reduce the responsibilities of governments so that policymakers can better focus on their core activities. Third, there is vast foreign privatization experience that can be drawn on in pursuing U.S. reforms. Fourth, privatization would spur economic growth by opening new markets to entrepreneurs and bringing new innovation to industries.

Transportation infrastructure is one of the most promising areas for privatization reforms. Before the 20th century, transportation infrastructure was usually financed and built by the private sector. There were more than 2,000 companies that built private toll roads in America in the 18th and early 19th centuries.[12] Most of those roads were put out of business by the spread of the railroads, which were also mainly privately financed. Then entrepreneurs financed and built networks of electric streetcars in America beginning in 1880s, with systems installed in more than 850 American cities.[13] Until the early 1960s, urban mass transit in United States was mainly provided by private bus companies.[14]

Just about any service that can be supported by customer fees and advertising can be privatized. A big advantage of privatized infrastructure is that private companies can freely tap debt and equity markets for capital expansion to meet rising demand. By contrast, government

infrastructure is subject to the politics and uncertainties of government budgeting processes. As a consequence, government infrastructure is often old, congested, and poorly maintained.

Today, a number of states are moving ahead with privately financed and operated highways. The Dulles Greenway in Northern Virginia is a 14-mile private toll highway opened in 1995, which was financed by private bond and equity issues. In the same region, Fluor-Transurban is building and mainly funding high-occupancy toll lanes on a 14-mile stretch of the Capital Beltway. Drivers will pay to use the lanes with electronic tolling, which will recoup the company's roughly $1 billion investment.

How about airports? Nearly all major U.S. airports are owned by state and local governments. By contrast, airports have been fully or partly privatized in many foreign cities, including Athens, Auckland, Brussels, Copenhagen, Frankfurt, London, Melbourne, Naples, Rome, Sydney, and Vienna. Britain led the way with the 1987 privatization of British Airports Authority, which owns Heathrow and other airports. A recent survey identified 100 different companies around the world that own and operate airports, finance airport privatization, or participate in projects to finance and operate new airport terminals.[15]

In the United States, there is some growing interest in airport privatization, or at least in leasing-out airport operations to private contractors. Chicago has been close to a deal on privatizing Midway airport, for example, but the financial crisis has put that plan on hold for now.[16] In 2009, a $140 million privately financed, built, and operated airport opened near Branson, Missouri for commercial flights by Airtran and other carriers.

Or consider seaports, which in the United States are virtually all owned by state and local governments. Many U.S. ports do not operate at top efficiency levels because of inflexible union work rules and other factors. A U.S. Maritime Administration report in 2005 found that "American ports lag well behind other international transportation gateways such as Singapore and Rotterdam in terms of productivity."[17] Numerous countries around the world have privatized their seaports. One Hong Kong company, Hutchinson Whampoa, owns 30 ports in 15 countries. In Britain, 19 ports were privatized in 1983 to form Associated British Ports, and today about two-thirds of British cargo goes through private ports.[18]

What is America waiting for? Privatization would allow state governments to raise funds from asset sales to reduce their debt loads. Private firms could better gather financing for new capital investments than governments, which are always complaining that they are cash-strapped. And because of the vital role played by highways, airports, and seaports in the economy and international trade, privatization should be a high priority reform area for states to foster greater economic growth.

Reforming Government Worker Compensation

With large budget gaps in many states, substantial savings could be gained by cutting the generous compensation packages of the nation's 20 million state and local workers. In 2009, wages and benefits of government workers totaled $1.1 trillion, which accounted for half of total state and local government spending.[19]

Are state and local workers overpaid? Let's compare average compensation per hour worked in state and local governments with the U.S. private sector. According to the Bureau of Labor Statistics, public sector compensation averaged $39.66 per hour in 2009, which was 45 percent higher than the private sector average.[20] Just looking at wages, the public sector advantage was 34 percent. However, a recent job-for-job comparison of private sector and state and local workers by *USA Today* showed that wages were similar, on average.[21]

It is on the benefit side that state and local government compensation is out-of-line. Health and pension benefits are excessive. The BLS data shows that public-sector benefits per hour are 70 percent higher than in the private sector. In addition, public-sector workers receive one high-value non-monetary benefit: very high job security. "Layoffs and discharges" in the public sector occur at just one-third the rate of the private sector in good times and bad.[22]

Public sector pension benefits are recently receiving a great deal of media scrutiny, and for good reasons. As baby boomers in public-sector workforces retire, the large and underfunded (or overpromised) benefits in government pensions are starting to have a big impact on state and local budgets. Also, media articles have revealed a great number of pension abuses in states across the nation.[23]

In 2009, defined benefit pension plans were available to 84 percent of state and local workers but just 21 percent of private workers.[24] And public sector DB plans are generally much more generous than the remaining private plans. One study found that the median public sector DB plan paid benefits more than twice as high as the median private plan.[25]

State and local pension plans have a funding gap of about $1 trillion, according to official estimates.[26] But those estimates understate the poor shape of pension plans because they rely on optimistic assumptions to value future liabilities. A recent study by Robert Novy-Marx and Joshua Rauh found that governments are "severely underestimating" their pension liabilities by the use of high discount rates.[27] Using more realistic assumptions, the authors found that state and local pensions were underfunded by $3.2 trillion. At more than $27,000 for every U.S. household, that indicates a huge exposure for state and local taxpayers.

Some of the factors driving up costs in public-sector DB plans include:

- *Early Retirement*. Public sector workers generally retire earlier than private sector workers and enjoy generous pension benefits for life indexed for inflation. They can typically retire at age 55 after 30 years of work, as in California's CalPERS system.[28] In CalPERS, workers receive an annual pension equal to 60 percent of final salary after 30 years. Public safety workers in CalPERS can retire at age 50 after 30 years of work with benefits equal to 90 percent of their final salary. These lucrative benefits have put CalPERS in deep financial trouble.

- *Pension Formulas*. Virtually all public sector plans calculate benefits based on pay in the last one to three years of work. Private plans are more likely to use a lower-cost approach such as the last five years of pay or career-average pay.[29] Also, public plans typically have a more generous factor to adjust pension benefits for number of years worked. In the public sector, benefits equal to about 60 percent of pay after 30 years of work is typical. In some jurisdictions, government workers inflate or "spike" their pension earnings by getting themselves big raises or working overtime in their final year or two on the job.[30]

- *Double Dipping*. In California, New Jersey, Utah, and other states, public workers can "retire" early and then either resume their existing job or take a new job, thus receiving a salary and pension at the same time.[31]

- *Disability Claims*. Excessive and fraudulent disability claims are a growing problem. In Nevada, "firemen hobbled by heart disease can collect an inflation-protected $40,000 a year for life on top of their pension. That applies even if they're healthy enough to work in another occupation."[32] *Governing* notes that "hundreds of local governments and several states are wrestling with what some view as out-of-control disability pension and health insurance systems hard-wired to allow police and fire personnel to retire early and with very generous benefits. At the same time, they may pursue other full-time careers."[33]

- *Excessive Benefits*. News articles have revealed eye-popping annual pension amounts received by civil servants in run-of-the-mill positions in cities across the nation. In California, there are 6,144 retired public employees in the CalPERS plan and 3,090 retired teachers in the state teacher's plan receiving annual pension benefits of more than $100,000.[34]

Excessive pension benefits are creating a looming crisis for government budgets and state taxpayers. To make matters worse, governments have also built up large unfunded costs in their retiree health care plans, a type of benefit that is rare in the private sector. With a colleague, I estimated that state and local health obligations are underfunded (or overpromised) by at least $1.4 trillion, or about $12,000 per household in the United States.[35]

A final looming threat to taxpayers is the large amount of bond debt that governments are building up. Total state and local bond debt jumped 92 percent between 2000 and 2009—from $1.2 trillion to $2.3 trillion.[36] Governments are using debt to fund investments that used to be funded on a pay-as-you-go basis, and some governments are using debt to paper over routine budget shortfalls, which is the height of fiscal irresponsibility.

Policymakers should stop piling costs onto the next generation of young taxpayers. Government spending should be cut and bond debt reduced. New state and local employees should be offered

defined-contribution plans, not defined-benefit plans. Pension and health care premiums for state and local workers should be increased. Retirement ages and years-of-service requirements for pensions should be raised. Pension and health care benefits should be cut. Government staffing levels should be reduced. This may all sound quite drastic to some folks, but the huge structural gaps in government finances won't go away without dramatic action on the spending side of budgets.

Public-Sector Unions

Spending reforms, such as privatization and cuts to employee compensation, often face substantial political opposition. Reforms are more difficult to achieve particularly in those states with high levels of unionization in their public sector workforces. Public-sector unions have a substantial effect on state fiscal policies through aggressive lobbying, particularly in those states that allow public-sector collective bargaining and forced union dues.

In 2009, 39 percent of state and local workers were members of unions, or more than five times the share in the private sector of 7 percent.[37] Prior to the 1960s, unions represented less than 15 percent of the state and local workforce.[38] At the time, courts generally held that public-sector workers did not have the same union privileges that private workers had under the 1935 Wagner Act, such as collective bargaining.

That changed during the 1960s and 1970s, as a flood of pro-union laws in dozens of states triggered a dramatic rise in public-sector unionism.[39] Many states passed laws that encouraged collective bargaining in the public sector and laws imposing compulsory union dues and fees.

Today, about 26 states have collective bargaining for essentially all state and local workers. A further 12 states have collective bargaining for a portion of their state and local workers. The remaining 12 or so states do not have collective bargaining in the public sector.[40]

The union shares of state and local workforces vary widely, and they are strongly correlated with state rules regarding collective bargaining.[41] The rules range from states that actively require it, to states that allow it, to states that ban it, such as Virginia and North Carolina. In states that

require collective bargaining, half or more of public workers are unionized. In states with no collective bargaining, public-sector union membership averages just 17 percent.[42]

State union shares are also correlated with "agency shop" rules. Agency shop rules require workers to either join the union or pay a fee to the union. Today, 28 states have agency shop rules, while 22 are "right-to-work" states where workers cannot be forced to join a union or pay union fees.[43] Right-to-work states generally have much lower union shares in their workforces.[44]

Unionized public sector workers have much higher average wages and benefits than nonunionized public sector workers. Bureau of Labor Statistics data show that union members have a 31-percent advantage in wages and a 68-percent advantage in benefits over nonunion members of the public workforce.[45] However, part of this union-nonunion pay difference stems from general labor market variations across states. States with generally higher wages tend to be more unionized. Analyses that hold constant such cross-state differences find that public-sector unions increase average pay levels by roughly 10 percent.[46]

Besides raising compensation costs, unions reduce government efficiency in other ways. Unions tend to protect poorly performing workers, they often push for larger staffing levels than required, and they discourage the use of volunteers in government activities. Unions also tend to resist the introduction of new technologies and they create a more rule-laden workplace. Simple regression analyses show that states with higher union shares in the government workforce have higher levels of government debt and they receive poorer grades on public management based on Pew Center research.[47]

A final type of inefficiency created by public-sector unions is the cost of strikes in those states that allow it. In November, for example, transit workers in Philadelphia went on a six-day strike over disagreements regarding pay, which created chaos for 800,000 residents of the city who rely on government rail and bus services.[48]

In the private sector, businesses can mitigate such union-caused inefficiencies. In response to union demands for higher pay, for example, businesses can substitute capital for labor. Unfortunately, public-sector managers have little incentive or flexibility to make such changes.

Public sector unions have a broad effect on fiscal policy, as they are some of the nation's most powerful special interest groups. The National Education Association, the American Federation of Teachers, the American Federation of State, County, and Municipal Employees, and the Service Employees International Union have more than 7 million members combined, and they are very well financed. The NEA and AFT, for example, collect about $2 billion a year in member dues and fees, most of which is from jurisdictions with agency shop rules.[49]

With their large war chests, public-sector unions are active in political campaigns. Over the last two decades, AFSCME was the second-largest contributor to campaigns in the United States. The NEA was the seventh largest, the SEIU tenth largest, and the AFT fifteenth largest.[50] During 2007 and 2008, public-sector unions spent $165 million on campaigns and ballot measures.[51]

These groups generally favor increases in government spending partly because they personally benefit from expanded programs. In states such as California and Oregon, they have spent millions of dollars on various ballot measures, nearly always favoring the side of higher taxes and spending. Public-sector unions fight against school choice, privatization, and many other policies that can improve government efficiency.

To conclude, collective bargaining gives a privileged position in our democracy to government insiders who focus on expanding the public sector to their personal benefit. Monopolies in the business world usually create higher cost and lower quality services. Monopoly unions create similar problems in labor markets. With the many large fiscal challenges facing governments—such as huge pension funding gaps—policymakers need flexibility to make tough budget decisions. But powerful unions make budget reforms more difficult.

To put citizens and taxpayers back in control of their governments, collective bargaining and forced union dues should be outlawed in the public sector, following the successful policies of Virginia and North Carolina. Public employees should be free to join worker associations, but they should not be given a special legal status and handed extra power to block needed fiscal reforms.

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HEALTH CARE

STATE LEGISLATORS SHOULD:

- Encourage governors and attorneys general to join the lawsuits that seek to overturn ObamaCare's individual mandate and Medicaid mandate;
- Avoid creating new bureaucracies, applying for federal grants, or expanding state spending in response to ObamaCare;
- Educate the public about the harmful effects of ObamaCare;
- Demand that the federal government grant states flexibility, *not* additional funds, to administer Medicaid and SCHIP programs;
- Eliminate licensing of medical professionals or, as a preliminary step, recognize licenses issued by other states;
- Eliminate licensing of health insurance or, as a preliminary step, recognize insurance products licensed by other states;
- Eliminate "corporate-practice-of-medicine" laws;
- Eliminate "certificate-of-need" laws;
- Enforce private contracts that include medical malpractice reforms;
- Avoid creating special tax breaks for health insurance and medical care; and
- Eliminate existing tax breaks for health insurance and medical care while reducing the overall tax burden.

CATO RESOURCES:

- "Medicaid & SCHIP," by Michael F. Cannon, Chapter 13 of the *Cato Handbook for Policymakers*, 7th ed. (2009) 269
- "Health Care Regulation," by Michael F. Cannon, Chapter 15 of the *Cato Handbook for Policymakers*, 7th ed. (2009) 278
- "Health Insurance Regulation," by Michael F. Cannon, Chapter 16 of the *Cato Handbook for Policymakers*, 7th ed. (2009) 294
- "Bad Medicine: A Guide to the Real Costs and Consequences of the New Health Care Law," by Michael D. Tanner, White Paper (February 14, 2011) 308
- "The New Health Care Law's Effect on State Medicaid Spending: A Study of the Five Most Populous States," by Jagadeesh Gokhale (April 6, 2011) 368
- "Reforming Medical Malpractice Liability through Contract," by Michael F. Cannon, Working Paper no. 3 (November 12, 2010) 406
- "The Massachusetts Health Plan: Much Pain, Little Gain," by Aaron Yelowitz and Michael F. Cannon, Policy Analysis no. 657 (January 19, 2010) 428
- "Yes, Mr. President: a Free Market Can Fix Health Care," by Michael F. Cannon, Policy Analysis no. 650, October 21, 2009 441

CONTACT AN EXPERT:

- Michael Cannon, Director, Health Policy Studies
  - Email - mcannon@cato.org
  - Phone - 202-218-4632

- Michael Tanner, Senior Fellow
  - Email - mtanner@cato.org
  - Phone - 202-789-5258

Cato Handbook for Policymakers

CATO INSTITUTE

7TH EDITION

13. Medicaid and SCHIP

State legislators should

- deregulate health care and health insurance, and
- demand that the federal government grant them flexibility, not additional funds, to administer their Medicaid and SCHIP programs.

Congress should

- reform Medicare and the tax treatment of health insurance,
- deregulate health care and health insurance,
- eliminate any federal entitlement to Medicaid or SCHIP benefits,
- freeze each state's Medicaid and SCHIP funding at 2009 levels,
- give states total flexibility to use Medicaid and SCHIP funds to achieve a few broad goals, and
- eventually phase out all federal funding of Medicaid and SCHIP.

Americans want to help the needy obtain medical care. Our first obligation to the needy, however, is not to increase their numbers. Thus, the first step lawmakers should take to assist the needy is to eliminate subsidies and regulations that impede market competition. By making medical care of ever-increasing quality available to ever-increasing numbers of people, a free market would reduce the number of people needing assistance.

No matter how well a free market expands quality and access, however, there will always be seriously ill people who cannot afford medical care, or who could have purchased health insurance but chose not to do so. This chapter discusses how the federal and state governments might better address that problem.

The Samaritan's Dilemma

However we choose to help those in need, we confront what economists call ''the Samaritan's dilemma'': any effort to help the needy will induce others to take advantage of that assistance. Coined by Nobel Prize–winning economist James Buchanan, that term derives from the New Testament story of the Good Samaritan, who came to the aid of a traveler who had been beaten by thieves. Buchanan reasons that if the Samaritan decides to assist more unlucky travelers, travelers would likely take less care to avoid thieves and other hazards. Providing assistance to people can induce them to take less care of themselves.

For a modern manifestation of the Samaritan's dilemma, consider that in 1996 Congress reduced federal welfare benefits and cut millions of recipients from the welfare rolls. At the time, many predicted that cutting welfare would increase poverty. The opposite occurred. When people left the welfare rolls, poverty fell—often dramatically—for every racial category and age group, including children. In every year following 1996, the poverty rate has remained lower than at any point in the 17 years leading up to welfare reform. That fact suggests that the federal government had induced otherwise able-bodied people to become dependent on welfare.

The Samaritan's dilemma calls attention to the certainty that providing too little assistance will result in unnecessary suffering, but providing too much assistance will increase the burden of charity while it reduces society's ability to bear that burden. When assistance becomes more generous, more people will depend on it, and fewer will contribute to the economy and to charity, both public and private.

The Samaritan's dilemma is ubiquitous and unavoidable. It plagues both public and private charity.

To be effective, then, charitable efforts must attempt to distinguish between the truly needy and those who could care for themselves. No entity, public or private, can do that perfectly. Yet some approaches are more effective than others. Private charities, such as Habitat for Humanity, have the incentive and the ability to ensure that their resources assist only the truly needy. If it did not, Habitat could lose funding when donors learn their contributions are going to able-bodied people who don't need assistance.

Government, in contrast, has little ability or incentive to navigate carefully the Samaritan's dilemma. Politicians must craft broad eligibility rules for government welfare programs. Typically, these take the form of a legal entitlement to benefits for anyone who meets certain criteria. The bureaucrats who administer those programs must treat all qualifying indi-

viduals equally. If the bureaucracy identifies beneficiaries who technically meet those criteria, but nevertheless need no assistance, the bureaucrats have little ability or incentive to exclude them. In fact, they have the opposite incentive since their careers depend on a thriving welfare program. Even if the bureaucrats were to exclude those non-needy beneficiaries, the beneficiaries could sue the government for withholding benefits to which they are legally entitled. Unlike private charity, public charities rarely see their funding reduced for providing assistance to those who don't need it, because taxpayers don't have the choice to withdraw their ''contributions.'' Either they pay their taxes, or they go to jail. As a result, government charities, such as cash assistance, Medicaid, and the State Children's Health Insurance Program, tend to err on the side of providing too much assistance and subsidizing people who don't need it.

There are ways that government can make medical care and health insurance affordable for low-income Americans that do not involve a Samaritan's dilemma. Federal and state governments can reform Medicare (see Chapter 12) and the tax treatment of health care (see Chapter 14), as well as deregulate medicine (see Chapter 15) and health insurance (see Chapter 16).

Government can better navigate the Samaritan's dilemma, however, by reforming and reducing the size of Medicaid and the State Children's Health Insurance Program.

Medicaid

The federal government and state and territorial governments jointly administer Medicaid—or more precisely, the 56 separate Medicaid programs throughout the United States. Medicaid participation is ostensibly voluntary for states, if not for taxpayers. States that wish to participate (all states do) must provide a federally mandated set of health benefits to a federally mandated population of eligible individuals. In return, each state receives federal funds to administer its program. On average, 57 percent of Medicaid funding comes from the federal government and 43 percent comes from the states. States can make their Medicaid benefits more generous than the federal government requires and can also extend eligibility to more people than the federal government requires. For beneficiaries, Medicaid is an entitlement. So long as they meet the eligibility criteria, they can receive benefits.

According to the Kaiser Family Foundation, in 2005 Medicaid enrollment reached nearly 60 million individuals. Medicaid primarily serves

four low-income groups: mothers and their children, the disabled, the elderly, and those needing long-term care. The elderly and disabled comprised 24 percent of beneficiaries, but accounted for 70 percent of expenditures on benefits. Half the enrollees were children, while other adults comprised the remaining 26 percent of enrollees. Those two groups—children and nonelderly, nondisabled adults—comprised 76 percent of enrollees but accounted for 30 percent of expenditures on benefits.

The federal government's method for distributing Medicaid funds to states encourages fraud, creates perverse incentives for state officials, and encourages states to expand their programs to people who don't need assistance. The federal government provides Medicaid funds to each state in proportion to what the state itself spends. The more a state spends on its Medicaid program, the more it receives from the federal government. States receive at least $1 from the federal government for every dollar the state spends. Some states, however, receive as much as $3 for each dollar they put forward. Thus, states can double, triple, or even quadruple their money by spending more on Medicaid. Indeed, states that use fraudulent schemes, such as *pretending* to increase Medicaid spending in order to draw down federal matching funds, can increase their take even further. The federal Medicaid ''match'' is open-ended; Congress will match any amount a state puts forward.

The availability of matching federal funds creates perverse incentives for state officials to underfund other priorities. Spending $1 on police buys $1 of police protection, but spending $1 on Medicaid buys $2 or more of medical benefits. The federal match also makes lawmakers extremely reluctant to cut Medicaid spending. Cutting $1 of police protection causes $1 of political pain, but results in $1 of budget savings. Obtaining just $1 of budgetary savings through Medicaid cuts requires inflicting $2 to $4 worth of political pain.

Those perverse incentives combine to encourage states to expand their programs to millions of non-needy recipients. For example:

- According to the Urban Institute, about one-fifth of adults and children who are *eligible* for Medicaid nonetheless obtain private coverage. The fact that some 20 percent of those who fall within states' Medicaid eligibility criteria obtain private coverage suggests that many who are enrolled could obtain private coverage as well.
- Middle-class families frequently use Medicaid to pay for nursing-home and other long-term care expenses of their elderly members. A cottage industry of estate planners has emerged to help such

individuals artificially impoverish themselves to become eligible for Medicaid. Many elderly Medicaid enrollees could have purchased private long-term care insurance. Economists Jeffrey Brown of the University of Illinois at Urbana-Champaign and Amy Finkelstein of MIT estimate that Medicaid's long-term care benefits discourage 66 to 90 percent of seniors from purchasing such insurance on the private market.

- The 1996 welfare reform law also cut eligibility to Medicaid for noncitizen immigrants. Harvard economist George Borjas found that, again contrary to expectations, health insurance coverage among noncitizen immigrants *increased* after their eligibility for Medicaid was reduced—an effect that could not be explained by the robust economy of the 1990s. Borjas argues that affected immigrants increased their work effort and found jobs with health benefits.
- Economists Jonathan Gruber of MIT and Kosali Simon of Cornell University estimate that when Medicaid expands eligibility to new groups, ''the number of privately insured falls by about 60 percent as much as the number of publicly insured rises.'' That suggests that many people substitute Medicaid coverage for private coverage.

Medicaid's poor navigation of the Samaritan's dilemma has even permeated popular culture. The 2004 Oscar-winning film *Million Dollar Baby* showcased two forms of Medicaid abuse: One of the film's characters declined the gift of a new house so she could remain eligible for Medicaid (rather than sell the house and purchase her medication herself). Later, the family of a wealthy invalid encouraged the invalid to transfer her assets to the family so that taxpayers (through Medicaid) would pay the wealthy invalid's medical expenses.

Indeed, the more a state expands its Medicaid program, the more difficult it becomes for everyone to afford private insurance. Economists Mark Duggan of the University of Maryland and Fiona Scott Morton of Yale University find Medicaid's drug-pricing controls effectively increase by 13 percent the prices that private purchasers pay for prescription drugs. If grandma's medications cost her $1,000 per year, some $117 of that is a hidden tax attributable to Medicaid.

The State Children's Health Insurance Program

What is true of Medicaid is true of the State Children's Health Insurance Program. Congress created SCHIP in 1997 to expand health insurance

coverage among children in families that earned too much to be eligible for Medicaid but too little to afford private health insurance.

The federal government funds state SCHIP programs much as it funds Medicaid, but with two main differences. First, states receive a larger federal match under SCHIP than under Medicaid. Overall, the federal government funds 69 percent of the cost of state SCHIP programs, whereas states forward only 31 percent. Each state can *at least* triple its money by spending on SCHIP. Some states can ''pull down'' $4 or $5 from the federal government—really, from taxpayers in other states—for each $1 they spend on SCHIP. Second, the federal government limits the overall amount it will contribute to each state's SCHIP program, though that cap is not as binding as it may appear. States such as Georgia sometimes spend all their federal SCHIP funds before the end of the fiscal year, and then petition the federal government for additional funds. Another way to describe those states' behavior is to say that they demand more money and dare Congress to throw sick children off the SCHIP rolls. Congress has repeatedly bailed out such states, effectively rewarding them for committing to spend more federal dollars than they were allowed.

As a result of these perverse incentives, states such as New Jersey have expanded SCHIP eligibility to children in families of four earning as much as $72,000 per year. New York proposed expanding the program to families of four earning $82,000 per year. The Bush administration subsequently refused to provide federal SCHIP funds for families earning over 250 percent of the federal poverty level (about $51,000 for a family of four) unless a state enrolls in Medicaid and SCHIP 95 percent of eligible individuals below that threshold. (The future of that directive is uncertain.) Compared with Medicaid, SCHIP targets families higher up the income scale, who are therefore more likely to have private health insurance. As a result, SCHIP leads to even greater ''crowd-out'' of private insurance than Medicaid. The Congressional Budget Office reports that by 2006, some 670,000 *adults* had enrolled in the program.

Federal and state politicians devote significant resources to these programs even though expanding coverage may not be the best way to improve the health of targeted populations. Although Medicaid and SCHIP probably do improve health outcomes, economists have found no evidence that these programs produce the greatest possible health improvements for the money spent. Economists Helen Levy and David Meltzer write:

> It is clear that expanding health insurance is not the only way to improve health. . . . Policies could also be aimed at factors that may fundamentally

> contribute to poor health, such as poverty and low levels of education. There is no evidence at this time that money aimed at improving health would be better spent on expanding insurance coverage than on any of these other possibilities.

Major reform of Medicaid and SCHIP is long overdue.

Congress Should Reform Medicaid and SCHIP as It Reformed Welfare

It makes little sense for taxpayers to send money to Washington, so those funds can be sent back to their state capitol with strings and perverse incentives attached. Congress should devolve control over Medicaid and SCHIP to the states. The states can then decide whether and how to maintain their own programs, and could learn from the successes and failures of one another's experiments.

In 1996, Congress eliminated the federal entitlement to a welfare check; placed a five-year limit on cash assistance; and froze federal spending on such assistance, which was then distributed to the states in the form of block grants with fewer federal restrictions. The results were unquestionably positive. Welfare rolls were cut in half, and poverty reached the lowest point in a generation.

The federal government should emulate this success by eliminating federal entitlements to Medicaid and SCHIP benefits, freezing federal Medicaid and SCHIP spending at current levels, and distributing those funds to the states as unrestricted block grants. That would eliminate the perverse incentives that favor Medicaid and SCHIP spending over other state priorities, and that encourage states to defraud federal taxpayers. According to Congressional Budget Office projections, freezing Medicaid and SCHIP spending at 2009 levels would produce $979 billion in savings by 2018. That would significantly reduce or even eliminate future federal deficits. In time, the federal government should give the states full responsibility for Medicaid by eliminating federal Medicaid spending while concomitantly cutting federal taxes.

States should hasten these reforms by pressuring the federal government for maximum flexibility in administering their Medicaid programs. With unrestricted Medicaid block grants, states that wanted to spend more on their Medicaid programs would be free to raise taxes to do so, and vice versa.

Suggested Readings

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Cannon, Michael F., and Michael D. Tanner. *Healthy Competition: What's Holding Back Health Care and How to Free It*. Washington: Cato Institute, 2007.

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—Prepared by Michael F. Cannon

Cato Handbook for Policymakers

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7TH EDITION

15. Health Care Regulation

State governments should

- eliminate licensing of medical professionals or, as a preliminary step, recognize licenses issued by other states;
- eliminate ''corporate-practice-of-medicine'' laws;
- eliminate ''certificate-of-need'' laws; and
- enforce private contracts that include medical malpractice reforms.

Congress should

- eliminate states' ability to use licensing laws as a barrier to entry by medical professionals licensed by other states,
- eliminate the U.S. Food and Drug Administration's efficacy requirement for new drugs, and
- reject federal medical malpractice reforms.

A widely accepted premise of most health care reform debates is that health and medicine are special areas of the economy where markets are plagued by failure. For example, economists describe medicine as a ''credence'' good because it is difficult for consumers to judge its quality before *and even after* they have consumed it. It is also difficult for producers (e.g., doctors, hospitals, etc.) to judge the quality of their services, even after the fact. A doctor might *think* his actions were responsible for a good outcome, or not responsible for a bad outcome, but it is difficult to know for sure. Nevertheless, doctors tend to know more about the need for, and quality of, various services than patients do. That asymmetry of information creates an unequal relationship between patient and physician and causes much concern among health care reformers.

In 1963, Nobel Prize–winning economist Kenneth Arrow penned an influential article for the *American Economic Review* that described government intervention in health care markets as a response to the problems of uncertainty and asymmetric information in medicine. Lobbyists and health care reformers ritually cite Arrow's article as justification for their preferred government interventions.

The reality of health care markets, government intervention, and, indeed, Arrow's article is not that simple. Pulitzer Prize–winning sociologist Paul Starr notes that many government interventions benefit producers of medical care at the expense of consumers and *exacerbate* the problem of uncertainty. Health economist James C. Robinson writes:

> The central proposition of [Arrow's] article, that health care information is imperfect and asymmetrically distributed, has been seized upon to justify every inefficiency, idiosyncrasy, and interest-serving institution in the health care industry. . . . It has served to lend the author's unparalleled reputation to subsequent claims that advertising, optometry, and midwifery are threats to consumer well-being, that nonprofit ownership is natural for hospitals though not for physician practices, that price competition undermines product quality, that antitrust exemptions reduce costs, that consumers cannot compare insurance plans and must yield this function to politicians, that price regulation is effective for pharmaceutical products despite having failed in other applications, that cost-conscious choice is unethical while cost-unconscious choice is a basic human right, that what consumers want is not what they need, and, more generally, that the real is reasonable, the facts are functional, and the health care sector is constrained Pareto-efficient.

Robinson concludes:

> The most pernicious doctrine in health services research, the greatest impediment to clear thought and successful action, is that health care is *different.* . . . To some within the health care community, the uniqueness doctrine is self-evident and needs no justification. After all, health care is essential to health. That food and shelter are even more vital and seem to be produced without professional licensure, nonprofit organization, compulsory insurance, class action lawsuits, and 133,000 pages of regulatory prescription in the *Federal Register* does not shake the faith of the orthodox. . . . The uniqueness doctrine hence proves too much.

Consistent with Robinson's observation, producers have been the driving force behind or have subsequently captured most health care regulations, and have used them to protect themselves from market competition at the expense of consumers. Physicians sought and used licensing and corporate-

practice-of-medicine laws to prevent competition from less remunerative prepaid health plans or integrated delivery systems that curtail physician autonomy. Recently, nonphysician clinicians have used licensing, scope-of-practice, and minimum-education requirements to increase their incomes by reducing the supply of, and substitutes for, their services. Hospitals use government regulation to block competition from other, often innovative, medical facilities. Pharmaceutical and medical device manufacturers rely on the U.S. Food and Drug Administration to erect high barriers to entry into those markets.

Perhaps the one area of health care regulation that fails to fit this mold is the courts' refusal to enforce contracts where patients waive some or all of their right to sue for malpractice in return for a reduced price. Nevertheless, the effect of that regulation is the same as all others: lower quality and higher costs.

Medical Professionals

How might markets make medicine better, cheaper, and safer? Harvard Business School professor Clayton Christensen and his colleagues offer this insight: ''Many of the most powerful innovations that disrupted other industries did so by enabling a larger population of less-skilled people to do in a more convenient, less-expensive setting things that historically could be performed only by expensive specialists in centralized, inconvenient locations.'' In medical care, that process of using fewer inputs to achieve greater health outputs would come in large part from allowing less-trained clinicians, such as nurse practitioners and physician assistants, to perform tasks that were once performed only by highly trained (and more costly) physicians.

State licensing of medical professionals allows physicians and others to block that market process. To practice medicine in a state, physicians, nurse practitioners, physician assistants, and other clinicians must obtain a license from that state. To obtain a license, they must satisfy specified minimum-education requirements. For each type of clinician license, each state specifies the tasks the license allows clinicians to perform. That list of tasks is called the clinician's ''scope of practice.'' (Physicians' scope of practice is plenary.)

Licensing allows physicians to restrict entry into their profession and to restrict the supply of substitutes for their services. By lobbying legislatures to restrict the scopes of practice of nurse practitioners and physician assistants, physicians can reserve certain tasks for themselves. Such restric-

tions increase the demand for physician services and increase physician incomes. They also make medical care more expensive and reduce access.

Licensing also enables midlevel clinicians to do the same. Nurse practitioners, for instance, can restrict entry into their profession (and thereby increase their incomes) by pushing states to increase the education requirements for a nurse practitioner's license. They can block competition from substitutes for their services by lobbying to restrict the scopes of practice of other nonphysician clinicians.

Physicians typically argue that they seek to restrict the scopes of practice of nonphysician clinicians because broader scopes of practice would threaten patient safety. Yet study after study has shown that midlevel clinicians provide a level of quality equal to that of physicians performing the same services. The American Medical Association, the nation's largest lobbying group representing physicians, acknowledges this:

> More than 50 journal articles and reports comparing physician and nonphysician services have been reviewed. These were in peer-reviewed journals though not, for the most part, peer-reviewed journals with a physician readership. The articles and reports usually look at one procedure or at the treatment of one kind of patient, usually a patient with an uncomplicated disorder or the need for routine treatment. These studies almost uniformly conclude that in the particular instances studied, a non-physician clinician in defined circumstances can provide an acceptable level of care.

Typically, midlevel clinicians also provide those services at a much lower cost.

Moreover, licensing does little to discipline clinicians who actually harm patients. A study by the consumer watchdog Public Citizen found that between 1990 and 2005, ''only 33.26 percent of doctors who made 10 or more malpractice payments were disciplined by their state board—meaning two-thirds of doctors in this group of egregious repeat offenders were not disciplined at all.''

There is a limit, of course, to every clinician's competence. Market forces and medical malpractice liability already do much more than licensing to protect patients. In the absence of licensing, private credentialing and the desire to protect brand names and reputations would do even more to safeguard patients from incompetent providers.

The standard, static economic analysis suggests that, on balance, licensing has little if any positive effect on health outcomes. Economists generally agree that licensing increases the quality of medical services *actually delivered*. Economists also agree that licensing increases the cost of medical

care and therefore reduces the *quantity* of services delivered. For example, access to care will almost certainly fall if physicians secure regulations that inhibit nurse practitioner–staffed clinics such as MinuteClinic and RediClinic, which provide convenient and affordable access to routine care in retail stores such as CVS and Wal-Mart. Thus, licensing may do nothing to improve overall health.

A more dynamic analysis further suggests that licensing may in fact lead to *worse* health outcomes. Prepaid group practices such as Kaiser Permanente and Group Health Cooperative combine an integrated delivery system with prepayment. These plans make greater use of midlevel clinicians, preventive and primary care, and electronic medical records than other types of insurance or delivery systems. As a result, they have shown remarkable success at increasing the delivery of high-quality services, reducing low-value and harmful services (including medical errors), and making health insurance more affordable. As noted earlier, however, physicians have used licensing to block competition from integrated delivery systems and prepaid health plans, in large part because prepaid group practices are generally less remunerative for physicians and restrict physician autonomy. Thus, licensing may be reducing the overall quality of care by inhibiting higher-quality forms of health care delivery.

Reform is an inadequate response to licensing's pathologies. Whether licensing authority is vested in a legislature or regulatory agency, state or federal, there is no way to insulate that authority from influence by those whose incomes hang in the balance. Even absent political pressure, a government body is inherently unable to strike the proper balance between access and safety for millions of patients across billions of encounters with medical personnel. Such an authority would inevitably restrict access to care and block innovations that make medicine better, cheaper, and safer.

Instead, state governments should eliminate medical licensing. Many things would not change. Hospitals, health plans, and other organizations would continue to rely on board certification, private credentialing organizations, and their own internal processes to evaluate the competence of clinicians. Courts would continue to hold health care organizations and individual clinicians accountable for harm caused by negligence.

What would change is that providers would seek innovative ways to use midlevel clinicians to bring quality care within reach of more low-income Americans. And greater competition between different delivery and payment systems would drive the medical marketplace toward providing greater health for more Americans at a far lower cost.

Medical Facilities

Another way markets might make medical care better, cheaper, and safer is through rigorous competition among medical facilities, including clinics, physician offices, urgent care clinics, ambulatory surgical centers, specialty hospitals, and full-service hospitals. State laws that require government approval of new medical facilities are a leading barrier to competition between medical facilities.

For most of the 20th century, federal and state governments encouraged greater spending on medical care. Medical expenditures—especially by government—truly exploded after the creation of Medicare and Medicaid in 1965. In the 1960s and 1970s, state governments attempted to contain those rapidly growing outlays essentially by engaging in centralized economic planning. Their primary tools were laws requiring hospitals, nursing homes, and even physician offices to obtain a ''certificate of need'' (CON) from a state planning agency before opening a new facility or investing in new equipment. The rationale behind CON laws was that by restraining the supply of hospital beds, government could restrain medical spending. By 1976, the federal government mandated CON planning nationwide.

CON laws failed to slow the growth of medical spending. In a survey of the empirical literature on CON laws, health economist Michael Morrisey writes that those studies ''find virtually no cost-containment effects. . . . If anything, CON programs tended to increase costs.'' The failure of CON laws to achieve their stated aims led the federal government to lift its CON-planning mandate in 1987 and led many states to eliminate their laws also. Yet other states have maintained and even expanded their CON requirements. Why?

Although CON laws have done nothing to contain spending, they have been a boon for incumbent health care providers. Though the stated purpose of CON laws is cost containment, those regulations also protect existing health care facilities from competition. Morrisey concludes:

> A reasonably large body of evidence suggests that CON has been used to the benefit of existing hospitals. Prices and costs were higher in the presence of CON, investor-owned hospitals were less likely to enter the market, multihospital systems were less likely to be formed, and hospitals were less likely to be managed under for-profit contract. . . . The continued existence of CON and, indeed, its reintroduction and expansion despite overwhelming evidence of its ineffectiveness as a cost-control device suggest that something other than the public interest is being sought. The provider self-interest view is worthy of examination.

CON laws increase health care costs and deny patients the benefits of new forms of health care delivery. There is no justification for these laws, and no place in a market economy for Soviet-style economic planning. States should eliminate CON laws immediately. If state officials are concerned about runaway health expenditures, they should reduce or eliminate the government subsidies that fuel such spending.

Pharmaceutical Regulation

The Food and Drug Administration is the federal agency tasked with implementing the federal Food, Drugs, and Cosmetics Act of 1938, which Congress enacted in response to drug-related poisonings that killed over 100 children. That act requires pharmaceutical manufacturers to demonstrate to the federal government that their products are safe. Originally, if the FDA did not reject the application within 180 days, the firm could proceed to market its product.

Another drug-related tragedy occurred in 1962 when pregnant women taking the tranquilizer thalidomide gave birth to children with severe deformities. Though thalidomide victims numbered over 10,000 worldwide, there were relatively few in the United States, as the FDA had not yet approved thalidomide for marketing. Congress nevertheless responded to this tragedy by enacting the 1962 amendments to the Food, Drugs, and Cosmetics Act. Those amendments require firms to prove to the FDA's satisfaction that their products are efficacious for the indication for which approval is sought and require firms to obtain an affirmative approval from the FDA before marketing a new drug.

Economists have long acknowledged a fundamental tension in the FDA's regulation of pharmaceuticals. According to MIT economist Ernst Berndt and colleagues:

> A central tradeoff facing the FDA involves balancing its two goals—protecting public health by assuring the safety and efficacy of drugs, and advancing the public health by helping to secure and speed access to new innovations.

Failure to meet the first goal—assuring the safety of new drugs—results in what is called a ''Type I error.'' Failure to meet the second goal—speeding access to effective new drugs—results in a ''Type II error.''

As Table 15.1 illustrates, the FDA succeeds in its mission when it either timely approves an effective drug (quadrant 1) or blocks a harmful drug (quadrant 4). The FDA commits a Type I error when it approves an unsafe

Table 15.1
FDA Type I, Type II Error Problem

		Correct Decision: Approve	Correct Decision: Delay/Reject
FDA Decision	Approve	(1) **Success** (Helpful drug approved)	(2) **Type I Error** • Harmful drug approved • Patients harmed • Error traced to FDA officials
	Delay/Reject	(3) **Type II Error** • Helpful drug withheld • Patients harmed • Error *not* traced to FDA officials	(4) **Success** (Harmful drug withheld)

drug (quadrant 2). Type I errors harm patients by exposing them to dangerous or even deadly products. The FDA commits a Type II error when it delays or denies approval of a beneficial drug (quadrant 3). Type II errors harm patients by withholding products that would protect them from illness or death.

The FDA faces starkly different consequences for Type I and Type II errors. Type I errors bring swift and certain retribution on the agency. The victims of a Type I error are easily identifiable. Victims, their loved ones, the media, and Congress can discipline FDA officials for approving a harmful product. FDA officials know that a Type I error will lead to congressional hearings and public disgrace, and may even end their careers.

In contrast, FDA officials are rarely disciplined for Type II errors. Delaying or denying approval of a beneficial drug harms patients no less than approving an unsafe drug, yet victims of Type II errors are much harder to identify. Neither the Type II victim, nor their loved ones, nor FDA officials know exactly which patients might have been helped by a beneficial drug whose approval was delayed or denied. The patients and their families may never have heard of the drug. Indeed, the FDA may never have heard of the drug either: Type II errors include beneficial drugs that are never developed due to the high cost of winning FDA approval. Because of this information asymmetry, the political system does not—indeed cannot—discipline FDA officials for Type II errors the way it disciplines them for Type I errors.

Dr. Henry Miller, a former FDA official, offers an account of how those incentives affect the behavior of FDA reviewers:

> In the early 1980s, when I headed the team at the FDA that was reviewing the [new drug application, or NDA] for recombinant human insulin, the first drug made with gene-splicing techniques, we were ready to recommend approval a mere four months after the application was submitted (at a time when the average time for NDA review was more than two and a half years). . . . My supervisor refused to sign off on the approval—even though he agreed that the data provided compelling evidence of the drug's safety and effectiveness. ''If anything goes wrong,'' he argued, ''think how bad it will look that we approved the drug so quickly.'' . . . The supervisor was more concerned with not looking bad in case of an unforeseen mishap than with getting an important new product to patients who needed it.

The tradeoff between Type I and Type II errors is unavoidable. Reducing either type of error results in more errors of the other type. The FDA must commit a certain number of each.

The asymmetric information the FDA receives about Type I and Type II errors leads the agency to support policies that *increase* morbidity and mortality. Suppose the FDA were considering a new regulation that would prevent 1,000 deaths due to adverse drug reactions but that would slow down the approval of new drugs such that 10,000 patients would die while waiting for life-extending drugs that otherwise would have been approved. The FDA would implement the new regulation, even though it would result in 9,000 additional deaths.

Every effort to quantify the costs and benefits of FDA regulation supports that conclusion. Economist Sam Peltzman published the first such analysis in 1973. In 2005, Peltzman wrote:

> I found that the unregulated market was very quickly weeding out ineffective drugs prior to 1962. Their sales declined rapidly within a few months of introduction, and there was thus little room for the regulation to improve on market forces. . . . Most of the subsequent academic research reached conclusions similar to mine. . . . I concluded that the proof-of-efficacy requirement was a public health disaster, promoting much more sickness and death than it prevented. Nothing I have seen since has moved me to change that conclusion—the disaster is ongoing.

A study by Tulane University economist Mary K. Olson estimated that when additional revenue from user fees enabled the FDA to review drugs more quickly, the health benefits of quicker access to new drugs were roughly 12 times as great as the costs from additional adverse drug reac-

tions. Another study, by University of Chicago economist Tomas Philipson and colleagues, found that quicker reviews brought significant health benefits, but ''did not, in fact, have *any* effect on drug safety.'' That is, there appeared to be no additional adverse drug reactions. Those findings imply that the FDA will tolerate additional deaths due to Type II errors even if doing so were to produce little or no reduction in deaths due to Type I errors. Indeed, despite such research, Congress has in recent years sought to give the FDA additional powers to reduce Type I errors.

Little is to be gained from minor reforms such as user fees. The asymmetry of information available to the FDA guarantees that the agency will always behave in this manner.

Nobel Prize–winning economist Gary Becker advocates eliminating the efficacy standard and returning the FDA to the status quo *ante* 1962. Peltzman suggests, however, that even the safety requirement delivered more harm than benefit. Another Nobel Prize–winning economist, the late Milton Friedman, proposed eliminating the FDA entirely.

At a minimum, Congress should eliminate the FDA's efficacy standard. Eliminating the efficacy standard would not leave patients unprotected. The FDA would still have the power to keep from the market drugs that have not been proved safe to the agency's satisfaction. Moreover, private certification of pharmaceutical safety and efficacy, which already exists informally, would expand. Patients harmed by pharmaceuticals would continue to have recourse to the courts, which (along with liability insurers) would create powerful incentives for pharmaceutical manufacturers to conduct appropriate testing.

The United States already has an essentially unregulated, albeit informal, process for certifying drug efficacy. The FDA approves a drug for one particular use, which goes on the drug's label. Yet physicians may—and do—prescribe drugs for other, ''off-label'' uses. An example is aspirin. Though designed for pain relief, doctors have long prescribed aspirin to prevent heart attacks.

Lack of FDA certification does not mean such uses are dangerous or unproven. Off-label uses are suggested or discovered by doctors and scientists; tested; and discussed worldwide in medical journals and symposia, and (if validated) appear in medical textbooks, the *U.S. Pharmacopeia Drug Information*, the *American Hospital Formulary Service Drug Information*, and other authoritative sources. Off-label uses often become the standard of care, particularly in fighting cancer and other diseases. Absent the FDA, those private organizations would play a greater role in certifying safety and efficacy.

Moreover, additional organizations would step forward to meet the demand for safety and efficacy certification. Underwriters Laboratories certifies the safety of thousands of consumer products, many inherently dangerous. That organization's charter states that it will certify the safety of any consumer product submitted to it. Underwriters Laboratories or other consumer advocates, such as *Consumer Reports*, could perform that vital function. Most likely, however, integrated and prepaid health plans such as Kaiser Permanente and Group Health Cooperative would perform that function as an agent for their enrollees. Prepaid group plans lead the industry in the use of electronic medical records, which are essential to tracking accurately a drug's effects on patients. When the FDA wanted to study whether the pain reliever Vioxx was causing heart attacks, it turned to Kaiser Permanente of Northern and Southern California.

Market-based certification respects the freedom of doctors and patients to make treatment decisions according to individual circumstances. It also provides them with information more quickly than government certification. Economist J. Howard Beales III found that off-label uses that were later certified by the FDA had been certified by the *U.S. Pharmacopeia Drug Information* an average of 2.5 years sooner. Market-based certification can also do more for patients than government certification can. The FDA is prohibited by law from considering cost-effectiveness as a criterion for approval. In contrast, prepaid group plans face financial incentives to ensure that their enrollees receive maximum value for their money, and can condition their seal of approval on whether a drug provides benefits that are worth the cost.

Two things must be made clear. First, if Congress were to eliminate FDA regulation of pharmaceuticals—or just the agency's efficacy standard—more patients would likely be harmed by new drugs. That unfortunate fact will lead to greater skepticism of new drugs by doctors and patients, as well as innovations that would more quickly detect and stop adverse drug reactions. Second, many more lives would be saved through greater innovation and quicker access to helpful drugs than would be lost to harmful ones.

Medical Liability Reform

The right to sue health care providers for medical malpractice is an important tool for protecting patients from injury due to negligent care. Patients typically have little information about the quality of care. By

imposing the costs of negligent care on providers, the medical malpractice ''system'' can align the incentives of providers with those of patients

Nevertheless, many people complain—with some justification—that the medical liability system in the United States performs poorly. Research suggests that malpractice liability does little to discourage negligent care, that only a small fraction of patients injured by provider negligence actually recover damages from providers, and that many who do recover are not victims of negligence. Many specialists (neurosurgeons and obstetricians, to name two) report that they cannot afford the rising cost of medical liability insurance. Duke University professor Christopher Conover estimates that in 2002, the U.S. medical liability ''system'' cost Americans $81 billion net of benefits. Physicians and other providers—who have seen often-dramatic increases in malpractice insurance premiums—have intermittently declared the medical liability system to be in ''crisis'' for over 30 years.

This ''crisis'' has spawned numerous proposals to reform medical malpractice liability rules. The American Medical Association advocates a nationwide cap on noneconomic damages similar to the $250,000 cap enacted in California. Other proposals include legislative limits on contingency fees for plaintiffs' attorneys; ''no-fault'' compensation systems for medical injuries, such as the limited programs adopted in Florida and Virginia; alternative forms of dispute resolution, such as arbitration and special medical courts; the English rule of costs; and reform of the collateral source rule.

Each of these reforms would leave some patients better off—typically by reducing prices for medical care—at the cost of leaving other patients worse off. So-called loser pays reforms would often reallocate the costs of frivolous lawsuits to the correct party. However, that rule deters less affluent patients from seeking legal redress for legitimate grievances. A cap on noneconomic damages would reduce health care costs for noninjured patients, but at the expense of leaving some injured patients with uncompensated losses. Limits on contingency fees would reduce costs for noninjured patients, but at the cost of denying compensation to injured patients whose cases plaintiffs' attorneys deem too expensive to pursue.

Many observers have called on the federal government to enact such reforms. As discussed in Chapter 11, Congress is not constitutionally authorized to impose substantive rules of tort law on the states. Although the federal government may enact technical procedural changes, state legislatures are the proper venue for correcting excesses in their civil

justice systems. The fact that medical professionals can avoid states with inhospitable civil justice systems gives them significant leverage when advocating state-level medical liability reforms, and gives states incentives to enact such reforms. That some states have done so demonstrates that they have the ability.

Yet state-imposed medical malpractice reforms share two flaws with federally imposed rules. As noted earlier, imposing one set of limits on the right to sue for medical malpractice on all patients and providers will help some patients while hurting others. And the fact that those rules are written into statutes makes harmful rules extremely difficult to remove.

A more patient-friendly and liberty-enhancing approach would allow patients and providers to write their own medical malpractice reforms into legally enforceable contracts. For cases of ordinary negligence, patients could choose the level of protection they desired, rather than have a uniform level of protection (and the resulting price) imposed on them by the courts. Providers could offer discounts to patients who agree to limits on compensation in the event of an injury. If not, the patient could pay the higher price or seek a better deal from another provider. Insurance companies could facilitate such contracts on behalf of their enrollees. Those companies would have strong incentives to ensure that those contracts provide adequate protection, else the insurers could face higher claims from injured patients who could not collect the full extent of their damages. The regular tort rules would continue to apply in cases where patients and providers did not contract around those rules, where patients were subject to duress, or where providers were guilty of intentional wrongdoing or reckless behavior.

Freedom of contract would make medical care more affordable to many low-income patients. It would also enhance quality competition. Providers who know they are less likely to injure patients could offer more expansive malpractice protections, or equivalent malpractice protections at a lower cost. Low-quality providers would not be able to do the same and would face strong financial incentives to improve their processes of care.

Such contracts are not possible today because courts have invalidated them as ''against public policy.'' That policy has restricted the freedom of adults to make mutually beneficial exchanges that hurt no one else. It has also increased the cost of providing medical care to the indigent, which has undoubtedly reduced their access to care.

To remedy this costly restriction on liberty, courts should abandon their current policy and enforce contractual limitations on the right to sue for

medical malpractice. If courts refuse, state legislatures should require them to do so. Economist Richard Thaler and law professor Cass Sunstein write:

> In our view, state lawmakers should think seriously about increasing freedom of contract in the domain of medical malpractice, if only to see whether such experiments would reduce the cost of health care without decreasing its quality. Increasing contractual freedom won't solve the health care crisis. But it might well help—and in this domain every little bit of help counts.

As noted earlier, the medical malpractice system does a poor job of providing relief to injured patients, preventing frivolous lawsuits, or discouraging negligence. The remedies for these shortcomings are not obvious. A dynamic marketplace that allows parties to experiment with—and abandon—different malpractice rules is the quickest and surest way to find those solutions.

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—Prepared by Michael F. Cannon

Cato Handbook for Policymakers

CATO INSTITUTE

7TH EDITION

16. Health Insurance Regulation

State legislators should

- eliminate licensing of health insurance or, as a preliminary step, recognize insurance products licensed by other states.

Congress should

- eliminate states' ability to use licensing laws as a barrier to trade with out-of-state insurers, and
- relinquish any role as an insurance regulator.

Every year in the United States, thousands upon thousands of Americans walk or are carried into hospitals. Some are in extreme pain. Some are close to death. Using the tools of modern medicine, doctors routinely heal their pain and save their lives. No less marvelous, however, is the fact that the bill is often paid, voluntarily, *by complete strangers*. These benefactors do not know the patient. They do not know her illness. They may not practice the same religion or speak the same language. Were they to meet the patient, they might not even like her. And yet, without anyone pressuring or forcing them to do so, these people repeatedly purchase life-saving medical care for complete strangers. Indeed, they play a role every bit as important as the doctors and hospitals. By some marvel, this wonderful phenomenon occurs every day in the United States.

That marvel is health insurance. When individuals choose to purchase health insurance, they make an agreement to pay for the medical expenses of those in the insurance pool who become sick or injured. They uphold that agreement by paying a periodic premium to an insurance company. To be sure, it is not compassion for others but self-interest that motivates most insurance purchasers: each wants to have her own medical bills paid

in the event of a catastrophe. Yet that only makes health insurance all the more marvelous. Health insurance harnesses the self-interest of millions of strangers to produce an unquestionably compassionate result.

As discussed in Chapter 13 (''Medicaid and the State Children's Health Insurance Program''), that sort of generosity invites opportunistic behavior. If the insurance pool is paying for all their medical care, some patients will consume more medical care than they need. (And why not? Those other people in the pool are just strangers.) Likewise, health care providers will try to sell those patients more medical care than they need. If individuals can tap that generosity whenever they choose, many will not contribute to the pool until they become sick. By the time they join the pool, their medical expenses would well exceed their contributions. Before long, the premiums would spiral out of control, and no one would want to participate. For these reasons, members of the insurance pool hire someone to protect the members' generosity from opportunistic behavior.

Health insurance companies are essentially intermediaries between members of the pool. They charge higher premiums to enrollees who purchase more extensive coverage, because those members will draw more money from the pool. They require members to pay part of the cost of their own medical care (through deductibles, coinsurance, and copayments) to ensure that members aren't careless with other members' money. They look over physicians' shoulders (with managed-care tools like capitation payment, preauthorization, and utilization review) to ensure physicians are being careful with their members' money. They also calibrate each new member's premium to her expected claims. If an individual waits until she is sick to join the pool, her premiums will therefore be much higher than if she joined while healthy. Risk-based premiums thus *promote* compassionate behavior, because they encourage individuals to contribute to the pool while they are still healthy—so their premiums can help save the lives of strangers. Once in the pool, however, insurers don't increase members' premiums when they become ill.

Insurers compete to see who can best manage these features, and provide members the protection they desire at the lowest possible premium. That competition is the market's way of navigating the Samaritan's dilemma, discussed in Chapter 13 (''Medicaid and the State Children's Health Insurance Program'').

Do Health Insurance Markets Fail?

Critics claim that unregulated insurance markets do not provide secure access to medical care; that risk-based premiums are unfair; that insurance

companies drop people when they get sick; that markets will not provide health insurance to everyone; and that government must create pooling arrangements that correct these alleged market failures.

Evaluating the performance of unregulated health insurance markets is complicated by the fact that most Americans obtain health insurance in markets heavily regulated or distorted by government. For example:

- Nearly all seniors obtain health insurance from government through the federal Medicare program (see Chapter 12).
- Due to large tax preferences for employer-sponsored insurance (see Chapter 14, ''The Tax Treatment of Health Care''), about 90 percent of nonelderly Americans with health insurance obtain it through an employer.
- Only 10 percent of the nonelderly insured (about 18 million people) obtain insurance directly from an insurance company, i.e., through the ''individual'' market.

In addition, many states impose significant regulations on their individual health insurance markets. Even if a state does not, administrative costs and premiums in that market will be higher than necessary because government diverts most consumers into the employment-based market.

Researchers examining America's badly hampered individual health insurance markets nevertheless have found considerable evidence that unregulated markets provide consumers with reliable long-term protection from the cost of illness. For example, University of Pennsylvania economist Mark Pauly and colleagues find as follows:

- ''Actual premiums paid for individual insurance are much less than proportional to risk, and risk levels have a small effect on obtaining coverage.''
- ''Premiums do rise with risk, but the increase in premiums is only about 15 percent of the increase in risk. Premiums for individual insurance vary widely, but that variation is not very strongly related to the level of risk.''
- ''Guaranteed renewable'' policies, which are intended to protect against premium increases if the enrollee becomes sick, ''appear to be effective in providing protection against reclassification risks in individual health insurance markets.''
- The vast majority of insurance products (75 percent) provided guaranteed renewability *before* they were required to do so by government.

- High-cost individuals who are covered by small employers are nearly twice as likely to end up uninsured as high-cost individuals covered in the individual market.
- ''On average, guaranteed renewability works in practice as it should in theory and provides a substantial amount of protection against high premiums to those high-risk individuals who bought insurance before their risk levels changed. The implication is that, although there are some anecdotes about individual insurers trying to avoid covering people who become high risk (for example, by canceling coverage for a whole class of purchasers), the data on actual premium-risk relationships strongly suggest that such attempts to limit risk pooling are the exception rather than the rule.''

Similarly, RAND economist Susan Marquis and colleagues find that the individual market protects enrollees with expensive conditions and that risk-based premiums are not as harsh as critics imply:

- ''Purchasers derive value from having the range of choices that the individual market offers.''
- In the individual market, ''a large number of people with health problems do obtain coverage.''
- ''We also find that there is substantial pooling in the individual market and that it increases over time because people who become sick can continue coverage without new underwriting.''
- Regarding enrollees who purchase insurance and later become sick, ''in practice they are not placed in a new underwriting class.''
- ''Our analysis confirms earlier studies' findings that there is considerable risk pooling in the individual market and that high risks are not charged premiums that fully reflect their higher risk.''

Recent experience in California shows that insurance companies will sometimes rescind coverage when enrollees provide inaccurate information about preexisting conditions—and perhaps even when enrollees have not done so. California insurers have since reinstated coverage for many enrollees. That episode demonstrates that media scrutiny is an important market mechanism; that government enforcement of insurance contracts can prevent individuals from defrauding strangers and prevent insurers from breaching their contracts; and that both types of consumer protection can spur insurers to change their behavior. All told, free markets provide considerably better health coverage than critics suggest.

Should Markets Provide Universal Coverage?

Critics are correct that markets will not provide health insurance to everyone. Voluntary insurance pools often will not cover medical conditions that are known to exist at the time an individual enrolls.

Health insurance markets are completely justified in not covering preexisting conditions. If they did, few would purchase insurance until they had an expensive medical condition, and the pool would unravel. Thus, there is a very good reason why markets will not deliver universal coverage.

That still leaves a problem. Risk-based premiums will encourage most people to purchase insurance before they become ill. Yet there will always be some people who either did not join a pool while they were still healthy or never had the opportunity because their high-cost condition has been with them since birth.

Assuming they cannot afford medical care, individuals with expensive preexisting conditions require *subsidies*, which is not to say they need *insurance*. Insurance is merely one way—and a very expensive way—of subsidizing preexisting conditions. More than other types of subsidies, insurance resembles a blank check. In general, strangers do not voluntarily give blank checks to other strangers, again with good reason: strangers are difficult to monitor, and the beneficiaries (encouraged by their health care providers) may take more than they need. Other ways of subsidizing the needy include limited amounts of cash, vouchers, or in-kind subsidies from providers, private charities, or government. Compared with the alternatives, the added costs of subsidizing preexisting conditions with insurance outweigh the added benefits.

Exclusions for preexisting conditions do not indicate a lack of compassion by insurance companies or consumers. They are the insurance market's way of telling us that consumers do not want to subsidize people with preexisting conditions *through insurance*. They do not preclude other options for subsidizing the needy, a topic discussed in Chapter 13 (''Medicaid and the State Children's Health Insurance Program'').

State Regulation of ''Individual'' Health Insurance Markets

As a result of the damage it has sustained from federal and state governments, however, the individual market performs well below its potential. As noted earlier, the federal government diverts the vast majority of insurance purchasers into job-based insurance. Moreover, state governments impose countless regulations on their insurance markets. Those

regulations include restrictions on insurance pools' ability to limit or refuse coverage, to vary premiums according to risk, and to negotiate price discounts from providers. States also limit enrollees' freedom to purchase only the coverage they wish. Finally, states prohibit their residents from purchasing insurance from states with more consumer-friendly regulation.

The most disastrous state health insurance regulations are known as ''guaranteed issue'' and ''community rating.'' Guaranteed issue requires insurers to offer coverage to all comers. Supporters claim that requiring insurers to offer coverage to all individuals will increase access to coverage for those with preexisting conditions. States with guaranteed-issue requirements include Idaho, Maine, Massachusetts, New Jersey, New York, Ohio, Rhode Island, and Vermont. Similarly, 31 states and the federal government restrict, to a lesser extent, insurance pools' ability to deny coverage for preexisting conditions.

Guaranteed issue allows individuals to avoid contributing to an insurance pool until they have a high-cost condition, which is akin to letting drivers who cause an accident purchase retroactive auto insurance. Such laws allow people to take advantage of strangers by removing the insurance pool's ability to protect itself from opportunistic behavior. They leave insurance pools smaller and sicker, which puts upward pressure on premiums.

Despite guaranteed-issue requirements, insurance pools can protect themselves somewhat by charging higher premiums to individuals who wait until they are sick to join the pool. As one might expect, many people with preexisting conditions cannot afford those risk-based premiums. Since the very purpose of guaranteed-issue laws is to give those individuals access to health insurance, many states also limit the extent to which insurance pools can price coverage according to risk. In its purest form, ''community rating'' requires insurance pools to charge the same premium to all members. States with the strictest community-rating laws include Maine, Massachusetts, New Jersey, New York, North Dakota, Oregon, Vermont, and Washington. Some 10 additional states impose lesser limits on insurance pools' ability to adjust premiums according to new enrollees' age and health status.

Community-rating laws try to force insurance pools to provide greater subsidies to people with preexisting conditions. In effect, community rating forces healthy people to pay higher premiums so that irresponsible people can wait until they are sick to purchase insurance. Put differently, community rating prevents insurers from responsibly managing the relationships

between members of the pool. When community rating requires insurers to charge healthy 18-year-olds the same premium as 50-year-olds with multiple chronic conditions, it encourages all parties to behave in ways that are harmful to the pool and to society:

- Individuals with preexisting conditions see their premiums fall, and therefore purchase more coverage. That increases claims made against the pool, which increases the community-rated premium.
- Healthy individuals are essentially asked to subsidize sicker members of the pool, who are generally older and (ironically) have higher incomes. As the healthy members see their premiums rise, many will drop out of the pool, safe in the knowledge that they can always return and pay a community-rated (i.e., average) premium. Their departure makes the pool sicker on average, which further increases the community-rated premium. As that premium rises, additional healthy members drop out of the pool, and the cycle repeats itself. Economists and actuaries call that process an ''adverse selection death spiral.''
- All individuals find that they can no longer reduce their health insurance premiums by engaging in healthy behaviors or avoiding unhealthy behaviors. Thus, fewer individuals will do so, which reduces health and increases claims and premiums.
- Insurers compete to enroll healthy individuals and avoid the sick. Since all enrollees must pay the same premium regardless of their expected claims, healthy members become a gold mine and sick enrollees become a liability. Insurers therefore market their products with benefits (e.g., gym memberships) and advertising (e.g., featuring healthy-looking families) designed to appeal only to healthy people. They may also make enrollment difficult for sicker people, or curtail services that sick people value, hoping that sicker members will choose another insurer.

Community rating contributes to the large number of uninsured. It is one reason why residents of New York and New Jersey face some of the most expensive health insurance premiums in the nation.

For all the damage they cause, community-rating laws appear to offer little benefit. On the basis of his studies of unregulated markets and markets with community rating, Pauly concludes:

> We find that regulation modestly tempers the (already-small) relationship of premium to risk, and leads to a slight increase in the *relative* probability

that high-risk people will obtain individual coverage. However, we also find that the increase in overall premiums from community rating slightly reduces the total number of people buying insurance. All of the effects of regulation are quite small, though. We conjecture that the reason for the minimal impact is that guaranteed renewability already accomplishes a large part of effective risk averaging (without the regulatory burden), so additional regulation has little left to change.

Some 21 states also increase the cost of health insurance with ''any-willing-provider'' laws. Health insurers frequently negotiate discounts from providers. In exchange, those ''preferred'' providers receive a greater volume of business as insurers steer enrollees toward them. Any-willing-provider laws, however, require insurers to offer the same payment levels and contract terms to any provider who agrees to those terms. ''Any-willing-provider legislation removes the incentive to compete aggressively on a price basis,'' writes health economist Michael Morrisey. ''No one has an incentive to offer much of a discount since discounts will result only in lower prices with little or no expanded volume,'' he adds. The result is that enrollees pay more for medical care and health insurance.

All states increase the cost of health insurance by requiring consumers to purchase certain types of coverage, whether or not they want the particular coverage. As a result of these ''mandated coverage'' laws:

- Teetotalers must purchase coverage for alcoholism treatment (45 states).
- Nonsmokers must purchase coverage for smoking-cessation programs (2 states).
- Nondrug users must purchase coverage for drug-abuse treatment (34 states).
- Many consumers must purchase coverage for services they consider quackery, such as acupuncture (11 states), chiropractic (44 states), and naturopathy (4 states).
- Consumers are required to purchase coverage for services that may be more economical to purchase directly, such as various screening exams (mammograms, 50 states; cervical cancer and/or human papillomavirus, 29 states; colorectal cancer, 28 states; newborn hearing, 17 states; ovarian cancer, 3 states; and prostate cancer, 33 states), as well as uncomplicated deliveries (21 states) and well-child care (31 states).
- Ten states require residents to purchase coverage for hairpieces.

- Many consumers must purchase insurance that covers services or people in relationships that they find morally offensive, such as coverage for contraceptives (31 states), human papillomavirus vaccine (16 states), in vitro fertilization (13 states), and domestic partners (13 states).
- States have also required consumers to purchase coverage for medical treatments that later proved *harmful* to health, such as hormone replacement therapy (2 states) and high-dose chemotherapy with autologous bone marrow transplant for breast cancer (at least 1 state, Minnesota).

Eleven states require consumers to purchase 50 or more types of mandated coverage: California (50), Connecticut (51), Maine (53), Maryland (63), Minnesota (64), Nevada (52), New Mexico (51), New York (55), Texas (54), Virginia (55), and Washington (53). Another dozen states require at least 40 types of mandated coverage. State legislatures have enacted a total of 1,961 mandated coverage laws.

Mandated coverage laws are not sought by broad coalitions of consumers. Legislatures impose these requirements on consumers in response to pressure from special-interest groups, such as chiropractors, acupuncturists, massage therapists (four states), and other providers who want to expand the market for their services. Mandated coverage laws are special-interest legislation that harms consumers by reducing choice and increasing both the cost of health insurance and the number of Americans who cannot afford coverage.

States impose many additional regulations on insurance pools, from premium taxes to rules limiting insurers' ability to manage utilization. The Congressional Budget Office estimates that, on average, state regulations increase the cost of health insurance by 15 percent. Moreover, states prohibit individuals (and employers) from avoiding those laws by purchasing health insurance from states with more consumer-friendly regulations.

The Cure: Force Regulators to Compete

The original sin of health insurance regulation is not guaranteed issue, community rating, any-willing-provider laws, or mandated coverage laws. The original sin of health insurance regulation is insurance-licensing laws. Each state uses insurance-licensing laws to require every insurance policy sold to their residents to comply with all other insurance regulations. Insurance-licensing laws prohibit individual insurance purchasers from

joining insurance pools with residents of other states. Put differently, they prohibit residents from purchasing out-of-state insurance products that come with a different set of regulatory protections. As a result, insurance-licensing laws erect barriers to trade between the states and prevent individuals from shopping for regulatory protections the same way they shop for other insurance features. In effect, insurance-licensing laws give each state's insurance regulators a monopoly over providing regulatory protections. Those regulators then behave the way all monopolists do: they provide a low-quality product at an excessively high cost.

The best solution would be for states to repeal insurance-licensing laws. Doing so would eliminate government's ability to use regulation to redistribute income, or to shower rents on favored special interests. Government enforcement of contracts would continue to provide the financial solvency protections and other safeguards that insurance purchasers demand. If that is infeasible politically, preliminary steps could provide nearly as much benefit to consumers.

With an approach known as ''regulatory federalism'' the federal or state governments would leave most health insurance regulations intact but would allow individuals and employers to purchase health insurance from other states, regulated by that second state. If a purchaser is content with her own state's regulations, she could continue to purchase a policy regulated at home. But if her state imposes too many mandates, or prevents the insurance pool from protecting itself from irresponsible and opportunistic behavior, then the purchaser could choose an insurance plan with more consumer-friendly regulations. A recent study by economist Stephen Parente and colleagues estimated the following:

- Letting individuals and employers purchase health insurance from out of state could reduce the number of uninsured Americans by as many as 17 million, or one-third of the most-cited estimate of the number of uninsured.
- When combined with tax reforms (see Chapter 14), this approach could cover as many as 24 million uninsured Americans.

Regulatory federalism would increase competition in health insurance markets. Insurers would face lower barriers to introducing products into new states. As a result, consumers would have much greater choice among cost-saving features (e.g., cost sharing and care management), provider financial incentives (fee-for-service, prepayment, and combinations thereof), and delivery systems (integrated, nonintegrated, and everything

in between). Insurance pools would be more stable, and consumers would have much more freedom to obtain coverage that fits their needs.

Perhaps most important, regulatory federalism would force *insurance regulators* to compete against one another to provide the optimal level of regulation. States that impose unwanted regulatory costs on insurance purchasers would see their residents' business—and their premium tax revenue—go elsewhere. The desire to retain premium tax revenue would drive states to eliminate unwanted, costly regulations and retain only those regulations that consumers value. It is likely that one or a handful of states would emerge as the dominant regulators in a national marketplace. Regulatory federalism already exists for corporate chartering, where Delaware has created a niche for itself by offering a hospitable regulatory environment.

Many people, of course, will not want greater competition. Insurance regulators enjoy being monopoly providers. They will oppose threats to their monopoly position, even at the cost of harming consumers. The insurance industry will oppose regulatory federalism, which would subject them to greater competition as well. What insurance company wants to have to look over its shoulder to see if someone else might be doing a better job of managing insurance pools? Those are the very competitive pressures that benefit consumers, yet regulators and insurers will paint competition as a *threat* to consumers.

For example, opponents will claim that regulatory federalism will lead to a ''race to the bottom,'' with some states so eager to attract premium tax revenue that they will eliminate all regulatory protections or skimp on enforcement. In reality, both market and political forces would prevent a race to the bottom. As producers of regulatory protections, states are unlikely to attract or retain customers—insurers, employers, or individual purchasers—by offering an inferior product. Purchasers will avoid states whose regulations prove inadequate, and ultimately, so will insurers. Moreover, the first people to be harmed by inadequate regulatory protections will likely be residents of that state, who will demand that their legislators remedy the problem. The resulting level of regulation would *not* be zero regulation. Rather than a race to the bottom, regulatory federalism would spur a race to equilibrium—or multiple equilibria—between too much and too little regulation. That balance would be struck by consumers' revealing their preferences.

Opponents of regulatory federalism will also claim that consumers would have to travel to another state to have those protections enforced.

On the contrary, those protections can be enforced in the consumer's state of residence. Not only will state courts enforce other states' laws, when appropriate, but another state's regulations can be incorporated into an insurance contract and enforced in the purchaser's home state. Such ''choice-of-law'' decisions are complicated and often disputed, but are ultimately controlled by extensively developed legal doctrine and case precedents. Insurance regulators can even play a role in policing and enforcing other states' regulatory protections. There is no reason not to allow consumers to choose where they purchase their health insurance.

There are several options for implementing regulatory federalism. Ideally, each state would unilaterally give its residents the right to purchase insurance from out of state. All a legislature need do is deem as licensed in its state any health insurance policy licensed by any of the other 49 states or the District of Columbia.

States could also give their residents a more limited right to purchase coverage out of state. For example, they could allow residents to purchase insurance from select states, or they could enter into reciprocal compacts with other states. These approaches, however, would be less desirable. They would unnecessarily limit competition among insurers and regulators, as well as limit consumer choice. The latter option would condition each consumer's access to affordable health insurance on whether the legislature *of another state* is willing to do the right thing. Lowering this trade barrier unilaterally and completely is the more consumer-friendly option.

The best way to eliminate those trade barriers might be for Congress to do so. The Framers intended the United States to be one large free-trade zone. Article I, section 8, of the Constitution grants Congress the power to regulate commerce among the states, largely so that Congress could prevent states from erecting trade barriers that keep out products from other states. Insurance-licensing laws are a clear example of such trade barriers and a perfect target for congressional elimination. As with state-level reform, Congress need not alter any state's health insurance regulations. All that is necessary is for Congress to require each state to recognize the insurance licenses issued by the other states.

The Constitution, however, does not grant Congress the power to regulate health insurance. Thus, in the same legislation, Congress should relinquish any role as an insurance regulator. Were Congress to do otherwise, the federal government itself would soon emerge as a monopoly provider of regulatory protections, and consumers would be even worse off than they are today. Over time, rent-seeking special interests would storm

Capitol Hill with demands for additional regulation. Once those federal regulations were enacted, they would be even further removed from the people than state regulations, and much more difficult to dislodge. It is crucial, therefore, that any federal law aimed at regulatory federalism do nothing more than allow consumers to purchase health insurance regulated by another state and ensure that those are the only regulations that govern. If Congress uses the opportunity to regulate health insurance itself, reform will not have been worth the effort.

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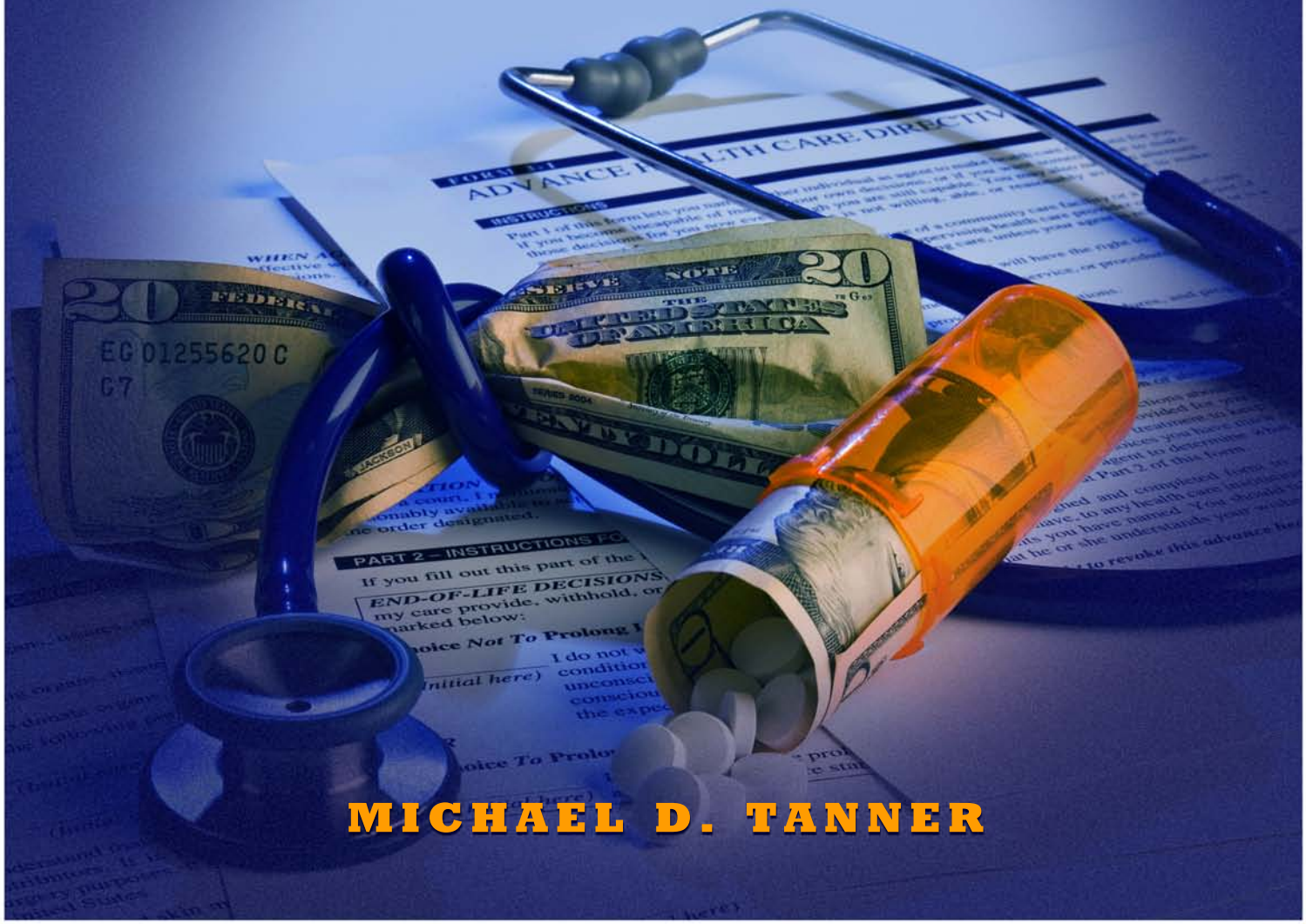
—Prepared by Michael F. Cannon

NEWLY UPDATED & REVISED FOR 2011

BAD MEDICINE

A GUIDE TO THE REAL COSTS AND CONSEQUENCES OF THE NEW HEALTH CARE LAW



MICHAEL D. TANNER

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Cover design by Jon Meyers.

Printed in the United States of America.

Cato Institute
1000 Massachusetts Ave., N.W.
Washington, D.C., 20001
www.cato.org

Executive Summary

It has been a year since President Obama's health care reform bill was signed into law. The Patient Protection and Affordable Care Act represents the most significant transformation of the American health care system since Medicare and Medicaid. It will fundamentally change nearly every aspect of health care, from insurance to the final delivery of care.

The length and complexity of the legislation, combined with a debate that often generated more heat than light, has led to massive confusion about the law's likely impact. But it is now possible to analyze what is and is not in it, what it likely will and will not do. In particular, we now know that

- While the new law will increase the number of Americans with insurance coverage, it falls significantly short of universal coverage. By 2019, roughly 21 million Americans will still be uninsured.
- The legislation will cost far more than advertised, more than $2.7 trillion over 10 years of full implementation, and will add more than $823 billion to the national debt over the program's first 10 years.
- Most American workers and businesses will see little or no change in their skyrocketing insurance costs, while millions of others, including younger and healthier workers and those who buy insurance on their own through the nongroup market will actually see their premiums go up faster as a result of this legislation.
- The new law will increase taxes by more than $569 billion between now and 2019, and the burdens it places on business will significantly reduce economic growth and employment.
- While the law contains few direct provisions for rationing care, it nonetheless sets the stage for government rationing and interference with how doctors practice medicine.
- Millions of Americans who are happy with their current health insurance will not be able to keep it.

In short, the more we have learned about what is in this new law, the more it looks like bad news for American taxpayers, businesses, health care providers, and patients.

Michael Tanner is a senior fellow with the Cato Institute and co-author of Healthy Competition: What's Holding Back Health Care and How to Free It.

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Introduction

On March 21, 2010, in an extraordinary Sunday night session, the House of Representatives gave final approval to President Obama's long-sought health insurance plan in a partisan 219–212 vote.[1] The bill had earlier passed the Senate on Christmas Eve 2009. Not a single Republican in either chamber voted for the bill. Four days later, the Senate, using a parliamentary tactic known as reconciliation to avoid a Republican filibuster, gave final approval to a package of changes designed to "fix" the bill.[2]

More than 2,500 pages and 500,000 words long,[3] the Patient Protection and Affordable Care Act represents the most significant transformation of the American health care system since Medicare and Medicaid. It will fundamentally change nearly every aspect of health care from insurance to the final delivery of care.

The final legislation was in some ways, an improvement over earlier versions. It was not the single-payer system sought by many liberals. Nor did it include the interim step of a so-called "public option" that would likely have led to a single-payer system in the long run.[4] The employer mandate is far less onerous than the 8 percent payroll tax once championed by the House.[5] And a proposed income tax surtax on the wealthy was dropped.[6] But that does not mean that this is, as the president has claimed, a "moderate" bill.

It mandates that every American purchase a government-designed insurance package, while fundamentally reordering the insurance market and turning insurers into something resembling public utilities, privately owned while their operations are substantially regulated and circumscribed by Washington. Insurance coverage will be extended to millions more Americans as government subsidies are expanded deep into the middle class. Costs will be shifted between groups, though ultimately not reduced. And a new entitlement will be created, with the threat of higher taxes and new debt for future generations. In many ways, it has rewritten the relationship between the government and the people, moving this country closer to European-style social democracy.

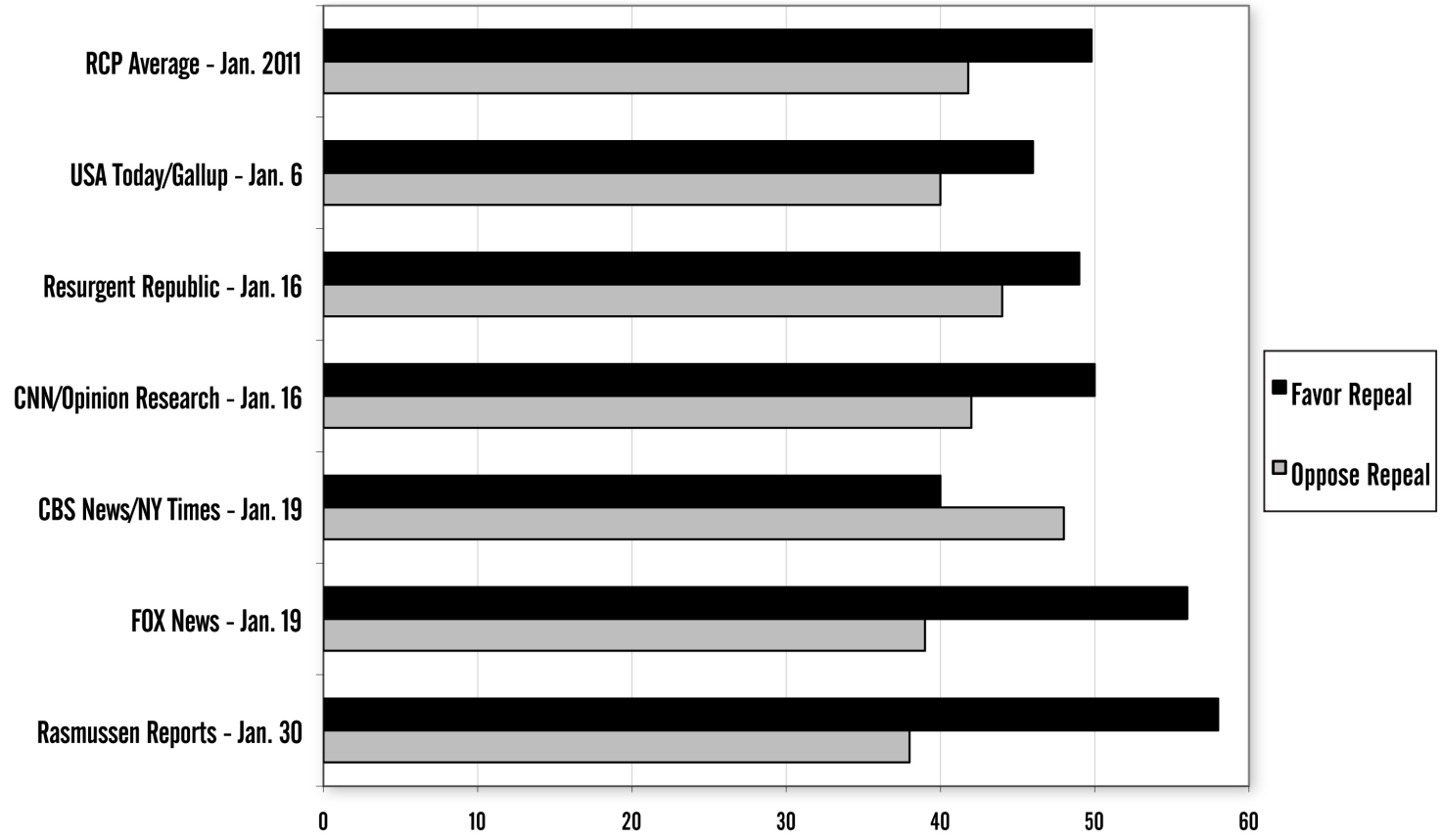
The legislation remains deeply unpopular. Recent polls show substantial majorities support repealing it. For example, a Rasmussen poll in late January of this year showed 58 percent of likely voters supported repeal, with just 38 percent opposed. Similarly, a mid-January Fox News poll showed registered voters favoring repeal by 17 percent. In fact, with the exception of a *New York Times*/CBS News poll of "all Americans," recent polling has consistently shown that most voters support repeal (Figure 1).

Republicans ran on a platform of "repeal" or "repeal and replace" during the 2010 midterm elections, and surveys suggest that opposition to the health care law was an important reason that they recaptured the House and gained six Senate seats. On health care, exit polls showed that at least half of voters wanted to repeal Obamacare. This represented an almost unprecedented level of opposition for a major entitlement expansion. Given that exit polls have a history of oversampling Democratic voters, an even better measure might be an election-night Rasmussen telephone poll that found 59 percent of voters in favor of repeal.[7] A Kaiser Foundation survey of voters found similar results: 56 percent of midterm voters said they wanted to see some or all of the law repealed. [8]Another post-election survey found that 45 percent saw their vote as a specific message of opposition to the health care bill.[9]

The new Republican majority in the House has already begun efforts to undo the health care law. On January 18, 2011, the House voted 245 to 189 to repeal it.[10] While repeal is all but impossible in the short term, given Democratic control of the Senate and a presidential veto, Republicans plan a continued assault on the law, ranging from attempts to repeal some of the most unpopular provisions to plans for de-funding implementation.[11]

The individual mandate is unprecedented in U.S. governance.

Figure 1
Repeal of Health Care Law



Source: Real Clear Politics.

Meanwhile, outside of Washington, opposition remains active. Seven states—Arizona, Idaho, Louisiana, Missouri, Oklahoma, Utah, and Virginia—have passed variations of the Health Care Freedom Act prohibiting mandatory health insurance.[12] Similar legislation has been introduced in nearly all remaining states. State governments have also been slow to cooperate with federal efforts to implement the law. For example 23 states refused to set up a high-risk pool in response to the law, and several states are considering a refusal to establish exchanges.

Numerous court challenges have also been filed, raising questions about the constitutionality of various aspects of the legislation, especially its individual mandate.[13] Plaintiffs include 28 states, as well as individuals, business groups, and others.[14] To date, the outcome of those suits has been mixed. In two minor lawsuits in Michigan and Virginia, courts have upheld the mandate.[15] However, in the two most closely watched—and extensively argued—cases, federal judges struck down the mandate, and while the judge in the Virginia case allowed other portions of the law to go forward, the judge in Florida ruled that the lack of a severability clause made the entire law unconstitutional.[16] All the cases will be appealed and the final decision will be made by the U.S. Supreme Court.

It seems almost certain, therefore, that the debate over health care reform will be

with us for some time to come.

In the meantime, the legislation has spawned enormous confusion. Insurance companies report people calling and asking, "Where do we get the free Obamacare, and how do I sign up for that?"[17] But for good or ill, those expecting immediate change are likely to be disappointed. Most of the major provisions of the legislation are phased in quite slowly. The most heavily debated aspects, mandates, subsidies, and even most of the insurance reforms don't begin until 2014 or later.

Former House Speaker Nancy Pelosi once famously told us: "We have to pass the bill so you can find out what's in it."[18] A year after passage, we are indeed discovering what is in it. And what we are finding increasingly looks like it will leave Americans less healthy, less prosperous, and less free.

Part I: The Patient Protection and Affordable Care Act

Individual and Employer Mandates

Perhaps the single most important aspect of the law is its individual mandate, a legal requirement that every American obtain health insurance coverage that meets the government's definition of "minimum essential coverage." Those who don't receive such coverage through government programs, their employer, or some other group would be required to purchase individual coverage on their own.[19]

This individual mandate is unprecedented in U.S. governance. Back in 1993, when the Clinton health care plan was under consideration, the Congressional Budget Office noted: "A mandate requiring all individuals to purchase health insurance would be an unprecedented federal action. The government has never required people to buy any good or service as a condition of lawful residence in the United States."[20] Moreover, the individual mandate raises serious constitutional questions.[21] Even the Congressional Research Service was not able to conclude it was constitutional![22]

Under the law, beginning in 2014, those who failed to obtain insurance would be subject to a tax penalty. That penalty would be quite mild at first, either $95 or one percent of annual income in 2014, whichever is greater.[23] But it ramps up quickly after that, the greater of $325 or 2 percent of annual income in 2015, and the greater of $695 or 2.5 percent of annual income after that. In calculating the total penalty for an uninsured family, children count as half an adult, which means that in 2016 an uninsured family of four would face a minimum penalty of $2,085 ($695+$695+$347.50+$347.50), pro-rated on the basis of the number of months that the person was uninsured over the course of the year.[24] Individuals will be exempt from the penalties if they earn less than an income threshold to be determined by the secretary of Health and Human Services (but presumed to be roughly the poverty level), or if they are unable to obtain insurance that costs less than 8 percent of their gross incomes.[25]

According to the CBO, roughly four million Americans will be hit by penalties in 2016, with the penalties averaging slightly more than $1,000.[26] In fact, the federal government expects to raise $17 billion from penalties by 2019.[27]

Simply having insurance, however, is not necessarily enough to satisfy the mandate. To qualify, insurance would have to meet certain government-defined standards for "minimum essential coverage." For example, in order to qualify, plans would be required to cover ambulatory patient services, emergency services, hospitalization; maternity and newborn care, mental health and substance abuse treatment; prescription drugs; rehabilitative and habitative services; laboratory services; preventative services; wellness services; chronic disease management; pediatric services; and dental and vision care

Simply having insurance is not necessarily enough to satisfy the mandate.

for children.[28] The secretary of HHS is given the authority to define the meaning of those terms and ultimately to set the minimum benefits package.[29] That process is ongoing, as an Institute of Medicine committee considers whether to mandate the inclusion of benefits such as autism treatment or *in vitro* fertilization.[30]

In addition, plans must meet the new insurance regulatory requirements below.

Unlike previous versions of the bill, however, individuals who currently have insurance are grandfathered in, meaning they will not have to change their current insurance to meet the new minimum benefit.[31] They will even be able add a spouse or children to the plan without changing. While clearly an improvement over earlier versions, this does not necessarily mean that people will be able to keep their current plan. In particular, making changes to their current plan will end the plan's grandfathered status, and would require that individuals bring their plan into compliance with the full range of federal mandates and requirements, even if those additional mandates make the new plan more expensive or include benefits that the individual does not want. What changes meet the threshold to end grandfathered status will be determined by the secretary of HHS.[32]

Regardless of what federal regulators eventually decide, the grandfathering of current plans may be short-lived. That is because, aside from spouses and children, insurers will not be able to continue enrolling new customers in the noncomplying plans. As a result, insurers may stop offering these plans. Over time, the vast majority of noncomplying plans will simply fade away.

More than two-thirds of companies could be forced to change their current coverage.

There has been some dispute over the government's ability to enforce the mandate. While the law imposes penalties for failure to comply and authorizes the IRS to collect those penalties (indeed, the IRS is expected to hire as many as 11,800 additional agents, auditors, and examiners for enforcement)[33] it does not contain any criminal penalties for failing to comply, and it forbids the use of liens or levies to collect the penalties. However, the IRS is nothing if not resourceful. Already, IRS deputy commissioner Steven Miller has said that the IRS may withhold tax refunds to individuals who fail to comply with the mandate.[34] And, because money is fungible, the IRS could simply apply part of your regular tax payments toward the mandate penalty, and then penalize you for failing to pay those regular taxes in full.

Interestingly, the law may have created the worst of both worlds, a mandate that is costly and violates individual liberty, but one that is still weak enough that it may be cheaper for many individuals to pay the penalty than to purchase insurance. As a result it may fall far short of its proponents' goal of bringing young and healthy individuals, who today frequently forego insurance, into the insurance pool. The Congressional Budget Office, in fact, estimates that the penalties from individuals failing to comply with the mandate will generate $17 billion between 2014 and 2019.[35] And according to a RAND Corporation study, those remaining uninsured after implementation are likely to be younger and healthier as a group than today's uninsured.[36] Massachusetts's experience with an individual mandate yielded just such a result. Slightly more than 35 percent of that state's remaining uninsured are between the ages of 18 and 25, and more than 60 percent are under the age of 35.[37] Before the mandate, those between the ages of 18 and 25 made up roughly 30 percent of the uninsured, suggesting that the young (and presumably healthier) are less likely to comply with the mandate.[38]

Indeed, evidence suggests that Massachusetts residents are increasingly "gaming" the system: purchasing insurance when they know they are going to use health care services, then dropping it when they no longer need it. In 2009 alone, 936 people signed up for coverage with Blue Cross and Blue Shield of Massachusetts for three months or less and ran up claims of more than $1,000 per month while in the plan. Their medical

spending while insured was more than four times the average for consumers who buy coverage on their own and retain it in a normal fashion.[39] Given that the penalties under the Massachusetts mandate are actually stronger than those under the Patient Protection and Affordable Care Act, this does not bode well for the national plan.[40]

The law also contains an employer mandate. Beginning in 2014, if a company with 50 or more full-time employees (or the equivalent[41]) does not provide health insurance to its workers, and as a result even a single worker qualifies for a subsidy to help purchase insurance through the exchange (see below), the company must pay a tax penalty of $2,000 for every person they employ full time (minus 30 workers). Thus a company employing 100 workers would be assessed a penalty of $2,000 x 70 workers.[42] CBO estimates that those penalties will cost businesses $52 billion from 2014 to 2019.[43]

Even more than the individual mandate, the employer mandate may affect people who already have health insurance coverage. In part, this would be because far more people receive their insurance through work. But, in addition, HHS has released rules suggesting that if companies make any significant changes to their current coverage they will no longer be "grandfathered" under the employer mandate, meaning that they will have to bring their plan into full compliance with all the new federal requirements. Among the changes that would end "grandfathered" protection would be a change in insurance carrier, changes in or the elimination of any currently covered benefit, decreases in the employer's contribution rate, increases in annual payment limits, and increases in employee cost-sharing, including any increase in deductibles or copayments.[44] An internal study by HHS estimates that more than two-thirds of companies could be forced to change their current coverage. For small businesses, the total could reach 80 percent.[45]

Even offering the correct benefits will not necessarily exempt companies from penalties. Companies that offer coverage, but which have employees who still qualify for a subsidy because the employee's contribution is deemed unaffordable (that is, it exceeds 8 percent of an employee's income), will still have to pay a penalty of the lesser of $3,000 per employee receiving a subsidy or $2,000 per worker whether they are receiving subsidy or not. A survey by the employer benefits firm, Mercer, suggests that as many as one-third of employers could face penalties for failing to meet the affordable insurance requirement.[46]

Such a mandate is simply a disguised tax on employment. As Princeton University professor Uwe Reinhardt, the dean of health care economists, points out, "[Just because] the fiscal flows triggered by the mandate would not flow directly through the public budgets does not detract from the measure's status of a *bona fide* tax."[47]

And while it might be politically appealing to claim that business will bear the new tax burden, nearly all economists see it quite differently. The amount of compensation a worker receives is a function of his or her productivity. The employer is generally indifferent to the composition of that compensation. It can be in the form of wages, benefits, or taxes. What really matters is the total cost of hiring that worker. Mandating an increase in the cost of hiring a worker by adding a new payroll tax does nothing to increase that worker's productivity. Employers will therefore seek ways to offset the added cost by raising prices (the least likely solution in a competitive market), lowering wages, reducing future wage increases, reducing other benefits (such as pensions), cutting back on hiring, laying off current workers, shifting workers from full-time to part-time, or outsourcing.[48] In fact, a survey by Towers Watson shows that employers are preparing to take exactly those steps.[49]

And, as with the individual mandate, the penalty may be low enough that many businesses may find it less costly to "pay" than to "play."[50] As an internal document prepared for Verizon explains "Even though the pro-

Some of the regulatory changes are likely to have unintended consequences.

posed assessments [on companies that do not provide health care] are material, they are modest when compared to the average cost of health care."[51] In fact, CBO estimates that at least 10 to 12 million workers could lose their current employer-provided health insurance.[52] Approximately 8 to 9 million could end up on Medicaid, with the rest purchasing subsidized coverage through the exchanges (see below).[53] But this may vastly underestimate the actual number of workers who could be dumped from their current coverage, as several large U.S. corporations have indicated that they may drop their current coverage.[54]

Such a rigid cap may create a number of unintended consequences.

Insurance Regulations

Since the advent of the McCarran-Fergusson Act in 1945, health insurance has been primarily regulated at the state level.[55] The Patient Protection and Affordable Care Act imposes a host of new federal insurance regulations that will significantly change the way the health insurance industry does business. Some of these regulatory changes are likely to be among the law's most initially popular provisions. But many are likely to have unintended consequences.

Perhaps the most frequently discussed regulatory measure is the ban on insurers denying coverage because of preexisting conditions. Throughout the health care debate, proponents of reform highlighted stories of people with terrible illnesses who were unable to get insurance coverage.[56]

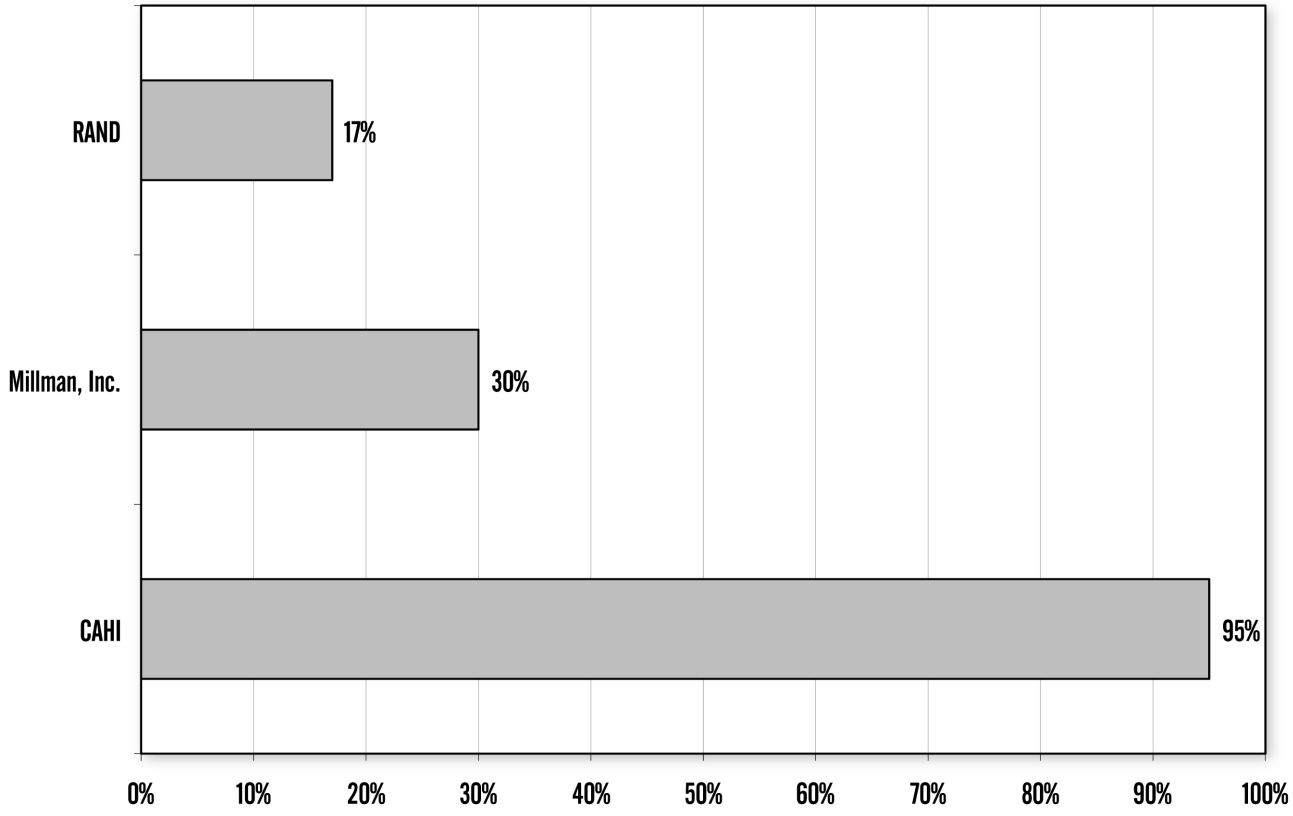
Under the Patient Protection and Affordable Care Act insurers would be prohibited from making any underwriting decisions based on health status, mental or physical medical conditions, claims experience, medical history, genetic information, disability, other evidence of insurability, or other factors to be determined later by the secretary of HHS.[57]

Specifically, the law would require insurers to "accept every employer and individual . . . that applies for such coverage."[58] Insurers are also forbidden to cancel insurance if a policyholder becomes sick.[59] Finally, there will be limits on the ability of insurers to vary premiums on the basis of an individual's health. That is, insurers must charge the same premium for someone who is sick as for someone who is in perfect health.[60] Insurers may consider age in setting premiums, but those premiums cannot be more than three times higher for their oldest than their youngest customers.[61] Smokers may also be charged up to 50 percent more than nonsmokers.[62] The only other factors that insurers may consider in setting premiums are geographic location and whether the policy is for an individual or a family.[63]

It is also worth noting that, while a ban on preexisting conditions for children started last year, the rules will not apply to adults until 2014.[64] Until then, adults with preexisting conditions will be eligible to participate in federally sponsored high-risk pools.[65] The high-risk pools will contract with private, nonprofit insurers for plans that must cover at least 65 percent of the costs of participants' care. Out-of-pocket costs would be capped at $5,950 a year for an individual or $11,900 for a family. The risk pools were supposed to be in place no later than the end of June 2010, but there have been numerous delays.[66] As many as 23 states have declined to establish the pools, forcing the federal government to set them up in those states.

So far, very few people have enrolled in the risk polls. In fact, by the end of 2010, only 8,011 people had signed up nationwide.[67] One reason may be that premiums within the pools are relatively high. For example, the premium for a non-smoking 45–54 year old ranges from $330 per month in Hawaii to $729 per month in North Carolina.[68] However, a bigger problem may be the structure of the program, which is incompatible with existing state high-risk pools.[69] Individuals currently insured through their state risk pool must drop out of that pool, remain uninsured for six months, then join the federal pool. It's not surprising that that has not been a popular option.

Figure 2
Possible Premium Increases for Young Workers Under PPACA



Source: RAND and Millman studies cited in Carla Johnson, "Health Premiums Could Rise 17 Percent for Young Adults," Associated Press, March 29, 2010; and Brian McManus, "Universal Coverage + Guaranteed Issue + Modified Community Rating = 95% Rate Increase," Council for Affordable Health Insurance, August 2009.

While the ban on medical underwriting may make health insurance more available and affordable for those with preexisting conditions and reduce premiums for older and sicker individuals, it will increase premiums for younger and healthier individuals. The RAND Corporation recently conducted a study for the Associated Press concluding that premiums for the young would rise about 17 percent, roughly $500 per year, as a result of the new law.[70] Other studies suggest that the increase could be much higher. For example, a study by the independent actuarial firm Millman, Inc., concluded that premiums for young men could increase by 10 to as much as 30 percent.[71] The Council for Affordable Health Insurance suggests that premiums for some individuals could increase by 75 to 95 percent in states that do not now have guaranteed issue or community rating requirements (see Figure 2).[72]

Moreover, the ban may not be as effective as proponents hope in making insurance available to those with preexisting conditions. Insurance companies have a variety of mechanisms for evading such restrictions. A simple example is for insurers to focus their advertising on young healthy people, or they can locate their offices on the top floor of a building with no elevator or provide free health club memberships while failing to include any oncologists in their network.

Even the ban on excluding preexisting conditions for children has already had unintended consequences. Several large insurers have stopped offering "child only" insurance plans, thereby depriving thousands of parents of a low-cost insurance option.[73]

In a similar vein, the law also bans "rescissions," or the practice of insurers dropping coverage for individuals who become sick.[74] Under existing practices, insurers sometimes retroactively review an individual's initial insurance application and cancel the policy if the application is found to be inaccurate.[75] Because insurers would undertake such a review only when individuals submitted large claims (and were therefore sick) and the grounds for rescission often appeared to be very minor discrepancies, the practice was widely condemned by the bill's proponents. Under the legislation, insurers could cancel coverage only in cases of fraud or intentional misrepresentation of material fact. While likely to be very popular, this provision may have little practical impact. According to a congressional report, there are actually fewer than 5,000 rescissions per year, and at least some of those were cases of actual fraud where cancellations would still be allowed under this legislation.[76]

A second new insurance regulation would prohibit insurers from imposing lifetime limits on benefit payouts.[77] Although popular, this provision is also likely to have less impact than most people believe. Roughly 40 percent of insured Americans already had policies with no lifetime caps. For those policies that did have a cap on lifetime benefits, that cap was usually somewhere between $2.5 and 5 million, with many running as high as $8 million, amounts that very few people ever reached.[78] Still, some individuals with chronic or catastrophic conditions will undoubtedly benefit from this provision, although there are no solid estimates on how many. Removing lifetime caps will most likely increase the cost of reinsuring policies, leading ultimately to higher premiums, but most insurers predict the increase will be modest.[79]

Tennessee's experience with Tenncare provides a cautionary tale.

This regulation, however, may have a much bigger impact on more than one million part-time, seasonal, and low-wage workers who currently take advantage of low-cost, limited benefit plans. Those plans, known in the industry as "mini-med" plans, have inexpensive premiums because they can, among other things, restrict the number of covered doctor visits or impose a maximum on insurance payouts in a year. They are particularly popular with low-wage workers in the restaurant and retail industries. The prohibition on lifetime caps could all but eliminate these plans, meaning that as many as a million workers could lose the coverage they have now. Some could be forced into Medicaid, while others would be forced to purchase much more expensive insurance than they have today.[80]

In fact, the administration has already been forced to issue more than 728 waivers as of February 2011, allowing some employers to continue offering mini-med plans.[81] These include large employers such as McDonald's, which had threatened to drop coverage for most of its workforce in the absence of an exemption.[82] Several unions, including at least three locals of the Service Employees International union, 17 Teamsters chapters, 28 affiliates of the United Food and Commercial Workers Union, several locals of the Communications Workers of America, and chapters of the American Federation of Teachers have received waivers as well.[83] However, at least 50 companies have had their requests for waivers denied. (The administration will not divulge the names of those companies.)[84]

The law also places limits on deductibles. Employer plans may not have an annual deductible higher than $2,000. Family policies are limited to deductibles of $4,000 or less.[85] There is an exception, however, for individuals under the age of 30, who will be allowed to purchase a catastrophic policy with a deductible of $4,000 for an individual, $8,000 for a family.[86]

In addition, the law requires insurers to maintain a medical loss-ration (that is the

ratio of benefits paid to premiums collected) of at least 85 percent for large groups and 80 percent for small groups and individuals.[87] Insurance companies that pay out benefits less than the required proportion of the premium, must rebate the difference to policy holders on an annual basis beginning in 2011.[88] This requirement is intended to force insurers to become more efficient by reducing the amount of premiums that can be used for administrative expenses (and insurer profits).[89] However, while there is undoubtedly waste in insurance overhead, such a rigid cap may create a number of unintended consequences. Insurance overhead includes many useful services and programs. These include efforts to monitor patient care to ensure that those with chronic medical conditions are getting appropriate care, exactly the type of program that President Obama says he wants to encourage, and efforts to combat fraud and abuse. Those programs can actually reduce overall costs and result in lower insurance premiums. Forcing insurers to abandon those efforts could have the perverse effect of increasing costs to consumers.[90]

Finally, the legislation would also allow parents to keep their dependent children on their policies until the child reaches age 27. This too is generally considered a popular aspect of the new law, but it does come with a price tag. HHS estimates that every dependent added to a policy will increase premiums by $3,380 per year.[91] And employers have indicated that they are reluctant to add dependent children to the coverage they provide, even if insurers offer it, meaning parents will have to pay most or all of the additional cost.[92]

The new insurance regulations may result in many insurers withdrawing from their less profitable markets, leaving many consumers with few insurance choices. Already, Principal Financial has stopped selling health insurance, which has resulted in coverage being dropped for some 840,000 people.[93] And Aetna has announced that it is pulling out of the individual market in Colorado.[94] Perversely, the Patient Protection and Affordable Care Act could reduce competition in the insurance market.

Overall, most of the law's insurance reforms have been among the more politically popular aspects of the new law, but they are likely to have only a minor impact and may, indeed, have a number of unintended consequences.

Subsidies

The number one reason that people give for not purchasing insurance is that they cannot afford it.[95] Therefore, the legislation's principal mechanism for expanding coverage (aside from the individual and employer mandates) is to pay for it, either through government-run programs such as Medicaid and the State Children's Health Insurance Program (SCHIP) or through subsidizing the purchase of private health insurance.

Starting this year, states are required to expand their Medicaid programs to cover all U.S. citizens with incomes below 133 percent of the poverty level ($14,404 for an individual; $29,327 for a family of four; higher in Alaska, Hawaii, and the District of Columbia).[96] Previously, only pregnant women and children under age six were covered to 133 percent of the poverty level. Children 6–18 were required to be covered up to 100 percent of the poverty level, though 18 states covered children from families with higher incomes. In fact a few states covered pregnant women and children under age 1 up to 185 percent of the poverty level.[97] Most other low-income children were covered through SCHIP (up to 250 percent of poverty).

Thus, the primary result of the law's Medicaid expansion would be to extend coverage to the parents in low-income families and to childless adults. In particular, single, childless men will now be eligible for Medicaid. This raises potentially serious concerns. Low-income, childless, adult men in particular are a high-risk, high-cost health care population. That means costs may run higher than

The phase-out of these benefits creates a high marginal tax penalty.

All together the law represents a massive increase in the welfare state.

expected, a problem that may be exacerbated by adverse selection within that population.

Tennessee's experience with TennCare provides a cautionary tale. In 1994, Tennessee expanded Medicaid eligibility to uninsured citizens who weren't able to get health insurance through their employers or existing government programs and to citizens who were uninsurable because of pre-existing conditions. Over the next 10 years, Medicaid costs in the other 49 states rose by 71 percent. In Tennessee they increased by an overwhelming 149 percent.[98] Despite this massive increase in spending, health outcomes did not improve. Even the state's Democratic governor Phil Bredesen called the program "a disaster."[99] Similar problems with the Patient Protection and Affordable Care Act's Medicaid expansion could dramatically drive up costs for both the federal and state governments.

Initially, the federal government will pay 100 percent of the cost for new enrollees. However, beginning in 2017, states will be required to pick up a portion of the cost. The impact on state budgets would very dramatically. Those states like California, whose eligibility standards already are close to the new federal requirements and are therefore unlikely to see large enrollment increases, will see only modest cost increases. In the case of California, Medicaid costs would go up only about 4.5 percentage points higher than they would have risen in the absence of PPACA's requirements, or about $11.7 billion between 2014 and 2023. But other states would see far bigger increases. Texas, for example, would receive the largest percentage hit, being forced to absorb an increase 20 percentage points higher than it otherwise would have, a cost of $30.5 billion from 2014 to 2023. New York would see the largest cost increase in dollars, $65.5 billion over those 10 years, largely because of its already high cost per enrollee.[100] It is important to remember that these are costs over and above already rising Medicaid costs.

Arizona has already requested a waiver exempting the state's Medicaid program from the law's "maintenance of effort" requirement. That provision prohibits states from changing their current eligibility levels, but Arizona is seeking to drop 280,000 people from the program in order to help close the state's budget deficit. Several other states may follow suit.[101]

SCHIP would be continued until September 30, 2019. Between 2014 and 2019, the federal government will increase its contribution to the program, raising the federal match rate by 23 percentage points (subject to a 100 percent cap).[102] States must maintain their current income eligibility levels for the program.[103]

Individuals with incomes too high to qualify for Medicaid but below 400 percent of the poverty level ($88,000 per year) will be eligible for subsidies to assist their purchase of private health insurance. These subsidies, which will be provided in the form of refundable tax credits, are expected to total more than $457 billion between 2014, when individuals are first eligible for the payments, and 2020.[104]

There are actually two separate credits designed to work more or less in conjunction with one another. The first is a "premium tax credit."[105] The credit is calculated on a sliding scale according to income in such a way as to limit the total proportion of income that an individual would have to pay for insurance.[106] Thus, individuals with incomes between 133 and 200 percent of the poverty level will receive a credit covering the cost of premiums up to four percent of their income, while those earning 300–400 percent of the poverty level will receive a credit for costs in excess of 9.5 percent of their income.

The second credit, a "cost-sharing credit" provides a subsidy for a proportion of out-of-pocket costs, such as deductibles and co-payments. Those subsidies are also provided on a sliding income-based scale, so that those with incomes below 150 percent of the poverty level receive a credit that effectively reduces their maximum out-of-pocket costs to 6 percent of a plan's actuarial value, while those with incomes between 250 and

400 percent of the poverty level would, after receiving the credit, have maximum out-of-pocket costs of no more than 30 percent of a plan's actuarial value.

As with many tax credits, the phase-out of these benefits creates a high marginal tax penalty as wages increase. In some cases, workers who increase their wages could actually see their after-tax income decline as the subsidies are reduced. This creates a perverse set of incentives that can act as a "poverty trap" for low-wage workers.[107]

In addition to the individual subsidies, there will also be new government subsidies for some small businesses. Beginning this year, businesses with fewer than 25 employees and average wages below $50,000 are eligible for a tax credit to help offset the cost of providing insurance to their workers.[108] To be eligible, employers must provide insurance to all full-time workers and pay at least 50 percent of the cost of that coverage. The actual amount of the credit depends on the size of the employer and the average worker salary. Between 2011 and 2014, when the exchanges begin operation (see below), employers with 10 or fewer workers and an average wage below $25,000 per year would be eligible for a credit equal to 35 percent of the employer's contribution. For a typical family policy, the credit would be around $2,000. The credit gradually phases out as the size of the company and average wages increase.

Once the exchanges are operational after 2014, businesses with 10 or fewer employees and average wages below $25,000 that purchase their insurance through the exchange will be eligible for a credit of up to 50 percent of the employer's contribution toward a worker's insurance. Again, the credit is phased out as the size of the company and average wages increase. The credit can only be claimed for two years.

In addition, the legislation establishes a $5 billion temporary reinsurance program for employers who provide health insurance coverage for retirees over age 55 who are not yet eligible for Medicare.[109] The program will reimburse insurers for 80 percent of retiree claims between $15,000 and $90,000.[110] Insurers are required to pass those savings on to employers through lower premiums, though how that will be enforced remains a question.[111]

The law also increases funding for community health centers by $11 billion.[112] Approximately $1.5 billion would be used for the construction of new health centers in inner-city or rural low-income communities, with the remainder designed to subsidize operations for existing centers. Community health centers are expected to treat nearly 40 million patients by 2015, nearly double today's utilization.[113]

All together, this law represents a massive increase in the welfare state, adding millions of Americans to the roll of those dependent, at least to some extent, on government largess. Yet for all the new spending, the Patient Protection and Affordable Care Act falls short of its goal of achieving universal coverage (see below).

The Exchanges

Perhaps the most fundamental reordering of the current insurance market is the creation of "exchanges" in each state. Ezra Klein, one of the bill's most prominent liberal supporters, maintains that that the exchanges are "the most important element in the plan."[114] The exchanges would function as a clearinghouse, a sort of wholesaler or middleman, matching customers with providers and products.

Exchanges would also allow individuals and workers in small companies to take advantage of the economies of scale, both in terms of administration and risk pooling, which are currently enjoyed by large employers. The larger risk pools should theoretically reduce premiums, as would the exchanges' ability to "use market share to bargain down the prices of services."[115]

However, one should be skeptical of claims that the exchange will reduce premiums. In

Plans offered through the exchange must meet the federal requirements for minimum benefits.

President Obama has always been hostile to consumer-directed health care.

Massachusetts, supporters of the "Connector" claimed that it would reduce premiums for individual insurance policies by 25 to 40 percent.[116] Instead, premiums for policies sold through the Connector have been rising, up 11 percent for the lowest cost plans since the program began.[117]

Beginning in 2014, one or more exchanges would be set up by each state and largely operated according to rules developed by that state. States would also have the option of joining with other states and creating regional exchanges. If a state refuses to create an exchange, the federal government is empowered to set one up within that state.[118] States are given considerable discretion over how the exchanges would operate, but some of the federal requirements are significant.

Exchanges may be either a governmental agency or a private nonprofit entity.[119] And states would have the option of either maintaining separate insurance pools for the individual and small-group markets or of combining them into a single pool.[120] The pools would also include individual or small-group policies sold outside the exchange.[121] Existing plans could not be included in those pools, however.[122]

Initially, only businesses with fewer than 50 employees, uninsured individuals, or the self-employed may purchase insurance through the exchange. Members of Congress and senior congressional staff are also required to purchase their insurance through the exchange.[123] However, beginning in 2017, states have the option of opening the exchange to large employers.[124]

Insurance plans offered for sale within the exchanges would be grouped into four categories based on actuarial value: bronze, the lowest cost plans, providing 60 percent of the actuarial value of a standard plan as defined by the secretary of HHS; silver, providing 70 percent of the actuarial value; gold, providing 80 percent of the actuarial value; and platinum, providing 90 percent of the actuarial value.[125] In addition, exchanges may offer a special catastrophic plan to individuals who are under age 30 or who have incomes low enough to exempt them from the individual mandate.[126]

For all categories of plans, out-of-pocket expenses would be limited according to the income of the purchaser. For individuals and families with incomes above 400 percent of the poverty level, out-of-pocket expenses would be limited to $5,950 for individuals and $11,900 for families, approximately the current limits for a health savings account (HSA). Those limits would also apply to those who purchase the catastrophic plan. Individuals with incomes between 300 and 400 percent of the poverty level would have out-of-pocket expenses limited to two-thirds of the HSA limits ($3,987/individual and $7,973/family); 200 to 300 percent of poverty would have out-of-pocket expenses limited to one-half of the HSA limits ($2,975/individual and $5,950/family); and those with incomes below 200 percent of poverty would have out-of-pocket expenses limited to one-third of the HSA limits ($1,983 per individual and $3,967 per family).[127] The reductions in out-of-pocket expenses would occur within the plan in such a way as to not change their overall actuarial value.

CBO estimates that premiums for bronze plans would probably average between $4,500 and $5,000 for an individual and between $12,000 and $12,500 for family policies.[128] The more inclusive policies would have correspondingly higher premiums.

Plans offered through the exchange must meet the federal requirements for minimum benefits. State mandated benefits are not preempted, meaning that states may continue to impose additional mandates (though states must pay for the cost of the additional mandates in subsidized policies.)[129]

In addition to the state insurance plans, the legislation authorizes the federal Office of Personnel Management to contract with private insurers to ensure that each state exchange offers at least two multi-state insurance plans. These multi-state plans are supposed to resemble the Federal Employee Health Benefit Plan, but will operate separately from the FEHBP and will have a separate

risk pool.[130] The multi-state plans must meet the licensing and regulatory requirements of each state in which they are offered.[131] At least one plan must not include abortion coverage, and one must be offered by a nonprofit insurer. The legislation also provides start-up funds for states to establish health insurance cooperatives, which may participate in the state's exchange.[132]

Exactly how significant the exchanges will prove to be remains to be seen. At the very least exchanges will change the way individuals and small businesses purchase health insurance. However, if expanded to include large businesses or their employees, exchanges represent a potential framework for a far more extensive government intervention in the insurance market.

Impact on Consumer-Directed Health Plans

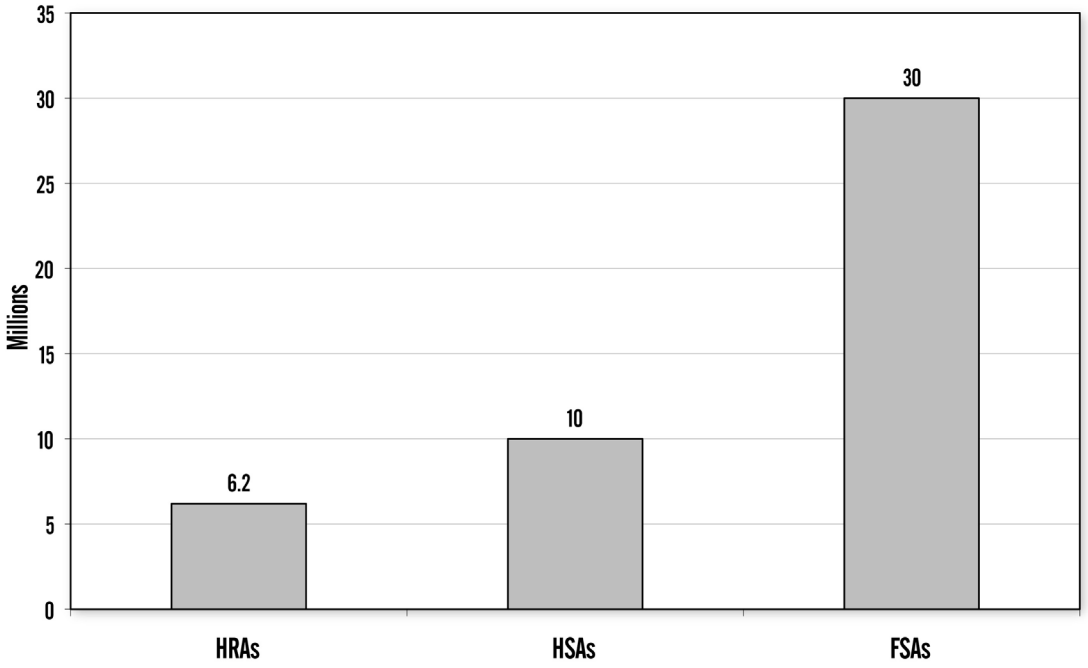
The health care bill reverses much of the progress in recent years toward more consumer-directed health care.

Consumer-directed health care is a broad term used to describe a variety of insurance arrangements, including health savings accounts, flexible spending accounts (FSAs), and health reimbursement accounts (HRAs), based on the concept that patients ("consumers") should have more control over the utilization of their health care dollars.[133] The goal is to simultaneously control costs and improve quality by creating incentives for consumers to make judgments based on price and value; in short to purchase health care the way we buy other goods and services.[134] More than 46 million workers currently participate in consumer-directed health plans (see Figure 3).

President Obama has always been hostile to consumer-directed health care. In his book, *The Audacity of Hope*, for example, he dismisses health savings accounts as being based on the idea that people have "an irrational desire to purchase more than they

The fate of HSAs is therefore dependent on a regulatory ruling by the Secretary of HHS.

Figure 3
Workers with Consumer-Directed Health Plans



Source: Source for HRAs: Employer Benefit Research Institute, "What Do We Know About Enrollment in Consumer-Driven Health Plans?" vol. 30, no. 12, December 2009.

The legislation does cut Medicare—and it should!

need."[135] That hostility is reflected in the final legislative language. Notably, the legislation puts substantial new restrictions on such consumer-oriented innovations as HSAs and FSAs.

Roughly 10 million Americans currently have health savings accounts.[136] Nothing in the legislation directly prohibits them. However, the law does add several new restrictions. For example, the tax penalty for HSA withdrawals that are not used for qualified medical expenses will be doubled from the current 10 percent to 20 percent, starting this year.[137] In addition, the definition of "qualified medical expense" has been made more restrictive. Among other things, over-the-counter medications are no longer considered a "qualified medical expense."[138]

Of greater concern is the potential impact of the law on high-deductible insurance plans. Current law requires that an HSA be accompanied by such a policy. However, many of the insurance regulations discussed above raise questions about whether or not high-deductible plans will remain viable.

For example, the lowest permissible actuarial value for an insurance plan (the bronze plan) would be 60 percent.[139] It is unclear whether a plan's actuarial value would include employer or individual contributions made to the individual's HSA. That decision is left to the discretion of the Secretary of HHS.[140] Whether or not HSA contributions are included can make as much as a 10–20 percent difference in a plan's actuarial value. As a result, if the contributions are not included, many, if not most, high-deductible plans will not qualify. The fate of HSAs is therefore dependent on a regulatory ruling by the secretary of HHS in an administration avowedly hostile to HSAs.

The 80 percent minimum medical loss ratio required of insurance plans could also prove problematic for HSAs. Again, how this provision will work in practice will depend on rules to be developed by the secretary of HHS. But, the legislation makes no distinction between traditional and high-deductible insurance plans. Few if any current high-deductible policies meet this requirement.

In addition, there is reason to wonder whether high-deductible insurance plans will likely be able to meet the law's requirement that insurance plans provide first-dollar coverage for all "preventive services."[141] Currently, most high-deductible plans *do* cover preventive services as defined by the IRS. However, as discussed above, under the Patient Protection and Affordable Care Act, preventive services will be defined by the U.S. Preventative Services Task Force and, once again, the secretary of HHS.[142] If the new definition of preventive services is more expansive than the IRS definition, as seems likely, most current high-deductible plans will once again be out of compliance.

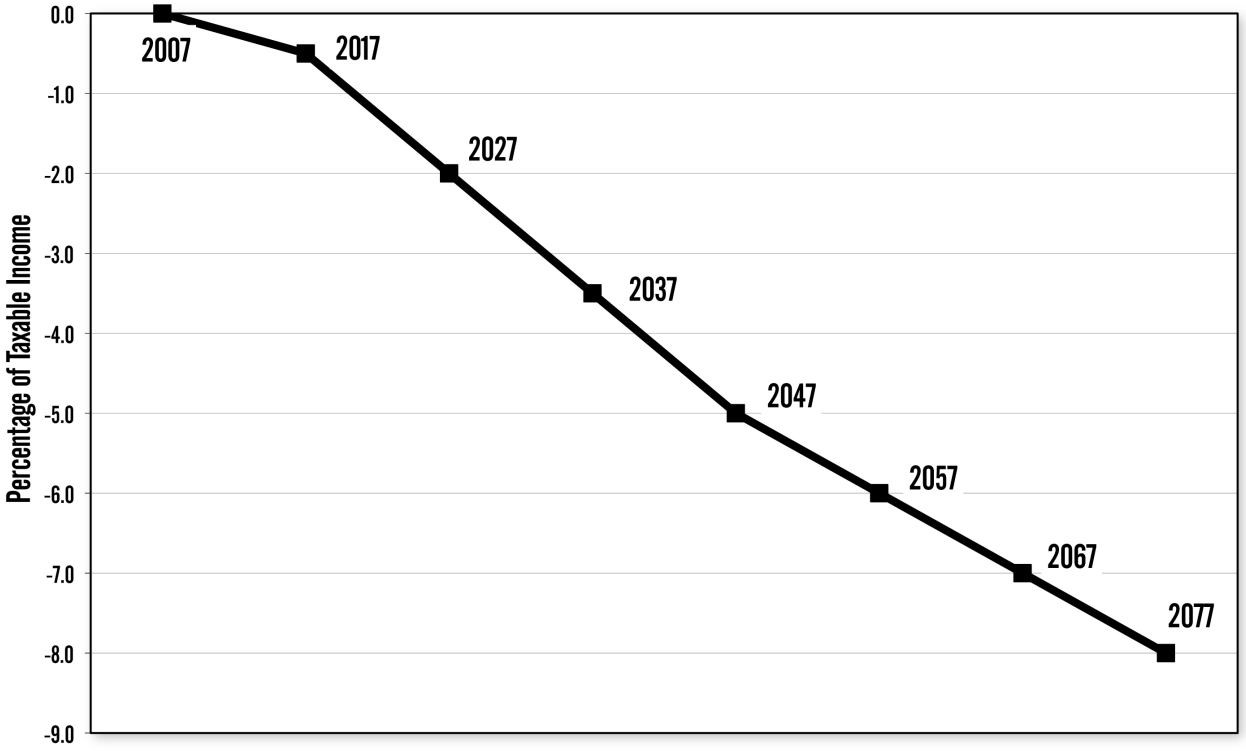
Finally, insurers must make certain that their high-deductible plans are designed so as to comply with the law's limits on out-of-pocket expenses.

In theory, a high-deductible plan designed to work with health savings accounts could meet all the new requirements. But industry sources warn that a plan designed to those specifications would offer few if any advantages over traditional insurance and would not be competitive in today's markets. As a result, insurers may stop offering high-deductible policies.[143] And since the rules for HSAs require that they be accompanied by a high-deductible plan, the result would be to end HSAs.

The law also includes new limits on FSAs, which are currently used by as many as 30 million Americans.[144] Starting this year, the maximum tax-exempt contribution to an FSA was cut in half, from $5,000 annually to just $2,500. [145] The new definition of "qualified medical expense" will also be applied to FSAs, meaning that as with HSAs, FSAs can no longer be used to pay for over-the-counter medications.[146]

The impact of these provisions extends well beyond their impact on workers who currently take advantage of such innovative products as HSAs and FSAs. More significantly, the assault on these products repre-

Figure 4
Medicare Cash Flow



Source: 2009 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds, Figure II.E2.

sents a fundamental philosophical shift in the health care debate. Through this legislation, the president and democrats in Congress reject consumer-oriented health care reform in clear favor of government control.

Medicare Cuts

Despite denials from the Obama administration and Democrats in Congress, the legislation *does* cut Medicare—and it should. Medicare is facing unfunded liabilities of $50 to $100 trillion depending on the accounting measure used, making future benefit cuts both inevitable and desirable.[147] Of course it would have been better if the savings from any cuts had been used to reduce the program's future obligations rather than to fund a brand new entitlement program. And, clearly, not all Medicare cuts are created equal.[148] Still, that should not obscure the necessity for dealing with Medicare's looming financial crisis (see Figure 4).

The legislation anticipates a *net* reduction in Medicare spending of $416.5 billion over 10 years.[149] Total cuts would actually amount to slightly more than $459 billion, but since the bill would also increase spending under the Medicare Part D prescription drug program by $42.6 billion, the actual savings would be somewhat less.[150]

The key word here is "anticipates," because several of those cuts are speculative at best. For example, the bill anticipates a 23 percent reduction in Medicare fee-for-service reimbursement payments to providers.[151] But Medicare has been slated to make reductions to those payments since 2003, yet each year Congress has voted to defer the cuts. There is no reason to believe that Congress is now more likely to follow through

on such cuts. In fact, in a perfect exercise in cynicism, the House has already passed separate legislation to repeal them.

More likely, but still problematic, are $136 billion in cuts to the Medicare Advantage program. Currently, some 10.2 million seniors, 22 percent of all Medicare recipients, are enrolled in the Medicare Advantage program, which allows Medicare recipients to receive their coverage through private insurance plans.[152] The bill would change the way payments are calculated for Medicare Advantage. Currently Medicare Advantage programs receive payments that average 14 percent more than traditional fee-for-service Medicare,[153] something that Democrats have derided as wasteful.[154] However, the program also offers benefits not included in traditional Medicare, including preventive-care services, coordinated care for chronic conditions, routine physical examinations, additional hospitalization, skilled nursing facility stays, routine eye and hearing examinations, glasses and hearing aids, and more extensive prescription drug coverage than offered under Medicare Part D.[155]

The law imposes a new competitive bidding model on the Medicare Advantage program that will effectively end the 14 percent overpayment.[156] The change will be phased in over three years beginning in 2012. In response, many insurers are expected to stop participating in the program, while others will increase the premiums they charge seniors. Medicare's chief actuary estimates more than 7 million seniors could be forced out of their current insurance plan and back into traditional Medicare.[157] The Congressional Budget Office predicts these cuts "could lead many plans to limit the benefits they offer, raise their premiums, or withdraw from the program." Already, Harvard Pilgrim Health Care has dropped its Medicare Advantage program, forcing 22,000 seniors in Massachusetts, New Hampshire, and Maine to seek other coverage.[158]

Particularly hard hit would be minorities and seniors living in underserved areas. For example, nearly 40 percent of African-American and 54 percent of Latino seniors participate in Medicare Advantage, in part because lower-income seniors see it as a low-cost alternative to Medigap insurance for benefits not included under traditional Medicare.[159] Interestingly, the law exempts three counties in south Florida from the Medicare Advantage cuts.

In addition, a new "productivity adjustment" would be applied to reimbursements to hospitals, ambulatory service centers, skilled nursing facilities, hospice centers, clinical laboratories, and other providers, resulting in an estimated savings of $196 billion over 10 years.[160] There would also be $3 billion in cutbacks in reimbursement for services that the government believes are overused, such as diagnostic screening and imaging services. And, beginning next year, the "utilization assumption" used to determine Medicare reimbursement rates for high-cost imaging equipment will be increased from 50 to 75 percent, effectively reducing reimbursement for many services.[161] This change is expected to reduce total imaging expenditures by as much as $2.3 billion over 10 years.[162] Other Medicare cuts include freezing reimbursement rates for home health care and inpatient rehabilitative services and $1 billion in cuts to physician-owned hospitals.[163]

And, for the first time, the secretary of HHS would be permitted to use comparative effectiveness research in making reimbursement decisions. The use of comparative effectiveness research has been extremely controversial throughout this debate. On the one hand, many health care experts believe that much of U.S. health care spending is wasteful or unnecessary.[164] Medicare spending varies wildly from region to region, without any evidence that the variation is reflected in the health of patients or procedural outcomes.[165] A case could certainly be made that taxpayers should not have to subsidize health care that has not proven effective, nor can Medicare and Medicaid pay for *every* possible treatment regardless of cost-effectiveness.

On the other hand, the use of such research in determining what procedures are reimbursed could fundamentally alter the

Many other proposed cuts are actually steps in the right direction.

way medicine is practiced and could interpose government bureaucracies in determining how patients should be treated. Moreover, there are significant questions about whether comparative effectiveness can provide a truly effective basis for determining reimbursement policy.[166] In fact, it could be argued that Medicare is particularly unsuited for such a policy.[167]

Many others worry that the use of comparative effectiveness research for government programs such as Medicare sets the stage for its extension to private medical practice. There is no doubt that national health care systems in other countries use comparative effectiveness research as the basis for rationing.[168] Some of President Obama's health care advisers, such as former senator Tom Daschle have recommended that it be extended to private insurance plans.[169] And the president has named as the new director of the Center for Medicare and Medicaid Services Dr. Donald Berwick, who is an outspoken admirer of the British National Health Service, and particularly its National Institute for Clinical Effectiveness, which makes such cost-effectiveness decisions.[170]

Although some of the cuts described above are problematic, many other proposed cuts in this bill are actually steps in the right direction. For example, the law reduces Medicare Part D subsidies by $10.7 billion for high-income recipients. This means that individuals with incomes over $85,000 and couples with incomes over $170,000 will no longer have their prescription drug purchases subsidized by taxpayers.

In addition, the law will eliminate part of a Bush-era subsidy for businesses that includes prescription drug coverage in retiree health plans.[171] Since 2006, as part of the Medicare prescription drug program, companies have received a federal subsidy for 28 percent (up to a cap of $1,330 per retiree) of the cost of providing prescription drugs to retired workers.[172] Proponents justified the subsidy on the grounds that companies would otherwise dump workers into Medicare, raising the cost of the Part D, prescription drug plan. However, not only do businesses receive the subsidy, they were also allowed to deduct the subsidy from their taxes, receiving what was in effect a second subsidy. In fact, UC Berkeley Economist Brad DeLong estimates that by making the original subsidy tax free, the federal government actually ends up subsidizing 63 percent of the cost of retiree drug benefits for some companies.[173] The health care legislation retains the subsidy but eliminates the tax break beginning in 2013.[174]

This change received a great deal of press attention when it forced several companies, such as Caterpillar, Lockheed Martin, and AT&T, to take charges against earnings on their Securities and Exchange Commission (SEC) filings. Altogether those charges could total more than $4.5 billion, reflecting future tax costs to those companies.[175]

Democrats reacted to the accounting changes with outrage and threatened hearings on the issue. However, the charges appear to be required under SEC rules, and Democrats later backed down.[176] On the other side, Republicans attempted to score points by warning that the change could reduce economic growth and reduce employment. They have a point in that the money that the companies will now have to pay in taxes is money that cannot be used to expand operations or pay workers. However, not all tax breaks are created equal. This one, in particular, appears to be a highly questionable form of corporate welfare.

Finally, the new law establishes a new Independent Payment Advisory Board, which would have the power to recommend changes to the procedures that Medicare will cover, and the criteria to determine when those services would be covered, provided its recommendations "improve the quality of care" or "improve the efficiency of the Medicare program's operation."[177] Starting in 2013, if Medicare spending is projected to grow faster than the combined average rate of general inflation and medical inflation (averaged over five years), IPAB must submit recommendations bringing spending back in line with

Savings from the cuts will not be used to deal with Medicare's looming budget shortfalls.

The legislation does nothing to reform the program's unsustainable structure.

that target. Beginning in 2018, the annual spending target becomes the rate of GDP growth plus 1 percent. Once IPAB makes its recommendations, Congress would have 30 days to vote to overrule them. If Congress does not act, the secretary of HHS would have the authority to implement those recommendations unilaterally.

Given Congress's proven inability to restrain the growth in Medicare spending, an independent commission, and a requirement that Congress vote on the issue, could prove beneficial. Unfortunately, IPAB is prohibited from making any recommendation that would "ration care," increase revenues, or change benefits, eligibility, or Medicare beneficiary cost-sharing (including Medicare premiums).[178] That leaves IPAB with few options beyond reductions in provider payments. Hospitals and hospices would be exempt from any cuts until 2020.[179] Thus, most of the cuts would initially fall on physicians. With Medicare already underreimbursing providers, further such cuts would have severe consequences, including driving physicians from the program and increased cost-shifting to private insurance. Eventually hospitals will also see significant reimbursement cuts. The Centers for Medicare and Medicaid Services estimates that this could cause about 15 percent of hospitals, nursing homes, and home health agencies to close.[180]

Given the opposition such service cutbacks are likely to engender, it is quite possible that IPAB will end up as neutered as previous attempts to impose fiscal discipline on government health care programs.[181]

On the other side of the ledger, the legislation *increases* subsidies under the Medicare Part D prescription drug program. A Medicare recipient enrolled in the standard version of the prescription drug plan currently pays a deductible of $310. Thereafter, Medicare pays 75 percent of costs between $310 and $2,800 in drug spending. The patient will pay the remaining 25 percent of these costs. The patient then encounters the notorious "doughnut hole." For drug costs above $2,800 but below $4,450 in out-of-pocket spending, the patient must pay 100 percent of the costs. After that, the prescription drug plan kicks in again and pays 95 percent of costs above $4,450.[182]

The Patient Protection and Affordable Care Act ever so slowly closes this donut hole. In June, seniors enrolled in the program who have drug costs in excess of $2,700 began receiving a $250 check as a partial rebate of their drug costs.[183] Starting in 2011, a slow reduction in the amount that seniors have to pay out-of-pocket within the donut hole begins, eventually reducing that amount from the current 100 percent to 25 percent by 2020. Part of the cost of filling the donut hole will be borne by pharmaceutical companies, which will be required to provide a 50 percent discount on the price of brand-name drugs. This provision's cost to drug companies has been estimated at approximately $42.6 billion.[184] The remaining 25 percent reduction in out-of-pocket costs will come from federal subsidies. For generic drugs, the entire out-of-pocket cost reduction is through subsidies.

In considering any of the cuts discussed above, there are three things to keep in mind. First, cuts in Medicare are both necessary and inevitable. However, there will almost certainly be an impact on the quality and availability of care. Second, savings from the cuts will not be used to deal with Medicare's looming budget shortfalls, but rather to finance the new entitlements under the legislation. Democrats have pointed out that changes under the legislation, combined with new Medicare tax revenue, would extend the life of the Medicare Trust Fund by as much as 12 years. While technically true, this represents a very misleading double counting of the savings and revenue.

And third, there is ample reason to be skeptical about whether the cuts will ever actually occur. Medicare's actuary warns that the proposed cuts "may be unrealistic."[185] The CBO itself cautions that "it is unclear whether such a reduction in the growth rate of spending could be achieved, and if so, whether it would be accomplished through greater efficiencies in the delivery of health

care or through reductions in access to care or the quality of care."[186]

Congress's record in this regard is decidedly mixed. As the bill's proponents point out, it is untrue to say that Congress has *never* cut Medicare spending. At least 11 times since 1980, Congress has passed Medicare cuts that actually did take place.[187] Most were modest reductions in payments to certain types of providers, reductions in "disproportionate share" (DSH) payments to hospitals, or small increases in cost-sharing by seniors, or in Medicare premiums. At least in limited circumstances, Congress *has* been able to trim Medicare.[188]

However, Medicare is still facing a $50–100 trillion funding gap, and Congress has proven itself unable to take the steps necessary to deal with this long-term gap. Some of the most significant cuts that have been proposed have later been reduced or repealed. For instance, in 1997, as part of the Balanced Budget Act, Congress established the "sustainable growth rate" (SGR), designed to hold annual increases in Medicare reimbursements to a manageable growth rate. But in 2003, 2005, 2007, 2008, and this year (reaching back to 2009), Congress has overturned provider payment cuts that would have been required by the SGR. A bill before Congress—the infamous "doc fix" (see below)—would permanently eliminate future SGR mandated cuts.[189]

In some ways the legislation is a victim of Medicare itself. Because the legislation does nothing to reform the program's unsustainable structure, Congress is caught between two unpalatable choices. If it makes the cuts called for under the legislation, it risks, according to the CBO "reductions in access to care or the quality of care."[190] But if it fails to make those cuts, then the legislation will add a huge new cost to an already exploding debt.

That is a recipe for legislative paralysis.

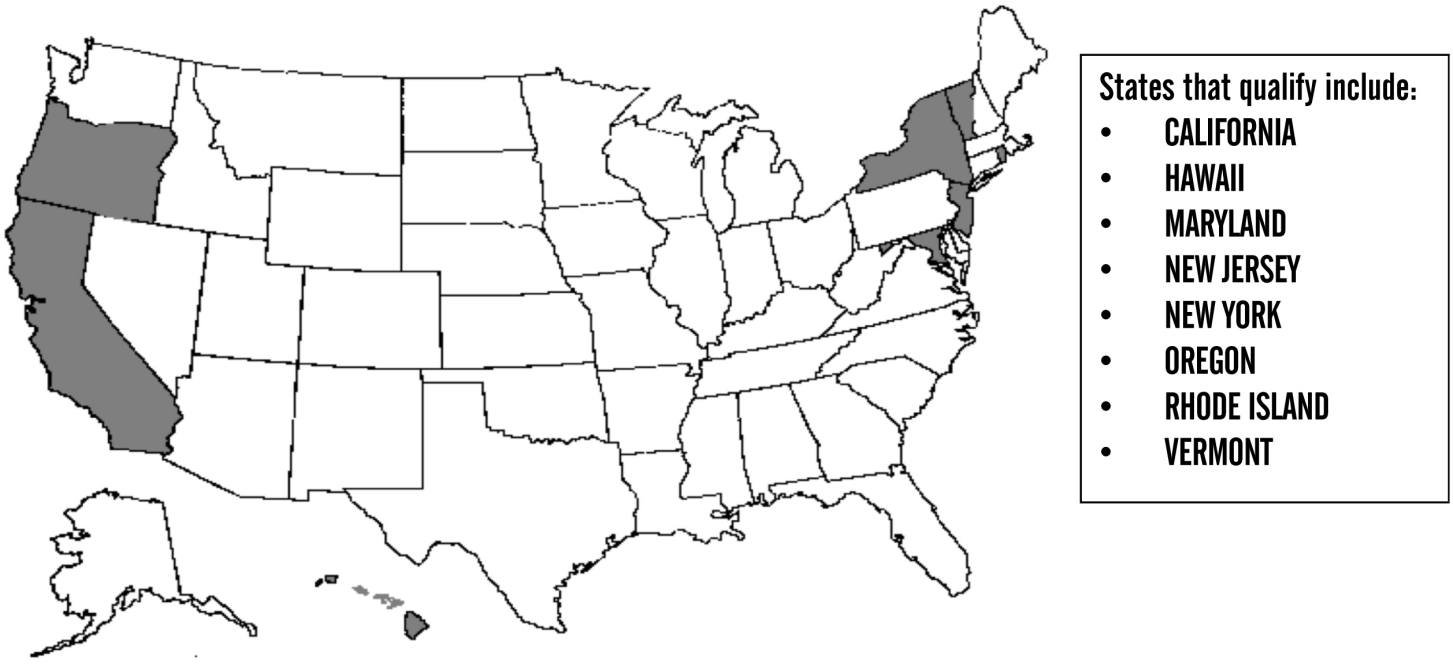
Taxes

The Patient Protection and Affordable Care Act imposes more than $569 billion in new or increased taxes over the first 10 years.[191] These include

- **Tax on "Cadillac" Insurance Plans**. One of the most heavily debated new taxes in the health care bill was the tax on high-cost insurance plans. Beginning in 2018, a 40 percent excise tax will be imposed on employer-provided insurance plans with an actuarial value in excess of $10,200 for an individual or $27,500 for families. (The threshold is increased to $11,850 for individuals and $30,950 for families whose head of household is over the age of 55 or engaged in high-risk professions such as police, firefighters, or miners.) The tax falls on the value of the plan over the threshold and is paid by the insurer, or the employer if self-insured.[192] The benefit value of employer-sponsored coverage would include the value of contributions to employees' FSAs, HRAs, and HSAs. It is estimated that 12 percent of workers will initially have policies that are subject to the tax.[193] However, the tax is indexed to inflation rather than the faster-rising medical inflation, which drives insurance premiums. As a result, more and more workers will eventually find their insurance plans falling subject to the tax. In fact, a study for the benefits consulting firm Towers Watson concludes, "Assuming even reasonable annual plan cost increases to project 2018 costs, many of today's average plans will easily exceed the cost ceilings directed at today's 'gold-plated' plans."[194]
- **Payroll tax hike**. The Medicare payroll tax will be increased from 2.9 percent today to 3.8 percent for individuals with incomes over $200,000 for a single individual or $250,000 for a couple.[195] The payroll tax hike would mean that in eight states, workers would face marginal tax rates in excess of 50 percent (see Figure 5).[196]

The combination of taxes and subsidies in this law results in a substantial redistribution of income.

Figure 5
States with Marginal Tax Rates over 50 percent after PPACA



Source: Tax Foundation, Private Report.

- **Tax on Investment Income**. Starting in 2013, the 3.8 percent Medicare tax will be applied to capital gains and interest and dividend income if an individual's total gross income exceeds $200,000 or a couple's income exceeds $250,000.[197] The tax would only apply to the amount of income in excess of those limits, but would be based on total income. Thus, if a couple had $200,000 in wage income and $100,000 in capital gains, $50,000 would be taxed. Moreover, the definition of capital gains includes capital gains from the sale of real estate, meaning that an individual who sold his or her home for a profit of $200,000 or more would be subject to the tax. Given the current weakness in the housing market, this would seem to create a particularly pernicious outcome. Numerous studies have shown that high capital gains taxes discourage investment, resulting in lower economic growth, fewer jobs, and reduced wages.
- **Limit on Itemized Deductions.** Beginning in 2013, the threshold at which taxpayers can deduct medical expenses will be raised from the current 7.5 percent of adjusted gross income to a new floor of 10 percent.[198] The increased threshold would be postponed until 2016 for taxpayers age 65 or older.[199]
- **Tax on Prescription Drugs**. Starting this year, the legislation imposes a new tax on brand-name prescription drugs designed to raise a specific amount of money annually. Rather than imposing a specific tax amount, the legislation identifies a specific amount of revenue to be raised, ranging from $2.5 billion in 2011 to $4.2 billion in 2018, before leveling off at $2.8 billion thereafter, and assigns a proportion of that amount to pharmaceutical manufacturers according to a formula based on the company's aggregate revenue from branded prescription drugs.[200] The structure of this tax almost guarantees that it will be passed along to consum-

ers through higher prices.

- **Tax on Medical Devices**. A 2.3 percent federal sales tax is imposed on medical devices, which includes everything from CT scanners to surgical scissors.[201] The secretary of HHS has the authority to waive this tax for items that are "sold at retail for use by the general public."[202] However, almost everything used by doctors, hospitals, or clinics would be taxed. The tax would also fall on laboratory tests. The government's chief actuary has concluded that this tax, as those on pharmaceutical manufacturers and insurers "would generally be passed through to health consumers."[203] In fact, a study by the Republican staff of the Joint Economic Committee estimates that the pass-through could cost the typical family of four with job-based coverage an additional $1,000 a year in higher premiums.[204]
- **Additional Taxes on Insurers**. Similar to the tax on pharmaceutical companies, the legislation imposes a tax on health insurers based on their market share.[205] The total assessment will begin at $8 billion and rise to $14.3 billion by 2018. Thereafter the total assessment will increase by the same percentage as premium growth for the previous year.[206] The tax will be allocated according to a formula based on both the total premiums collected by an insurer and the insurer's administrative costs.[207] However, some insurers in Michigan and Nebraska received a special exemption.[208] This tax is also expected to be passed through to consumers through higher premiums. (Interestingly, AARP is exempt from this tax on sales of its highly profitable Medigap policies.)[209]
- **Tax on Tanning Beds**. The legislation imposes a 5 percent tax on tanning salons.[210] While tanning may be seen as a luxury or frivolous expenditure, it is actually a recommended treatment for psoriasis and certain other medical conditions. The law makes no distinction between tanning for medical or cosmetic reasons. This tax went into effect July 1, 2010.

The combination of taxes and subsidies in this law results in a substantial redistribution of income. The new law will cost families earning more than $348,000 per year, (top 1 percent of incomes) an additional $52,000 per year on average in new taxes and reduced benefits.[211] In contrast, those earning $18,000–$55,000 per year will see a net income increase of roughly $2,000 per family.[212]

The new law contains other tax-related provisions that will add significantly to business costs. For example, the legislation requires that businesses provide a 1099 form to every vendor with whom they do more than $600 worth of business over the course of a year.[213] This provision has proven so unpopular that there is strong bipartisan support for repeal. In fact, on February 2, 2011, the Senate voted 81 to 17 to repeal this provision. The House will likely follow suit.[214]

For both individual Americans and businesses large and small, the Patient Protection and Affordable Care Act is a tax and regulatory nightmare.

The Patient Protection and Affordable Care Act is a tax and regulatory nightmare.

The CLASS Act

The health care legislation establishes a new national long-term care program, called the Community Living Assistance and Support Act (CLASS Act), designed to help seniors and the disabled pay for such services as an in-home caretaker or adult day services.[215]

The CLASS Act is theoretically designed to be self-financed. Workers would be automatically enrolled in the program, but would have the right to opt out. Those who participate will pay a monthly premium that has not yet been determined.[216] However, the CBO estimates that will be roughly

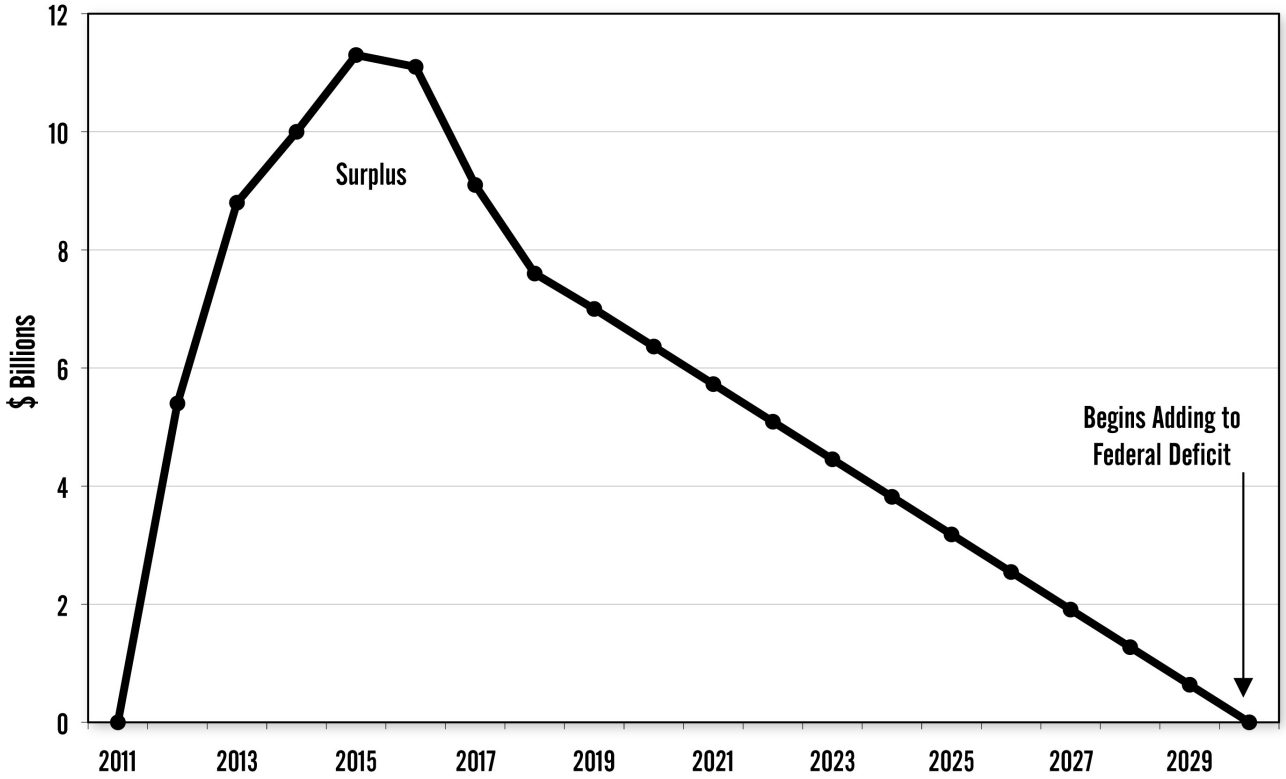
$123 per month for the average worker.[217] Other estimates suggest that the premiums could be much higher, perhaps $180–$240 per month.[218] Workers must contribute to the program for at least five years before they become eligible for benefits.[219] (Individuals age 55 or over at the time the program is fully implemented must not only contribute for five years, but must be employed for at least three years following the program's implementation date.)[220] There is no health underwriting of participation or premiums.

The actual benefits to be provided under the program are among the many details that remain to be determined but will not be "less than an average of $50 daily adjusted for inflation."[221] Some estimates suggest that benefits will average roughly $75 per day, or slightly more than $27,000 per year.[222] Benefits will be paid directly to the individual, not to the service provider, based on the degree of an individual's impairment, and can be used to purchase home care and other community-based long-term care assistance, as well as certain nonmedical services.[223] Benefits may be paid daily, weekly, monthly, or deferred and rolled over from month to month at the beneficiary's discretion.[224] There is no lifetime limit to benefits.

Eligibility for benefits will be based on the same criteria currently used to qualify for federal-tax-qualified long-term-care insurance benefits. That is, a person must be unable to perform at least two "activities of daily living" from a list of six such activities, or need substantial supervision due to cognitive impairment.[225] The secretary of HHS may also develop different or additional eligibility requirements.[226]

During the law's first five years it will collect premiums, but not pay benefits. As a result, over the first 10 years, the period

Figure 6
Effect of CLASS Act on Federal Budget



Source: Letter from Douglas Elmendorf, director, Congressional Budget Office, to House speaker Nancy Pelosi, March 20, 2010, and Letter from Douglas Elmendorf, director, Congressional Budget Office, to Sen. Tom Harkin, November 25, 2009.

conveniently included in the budget scoring window, the CLASS Act will run a surplus, collecting more in premiums than it pays out in benefits (see Figure 6).

Those premiums will accrue in a CLASS Act Trust Fund, similar to the Social Security and Medicare trust funds. Using trust fund accounting measures, the premium payments will reduce the federal deficit over that period by roughly $70.2 billion.[227] However, thereafter, the CLASS Act will begin to pay out benefits faster than it brings in revenue. Although this time period falls outside the formal 10-year scoring window, CBO warns, "In the decade following 2029, the CLASS program would begin to increase budget deficits . . . by amounts on the order of tens of billions of dollars for each 10-year period."[228] CBO goes on to warn, "We have grave concerns that the real effect of [the CLASS Act] would be to create a new federal entitlement program with large, long-term spending increases that far exceed revenues."

Trust fund accounting, of course, is little more than budgetary sleight of hand. Because the government is structurally incapable of saving such surpluses, they become simply a source of current revenue for the government to use for whatever purpose seems most pressing at the time. It does not provide resources with which to pay the future obligations that have been created.[229] Even Senate Budget Committee chairman Kent Conrad (D-ND), who eventually voted for the bill, called it "a Ponzi scheme of the first order, the kind of thing that Bernie Madoff would have been proud of."[230] And the bipartisan Commission on Fiscal Responsibility and Reform (the Bowles-Simpson Commission) recognized that the CLASS Act program will "require large general revenue transfers or collapse of its own weight."[231] The commission recommended that the CLASS Act be reformed in some unspecified way so as to make it credibly sustainable over the long term; otherwise it should be repealed.

In addition, the structure of the program creates a huge "adverse selection" risk that could add to the program's financial instability. As the actuarial firm Milliman Associates points out, "The voluntary aspect of the program allows low-risk individuals to never sign up for the program while the guaranteed issue enables some of the highest-risk individuals to join the program. This is a formula that is virtually certain to create financial instability in any insurance program unless there are other important provisions to control risk."[232]

The law tries to ameliorate the adverse selection problem by requiring individuals who opt out of the program to pay a higher premium—up to 250 percent higher—if they later decide to opt back in.[233] But experts suggest that these provisions will be insufficient to prevent gaming the system. And other provisions actually make adverse selection *more* likely. For example, the law limits marketing costs to no more than 3 percent of premiums. The resulting lack of marketing will likely result in a low participation rate by the public at large, while those with health problems are most likely to seek out the benefits. The American Academy of Actuaries estimates that only about 6 percent of the U.S. population will participate in the program.[234] And, Richard Foster suggests that just 2 percent of workers will participate after three years.[235] Given such low participation levels, the covered population will almost certainly be far sicker than general insurance pool. Foster warns that "there is a very serious risk that the problem of adverse selection will make the CLASS program unsustainable."[236]

Making matters worse, the legislation caps premiums for low-income workers and undergraduate students and prohibits future premium hikes for some groups of retirees.[237] Therefore, if the program is to remain self-sustaining, other workers will have to bear a disproportionate share of future premium hikes. That in turn increases the risk that program premiums will exceed those for products available in the private market. Healthier individuals, in particular, would have an incentive to flee the program

The CLASS Act may represent one of the health care legislation's biggest fiscal time bombs.

for less expensive private alternatives, leaving only the sickest and most expensive participants in the government plan. The adverse selection death spiral would be in full force, which could tempt the government to solve the problem by making participation mandatory, forcing Americans into a program they may not want and to which there are superior private alternatives.[238] The only other alternative will be a taxpayer bailout.

The CLASS Act, therefore, while little debated, may represent one of the health care legislation's biggest fiscal time bombs.

Growing the Nanny State

A little-discussed provision of the health care legislation requires restaurant chains with at least 20 locations or franchises to post calorie counts next to prices on menus, menu boards, and drive-through menus. In addition, restaurateurs would be required to post a brief statement regarding daily caloric intake and advise guests that additional nutrition information is available. Other nutrition data, which must be available on request, would include calories from fat, total fat, saturated fat, cholesterol, sodium, carbohydrates, sugars, dietary fiber and protein.[239] More than 200,000 establishments will be affected by the change.[240] The law also requires nutrition information to be posted on food and beverage vending machines.[241]

There is no doubt that the United States has a serious obesity problem.[242] However, posting calories is unlikely to have a significant impact. Studies show that only about 56 percent of chain restaurant customers said they even notice posted calorie information, while even fewer, just 15 percent, take the calorie information into account when making their choices.[243]

But, while they are unlikely to significantly reduce obesity, the new regulations will impose a cost on restaurants and consumers. Estimates suggest that the cost of analyzing calories runs as high as $1,000 per meal.[244] In addition there will be the cost of changing all those menus and signs. And, the cost of posting the information on vending machines has been estimated to be at least $56.4 million for the first year.[245]

While the financial cost of this provision is not substantial, especially in the context of other taxes and regulatory costs imposed by this law, it does represent yet another blow against individual responsibility.

Other Provisions

The legislation includes a number of pilot programs designed to increase quality of health care or control costs. Most are well intentioned but unlikely to have significant impact, especially in the short term. These would include programs such as bundled payments, global payments, accountable-care organizations and medical homes through multiple payers and settings.[246] It would also create a new Center for Innovation within the Centers for Medicare and Medicaid Services (CMS) to evaluate innovative models of care, and would require CMS to develop a National Quality Strategy to "improve care delivery, health outcomes and population health.[247]

The federal government would also provide grants to states for incentives for Medicaid beneficiaries to participate in healthy-lifestyle programs. A state option would enroll Medicaid beneficiaries with chronic illnesses into health homes that offer comprehensive, team-based care, and a new optional Medicaid benefit would allow people with disabilities to receive community-based services and supports.[248] Other grants would provide incentives for states to shift Medicaid beneficiaries away from nursing homes and toward care in the home or community.[249]

The law would also reward hospitals for providing value-based care, and penalize hospitals that perform poorly on quality measures such as preventable hospital readmissions.[250]

Of greater concern is a provision to establish a private, nonprofit institute to con-

Some estimates suggest we will face a shortage of more than 150,000 physicians.

duct comparative effectiveness research.[251] Many health care reform advocates believe that much of U.S. health care spending is wasteful or unnecessary. Certainly it is impossible to draw any sort of direct correlation between the amount of health care spending and outcomes.[252] In fact, by some estimates as much as 30 percent of all U.S. health spending produces no discernable value.[253] Medicare spending, for instance, varies wildly from region to region, without any evidence that the variation is reflected in the health of patients or procedural outcomes.[254] The Congressional Budget Office suggests that we could save as much as $700 billion annually if we could avoid treatments that do not result in the best outcomes.[255] It makes sense, therefore, to test and develop information on the effectiveness of various treatments and technology.

Critics fear, however, that comparative effectiveness research will not simply be used to provide information, but to impose a government-dictated method of practicing medicine. The legislation prohibits use of the research to create health care practice guidelines or for insurance coverage decisions.[256] The research would initially be informative only. Still, there is no doubt that many reformers hope to ultimately use the information to restrict the provision of "unnecessary" care.[257]

The Patient Protection and Affordable Care Act also includes several provisions aimed at increasing the health care workforce. This is particularly important given the law's emphasis on increasing coverage and therefore the demand for services. The United States already faces a potential shortage of physicians, especially primary-care physicians and certain specialties such as geriatric care. Some estimates suggest we will face a shortage of more than 150,000 physicians in the next 15 years.[258] The legislation itself could exacerbate this trend if physicians find their reimbursement rates reduced under Medicare and Medicaid, or find more bureaucratic interference with their medical decisionmaking. Indeed, one survey found that 45 percent of physicians would at least consider the possibility of quitting as a result of this health care legislation.[259]

The law attempts to combat this by increasing funding for physician and nursing educational loan programs, and would expand loan forgiveness under the National Health Service Corps.[260] It would also fund new educational centers in geriatric care, chronic-care management, and long-term care.[261] It also takes more controversial steps toward increasing the supply of primary-care physicians by shifting reimbursement rates for government programs, such as Medicare and Medicaid, to reduce payments to specialists while increasing reimbursement for primary care.[262] Yet, what possible reason is there to believe that the federal government can (a) know the proper mix of primary-care physicians and specialists, and (b) fine-tune reimbursements in a way that will produce those results? Nothing in the government's previous activities suggests that such central planning would be effective.

Finally, there is a host of special interest provisions. The so-called "cornhusker kickback" (a provision that committed the federal government to picking up the cost of Nebraska's Medicaid expansion forever) was removed by the reconciliation bill.[263] However, much other pork remains. For example, the legislation included $100 million in special funding for a hospital in Connecticut;[264] and money for asbestos abatement in a Montana town.[265] There was also a provision that gives drug makers 12 years of protection, or exclusivity, to sell biologic medicines before facing the threat of cheaper, off-brand alternatives.[266]

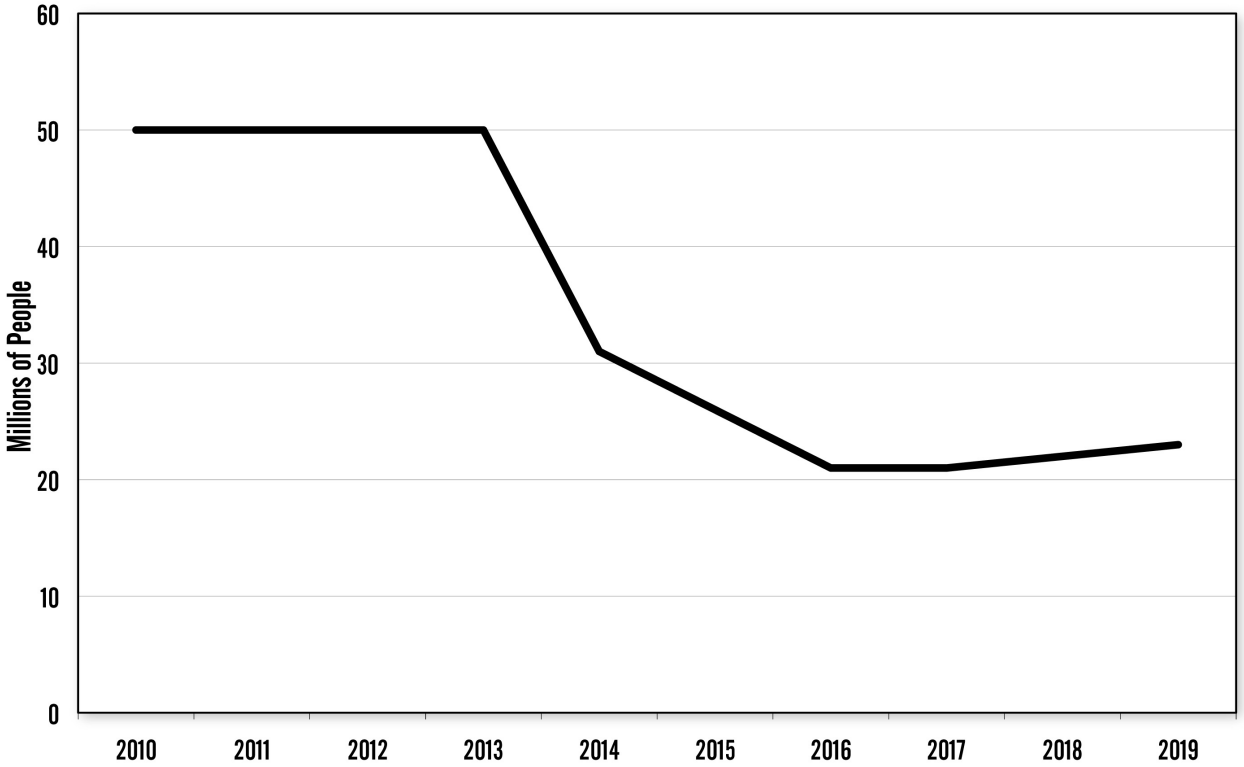
Part II: Costs and Consequences

Expanded, Not Universal, Coverage

Passage of health care reform was heralded by some in the media as providing "near

By 2019, CBO expects there to be more than 23 million uninsured.

Figure 7
Number of Uninsured under PPACA



Source: Letter from Douglas Elmendorf, director, Congressional Budget Office, to House Speaker Nancy Pelosi, March 20, 2010.

universal coverage."[267] Indeed, President Obama made it clear that one of the primary reasons he was pushing for health care reform was "it should mean that all Americans could get coverage."[268] But by this standard, the Patient Protection and Affordable Care Act falls far short of its goals.

According the Congressional Budget Office, the legislation would reduce the number of uninsured Americans by about 32 million people by 2019.[269] Most of those gains in the number of insured will not occur until after 2014 when the mandates and subsidies kick in. And even by 2019, CBO expects there to be more than 23 million uninsured (see Figure 7).[270] About one-third of the uninsured would be illegal immigrants. But that would still leave 15–16 million legal, non-elderly U.S. residents without health insurance.

Supporters of the legislation point out that that would decrease the number of uninsured Americans to roughly 6–8 percent of non-elderly Americans, a far cry from universal coverage, but undoubtedly better than today's 15 percent.[271]

Independent analysis suggests a modestly more pessimistic result. The RAND Corporation, for example, estimates that roughly 28 million more Americans would be insured under the legislation than would have been under the status quo, leaving roughly 25 million uninsured.[272] RAND also estimates that increases in coverage would occur somewhat more slowly than does the CBO.[273]

Not surprisingly, most of those remaining uninsured will be young and healthy. In fact, the uninsured after implementation are likely to be somewhat younger, healthier, and wealthier as a group than today's uninsured.[274] If so, it may prove a blow to projections of reduced insurance costs through bringing the young and healthy into the

insurance pool. In addition, as many as 38 percent of the remaining uninsured will be eligible for Medicaid, SCHIP, or government programs, but will not have enrolled.[275] That is a similar percentage to the status quo. And, nearly a third will be illegal immigrants, roughly double the proportion of uninsured today who are undocumented residents.[276] This suggests that we should not anticipate significant future reductions in the number of uninsured beyond 2019.

It is also important to realize that roughly 47 percent of the newly insured will not be receiving traditional health insurance, but will instead be put into the Medicaid or SCHIP programs.[277] Given that roughly a third of physicians no longer accept Medicaid patients,[278] these individuals may still find significant barriers to access, despite their newly insured status.

The Massachusetts health reform plan enacted in 2006 provides a useful warning on this score. Like the new federal legislation, Massachusetts expanded its coverage in large part by enrolling more people in Medicaid. However, after the reform was enacted, 6.9 percent of low-income residents reported that they could not find a doctor or get an appointment, a nearly 50 percent increase since the plan went into effect.[279] Waiting times were an even bigger problem, with the wait for seeing an internist, for example, increasing from 33 days to 52 days during the program's first year.[280]

Increased Spending, Increased Debt

Throughout the health care debate, President Obama emphasized the need to control the rise in health care spending. As the president put it:

> We've got to control costs, both for families and businesses, but also for our government. Everybody out there who talks about deficits has to acknowledge that the single biggest driver of our deficits is health care spending. We cannot deal with our deficits and debt long term unless we get a handle on that. So that has to be part of a package.[281]

Proponents of reform correctly pointed out that the U.S. spends far more on health care than any other country, whether measured as a percentage of GDP or by expenditure per capita.[282] Health care costs are rising faster than GDP growth and now total more than $2.5 trillion—more than Americans spend on housing, food, national defense, or automobiles.[283]

However, the Patient Protection and Affordable Care Act fails to do anything to reduce or even restrain the growth in those costs. According to Richard Foster, the government's chief health care actuary, the legislation will actually increase U.S. health care spending by $311 billion over 10 years (see Figure 8).[284]

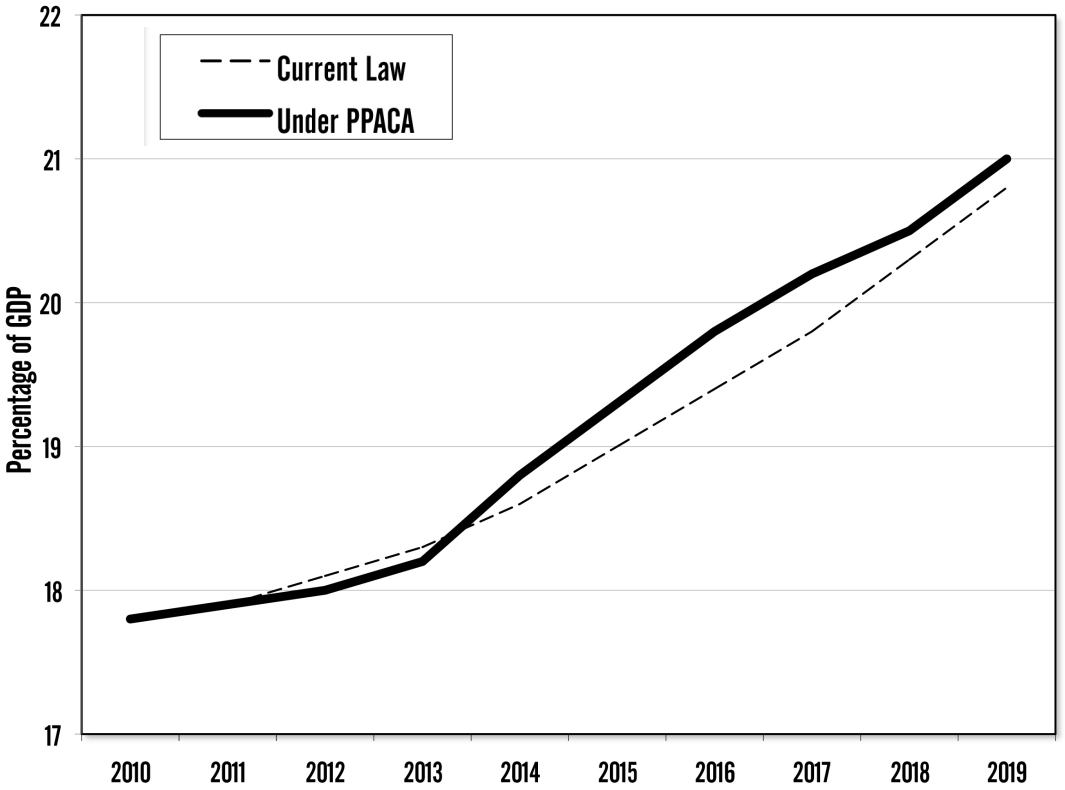
This should not come as a big surprise. The primary focus of the legislation was to expand insurance coverage. Giving more people access to more insurance, not to mention mandating that current insurance cover more services, will undoubtedly result in more spending. In fact, we should not be surprised if the increased coverage results in even more spending than the government predicts. MIT economist Amy Finkelstein, for example, estimates that roughly 40 percent of the real increase in per capita health spending from 1950 to 1990 reflected the spread of comprehensive health insurance.[285] If utilization increases substantially as result of the coverage expansions in this legislation, spending could likewise skyrocket.

The failure to restrain costs will have serious consequences for government spending under the legislation. As CBO director Douglas Elmendorf noted in his official blog:

> The rising costs of health care will put tremendous pressure on the federal budget during the next few decades and beyond. . . . In CBO's judgment, the health legislation enacted earli-

If utilization increases substantially spending could likewise skyrocket.

Figure 8
Estimated Increases in National Health Expenditures under PPACA



Source: Richard S. Foster, chief actuary, Centers for Medicare and Medicaid Services, "Estimated Financial Effects of the 'Patient Protection and Affordable Care Act,'" as amended, April 22, 2010.

er this year does not substantially diminish that pressure. In fact, CBO estimated that the health legislation will increase the federal budgetary commitment to health care.[286]

The Congressional Budget Office scored the Senate-passed Patient Protection and Affordable Care Act as costing $875 billion over 10 years.[287] The changes passed under reconciliation increased that cost to $938 billion.[288] However, those numbers do not tell the whole story, nor do they reveal the law's true cost.

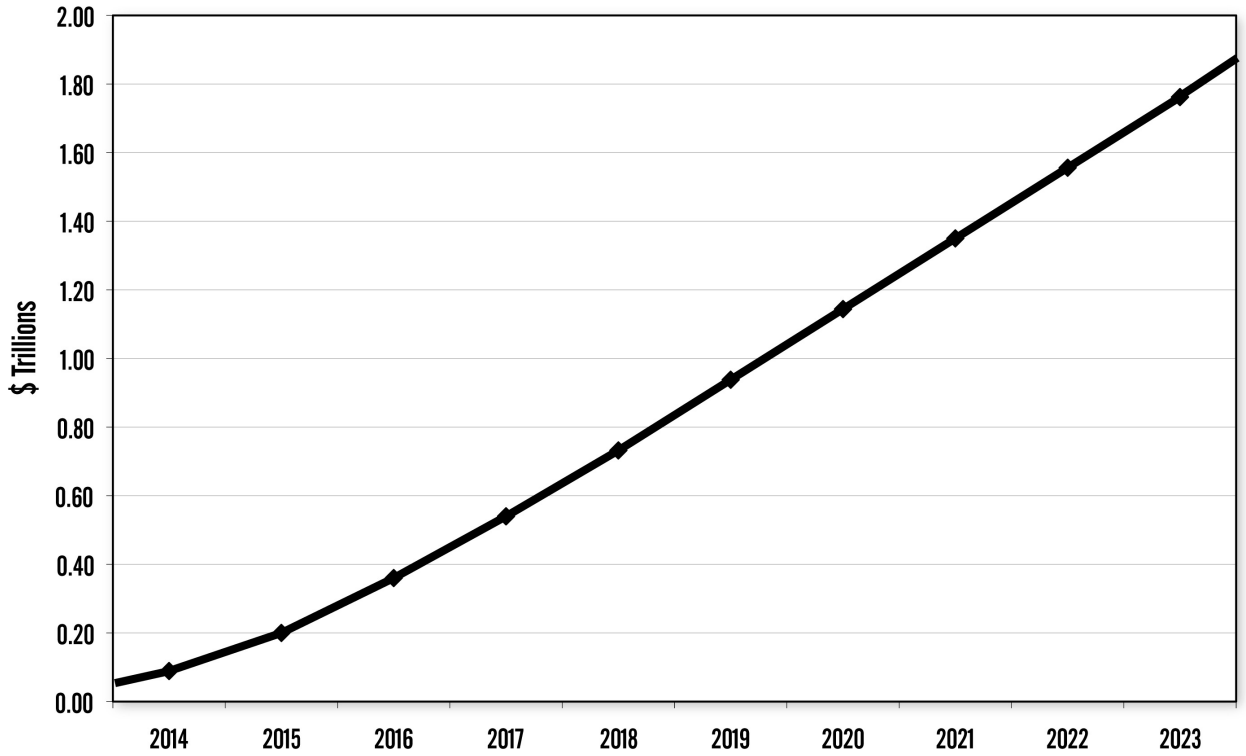
Much of the bill's cost is shifted onto businesses, individuals, and state governments.

The CBO does not provide formal budget analysis beyond the 10-year window, pointing out that any calculation made beyond 2020, "reflects the even greater degree of uncertainty" regarding those years.[289] However, since program costs will be on an upward trajectory through 2019 (see Figure 9), it expects the cost of the program to continue to grow rapidly after 2019.

Moreover, as Figure 9 makes clear, most of the spending under this legislation doesn't take effect until 2014. So the "10-year" cost projection includes only 6 years of the bill. However, as Figure 9 shows, if we look at the legislation more honestly over the first 10 years that the programs are actually in existence, say from 2014 to 2024, it would actually cost nearly $2 trillion.

CBO officially scored the bill as reducing the budget deficit by $138 billion over 10 years. Putting that in perspective, if true, it would amount to roughly 62 percent of the total deficit that the federal government incurred *in February of 2010 alone*.[290] In reality, however, that scoring is achieved through the use of yet another budget gimmick.

Figure 9
Total Spending under PPACA through 10 Years of Implementation



Source: Author's calculations based on Letter from Douglas Elmendorf, director, Congressional Budget Office, to House speaker Nancy Pelosi, March 20, 2010.

As mentioned above, the legislation anticipates a 23 percent reduction in Medicare fee- for-service reimbursement payments to providers, yielding $196 billion in savings.[291]

Those cuts were part of a Medicare reimbursement reduction first called for in 2003, as part of changes to the sustainable growth rate required by the Balanced Budget Act of 1997.[292] However, as discussed earlier, the cuts have never actually been implemented, with Congress regularly postponing their effective date. Current law would reduce payment rates for providers by 21 percent beginning in January 2011, and by an average of 2 percent each year thereafter through the end of the decade. This is the baseline that the CBO used to project the bill's future costs. However no one in Washington seriously believes that those cuts will actually occur. In fact, congressional Democrats have introduced a separate bill, the Medicare Physicians' Payment Reform Act of 2009 (HR 3961), effectively repealing the cuts. According to the Congressional Budget Office, the 10-year cost of repealing those cuts would be $259 billion.[293] However, other sources, including the Obama administration have suggested the cost could go as high as $371 billion.[294]

In a letter to Congressman Paul Ryan (R-WI), the Congressional Budget Office confirms that if the costs of repealing the payment reductions, known as the "doc-fix," as reflected in HR 3961, were to be included in the cost of health care reform, the legislation would actually increase budget deficits by $59 billion over 10 years. [295]

Moreover, the initially projected cost failed to include discretionary costs associated with the program's implementation. The legislation does not provide specific expenditures for these items, but simply au-

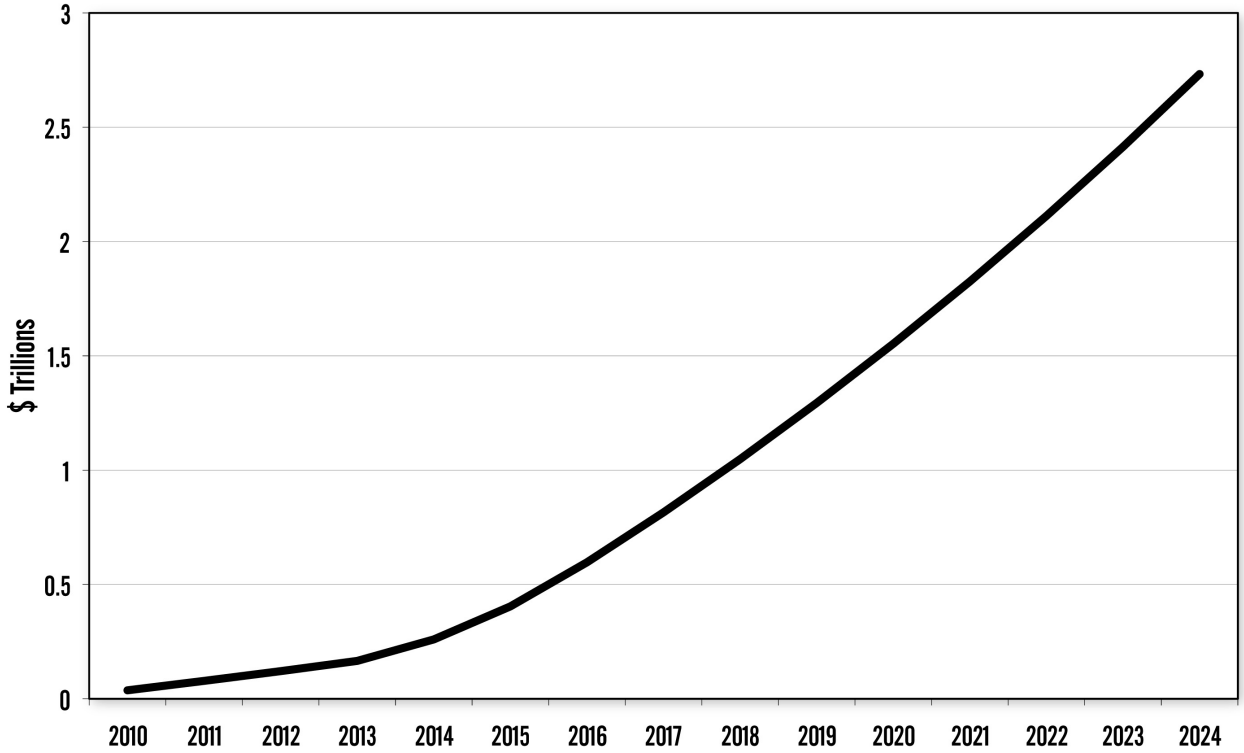
thorizes "such sums as may be necessary." Therefore, because the costs are subject to annual appropriation and the actions of future congresses are difficult to predict, it may be impossible to put a precise figure to the amount. However, CBO suggests that they could add as much as $115 billion to the 10-year cost of the bill.[296]

As Figure 10 shows, adding the cost of the doc-fix, discretionary costs, and other costs that were not originally included in CBO's score to the legislation brings the total cost over 10 years of actual operation to over $2.7 trillion.[297]

In addition, estimates of the PPACA's impact on the budget deficit double count both Social Security taxes and revenue and savings from Medicare. As mentioned above, scoring for the health care bill anticipates a net reduction in Medicare spending of $416.5 billion over 10 years. The law would also bring in additional payroll tax revenue through the 0.9 percent increase in the Medicare payroll tax, and the imposition of the tax to capital gains and interest and dividend income. This money is funneled through the Medicare Trust Fund, reducing the unfunded liabilities under Medicare Part B from $37 trillion to just $12.9 trillion.[298] As mentioned, this will extend the life of the Trust Fund by as much as 12 years.

The new funds would indeed be routed through the Medicare Trust Fund, where government trust fund accounting methodology would count them as extending the trust fund's solvency. However, as has been pointed out with regard to the Social Security Trust Fund, the government is structurally incapable of actually saving the money. In fact, the funds would be used to purchase special-issue Treasury bonds. When the bonds are purchased, the funds used to pur-

Figure 10
Total Cost of PPACA through 10 Years of Implementation, including "Doc Fix" and Administrative/Implementation Costs



Source: Author's calculations based on Letter from Douglas Elmendorf, director, Congressional Budget Office, to House speaker Nancy Pelosi, March 20, 2010.

chase them become general revenue, and are spent on the government's annual general operating expenses. What remains behind in the trust fund are the bonds, plus an interest payment attributed to the bonds (also paid in bonds, rather than cash). Government bonds are, in essence, a form of IOU. They are a promise against future tax revenue. When the bonds become due, the government will have to repay them out of general revenue.[299] In the meantime, however, the government counts on that new general revenue to pay for the cost of the new health legislation. Thus, the government spends the money now, while pretending it is available in the future to pay for future Medicare benefits. This results in a double counting of roughly $398 billion.

As Medicare's chief actuary points out, "In practice, the improved [Medicare] financing cannot be simultaneously used to finance other Federal outlays (such as the coverage expansions) and to extend the trust fund, despite the appearance of this result from the respective accounting conventions."[300]

The same is true regarding $53 billion in additional Social Security taxes generated under the PPAC. CBO assumes that, as discussed above, many employers may ultimately decide that it is cheaper to "pay than play," and will stop offering health insurance to their workers. CBO assumes that in those cases workers will receive higher wages to offset at least some of the loss in nonwage (insurance) compensation. The workers will, however, have to pay taxes, including Social Security payroll taxes, on those additional wages. The additional revenue from those taxes is counted in CBO's scoring of the Patient Protection and Affordable Care Act. However, because they are paying additional taxes, those workers are also accruing additional Social Security benefits. Yet, because those benefits will paid outside the 10-year budget window, the cost of the additional benefits is not included in the scoring. Only one side of the revenue-benefit equation is included.

And, as noted above, revenue from the CLASS Act is similarly double counted. Eliminating all of this double counting, and including the full cost of the bill as discussed above, means that the PPACA will actually add at least $823 billion to the budget deficit over the program's first 10 years. Some estimates suggest that over the program's second 10 years, it could add as much as an additional $1.5 trillion to the deficit.[301]

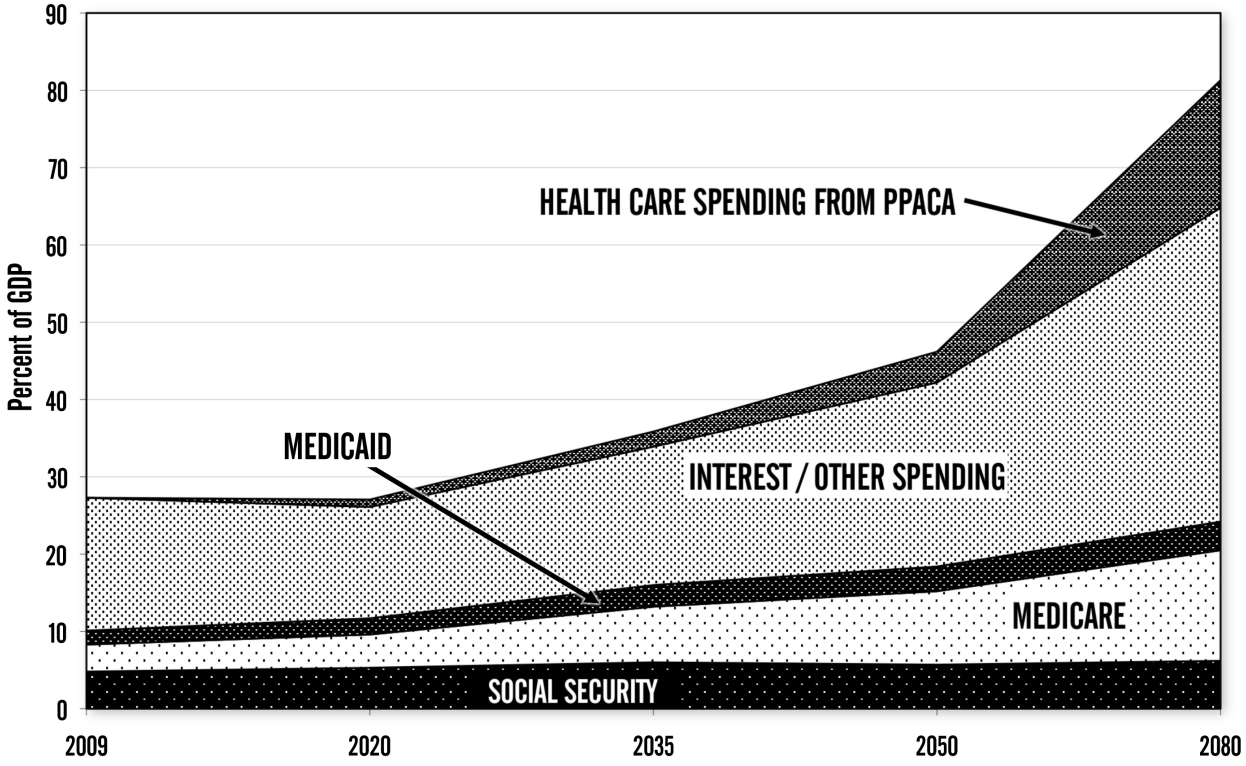
Finally, it is important to point out that much of the bill's cost is shifted off the federal books onto businesses, individuals, and state governments through mandates and other regulatory requirements. These business and individual mandates are the equivalent of tax increases, but those costs aren't included in the law's cost estimates. And, as mentioned above, state governments will have to pick up at least $34 billion of the cost to expand Medicaid.

When the CBO scored the Clinton health care plan back in 1994, those costs were included, and accounted for as much as 60 percent of the law's total cost.[302] Despite repeated requests, CBO did not produce a similar analysis for this bill. But if a similar ratio were to hold for the Patient Protection and Affordable Care Act, the real cost of the legislation would be somewhere in the vicinity of $7 trillion.[303]

It is also worth noting that cost estimates for government programs have been wildly optimistic over the years, especially for health care programs. For example, when Medicare was instituted in 1965, government actuaries estimated that the cost of Medicare Part A would be $9 billion by 1990. In actuality, it was seven times higher—$67 billion.[304] Similarly, in 1987, Medicaid's special hospitals subsidy was projected to cost $100 million annually by 1992, just five years later; it actually cost $11 billion, more than 100 times as much.[305] And, in 1988, when Medicare's home-care benefit was established, the projected cost for 1993 was $4 billion, but the actual cost in 1993 was $10 billion.[306] If the current estimates for the cost of Obamacare are off by similar

Millions of Americans who purchase insurance on their own will actually be worse off.

Figure 11
Spending Projections under PPACA



Source: Author's calculations based on Congressional Budget Office, "Long-Term Outlook for Medicare, Medicaid, and Total Health Care Spending."

orders of magnitude, costs and future deficits would be even larger.

There is certainly reason to believe that the costs of this law will exceed projections. For example, as discussed above, increased insurance coverage could lead to increased utilization and higher subsidy costs. At the same time, if companies choose to drop their current insurance and dump employees into subsidized coverage or Medicaid, it could substantially increase the program's costs. One estimate, cited by *Fortune* magazine, notes that "if 50 percent of people covered by company plans get dumped, federal health care costs will rise by $160 billion in 2016, in addition to the $93 billion in subsidies already forecast by the CBO."[307] Another study, by former CBO director Douglas Holtz-Eakin and Cameron Smith warns that shifting employees to government-subsidized coverage could increase the legislation's cost by as much as $1.4 trillion over 10 years.[308] And, adverse selection could increase Medicaid costs. Thus, the multi-trillion-dollar estimated cost of this legislation should be seen as a *best case* scenario.

This is all taking place at a time when the government is facing an unprecedented budgetary crisis. The U.S. budget deficit hit $1.5 trillion in 2011, and we are expected to add as much as $9 trillion to the national debt over the next 10 years, a debt that is already in excess of $14.3 trillion and rising at a rate of nearly $4 billion per day.[309] Under current projections, government spending will rise from its traditional 20–21 percent of our gross domestic product to 43 percent by 2050.[310] That would require more than a doubling of the tax burden just to keep up.

Figure 11 shows how the new health care law will add to the burden of future government spending. By 2050, the new law will

push total government spending toward 50 percent of GDP. By the end of the century, federal government spending would become almost unfathomable, surpassing 80 percent of GDP.

By any realistic measure, therefore, the Patient Protection and Affordable Care Act dramatically increases government spending, the national debt, and the burden of government on the economy as a whole.

Higher Insurance Premiums

During the 2008 presidential campaign, candidate Obama promised that his health care reform plan would reduce premiums by up to $2,500 per year.[311] That promise has long since been abandoned. However, without putting a dollar amount to it, the president continues to promise that health care reform will reduce insurance costs.[312] While that may be true for those Americans receiving subsidies or those who are currently in poor health, millions of others will likely end up paying higher premiums.

Today, the average nongroup-insurance plan costs $2,985 annually for an individual and $6,328 for a family.[313] In the nongroup—that is employer-based—market, premiums average $4,825 for an individual, and $13,375 for a family.[314] CBO estimates that if reform had not passed, premiums in the individual market would have risen to $5,200 for an individual and $13,100 for a family by 2016. And, the cost of employer-provided insurance would rise to $7,800 for an individual, $20,300 for a family.[315] That increase would place a significant burden on both individuals and businesses.

However, the health care law does little or nothing to change this. The biggest businesses, those with more than 100 employees, would see the biggest benefit, but even here the benefit would be minimal. CBO estimates that large companies would see a premium increase between zero and three percent less than would otherwise occur.[316] That means that under the best case scenario, their premiums for a family plan would only increase to $20,100, compared with $13,375 today, and $20,300 if the bill hadn't passed.[317] That represents a savings of $200 over what would have happened if the bill had not passed, but still represents a $6,350 increase over what the company is paying today.

Small businesses would see a premium increase between zero and just 1 percent less than would otherwise occur.[318] Thus, again under the best-case scenario, small business premiums for a family plan would only increase to $19,200, compared to $19,300 if the bill hadn't passed, a savings of just $100.[319]

But the millions of Americans who purchase insurance on their own through the nongroup market will actually be worse off as a result of this law. According to CBO, their premiums will increase 10–13 percent faster than if the bill had not passed. That is, an individual premium would increase from $2,985 today to $5,800, compared to $5,500 if the bill had never passed. A family policy will increase from today's $6,328 to $15,200. If the bill hadn't passed, it would only have increased to $13,100.[320] Thus, this bill will cost a family buying their own health insurance an additional $2,100 per year in higher premiums (see Table 1).

Indeed, premiums for 2011 have risen rapidly due to factors both related and unrelated to the PPACA.[321] Early estimates suggest that the bill itself has been responsible for a premium hike of roughly 9 to 12 percent.[322]

Of course, for low- and some middle-income Americans, any increase in premiums may ultimately be offset by government subsidies. But individuals whose income falls in the range where subsidies begin to phase out and those not receiving subsidies will likely see significant increases in what they have to pay.

The bill's proponents also point out that most of the increased cost is due to increased benefits mandated by the new law,

The new law makes government rationing far more likely in the future.

Table 1
Premiums under PPACA

Type of Plan	Current	2016	
		With bill	Without bill
Large Business	$13,375	$20,100	$20,300
Small Business	$13,375	$19,200	$19,300
Individual Policy	$6,328	$15,200	$13,100

Source: Current cost of health insurance policy based on America's Health Insurance Plans' (AHIP) data; future estimates based on Letter from Douglas Elmendorf, director, Congressional Budget Office, to Sen. Evan Bayh, November 30, 2009.

and the new insurance reforms. It is not that the per unit cost of insurance will have risen faster than the baseline, but that individuals will be purchasing more insurance. That, however, does not change the bottom line. Individuals will be paying more, and not because they choose to do so. If everyone was mandated to trade their current car for a new BMW, people would have a better car—but they would still be poorer.

That is not at all what the president promised.

Conclusion

Health care reform was designed to accomplish three goals: (1) provide health insurance coverage for all Americans, (2) reduce insurance costs for individuals, businesses, and government, and (3) increase the quality of health care and the value received for each dollar of health care spending. Judged by these goals, the new law should be considered a colossal failure. The president and the law's supporters in Congress also promised that the legislation would not increase the federal budget deficit or unduly burden the economy. And, of course, we were repeatedly promised that "If you like your health care plan, you'll be able to keep your health care plan, period. No one will take it away, no matter what."[323] But Richard Foster, the government's own chief actuary, has testified that that statement is "not true."[324] Individual and employer mandates will ultimately force individuals and businesses to change plans in order to comply with the government's new standards for insurance, even if the new plans are more expensive or contain benefits that people don't want. Flexible spending accounts have already been reduced, and health savings accounts could be eliminated. More than 7 million seniors with Medicare Advantage plans will likely be forced out of those plans and back into traditional Medicare. On these grounds too, the Patient Protection and Affordable Care Act doesn't come close to living up to its promises.

The debate over health care reform is far from over.

The legislation comes closest to success on the issue of expanding the number of Americans with insurance. Clearly, as a result of this law, millions more Americans will receive coverage. This results mainly from an expansion of government subsidies and other programs, with nearly half of the newly insured coming through the troubled Medicaid program. Thus, the degree to which expanded coverage will lead to expanded access is still an open question. And, despite the passage of this legislation, at least 23 million Americans will still be uninsured by 2019. On this dimension, therefore, the new law is an improvement over the status quo, but a surprisingly modest one.

The law also makes some modest insurance reforms that will prohibit some of

the industry's more unpopular practices. However, those changes come at the price of increased insurance costs, especially for younger and healthier individuals, and reduced consumer choice.

At the same time, the legislation is a major failure when it comes to controlling costs. While we were once promised that health care reform would "bend the cost curve down,"[325] this law will actually *increase* U.S. health care spending. This failure to control costs means that the law will add significantly to the already crushing burden of government spending, taxes, and debt. Accurately measured, the Patient Protection and Affordable Care Act will cost more than $2.7 trillion over its first 10 years of full operation, and add more than $823 billion to the national debt. And this does not even include more than $4.3 trillion in costs shifted to businesses, individuals, and state governments.

It is not just government that will face higher costs under this law. In fact, most American workers and businesses will see little or no change in their skyrocketing insurance costs—while millions of others, including younger and healthier workers and those who buy insurance on their own through the nongroup market, will actually see their premiums go up faster as a result of this legislation.

Clearly the trajectory of U.S. health care spending under this law is unsustainable. Therefore, it raises the inevitable question of whether it will lead to rationing down the road.

We should be clear, however. With a few minor exceptions governing Medicare reimbursements, the law would not directly ration care or allow the government to dictate how doctors practice medicine. There is no "death board" as Sarah Palin once wrote about in a Facebook posting.[326] Even so, by setting in place a structure of increased utilization and rising costs, the new law makes government rationing far more likely in the future.[327]

Indeed, this trend is already playing out in Massachusetts. With the cost of the state's reform becoming unsustainable, the legislature established a special commission to investigate the health payment system in a search of ways to control costs.[328] In March of 2009, the commission released a list of options that it was considering, including "exclud[ing] coverage of services of low priority/low value" under insurance plans offered through Commonwealth Care. Along the same lines, it has also suggested that Commonwealth Care plans "limit coverage to services that produce the highest value when *considering both clinical effectiveness and cost*."[329]

The Patient Protection and Affordable Care Act will also significantly burden businesses, thereby posing a substantial threat to economic growth and job creation. While some businesses may respond to the law's employer mandate by choosing to pay the penalty and dumping their workers into public programs, many others will be forced to offset increased costs by reducing wages, benefits, or employment.

The legislation also imposes more than $569 billion in new or increased taxes, the vast majority of which will fall on businesses. Many of those taxes, especially those on hospitals, insurers, and medical-device manufacturers, will ultimately be passed along through higher health care costs. But other taxes, in particular new taxes on investment income, are likely to reduce economic and job growth. Businesses will also face new administrative and record-keeping requirements under this legislation that will also increase their costs, reducing their ability to hire, expand, or increase compensation.

It is becoming increasingly clear that millions of Americans will not be able to keep their current coverage. Seniors with Medicare Advantage and those workers with health savings accounts are the most likely to be forced out of their current plans. Millions of others are at risk as well. As mentioned above, many businesses may choose to "pay" rather than "play," dropping their current coverage and forcing workers either into Medicaid or to purchase their insurance through the gov-

The Patient Protection and Affordable Care Act will cost more than $2.7 trillion . . . and add more than $823 billion to the national debt.

ernment-run exchanges. CBO's estimate of 10–12 million workers being dropped from their current employer coverage is probably conservative. With other, and much larger, businesses now reportedly considering such an approach, the number of workers forced out of their current plans could increase significantly.

Finally, the law's individual mandate continues to pose a threat to people being able to keep their current coverage. While the final bill grandfathered current plans—a significant improvement over previous versions—individuals will still be forced to change coverage to a plan that meets government requirements if they make any changes to their current coverage. And, by forbidding noncompliant plans from enrolling any new customers, the law makes those plans nonviable over the long term. As a result, Americans whose current insurance does not meet government requirements may ultimately not have the choice to keep that plan.

The law's individual mandate continues to pose a threat to people being able to keep their current coverage.

All of this represents an enormous price to pay in exchange for the law's small increases in insurance coverage. There is very little "bang for the buck."

Even more significantly, this law represents a fundamental shift in the debate over how to reform health care. It rejects consumer-oriented reforms in favor of a top-down, "command and control," government-imposed solution. As such, it sets the stage for potentially increased government involvement, and raises the specter, ultimately, of a government-run single-payer system down the road.

The debate over health care reform now moves to other forums. Numerous lawsuits have been filed challenging provisions of the law, especially the individual mandate, with two federal judges striking down all or part of the law.[330] Republicans, having won an enormous victory in the mid-term elections, have vowed to make repealing the PPACA a central part of their legislative agenda. And while institutional barriers such as the filibuster and presidential veto make an actual repeal unlikely, there will almost certainly be efforts by Congress to delay, de-fund, or alter many aspects of the law.

One thing is certain—the debate over health care reform is far from over.

Appendix I: A Timeline

Anyone expecting to see major changes to the health care system in the next few months or years is liable to be disappointed. Although some insurers and businesses have begun raising rates and taking other preemptive actions in anticipation of changes to come, most of the major provisions of the legislation are phased in quite slowly. As Table 2 shows, the most heavily debated aspects, mandates, subsidies, and even most of the insurance reforms don't begin until 2014 or later.

A handful of small changes began last year, notably a provision allowing parents to keep their children on the parent's policy until the child reaches age 26 and a ban on preexisting-condition exclusions for children. There was also a $250 rebate to seniors whose prescription drug costs fell within the Medicare Part D "donut hole." A few other provisions, notably the small business tax credits, kick in this year. From here on, however, there will be few benefits from the law until 2014 or later. At the same time, with the exception of the tax on tanning beds, most of the new taxes in the new law do not start until 2012 or later. The individual and employer mandates do not come into effect until 2014. In fact, some aspects of the new law, such as the tax on "Cadillac" insurance plans do not take place until 2018. The Medicare prescription drug "donut hole" is not scheduled to be fully eliminated until after 2020.

This means there remains time to repeal or at least make significant changes to the legislation before most of it takes effect. If not, this legislation will be very bad news for American taxpayers, businesses, health care providers, and patients.

Table 2
Patient Protection and Affordable Care Act Timeline for Implementation

2010 (already in place)	Five percent tax imposed on tanning salons.
	Seniors with prescription drug costs of at least $2,700 receive a check for $250. If seniors reach the $2,700 ceiling later in the year, they will receive the check at the end of the quarter in which they reach the ceiling.
	$5 billion for temporary reinsurance program for employers who provide health insurance coverage for retirees over age 55 who are not yet eligible for Medicare. The program ends in 2014.
	Insurers required to provide coverage for children regardless of preexisting conditions. The prohibition on excluding preexisting conditions does not apply to adults until 2014.
	High-risk pools established to cover adults with preexisting conditions. Pools will be eliminated after the ban on excluding preexisting conditions goes into effect in 2014.
	Parents may keep children on their insurance plan until the child reaches age 26.
	Lifetime caps on insurance benefits prohibited.
2011	Medicare payroll tax increases from 1.45 percent to 2.35 percent for individuals earning more than $200,000 and married filing jointly above $250,000.
	A three-year phase-out of subsidies to Medicare Advantage begins. Some seniors may be forced back into traditional Medicare.
	States must expand Medicaid eligibility to all individuals with incomes below 133 percent of the poverty line. The federal government will cover the cost of this expansion until 2017.
	Businesses with fewer than 25 employees and average wages below $50,000 become eligible for a tax credit to help offset the cost of providing insurance to their workers. The credit applies to 2010 taxes filed in 2011.
	Maximum contributions to flexible spending accounts (FSAs) reduced from $5,000 to $2,500. FSAs and health savings accounts (HSAs) cannot be used to purchase over-the-counter medications.
	Workers begin contributing to the CLASS Act long-term care program, or may opt out of the program.
	$2.5 billion in new taxes are imposed on the pharmaceutical industry. The tax, or assessment, rises to $4.2 billion by 2018, and is imposed on manufacturers according to a formula based on the company's aggregate revenue from branded prescription drugs.
2012	Businesses required to complete 1099 forms for every business-to-business transaction of $600 or more.

Continued next page

Table 2 *Continued*
Patient Protection and Affordable Care Act Timeline for Implementation

2013	2.3 percent excise tax imposed on sale of medical devices.
	Floor for deducting medical expenses from income taxes rises from 7.5 percent of income to 10 percent.
	The Employer Medicare Part D subsidy deduction for employers eliminated. Employers will lose the tax deduction for subsidizing prescription drug plans for Medicare Part D–eligible retirees.
	The 3.8 percent Medicare tax is applied to capital gains and interest and dividend income if an individual's total gross income exceeded $200,000 or a couple's income exceeds $250,000.
	An $8 billion tax is imposed on insurers, based on market share. The tax rises to $14.3 billion by 2018.
2014	Individual mandate imposed. With few exceptions, every American is required to have a government-designed minimum insurance package. Failure to comply will result in a fine equal to 1 percent of income. The penalty increases to 2 percent in 2015, and finally to 2.5 percent in 2016.
	Employer mandate imposed. Companies with 50 or more employees must offer coverage to employees or pay a $2,000 penalty per employee after their first 30 if at least one of their employees receives a tax credit. Employers who offer coverage but whose employees receive tax credits will pay $3,000 for each worker receiving a tax credit.
	All insurance must meet federal minimum benefit requirements.
	Prohibition on preexisting condition exclusions applies to adults.
	Health plans prohibited from imposing annual limits on coverage.
	Subsidies begin for individuals and families with incomes up to 400 percent of the poverty line. Refundable tax credits limit the percent of income that must be paid for either insurance premiums or out-of-pocket expenses.
	Insurance exchanges become operational.
2015	Independent Medical Advisory Commission (IMAC) established.
2016	Individuals may begin collecting benefits from CLASS Act long-term care program.
2017	States have option to allow large employers to participate in exchanges.
	States must begin covering part of the cost of Medicaid expansion.
2018	"Cadillac" insurance tax imposed on high-cost, employer-provided health plans with an actuarial value exceeding $27,500 for family coverage and $10,200 for individual coverage.

Notes

The author thanks Jacob Shmukler and Carey Anne Lafferty for their contributions.

1. David Espo, "Landmark Health Bill Passes," Associated Press, March 22, 2010. See also, "Final Vote Results for Roll Call 165," March 21, 2010, http://clerk.house.gov/evs/2010/roll165.xml.

2. The Senate did make minor amendments to the bill, requiring it to go back to the House for final approval, which it received the next day. Alan Fram, "Senate OK's Health Care Fix-It Bill; House is Next," Associated Press, March 25, 2010; Erica Werner, "At Last: Final Health Care Measure Heads to Obama," Associated Press, March 25, 2010.

3. There are 2,562 pages and 511,520 words when both the Patient Protection and Affordable Care Act and the Health Care and Education Affordability Reconciliation Act are combined.

4. HR 3200, sec. 221. Regardless of how it was structured or administered, such a government-run plan would have an inherent advantage in the marketplace because it ultimately could be subsidized by American taxpayers. The government plan could keep its premiums artificially low or offer extra benefits since it could turn to the U.S. Treasury to cover any shortfalls. Consumers naturally would be attracted to the lower-cost, higher-benefit government program, thus undercutting the private market. The actuarial firm Lewin Associates estimated that, depending on how premiums, benefits, reimbursement rates, and subsidies were structured, as many as 118.5 million people, roughly two-thirds of those with insurance today, would have shifted from private to public coverage—or be pushed. Businesses would have had every incentive to dump their workers into the public plan. The result would have been a death spiral for private insurance, and eventually a single government-run system. John Sheils and Randy Haught, "Analysis of the July 15 Draft of the American Affordable Health Choices Act of 2009," Lewin Associates, July 23, 2009.

5. HR 3200, sec. 313.

6. Ibid., sec. 441.

7. Rasmussen Reports, "Election Night 2010: Exit Poll Results," November 2, 2010, http://www.rasmussenreports.com/public_content/politics/elections/election_2010/election_night/election_night_2010_exit_poll_results.

8. http://www.kff.org/kaiserpolls/8120.cfm.

9. Chris Cillizza, "A Referendum, Sure, but Was It on Health Care?" *Washington Post*, November 8, 2010.

10. Russell Berman, "House Repeals Healthcare Law, *The Hill*, January 19, 2011. Three Democrats—Dan Boren (OK), Mike McIntyre (NC), and Mike Ross (AR)—joined all 242 Republicans in voting for repeal.

11. A Republican effort to force a Senate vote on repeal failed on a party-line procedural vote, 47–53. David Herszenhorn, "Senate Rejects Repeal of Health Care Law," *New York Times*, February 2, 2011.

12. Equivalent legislation is being considered in current sessions in state legislatures in Arkansas, Florida, Kentucky, Indiana, Maryland, Michigan, Montana, Nebraska, South Carolina, South Dakota, Texas, and Wyoming. "State Legislation and Actions Challenging Certain Health Reforms, 2010–11," National Conference of State Legislatures, January 21, 2011, http://ncsl.org/default.aspx?tabid=18906.

13. These lawsuits can be tracked at http://healthcarelawsuits.org/.

14. Twenty-six states joined *Florida v. U.S. Dept. of Health and Human Services*. Virginia and Oklahoma filed their own cases.

15. *Thomas Moore Law Center v. Barack Hussein Obama et al.*, October 7, 2010; *Liberty University v. Geitner*, November 30, 2010.

16. *Commonwealth of Virginia ex. rel. Cuccinelli v. Sebelius*, no. 3:10CV188-HEH (E.D. Va. 2010); *Florida v. U.S. Dept. of Health and Human Services*.

17. Margaret Talev, "Health Care Overhaul Spawns Mass Confusion in Public," McClatchy Newspapers, April 6, 2010.

18. Nancy Pelosi, "Remarks to the 2010 Legislative Conference for National Association of Counties," March 9, 2010, http://www.speaker.gov/newsroom/pressreleases?id=1576.

19. In what appears to be an unintentional error, the military's TRICARE program, which covers nearly 10 million service people, retirees, and dependents, does not appear to meet the legislation's definition of "minimum essential coverage," meaning individuals in this program would face penalties for failing to satisfy the mandate. Sen. Jim Webb (D-Va) has introduced legislation to correct the error. Michael Posner, "Veterans Push for Fixes to New Law," *Congress Daily*, April 6, 2010.

20. Robert Hartman and Paul van de Water, "The Budgetary Treatment of an Individual Mandate to Buy Health Insurance," Congressional Budget Office Memorandum, August 1994.

21. This paper is not the place to do justice to the serious constitutional issues involved. However, those who oppose the mandate on constitutional grounds make generally make two arguments. First, that the federal government lacks the authority to impose such a mandate, especially regarding a matter that is neither interstate nor commerce. Although the Patient Protection and Affordable Care Act contains language justifying itself on the grounds that "the individual responsibility requirement provided for in this sec. . . . is commercial and economic in nature, and substantially affects interstate commerce," Patient Protection and Affordable Care Act–Title I, sec. 1501(a)(1). This bill would expand the commerce clause far beyond any current interpretation, and would give the federal government virtually unlimited authority to regulate any activity it chose. As Judge Vinson wrote in his decision in *Florida v. U.S. Dept. of Health and Human Services*, "The problem with this legal rationale, however, is it would essentially have unlimited application. *There is quite literally no decision that, in the natural course of events, does not have an economic impact of some sort.* The decisions of whether and when (or not) to buy a house, a car, a television, a dinner, or even a morning cup of coffee also have a financial impact that—when aggregated with similar economic decisions—affect the price of that particular product or service and have a substantial effect on interstate commerce. To be sure, it is not difficult to identify an economic decision that has a cumulatively substantial effect on interstate commerce; rather, the difficult task is to find a decision that does not." (Emphasis added). Proponents, of course, note that the Supreme Court has interpreted the Commerce Clause broadly enough to reach wholly intrastate economic "activity" that substantially affects interstate commerce. *Wickard v. Filburn* 317 US 111 (1942). But the individual mandate goes beyond regulating even intrastate activity to regulate non-activity. Under proponents' interpretation of the Commerce Clause, therefore, Congress would be free to order you to take or not take a job, to sell or not sell your house, to buy or not buy a car. There would have been no need for a "cash for clunkers" program. Congress could simply have ordered every American to purchase a new car. Judge Vinson put it this way, *"Congress could require that people buy and consume broccoli at regular intervals, not only because the required purchases will positively impact interstate commerce, but also because people who eat healthier tend to be healthier, and are thus more productive and put less of a strain on the health care system.* Similarly, because virtually no one can be divorced from the transportation market, Congress could require that everyone above a certain income threshold buy a General Motors automobile—now partially government-owned—because those who do not buy GM cars (or those who buy foreign cars) are adversely impacting commerce and a taxpayer-subsidized business." *Florida v. U.S. Dept. of Health and Human Services* (42). Second, proponents argue that the penalty is simply a tax and therefore is authorized under Congress's power "to lay and collect Taxes." U.S. Constitution, art. I, § 8, cl. 1. The penalty would seem to much more closely fit the definition of a fine than a tax. As Jeff Rowes and Robert McNamara of the Institute for Justice point out, "For an exaction to be a true tax, it has to be a genuine revenue-raising measure," whereas the penalty for failing to comply with the mandate "exists solely to coerce people into acquiring healthcare coverage. If the mandate were to work perfectly, it would raise literally no revenue." Jeff Rowes and Robert McNamara, unpublished memorandum, Institute for Justice, May 2010, quoted in Robert Levy, "The Taxing Power of Obamacare, National Review Online, April 20, 2010. And, as Judge Vinson and others have noted, prior to passage of the bill, supporters of the mandate, including President Obama, insisted that the penalty was not a tax. The change from penalty to tax occurred only after the measure reached the courts. Jennifer Hakerborn, "Judge Disses Dems 'Alice in Wonderland' Defense," *Politico*, October 14, 2011. But even if one accepts the argument that the penalty is a tax, it does not meet the constitutional requirements for income, excise, or direct taxes. It does not fit the definition of either an income or excise tax, and if it is a direct tax, it does not meet the constitutional requirement that it be "apportioned among the several States," U.S. Constitution. art. I, § 2, cl. 3. Furthermore, the courts have ruled that Congress cannot use the taxing power as a backdoor means of regulating an activity, unless the regulation is authorized elsewhere in the Constitution. *Bailey v. Drexel Furniture Co.* 259 US 20 (1922). For further discussion, see Randy Barnett, "The Insurance Mandate in Peril," *Wall Street Journal*, April 29, 2010 or Levy. The same reasoning holds true regarding supporters' reliance on the Constitution's "Necessary and Proper Clause," which gives the government the power to enact laws that are necessary and proper to the conduct of its duties. U.S. Constitution, art. I, § 8, cl. 18. Those "necessary and proper" actions must be linked to otherwise constitutional actions by the government. Judge Vinson made this clear in his decision in *Florida v. U.S. Dept. of Health and Human Services*: "The Necessary and Proper Clause cannot be utilized to pass laws for the accomplishment of objects" that are not within Congress's enumerated powers." Of course final determination of the consti-

tutionality of the mandate (and the Patient Protection and Affordable Care act more generally) awaits a decision by the U.S. Supreme Court.

22. Jennifer Staman and Cynthia Brougher, "Requiring Individuals to Obtain Health Insurance: A Constitutional Analysis," Congressional Research Service, July 24, 2009.

23. "The Patient Protection and Affordable Care Act (Public Law 111-148), Subtitle F, Part I, sec. 1501, as amended by the Health Care and Education Affordability Reconciliation Act," sec. 1002. Note this amends Subtitle D of Chapter 48 of the Internal Revenue Code of 1986.

24. Ibid.

25. Patient Protection and Affordable Care Act, Title I, Subtitle F, sec. 1501, as amended by the Health Care and Education Affordability Reconciliation Act, Title I, Subtitle A, sec. 1002(b)(2). Also exempt are American Indians, those with qualifying religious objections, illegal immigrants, and, ironically, people in jail. The Patient Protection and Affordable Care Act, Subtitle F, Part I, sec. 1501(d)(2-4). The 8 percent exemption is far less clear cut than it appears at first glance. For example, a single adult earning 245 percent of the Federal poverty line ($27,500) would be forced to pay the tax, because he could buy subsidized health insurance for a little less than 8 percent of his income. A single adult earning 250 percent of the Federal poverty line (~$28,000) would not have to pay the tax, because subsidized health insurance would cost him a bit more than 8 percent of his income. A 34-year-old single adult earning $50,000 could be in a ratings band where the cheapest health insurance he can purchase is $4,000. If he doesn't comply with the mandate, he'd have to pay the fine. If after he turns 35, the cheapest health insurance he could purchase is now $4,100, he would no longer have to pay the fine. Alternatively, if at 34 he started smoking (not even buying cigarettes necessarily) and the cheapest insurance he could now purchase was $4,500, he would no longer have to pay the fine. Or if he moved a few zip codes over to a slightly more expensive community rating area and the cheapest health insurance he can purchase is now $4,200, he's then again exempt from a fine. Thus, whether a person has to pay the tax (and how much) depends not just on income, but also on age, family size, smoking status, and location.

26. Congressional Budget Office and the staff of the Joint Committee on Taxation, "Payments of Penalties for Being Uninsured under PPACA," April 22, 2010.

27. Letter from Douglas Elmendorf, director, Congressional Budget Office, to House speaker Nancy Pelosi, March 20, 2010.

28. The Patient Protection and Affordable Care Act, Subtitle D, sec. 1302(b)(1).

29. The Patient Protection and Affordable Care Act, sec. 1302(b)(2)(A).

30. N. C. Aizenman, "'Basic' Gets Tricky in the Health-Care Law," *Washington Post*, January 15, 2011.

31. The Patient Protection and Affordable Care Act, sec. 1251.

32. While specific rules have not yet been issued for grandfathering individual policies, those rules are likely to be similar to the rules for the small-group market, which have been issued and are discussed below, meaning changes to carriers, benefits, and/or cost-sharing would remove the plan from grandfathered status.

33. House Republicans on the Ways and Means Committee, "The Wrong Prescription: Democrats' Health Overhaul Dangerously Expands IRS Authority," March 18, 2010. Politifact suggests that the number of new agents could be as few as 5,000. Carol Fader, "Fact Check, 16,500 New IRS Agents Probably Not on the Way," *Jacksonville Times-Union*, April 11, 2010. Regardless of quibbles over the numbers, the point remains that the health care bill will result in a significant expansion of the IRS and its powers. In fact, the IRS has informed Congress that it may need to change its mission statement to acknowledge its new responsibilities and duties. Internal Revenue Service, National Taxpayer Advocate, "2010 Annual Report to Congress, vol. 1," p. 17.

34. Martin Vaughn, "IRS May Withhold Tax Refunds to Enforce Health-Care Law," *Wall Street Journal*, April 16, 2010.

35. Letter from Douglas Elmendorf, director, Congressional Budget Office, to House speaker Nancy Pelosi, March 20, 2010.

36. Jeanne S. Ringel et al., "Analysis of the Patient Protection and Affordable Care Act, HR 3590," Rand Corporation, March 2010.

37. Sharon Long, "On the Road to Universal Coverage: Impacts of Reform in Massachusetts," *Health Affairs* (July/August 2008): w270–w284, Exhibit 6.

38. Allison Cook and John Holahan, "Health Insurance Coverage and the Uninsured in Massachusetts: An Update Based on the 2005 Current Population Survey Data," Blue Cross Blue Shield of Massachusetts Foundation, 2006.

39. Kay Lazar, "Short-Term Customers Boosting Health Care Costs," *Boston Globe*, April 4, 2010.

40. The penalty in Massachusetts is up to half the cost of a standard insurance policy. Chapter 58 of the Acts of 2006, sec. 13.

41. For instance two half-time workers are considered the equivalent of one full-time employee for the purpose of determining a company's size. A full-time worker is considered to work 30 hours per week. There is also some confusion in the legislation over how companies with exactly 50 workers will be treated. In a testimony to the rushed and sloppy way in which the bill was passed, sec. 1513(A) of the Patient Protection and Affordable Care Act refers to "*at least* 50 full time workers," (emphasis added), while sec. 1513(B) refers to "*more than* 50 full times workers" (emphasis added).

42. The Patient Protection and Affordable Care Act, sec. 4908H(a), as amended by the Health Care and Education Affordability Reconciliation Act," sec. 1003.

43. Letter from Douglas Elmendorf, director, Congressional Budget Office, to House speaker Nancy Pelosi, March 20, 2010.

44. http://www.healthcare.gov/news/factsheets/keeping_the_health_plan_you_have_grandfathered.html.

45. Ibid.

46. Robert Pear, "Study Points to Health Law Penalties," *New York Times*, May 23, 2010.

47. Quoted in Lawrence H. Summers, "Some Simple Economics of Mandated Benefits," *American Economic Review* 79, no. 2 (May 1989): 177–83.

48. Economists are divided about the most likely way that the cost of an employer mandate would be passed along to employees. Some suggest that most of the mandate's cost would be offset through lower wages. A study by Jonathan Gruber, for example, looking at the impact of a requirement that health insurance cover comprehensive childbirth benefits found strong evidence that employers reduced wages to pay for the benefits. Jonathan Gruber, "The Incidence of Mandated Maternity Benefits," *American Economic Review* 84, no. 3 (June 1994): 662–41. And Alan Krueger and Uwe Reinhardt suggest that in the long run, the cost of the employer mandate would be shifted to the employee not through immediate wage cuts but through smaller future wage increases than would otherwise occur. Alan Krueger and Uwe Reinhardt, "The Economics of Employer versus Individual Mandates," *Health Affairs* 13, no. 2 (Spring II, 1994): 34–53. However, a large group of economists believe that most of the offset costs would come in the form of job loss. They argue that workers are likely to resist current wage reductions, particularly if they value wage compensation over heath insurance, which seems likely for many of the currently uninsured. Aaron Yelowitz, "Pay-or-Play Health Insurance Mandates: Lessons from California," Public Policy Institute of California, http://www.ppic.org/content/pubs/cep/EP_1006AYEP.pdf. In addition, minimum wage laws provide a floor for how far employers could reduce wages. As Larry Summers, now head of the White House's National Economic Council, once wrote, the minimum wage means that "wages cannot fall to offset employers' cost of providing a mandated benefit, so it is likely to create unemployment." Summers, pp. 177–83.

49. "The Impact of Health Reform on Employers," Towers Watson, May 2010, http://www.towerswatson.com/united-states/research/1935.

50. Roughly 70 percent of Americans under age 65 get their health insurance through work. Carmen DeNavas-Walt, et al., "Income, Poverty and Health Insurance Coverage in the United States: 2006," Current Population Reports, U.S. Census Bureau, August 2007. Today there is no requirement that businesses provide insurance. And, while most businesses continue to do so (because, in a competitive labor market, it is an effective recruitment and retention tool), there has been a slow but steady decline in the number who do. Elise Gould, "Employer-Sponsored Health Insurance Erosion Continues," Employment Policy Institute, October 27, 2009. However, through the exchanges (see below) and expanded Medicaid eligibility, the bill creates a way for businesses to divest themselves of the expense and other headaches of offering health insurance without cutting the worker off completely. This may accelerate the tendency of employers to dump their workers from their current coverage.

51. Jennifer Haberkorn, "Four Companies Mulled Dropping Health Insurance Plans," *Politico*, May 7, 2010.

52. Letter from Douglas Elmendorf, director, Congressional Budget Office, to House Speaker Nancy Pelosi, March 20, 2010.

53. Ibid.

54. Haberkorn, "Four Companies Mulled Dropping Health Insurance Plans." The calculation is fairly simple. AT&T, for example, paid $2.4 billion last year in medical costs for its 283,000 workers. If the firm dropped its health insurance plan and instead paid an annual penalty of $2,000 for each uninsured employee, the fines would total less than $600 million, meaning AT&T would save

about $1.8 billion a year. John Goodman, "Goodbye, Employer-Provided Insurance," *Wall Street Journal*, May 21, 2010.

55. 15 U.S.C. secs. 1011-1015.

56. Interestingly though, for all the hype about insurance reform, the most commonly cited insurance provisions take up roughly 20 pages, or less than one percent of the 2,409-page bill.

57. Public Health Service Act, Title XXVII, Part A, sec. 2705(a)(1-9), as amended by the Patient Protection and Affordable Care Act, Title I, Subtitle C, sec. 1201.

58. Public Health Service Act, Title XXVII, Part A, sec. 2702(a), as amended by Patient Protection and Affordable Care Act, Title I, Subtitle C, sec. 1201.

59. Ibid.

60. Public Health Service Act, Title XXVII, Part A, sec. 2701, as amended by Patient Protection and Affordable Care Act, Title I, Subtitle C, sec. 1201.

61. Public Health Service Act, Title XXVII, Part A, sec. 2701(a)(1)(A)(iii), as amended by the Patient Protection and Affordable Care Act, Title I, Subtitle C, sec. 1201.

62. The Public Health Service Act, Title XXVII, Part A, sec. 2701(a)(1)(A)(iv), as amended by the Patient Protection and Affordable Care Act, Title I, Subtitle C, sec. 1201,

63. Public Health Service Act, Title XXVII, Part A, sec. 2701(a)(1)(B), as amended by the Patient Protection and Affordable Care Act, Title I, Subtitle C, sec. 1201.

64. The legislation appears to include a loophole that would allow insurers to continue excluding many children with preexisting conditions. Sec. 1201 of the bill prohibits insurers from excluding coverage of preexisting conditions for children who are currently covered. Thus, it would require insurers who currently provide coverage for children but exclude payments for certain ongoing medical situations, for example a congenital heart condition, to drop that exclusion. But for children who are not insured today, insurers would not be required to insure them until the full ban on preexisting conditions kicks in, in 2014. Robert Pear, "Coverage now for Sick Children? Check the Fine Print," *New York Times*, March 28, 2010. However, despite the wording of the law, most major insurers have said that they will nevertheless cover children with such conditions. Robert Pear, "Insurers to Comply with Rules on Children," *New York Times*, March 30, 2010. At the very least this shows the dangers of rushed legislation.

65. The Patient Protection and Affordable Care Act, Title I, Subtitle B, sec. 1101. Interestingly, high-risk pools were actually an important component of Republican alternatives to the Democratic health bill.

66. The creation of a federal high-risk pool may have created some unintended consequences in the 35 states that already operated high-risk pools. The insurance available through the federal risk pool is frequently more generous and sometimes less expensive than that available through the state pools. However, eligibility rules for the federal pool require applicants to be uninsured for at least six months. That would mean that current participants in the state pools cannot transfer to the federal pool, even if it's a better deal. Thus people in states that have attempted to deal with the problem of preexisting conditions are, in effect, penalized. Ricardo Alonso-Zaldivar, "Low-Cost Coverage in Obama Health Plan Not for All," Associated Press, April 16, 2010.

67. "State-by-State Enrollment in Pre-Existing Condition Insurance Plan, as of November 1, 2010," healthcare.gov.

68. Phil Galewitz, "HHS Cuts Premiums for Some High-Risk Pools," *Kaiser Health News*, November 5, 2010; Kevin Sack, "High-Risk Insurance Pools Are Attracting Few," *New York Times*, November 4, 2010.

69. See, for instance, Letter from M. Jodi Rell, Governor of the State of Connecticut, to Kathleen Sebelius, Secretary of U.S. Department of Health and Human Services, September 30, 2010.

70. Carla Johnson, "Health Premiums Could Rise 17 Percent for Young Adults," Associated Press, March 29, 2010.

71. Ibid.

72. Brian McManus, "Universal Coverage + Guaranteed Issue + Modified Community Rating = 95% Rate Increase," Council for Affordable Health Insurance, August 2009.

73. N. C. Aizenmanm, "Major Insurers to Stop Offering New Child-Only Policies," *Washington Post*, September 20, 2010.

74. Public Health Service Act, Title XXVII, Part A, sec. 2712, as amended by the Patient Protection and Affordable Care Act, Title I, Subtitle A, sec. 1001.

75. Henry Waxman and Joe Barton, "Memoran-

dum to Members and Staff of the Subcommittee on Oversight and Investigations: Supplemental Information Regarding the Individual Health Insurance Market," June 16, 2009, http://energycommerce.house.gov/Press_111/20090616/rescission_supplemental.pdf.

76. Ibid.

77. Public Health Service Act, sec. 2711, as amended by the Patient Protection and Affordable Care Act, Title X, Subtitle A, sec. 10101.

78. Brie Zeltner, "How Will Removing Lifetime Caps on Health Coverage Affect You? Health Care Fact Check," *Cleveland-Plain Dealer*, March 24, 2010.

79. Emily Bregel, "Lifting the Cap on Coverage," McClatchy Newspapers, April 12, 2010.

80. Jennifer Haberkorn, "Health Bill Could Ban Low-Cost Plans," *Politico*, June 8, 2010. Many of these plans also ran afoul of the law's minimum loss ratio (MLR) requirement (see below).

81. The waivers affect plans covering more than 1.5 million workers. To see which companies have received waivers, check http://www.hhs.gov/ociio/regulations/approved_applications_for_waiver.html.

82. Janet Adamy, "McDonald's Says It May Drop Health Plan," *Wall Street Journal*, September 30, 2010.

83. http://www.hhs.gov/ociio/regulations/approved_applications_for_waiver.html.

84. Jason Millman, "Some Healthcare Waiver Requests Denied Even as HHS Approves 500 Others," *The Hill*, January 27, 2011.

85. The Patient Protection and Affordable Care Act, sec. 1302(c)(2)(A).

86. The Patient Protection and Affordable Care Act, sec. 1302(c)(1)(b)(ii).

87. The Patient Protection and Affordable Care Act, Title IX, Subtitle A, sec. 9016(a).

88. Companies operating in Massachusetts, New Jersey, Ohio, and Tennessee may receive a temporary exemption from this requirement at the request of their states' insurance commissioners. Michelle Malkin, "Big Labor's Obamacare Escape Hatch," *New York Post*, January 29, 2011.

89. Although insurance companies are undoubtedly one of the nation's most unpopular industries, it should be noted that their profits are not particularly high as industries go. The health insurance industry today actually has a profit margin of just 5.5 percent for traditional insurers and only 3.8 percent for Health Maintenance Organizations. Joseph Paduda, "Insurance Industry Profit Margins," *Managed Care Matters*, December 9, 2004, citing data from Weiss Ratings.

90. J. P. Wieske, "High Loss Ratios Undermine the Affordability of Health Insurance, *Health Care News*, July 1, 2007. There have been a few state-level experiments with minimum pay-out requirements, notably in Kentucky and North Dakota, and the results are cause for concern. Insurers abandoned the market in those states and left consumers with fewer choices and higher premiums.

91. Ricardo Alonso-Zaldivar, "New Coverage for Young Adults Will Raise Premiums," Associated Press, May 10, 2010.

92. Michelle Andrews, "Graduates May See Coverage Gap After All," *New York Times*, May 31, 2010.

93. Reed Ableson, "Insurer Cuts Health Plan as New Law Takes Hold," *New York Times*, September 30, 2010.

94. "Aetna Withdrawing from Colorado Individual Market," Colorado Insurance Insider, January 31, 2011.

95. "The Uninsured: A Primer, Key Facts about Americans without Health Insurance," Kaiser Family Foundation, December 2003.

96. The Patient Protection and Affordable Care Act, Title II, Subtitle A, sec. 2001(a).

97. Andy Schneider, Risa Elias, and Rachel Garfield, "Chapter 1: Medicaid Eligibility," Kaiser Commission on Medicaid and the Uninsured, http://www.kff.org/medicaid/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=14259.

98. Patient Protection and Affordable Care Act, sec. 2001(b)(2)(gg)(2).

99. Quoted in Marsha Blackburn and Phil Roe, "TennCare Lessons for Healthcare Reform," RealClear Politics.com, July 22, 2009, http://www.realclearpolitics.com/articles/2009/07/22/tenncare_lessons_for_modern_health_care_reform_97570.html.

100. Jagadeesh Gokhale, "Estimating ObamaCare's Effect on State Medicaid Expenditure Growth: A Study of Five Most Populous U.S. States," Cato Institute Working Paper, January 2011.

101. Ginger Rough and Mary Reinhart, "Brewer Signs Law Seeking Medicaid Waiver," *Arizona Republic*, January 21, 2011.

102. Patient Protection and Affordable Care Act,

sec. 2101, as amended by the Health Care and Education Affordability Reconciliation Act," sec. 10201.

103. Patient Protection and Affordable Care Act, Title II, Subtitle B, sec. 2101(b).

104. Letter from Douglas Elmendorf, director, Congressional Budget Office, to House Speaker Nancy Pelosi, March 20, 2010. A refundable tax credit is paid regardless of an individual's actual tax liability. Thus, even an individual who pays no federal income tax would still receive the payment. In such cases, despite President Obama's insistence that such credits represent a "tax cut" it is appropriate to think of the payments as a form of welfare.

105. The Patient Protection and Affordable Care Act, Title I, Subtitle E, Part I, Subpart A, sec. 1401.

106. Based on the lowest cost Silver Plan available.

107. For a detailed discussion of the marginal tax problem in this legislation, see Michael Cannon, "Obama's Prescription for Low-Wage Workers: High Implicit Taxes, Higher Premiums," Cato Institute Policy Analysis no. 656, January 13, 2010.

108. The Patient Protection and Affordable Care Act, Title I, Subtitle E, Part II, sec. 1421.

109. The Patient Protection and Affordable Care Act, Title I, Subtitle B, sec. 1102.

110. The Patient Protection and Affordable Care Act, Title I, Subtitle B, sec. 1102 (c)(3).

111. The Patient Protection and Affordable Care Act, Title I, Subtitle B, sec. 1102 (c)(4).

112. The Patient Protection and Affordable Care Act, Title X, Subtitle E, sec. 10503.

113. Doug Trapp, "Health Reform May Mean 40 Million Health Center Patients in 5 Years," *American Medical News*, April 13, 2010.

114. Ezra Klein, "The Most Important, Undernoticed Part of Health Reform," http://voices.washingtonpost.com/ezra-klein/2009/06/health_insurance_exchanges_the.html.

115. Ezra Klein, "Health Care Reform for Beginners: The Many Flavors of the Public Option," *Washington Post*, June 8, 2009.

116. Office of the Governor, "Massachusetts Healthcare Reform," PowerPoint Presentation, April 10, 2006.

117. Jon Kingsdale, "About Us: Executive Director's Message," March 12, 2009, http://www.mahealthconnector.org/portal/site/connector/template.MAXIMIZE/menuitem.3ef8fb03b7fa1ae4a7ca7738e6468a0c/?javax.portlet.tpst=2fdfb140904d489c8781176033468a0c_ws_MX&javax.portlet.prp_2fdfb140904d489c8781176033468a0c_viewID=content&javax.portlet.prp_2fdfb140904d489c8781176033468a0c_docName=executive%20director%20message&javax.portlet.prp_2fdfb140904d489c8781176033468a0c_folderPath=/About%20Us/Executive%20Director%20Message/&javax.portlet.begCacheTok=com.vignette.cachetoken&javax.portlet.endCacheTok=com.vignette.cachetoken.

118. The Patient Protection and Affordable Care Act, sec. 1321(c).

119. The Patient Protection and Affordable Care Act, sec. 1311(d)(1)

120. The Patient Protection and Affordable Care Act, sec. 1312(c)(3)

121. The Patient Protection and Affordable Care Act, sec. 1312(d)(1).

122. The Patient Protection and Affordable Care Act, sec. 1312(c)(1).

123. The Patient Protection and Affordable Care Act, sec. 1312(d)(3)(D).

124. The Patient Protection and Affordable Care Act, sec. 1312(f)(2)(B). If they do so, many companies may choose to drop their current insurance coverage and push their employees into the exchange. Jennifer Haberkorn, "Four Companies Mulled Dropping Health Insurance Plans." That would, of course, mean that millions more American workers would not be able to keep their current coverage. And, since many of those employees would become eligible for subsidies, it would substantially increase the program's costs.

125. The Patient Protection and Affordable Care Act, sec. 1302(d)(1)(A-D).

126. The Patient Protection and Affordable Care Act, sec. 1302(e)(2).

127. The Patient Protection and Affordable Care Act, sec. 1402(c).

128. Estimates are for 2016. Letter from Douglas Elmendorf, director, Congressional Budget Office, to Sen. Olympia Snowe, January 11, 2010.

129. Patient Protection and Affordable Care Act, sec. 1311(d)(3)(ii).

130. Patient Protection and Affordable Care Act, Title I, Subtitle D, Part IV, sec. 1334(g)(2), as

amended by sec. 10104(q).

131. Patient Protection and Affordable Care Act, Title I, Subtitle D, Part IV, sec. 1334(b)(2), as amended by sec. 10104(q). The legislation also prohibits federal funds from being used for abortion services and requires separate accounts for payments for such services. Patient Protection and Affordable Care Act, Title I, Subtitle D, sec. 1303(b)(2)(B)(i), as amended by PPACA, Title X, Subtitle A, sec. 10104(c).

132. A cooperative, or co-op, is simply a member-owned business, operated on a not-for-profit basis, with the officers and directors elected by the members, in this case presumably the people whom it insures. States already have the power to charter co-ops, including health insurance co-ops. In fact, several co-operative insurance companies already exist. Health Partners, Inc. in Minneapolis has 660,000 members and provides health care, health insurance, and HMO coverage. The Group Health Cooperative in Seattle provides health coverage for 10 percent of Washington State residents. PacAdvantage, a California co-op, covers 147,000 people. There is no evidence that they are significantly less expensive or more efficient than other insurers. Several previous attempts by governments to set up co-ops have, in fact, failed. Perhaps the largest such failure was the Florida Community Health Purchasing Alliance, which was set up by the State of Florida in 1993, and at one time covered 98,000 people. It was unable to attract small business customers and ultimately went out of business in 2000.

133. See, for example, John Goodman, "What Is Consumer-Directed Health Care?" *Health Affairs* 25 (November–December 2006): 540–43. See also, Michael Tanner and Michael Cannon, *Healthy Competition: What's Holding Back Health Care and How to Free It* (Washington, Cato Institute, 2008, 2nd ed.); John Goodman and Gerald Musgrave, *Patient Power: Solving America's Health Care Crisis* (Washington: Cato Institute, 1993).

134. Essentially, we all want to live forever. This makes health care a very desirable good. At the same time, the normal restraints imposed by price are frequently lacking. Today, of every dollar spent on health care in this country, just 13 cents is paid for by the person actually consuming the goods or services. Roughly half is paid for by government, and the remainder is covered by private insurance. As long as someone else is paying, consumers have every reason to consume as much health care as is available. By contrast, when consumers share in the cost of their healthcare purchasing decisions, they are more likely to make those decisions on the basis of price and value. Take just one example. If everyone were to receive a CT brain scan every year as part of their annual physical, we would undoubtedly discover a small number of brain cancers much earlier than we otherwise would, perhaps early enough to save a few patients' lives. But given the cost of such a scan, adding it to everyone's annual physical would quickly bankrupt the nation. But, if they are spending their own money, consumers will make their own rationing decisions based on price and value. That CT scan that looked so desirable when someone else was paying may not be so desirable if you have to pay for it yourself. The consumer himself becomes the one who says no. The RAND Health Insurance Experiment, the largest study ever done of consumer health purchasing behavior, provides ample evidence that consumers can make informed cost-value decisions about their health care. Under the experiment, insurance deductibles were varied from zero to $1,000. Those with no out-of-pocket costs consumed substantially more health care than those who had to share in the cost of care. Yet, with a few exceptions, the effect on outcomes was minimal. Emmett B. Keeler, "Effects of Cost Sharing on Use of Medical Services and Health," RAND Corporation, Health Policy Program, 1992; See also, Joseph P. Newhouse, "Some Interim Results from a Controlled Trial of Cost Sharing in Health Insurance," *New England Journal of Medicine* 305 (December 17, 1981): 1501–07. And, in the real world, we have seen far smaller increases in the cost of those services, like Lasik eye surgery or dental care, that are not generally covered by insurance, than for those procedures that are insured. Barbara Kiviat, "Can Price Shopping Improve Health Care?" *Time*, April 19, 2010.

135. Barack Obama, *The Audacity of Hope: Thoughts on Reclaiming the American Dream* (New York: Three Rivers Press, 2006), p. 179.

136. "2010 Census Shows 10 Million People Covered by HAS/High-Deductible Health Insurance Plans," America's Health Insurance Plans (AHIP), press release, May 2010. A health savings account (HSA) is a tax-advantaged medical savings account available to taxpayers in the United States who are enrolled in a high-deductible health plan. The funds contributed to the account are not subject to federal income or payroll taxes at the time of deposit. Unspent funds in an HSA may be rolled over from year to year, and may be withdrawn for nonmedical purposes beginning at age 65.

137. The Patient Protection and Affordable Care Act, Title IX, Subtitle A, sec. 9004. The Joint Committee on Taxation estimates this tax will cost families an additional $1.4 billion over the bill's first 10 years. Joint Committee on Taxation, "Estimated Revenue Effects of the Manager's Amendment to the Revenue Provisions Contained in the 'Patient Protection and Affordable

Care Act,'" December 19, 2009.

138. The Patient Protection and Affordable Care Act, sec. 9003.

139. "Actuarial value" is a method of measuring an insurance plan's benefit generosity. It is expressed as the percentage of medical expenses estimated to be paid by the insurer for a standard population and set of allowed charges. For a more detailed explanation, see Chris Peterson, "Setting and Valuing Health Insurance Benefits," Congressional Research Service, April 6, 2009.

140. The Patient Protection and Affordable Care Act, sec.1302(d)(2)(B).

141. Ibid., sec. 10406.

142. Ibid., sec. 4003.

143. John Fund, "Health Reform's Hidden Victims," *Wall Street Journal*, July 24, 2009. Indeed, at least one Virginia-based insurer that specialized in HSAs has already gone out of business, citing the "considerable uncertainties" created by the new health care law. Michael Schwartz, "Start Up Health Insurer Shutting," RichmondBizSense.com, June 4, 2010, http://www.richmondbizsense.com/2010/06/04/startup-health-insurer-shutting/.

144. Bureau of Labor Statistics, "Pretax Benefits: Access, Private Industry Workers," National Compensation Survey, March 2007, Table 24. Flexible spending accounts (FSAs) allow an employee to set aside a portion of his or her salary on a tax-advantaged basis to pay for qualified expenses, most commonly medical expenses, as part of an employer's "cafeteria plan," of benefits under sec. 125 of the Internal Revenue Code. Money deposited in an employee's FSA is not subject to income or payroll taxes. Unlike health savings accounts, funds deposited in an FSA may not be rolled over from year to year. Unused funds revert back to the plan administrator under what is commonly known as the "use-it-or-lose-it" rule.

145. The Patient Protection and Affordable Care Act, Title IX, Subtitle A, sec. 9005.

146. The rules on over-the-counter medications would also apply to health reimbursement accounts (HRAs). The Patient Protection and Affordable Care Act, sec. 9003(c).

147. Social Security and Medicare Board of Trustees, "A Summary of the 2009 Annual Reports."

148. For a discussion of how Cato scholars believe Medicare should be reformed, see Michael Cannon, "Medicare," in *Cato Handbook for Policy Makers*, ed. Ed Crane and David Boaz (Washington: Cato Institute, 2009), pp. 125–31, http://www.cato.org/pubs/handbook/hb111/hb111-12.pdf.

149. Letter from Douglas Elmendorf, director, Congressional Budget Office, to House speaker Nancy Pelosi, March 20, 2010.

150. Ibid.

151. Ibid.

152. Kaiser Family Foundation, "Medicare Advantage Fact Sheet," April 2009.

153. "The Medicare Advantage Program," Testimony of Peter R. Orzag, director, Congressional Budget Office, before the Committee on the Budget, U.S. House of Representatives, June 28, 2007.

154. For example, President Obama told ABC News, "We've got to eliminate programs that don't work, and I'll give you an example in the health care area. We are spending a lot of money subsidizing the insurance companies around something called Medicare Advantage, a program that gives them subsidies to accept Medicare recipients but doesn't necessarily make people on Medicare healthier. And if we eliminate that and other programs, we can potentially save $200 billion out of the health care system." ABC *World News Tonight*, January 11, 2009.

155. Supporting Information, Official U.S. Government Site for People with Medicare, http://www.medicare.gov/MPPF/Static/TabHelp.asp?language=English&version=default&activeTab=3&planType=MA.

156. The Patient Protection and Affordable Care Act, Title III, Subtitle C, sec. 3201, as amended by the Health Care and Education Affordability Reconciliation Act, sec. 1102.

157. Testimony of Richard Foster, chief actuary, Center for Medicare and Medicaid Services, before the House Committee on the Budget, January 26, 2011, cited in Ricardo Alonso-Zaldivar, "Medicare Official Doubts Health Savings," Associated Press, January 27, 2011.

158. Robert Weisman, "Harvard Pilgrim Cancels Medicare Advantage Plan," *Boston Globe*, September 28, 2010.

159. Ibid.

160. Letter from Douglas Elmendorf, director, Congressional Budget Office, to House speaker Nancy Pelosi, March 20, 2010.

161. "ACR Strongly Opposes Imaging Cuts in Health Care and Education Affordability Reconcil-

iation Act," March 19, 2010, http://www.dotmed.com/news/story/12058/.

162. Letter from Douglas Elmendorf, director, Congressional Budget Office, to House Speaker Nancy Pelosi, March 20, 2010.

163. Patient Protection and Affordable Care Act, Title III, Subtitle B, Part III, sec. 3131.

164. Certainly it is impossible to draw any sort of direct correlation between the amount of health care spending and outcomes. Gerard Anderson and Kalipso Chalkidou, "Spending on Medical Care: More Is Better?" *Journal of the American Medical Association* 299, no. 20 (May 28, 2008): 2444–45. In fact, by some estimates as much as 30 percent of all U.S. health spending produces no discernable value. Elliott Fisher, "Expert Voices: More Care Is Not Better Care," National Institute for Health Care Management, January 2005.

165. See, for example, Elliott Fisher, Julie Bynum, and Jonathan Skinner, "Slowing the Growth of Health Care Costs—Lessons from Regional Variation," *New England Journal of Medicine* 360, no. 9 (2009): 849–52.

166. First, "quality" and "value" are not unidimensional terms. In fact, such concepts are highly idiosyncratic, with every individual having different ideas of what "quality" and "value" means to them, based on such things as a person's pain tolerance, lifestyle, feeling about hospitalization, desire to return to work, and so forth. For example, a surgeon may tell you that the only way to ensure a cure for prostate cancer is a radical prostatectomy. But that procedure's side-effects can severely impact quality of life—so some people prefer a procedure with a lower survival rate, but fewer side effects. Second, comparative effectiveness research too often has a tendency to gear its results toward the "average" patient. But many patients are outliers, whose response to any particular treatment, for either good or ill, can vary significantly from the average. This matters little when the research is simply informative. However, if the research becomes the basis for more prescriptive requirements, for example prohibiting reimbursements for some types of treatment, the impact on patient outliers could be severe. In the end, the answer to Medicare and Medicaid's open-ended subsidies is to change the structure of those programs, shifting the subsidy (to the degree there is one) directly to the consumer through some form of capped premium support. The consumer would then be required to make comparative cost-value decisions.

167. Michael Cannon, "A Better Way to Generate and Use Comparative-Effectiveness Research," Cato Institute Policy Analysis no. 632, February 6, 2009.

168. For example, in Great Britain, the National Institute on Clinical Effectiveness makes such decisions, including a controversial determination that certain cancer drugs are "too expensive." Jacob Goldstein, "U.K. Says Glaxo's Breast Cancer Drug Isn't Worth the Money," *Wall Street Journal*, July 7, 2008.

169. Tom Daschle, Scott Greenberger, and Jeanne Lambrew, *Critical: What We Can Do about the Health-Care Crisis* (New York: Thomas Dunne Books, 2008), p. 179.

170. Jennifer Haberkorn, "GOP: Medicare Pick Favors 'Rationing'," *Politico*, May 12, 2010.

171. Patient Protection and Affordable Care Act, Title IX, sec. 9012.

172. See http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=108_cong_bills&docid=f:h1enr.txt.pdf.

173. Cited in Jon Healey, "The Healthcare Reform Exposes an Extraordinary Tax Subsidy," *Los Angeles Times*, March 21, 2010.

174. Patient Protection and Affordable Care Act, Title IX, sec. 9012, as amended by the Health Care and Education Affordability Reconciliation Act of 2010, sec. 1407.

175. Kris Maher, Ellen Schultz, and Bon Tita, "Companies Take Health Care Charges," *Wall Street Journal*, March 26, 2010.

176. "Dems Cancel Hearing on Business Health Gripes," Associated Press, April 14, 2010.

177. The Patient Protection and Affordable Care Act, Title III, Subtitle E, sec. 3403.

178. The Patient Protection and Affordable Care Act, Title III, Subtitle E, sec. 3403(c)(2)(a)(ii).

179. Social Security Act, sec. 1899A(c)(2)(A)(iii), as amended by the Patient Protection and Affordable Care Act, sec. 3403.

180. Testimony of Richard Foster, chief actuary, Center for Medicare and Medicaid Services, before the House Committee on the Budget, January 26, 2011, cited in Ricardo Alonso-Zaldivar "Medicare Official Doubts Health Savings."

181. See Cannon, "A Better Way to Generate and Use Comparative Effectiveness Research."

182. U.S. Department of Health and Human Services, "What Is the Donut Hole?" August 9, 2010, http://www.healthcare.gov/news/blog/donuthole.html.

183. Perry Bacon, Jr., and Michael Shear, "Obama Will Tout $250 Health-Care Rebate in Town-Hall Meeting with Seniors," *Washington Post*, June 8, 2010. Seniors become eligible for the rebate at the end of the quarter in which they reach the $2,700 ceiling. Therefore, the checks will initially be sent to those seniors that had $2,700 in prescription drug expenses by May 31, 2010. Other seniors may receive rebate checks later in the year.

184. Letter from Douglas Elmendorf, director, Congressional Budget Office, to House Speaker Nancy Pelosi, March 20, 2010. However, drug companies expect to more than make up this cost from other provisions in the bill, such as expanded insurance coverage and an inclusion of prescription drugs, in the minimal acceptable coverage mandate. As a result, the pharmaceutical industry strongly supported the bill's passage.

185. Ibid.

186. Ibid.

187. The Omnibus Budget Reconciliation Act of 1981, the Tax Equity and Fiscal Responsibility Act of 1982, the Deficit Reduction Act of 1984, the Consolidated Omnibus Budget Reconciliation Act of 1985, the Omnibus Budget Reconciliation Acts of 1986, 1987, 1989, 1990, and 1993, the Balanced Budget Act of 1997, and the Deficit Reduction Act of 2005.

188. See, James Horney and Paul van de Water, "House-Passed and Senate Health Bills Reduce Deficit, Slow Health Costs, and Include Realistic Medicare Savings," Center on Budget and Policy Priorities, December 4, 2009.

189. HR 3961.

190. Letter from Douglas Elmendorf, director, Congressional Budget Office, to House Speaker Nancy Pelosi, March 20, 2010.

191. Ibid.

192. The Patient Protection and Affordable Care Act, Title IX, Subtitle A, sec. 9001, as amended by the Health Care and Education Affordability Reconciliation Act, sec. 1401.

193. Richard Foster, "Estimated Financial Effects of the 'Patient Protection and Affordable Care Act,' as Amended," Centers for Medicare and Medicaid Services, April 22, 2010.

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207. The Patient Protection and Affordable Care Act, Title IX, Subtitle A, sec. 9010(b)(1)(A).

208. Patient Protection and Affordable Care Act, Title IX, sec. 9010(c)(2)(C), as amended by Title X, Subtitle H, sec. 10905(c), and sec. 9010(c)(2)(E), as amended by Title X, Subtitle H, sec. 10905(c).

209. Patient Protection and Affordable Care Act, Title IX, sec. 9010 (c)(2)(C), as amended by Title X, Subtitle H, sec. 10905(d). AARP insurance plans are also exempt from several other provisions of the law, including the prohibition on excluding preexisting conditions, sec. 1201(2)(A);

medical loss-ratio requirements, sec. 1103; and limits on compensation for insurance executives, sec. 9014.

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220. Public Health Service Act, sec. 3202(6)(ii), as amended by Patient Protection and Affordable Care Act, sec. 8002(a).

221. Public Health Service Act, sec. 3203(a)(1)(D)(i), as amended by Patient Protection and Affordable Care Act, sec. 8002(a).

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224. Public Health Service Act, sec. 3203(a)(1)(D)(iii), as amended by Patient Protection and Affordable Care Act, sec. 8002(a). However, benefits cannot be rolled over year to year.

225. Public Health Service Act, sec. 3203(a)(1)(C)(i), as amended by Patient Protection and Affordable Care Act, sec. 8002(a).

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247. Patient Protection and Affordable Care Act, Title III, Part III, sec. 3021.

248. Patient Protection and Affordable Care Act, Title II, Subtitle E, sec. 2401.

249. Patient Protection and Affordable Care Act, Title II, Subtitle E, sec. 2402.

250. Patient Protection and Affordable Care Act, Title III, Part III, sec. 3025.

251. Public Health Service Act, Title III, sec. 399HH, as amended by the Patient Protection and Affordable Care Act, sec. 3011.

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262. Social Security Act, Title XVIII, sec. 1833, as amended by the Patient Protection and Affordable Care Act, Title V, Subtitle F, sec. 5501.

263. Patient Protection and Affordable Care Act, Title X, Subtitle B, Part I, sec. 10201(z)(B)(3), as amended by the Health Care and Education Affordability Reconciliation Act of 2010, Title I, Subtitle C, sec. 1201.

264. Patient Protection and Affordable Care Act, Title X, Subtitle E, sec. 10502.

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reflect the final bill language, CBO noted in May 2010 that "the effects of the enacted legislation are expected to be quite similar," http://www.cbo.gov/publications/collections/health.cfm. Premiums for employer policies usually have lower deductibles and more comprehensive benefits, accounting for the higher employer-based premiums. Premiums for identical policies are generally higher in the non-group market.

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THE NEW HEALTH CARE LAW'S EFFECT ON STATE MEDICAID SPENDING

A STUDY OF THE FIVE MOST POPULOUS STATES

JAGADEESH GOKHALE

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Cover design by Jon Meyers.

Printed in the United States of America.

Cato Institute
1000 Massachusetts Ave., N.W.
Washington, D.C., 20001
www.cato.org

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Executive Summary

Unless it is repealed, the Patient Protection and Affordable Care Act of 2010 promises to increase state government obligations for Medicaid by expanding Medicaid eligibility and introducing an individual health insurance mandate for all U.S. citizens and legal permanent residents. Once PPACA becomes fully effective in 2014, the Medicaid benefits of those who become newly eligible and enroll into Medicaid will be almost fully covered by the federal government through 2019, with federal financial support expected to be extended thereafter. But PPACA provides states with no additional federal financial support for *new enrollees among those eligible for Medicaid under the old laws*. That makes increased state Medicaid spending from higher enrollments by "old-eligibles" virtually certain as they enroll in Medicaid in response to the individual mandate to purchase health insurance.

This study estimates and compares potential increases in Medicaid expenditures from PPACA by the five most populous states: California, Florida, Illinois, New York, and Texas. State Medicaid spending is projected to increase considerably even without PPACA in California, Florida, and Texas, with smaller increases in Illinois and New York. With PPACA, projected spending is actually reduced for California, while spending increases are positive and large for Florida and Texas. Both Illinois and New York have the potential for considerably higher enrollments and increased expenditures.

My estimates of the states' PPACA Medicaid burdens are considerably larger than those reported elsewhere, such as in the Kaiser Family Foundation's study, which appears to have used fixed enrollment rates for new- and old-eligibles based on 2007 data. In this study, the individual mandate's impact depends on historical enrollment trends—stronger where enrollment rates were low or declining, weaker where they were high and increasing. Thus, methodological differences may underlie the sizable differences in estimates of states' additional costs from PPACA.

Jagadeesh Gokhale is a Cato Institute senior fellow and member of the Social Security Advisory Board. He works on U.S. fiscal policy and entitlement reforms. Gokhale is the author of Social Security: A Fresh Look at Reform Alternatives*, published in 2010 by the University of Chicago Press.*

Introduction

This study focuses on the effect of the Patient Protection and Affordable Care Act (PPACA) on the future growth of states' General Revenue Medicaid spending obligations.[1] Ever since Medicaid was introduced in the mid-1960s as a key element of President Lyndon Johnson's Great Society agenda, state expenditures on items such as infrastructure, education, and other public services to maintain economic competitiveness have been constrained by rapid growth in state Medicaid obligations. PPACA was enacted in March 2010 and expands states' Medicaid funding burdens yet again. It requires states to maintain current eligibility levels and also expands eligibility for Medicaid benefits to additional categories of people and to those with incomes both above and below the federal poverty level (FPL). The federal government will bear nearly all of the cost of providing Medicaid coverage to these newly eligible individuals. The effect of PPACA's "individual" mandate, however, will be to induce additional enrollments among those who are already eligible for but not enrolled in Medicaid, thereby increasing state Medicaid spending. Finally, PPACA increases uncertainty about future escalations in state Medicaid expenditures through the possibility that surging federal deficits and debt will force a reduction of federal financial support beyond 2019 for those made newly eligible for Medicaid.

This study projects future Medicaid expenditures for the five most populous states—California, Florida, Illinois, New York, and Texas[2]—both with and without PPACA, thereby revealing the burden that the law imposes on these state budgets.

The results differ across the five states. They suggest that even without PPACA, Medicaid expenditures will soar in California, Florida, and Texas, partly because their populations are projected to grow and age rapidly. For these three states, PPACA is projected to compound the population growth and aging effect by spurring Medicaid enrollments, thereby reinforcing upward pressure on health care expenditures and transmitting downward pressure through the state budget on other public services.

In the absence of PPACA, Medicaid spending growth in Illinois and New York would be relatively slower than in the other three states. The reason, again, lies in their much slower projected population growth during the next two decades. However, the introduction of PPACA will provide a much stronger impulse for Medicaid expenditure growth in these two states. The main reason is Illinois's and New York's low and declining trends in enrollment rates among key groups that are eligible for Medicaid. The introduction of PPACA's individual mandate, combined with public awareness campaigns to drive home the importance of complying with the mandate and the availability of subsidized health coverage under Medicaid, is likely to cause many more individuals to sign up for Medicaid coverage rather than remain uninsured or else purchase costlier private health insurance. Indeed, some people may also terminate their existing private health coverage and enroll in Medicaid in response to such campaigns.

As described in the Appendix, the estimation of Medicaid expenditure projections carries forward historical Medicaid eligibility, enrollment, recipiency, and per recipient benefit rates into the future, separately for each state and for detailed demographic and special-eligibility population groups. The calculations are first implemented by excluding the effects of PPACA. If recent state-specific trends in population growth, Medicaid eligibility, enrollments, benefit receipt, and Medicaid benefits per beneficiary were to continue into the future:

- California's general-revenue (GR) funded Medicaid expenditures would almost double from $19.4 billion in 2008 to $35.2 billion by 2020. Medicaid expenditures will continue to increase during the 2020s, amounting to almost $60 bil-

State expenditures on items such as infrastructure and other public services have been constrained by rapid growth in state Medicaid obligations.

lion per year by the end of that decade. From 2010 forward, the average annual (nominal) Medicaid expenditure growth rate is projected to be almost 9 percent through 2020, slowing to 5.5 percent per year thereafter.[3] The 2010–30 projected Medicaid spending growth rate of 7.2 percent is considerably faster than California's average annual (nominal) GDP growth rate of 5.2 percent per year.[4]

- Florida's GR-funded Medicaid expenditures would double from $6.3 billion in 2008 to $12.6 billion by 2020 and would increase to $19.5 billion by 2030. Medicaid expenditures will grow rapidly through 2020 at 7.9 percent per year, and the growth rate will slow to 4.5 percent per year during the 2020s. The two-decade projected Medicaid spending growth rate of 6.2 percent per year is appreciably faster than Florida's historical average annual GDP growth rate of 5.8 percent per year.
- For Texas, GR-funded annual Medicaid expenditures would grow from $8.5 billion in 2008 to $18.0 billion by 2020 and to $32.5 billion by 2030. Medicaid expenditures are projected to grow at 9.3 percent per year between 2010 and 2020. The two-decade projected annual Medicaid expenditure growth rate through 2030 equals 7.7 percent—far exceeding historical annual (nominal) GDP growth in Texas of 5.9 percent.
- Of the five states considered here, Illinois has the smallest Medicaid expenditures. It also has the lowest Medicaid spending growth rates: Illinois's Medicaid expenditures are projected to increase from $5.8 billion in 2008 to $6.9 billion by 2020, and to $7.6 billion by 2030. The two decade expenditure growth rate is projected to be 3.0 percent per year, well within the historical rate of annual (nominal) GDP growth of 3.9 percent.
- New York's Medicaid expenditures are projected to grow from $23.8 billion in 2008 to $32.9 billion by 2020 and to $37.1 billion by 2030. The two-decade projected spending growth rate beginning in 2010 is 3.7 percent per year, slower than New York's historical annual (nominal) GDP growth of 4.5 percent.

PPACA's health insurance mandate implies that Medicaid spending increases from the new law would be especially pronounced in Illinois and New York.

Thus, even if PPACA had not been enacted, projected growth in Medicaid spending in California, Florida, and Texas would be on an unsustainable trajectory—if judgment is based on projected Medicaid expenditure growth relative to historical experience in state GDP growth rates. On that basis, Medicaid expenditures projected without PPACA would be sustainable in Illinois and New York.

The results suggest a positive association between economic growth and growth in Medicaid expenditures. States such as Illinois and New York with slower population and economic growth rates experience slower growth in Medicaid expenditures, attributable to slower growth in Medicaid eligibility, enrollment, and benefit claiming rates and benefit amounts. States that experienced more rapid population and economic growth since the mid-1990s and that appear likely to continue growing relatively faster are likely to experience more rapid growth in Medicaid expenditures, attributable to high and rapid growth in Medicaid eligibility, enrollments, and benefits.

Adding PPACA's expansion of eligibility for Medicaid coverage will increase future Medicaid expenditures in all states. However, PPACA's health insurance mandate implies that Medicaid spending increases from the new law would be especially pronounced in Illinois and New York—states with the smallest capacity to fund the increases because these two states are likely to continue their slower historical growth experience in the future as their populations remain stagnant or decline:

- The projected number of new enrollees among old-eligibles from PPACA in 2020, calculated as a percentage

of total projected enrollments without PPACA in 2020, is 21.2 percent in Illinois and16.8 percent New York, as compared with 1.9 percent California, 16.3 percent Florida, and 13.4 percent in Texas.
- Estimates of enrollment increases among old-eligibles in 2030 are even more pronounced, with Illinois (23.3 percent) and New York (23.5 percent) projected to experience higher enrollment increases than California (2.7 percent), Florida (17.3 percent), and Texas (11.1 percent).

These enrollment increases will directly lead to higher GR Medicaid expenditures, if new enrollees claim benefits at the same rates as those projected to be enrolled in Medicaid irrespective of PPACA:

- Percentage increases in projected GR Medicaid expenditures in the year 2014 under PPACA compared with spending projected without PPACA in the same year are sizable in four states: 22.2 percent for Illinois, 6.4 percent for New York, 9.0 percent for Florida, and 13.5 percent for Texas. Only in California is the change negative—2.9 percent—because enrollment rates among old-eligibles are already very high whereas savings from uncompensated care are estimated to be sizable.[5]
- Projected GR Medicaid expenditures in the year 2020 (the seventh year of PPACA's Medicaid mandate) in California, Florida, and Texas are 0.2 percent, 20.1 percent, and 13.3 percent larger, respectively, with PPACA than Medicaid expenditures in 2020 projected without PPACA.
- Percentage increases in projected GR Medicaid expenditures under PPACA in the year 2020 are 30.5 percent and 19.8 percent larger in Illinois and New York, respectively, compared with Medicaid spending projections for the same year without PPACA.
- Percentage increases in projected GR Medicaid expenditures under PPACA compared with projected spending levels without PPACA in the year 2030 are also striking: spending increases for Illinois (34.3 percent) and New York (31.5 percent) from introducing PPACA are much larger than for California (–1.4 percent), Florida (22.3 percent), and Texas (7.9 percent).

This result arises, in part, because the potential under PPACA for additional enrollments—relative to enrollments projected by excluding PPACA—are almost exhausted by the mid-2020s for California, Florida, and Texas. In Illinois and New York, however, enrollments in key age and eligibility groups were stable or declining during 2000–08, which means the potential for increases in enrollments driven by the health insurance mandate persists for much longer in these two states.

The potential for magnified state budget pressures can be appreciated by comparing differences in cumulative Medicaid expenditures over the first 10 years of the new law's implementation beginning in 2014. The spending estimates, both with and without PPACA, are stated relative to a flat spending baseline: projected spending for 2014 multiplied by 10 to produce the 10-year flat spending total for each state. The results are consistent with those summarized above: the 10-year GR baseline flat expenditures are $262.6 billion for California, $98.4 billion for Florida, $64.2 billion for Illinois, $287.1 billion for New York, and $126.8 billion for Texas.

Without PPACA, the 10-year Medicaid expenditures are projected to be larger than the flat-spending baseline after 2014 in all of the five states. This is because the projection carries forward historical trends of generally increasing eligibility, enrollments, benefit claim rates, and increases in Medicaid expenditures per beneficiary:

- Percentage increases in 10-year expen-

The 10-year Medicaid expenditures projection carries forward historical trends of generally increasing eligibility, enrollments, and benefit claim rates.

The federal budget is already under considerable strain without additional burdens imposed by PPACA.

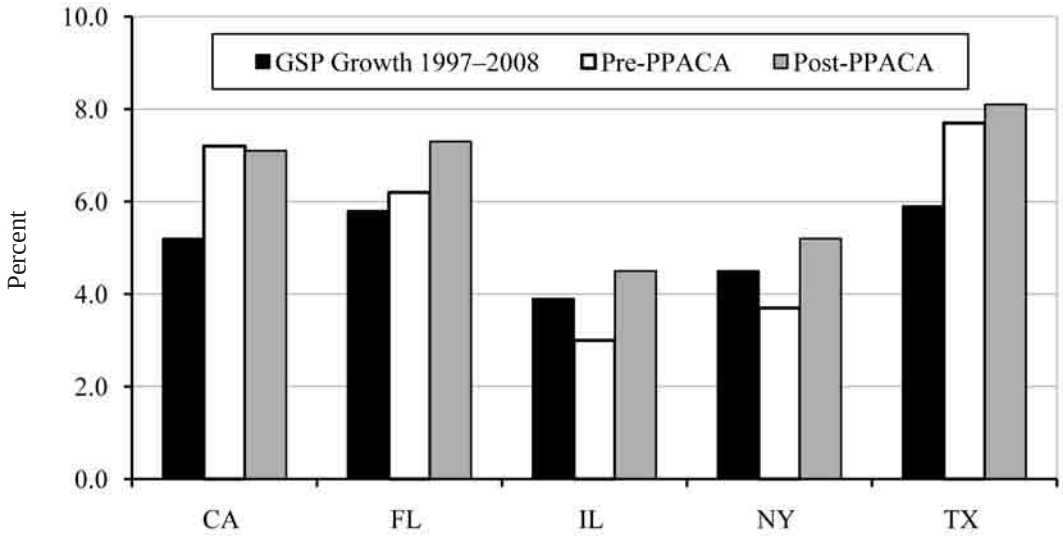
ditures without PPACA relative to the flat-spending baseline in California, Florida, and Texas are 26.2 percent, 20.9 percent, and 31.7 percent, respectively.

- Percentage increases in 10-year expenditures without PPACA relative to the flat-spending baseline are smaller for Illinois and New York, at 5.1 percent and 10.8 percent, respectively.
- With PPACA, the increase in 10-year expenditures relative to the flat-spending baseline is 25.4 percent for California—a small *decline* compared with the increase in spending of 26.2 percent without PPACA beyond the 10-year flat-spending level.
- GR Medicaid spending projected under PPACA is higher compared with flat spending by 41.6 percent for Florida and by 48.7 percent for Texas. These increases are sizable compared with those without PPACA.
- The with-PPACA increases, relative to flat spending, are 34.6 percent for Illinois and 29.1 percent for New York. These figures are not as large cumulatively as those for Florida and Texas, but nonetheless are considerably larger compared with spending increases without PPACA.
- In dollar terms, the 10-year spending increase from PPACA (compared with without it) is highest for New York, primarily because of its high health care costs and Medicaid benefits per enrollee. Additional enrollments of old-eligibles post-PPACA will cause a rapid increase in total additional Medicaid spending.
- Figure 1 shows that for both Illinois and New York, the growth of annual (nominal) Medicaid expenditures during 2010–30 increases well above sustainable rates as a result of PPACA. For Illinois, the two-decade expenditure growth rate increases from 3.0 percent to 4.5 percent—higher than its historical (1997–2008) gross state product growth rate of 3.9 percent. New York's annual Medicaid growth rate over the same period would increase from 3.7 percent to 5.2 percent, also above its historical gross state product growth rate of 4.5 percent per year.

Finally, under PPACA, the federal government is to pay the full cost for those newly made eligible for Medicaid during the first three years (2014–16). Under the new law, the *marginal federal cost-sharing rate* for newly eligible Medicaid enrollees would be gradually reduced from 100 percent to 92.8 percent by 2019.[6] The standard expectation (or assumption) among budget experts is that the marginal cost-sharing rate will remain at 92.8 percent after 2019. However, the federal budget is already under considerable strain, with unprecedented and unsustainable budget deficits projected through 2019 and beyond. That puts all programs funded out of federal general revenues at risk, including Medicaid support for states. To account for a possible further reduction in federal marginal cost-sharing for newly eligible Medicaid beneficiaries, Medicaid's spending-time profile for each state is projected under alternative assumptions regarding federal financial participation beyond 2019. For instance, assuming that federal financial support for newly eligible Medicaid beneficiaries is gradually reduced after 2019 at a rate consistent with making it equal to the standard Federal Medical Assistance Percentage, after 10 years (after 2028) states' GR Medicaid expenditures will increase by even more:

- By 2030, Illinois and New York will both spend about 45 percent more, respectively, compared with expenditures projected without PPACA—much more than the 34 percent and 32 percent increases, respectively, from introducing PPACA but maintaining marginal federal cost-sharing at rates as scheduled for 2019.
- For California, Florida, and Texas, the

Figure 1
Medicaid Growth with and without PPACA and Historical Growth in Gross State Products



Source: Author's calculations based on data from the Bureau of Economic Analysis, Current Population Survey, and Medicaid Statistical Information System.

spending increases from eliminating marginal federal cost-sharing are 4.1 percent, 46.3 percent, and 20.9 percent, respectively. These numbers, again, are considerably larger than the spending increases of −1.4 percent, 22.3 percent, and 7.9 percent, respectively, under PPACA with marginal federal cost-sharing maintained at their 2019 rates through the end of the projection horizon of 2030.

With the enactment of PPACA, concern about runaway Medicaid spending is motivating many state policymakers to find ways to restrain Medicaid expenditures. One method receiving serious consideration is to opt out of Medicaid altogether—an option that has always existed under the Social Security Act—and to provide basic health coverage to low-income and medically needy groups financed exclusively out of GR funds. As of this writing, however, it is uncertain whether PPACA's individual mandate to purchase health insurance will ultimately be sustained or rejected in court cases filed by several states to challenge the mandate's constitutionality. If it is rejected, large parts of PPACA could be struck down with it, or will become unworkable and require a radical overhaul. State lawmakers face considerable uncertainty about increased Medicaid spending commitments that they face because of PPACA—commitments that they must either accept and prepare for, or take steps to avoid, perhaps by opting out of Medicaid.

Medicaid: Programs, Coverage, and Financing

Medicaid programs are a part of state welfare programs that provide subsidized health care to low-income and medically needy individuals. Federal rules determine the basic coverage criteria that take account of household income and asset thresholds, medical conditions, and eligibility for special groups such as pregnant women, children, disabled individuals, the aged, and so on. However, state governments, at their discretion, may

With the enactment of PPACA, concern about runaway Medicaid spending is motivating many state policymakers to find ways to restrain Medicaid expenditures.

Beginning in 2011, FMAP rates will revert close to their pre-recession values, which will require states to come up with additional financing.

extend coverage to broader groups—by specifying higher income and asset eligibility thresholds than the federally mandated levels and by including additional groups based on medical conditions, family resources, and so on. Many states cover children and pregnant women even if their incomes are above the state's eligibility levels but are deemed insufficient to meet the medical costs that they face. Other groups covered under optional programs in many states include nondisabled children and their related caretakers, pregnant women, the aged, blind, disabled, and others with medical expenditures exceeding their incomes.[7]

State Medicaid programs pay for a wide range of health care services including physician, hospital (in- and out-patient), lab, nursing, home health care, pharmacy costs, and more. Usually, the federal government provides matching funds to share state Medicaid costs. Federal cost-sharing is implemented using the FMAP formula, which is based on each state's per capita income relative to that of the nation overall.[8] The statutory minimum FMAP percentage for all states is 50 percent, the maximum being 83 percent. The average FMAP value across all states is about 59 percent. During 2009–10, FMAP rates were higher than normal because of the temporary FMAP enhancement enacted as part of the American Recovery and Reinvestment Act of 2009.

California, Illinois, and New York have pre-ARRA FMAP rates set to 50 percent; they are among the states with the highest incomes per capita. Pre-ARRA FMAP rates for Florida and Texas are higher, 55.45 percent and 60.56 percent, respectively. The ARRA-inclusive (year-end) values are about 10–15 percentage points higher for all states during 2009 and 2010, implying a smaller Medicaid funding burden. Beginning in 2011, however, FMAP rates will revert close to their pre-recession values, which will require states to come up with additional financing, as Medicaid caseloads have continued to increase during 2009 and 2010. For all states, federal Medicaid cost-sharing rates are assumed to remain at their 2011 values when projecting future expenditures. Those values are also applied for determining federal and state cost-sharing for beneficiaries who are eligible for Medicaid under the old laws (without PPACA) and are projected to become new enrollees in Medicaid in response to the individual mandate to purchase health insurance.[9]

PPACA mandates new spending commitments for state governments under Medicaid. All five states examined here have constitutional balanced-budget requirements, either on the state legislature or on the governor's budget submission. Thus, increased spending commitments from entitlements such as Medicaid that are difficult to reverse, and revenue losses during the recent recession, are worsening pressures on other budget items. Many states, including the five evaluated in this study, are projecting persistent budget gaps during 2011 and 2012 that must be addressed by increasing revenues and reducing state public services. Medicaid benefits are unlikely to be spared as federal financial assistance is reduced after 2010.

State Population Projections

For the five states under consideration, Table 1 shows population growth rates calculated based on projections of the U.S. Census Bureau. Through 2020, California, Florida, and Texas are projected to experience significantly higher population growth rates than Illinois and New York. The growth rates in the former three states are larger in all age categories, and especially among their retiree populations. Illinois and New York are projected to have declining populations among the working population—those aged 19 through 64. Beyond 2020, population growth is projected to increase in the three already rapidly growing states, whereas it is expected to decline in the two slow-growing states. Indeed, New York's overall population growth is expected to be negative during this century's third decade.

Examining each state's demographic profile and dynamics provides clues for under-

Table 1
Projected Population Growth (annualized, percent)

Age	2010–20					2020–30				
Category	CA	FL	IL	NY	TX	CA	FL	IL	NY	TX
0–18	0.69	1.47	0.12	−0.15	1.33	0.64	1.70	0.02	−0.11	1.24
19–64	0.51	1.12	−0.13	−0.27	0.85	0.56	1.21	−0.30	−0.63	1.24
65+	2.91	3.40	1.82	1.71	3.15	2.95	4.29	1.95	1.88	3.28
All	0.86	1.64	0.20	0.06	1.26	0.96	2.05	0.15	-0.05	1.53

Source: Author's calculations based on data on population projections from the Census Bureau. As the text explains, results for Illinois and New York (shaded) are qualitatively different from those for the other three states.

standing the results on state-specific Medicaid enrollment and expenditure changes, both with and without PPACA, that are reported later in this study. That is because each state's projected total Medicaid expenditures are anchored by its population projections by age and gender (see Appendix). State-specific population projections are obtained directly from the Census Bureau.[10] These projections are based on the 2000 Census and use fertility, mortality, and migration trends for each state to project their populations forward through 2030.

The Census-projected population age distributions for the five states are shown in Figure 2. The figure indicates that demographic changes in terms of changes in the size and age composition are occurring more rapidly in California, Florida, and Texas. Florida stands out for its rapid increase in the number and proportion of elderly residents—as expected, because the absence of income taxes makes it a popular destination for retirees. The California population profiles show substantial increases in the number of children, young adults, and the elderly. California's younger populations are expected to grow, partly because of continuing migration from the nation's eastern and mid-western regions. Similar to California, Texas's population profile is growing throughout the age distribution, but the increase in the young-adult population is not as pronounced. The significant increases in these populations suggest growing Medicaid expenditures even without PPACA.

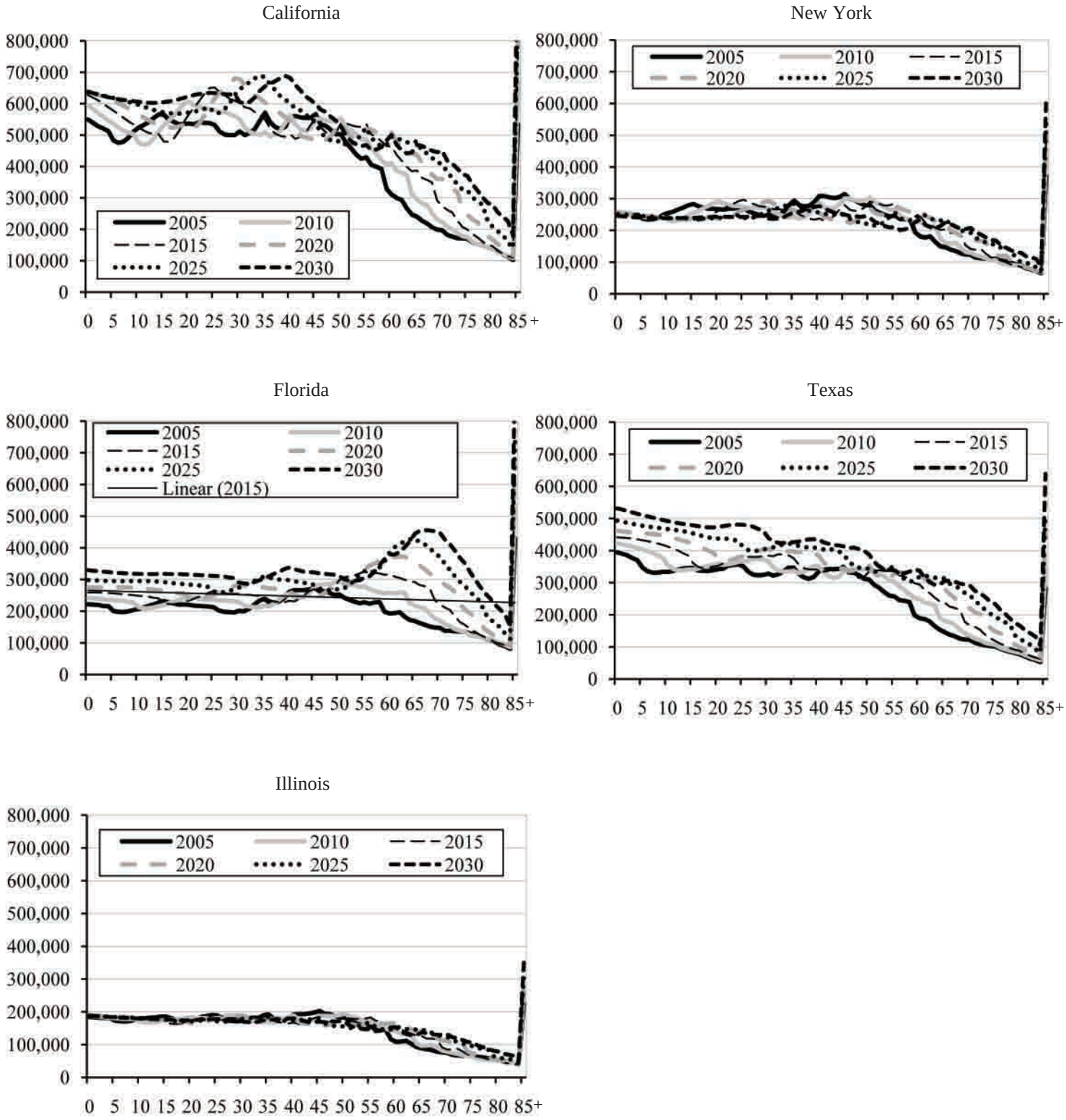
Population projections for Illinois and New York (shaded) exhibit considerably greater constancy, both in population size and age composition, and suggest that Medicaid expenditures will not increase as rapidly in these two states compared with the other three states with more robust population growth and faster aging population.

State Medicaid Spending Projections

PPACA broadens Medicaid eligibility by increasing income thresholds for children and adults. Children living in families with incomes less than 138 percent of the FPL (including PPACA's new 5 percent income disregard) will now qualify for Medicaid. In addition, adults with or without qualifying children are also made eligible under the new FPL threshold. Expanded eligibility levels under PPACA will increase state Medicaid expenditures. But it will not significantly increase state GR Medicaid expenditures, at least in the short term, because of the high marginal cost-sharing provided by the federal government for individuals made newly eligible for Medicaid. GR-funded state Medicaid expenditures would not increase by much if enrollment rates among those eligible for Medicaid under the old laws remain low. That possibility appears unlikely, however, because the key goal of PPACA is to reduce rates of non-insurance extensively and intensively—that is, by expanding Medicaid eligibility *and* by facilitating enrollment and conducting widespread enrollment drives that induce non-enrolled old-eligibles to sign up

PPACA broadens Medicaid eligibility by increasing income thresholds for children and adults.

Figure 2
State Population Projections by Age, 2005–30



Source: United States' Census Bureau.

Table 2
Enrollment Increases Induced by PPACA (thousands of people)

	New Enrollees (Newly Eligible)					New Enrollees (Old-Eligibles)				
Year	CA	FL	IL	NY	TX	CA	FL	IL	NY	TX
2014	2,985	2,315	979	2,059	2,118	204	624	518	467	858
2020	3,078	2,434	925	2,001	2,329	257	739	620	677	820
2030	3,479	3,125	886	1,917	2,729	412	937	767	1,014	864
					Percent					
2014	24.9	55.4	36.0	42.2	40.8	1.7	14.9	19.0	12.3	16.5
2020	23.3	53.6	31.7	41.3	38.0	1.9	16.3	21.2	16.8	13.4
2030	22.6	57.6	26.9	38.6	34.9	2.7	17.3	23.3	23.5	11.1

Source: Author's calculations based on the Medicaid Statistical Information System and the Current Population Surveys. As the text explains, results for Illinois and New York (shaded) are qualitatively different from those for the other three states.

for Medicaid. Moreover, the individual mandate, even when it does not result in a penalty for non-insurance, will induce Americans to sign up for health insurance—Medicaid if they are eligible for it—simply out of a desire to comply with the nation's laws.

Though it is uncertain whether the individual mandate will survive court challenges from many states, this study's Medicaid spending growth estimates are constructed under the assumption that it will. The mandate and health insurance enrollment drives will induce an increase in enrollment by those who were eligible under the old laws but who were not enrolled in Medicaid or any other health insurance plan. Although PPACA provides full federal support for newly eligible Medicaid enrollees through 2019, it provides zero additional support for new enrollees among old-eligibles. States will bear the cost of these old-eligibles according to their (post-ARRA) FMAP rates.

PPACA will be implemented with special efforts to advertise the availability of Medicaid's health care coverage options to newly eligible populations to increase the enrollment rates among newly eligible children and adults. However, the enrollment facilitation will also induce some old-eligibles to switch from non-Medicaid to Medicaid coverage because the latter is subsidized and imposes zero (or a much smaller) financial burden on beneficiaries compared with their current employer-provided or privately purchased health insurance coverage. The added burden states bear will depend on the success of those promotional efforts.[11]

In calculating enrollments under PPACA, it is assumed that enrollments by those newly eligible will either follow the same enrollment rates as those presently eligible or they will enroll at the rate of those with no other health insurance, depending on which rate is larger. A similar method is followed for those who are eligible for Medicaid under the old laws but who are not enrolled in Medicaid. Applying these rules yields a sizable increase in enrollments in 2014.

Enrollment Projections. Even without PPACA, Medicaid enrollments are projected to increase substantially in California, Florida, and Texas. The top panel of Table 2 shows projected increases in Medicaid enrollments as a result of PPACA in the five states being considered. The five columns on the left show the number (in thousands) of new enrollees that would result under PPACA in selected future years (2014, 2020, and 2030). These are counts of enrollees estimated from among those made newly eligible for Medicaid benefits under PPACA's broader eligibility criteria. The lower panel (again of the five columns on the left) shows the increase that these new enrollees repre-

The mandate and health insurance enrollment drives will induce an increase in enrollment by those who were eligible under the old laws but who were not enrolled in Medicaid or any other health insurance plan.

PPACA adds to states' fiscal burden, primarily by bringing forward in time enrollment increases that would likely have occurred later.

sent as a percent of projected enrollees in the same years in a world without PPACA. The increases in Medicaid caseloads are sizable—ranging from the mid-20 percents for California to the mid-50 percents for Florida and New York. However, the costs of these increases in Medicaid caseloads will be paid for almost entirely out of marginal federal cost-sharing.

The five columns on the right of Table 2 show the number (in thousands) of new enrollees among old-eligibles who are projected to enroll as a result of PPACA. Effectively, applying for health insurance through state-operated health insurance exchanges would reveal if the applicant is eligible for Medicaid under the old eligibility rules (without PPACA). If so, that person would be directed or advised to sign up for Medicaid unless he or she desired an alternative insurance source. The estimation procedure mentioned above—taking the larger of the uninsured rate or the existing enrollment rate observed for old-eligibles—produces the estimates reported in Table 2.[12]

The lower panel shows the increase that new enrollees among old-eligibles represents as a percent of Medicaid enrollees in the same years projected without PPACA. The estimates are much smaller compared with those in the columns on the left. But the Medicaid benefits of these new enrollees, under the new law, would be paid for entirely out of state budgets: PPACA provides zero federal financial support on account of new enrollees among old-eligibles.

It is noteworthy that California is projected to experience very small increases in new enrollments among old-eligibles into Medi-caid. That's because California already has very high enrollment rates among Medicaid eligibles and there is not much scope for expanding enrollments among old-eligibles under PPACA. Florida and Texas are projected to experience Medicaid enrollment increases in the 10 to 16 percent range in years beginning in 2014. However, Illinois and New York (shaded) are projected to gain Medicaid enrollments among old-eligibles much more rapidly—clustered around 20 percent—in the various years shown in Table 2. This occurs because these two states have smaller projected enrollment rates without PPACA, leaving more scope for enrollment increases as the PPACA laws take effect in 2014. This means that in each future year, Medicaid enrollments would be between 10 to 25 percent higher in all the states examined except in California.

Table 3 shows GR Medicaid spending increases in the five states, comparing projections with and without PPACA in selected future years. Spending increases are generally larger than enrollment increases because the historical increases in benefits per beneficiary are projected forward in time and augment expenditure growth from larger enrollments.

The top panel of Table 3 shows GR Medicaid expenditures (in billions of dollars) for selected future years constructed with and without PPACA. The two rows in the middle of Table 3 show the percentage increases in states' GR Medicaid expenditures, separately with and without PPACA, between 2014 and 2020 and between 2014 and 2030:

- In California, Florida, and Texas, spending growth is sizable between 2014 and 2020, even without PPACA. The increases range from about 28 percent to about 42 percent for these three states.
- In Illinois and New York, cumulative changes through the year 2020 are much smaller, ranging between 7 percent to about 15 percent.
- Through 2030, cumulative spending increases even without PPACA are, again, much larger for California, Florida, and Texas—doubling or more even without PPACA. For Illinois and Florida, the cumulative spending increases are relatively modest—ranging between about 18 and 29 percent.

Without PPACA, GR spending projections exhibit very different trends in the five states, increasing much more rapidly for California, Florida, and Texas, and more slowly

Table 3
Projected General Revenue Medicaid Expenditures with and without PPACA (billions of dollars)

	CA		FL		IL		NY		TX	
Year	Without PPACA	With PPACA	Without PPACA	With PPACA	Without PPACA	With PPACA	Without PPACA	With PPACA	Without PPACA	With PPACA
2008	19.4	-	6.3	-	5.8	-	23.8	-	8.5	-
2014	26.3	26.5	9.8	10.7	6.4	7.8	28.7	30.5	12.7	14.4
2020	35.2	36.8	12.6	15.1	6.9	8.9	32.9	39.4	18.0	20.3
2030	59.9	62.3	19.5	23.8	7.6	10.2	37.1	48.9	32.5	35.1
Percent Increase from Spending Projections Without PPACA for 2014										
2020/2014	34.1	34.4	27.8	53.6	6.8	39.3	14.5	37.2	41.7	60.5
2030/2014	128.0	124.8	97.9	141.9	17.8	58.2	29.4	70.2	156.6	177.0
Percent Change due to PPACA										
2014	-2.9		9.0		22.2		6.4		13.5	
2020	0.2		20.1		30.5		19.8		13.3	
2030	-1.4		22.3		34.3		31.5		7.9	

Source: Author's calculations based on the Medicaid Statistical Information System, Current Population Surveys, and CMS-64 reports. As the text explains, results for Illinois and New York (shaded) are qualitatively different from those for the other three states.

for Illinois and New York. A salient reason is that the former states are projected to experience growing populations among age-gender groups that have historically high Medicaid eligibility and utilization rates, whereas the latter two states have stagnant or declining populations among those groups. With PPACA, however, spending increases are much larger, and the increases are especially sizable for Illinois and New York.

Another way to measure PPACA's effect on spending is shown in the bottom panel of Table 3. This panel shows the percent increase in projected Medicaid expenditures due to PPACA in selected years. Here, the story is reversed compared with projected spending increases over time: states with high spending increases over time without PPACA exhibit low projected spending increases from introducing PPACA and states with low spending growth over time without PPACA exhibit relatively more rapid spending increases from introducing PPACA:

- PPACA's effects on Medicaid expenditures in California are negative—the result of savings from uncompensated care (reductions in state Disproportionate Share Hospital expenditures) dominating those from increased Medicaid enrollments by old-eligibles.[13]
- Medicaid expenditures in Florida and Texas increase more rapidly as a result of PPACA, ranging between 8 percent and 22 percent in the years shown.
- Illinois and New York (shaded) are projected to have higher spending increases as a result of PPACA—increasing by up to the mid-30 percents by 2030.

This result emerges because, consistent with historical data, Illinois and New York are projected to have lower eligibility and enrollment rates than California, Florida, and Texas (without PPACA) and those rates are projected to increase more slowly in both of those states. With the introduction of PPACA's individual mandate, however, many among the old-eligibles who do not have health insurance will be induced to acquire it. If applying for health

Table 4
Projected General Revenue Medicaid Spending Growth by Age and Special Eligibility Categories without PPACA (annualized, percent)

Age and Special Eligibility Category	2010–20					2020–30				
	CA	FL	IL	NY	TX	CA	FL	IL	NY	TX
0–18*	9.0	11.1	7.4	7.0	12.0	4.1	7.4	2.8	2.6	7.8
19–64*	8.6	10.4	-3.1	5.5	5.9	4.6	7.2	-0.8	-2.3	3.5
65+*	12.5	4.6	6.3	4.0	5.5	8.4	-2.8	1.9	-3.3	2.3
Medically Needy	6.3	9.1	2.0	6.4	-0.7	5.0	6.6	-2.1	1.2	-0.9
Breast and Cervical Cancer Act	16.3	20.7	22.7	15.6	16.8	9.8	11.7	14.2	8.4	10.1
Foster Care	10.3	9.4	2.4	1.5	13.6	7.2	5.5	2.1	5.2	8.5
Family Planning	13.4	-30.0	9.4			10.0	7.6	7.5		
Disabled Adults	7.0	6.9	5.8	7.8	7.6	2.4	2.5	-0.1	2.4	3.8
Waivers	4.2	6.4	3.4	3.4	4.4	0.9	3.3	0.1	-0.7	1.4
All	8.9	7.9	5.0	6.3	9.3	5.5	4.5	1.0	1.2	6.1

*Excludes people eligible under other special categories. Spending growth from PPACA is shown without netting out state saving from uncompensated care (DSH).

Source: Author's calculations based on the Medicaid Statistical Information System, Current Population Surveys, and CMS-64 reports. As the text explains, results for Illinois and New York (shaded) are qualitatively different from those for the other three states.

insurance at state-operated exchanges reveals eligibility for Medicaid under the old eligibility rules, enrollment in Medicaid will rise, usually leading to benefit claims. In addition, the health insurance mandate may cause some individuals to realize that obtaining health insurance through Medicaid is more cost effective than their existing private insurance and may cause them to shift to Medicaid. Alternatively, if employers choose to drop coverage, many old-eligibles who are currently insured in the private market may enroll in Medicaid.

The message from Tables 2 and 3 is that states with already high enrollments and rapid growth in Medicaid enrollments would face serious budget problems from rising Medicaid expenditures. PPACA adds to their fiscal burden, primarily by bringing forward in time enrollment increases that would likely have occurred later. Moreover, the additional Medicaid spending from PPACA is relatively small. However, states with heretofore low Medicaid enrollments and slower growth in enrollments are likely to experience a substantial increase in Medicaid expenditures because of PPACA's health insurance mandate.

Table 4 shows Medicaid spending growth rates by age group and special eligibility categories. The growth rates by age categories are calculated without PPACA after excluding individuals that qualify for and claim Medicaid benefits under special eligibility rules. The table shows that the annual average Medicaid spending growth on account of children (not including expenditures of the Children's Health Insurance Program) is projected to be quite high through the year 2020 in California, Florida, and Texas—ranging between 9 and 12 percent per year. In Illinois and New York that growth rate is not as high. Between 2020 and 2030, the growth rate is lower in all states, but especially in Illinois and New York (shaded).

The same remarks are applicable to Medicaid spending growth on account of nondisabled adults aged 19–64. However, Illinois and New York (shaded) will experience low or negative spending growth rates, probably because of the projected decline in their populations of working-age adults. Among retirees, growth rates vary across states and over time: rates are highest in California but negative

over the long term in Florida and New York. Those negative growth rates are probably the result of increasing use of prescription drugs, payment for which was switched from Medicaid to Medicare during the early 2000s, and the consequent decline in the ratios of beneficiaries to enrollees in these two states.[14]

Among special-eligibility categories, spending growth rates are highest among women with breast and cervical cancer, followed by foster-care children and blind/disabled adults. Across all categories, projected annual (nominal) Medicaid spending growth rates are 8.9 percent for California, 7.9 percent for Florida, and 9.3 percent in Texas—much larger than the 5 percent for Illinois and 6.3 percent for New York. During the subsequent decade, annual (nominal) Medicaid spending growth rates are slower, between 4.5 and 6.1 percent for California, Florida, and Texas, and they are very small for Illinois (1.0 percent) and New York (1.2 percent) (shaded). The slower spending growth after the year 2020 in most cases is explained by projected eligibility/enrollment/beneficiary rates, eventually attaining maximum values of 100 percent with no scope for additional increases.

Alternative Federal Cost-Sharing Scenarios. The Congressional Budget Office projects unprecedented federal deficits as a share of GDP—indicating the precarious condition of federal finances—through the next 10 years. It means that the promised high marginal federal cost sharing for new enrollees among those made newly eligible for Medicaid under PPACA could be reduced rather than maintained at the 2019 value of 92.8 percent. Two alternative projections are constructed for states' Medicaid expenditures assuming reduced marginal federal cost sharing. The first scenario implements a gradual reduction in marginal federal FMAP support after 2019 and the second a more rapid reduction of the same. The results are shown in Table 5.

The top panel of Table 5 shows projected Medicaid expenditures with PPACA and the bottom panel shows the percentage increase in expenditures caused by PPACA for selected years. In each state's panel in Table 5, the first column shows the "Base Case," taken from the first panel of Table 3; the second column, "Alternative 1," projects the percent increase in each state's Medicaid spending under the assumption that the marginal FMAP cost-sharing rate under PPACA is gradually reduced by 1 percentage point per year until it reaches the standard FMAP rate applicable for each state; and the third column, "Alternative 2," projects the percent

Table 5
Medicaid Spending Increases Post-PPACA under Alternative Federal Match Policies

	CA			FL			IL			NY			TX		
Year	Base Case	Alt 1	Alt 2	Base Case	Alt 1	Alt 2	Base Case	Alt 1	Alt 2	Base Case	Alt 1	Alt 2	Base Case	Alt 1	Alt 2
2014	25.5	25.5	25.5	10.7	10.7	10.7	7.8	7.8	7.8	30.5	30.5	30.5	14.4	14.4	14.4
2020	35.3	35.4	35.7	15.1	15.2	15.7	8.9	9.0	9.1	39.4	39.5	40.5	20.3	20.4	21.0
2030	59.0	60.2	62.3	23.8	25.4	28.5	10.2	10.4	10.9	48.9	50.6	53.9	35.1	36.6	39.3
	Percent change over Medicaid spending projections without PPACA														
2014	-2.9	-2.9	-2.9	9.0	9.0	9.0	22.2	22.2	22.2	6.4	6.4	6.4	13.5	13.5	13.5
2020	0.2	0.4	1.5	20.1	20.9	25.1	30.5	30.8	32.9	19.8	20.3	22.9	13.3	13.8	16.7
2030	-1.4	0.5	4.1	22.3	30.4	46.3	34.3	37.8	44.6	31.5	36.2	45.2	7.9	12.3	20.9

Notes: Alt 1: Marginal federal match for new-eligibles is reduced by one percentage point each year through 2030. Alt 2: Marginal federal match for new-eligibles is eliminated by 2028.

Source: Author's calculations from the Medicaid Statistical Information System, Current Population Surveys, and CMS-64 reports. As the text explains, results for Illinois and New York (shaded) are qualitatively different from those for the other three states.

Table 6
Increases in 10-Year (2014–23) Medicaid Spending with and without PPACA, Relative to a Flat Spending Baseline

	CA	FL	IL	NY	TX
1. 10-Year Flat-Spending Baseline (Based on 2014 Spending Without PPACA; billions of dollars)	262.6	98.4	64.2	287.1	126.8
2. 10-Year Change from Flat-Spending Baseline to without PPACA (%)	26.2	20.9	5.1	10.8	31.7
3. 10-Year Change from Flat-Spending Baseline to with PPACA (%)	25.4	41.6	34.6	29.1	48.7
4. 10-Year Change from Flat-Spending Baseline to Alternate Scenario 1 (%)	25.7	42.7	35.0	29.7	49.5
5. 10-Year Change from Flat-Spending Baseline to Alternate Scenario 2 (%)	26.8	46.7	36.6	31.8	52.5
6. Memo: 10-Year Flat Enrollment (millions of people)	119.7	41.8	27.2	48.8	51.9
7. Memo: Average State GR Medicaid Spending per Enrollee (dollars)	2,195	2,355	2,358	5,878	2,441

Source: Author's calculations from the Medicaid Statistical Information System, Current Population Surveys, and CMS-64 reports. As the text explains, results for Illinois and New York (shaded) are qualitatively different from those for the other three states.

increase under the assumption that federal marginal cost-sharing is reduced rapidly so that it achieves the standard FMAP rate for each state by 2028. Note that the terminal year through which marginal federal cost-sharing rates have been specified under PPACA is 2019.

The lower panel of Table 5 shows that PPACA would reduce California's GR Medicaid spending in the year 2030 by 1.4 percent under the Base Case, but increase it marginally under both alternative scenarios—by 4.1 percent under Alternative 2, where the reduction of federal cost sharing is more rapid. For other states, however, spending increases under the two alternative scenarios are much larger. In Florida, for example, the additional Medicaid spending from PPACA would increase from 22.3 percent to 30.4 percent under the first alternative scenario and to 46.3 percent under the second. Significant increases in additional Medicaid expenditures from PPACA also arise for Illinois, New York, and Texas, as Table 5 shows.

Table 6 provides the overall picture of Medicaid spending growth during the 10 years after the law is implemented in 2014. The first row of the table shows total 10-year spending under the assumption that Medicaid's dollar spending out of state general revenues is frozen at the 2014 level. That spending is highest for New York, followed by California, with Texas a distant third. The sixth row of the table shows flat-lined enrollments—that is, assuming that enrollments are maintained at the 2014 level for 10 years thereafter. Dividing the 10-year flat spending with the 10-year flat enrollment yields the average spending per enrollee, as shown in the last row of the table. New York is by far the most expensive Medicaid state, spending almost $6,000 per Medicaid enrollee. All of the other four states included in this study are projected to experience much smaller expenditures of a little more than $2,000 per enrollee—only about one-third of New York's average Medicaid spending per enrollee.[15]

The second row of Table 6 shows the percentage increase in projected Medicaid expenditures if future enrollments and benefits per beneficiary continue to evolve along historical trends in each of the age and special-eligibility categories as described in the Appendix. This projection shows that Medicaid expenditures would increase substantially for California (26.2 percent), Florida (20.9 percent), and Texas (31.7 percent) even without PPACA. Ten-year spending increases are projected to be quite low for Illi-nois (5.1 percent) and New York (10.8 percent) (shaded) because enrollment ratios in these two states have been historically low and increased less steeply than in others.

The third row of Table 6 shows that PPACA reduces California's 10-year Medi-

caid spending by a small amount; the increase from the flat-spending with PPACA is just 25.4 percent compared with the 26.2 percent increase without PPACA. Because the ratio of enrollees to old-eligibles is already quite high in California, there is little scope for PPACA to increase Medicaid expenditures further on account of new enrollees among old-eligibles in California compared with Florida and Texas.[16] Projections for the latter two states suggest a much larger scope for spending increases under PPACA, as enrollment rates have stagnated, especially among the largest category of non-disabled adults aged 19–64. This is confirmed in Table 6, which shows that compared with the flat-spending level, Florida's 10-year Medicaid costs would escalate by 41.6 percent because of PPACA rather than by just 20.9 percent without it. In the case of Texas, the 10-year total spending would increase by 48.7 percent under PPACA rather than by just 31.7 percent without it. Thus, the cumulative impact of carrying forward historical trends in eligibility, enrollments, beneficiary ratios, and benefits per beneficiary lead to the largest escalation in Medicaid expenditures in Texas—both without and with PPACA—casting a bright spotlight on why Texas state policymakers are so highly concerned with the implications of PPACA for that state's budget.

In Illinois and New York, the ratio of enrollees to eligibles is low and, in some instances, it has historically declined. Again, this explains why PPACA would lead to sizable spending increases—the individual mandate will spur old-eligibles into enrolling under Medicaid. Table 6 shows that compared with the flat spending baseline, PPACA would escalate Illinois's 10-year expenditures by 34.6 percent, rather than by just 5.1 percent without PPACA. And New York's spending increase would be by 29.1 percent, not by just 10.8 percent.

The overall results show that all of the five states are facing a 10-year Medicaid spending increase larger than 30 percent, resulting from a combination of already increasing trends in eligibility, enrollments, beneficiary ratios, and expenditures per beneficiary, as well as PPACA's Medicaid expansion. Among the five states examined, PPACA causes the steepest rise in spending in Illinois—by almost 30 percentage points—whereas the steepest cumulative increase (48.7 percent) is projected for Texas. California's cost increase is already sizable, but much of its uninsured population would either be ineligible to enroll in Medicaid or be in categories that would impose higher costs on that state.

These results are at odds with previous portrayals of how much state expenditures would increase under PPACA. The debate appears to be informed largely by estimates reported by the Kaiser Family Foundation, which projects very small increases in total state expenditures during 2014–19. Kaiser's estimates of state spending increases range from 0.0 percent for New York to 3.0 percent for Texas—much smaller than the estimates reported here.[17] Kaiser's methodology appears to have used future enrollment rates for new-eligibles and old-eligibles that are not calibrated from historical trends, but instead are based on calibrations from a given year (2007) and Congressional Budget Office assumptions about future enrollment rates that are assumed to remain fixed. These assumptions would tend to produce smaller estimates of enrollment and spending on old-eligibles compared with the assumptions made here. For example, in those cases where historical trends show consistently low or declining enrollments among old-eligibles, the enrollment-increasing effect of the individual health insurance mandate on non-enrolled old-eligibles may be understated under Kaiser's methodology. This study does not assume that enrollment rates among old-eligibles would remain fixed at the levels observed in 2007, a year with no federal mandate to purchase health insurance or widespread public education campaigns about the need to comply with the law by obtaining health insurance. This study makes the alternative assumption that the individual mandate would raise

The overall results show that California, Florida, Illinois, New York, and Texas are facing a 10-year Medicaid spending increase larger than 30 percent.

enrollment rates among old-eligibles and, therefore, tracks changes to historical trends in eligibility, enrollment, benefit recipiency, and average benefits per beneficiary that would arise from introducing PPACA. All of these estimates are anchored to nationally representative historical micro-data surveys and Medicaid's state-wise administrative information. Thus, methodological differences between Kaiser's and this study's calculations may underlie the sizable differences in estimates of states' additional costs from PPACA, especially the potential additions to state Medicaid expenditures from new enrollments by old-eligibles.

The estimates of projected Medicaid expenditures may be conservative because the effect of future shifts from private coverage to Medicaid, post-PPACA, is not fully incorporated.

Conclusion

Detailed estimates of the effect of PPACA on the budgets of the five most populous states suggest the law will impose large unfunded mandates to expand Medicaid caseloads and increase state Medicaid outlays. States will have to meet this increased financial burden either through cutbacks in other public services or higher tax burdens—both of which will exert negative effects on states' economies.

The results suggest that even without PPACA, Medicaid expenditures would increase rapidly in California, Florida, and Texas, each of which has growing populations across many Medicaid eligibility and enrollment groups. Medicaid spending increases projected without PPACA are relatively small in Illinois and New York, states whose populations are projected to remain generally stagnant or to decline during the next two decades. When PPACA's effects on enrollment in Medicaid are included—especially enrollment by old-eligibles who would now be directed to enroll as a consequence of the new law's health insurance mandate—Medicaid will impose large financial burdens on all five states.

The projected cumulative post-PPACA Medicaid spending increase during 2014–23 is negative only for California: spending is projected to decline by a smaller amount under PPACA than without it. Florida and Texas, however, are projected to have larger populations of non-enrolled old-eligibles: spending without PPACA is projected to be 20.9 percent higher in Florida compared with holding it at the 2014 level for 10 years. With PPACA, it would be 41.6 percent higher compared with the flat baseline. The corresponding increases for Texas are 31.7 percent without PPACA and 48.7 percent with PPACA. Illinois and New York exhibit historically stable or declining enrollment rates among old-eligibles, implying higher potential spending on these individuals in 2014 and thereafter. Without PPACA, Medicaid expenditures are projected to increase from the flat-spending baseline by just 5.1 percent in Illinois and 10.8 percent in New York. With it, however, the increases in the two states are 34.6 percent and 29.1 percent, respectively.

It should be noted that the estimates presented here of projected Medicaid expenditures in five states, both with and without PPACA, are based on standard assumptions and methods for extending eligibility, enrollment, benefit recipiency status, and benefit award rates into the future. The estimates may be conservative because the effect of future shifts from private coverage to Medicaid, post-PPACA, is not fully incorporated. The results are also uncertain because future trajectories of all of these rates will be affected by many factors not considered here: the economic environment, the specific implementation of PPACA, the availability and cost of non-Medicaid health insurance for low-income individuals, and so on.

Supporting such high Medicaid spending increases under PPACA, but also irrespective of PPACA, would require higher taxes or reductions in other public services, both of which appear to state policymakers as economically undesirable. Concerns about runaway Medicaid expenditures are motivating policymakers in many states to explore ways to restrain Medicaid expenditures, including opting out of Medicaid altogether—an option that has always existed under the

Social Security Act—using alternative state programs to provide basic health coverage to low-income and medically needy groups. Another possibility is to allow the quality of Medicaid-covered health care services to deteriorate in order to prevent the crowd-out of private health coverage that has historically occurred after every expansion of the Medicaid program. Prospects of such steep increases in Medicaid expenditures probably explain growing support among citizens and many state policymakers to alter PPACA, if not to repeal it.

Appendix

Methodology for Projecting Texas Medicaid Expenditures under PPACA

Medicaid spending projections for the five states considered in this study are based on various data sources, namely, the Medicaid Statistical Information System, the Current Population Surveys, and the U.S. Census Bureau. Section A1 of this Appendix explains the general methodology and Section A2 discusses the rules applied to determine Medicaid eligibility for various age and eligibility categories, including differences in rules across the five states evaluated here. Section A3 describes historical trends of Medicaid eligibility, enrollment, recipiency, and average benefits per recipient separately for various demographic groups and eligibility categories.

A1. Methodology for Projecting Medicaid Expenditures in Texas. The Medicaid Statistical Information System State Data Mart website provides administrative information on the number of Medicaid beneficiaries by gender (g), age-category (a), and eligibility group (e) for the years 1999–2008. It also provides information on total Medicaid benefits awarded to state residents (B_STT) in those years, where the suffix, *STT*, stands for the state in question.

In all states, residents qualify for Medicaid benefits based on a range of income- and asset-related criteria. In addition, special categories of individuals such as children, pregnant women, aged, blind, disabled, and medically needy individuals qualify for "categorical coverage," even though their incomes and resources exceed federally mandated income and asset qualification thresholds.

First, the total population for the state in question is calculated by gender, age category, income range (f) relative to the federal poverty level (FPL), and year (t), based on data from the Current Population Survey, $CPS_STTPOP_{g,a,f,t}$.[18] Because the CPS undercounts state populations relative to Census Bureau counts for all states, the Census population $CEN_STTPOP_{g,a,t}$ is also categorized according to gender, age category, and year cells, and the latter population is used to rescale CPS population counts: for each demographic cell, the ratio of the two populations

$$U_{g,a,t} = \frac{CEN_STTPOP_{g,a,t}}{\Sigma_f CPS_STTPOP_{g,a,f,t}}$$

provides a measure of the cell-specific population over- or under-counts in the CPS relative to the Census population.

Next, populations of Texas Medicaid benefit-*eligible* individuals by demographic cells are calculated from the CPS: $CPS_E_STT_{g,a,f,t}$. These cells are calculated separately for specific income ranges (f) relative to FPL values.[19]

For example, take a male aged a in 2008. Adults qualify for Medicaid coverage if they have a covered child. In turn, the child is Medicaid-eligible if the income of the child's family falls within the income threshold or the child qualifies based on non-income-related criteria such as disability and foster care (for which income-eligibility limits are different). Thus, the eligibility rate, e, for adults aged a, of gender g, with FPL-relative income f, and in year t, can be calculated conditional on their children's eligibility as

$$e_{g,a,f,t} = \frac{U_{g,a,t} \times E_CPS_{g,a,f,t}}{U_{g,a,t} \times CPS_STTPOP_{g,a,f,t}}.$$

Here, the numerator refers to the total num-

Prospects of steep increases in Medicaid expenditures probably explain growing support among citizens and many state policymakers to alter PPACA, if not to repeal it.

Component rates, independently calculated and projected, capture different policy or environmental factors, each with the potential to exhibit its own future trend.

ber of state residents found to be Medicaid eligible in the CPS after applying the eligibility rules and the population adjustment ratio $U_{g,a,t}$ (described above).

Next, the enrollment rate, *n,* is calculated as the number of Medicaid enrollees divided by the number of Medicaid eligibles:

$$n_{g,a,t} = \frac{N_MSIS_{g,a,t}}{U_{g,a,t} \times \Sigma_f E_CPS_{g,a,f,t}} .$$

Here, the numerator is the total number of male state residents aged *a*, of gender *g*, in year *t*, who are enrolled in Medicaid based on data obtained from MSIS. One limitation of the data from MSIS is that they are not decomposed by FPL-relative income categories. Therefore, the average age-gender enrollment rate is applied to all three FPL categories. Next, the recipiency rate, *r,* is calculated as the number of Medicaid recipients (or beneficiaries) among Medicaid enrollees:

$$r_{g,a,t} = \frac{R_MSIS_{g,a,t}}{N_MSIS_{g,a,t}} .$$

Again, data for the number of state residents who received Medicaid benefits are obtained from MSIS. Finally, average Medicaid benefits per recipient, *b,* in the state in question are calculated from the MSIS as

$$b_{g,a,t} = \frac{B_MSIS_{g,a,t}}{R_MSIS_{g,a,t}} ,$$

where the numerator refers to total Medicaid benefits for this group. The average age-gender ratios $r_{g,a,t}$ and $b_{g,a,t}$ are applied to those who are Medicaid eligible in each FPL-relative income category. Thus, total state Medicaid expenditures in 2008 on males aged *a*, gender *g*, FPL category *f*, and year *t*, can be represented as

$$M_{g,a,f,t} = U_{g,a,t} \times CPS_STTPOP_{g,a,f,t} \times e_{g,a,f,t} \times n_{g,a,t} \times r_{g,a,t} \times b_{g,a,t} .$$

This method of calculating the four rates can be applied to all age groups and both genders and aggregated to yield total (MSIS-based) Medicaid expenditures for the year in question.

Total Medicaid expenditures derived in this manner for the base year, 2008, are benchmarked to total (expended) Medicaid expenditures in 2008 as reported in the state budget. This step takes account of Disproportionate Share Hospital, Upper Payment Limit, and Medicaid administrative expenditures that are not included in MSIS data. Thus, these additional expenditures are implicitly distributed across age, gender, and eligibility categories in the same proportion as Texas Medicaid expenditures included in MSIS data.

The simplest way to project states' Medicaid expenditures for future years is to represent total expenditures in earlier years by age, gender, and income, $M_{g,a,f,t}$, t=2001–2008, as above, and extrapolate each of the component elements over future years. The product of those terms in future years provides estimates of future Medicaid expenditures in the state for each particular gender, age, and FPL category. Summing over all categories provides the future year's total Medicaid expenditures.

The reason for calculating and independently projecting each of these component rates when constructing Medicaid's expenditure projections is that those rates capture different policy or environmental factors, each with the potential to exhibit its own future trend. For example, while the Medicaid eligibility rate for a particular population sub-group is determined by federal and state policies about which types of individuals should qualify for Medicaid benefits, enrollment rates for different population sub-groups may be determined by the availability and cost of alternative health insurance coverage, individual perceptions about their health care needs, the quality and out-of-pocket expenditures of Medicaid's health care provision, and public awareness about the availability of Medicaid coverage for people with similar demographic, economic, and health characteristics.

Furthermore, Medicaid recipiency rates could be different among different population sub-groups by age, gender, and other characteristics, depending on their frequencies of adverse health episodes and health service needs. Finally, average benefit rates would differ depending on the incidence of chronic conditions: whether recipients are elderly or disabled; the type, quality, and cost of health care treatments that are locally available, and so on. Basing projections on detailed historical information on the group-specific trends of all four components separately: by age; gender; whether disabled; and income level (relative to the federal poverty level), whether medically needy, unemployed, single- or dual-income family, number of children, etc.—provides greater confidence that the rich variety of independent influences of policies, environmental conditions, and behavioral propensities on Medicaid expenditures has been adequately accounted for.

PPACA changes eligibility rules for low-income individuals and mandates health insurance coverage for all. In addition, it envisions a vigorous public-awareness and enrollment facilitation drive that would increase enrollment rates among both those people eligible under the old Medicaid laws and those newly eligible under PPACA. So state Medicaid expenditures under PPACA are likely to be quite different (and considerably larger) compared with expenditures under the old health care laws.

A2. Medicaid Eligibility Criteria. There are three key requirements to be eligible for Medicaid in any state. This section will briefly discuss each of these rules and how they vary by state. The section will then cover a handful of other reasons someone may be eligible for Medicaid. All of the rules described here for the three key eligibility criteria are coded to determine eligibility to Medicaid among the CPS sample populations by age, gender, FPL-relative income category, and those eligible under special rules for the years spanning 2000 to 2008—the latest year for which CPS data are available.

a. Federal Poverty Level. Having a family income below a specific FPL is one of the key eligibility criteria. Prior to the new health care law, Medicaid's federal income eligibility threshold was 100 percent of the FPL for children aged 6 through 18, with a state option up to 133 percent and an option to extend the eligible age to 20 for those in school. For 1- to 5-year-olds the federal income eligibility threshold was 133 percent. For newborns and pregnant women, the income limit was at 133 percent of FPL, with options for states to increase it up to 185 percent of FPL.

The new law establishes an income eligibility threshold for everyone (including childless adults) at 133 percent of FPL. It also introduces an income disregard at 5 percent of family income.

The new law establishes an income eligibility threshold for everyone at 133 percent of the federal poverty level.

Other special deductions were applied before the new health care laws were enacted, and varied by state. These generally included items such as work-related ($90 a month) and dependent-care expenses ($175–$200 a month), child-support payments, earnings of children under age 19 and in school, all income from Social Security's Supplemental Security Income program, other public assistance, and educational assistance.

Of the five most populous states, California, Illinois, and New York have elected to cover children aged 6 through 18 at the 133 percent level. All of the states cover newborns and pregnant women up to 185 percent of FPL. Not only that, but each of this study's states, except for Texas, has chosen to pay for pregnant women up to 200 percent from outside its federal Medicaid budgets.

b. TANF/AFDC. The original federal welfare program, Aid to Families with Dependent Children, was reformed in 1996, becoming the Temporary Assistance for Needy Families program. Originally, AFDC qualifying thresholds and conditions were used to determine Medicaid eligibility, but today, TANF thresholds and conditions are used. A family is eligible for AFDC/TANF, and therefore Medicaid, if they are citizens with dependent children and have incomes less than

the qualifying thresholds. In addition, for two-parent households, the primary earner must either be unemployed (or disabled) or earn less than the AFDC income threshold, or else be underemployed (as defined by each state).

Run separately by each state, the TANF eligibility rules vary widely between the five states examined in this report. In California the income limits vary each year, with the 2008 income limit at $12,960 for a three-person household, or around 70 percent of FPL. California also uses an income disregard (income not included when calculating Medicaid's income eligibility threshold) that equals 100 percent of FPL minus the 1996 AFDC Maximum Aid Payment. For a three-person household this brings the effective 2008 FPL to 125 percent. Unlike California, Florida's income limits are fixed at the 1996 AFDC standard of $3,636 for a three-person household, or around 20 percent of FPL, and are declining over time. Also, Florida only has an income disregard for those who are already receiving Medicaid. For these people it is the $200 and a one-half earned income disregard, which pushes up the effective 2008 FPL to 166 percent.

Illinois's income limits vary periodically and by whether or not there is an adult in the household. The 2008 limit was $4,752 for a three-person household with a parent, or 26 percent of FPL. If a family is already receiving Medicaid, they are eligible for the $30 and one-third earned income disregard, or 55 percent of the FPL in 2008. New York income limits also vary over time but not necessarily every year. In 2008 the income limit for a three-person household was $12,276, or around 67 percent of FPL. New York also has the $30 and one-third earned income disregard for those already receiving Medicaid, bringing the effective 2008 FPL to 137 percent. Texas's AFDC income limit is also stagnant at the 1996 level, which varies by the number of adults in the household. The income level for a single-parent, three-person household is $16,668, which in 2008 was at 91 percent of FPL, and declining. Texas also maintains separate TANF rules with a 1996-level income limit for a household of three with one parent at $9,012, approximately 50 percent of FPL, and declining. If the family is currently receiving Medicaid, they get a one-third earned income disregard, bringing the effective FPL to 74 percent.

Run separately by each state, the TANF eligibility rules vary widely between the five states examined in this report.

c. Blind/Disabled and Elderly. Social Security Supplemental Security Income recipients are also eligible for Medicaid benefits under the Medicaid for Employed Persons with Disabilities program. The qualifying rules consider unearned income (net of a monthly $20 exclusion) and earned income (net of a monthly $65 exclusion and an annually determined student earned-income exclusion), the sum of which must be below a specific annually indexed dollar threshold ($11,472 for a couple in 2009). Additionally, retirees and disabled individuals qualify for subsidies to pay for their Medicare costs (premiums, co-pays, etc.) funded out of Medicaid through the Medicare Savings Program. These rules require individuals to be receiving Social Security or Railroad Retirement benefits and have family income less than 200 percent of FPL for retired persons and 135 percent of FPL for blind/disabled individuals. Further, disabled workers with earned income less than 250 percent of FPL qualify for the Medicaid buy-in program. The blind/disabled and elderly eligibility rules are the same across all states as dictated by the Social Security Act.

d. Other Reasons. The federal government requires that states' Medicaid programs cover the above groups of people in order to receive federal matching funds for Medicaid. States are not compelled to cover the following groups of people, although many states—including all five states examined in this report—do extend at least some benefits to these groups.

Foster-care children are covered under Medicaid if the household they came from qualifies for AFDC/TANF or has an income below the federal poverty level. When a foster-care child ages out of the system at age

18, the child continues to be fully covered through age 21 if that child has an income below a certain FPL. Under the new health care law, the age limit to receive Medicaid for aged-out foster-care children has risen to 25. Medically needy individuals can also be fully covered by Medicaid if the state elects to. Medically needy individuals are determined by a combination of income thresholds and medical expenses.

Women aged 18–44 with incomes below a state-specific FPL qualify for Medicaid family-planning services (of which pregnant women receive full Medicaid benefits). States may also receive waivers to expand family planning to more of their populations. Women between the ages of 18 and 64 may also be eligible for breast or cervical cancer care under Medicaid if they are found with either of those cancers and their income is below a certain threshold as determined by the states.

Last but not least, certain groups of people may become eligible under the waiver system. Specifically, the 1115 waiver allows states to write-off certain rules for a demonstration or pilot project. New York has taken this opportunity to allow childless individuals below 100 percent of FPL to be eligible for Medicaid. In most cases the 1115 waiver and the other waivers (1915(b) and 1915(c)) are used to expand services or change the way services are conducted.

A3. Medicaid Eligibility, Enrollment, Recipiency, and Average Benefits per Enrollee. This section describes information obtained from calculating each of the four components for those with FPL less than 100 percent as noted in Section *A1* above—namely, eligibility rates, enrollment rates, recipiency rates, and average benefits per recipient. Because eligibility conditions and health needs differ substantially by age and gender, the four items are calculated separately for various age groups (see note 17), gender, and FPL-relative income levels. In addition, special eligibility groups such as the medically needy, foster-care children, family planning, and others are treated separately. The calculations span the years 2000–08, corresponding to the latest available data from the CPS (on eligibility rates) and MSIS (enrollment and recipiency rates, average benefits per recipient).

It should be noted that the methodology for projecting eligibility, enrollments, and other ratios as described above is different from those adopted in other studies, particularly the Kaiser study referenced earlier (see note 16). As in my study, Medicaid eligibility rates are determined from the Current Population Survey's Annual Social and Economic Supplement in the Kaiser study. The latter study fixes baseline eligibility rates according to those observed in the 2007 data. In my study, however, eligibility trends are established between 2000 and 2008 and those trends are projected forward using linear regressions—one for each eligibility group. This method is likely to more robustly establish and extrapolate the direction of change of group-specific population eligibility rates projected, with and without PPACA's eligibility rules. The same remark applies to the determination of enrollment and beneficiary ratios and average benefits per beneficiary. Thus, my study tracks the change in the trend in state GR Medicaid spending that PPACA would induce over and above spending without PPACA, whereas the Kaiser study measures changes from fixed eligibility rates benchmarked to 2007. Also, the Kaiser study uses fixed, assumed rates of new enrollments post-PPACA for old-eligibles and for those newly eligible under PPACA. Those rates are taken from average enrollments over all groups reported by the Congressional Budget Office. My study, in contrast, allows the CPS and MSIS data to inform the calibration of group-specific new enrollment rates for those newly eligible and those who are not enrolled (without PPACA) among old-eligibles. For both types of new enrollees, group-specific enrollment rates are taken to be the larger of the enrollment rate without PPACA (for the entire group) or the non-insurance rate among those (old-eligibles or the newly eligible) not

Women aged 18–44 with incomes below a state-specific federal poverty level qualify for Medicaid family-planning services.

In all states, Medicaid eligibility rates increased during the last decade among children of all ages and both genders.

enrolled in Medicaid, again assuming the absence of PPACA.

a. Eligibility, Enrollments, Recipiency, and Benefits among Children. In all states, Medicaid eligibility rates increased during the last decade among children of all ages and both genders.[20] The data indicate that more than 80 percent of almost all child age and gender groups (except for newborns) were Medicaid-eligible by 2008. During the early 2000s, enrollment rates were much smaller for older children compared with younger ones. However, enrollment rates for older children have increased steadily so that, by 2008, more than 60 percent of all eligible children are enrolled in the program. Medicaid recipiency rates were quite high during the early 2000s and have increased consistently during the last decade: at least 85 percent of all child groups received Medicaid benefits during 2008—again, except for newborns, who have the smallest recipiency rates.

On the other hand, the data indicate that newborns incur the highest Medicaid expenditures. Excluding newborns and those aged 1–5, Average Medicaid expenditures per recipient are smaller for younger children and they increase with age. However, average expenditures for the oldest children are only about one-half of those for newborns. Average expenditures have trended upward during the last decade, reflecting the general rapid increase in health care costs.

b. Working-age Adults. Working-age adults are split between disabled adults, non-disabled adults, and others, where the last category includes medically needy individuals and women eligible for benefits from the Breast and Cervical Cancer Act under Medicaid. For non-disabled adults, eligibility rates under Medicaid are distinctly different for males versus females. As Figure A1 shows, female eligibility rates among the 0–100 percent FPL category were at 40 percent or less and barely increased during the last decade.[21] That is not surprising, because women are more likely to be part of a low-income family. Figure A2 shows that Medicaid eligibility rates are much smaller for men (as they are less likely to be in low-earning families and are also less likely to have a Medicaid-eligible child as a dependent, on average), and the pattern of eligibility by age-group is reversed compared with females: older males have a higher likelihood of qualifying for Medicaid, probably because a higher proportion of men work in strenuous jobs and become disabled or unemployed at older working ages.

Figures A3 (females) and A4 (males) show that Medicaid enrollment rates among eligibles is widely divergent across the five states examined here. Enrollment rates are highest in California for both genders. Enrollment rates are low and/or declining in Illinois and New York, a fact that plays a key role in generating high spending increases in those two states when PPACA's individual health insurance mandate is included when making spending projections. Florida and Texas have mixed enrollment rates across age groups—high for those aged 19–20, but low among many older age-gender groups.

Figures A5 and A6 show Medicaid recipiency rates above 80 percent for females in all states. For males, recipiency rates in all states except California were low at the turn of the century, but increased rapidly to reach the same levels as those for females by 2008. California's recipiency rates, however, appear to be declining rapidly—a factor that explains the low impact of introducing PPACA when making spending projections. Figures A7 and A8 show that older non-disabled adult beneficiaries receive larger Medicaid benefits, on average, compared with younger ones—except in California. Benefit awards per beneficiary are stable or gradually increasing in California, Florida, Illinois, and Texas. They increase more rapidly in New York for both genders. Differences in benefit awards per beneficiary by age-group are much larger for men compared with women.

c. Retirees. Among those aged 65 and older in the 0–100 percent FPL range, eligibility rates are highest in Texas—well above 80 percent among younger retirees and close to 100 percent among older ones.[22] Given Tex-

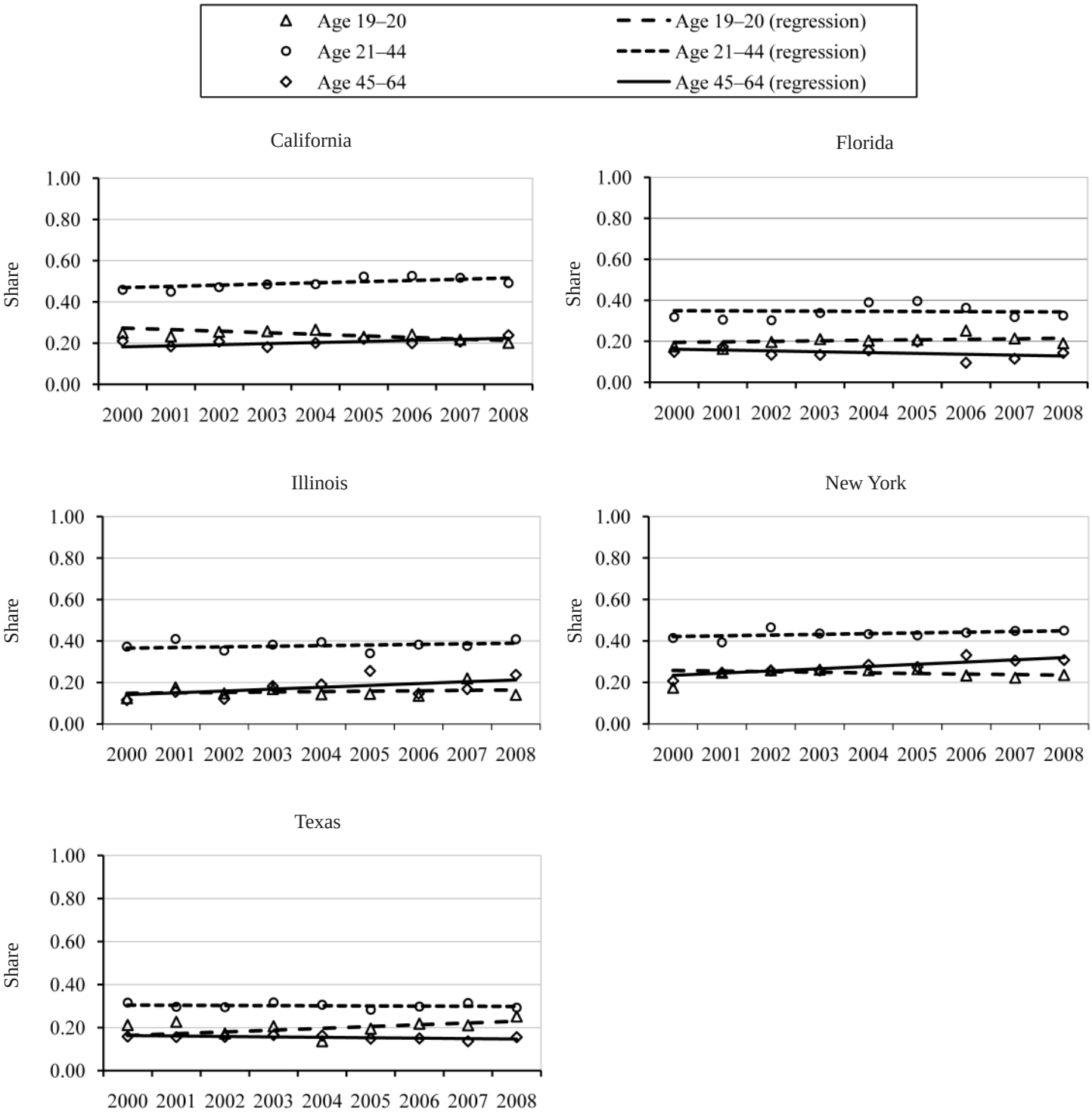
as's moderate historical enrollment rates, these conditions imply a strong spending-increasing effect from introducing PPACA. Eligibility rates are lowest for Illinois and average about 50 percent for the other three states. Enrollment rates are highest for California and Florida, with rates in the three other states varying from 30 percent in Texas to 80 percent in Illinois and New York. Enrollment rates have generally increased, more so among the oldest retirees. Medicaid recipiency rates were quite high in all of the five states considered here—about 80 percent during the early years of the 21st century—but have declined since for both genders, especially in Florida, New York, and Texas. The reason for this may be the expansion of Medicare Part B coverage and the shift of many retirees' Medicaid coverage for prescription drugs to the Medicare program. Finally, average Medicaid expenditures per recipient increased across all retiree age groups—Illinois being the exception—and the increase was especially rapid for the oldest retirees.

d. Other Groups. Calculations of eligibility, enrollment, recipiency, and average benefits per recipient are implemented separately for foster-care children, medically needy individuals, women qualifying under the Breast and Cervical Cancer Act, the family-planning program, and blind/disabled adults. Except for blind/disabled adults, CPS data do not allow identification of the eligible populations for these groups.[23] Hence, calculations are based on directly calculating the share of enrollees in the population based on MSIS data for foster-care children, BCCA women, family-planning recipients, and medically needy individuals.

For blind/disabled adults, however, eligibility co-criteria based on income (including spousal income where applicable) are incorporated, again counting all eligible sources and net of applicable exemptions, deductions, and income disregards. Medicaid eligibility rates were higher for older blind/disabled adults compared with younger ones in most states, and they have generally increased during the early years of the 21st century across all age groups. Data show stable enrollment rates for most blind/disabled women—higher in California and Florida than in the other three states. Enrollment rates have been higher, but stable overall, for disabled/blind men compared with women during the last decade—also highest in California and Florida. Medicaid recipiency rates have been stable or declining in Florida and Texas for most disabled adults, and stable or increasing in the other three states. However, Medicaid expenditures per blind/disabled recipient are among the highest among all population groups and have increased consistently for both genders in all states except Illinois during the last decade.

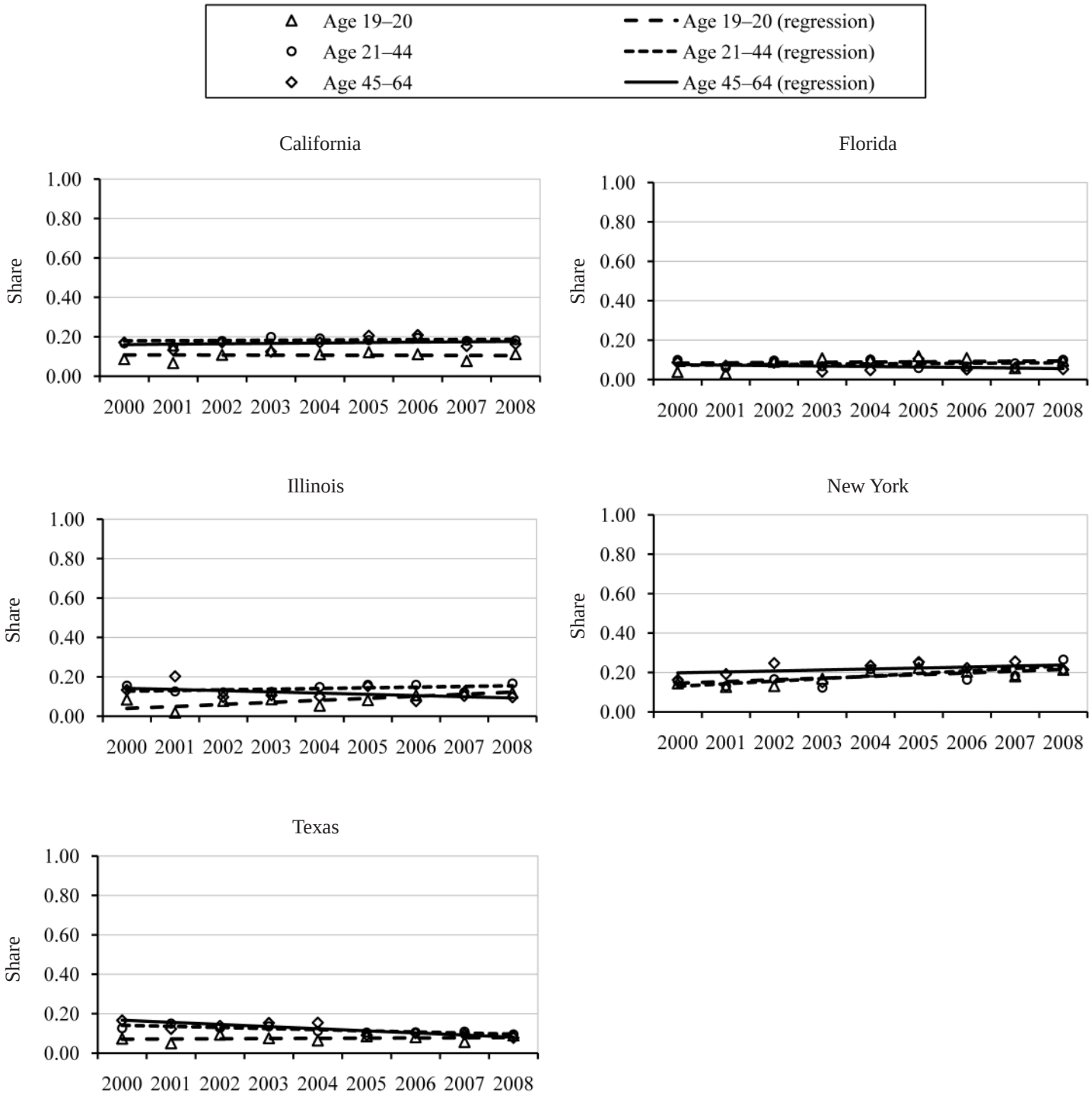
Medicaid recipiency rates were quite high in all of the five states considered here—about 80 percent during the early years of the 21st century.

Figure A1
Shares of Medicaid Eligibles in State Populations and Linear Trends for Female Non-Disabled Adults Aged 19–64; 0–100 Percent of FPL; 2000–08



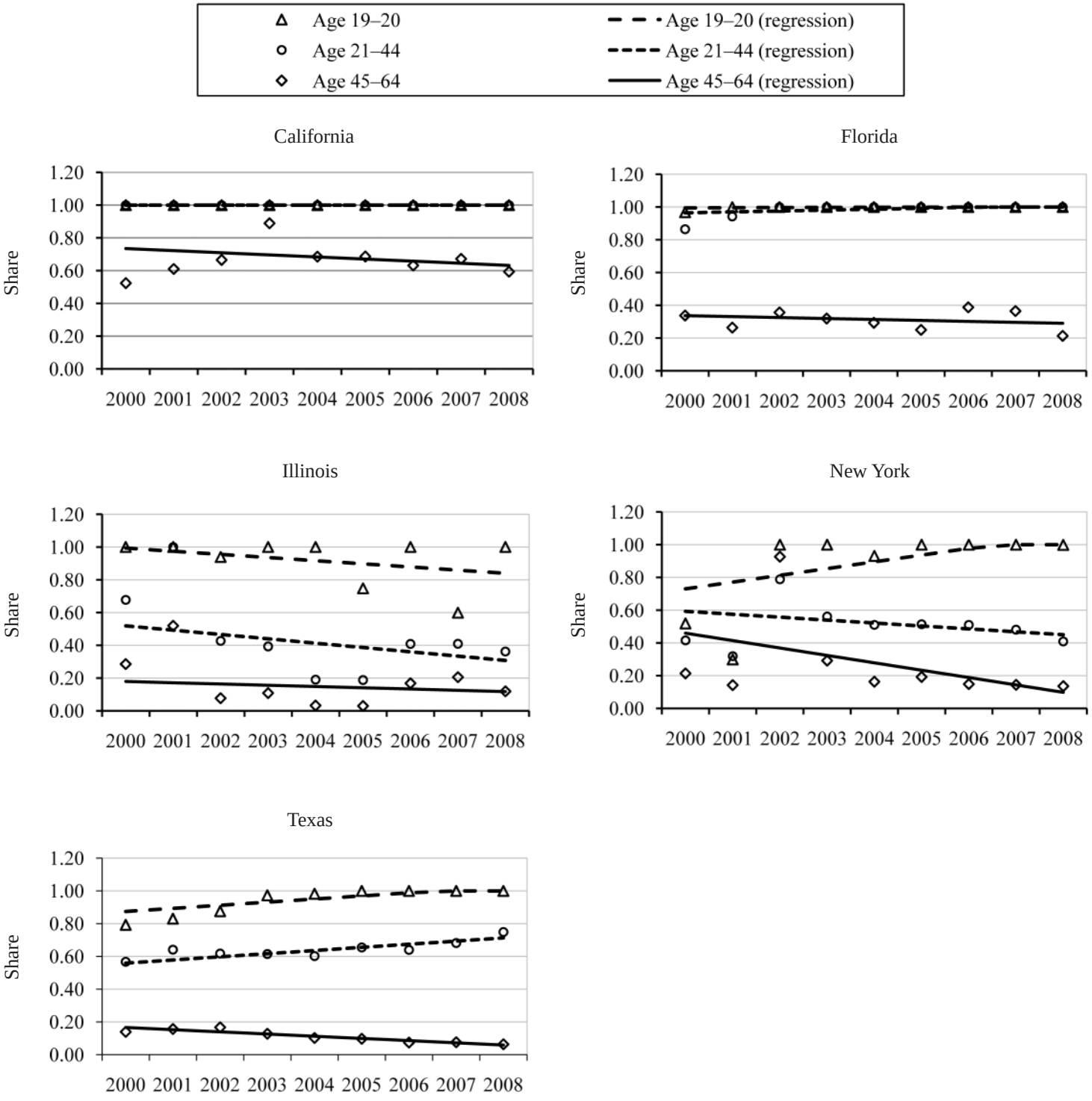
Source: Author's calculations based on the Medicaid Statistical Information System, current population surveys, CMS-64 reports, and the U.S. Census Bureau.

Figure A2
Shares of Medicaid Eligibles in State Populations and Linear Trends for Male Non-Disabled Adults aged 19–64; 0–100 percent of FPL; 2000–08



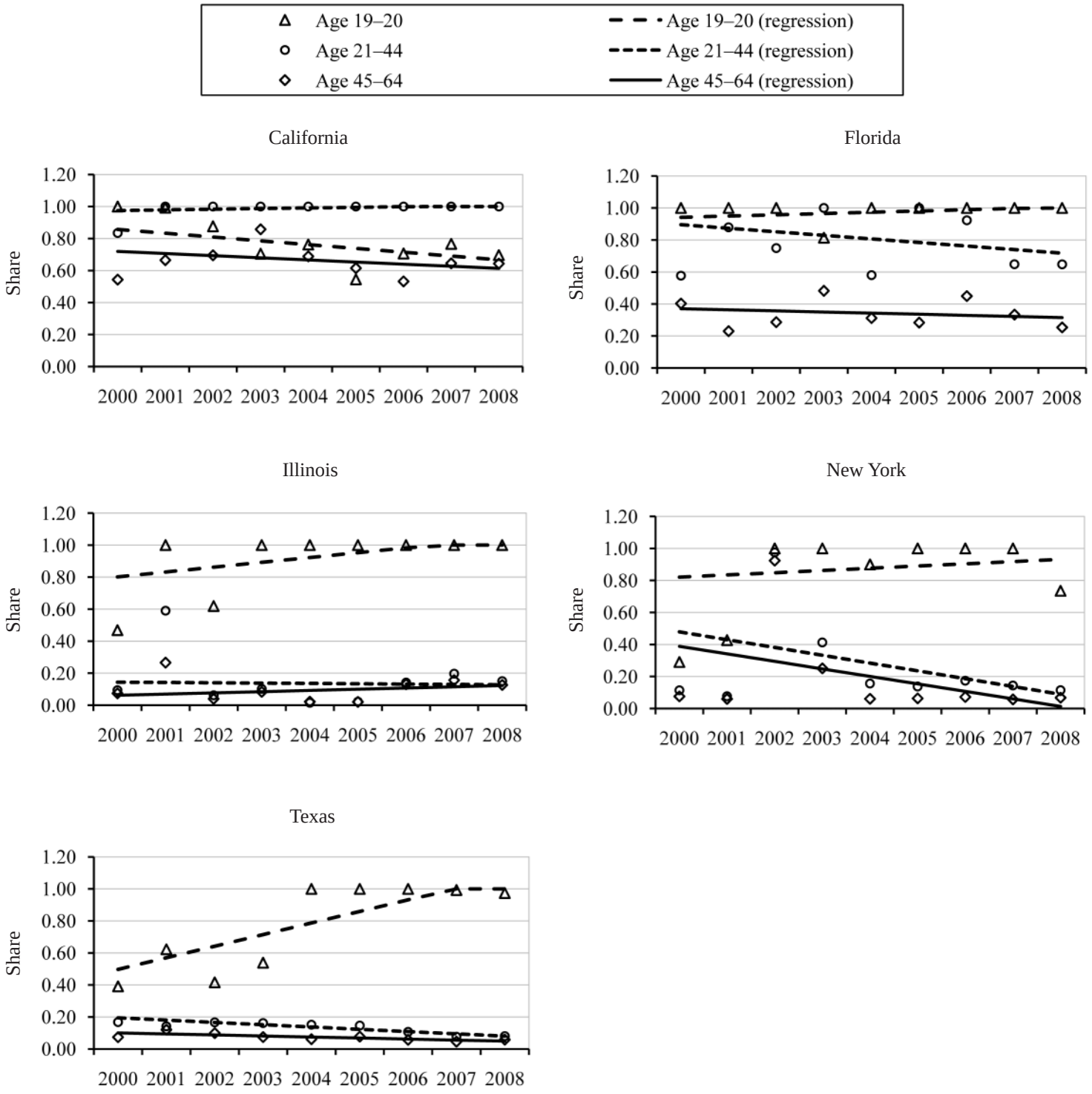
Source: Author's calculations based on the Medicaid Statistical Information System, current population surveys, CMS-64 reports, and the U.S. Census Bureau.

Figure A3
Shares of Medicaid Enrollees among Eligibles and Linear Trends for Female Non-Disabled Adults Aged 19–64; 0–100 Percent of FPL; 2000–08



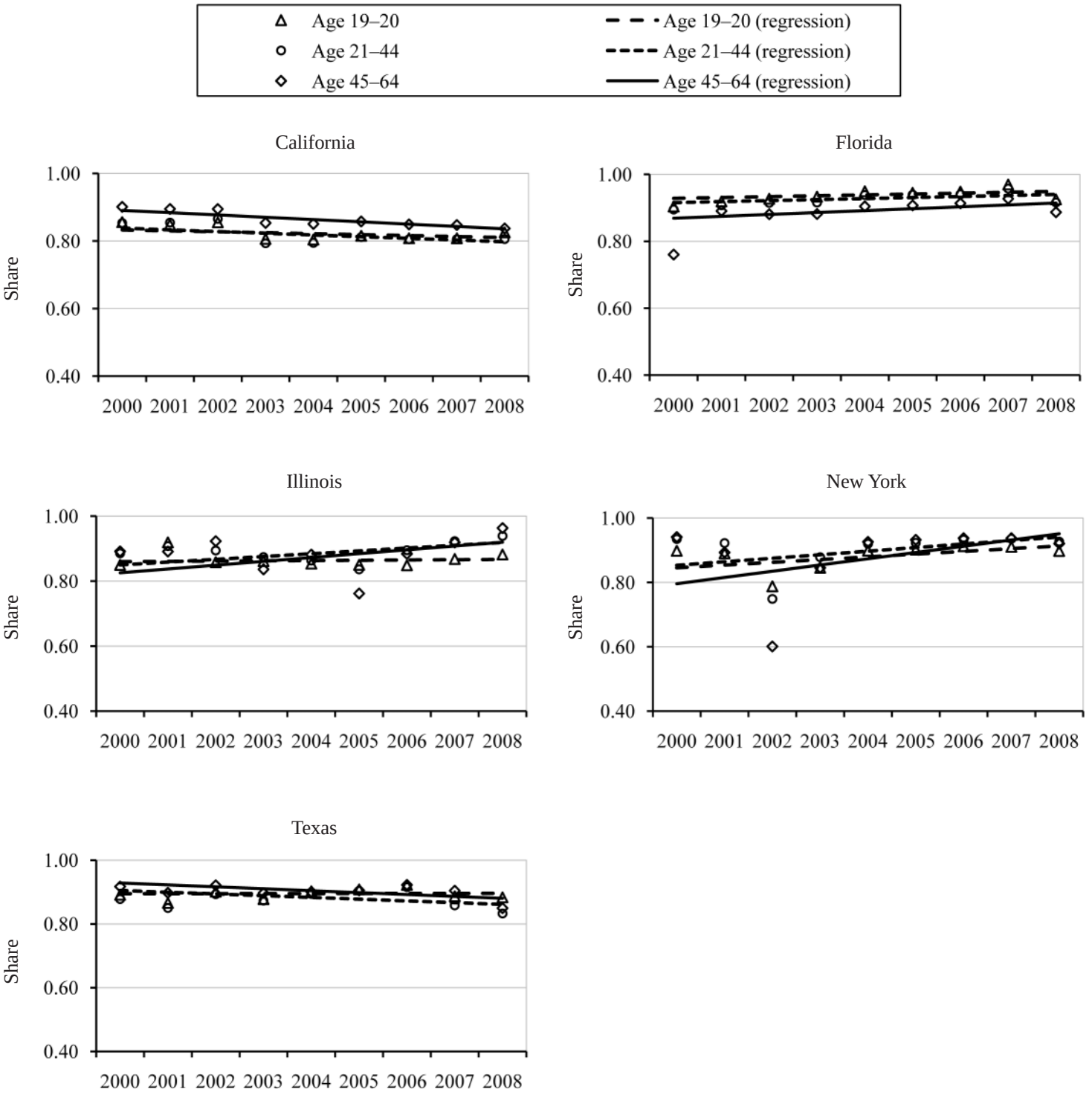
Source: Author's calculations based on the Medicaid Statistical Information System, current population surveys, CMS-64 reports, and the U.S. Census Bureau.

Figure A4
Shares of Medicaid Enrollees among Eligibles and Linear Trends for Male Non-Disabled Adults Aged 19–64; 0–100 Percent of FPL; 2000–08



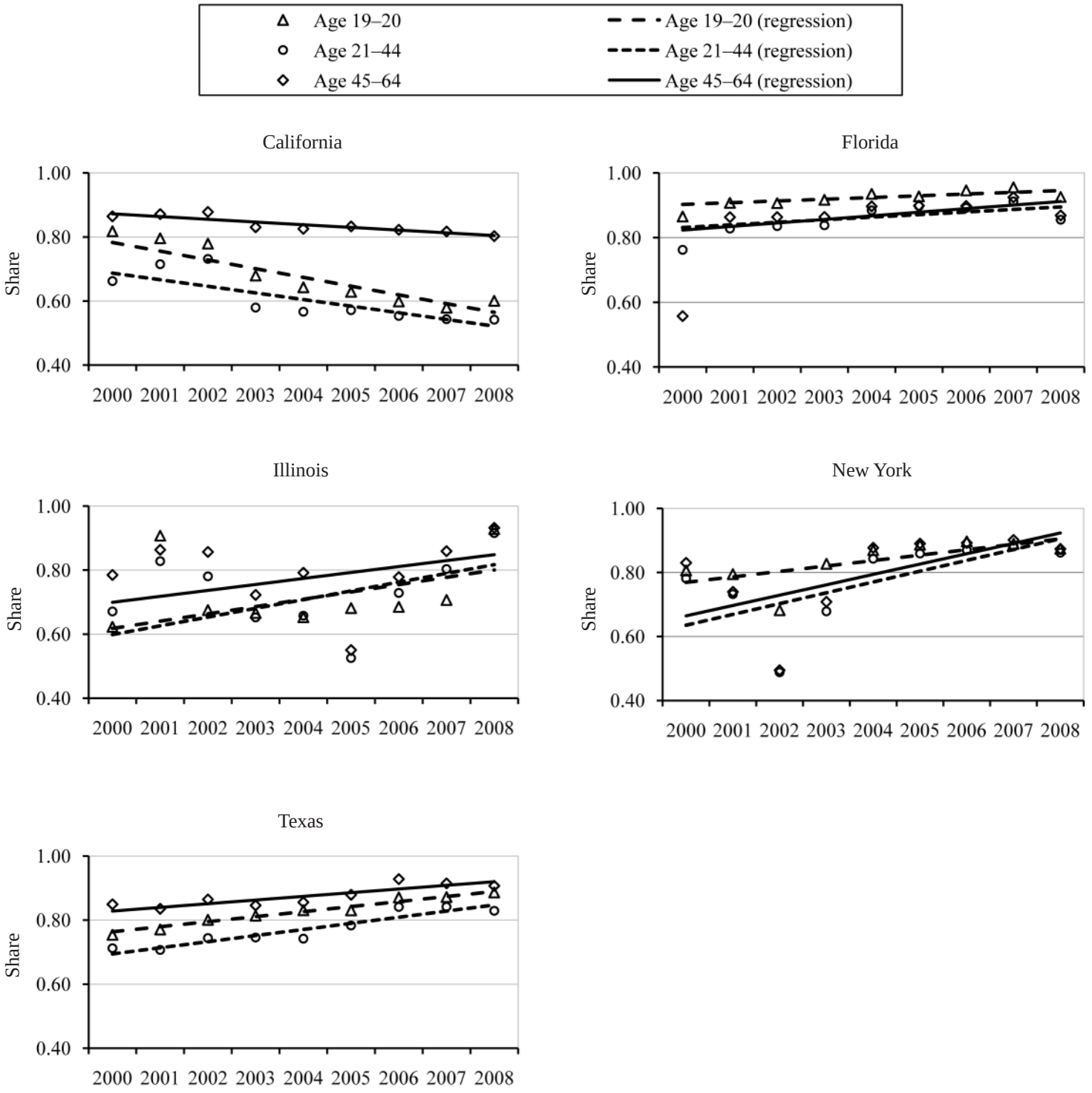
Source: Author's calculations based on the Medicaid Statistical Information System, current population surveys, CMS-64 reports, and the U.S. Census Bureau.

Figure A5
Shares of Medicaid Beneficiaries among Enrollees and Linear Trends for Female Non-Disabled Adults Aged 19–64; 0–100 percent of FPL; 2000–08



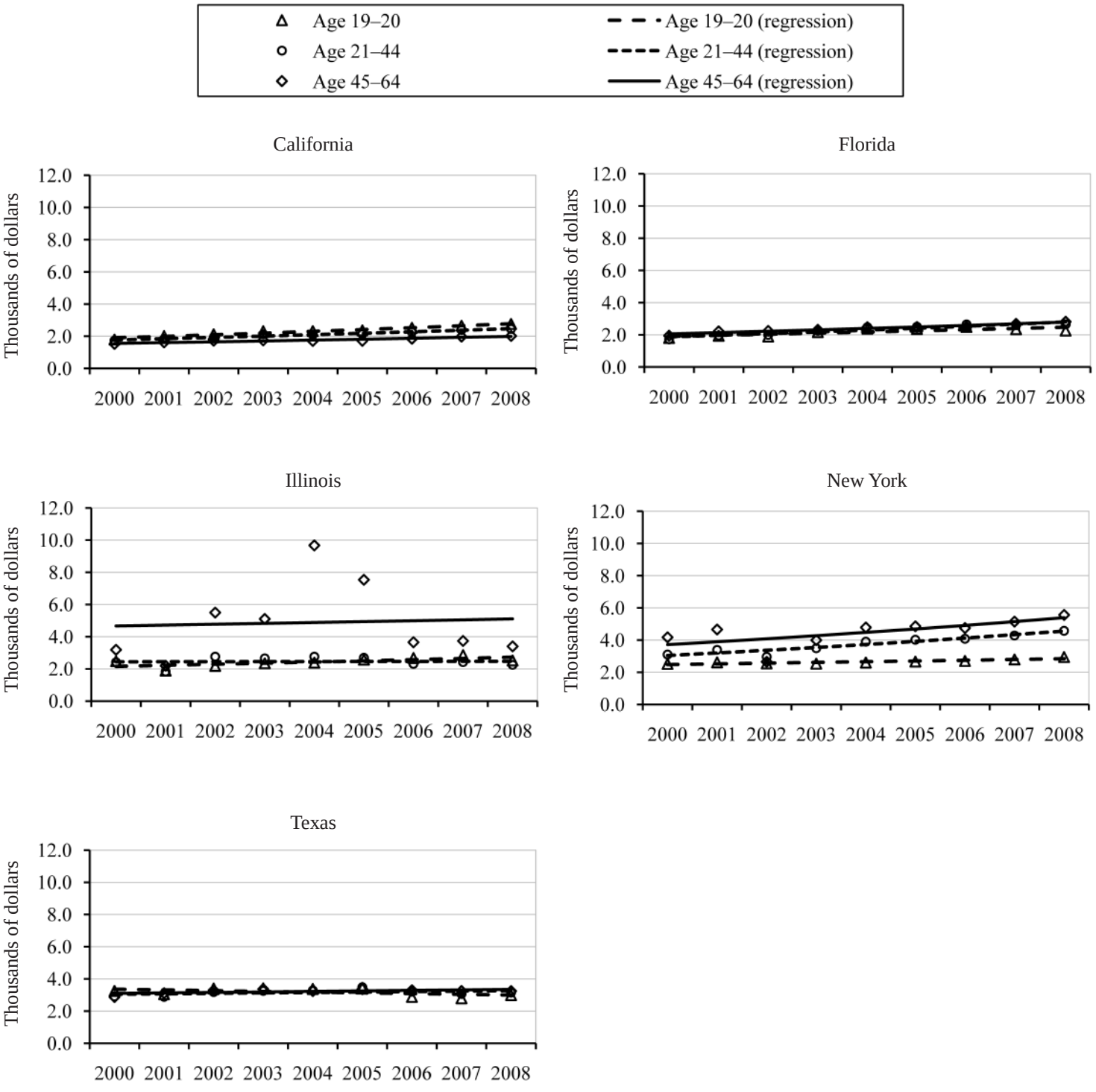
Source: Author's calculations based on the Medicaid Statistical Information System, current population surveys, CMS-64 reports, and the U.S. Census Bureau.

Figure A6
Shares of Medicaid Beneficiaries among Enrollees and Linear Trends for Male Non-Disabled Adults Aged 19–64; 0–100 percent of FPL; 2000–08



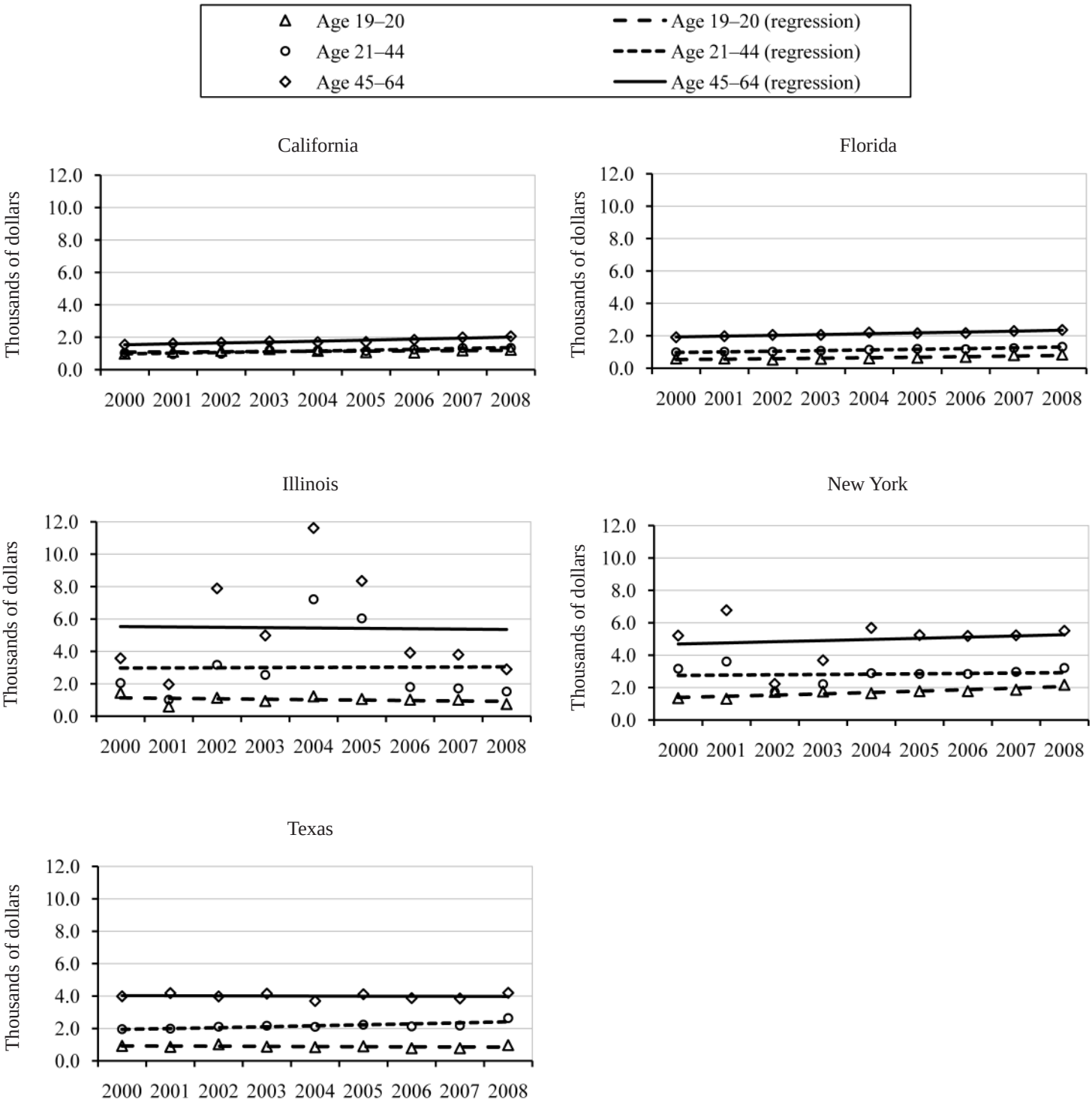
Source: Author's calculations based on the Medicaid Statistical Information System, current population surveys, CMS-64 reports, and the U.S. Census Bureau.

Figure A7
Average Medicaid Expenditures per Beneficiary and Exponential Trends for Female Non-Disabled Adults Aged 19–64; 0–100 percent of FPL; 2000–08



Source: Author's calculations based on the Medicaid Statistical Information System, current population surveys, CMS-64 reports, and the U.S. Census Bureau.

Figure A8
Average Medicaid Expenditures per Beneficiary and Linear Trends for Male Non-Disabled Adults Aged 19–64; 0–100 percent of FPL; 2000–08



Source: Author's calculations based on the Medicaid Statistical Information System, current population surveys, CMS-64 reports, and the U.S. Census Bureau.

Notes

This paper draws heavily from "The Effects of ObamaCare on Texas's Medicaid Expenditures' Growth," by Jagadeesh Gokhale, published in the 2010 *PolicyPerspective* series of the Texas Public Policy Foundation. Angela Erickson provided excellent research assistance.

1. State budget reports include expenditures on a General Revenue basis and the All Funds basis, the former referring to expenditures out of state revenue sources and the latter being inclusive of expenditures funded out of federal grants. This study focuses only on states' General Revenue–funded Medicaid expenditures, projected with and without PPACA.

2. Constructing these estimates is a laborious and time-intensive process, and doing so for all 50 states and the District of Columbia was not feasible.

3. The growth rate of state GR Medicaid expenditures is calculated beginning in the year 2010 and includes the effect of reduced federal support from the American Recovery and Reinvestment Act. However, see the note attached to Table 4.

4. The slowdown in economic growth all five states experienced during 2007–09 makes it very difficult to project GDP for future years. Projected Medicaid expenditure growth is, therefore, compared with historical GDP growth calculated using data from the United States Bureau of Economic Analysis. The earliest year of data available for historical calculations of annual (nominal) GDP growth is 1997.

5. States partially cover "disproportionate share hospital" (DSH) hospital costs of treating uninsured patients. Those include illegal immigrants, old-eligibles who are not yet enrolled into Medicaid, those who will become newly eligible to Medicaid under PPACA, and those who are not eligible to Medicaid currently and will not become eligible under PPACA. As everyone except illegal immigrants acquires health insurance under PPACA's individual mandate, state payments to DSH hospitals for uncompensated care will decline. But some of the cost savings will be offset because some of the previously uninsured (among both old-eligibles and those made newly eligible under PPACA) will enroll into Medicaid. However, other newly insured individuals may enroll into private health insurance—generating sizable state savings of uncompensated care. State uncompensated care costs will remain positive on account of illegal immigrants. Because California has very few potential new Medicaid enrollees (especially among old-eligibles) but has a large number of uninsured, much of California's uncompensated cost saving under PPACA is likely to arise from newly privately insured individuals. These costs savings appear to dominate the state's increased Medicaid spending from the few new Medicaid enrollees among old eligibles and those made newly eligible under PPACA.

6. There is an exception for states with waivers already covering these populations, such as New York. These states will continue to pay Medicaid benefits to these individuals for the first three years and then will have an increased Federal Medical Assistance Percentage for the newly eligible that will match those for other states by 2019. For New York and other non-expansion states this represents a cost savings per childless adult enrollee.

7. Qualification for Medically Needy Program benefits varies by state. In Texas, for example, an applicant must be: (1) a pregnant woman with no child eligible for the Temporary Assistance for Needy Families Program; (2) a child under 19 years of age; or (3) an adult caretaker whom the state's Health and Human Services Commission includes in the certified group, and who ordinarily receives and manages the benefits for the certified group, except that the caretaker's countable income exceeds TANF limits, the caretaker's 60-month time-limited TANF benefits are exhausted, the caretaker chooses Medicaid-only benefits, or the caretaker is disqualified from TANF for a reason that is not applicable to Medicaid; and (4) have countable income that meets the applicable income limit. The income limit is defined based on family size; for a family of two people, it is $216 per month. Applicants whose income exceeds the limit may spend down excess income to pay medical bills and qualify.

8. The formula equals 100 percent minus the state's share where the state's share equals $0.45 \times (SPCI/USPCI)^2$, where SPCI is state's per capita income and USPCI is the United States' per capita income. A higher SPCI translates into a lower FMAP value.

9. The 2012 FMAP value for Texas is expected to be published by the federal department of Health and Human Services in November 2010.

10. Census Bureau state-wise population projections are available online at: http://www.census.gov/population/www/projections/projectionsagesex.html.

11. Increases in future Medicaid expenditures in each state will also depend on how successful efforts are to repeal PPACA. Twenty-six states have filed court cases to challenge the new health care law on two grounds: (1) that mandating purchase

of health insurance by individuals (with failure punishable by a fine) is unconstitutional under the Tenth Amendment and Article I of the U.S. Constitution (the commerce clause); and (2) that the new health care law increases states' Medicaid expenditures without recompense from the federal government—that is, it constitutes an unfunded mandate.

12. Despite determining enrollment rates for heretofore non-enrolled old-eligibles (as described in the text), a valid question is whether it is appropriate to apply the same beneficiary/enrollment and benefits/beneficiary rates applicable to pre-PPACA Medicaid enrollees when making projections on a post-PPACA basis. There are several reasons that justify doing so: first, the uninsured do not have zero health care costs; their emergency room visits are costly and the costs are shifted to other patients who either pay out-of-pocket or through their insurers. Second, the uninsured have low measured health care costs *because* they are uninsured. Once they are insured under Medicaid via PPACA and the individual health insurance mandate, their utilization of health care goods and services is likely to increase and match that of other Medicaid enrollees. Third, some of the uninsured may be without insurance because they have pre-existing conditions that are expensive to treat. Indeed, after they enroll into Medicaid under PPACA, those costs may surpass the average costs of those already insured. Fourth, historical trends in the ratio of beneficiaries among enrollees are increasing, suggesting that future expenditures may be larger as more people need and claim health insurance benefits. Finally, the old-eligibles newly enrolled under PPACA may be uninsured and young, but their health care needs and costs will grow over time.

13. Uncompensated care savings are calculated by distributing total state DSH spending among the state's uninsured population, and allocating the cost to those who are legally obligated to acquire health insurance under PPACA—all uninsured except for illegal immigrants. Uncompensated care savings in future years are anchored on the state's population projections.

14. All five states exhibit stable or declining ratios of beneficiaries-to-enrollees among non-disabled retirees. The declines are steepest in Florida and New York.

15. These results depend on projections of average benefits per recipient and enrollments on a pre-PPACA basis between 2008 (the latest year with full information available at the time of writing this study) and 2014. However, the results obtained for 2014 and beyond are consistent with those obtained by simply dividing total expenditures by enrollments in the base (historical) year, 2008.

16. See Note 6. A further reason for the low spending increase in California from PPACA is that the ratio of beneficiaries among enrollees has historically declined, especially among the largest group of non-disabled adults—a feature that would dampen future expenditures under the methodology of this study.

17. Even when the incremental Medicaid spending totals under this study are restricted to the 2014–19 period, spending increases among the four states, excluding California (for which the increase is small), range from 17 percent for Florida to 28 percent for Illinois. Kaiser's estimates are available online at: http://www.statehealthfacts.org/comparereport.jsp?rep=68&cat=4.

18. The age categories correspond to those of the Medicaid State Information System's age ranges: 0, 1–5, 6–12, 13–14, 15–18, 19–20, 21–44, 45–64, 65–74, 75–84, and 85+.

19. The income ranges are defined according to the applicable cutoffs before and under the new health care law. Those cutoffs are generally different for population groups served by various Medicaid programs in Texas.

20. Charts for selected child age/gender/FPL groups are available from the author upon request.

21. Although post-PPACA Medicaid eligibility is based only on an income test, pre-PPACA eligibility requires an asset test as well. The pre-PPACA asset test is incorporated based on information from the 2007 Survey of Consumer Finances. Calculations show that the population share of adult non-disabled household heads who fail the Medicaid asset test and who do not receive Medicaid is 13.2 percent for the nation as a whole. Unfortunately, the survey does not allow separate identification of Texas residents, nor of blind/disabled individuals. Therefore, an approximate asset-based constraint is applied to pre-PPACA eligibility rates, to restrict Medicaid eligibility to 86.8 percent (100 percent minus 13.2 percent) of the income-based eligibility rate as calculated from the Current Population Survey.

22. Charts for selected age/gender/FPL groups are available from the author upon request.

23. Medicaid eligibility criteria for children in foster care and younger than age 18 are the same as those for non-foster-care children aged less than 18. Eligibility under AFDC/TANF rules are based on the incomes of the household a child comes from before foster care placement. For children older than age 18 there is the Medicaid for Transitioning Foster Care Youth program,

whereby the person must have aged out of foster care, must be between the ages of 18 and 20, must not be covered under another health plan offering adequate benefits, and must have income at or below 400 percent of the Federal Poverty Level. Medicaid eligibility criteria for persons with breast and cervical cancer include the provision that the person must be diagnosed with breast cancer (men and women) or cervical cancer (women only), must not have income more than 200 percent of the FPL, and must not have alternative medical insurance coverage.

Reforming Medical Malpractice Liability through Contract

Michael F. Cannon
Director, Health Policy Studies
Cato Institute

Cato Institute
1000 Massachusetts Avenue, N.W.
Washington, D.C. 20001

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Reforming Medical Malpractice Liability through Contract

Michael F. Cannon*

This paper discusses the medical malpractice "crisis" and the potential of contract liability to reduce overall malpractice costs as well as improve the quality of and access to care. First, the paper describes the current medical malpractice liability "system" and some of the more common reforms offered. It then discusses the economic rationale of allowing patients and providers to agree in advance of treatment on how the patient will be compensated in the event of simple negligence on the part of providers, explaining how contract liability may offer improvements in the areas of costs, patient preferences, the pursuit of more efficient liability rules, and quality of care. The paper then critiques select objections to contract liability – those based on the superior bargaining power of providers, the lack of information available to patients, and possible reductions in quality – and forwards possible limitations on the right to contract that may allay such concerns.

Michael F. Cannon is director of health policy studies at the Cato Institute.

I. Introduction

Patients typically have little information about the quality of medical care in advance of seeking treatment. One way the law seeks to overcome that information problem is by allowing patients injured by sub-standard care to recover from the responsible health care provider through an action for negligence. Rules for medical malpractice liability are determined by the courts and legislatures and are uniform within a state. That is, the medical malpractice "system" requires the same level of protection for all patients.

There is near-universal agreement that the current medical malpractice system does not achieve its aims. In theory, that system is supposed to encourage providers to deliver high-quality care by transferring to negligent providers a large portion of the costs that their negligence imposes on patients. Insofar as that system makes the provider suffer financially when her negligence injures her patient, it aligns the incentives of the provider with the needs of the patient. In practice, however, the medical malpractice system achieves that goal rather imperfectly. Research suggests that only a small fraction of patients injured by provider negligence actually recover and that many who do recover from providers are not victims of negligence.[1] Such imprecision is one reason why a recent study estimates that in 2002, the medical liability system provided benefits of $33.0 billion, but carried far greater costs of $113.7 billion, thereby imposing a net loss of $80.7 billion on society.[2]

The costs of the medical liability system are passed on to patients through higher prices for medical care, which can make care unaffordable for those with below-average incomes

[1] Mark A. Hall et al., *Health Care Law and Ethics* 270 (6th ed 2003). *See also* Patricia Danzon, *Liability For Medical Malpractice*, in HANDBOOK OF HEALTH ECONOMICS (Anthony J. Culyer & Joseph P. Newhouse eds., 2000) at 1354, 1358.

[2] Christopher Conover, *Health Care Regulation: A $169 Billion Hidden Tax* (Cato Institute, 2004).

and/or above-average medical expenses. The above-mentioned study further suggests that the net cost of the medical liability system made health insurance unaffordable for over three million individuals in 2002.[3] Physicians and other providers – who have seen often dramatic increases in malpractice insurance premiums – have intermittently declared the medical liability system to be in "crisis" for over 30 years.[4]

This "crisis" has spawned numerous proposals to reform medical malpractice liability rules. The American Medical Association (AMA) advocates a nationwide cap on non-economic damages similar to the $250,000 cap enacted in California. The AMA claims that three-quarters of the public favor such a limit on non-economic damages.[5] Other proposals include legislative limits on contingency fees for plaintiffs' attorneys; "no-fault" compensation systems for medical injuries, such as the limited programs adopted in Florida and Virginia; alternative forms of dispute resolution, such as arbitration and special medical courts; the English rule of costs; and reform of the collateral source rule. Each of these reforms has the characteristic that it would leave some plaintiffs better off – typically by reducing prices for medical care – at the cost of leaving other plaintiffs worse off. For example, a cap on non-economic damages would reduce health care costs for non-injured patients, but at the expense of leaving some injured patients with uncompensated losses. Likewise, limits on contingency fees would reduce costs for non-injured patients, but at the cost of denying compensation to injured patients whose cases plaintiffs' attorneys deem too expensive to pursue.

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[3] *Id*.

[4] *See generally* Richard A. Epstein, *Medical Malpractice: The Case for Contract*, 1 AM. BAR. FOUND. RESEARCH. J., 87, 87-89 (1976). *But see* Bernard S. Black et al., *Stability, Not Crisis: Medical Malpractice Claim Outcomes in Texas, 1988-2002*, 2 JOURNAL OF EMPIRICAL LEGAL STUDIES, 207 (2005) ("We do not find evidence in claim outcomes of the medical malpractice insurance crisis that produced headlines over the last several years and led to legal reform in Texas and other states.").

[5] American Medical Association, *Medical Liability Reform: Q&A* (March 2006), *available at* http://www.ama-assn.org/ama1/pub/upload/mm/399/mlr_tp.pdf (last visited Nov. 29, 2006).

An alternate approach to medical liability reform would allow patients and providers to determine in advance the rules that govern how patients will be compensated in the event they are injured by simple negligence. Contractual liability rules could employ greater or lesser protections than current tort liability rules crafted by the judiciary and legislatures. For instance, a patient and provider could agree to some combination of caps on non-economic damages, the English rule of costs (or "loser pays"), and so forth. The contract could also alter the standard of care used to determine negligence. Alternatively, the contract could specify greater protections against negligence than are currently available through tort liability. A patient could demand a higher standard of care than customary practice within a region and specialty, or a California patient could insist on being able to collect more than the $250,000 statutory limit on non-economic damages.

The economic appeal of contract liability is that competent adults vary in their preferences for risk and their ability to pay for medical care. Requiring all patients to accept a uniform level of protection against negligence may price health care out of the reach of low-income patients and force others to "purchase" more malpractice protection than they would prefer. The opportunity to contract around tort liability rules could enable providers to lower their prices, thereby enabling more low-income patients to afford medical care, as well as reducing the cost of care for patients who demand less protection against negligence than tort rules require. At the same time, contract liability would allow risk-averse patients to bargain for greater protection from negligence than current tort rules offer. As discussed further in Section II, the ability to vary malpractice protections could also provide patients with a useful tool for judging the quality of different providers.

Despite this appeal, contractual limitations on providers' liability for malpractice are largely unenforceable. The main criticisms will be touched on here, and discussed at greater length below. Scholars and courts, in particular the court in *Tunkl v. Regents of the University of California*, consider such agreements to be contracts of adhesion due to the lopsided nature of the relationship between provider and patient. Some contend that such contracts violate vertical equity by suggesting that low-income individuals are due a lesser standard of care than those with greater means. Others maintain that allowing some individuals to accept less protection against malpractice would harm those who prefer higher levels of protection, in that a net loss of liability exposure could encourage providers to reduce their investments in quality.

This paper proceeds in the same fashion as the foregoing discussion. Section II presents the arguments for moving control over liability protections from tort law, the courts, and legislatures, to contract law, where liability protections may be determined by the market. Section III presents and evaluates select criticisms of contract liability that appear in the literature and case law. Section IV offers possible limitations on the right to contract around tort liability rules that might assuage the major concerns of critics. Section V concludes.

II. Contractual Liability for Medical Malpractice

This section provides the economic rationale for enforcing contracts between patients and providers that specify malpractice protections different from those available in tort. It then examines possible contract terms, as well as areas where tort liability should continue to govern provider misconduct.

Though tort law has traditionally governed medical malpractice liability, the relationship between a patient and a health care provider may be distinguished from the relationships in many actions for tort. The classic tort suit typically involves two individuals who were unknown to each other prior to the tort; for example, the pedestrian struck by a falling barrel when walking past a warehouse owned by another.[6] In contrast, patients and health care providers are typically known to one another and form a contract before the provider plies her trade. Before any negligence can occur, patient and provider typically have the opportunity to negotiate the various aspects of their relationship, in particular the quality guarantees offered by the provider. The protection that a patient enjoys against negligence by the provider is one component of quality assurance. Thus, those protections often could be one of the contractual terms negotiated by the two parties.[7]

Given the amenability of the patient-provider relationship to negotiating liability protections as one aspect of quality assurance, there are several reasons *why* a patient and provider would want to negotiate over those terms. First, patients vary in their ability to pay for medical care and their preferences for risk. As noted above, the cost of the medical malpractice "system" is widely considered to be one reason behind the rising cost of medical care and health insurance.[8] Insofar as existing tort liability rules make medical care more expensive, they likely make medical care unaffordable for those with below-average incomes. Patients who have difficulty affording medical care might wish to contract for a reduced level of protection against

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[6] Epstein, *supra* note 4 at 92, 140, citing *Byrne v. Boadle*, 2 H. & C. 722, 159 Eng.Rep. 299 (Court of Exchequer, 1863).

[7] *Id.*

[8] PricewaterhouseCoopers' Health Research Institute, *Top Seven Health Industry Trends in '07* 2 (2006) *available at* http://pwchealth.com/cgi-local/hregister.cgi?link=reg/topseven.pdf (last visited Dec. 1, 2006) (finding that 61 percent of consumers believe medical malpractice costs are a "big factor" behind rising health care costs, and a further 31 percent of consumers believe them to be "somewhat of a factor").

negligence if doing so enables them to obtain a greater degree of protection against illness. Indeed, that tradeoff could leave many patients much better off, particularly if the alternative is a high degree of protection against negligence in the delivery of medical care that they cannot afford. Distinct from issues of affordability, patients differ in their preferences for risk. Put differently, some patients value the protection against medical negligence offered by tort liability much less than other patients do. Such patients would prefer additional income in the here-and-now to the marginal reduction in risk provided by tort liability, and therefore would benefit from the opportunity to contract for a lower level of malpractice protection. By the same token, some patients may prefer *more* protection against medical malpractice than is afforded by the tort liability rules in their state. Although such patients may currently purchase additional protection in the form of disability or life insurance, they may also benefit from being able to contract with providers for an even greater level of malpractice protection. (There does not seem to be any judicial impediment to contracts that provide more protection than tort liability rules do. Nevertheless, judicial impediments to contracts providing less protection undoubtedly suppress the practice, and therefore may leave patients ignorant of that option.)

A second reason why patients and providers may prefer contract liability to tort liability is that the former would allow greater experimentation with different liability rules, which could lead to more efficient sets of rules. The political pressure currently expressing itself in state capitols and in Congress for reforms such as caps on non-economic damages is a manifestation of pent-up demand for different malpractice liability rules, at least on the part of health care providers, purchasers, and insurance companies. At present, the search for more efficient rules proceeds only in fits and starts as legislatures alter the rules of tort liability. Once new rules are enacted, it again becomes difficult for those who are dissatisfied to make alterations. Doing so

again requires judicial or legislative intervention. In contrast, contract liability would allow dissatisfied patients and providers to make instant corrections. That agility makes it more likely that disfavored rules would be discarded under contract liability than under tort liability, where interest groups can pressure the legislature to preserve their preferred rules.

A third appeal of contract liability is that it could improve the quality of care. To differentiate themselves from low-quality providers, high-quality providers must offer patients credible signals of quality. That is, high-quality providers must signal the quality of their services in a way that low-quality providers cannot emulate. For instance, both high- and low-quality providers can make unsupported claims about the quality of their services, making such claims not credible. An example of a credible quality signal is a high rating from an independent organization, such as the web site HealthGrades or *Consumer Reports*, although at present such organizations have little quality information to offer regarding individual providers. Another credible quality signal would be an enforceable contract wherein high-quality providers agree to furnish more protections against malpractice for the same price that low-quality providers charge, or identical liability protections at a lower price.

In the current system of tort liability, providers who are less likely to injure patients through negligence have little ability to convey that information in a credible manner. There are a number of reasons. First, the fact that a provider has been sued for malpractice, whether successfully or not, appears to be a poor indicator of the quality of care. The incidence of malpractice claims appears to bear little relation to the incidence of injuries due to negligence. It is estimated that some 98 percent of potentially valid malpractice claims are never filed; some 80 percent of those claims that are filed are invalid; and nearly 50 percent of filed claims result in a

payout, which implies that many invalid claims result in payouts.[9] Second, because providers insure against malpractice claims, and insurers tend not to vary malpractice premiums according to the quality of care, high- and low-quality providers tend to pay the same malpractice premiums. Thus high-quality providers cannot differentiate themselves by offering the same level of liability protection at a lower cost. Liability rules that prevent (only) invalid claims could enhance the ability of insurers to price malpractice coverage according to an individual provider's risk of injuring a patient through negligence. However, uniform tort liability frustrates the discovery and adoption of such rules.

In contrast, contract liability offers considerable flexibility to experiment with liability rules designed to reduce frivolous claims, such as the English rule of costs, which requires the losing party in litigation to pay some or all of the litigation costs of the winning party. Insofar as contract liability would allow discovery and implementation of rules that discourage frivolous claims, the share of claims that are valid would grow. That in turn should enhance malpractice liability insurers' ability to price coverage according to a provider's risk of being sued for negligence. In such an environment, high-quality providers would have a credible way of signaling quality. They would face smaller malpractice insurance premiums, and thus could differentiate themselves from low-quality providers by offering more liability protections for the same price, or identical liability protection for a lower price. By providing the freedom to experiment with different liability rules, contract liability presents an opportunity to improve the quality of care by rewarding high-quality providers and punishing low-quality providers.

Contract liability could facilitate quality improvements in other ways as well. Many providers are reluctant to collect or release data on medical errors for fear that those data could

[9] Hall et al., *supra* note 1 at 270. *See also* Danzon *supra* note 1 at 1358 ("Overall, only 43 percent of claimants receive any payment").

expose providers to greater liability. As a result, a potentially important tool for measuring and improving quality may go under-utilized. Allowing providers and patients to create contractual safe harbors for medical error data could encourage its collection.

What liability rules might providers and patients adopt if they knew that courts would enforce such contracts? Early candidates would include the very rules that interest groups currently seek to impose legislatively: caps on non-economic damages, limits on contingency fees, mandatory arbitration, medical courts, the English rule of costs, and changes to the collateral source rule. Those who lobby for caps on damages for pain and suffering could insist on such limits in their own contracts with health care providers.[10] Caps on damages could be set as low as $0 for the indigent faced with the prospect of otherwise receiving no medical care. Simply capping overall damages would provide a variant of collateral source rule reform for those who are elsewhere insured against disability. Contract liability could employ all, some, or none of the above-mentioned rules. The ability to experiment would generate novel combinations of these rules and even novel rules. Insofar as these innovations leave both patient and provider better off, they would be retained, while rules that proved intolerable to either side would be discarded.

Enforcing contractual limitations on providers' liability for medical malpractice would not obviate the need for tort liability. Contract liability is well-suited to supplant tort liability for many injuries caused by simple negligence. Tort liability could still deter and punish acts of gross negligence, and would still be necessary to deter and punish willful misconduct, which should vitiate any contract where a provider promises to exercise reasonable care. Moreover, contract liability is not an option for some patients. This group includes incompetents and those

[10] *But see* Frank Cornelius, *Crushed by My Own Reform*, NEW YORK TIMES (October 7, 1994) (former lobbyist for caps on damages is left with uncompensated losses after suffering injuries from medical negligence).

who choose not to contract. Tort liability could and should provide a set of background rules around which patients and providers may contract if they are able and willing.

III. Obstacles to Contract Liability

When advocating an idea that has no hope of being adopted, it is customary to blame those dim prospects on powerful vested interests rather than the idea itself. Certainly, there are organized interests who might suffer financially were patients and providers able to make binding ex ante agreements that limit the frequency and/or size of liability payouts. The trial bar comes to mind. Yet contract liability also meets resistance from open-minded skeptics. Nevertheless, such arguments against contract liability still fall short of demonstrating that tort liability affords patients greater overall protection than contract liability would. This section critiques three arguments against contract liability: that such agreements constitute contracts of adhesion due to providers' superior bargaining power; that patients are too poorly informed about different liability rules for such agreements to be upheld; and that contract liability would reduce investments in quality.

A leading case regarding contract liability for medical malpractice is *Tunkl v. Regents of the University of California*.[11] Tunkl was a charity patient at the University of California at Los Angeles Medical Center. Upon admission, he was asked to sign and did sign a document that waived his right to recover from the Regents or the hospital for injury due to the negligent acts of the hospital's employees. Tunkl was subsequently injured by the negligence of two physician employees. At trial, the jury upheld the release, reasoning that even though the plaintiff was in

[11] *Tunkl v. Regents of the University of California*, 60 Cal.2d 92, 383 P.2d 441, 32 Cal.Rptr. 33 (Cal. 1963).

pain and sedated when he signed, Tunkl "either knew or should have known the significance of the release."[12] On appeal, the Supreme Court of California invalidated the release as contrary to public policy. The court gave the following test for deciding when contracts that relieve an actor of liability for his own negligence affect the public interest, and are thus invalid:

> [T]he attempted but invalid exemption involves a transaction which exhibits some or all of the following characteristics[:]
>
> [1.] It concerns a business of a type generally thought suitable for public regulation.
>
> [2.] The party seeking exculpation is engaged in performing a service of great importance to the public, which is often a matter of practical necessity for some members of the public.
>
> [3.] The party holds himself out as willing to perform this service for any member of the public who seeks it, or at least for any member coming within certain established standards.
>
> [4.] As a result of the essential nature of the service, in the economic setting of the transaction, the party invoking exculpation possesses a decisive advantage of bargaining strength against any member of the public who seeks his services.
>
> [5.] In exercising a superior bargaining power the party confronts the public with a standardized adhesion contract of exculpation, and makes no provision whereby a purchaser may pay additional reasonable fees and obtain protection against negligence.
>
> [6.] Finally, as a result of the transaction, the person or property of the purchaser is placed under the control of the seller, subject to the risk of carelessness by the seller or his agents…
>
> In this situation, the releasing party does not really acquiesce voluntarily in the contractual shifting of the risk, nor can we be reasonably certain that he receives an adequate consideration for the transfer.[13]

Though *Tunkl* does not provide a precise rule for when an exculpatory contract is invalid, this passage illustrates that the court was concerned primarily with contracts of adhesion, where the

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[12] *Id*. at 95.

[13] *Id*. at 98-101 (formatting added).

provider wields "superior bargaining power" over the patient and can therefore compel the patient to waive protection against negligence contrary to the patient's own interest. This is consistent with the courts' handling of exculpatory contracts in other circumstances.[14]

That focus suggests that the reasoning in *Tunkl* need not invalidate all contractual limits on liability for malpractice. Certainly there are many transactions where the patient has ample time to choose from between a number of providers, drastically reducing the bargaining power of each provider and correspondingly increasing the patient's bargaining power. One can think of cosmetic surgery or any of a number of other elective procedures. If provider offers patient a range of protections against negligence (including traditional tort liability) from which to choose, as competition might force providers to do, the *Tunkl* court's fears are further assuaged.[15] If the patient ultimately agrees to a limit on recovery for non-economic damages equal to 80 percent of the state's cap on such damages, or to no changes to tort liability rules save the English rule of costs, the public's interest in the contract shrinks further.[16]

Even in the situations the court most fears, however, *Tunkl* fails as an argument against contract liability. First, the court expresses understandable reservations about allowing a patient to contract away liability protections right before she submits to complete vulnerability at the hands of a provider or multiple providers. The court's language evokes feelings of vulnerability before a careless and possibly malevolent provider who, exculpatory contract in hand, may do

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[14] *See* 175 A.L.R. 8 (1948) at § 9 ("Validity is almost universally denied to contracts exempting from liability for its negligence the party which occupies a superior bargaining position").

[15] *See Id*. at § 10 ("In some instances an artificial equality of bargaining power has been produced so far as agreements to exculpate are concerned by giving the party occupying the inferior bargaining position the option to secure the other's unlimited liability at a price set by governmental regulation at a 'reasonable' level, and where this has been done, exemption provisions have been held valid").

[16] *See Id.* at § 3, citing 2 AM L INST RESTATEMENT, CONTRACTS, § 574 ("A bargain for exemption from liability for the consequences of negligence *not falling greatly below the standard established by law* for the protection of others against unreasonable risk of harm, is legal except in the cases stated in § 575," emphasis added). *But see Id*. at § 3 ("No such clear-cut rule can be deduced from the various decisions of the courts").

with the patient as he wishes. But of course this is not the case. As noted in the previous section, honoring contractual limitations on liability for simple negligence would still leave in place tort remedies for gross negligence and willful misconduct. Contract liability could reduce the patient's ability to recover in the event of slight but not egregious deviations from the standard of care. Moreover, in cases where a contract limits recovery for simple negligence, judges and juries would police more carefully the boundary between simple and gross negligence just as they have used other tools at their disposal to invalidate exculpatory contracts.[17]

Yet the fatal flaw of *Tunkl* is that the court assumes that liability protection it mandates for indigent patients either has no cost, or that the cost is not passed on to those patients (e.g., through higher prices or by discouraging providers from practicing in low-income areas). The former is obviously not true, and the latter is almost certainly not true. In effect, *Tunkl* raises the cost to providers of delivering care to indigent patients above what it otherwise might be. If the resources available to provide care to the indigent are finite, the additional liability costs prevent providers from caring for additional indigent patients.[18] Thus the *Tunkl* court thoughtlessly dictates that some indigents must go without medical care so that others may receive medical care plus protection against the small probability of injury from substandard care. An attempt to protect the poor from negligence thus leaves them more vulnerable to illness.

Rather than adopt an inkblot-like test for determining the validity of exculpatory contracts, the courts should afford patients and providers the certainty that comes with a bright-line test. Where that line should be drawn can be found in the history of *Tunkl* itself. Courts

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[17] *See e.g., Id*. at § 11 ("Where there is no, or no great, disparity of bargaining power between the parties, contracts limiting liability for negligence will, as a rule, be upheld on the theory of freedom of contract. As stated before, *this fundamental rule, while correct in theory, has been changed in nearly all cases which do not expressly mention negligence, into the opposite rule through the principle of strict construction of exculpatory clauses against the person seeking to exculpate himself*," emphasis added).

[18] Richard A. Epstein, *Market and Regulatory Approaches to Medical Malpractice: The Virginia Obstetrical No-Fault Statute*, 74 VA. L. REV. 1451, 1460-1461 (Nov. 1988).

should uphold contractual liability rules agreed to by competent patients and should continue to invalidate limits on liability agreed to by incompetent patients. This is how the *Tunkl* jury approached the question at trial, before the California Supreme Court invalidated as violating public policy a contract that Tunkl's peers considered valid.

A related objection to contract liability is that patients lack sufficient information to bargain with providers over liability protections.[19] That patients lack such information today is undeniable, but that's because information about the value of alternate liability rules is of little use – and thus is seldom supplied – to consumers who cannot legally contract for non-standard rules. Able to choose alternate rules, consumers' demand for such information would increase markedly, creating profit opportunities for those in a position to supply such information. Markets could route the information to consumers as it does information about other products. To reduce patient confusion, providers may offer a small number of standardized contracts, perhaps drafted or approved by medical societies or independent groups. Employers, unions, and even health insurers[20] could act as the patient's agent in negotiations with providers, recommending or even demanding certain liability protections. Independent organizations such as *Consumer Reports* could evaluate the importance of discrete liability protections and standardized contracts, including the liability protections offered by corporate entities such as Kaiser Permanente and HCA.

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[19] *See, e.g.*, P.S. Atiyah, *Medical Malpractice and the Contract/Tort Boundary*, 49 LAW & CONTEMP. PROBS. 287, 295 (Spring 1986). *See also* Jennifer Arlen, *Private Contractual Alternatives to Malpractice Liability*, in MEDICAL MALPRACTICE AND THE U.S. HEALTH CARE SYSTEM: NEW CENTURY, DIFFERENT ISSUES (William M. Sage & Rogan Kersh, ed.) (Cambridge University Press, 2006).

[20] Provided a health insurer has an arm's length relationship with (1) the provider and (2) the carrier from whom the provider purchases malpractice liability insurance.

Moreover, at the same time critics of contract liability exaggerate the information problems confronting patients,[21] they ignore the information problems facing judges and legislators. Legislators obtain information on malpractice liability rules from groups that are relatively easy to organize and have a large stake in their preferred rules (e.g., the trial bar, providers, employers, etc.). Legislators tend not to receive information from those whose stake is relatively small and who are more difficult to organize (i.e., individual patients, particularly the indigent). For the individual patient, the costs of obtaining information about the potential effects of legislative reforms, organizing, and conveying one's views to the legislature would overwhelm the expected benefits of a given rule. Courts have a distinct advantage over legislatures in crafting tort liability rules, in that courts are better equipped than legislatures to collect information from individuals adversely affected by a legal rule, are less subject to political influence, and have more opportunities to experiment with and revisit a legal rule.[22] Nevertheless, as *Tunkl* illustrates, the indigent patient is privy to information that courts and lawmakers are not. Specifically, the patient who agrees to waive liability may know – in a way that a court cannot appreciate – that the cost of the court's preferred rule could require the patient to forgo medical care. Judges, much less legislators, should not dismiss the possibility that the indigent possess information that lawmakers do not.

A third objection to contract liability is that such a system could not generate the investments in quality that a functional tort liability system would generate. This case is made

[21] Indeed, critics of contract liability have used the information problems caused by the effective prohibition of contractual liability to dismiss the appeal of contract liability. At the same time Atiyah argues that consumers are poorly informed about different liability rules, he notes a "marked lack" of evidence that consumers demand reform of existing liability rules. Atiyah, *supra* note 19 at 295-296, 298. Yet a lack of demand for reform is meaningful only if consumers are well-informed about reform options.

[22] *See generally* John Hasnas, *What's Wrong with a Little Tort Reform?*, 32 IDAHO L. REV. 557 (1996).

forcefully by Jennifer Arlen of New York University School of Law.[23] Arlen argues that a uniform tort liability system that forces providers to bear the cost of their negligence encourages providers to invest in quality – in both human and physical capital, and both before and after forming a contract with a particular patient. Under a system where the parties can bind themselves to a lower level of liability protection, providers would face diminished incentives to invest in quality. Quality investments would thus fall, to the detriment of patients who preferred the level of quality investment spurred by uniform tort liability rules. Even if those patients were to contract for the same level of malpractice protection previously afforded under tort liability, they could not replicate the incentives for providers to invest in quality that come from exposing providers to that degree of liability for all patients. As a result, even if all patients were fully informed, those patients would be worse off under contract liability.

As an argument against contract liability, Arlen's analysis fails for two reasons. The first reason is that it faults markets for doing something that markets are supposed to do. Insofar as there are patients who would be worse off under contract liability than under an optimal tort liability system, that means that uniform tort liability confers subsidies on those patients – subsidies extracted from patients who would prefer less liability protection, but whose right to contract for less protection has been denied by the courts. The monetary and autonomy losses suffered by that latter group of patients must be entered in the ledger along with the losses borne by the indigent who are denied medical care. An important function of markets is to eliminate such cross-subsidies, particularly those that travel up the income scale, as these subsidies appear to do. Moreover, patients who lose these cross-subsidies are certainly not without recourse. They could obtain their preferred level of quality the old-fashioned way: by paying for it.

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[23] *See* Arlen *supra* note 19.

Demanding even greater liability protections than tort liability currently provides would encourage some providers to make the desired investments in quality.

The second reason is that Arlen demonstrates that contract liability would be inferior only to an idealized, "optimal" system of tort liability. Though Arlen adds much to our understanding of how contract liability would affect the health care sector, her critique compares contract liability only to an optimal system of tort liability, which she acknowledges does not exist. Nor does Arlen articulate a strategy for moving our actual tort liability system toward optimality, or compare such a strategy to the process of experimentation and learning that contract liability would provide. As a result, Arlen does not show contract liability to be any more flawed than our current tort liability system, or any other human institution. It is hardly a damning criticism to say that contract liability fails in comparison to an ideal.[24] Most human endeavors do.

It is that process of experimentation with different rules that gives contract liability its greatest advantage in the pursuit of optimality. Indeed, the process by which liability rules are selected is likely more important than which rule will be tried next. Presumably, Arlen would prefer to retain the current system's uniformity while pushing toward optimality through judicial and/or legislative intervention. However, an optimal selection process would reduce the cost of gathering and making use of new information. The fact that contract liability reduces the cost of adopting and discarding liability rules – including rules designed to deal with the problems Arlen identifies – gives contract liability a distinct advantage over experimentation by courts and legislatures. A full appraisal of the information problems under the three available reform processes – contract, judicial, and legislative – suggests that contract provides the least-imperfect route toward optimality.

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[24] *See generally* Harold Demsetz, *Information and Efficiency: Another Viewpoint*, 12 J.L. & ECON. 1, 1 (1969).

IV. Allaying Concerns with Contract Liability

Limitations on the right of competent adults to contract for protection against medical negligence are likely to be either unnecessary (because no patient and provider would choose the prohibited terms) or harmful (because the limitation would foreclose a preferred option). Yet the dim prospect that courts will begin to enforce such contracts suggests that some limitations might be tolerated in order to reduce the harm currently imposed by complete prohibition. What contracts might courts or legislatures be persuaded to declare valid? One possibility is to enforce only those contracts produced by someone other than providers themselves. Requiring that contract liability rules will only be enforced when written by those at arms-length from providers, and only when offered as a part of a menu of standardized contract liability protections, would provide a much needed, if ultimately inadequate, dose of experimentation and relief. Alternatively, legislatures could permit patients and providers to negotiate within boundaries set by other legislatures, such as by enforcing only those contracts that employ limits on malpractice liability enforceable in one of the other 49 states. Legislatures could overcome concerns that patients would forgo all malpractice protections by setting a lower bound on maximum awards, such as $250,000 for non-economic damages. Concerns about uninformed patients signing away their rights could be remedied by initially confining the right to contract only to those patients who are judges, lawyers, physicians, statisticians, actuaries, high-income earners, or who carry third-party insurance against such injuries. As *Tunkl* suggests, courts have not developed a clear rule to decide which contracts will be upheld and which invalidated. That

indeterminacy suggests courts are not hostile to all exculpatory contracts,[25] and opens the door to limited reforms such as these.

V. Conclusion

Public policy currently allows patients to assume the very large risks involved with forgoing treatment for fatal yet treatable diseases.[26] It further permits patients to select different liability protections by traveling abroad for medical care.[27] Judges and lawmakers respect the right to refuse treatment even when the risks are large, but deny the right to limit one's ability to recover for negligence even when the risks are small. Patients already have the right to choose different malpractice liability protections, but only if they are willing to travel out-of-state or out-of-country. If consumers are too poorly informed to allow them to bind themselves to different liability rules, a consistent approach to contract liability would have to prohibit traveling abroad for medical care.[28]

Proponents of uniform tort liability argue that the provider owes a duty to the patient upon the two forming a special legal relationship.[29] Yet the problem of malpractice protection has a positive economic component as well as a normative legal component. That is, where shall we invest resources: in protection from negligence, or in protection from illness? Certainly, society should not completely sacrifice either in pursuit of the other. Ignoring the tradeoff,

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[25] *See* A.L.R. at § 3.

[26] *See, e.g., Matter of Conroy*, 98 N.J. 321, 486 A.2d 1209, 53 USLW 2372, 48 A.L.R.4th 1 (N.J. 1985) at 353 ("On balance, the right to self-determination ordinarily outweighs any countervailing state interests, and competent persons generally are permitted to refuse medical treatment, even at the risk of death").

[27] *See, e.g.*, Michael F. Cannon and Michael D. Tanner, *Healthy Competition: What's Holding Back Health Care and How to Free It*, (Cato Institute, 2005) at 8-9, 141-143.

[28] One hesitates to give the legislature ideas.

[29] Atiyah *supra* note 19, at 296-297.

however, is dangerous precisely because in doing so we may inadvertently reduce protection overall, particularly for the poor. The threat posed by our current system of tort liability for medical malpractice is that we have struck a balance that demands greater protection from simple negligence than many patients would prefer, that is uniform and inescapable, that reduces protections against illness, and that may only be altered through Herculean efforts in a process that guarantees that some voices will not be heard.

Where, then, to strike the balance? As the foregoing discussion suggests, that question is subordinate to the threshold question: who decides?[30] It is here that contract liability offers advantages that tort liability cannot. Contract liability offers a means to drive the imperfections out of the medical malpractice liability system through a process that selects liability rules based on their ability to deliver improvements in both cost and quality. Our present system of uniform and rigid tort liability offers no such process, and thus provides less overall protection than we could achieve.

[30] Epstein, *supra* note 18, at 1451-1452.

Policy Analysis
No. 657 January 20, 2010

The Massachusetts Health Plan
Much Pain, Little Gain

by Aaron Yelowitz and Michael F. Cannon

Executive Summary

In 2006, Massachusetts enacted a sweeping health insurance law that mirrors the legislation currently before Congress. After signing the measure, Gov. Mitt Romney (R) wrote, "Every uninsured citizen in Massachusetts will soon have affordable health insurance and the costs of health care will be reduced." But did the legislation achieve these goals? And what other effects has it had? This paper is the first to use Current Population Survey data for 2008 to evaluate the Massachusetts law, and the first to examine its effects on the accuracy of the CPS's uninsured estimates, self-reported health, the extent of "crowd-out" of private insurance for both children and adults, and in-migration of new Massachusetts residents.

We find evidence that Massachusetts' individual mandate induces uninsured residents to conceal their true insurance status. Even setting that source of bias aside, we find the official estimate reported by the Commonwealth almost certainly overstates the law's impact on insurance coverage, likely by 45 percent. In contrast to previous studies, we find evidence of substantial crowd-out of private coverage among low-income adults and children. The law appears to have compressed self-reported health outcomes, without necessarily improving overall health. Our results suggest that more than 60 percent fewer young adults are relocating to Massachusetts as a result of the law. Finally, we conclude that leading estimates understate the law's cost by at least one third, and likely more.

Our results hold important lessons for the legislation moving through Congress. As in Massachusetts, there has been no effort to estimate the cost of the private health insurance mandates that legislation would impose on individuals and employers. The costs may therefore be far greater than legislators and voters believe, while the benefits may be smaller than the conventional wisdom about Massachusetts suggests.

Aaron Yelowitz is an associate professor of economics at the University of Kentucky and an adjunct scholar at the Cato Institute. Michael F. Cannon is director of health policy studies at the Cato Institute and coauthor of Healthy Competition: What's Holding Back Health Care and How to Free It.

CATO INSTITUTE

Our study is the first to use Current Population Survey data from 2008 to examine Chapter 58.

Introduction

In 2006, Massachusetts enacted a sweeping health insurance law known as Chapter 58.[1] The law created the nation's first "individual mandate" to purchase health insurance. All residents whom the Commonwealth deems able to afford health insurance must purchase it or else pay a tax penalty that rises with income. The individual mandate took effect on July 1, 2007, but penalties for noncompliance did not begin until December 31, 2007. Noncompliant residents faced the loss of their personal exemption to the state's income tax—a penalty of $219. The penalty rose the next year to a maximum of $912—more than four times the 2007 penalty. Each year after 2008, penalties increase at the rate of health insurance premium growth.[2]

Chapter 58 also established the nation's second "employer mandate" (behind Hawaii). Beginning July 1, 2007, the law required firms with 11 or more workers to offer health benefits to their workers and to "contribute" a specified amount toward the cost of that coverage or face a tax penalty of $295 per worker.[3]

The law created or expanded various government subsidies to help residents obtain health insurance. It expanded eligibility for Massachusetts' Medicaid program (MassHealth) to children in families with incomes up to 300 percent of the federal poverty level (about $66,000 for a family of four); and to adults who are unemployed (100 percent FPL), HIV-positive (200 percent FPL), or disabled. The law created a new CommCare program to provide subsidies for private health insurance to families earning up to 300 percent of the federal poverty level.

Chapter 58 also imposed new rules for private health insurance markets, merged the individual and small-group markets, and created a new health insurance "connector" where individuals and employees of small firms (with 50 or fewer employees) may choose from a variety of health plans.

After signing Chapter 58 into law, Gov. Mitt Romney (R) wrote, "Every uninsured citizen in Massachusetts will soon have affordable health insurance and the costs of health care will be reduced."[4] Changes in Massachusetts' uninsurance rate and health care costs are therefore important measures of the law's impact. Other important indicators of the law's success include its impacts on overall health; "crowd-out" of private health insurance (that is, what percentage of insured people simply switched from private insurance to government-supported insurance); and the attractiveness of Massachusetts as a place to live.

How well Chapter 58 performs on these dimensions has particular relevance now that the federal government is considering similar legislation. When President Barack Obama told Congress in early September 2009, "there is agreement in this chamber on about 80 percent of what needs to be done,"[5] he was speaking of the provisions in federal legislation that mirror the Massachusetts law: individual and employer mandates; private health insurance subsidies; Medicaid expansions; a new health insurance "exchange"; and other private health insurance regulations.

This study uses data from the March 2006–2009 supplements to the Current Population Survey—which cover the 2005–2008 calendar years—to measure Chapter 58's impact on some of the above-mentioned factors. Our study is the first to use CPS data from 2008 to examine coverage and crowd-out. It is also the first to use CPS data to examine Chapter 58's impacts on self-reported health and in-migration, and the first to explore whether Chapter 58 introduced bias into the CPS's coverage estimates in Massachusetts. We consider this study to be a first approximation of the effects of Chapter 58 through 2008, and hope that further studies will refine and augment our results.

Methods

To evaluate the impact of the Massachusetts health law on coverage levels, crowd-

out, health status, and in-migration patterns, we rely on CPS data from 2005 through 2008. The March supplement to the Census Bureau's CPS has been described as "the survey of record" and "the most viable estimate" of the uninsured.[6] The Bureau of the Census administers the CPS for the Bureau of Labor Statistics, which scientifically selects the sample to represent the civilian noninstitutional population. The CPS is the official source for national health insurance estimates like the widely cited estimate of 46 million uninsured U.S. residents. The CPS has asked about health insurance since the 1980s, and those questions have been largely unchanged since 1994.[7] The response rate for the March supplement is exceptionally high compared to other voluntary household-based surveys. The nonresponse rate for the health insurance questions in Massachusetts in 2008 was 16 percent. Nonresponse rates for other surveys measuring the effects of Chapter 58 have been as high as 55 percent[8] and 68 percent.[9] Unlike those surveys, the Census Bureau includes residences without telephones by virtue of conducting interviews both by telephone and in person. The CPS data are publicly available from the Census Bureau.[10] To our knowledge, ours is the first study to employ data from the March 2009 supplement to the CPS, which covers all of calendar year 2008, and the first to examine Massachusetts two years prior to the mandate (2005–2006) and two years after the mandate (2007–2008).

Considerable difficulties arise when we try to measure the impact of a complex piece of legislation such as Chapter 58. For example, the outcomes of interest may be influenced by other changes occurring at the same time. The fact that the various elements of Chapter 58 took effect at different times may further complicate the picture.

Similar to Long et. al.,[11] we employ a difference-in-differences model to control for many factors that might also influence the outcomes of interest. We compare outcomes in Massachusetts to those of other New England states: Maine, New Hampshire, Vermont, Rhode Island, and Connecticut. We include controls for poverty thresholds, marital status, sex, education, race/ethnicity, and fixed effects for state and year. Our "Chapter 58 effect" is therefore identified from the interaction of state and year. We weight all regressions with the CPS weights, stratify by age group, and estimate models without imputed values. We attribute any differences between Massachusetts and the remaining New England states to the Massachusetts law. Our overall results on gains in insurance coverage are very similar to those of Long et al.

We are unaware of any published estimate of the full cost of Chapter 58, including costs that do not appear in government budgets—which is significant in itself. For data on the cost to the Commonwealth of Massachusetts and the federal government, we rely on estimates published by the Massachusetts Taxpayers Foundation.[12] For estimates of the costs imposed on the private sector, we rely on personal communications with staff from the Massachusetts Taxpayers Foundation.[13]

We are unaware of any published estimate of the full cost of Chapter 58.

Coverage Effects

A primary objective of Chapter 58 is to expand health insurance coverage in Massachusetts, with the goal of universal coverage. In this section, we examine how many Massachusetts residents remain uninsured, and how much of the increase in coverage since 2006 can be attributed to Chapter 58.

How Many Residents Remain Uninsured?

For 2003 through 2006, the CPS reported that the uninsured rate in Massachusetts hovered around 10 percent. Massachusetts' uninsured rate was low compared to the national average of 15 to 16 percent during that period. It was especially low relative to southwestern states, where the uninsured rate often exceeds 20 percent.

Various estimates exist of how many Massachusetts residents currently lack health insurance. The Commonwealth relies on one survey that provides an estimate of 2.6 percent

uninsured in 2008.[14] The Census Bureau's American Community Survey provides an estimate of 4.1 percent.[15]

There is controversy over whether the CPS accurately estimates Massachusetts' uninsured rate, which results from the CPS's method for dealing with households that do not answer the survey's questions about insurance status. When a respondent fails to answer a question on the CPS, the Census Bureau imputes a response for that person based on the answers of similar individuals.[16] For 2008, the CPS imputes the insurance status of 1 million out of a total of 6.4 million Massachusetts residents to arrive at an uninsured estimate of 5.5 percent.[17] The CPS imputes the insurance status of nearly 670,000 non-elderly adults (hereafter: "adults"), or one-sixth of the 4.1 million adult residents.

Davern et al. find that the CPS's imputation procedure tends to overstate the uninsured rate in states like Massachusetts that have relatively low uninsured rates, and that that bias may be greatest in Massachusetts.[18] Working with the 1998–2000 March supplements, they estimate that the CPS's imputation procedure overstated the Massachusetts uninsured rate by 1.8 percentage points, or 13.9 percent—the largest error in any state.[19] The authors suggest a rudimentary way to adjust for that bias would be to reduce Massachusetts' official uninsured rate by 13.9 percent,[20] which yields an estimate of 4.7 percent.

Excluding imputed answers from the 2008 sample produces an estimate of 3.8 percent, or 205,472 uninsured residents, which is very close to the ACS estimate.

Since December 31, 2007, not having health insurance coverage has had legal consequences for Massachusetts residents.

"Are You Breaking the Law?"

Research has not yet explored another potential source of bias related to the CPS's imputation procedure. Chapter 58 creates incentives for uninsured Massachusetts residents to conceal their true insurance status. Since December 31, 2007, not having health insurance coverage has had legal consequences for Massachusetts residents. Uninsured residents who accurately report their insurance status would be admitting to unlawful activity and subject to penalties.[21] In addition, Chapter 58's individual mandate may have created a social norm that uninsured residents might be reluctant to admit they are violating. If Chapter 58 induces uninsured residents to conceal their insurance status from the CPS, then that would bias the uninsured estimate downward.

Uninsured Massachusetts residents can conceal their lack of coverage from government surveys like the CPS in three ways. First, they may refuse to participate in the survey. Second, they may participate in the survey but misrepresent their coverage status. Third, they may participate in the survey but not answer the survey's health-insurance questions, whether by skipping those questions, refusing to answer them, or terminating the interview early. Nonresponse is more likely for sensitive questions like income.[22] Since 2006, insurance coverage may have become a more sensitive question in Massachusetts.

Each concealment strategy would bias the CPS estimate of Massachusetts' uninsured rate in the direction of overstating the law's impact on the uninsured. If uninsured residents refuse to take the survey, they would be underrepresented in the sample. If they misrepresent their coverage status, that would cause uninsured residents to be counted as insured. If they decline to answer the insurance questions, and the CPS imputes their response, that would further increase the number of households that are counted as insured but that are actually uninsured.

We cannot observe the first or second strategies, but we can observe how often respondents do not answer the CPS's health insurance questions across states and over time. And we can compare that to nonresponse rates for other questions in the March supplements. If uninsured Massachusetts residents respond to the incentives to conceal their true insurance status, we would expect to see an increase in the rate of nonresponse to the insurance questions relative to other states and to other questions on the CPS.

We find evidence that nonresponse to the CPS's health-insurance questions increased

Table 1
Changes in Response Rates to CPS Health Insurance and Income Questions in Massachusetts after Chapter 58

	Any Imputed Health Insurance Item	Any Imputed Income Item
Under 18 N=24,489	0.003 (0.015)	-0.016 (0.003)
Below 150% FPL N=5,089	0.005 (0.014)	
150–300% FPL N=6,004	0.053 (0.022)	
Above 300% FPL N=13,396	-0.016 (0.023)	
Age 18 to 64 N=51,582	0.021 (0.009)	-0.068 (0.007)
Below 150% FPL N=7,367	0.021 (0.016)	
150–300% FPL N=10,807	0.047 (0.020)	
Above 300% FPL N=33,408	0.015 (0.011)	

Notes: Each estimate is a difference-in-differences estimate from a separate ordinary least squares regression. The number of observations is shown for models including all of the 2005–2008 years. All specifications include fixed effects for an individual's age, state, and year. Robust standard errors are in parentheses, corrected for clustering state-year cell. All results are weighted.

after Massachusetts enacted its mandate. In one estimation, we compare the nonresponse rates for Massachusetts residents with those of other New England states. We find no overall effect of Chapter 58 on imputations among children, but imputations among adults rose by a statistically significant 2.1 percentage points (standard error: 0.9)—a 9-percent increase. The effect appears particularly strong between 150–300 percent FPL, where initial insurance coverage was relatively low and where compliance requires residents to pay some portion of their premiums. Imputations increased by 5.3 percentage points among children (standard error: 2.2) and 4.7 percentage points among adults (standard error: 2.0) in this income stratum. There was no statistically significant change in imputations among those below 150 percent FPL.[23]

In short, if the entire 2.1 percentage point increase in imputations among adults was the result of them concealing their uninsured status, then the (unadjusted) uninsured rate would be 5.1 percent, instead of the 3.8 percent reported by the CPS.

These results are consistent with Chapter 58 inducing uninsured Massachusetts residents to conceal their true insurance status. Imputations rise among those between

These results are consistent with Chapter 58 inducing uninsured Massachusetts residents to conceal their true insurance status.

The Commonwealth's estimate that only 2.6 percent of residents remain uninsured is most likely too low.

150–300 percent FPL, who were more likely to be uninsured prior to the law's enactment, and whom the law forces to purchase health insurance with their own money. Rather than comply with the mandate, some of these "insured" individuals may instead be concealing their lack of coverage by refusing to answer the CPS's insurance-status questions. In contrast, there was no discernable change in response rates by individuals below 150 percent FPL, who receive "free" coverage and who face no penalties for not obtaining coverage.

Next, we compare nonresponse to insurance-status questions to nonresponse to the CPS's questions about income. While the response rate for the insurance-status questions fell after the enactment of Chapter 58, the response rate for income-related questions increased. Income imputations fell by 1.6 percentage points for children (standard error: 0.3), and among adults by 6.8 percentage points (standard error: 0.7). This suggests that Massachusetts residents who participated in the survey were not less forthcoming overall, just less forthcoming about health insurance coverage.

We draw a number of conclusions. First, the Commonwealth's estimate that only 2.6 percent of residents remain uninsured—the lowest estimate available—is most likely too low. More rigorous surveys all yield higher estimates. As noted above, even ignoring imputations, the CPS yields an uninsured rate of 3.8 percent. Second, we conclude that Chapter 58 has introduced a new source of bias into the CPS's estimate of Massachusetts' uninsured rate. The 3.8-percent figure is not biased upward by the CPS imputation procedure, but it may be biased downward by the incentives that Chapter 58 creates for uninsured residents to conceal their true coverage status. Whether this is a significant source of bias is unclear. As noted previously, if the entire 2.1-percentage-point rise in imputations among adults were the result of them concealing their uninsured status, then the (unadjusted) uninsured rate would be 5.1 percent.[24] To the extent that uninsured residents employed either of the other concealment strategies, the true uninsured rate would be even higher and the number of newly insured residents even lower. We therefore regard 3.8 percent to be a lower-bound estimate of Massachusetts' uninsured rate. (In the same vein, we consider the below estimates of Chapter 58's impact on coverage to be an upper-bound estimate.) Third, this source of bias may also affect other surveys, including non-government surveys.

How Many Newly Insured?

The direction of Chapter 58's effect on insurance coverage is not in dispute. The law appears to have had a significant impact on the number of insured residents. Using two-year averages, the Census Bureau estimates that Massachusetts' uninsured rate dropped from 9.8 percent in 2005–2006 to 5.4 percent in 2007–2008—a 4.4 percentage point reduction.[25] But is the new law solely responsible for this increase, or did other factors contribute to it?

To isolate how many additional residents obtained coverage as a result of Chapter 58, we control for other factors that might influence coverage levels by performing a difference-in-differences estimation using only non-imputed observations, as did Long et al. Unlike Long et al., we use other New England states as controls, and we examine 2005–2008, rather than 2004–2007.

Our results, presented in Table 2, suggest that Chapter 58 reduced the uninsured rate for children by 2 percentage points, and for adults by 6.7 percentage points. These results are similar to those of Long et al., who found an increase of 6.6 percentage points in coverage among adults.[26] The effects were greatest among children between 150 percent and 300 percent of the federal poverty level (7.6 percentage points), and among adults at both below 150 percent (11 percentage points) and between 150 percent and 300 percent of the federal poverty level (14.2 percentage points). These results are unsurprising, since those groups were both the main targets of the new subsidies and subject to penalties under the individual mandate. Our difference-in-differ-

Table 2
Effect of Chapter 58 on Insurance Coverage, Self-Reported Health, and In-migration

	Insurance Coverage	Private Coverage	Self-Reported Health: Excellent	Self-Reported Health: Very Good or Better	Self-Reported Health: Good or Better	In-migration
			Under 18			
All Income Levels N=19,454	0.020 (0.005)	-0.044 (0.016)	-0.068 (0.013)	-0.024 (0.012)	0.011 (0.002)	
Under 150% FPL N=4,153	0.027 (0.016)	-0.146 (0.035)	-0.025 (0.031)	0.092 (0.045)	0.019 (0.009)	
Between 150–300% FPL N=4,715	0.076 (0.012)	0.001 (0.048)	-0.161 (0.033)	-0.133 (0.030)	0.027 (0.005)	
Over 300% N=10,586	-0.002 (0.005)	-0.013 (0.005)	-0.050 (0.018)	-0.031 (0.010)	0.002 (0.002)	
Non-movers N=18,272	0.019 (0.005)	-0.045 (0.017)	-0.068 (0.014)	-0.031 (0.012)	0.009 (0.003)	
			Age 18 to 64			
All Income Levels N=41,873	0.067 (0.003)	0.022 (0.007)	-0.042 (0.005)	-0.013 (0.006)	0.008 (0.004)	-0.009 (0.003)
Under 150% N= 5,784	0.11 (0.014)	-0.062 (0.024)	-0.057 (0.027)	-0.004 (0.010)	0.007 (0.019)	-0.016 (0.012)
Between 150–300% N= 8,664	0.142 (0.009)	0.067 (0.019)	-0.045 (0.014)	0.040 (0.020)	0.007 (0.014)	-0.007 (0.005)
Over 300% N=27,425	0.042 (0.003)	0.031 (0.003)	-0.034 (0.089)	-0.028 (0.007)	0.001 (0.003)	-0.007 (0.004)
Non-movers N=40,938	0.065 (0.003)	0.021 (0.006)	-0.045 (0.005)	-0.016 (0.006)	0.010 (0.003)	

Notes: Each estimate is a difference-in-differences estimate from a separate ordinary least squares regression. Observations with imputed values for health insurance or health status were excluded. The number of observations is shown for models including all of the 2005–2008 years. All specifications include fixed effects for an individual's age, state, and year. Health results exclude the 2007 calendar year. Robust standard errors are in parentheses, corrected for clustering state-year cell. All results are weighted.

ences estimations produce a point estimate of 297,000 Massachusetts residents newly insured as of 2008 as a result of Chapter 58.

One potential implication of these findings is that Chapter 58's subsidies did more to expand coverage than the individual mandate. Since Massachusetts introduced both to roughly the same populations at roughly the same time, it is difficult to discern which intervention had the greater impact on coverage

levels. Given that we examined 2005–2008, yet obtained similar results to Long et al., one possible interpretation is that the subsidies that became available in 2007 had a greater impact on insurance coverage than the individual mandate, which only became binding as of December 31, 2007, and whose penalties dramatically increased in 2008. At a minimum, our results suggest that the subsidies had a strong impact on coverage, since the groups targeted with new subsidies saw the greatest coverage gains.

We consider 297,000 to be an optimistic estimate of Chapter 58's effect on insurance coverage, for it assumes that no uninsured Massachusetts residents concealed their insurance status. To the extent that the legal penalties or a new social norm did induce uninsured residents to conceal their coverage status, our results overstate Chapter 58's impact on coverage. A "back of the envelope" calculation suggests that if the entire 2.1-percentage-point increase in imputations among adults is the result of concealment, for example, then Chapter 58 extended coverage to only 204,000 residents.

The law appears to have achieved more success in giving residents health insurance than shifting the population toward better health.

We thus conclude that the Commonwealth's estimate of 432,000 newly insured residents[27] is too high, as it lies above the upper bound of the 95-percent confidence interval (327,000) for our point estimate. The number of insured residents may have risen by 432,000 as of 2008, but the portion that can be attributed to Chapter 58 is almost certainly smaller. The Commonwealth's official estimate appears to overstate the actual impact of the law by 45 percent.

Self-Reported Health

A primary reason to expand health insurance coverage is to improve health. An important measure of Chapter 58's impact, therefore, is whether it improved the health of Massachusetts residents. The CPS enables researchers to gauge changes in health by observing self-reported health status.

The March 2009 supplement is more useful for examining the effects of Chapter 58 on health than the March 2008 supplement, which would count individuals as "insured" if they obtained coverage on Dec. 31, 2007. (We would expect little effect on health from one day's worth of insurance coverage.) By observing self-reported health one year after both the subsidies and penalties took effect, the March 2009 supplement is more likely to capture any effects that Chapter 58 would have on health status. Of course, we would not expect data covering 1.5 years of the experience with Chapter 58 to capture the full effect of the expanded health insurance coverage on health outcomes, but it is reasonable to assume that some improvement should be visible. Researchers such as Janet Currie and Jonathan Gruber find that Medicaid expansions affect health outcomes of infants and children in a short period of time.[28]

We again perform a difference-in-differences estimation using other New England states as controls. Since the law had been only partially implemented in 2007, we exclude data from 2007 and compare self-reported health in 2005–2006 to 2008.[29]

We find mixed effects on self-reported health after 2006. Table 2 shows improvements in good (or better) health, but declines in excellent and very good (or better) health. For example, among children, excellent health fell by 6.8 percentage points but good (or better) health increased by 1.1 percentage points. Where the coefficients are statistically significant, those countervailing effects are similar for adults and for most income subgroups. One exception is children under 150 percent FPL: the reduction in excellent health is not statistically significant, but the improvements in both good (or better) and very good (or better) health are statistically significant. Another exception is that adults between 150–300 percent FPL saw a statistically significant increase in very good (or better) health. Yet the same group also saw a drop in excellent health and no discernable change in good (or better) health.

Overall, it appears that the distribution of health status compressed, but did not neces-

sarily improve, in response to Chapter 58. To date, the law appears to have achieved more success in giving residents health insurance than shifting the population toward better health.

Evidence of Crowd-Out

One concern that arises when expanding government assistance is the tendency for government subsidies to substitute for, or "crowd-out," private effort. Crowd-out can occur because those newly eligible for government health insurance subsidies drop their private coverage or because employers cease offering coverage to eligible groups.[30] Previous studies of Chapter 58 have found no evidence of crowd-out, in that both public and private coverage expanded since 2006.[31]

Using a difference-in-differences estimation, we find that while coverage generally expanded for children and adults, private insurance coverage fell among certain income groups in Massachusetts relative to other New England states. Table 2 shows that private coverage fell by 4.4 percentage points among children, perhaps driven by a 14.6-percentage-point drop among children below 150 percent of the federal poverty level. Private coverage rose for adults overall, but fell by 6.2 percentage points among adults below 150 percent of poverty level. Again, this result is unsurprising, as Massachusetts targeted government programs principally at those groups.

We consider this to be evidence of substantial crowd-out among the poor, as well as a conservative measure of overall crowd-out, given that we cannot observe the extent to which public subsidies offered to those who purchase private insurance merely substituted for private dollars.

In-migration

Another potential effect of Chapter 58 is that its taxes and subsidies may affect Massachusetts' attractiveness as a place to live. The law affects different individuals differently; individuals likely to receive net subsidies may find the Commonwealth a more attractive place to relocate, while those likely to face net taxes would find it less attractive. The March supplement to the CPS measures in-migration for each state, which offers one tool to evaluate any effects that Chapter 58 may have on people's decisions to relocate to Massachusetts.

From 2005 to 2008, in-migration into other New England states fell from 2.4 percent to 2.2 percent. Migration into Massachusetts fell from 1.6 percent to 1.2 percent (data not shown.) A "back of the envelope" difference-in-differences estimate thus suggests that Massachusetts became a less attractive place to relocate after the enactment of Chapter 58.

The statistically significant regression-adjusted estimates are broadly consistent with the unadjusted data. Relative to other New England states, Massachusetts saw a 0.61 percentage point decline in in-migration post-Chapter 58 for the sample as a whole. For adults, the decline was 0.87 percentage points. For adults aged 18 to 29, in-migration fell by a sizable 2.8 percentage points—more than four times the magnitude for the entire sample, and a 62-percent drop from baseline in-migration among young adults (data not shown). Since the young tend to have much higher uninsurance rates, and the combination of the individual mandate and Massachusetts' strict community-rating price controls imposes greater implicit taxes on young adults than others,[32] a reasonable interpretation of these results is that those whom Chapter 58 would most adversely affect voted with their feet and avoided Massachusetts.

Is It Worth the Cost?

Chapter 58's benefits must be weighed against the costs it imposes.[33] Premiums appear to have declined in the non-group market,[34] which accounts for 4 percent of private health insurance in Massachusetts.[35] It is unclear, however, whether and to what extent

Those whom Chapter 58 would most adversely affect voted with their feet and avoided Massachusetts.

We estimate total new spending to be more than $1 billion in 2008, or 57 percent more than the Massachusetts Taxpayers Foundation formal estimates suggest.

that was the result of greater efficiency or cost-shifting to the (larger) small-employer market when Chapter 58 merged the two. Whatever the case, premiums in the other 96 percent of the market moved in the opposite direction. One study found that public and private spending on health insurance have accelerated.[36] Another found that premiums for employer-sponsored insurance in Massachusetts grew 21–46 percent faster than the national average over roughly the period studied here.[37]

The full cost of Chapter 58 includes not only new state and federal government spending, but also any new private-sector spending undertaken to comply with the law's unfunded mandates. The law uses the Commonwealth's sovereign power to require employers and individuals to purchase health insurance for previously uninsured residents. It even requires some residents who already were insured to purchase additional coverage to comply with the individual mandate's standard for "minimum creditable coverage."

We are unaware of any effort to tally all of the costs imposed by Chapter 58. The Massachusetts Taxpayers Foundation has formally estimated the cost to the state and federal governments and declared the cost of Chapter 58 to be "modest," based on the costs to the state government. Working with informal estimates provided by the Massachusetts Taxpayers Foundation, we reach a "back of the envelope" estimate that new state and federal spending amounts to just two-thirds of all new spending under Chapter 58, the remaining third being additional private-sector spending to comply with the individual and employer mandates. We estimate the total new spending to be more than $1 billion in 2008, or 57 percent more than the Massachusetts Taxpayers Foundation formal estimates suggest.

We consider this to be a conservative estimate of Chapter 58's cost for a number of reasons. This estimate includes only new federal spending, state spending, and new spending by previously uninsured residents. It does not include any new spending that previously insured Massachusetts residents must undertake to comply with the individual mandate, which required many residents to purchase coverage with less cost-sharing and more covered services than they had. In addition, there is a strong argument that the true cost of the individual and employer mandates includes not just the *new* spending mandated by the law, but *all* mandated spending, including the health insurance premiums that residents had been paying voluntarily. In its official cost estimate of the Clinton administration's health plan, the Congressional Budget Office included all mandatory premiums in the federal budget.[38] Viewed from that perspective, our estimate dramatically understates the cost of Chapter 58.

Is It Cost-Effective?

Even less attention has been paid to whether Chapter 58 was the lowest-cost means of achieving whatever outcomes the law has produced. We are aware of no effort to ascertain whether the benefits of Chapter 58—in terms of better health, better access to care, financial security, etc.—could have been obtained at a lower cost.

This appears to be a hole in both the economic literature and the priorities of policymakers. In 2004, Helen Levy and David Meltzer wrote, "There is no evidence at this time that money aimed at improving health would be better spent on expanding insurance coverage than on . . . other possibilities."[39] Levy and Meltzer reaffirmed that conclusion in 2008:

> The central question of how health insurance affects health, for whom it matters, and how much, remains largely unanswered at the level of detail needed to inform policy decisions. . . . Understanding the magnitude of health benefits associated with insurance is not just an academic exercise . . ., it is crucial to ensuring that the benefits of a given

amount of public spending on health are maximized.[40]

Judicious policymaking is unlikely in the absence of that information.

Conclusion

Our analysis of CPS data for 2008 shows that Massachusetts' health law has had a smaller impact on insurance coverage levels and a much higher cost than supporters claim. Gains in coverage have been overstated by nearly 50 percent, while costs have been understated by at least one-third, and likely more. The law has done little to improve overall self-reported health, though it does appear to have crowded out private health insurance and made Massachusetts a less attractive place to relocate, particularly for young people.

These findings hold lessons for the legislation moving through Congress, which largely resembles the Massachusetts law. As in Massachusetts, there has been no effort to estimate the full cost of the legislation—that is, including the mandates it would impose on individuals and employers. The costs of that legislation are therefore far greater than members of Congress and voters believe, while the benefits may be smaller than the conventional wisdom about Massachusetts suggests.

Notes

1. This description of Chapter 58 draws from Sharon K. Long, "On the Road to Universal Coverage: Impacts of Reform in Massachusetts at One Year," *Health Affairs* Web Exclusive (June 3, 2008), p. w271, http://bit.ly/7kTVcG.

2. See Commonwealth of Massachusetts Department of Revenue, "DOR Issues Updated Report on Insurance Mandate Compliance in 2007 and Draft Penalty Guidelines for the Uninsured in 2009," December 22, 2008, http://bit.ly/67kEha.

3. Economists broadly agree that "employer contributions" to employee health benefits are not employer contributions at all, but are deducted from workers' wages. See Michael A. Morrissey and John Cawley, "Health Economists' Views of Health Policy," *Journal of Health, Politics, Policy, and Law* 33, no. 4 (August 2008): 712.

4. Romney emphasized, "All Massachusetts citizens will have health insurance." Mitt Romney, "Health Care for Everyone? We've Found a Way," *Wall Street Journal*, April 11, 2006, http://bit.ly/5dfgBI.

5. White House Office of the Press Secretary, "Remarks by the President to a Joint Session of Congress on Health Care," September 9, 2009, http://bit.ly/5OZNAs.

6. M. Davern et al., "Are the CPS Uninsurance Estimates Too High? An Examination of Imputation," *HSR:Health Services Research* 42, no. 5 (October 2007): 2038–2055.

7. The Census Bureau did add a health insurance verification question in the March 2000 supplement.

8. Long, "On the Road to Universal Coverage."

9. Sharon K. Long, Allison Cook, and Karen Stockley, "Health Insurance Coverage in Massachusetts: Estimates from the 2008 Massachusetts Health Insurance Survey," Division of Health Care Finance and Policy, Commonwealth of Massachusetts Office of Health and Human Services, December 19, 2008, p. 2, http://bit.ly/7ll8wk.

10. See U.S. Bureau of the Census, Current Population Survey, http://www.bls.census.gov/cps_ftp.html.

11. Sharon K. Long et al., "Another Look at the Impacts of Health in Massachusetts: Evidence Using New Data and a Stronger Model," *American Economic Review: Papers and Proceedings* 99, no. 2 (May 2009): 508–11, http://bit.ly/5VOWKa.

12. Alan G. Raymond, "Massachusetts Health: The Myth of Uncontrolled Costs," Massachusetts Taxpayers Foundation, May 2009, http://bit.ly/4WUmTb.

13. Personal correspondence with Massachusetts Taxpayers Foundation president Michael J. Widmer, July 20, 2009, available on request.

14. Commonwealth of Massachusetts Health Connector, "Health Facts and Figures," August 2009, p. 4, http://bit.ly/4Tza1G.

15. Joanna Turner et al., "A Preliminary Evaluation of Health Insurance Coverage in the 2008 American

Community Survey," U.S. Bureau of the Census, September 22, 2009, p. 9, http://bit.ly/4GxDQ1.

16. Davern et al., "Are the CPS Uninsurance Estimates Too High?"

17. U.S. Bureau of the Census, "Historical Health Insurance Tables: Table HIA-4. Health Insurance Coverage Status and Type of Coverage by State—All Persons: 1999 to 2008," September 22, 2009, http://bit.ly/7jG4ND. There is a scholarly consensus that although the March supplement to the CPS attempts to capture the number of respondents who were uninsured for the whole of the previous year, it actually captures the number of respondents who were uninsured on the day they took the survey, which tends to be larger than the number actually uninsured for all of the previous year. See, for example, U.S. Congressional Budget Office, "How Many People Lack Health Insurance and For How Long?" May 2003, http://bit.ly/6uWfUh. The CPS can nevertheless capture trends in health insurance coverage.

18. "Th[e] combination of having a relatively low uninsurance rate and having a relatively high number of imputations makes Massachusetts more susceptible to the bias." M. Davern et al., "Missing the Mark? Possible Imputation Bias in the Current Populations Survey's State Income and Health Insurance Coverage Estimates," *Journal of Official Statistics* 20, no. 3 (2004): 544.

19. M. Davern et al., "Missing the Mark?"

20. Ibid., p. 546.

21. A small number of Massachusetts residents are exempt from the individual mandate.

22. Davern et al., "Missing the Mark?," pp. 519–49.

23. Our data reveal that imputed values for health insurance were unusually high in 2005 relative to the 2006–2008 period. More than 30 percent of individuals had at least one CPS health insurance item imputed in 2005, compared with 13.4–17.6 percent in the subsequent years. On the other hand, imputed values for income vary between 29.6 and 31.1 percent over the full time period. Due to the concern about the high relative rate of imputations in 2005, we re-ran our regressions excluding the 2005 calendar year. Our assessment of the impact of the Massachusetts law on the incentive to not report, if anything, is strengthened by excluding 2005.

24. This figure ignores any increase in imputations among children, which is statistically significant in the 150–300 percent FPL stratum, and therefore underestimates the potential bias from induced nonresponse.

25. This is statistically significant at a 90-percent confidence interval. U.S. Bureau of the Census, "Number and Percentage of People without Health Insurance Coverage by State Using 2- and 3-Year Averages: 2005–2006 and 2007–2008," http://bit.ly/7gcazN.

26. See Sharon K. Long et al., "Another Look at the Impacts of Health in Massachusetts: Evidence Using New Data and a Stronger Model," *American Economic Review: Papers and Proceedings* 99, no. 2 (May 2009): 511, Table 1, http://bit.ly/5VOWKa.

27. Raymond.

28. See Jonathan Gruber and Janet Currie, "Health Insurance Eligibility, Utilization of Medical Care, and Child Health," *Quarterly Journal of Economics* 111, no. 2 (May 1996): 431–66, http://bit.ly/6M6iI8; and Jonathan Gruber and Janet Currie, "Saving Babies: The Efficacy and Cost of Recent Expansions of Medicaid Eligibility for Pregnant Women," *Journal of Political Economy* 104, no. 6 (January 1997): 1263–96, http://bit.ly/8LRWQ9. Presumably, the response of an objective health measure like infant mortality to policy changes should be more inelastic than the response of self-reported health. The main shortcoming of using self-reported health as a health outcome is how self-reported health maps onto more objective measures of health.

29. Including 2007 data reduces the improvements in good (or better) health, yet still shows self-reported health compressing (data not shown).

30. For an overview of the literature on crowd-out, see Jonathan Gruber and Kosali Simon, "Crowd-out 10 Years Later: Have Recent Public Insurance Expansions Crowded out Private Health Insurance?" *Journal of Health Economics* 27, no. 2 (March 2008): 201–17, http://bit.ly/74UzPy.

31. See Sharon K. Long, "On the Road to Universal Coverage: Impacts of Reform in Massachusetts at One Year Long," *Health Affairs* Web Exclusive (June 3, 2008): w271, http://bit.ly/7kTVcG; and Sharon K. Long et al., "Another Look at the Impacts of Health in Massachusetts: Evidence Using New Data and a Stronger Model," *American Economic Review: Papers and Proceedings* 99, no. 2 (May 2009): 508–11, http://bit.ly/5VOWKa.

32. See Aaron Yelowitz, "ObamaCare: A Bad Deal for Young Adults," Cato Institute Briefing Paper no. 115, November 5, 2009, http://bit.ly/7qUTXm.

33. Some observers maintain that cost control was

not an objective of Chapter 58, in spite of Governor Romney's promises of lower health care costs. See, for example, Michelle Andrews, "Health Care: Stop Focusing on the Cost," *CBS Moneywatch*, August 6, 2009, http://bit.ly/4EfSN0.

34. U.S. Census Bureau, "Table HI05. Health Insurance Coverage Status and Type of Coverage by State and Age for All People: 2008," Current Population Survey, 2009 Annual Social and Economic Supplement, Page Last Modified: September 11, 2009, http://bit.ly/8Qh1LW.

35. Ibid.

36. Robert Seifert and Paul Swoboda, "Shared Responsibility: Government, Business, and Individuals: Who Pays What for Health?" Blue Cross Blue Shield of Massachusetts Foundation, March 2009, http://bit.ly/4X3NaI.

37. Cathy Schoen, Jennifer L. Nicholson, and Sheila D. Rustgi, "Paying the Price: How Health Insurance Premiums Are Eating up Middle-Class Incomes," The Commonwealth Fund, August 2009, p. 8, http://bit.ly/91cTbe.

38. See U.S. Congressional Budget Office, "An Analysis of the Administration's Health Proposal," February 1994, http://bit.ly/5VxkUP.

39. Helen Levy and David Meltzer, "What Do We Really Know about Whether Health Insurance Affects Health?" in *Health Policy and the Uninsured*, ed. Catherine G. McLaughlin (Washington: Urban Institute Press, 2004), p. 201.

40. Helen Levy and David Meltzer, "The Impact of Health Insurance on Health," *Annual Review of Public Health* 29 (April 2008): 399–409, http://bit.ly/4ytmhz.

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Policy Analysis

No. 650 October 21, 2009

Yes, Mr. President
A Free Market Can Fix Health Care

by Michael F. Cannon

Executive Summary

In March 2009, President Barack Obama said, "If there is a way of getting this done where we're driving down costs and people are getting health insurance at an affordable rate, and have choice of doctor, have flexibility in terms of their plans, and we could do that entirely through the market, I'd be happy to do it that way." This paper explains how letting workers control their health care dollars and tearing down regulatory barriers to competition would control costs, expand choice, improve health care quality, and make health coverage more secure.

First, Congress should give Medicare enrollees a voucher and the freedom to choose any health plan on the market. Vouchers would be means-tested, would contain Medicare spending, and are the only way to protect seniors from government rationing.

Second, to give workers control over their health care dollars, Congress should reform the tax treatment of health care with "large" health savings accounts. Large HSAs would reduce the number of uninsured Americans, would free workers to purchase secure health coverage from any source, and would effectively give workers a $9.7 trillion tax cut without increasing the federal budget deficit.

Third, Congress should break up state monopolies on insurance and clinician licensing. Allowing consumers to purchase health insurance licensed by other states could cover one-third of the uninsured without any new taxes or government subsidies.

Finally, Congress should reform Medicaid and the State Children's Health Insurance Program the way it reformed welfare in 1996. Block-granting those programs would reduce the deficit and encourage states to target resources to the truly needy.

The great advantage of a free market is that innovation and more prudent decisionmaking means that fewer patients will fall through the cracks.

Michael F. Cannon is director of health policy studies at the Cato Institute and coauthor of Healthy Competition: What's Holding Back Health Care and How to Free It.

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Whereas President Obama attempts to pour more resources into health care, a free market would get more out of America's health care sector.

Introduction

In March 2009, at the outset of his effort to overhaul America's health care sector, President Barack Obama told a White House summit:

> If there is a way of getting this done where we're driving down costs and people are getting health insurance at an affordable rate, and have choice of doctor, have flexibility in terms of their plans, and we could do that entirely through the market, I'd be happy to do it that way.[1]

This paper explains how a free market can and would control costs, expand choice, improve health care quality, and make health coverage more secure. The key steps that would move America toward a free health care market are Medicare, tax, and regulatory reforms that give consumers control over their health care dollars and free them to choose from a wide variety of providers and health plans.

At present, America's health care sector is far from a free market. Government directly controls nearly half of all health care spending, and indirectly controls most of the remainder.[2] Government controls more than half of the nation's health *insurance* dollars (through Medicare, Medicaid, and other public programs), and delegates control over another third to employers through the preferential tax treatment granted to employer-sponsored health insurance.[3] The federal government imposes an average tax penalty of more than 40 percent on the one market that offers a wide range of health plans and seamless coverage between jobs: the "individual" market, where consumers purchase coverage directly from insurers. (Indeed, that tax penalty may explain much public dissatisfaction with the individual market.[4]) More than half of U.S. health care spending takes place under government price and exchange controls. As President Obama's economic adviser Larry Summers reminds us, "Price and exchange controls inevitably create harmful economic distortions. Both the distortions and the economic damage get worse with time."[5] That is to say nothing of the countless counterproductive regulations that government imposes on clinicians, insurance, medical products, and health care facilities.[6]

As health economist Victor Fuchs explains, most leading health care reforms "aim at cost shifting rather than cost reduction."[7] Whereas the legislation that President Obama is shepherding through Congress attempts to cover the uninsured by pouring more resources into health care, a free market would get more out of America's health care sector. Letting Americans control their health care dollars and breaking up the states' monopolies on insurance and clinician licensing (with "regulatory federalism") would put access to health care within reach of millions of Americans by putting downward pressure on health care prices and health insurance premiums. Those reforms would also dramatically improve quality by allowing various health plans, with various payment systems and delivery systems, to compete on a level playing field.

Controlling Costs

Health care spending is growing unsustainably. Over the past 30 years, health care spending has grown more than 2 percentage points faster than the economy overall,[8] and now stands at 18 percent of GDP.[9]

That would not be a problem if we were getting our money's worth. The most credible estimates, however, suggest an alarming one-third of health care spending does nothing to make patients healthier or happier.[10] In 2009, Americans will waste more than $800 billion—about 6 percent of U.S. GDP—on medical care that provides zero benefit to patients. Americans will waste additional billions on services whose benefits are not worth the cost. That wasteful spending results in higher taxes, higher health insurance premiums, and more uninsured Americans.

Government Failure

Government is largely incapable of eliminating wasteful health care spending, because nobody spends other people's money as carefully as they spend their own. Government tax and entitlement policy denies patients ownership of their health care dollars, and thereby strips them of any incentive to control costs. Due to federal tax policy, for example, Stanford University health economist Alain Enthoven estimates that "less than 5 percent of the insured workforce can both choose a health plan and reap the full savings from choosing economically."[11] Indeed, consumers resist efforts to eliminate wasteful spending, and with good reason. Since they are enjoying health insurance that is effectively purchased with other people's money, consumers receive no direct financial benefit from eliminating wasteful spending, whether through cost-sharing or care management. When Medicare tries to eliminate coverage of low-value services or to reduce excessive provider payments, seniors experience nothing but pain. Workers perceive increased cost-sharing or managed-care controls as cuts in their compensation. Even though these steps should ultimately lead to higher wages and lower taxes, those benefits are not salient to seniors and workers.[12]

That lack of cost-consciousness creates what author David Goldhill describes as "an accidental collusion between providers benefiting from higher costs and patients who don't fully bear them."[13] Former Senate Majority Leader Tom Daschle writes that this results in a politically powerful "patient-provider pincer movement" that blocks efforts to reduce wasteful spending.[14] The patient-provider pincer movement prevents Medicare from considering cost-effectiveness when deciding whether to cover particular services; repeatedly eliminates funding for federal agencies that conduct comparative-effectiveness research;[15] preserves excessive Medicare payments for specialists, insurers, and procedures; blocks competitive bidding for durable medical equipment in Medicare; has made a joke out of the scheduled "sustainable-growth-rate" cuts to Medicare physician payments; and even curtails private-sector efforts to eliminate wasteful spending with managed-care controls.

The end result is that both government- and employer-sponsored insurance waste money in ways that consumers spending their own money never would. If the health reform legislation currently before Congress becomes law, politicians and employers will continue to control Americans' health care dollars, and this government failure will persist.[16]

The Free-Market Alternative

A free market, in contrast, would eliminate wasteful health care spending. Individuals would control their own health care dollars and would therefore benefit directly from reducing waste. A less-regulated market would also free Americans to choose from a wide variety of health plans and providers.

When consumers own and control their health care dollars—in particular, the money that purchases their health insurance—the self-interest of hundreds of millions of Americans will lead them to choose health plans that eliminate wasteful spending, whether through cost-sharing or care management, in exchange for lower premiums. Peter Orszag, President Obama's director of the Office of Management and Budget, testified before Congress on the promise of individual ownership:

> Workers may demand less efficiency from the health system than they would if they knew the full cost that they pay via forgone wages for coverage or if they knew the actual cost of the services being provided.[17]
>
> [I]magine what the world would be like if workers [understood] that today it was costing them $10,000 a year in take-home pay for their employer-sponsored insurance, and that could be $7,000 and they could have $3,000 more in their pockets today if we could relieve these inefficiencies out of the health system. Making those costs more

Government is largely incapable of eliminating wasteful health care spending, because nobody spends other people's money as carefully as they spend their own.

transparent may generate demand for efficiency.[18]

Consumers who *own* the money they are spending are a cornerstone of free and functional markets. A free market would reduce wasteful spending with minimal harm because, unlike price controls and other tools of government rationing,[19] markets allocate resources according to consumer preferences, rather than the preferences of politicians, government bureaucrats, or special-interest lobbyists.

Restoring individual ownership to health care will require a two-pronged strategy.

Medicare Reform

For Americans covered by Medicare, Congress should give enrollees a voucher and let them choose any health plan available on the market.[20] To ensure that all beneficiaries can afford a basic health plan, Medicare should give larger vouchers to poorer and sicker seniors and smaller vouchers to healthy and wealthy seniors, using current health-risk-adjustment mechanisms[21] and Social Security data on lifetime earnings.[22]

The amount of each individual's voucher must be fixed, so that enrollees who want to purchase comprehensive coverage would have to pay more for it. Likewise, if a Medicare enrollee chooses an economical policy, she could save the balance of her voucher in an account dedicated to out-of-pocket medical expenses. When enrollees bear the added cost of comprehensive coverage, and reap the savings from more economical coverage, their self-interest will lead them to select health plans that curb wasteful spending. Letting seniors make their own rationing decisions is the only way to protect seniors from government rationing.[23]

Medicare vouchers are the only way to protect seniors from government rationing.

Tax Reform

In the film *Sicko*, director Michael Moore took five Ground Zero rescue workers to Cuba, where they received "free" treatment for the ailments they contracted during the 9/11 rescue effort. All five had employer-sponsored insurance on September 11, 2001, but lost their coverage when they subsequently lost those jobs.[24] Had they been free to purchase coverage directly from an insurance company without penalty, Moore would have had more difficulty finding sick, uninsured Americans.

To give people under age 65 the freedom to control their health care dollars without penalty, Congress must reform the tax code. Employer-provided health insurance currently receives favorable tax treatment compared to health insurance that consumers purchase directly. That tax preference reduces the after-tax price of employer-sponsored insurance by 30 percent on average, which is the equivalent of imposing a 42-percent tax penalty on coverage purchased directly from an insurance company. As a result, some 163 million non-elderly Americans obtain coverage through an employer, while only 18 million purchase coverage directly from an insurance company.[25] The "tax exclusion" for employer-sponsored insurance encourages wasteful health spending by also distorting the after-tax price of medical services relative to other uses of income.[26]

This supposed tax "break" for employer-sponsored health insurance actually operates more like a tax hike, because it denies workers control over a large portion of their earnings as well as their health care decisions. To obtain this tax break in 2009, workers with self-only coverage sacrificed control over more than $4,000 of their earnings to their employers, while those with family coverage sacrificed control of nearly $10,000, on average.[27] Analysts typically call those amounts the "employer contribution" to the cost of health benefits, yet economists agree that employers fund those contributions by reducing workers' wages.[28] In other words, that money is part of each worker's earnings, but the worker does not and cannot control it. This tax break also largely confines workers' coverage choices to the few (if any) options their employer offers. In 2008, 80 percent of covered workers had at most two health insurance options; 47 percent had only one option.[29]

The tax preference for employer-sponsored insurance therefore creates a health insurance "market" that largely resembles a government program. Much like a tax, it denies workers control over their earnings. Much like a government program, it empowers agents—that is, employers—to determine whether consumers will have a choice of health plans, and what those choices will be. As with government programs, federal nondiscrimination rules effectively impose price controls that prohibit insurance premiums from varying according to risk.

Returning those earnings to the workers requires reforming the tax code so that all health insurance—whether purchased through an employer or directly from an insurer—receives the same tax treatment. For example, replacing the current tax exclusion with either health-insurance tax credits,[30] a standard deduction for health insurance,[31] or large health savings accounts[32] would level the playing field between employment-based coverage and other sources of health insurance. Absent any tax preference for employer-sponsored coverage, workers could demand that employers give them their $4,000 or $10,000 as cash, and could use those funds to purchase coverage from any source. A competitive labor market would force employers to comply.[33]

All of which means that eliminating the tax preference for job-based insurance would be an enormous tax *cut*. First and most obvious, the above-mentioned tax reforms would provide tax breaks to all individuals, regardless of where they purchase health insurance. Those reforms would therefore deliver tax relief to individuals who purchase insurance outside an employment setting, and who currently receive no tax break.

Second, and less obvious, eliminating the tax preference for employer-sponsored insurance would result in a massive tax cut for workers with employer-sponsored insurance, because each insured worker would gain control over $4,000 or $10,000 of her earnings that she currently does not control. In 2007, employers contributed more than $532 billion to employee health benefits. In the prior 10 years, aggregate employer contributions grew at an average rate of 8 percent. Assuming that they continue to grow at that rate through 2019, employer contributions to employee health benefits will total $9.7 trillion over the next 10 years.[34]

Eliminating the tax preference for employer-sponsored insurance would therefore shift control over more than $532 billion each year, and $9.7 trillion over the next 10 years, from employers to workers. That effective $9.7 trillion tax cut would not increase the federal budget deficit, and it would more than swamp any small, explicit tax increases that altering the existing tax treatment of employer-sponsored insurance would impose on some insured workers.[35] Unlike other tax reforms, Large HSAs would deliver that tax cut immediately and with greater transparency.

Workers would receive that tax cut even if employers immediately dropped their health benefits. An employer who did not cash out its workers would lose those workers to competing firms who either continue to offer health benefits, or who pay workers the cash equivalent of those health benefits. The CBO writes:

> To be sure, workers' cash compensation might not increase immediately by the full amount of any reduction in employers' payments for health insurance. For that reason, firms that currently contribute toward the costs of their workers' health benefits could temporarily reap some savings in labor costs.[36]

But those savings would not be permanent, because a competitive labor market would force those firms to pay workers the full value of those cancelled health benefits. Again, Large HSAs would make that tax cut immediate and transparent, and all but eliminate the incentive for employers to capture that short-term gain.

Eliminating the tax preference for employer-sponsored insurance would also expand consumers' health plan choices. Workers would be

Eliminating the tax preference for job-based insurance would be an enormous tax *cut* totaling $9.7 trillion over the next 10 years.

The individual market provides coverage as secure as, or more secure than, job-based coverage.

free to remain with their company's health plan. Yet they would no longer be confined to the few (if any) choices their employer offers. They could choose any health plan available on the market, including plans with varying benefits, cost-sharing structures, delivery systems, and payment systems. Consumers who value greater physician choice, but who are currently locked into closed-panel managed-care plans, could select a fee-for-service plan. Consumers who value lower premiums more than physician choice could do the reverse.

In the process, consumers' self-interest would eliminate wasteful spending. The Congressional Budget Office writes that "with a fixed-dollar tax credit or deduction . . . employees would capture more of the savings from choosing a cheaper plan. As a result, the CBO estimates that people would ultimately select plans with premiums that are between 15 percent and 20 percent lower than the premiums they would pay under current law."[37] Unlike government efforts to ration medical care, consumers would curb spending in ways that fit their individual preferences.

Medicare reform and tax reform would further reduce costs by spurring greater competition between health plans and providers. With seniors choosing from a menu of private health plans, the market would no longer operate under the stranglehold of Medicare's fee-for-service price and exchange controls. Greater competition would put downward pressure on prices for medical services. Provider competition would also grow as cost-conscious consumers make greater use of mid-level clinicians for basic care, such as through retail clinics and other settings.[38]

Answering the Critics

Few dispute that letting consumers control their health care dollars would reduce wasteful health care spending. The most common criticism of individual ownership is that consumers would restrain spending too much; that many consumers would skimp on care, leading to higher costs down the road. Research suggests that is not the case. The RAND Health Insurance Experiment showed that either cost-sharing or care management can reduce wasteful health care spending without harming overall health.[39] Individual ownership and greater competition could even improve health by expanding access to health plans that emphasize preventive care, coordinated care, information technologies (including electronic medical records), medical-error reduction, and comparative-effectiveness research.[40]

Critics also fear that, in the transition from the current tax preference for employer-sponsored insurance to a level playing field, some workers with high-cost illnesses would be unable to obtain coverage. If enough workers leave an employer's health plan for the individual market, the employer may have to drop its health benefits. The sickest people in those pools would then have difficulty purchasing coverage on their own.

For several reasons, this serious concern should not be an obstacle to letting workers control their own money. First, thousands of workers are already losing their employer-sponsored insurance with every passing day, because employers are either dropping coverage or eliminating jobs.[41] Many have expensive illnesses and are subsequently unable to purchase coverage. They generally receive no tax breaks to help them purchase private health insurance. Tax reform would assist those workers by reducing the after-tax cost of coverage for everyone who purchases insurance on the individual market.

Second, the freedom to purchase health insurance directly from an insurance company—coverage that stays with consumers between jobs—will guarantee that fewer Americans would find themselves in such dire straits. Economists Mark Pauly and Robert Lieberthal found that, for people with high-cost illnesses, the individual market provides coverage as secure as, or more secure than, job-based coverage: "a young male high risk who initially had small-[employer] coverage faces a 44 percent chance of becoming uninsured . . . a risk nearly twice as great as it would be if he initially had individual insurance."[42]

Third, the individual market does a better job of providing health insurance to the sick than conventional wisdom suggests. Pauly, Susan Marquis of the RAND Corporation, and their respective colleagues find that there is significant subsidization of the sick by the healthy in the individual market, and that such pooling increases over time.[43] Contrary to the conventional wisdom, Marquis and colleagues find that in California's individual market, "a large number of people with health problems do obtain coverage."[44]

Fourth, the above-mentioned tax reforms would put relatively more money in the hands of workers with higher medical costs. Economists consistently find that cash wages adjust downward to account for the higher costs that older,[45] obese,[46] and female[47] employees impose on an employer's health plan. Put differently, workers with costly medical conditions accept lower wages than they could otherwise command, in order to obtain health benefits.

Those workers would therefore receive the biggest tax cuts after eliminating the tax preference for employer-sponsored insurance. The fact that those workers currently accept lower wages than they could otherwise command means that they would generally receive more than the average $4,000 or $10,000 annual cash-out. A free market would therefore do exactly what so-called "risk-adjustment" schemes attempt to do: target resources to the people who need them most. Whereas President Obama and congressional Democrats have proposed taxing high-cost health plans, which would hit older, unionized, and female workers the hardest,[48] eliminating the tax preference for employer-sponsored insurance would give those workers the most tax *relief*. Unlike other tax reforms, which would delay that tax cut, Large HSAs would deliver those resources to sick workers immediately. To the extent that those workers are at a higher risk of losing their jobs and their coverage because they fall ill, the freedom to purchase secure, portable coverage is likewise more valuable to them than to other workers.

Finally, Large HSAs would go even further by extending the same tax relief to the uninsurable as to those who purchase insurance—something that no other tax reform proposal would do.

Affordable Coverage and a Choice of Doctors and Health Plans

Making health insurance more affordable requires more than giving consumers control over their health care dollars. Government regulations drive health care costs higher by blocking competition from more-efficient providers, insurance plans, delivery systems—and even more-efficient regulators. Reforming insurance and clinician regulation with "regulatory federalism" would make health insurance more affordable, as well as expand the freedom to choose one's own doctor and health plan.

Monopolistic Insurance Licensing

State health-insurance licensing is a prime example of costly regulation. Each state requires insurers to obtain a license from that state's government in order to sell insurance within that state's borders. Those laws effectively give each state a monopoly over providing consumer protections to insurance purchasers because they prevent employers and individuals from purchasing health insurance licensed and regulated by other states.[49]

Some form of regulation is necessary to ensure that health insurers keep their commitments to their enrollees. Yet monopolistic insurance-licensing laws may be more harmful than helpful. Those laws give government the power to dictate the terms of every health insurance policy sold in the state—a power that is inevitably captured by the health care industry.

As a result, state insurance-licensing laws require consumers to purchase coverage for an average of 42 specific types of health services—whether the consumer wants that coverage or not.[50] Some states also use insurance-licensing laws to enact price controls that tax healthy consumers to subsidize the sick. Those price-

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control laws typically do little to increase risk pooling,[51] but they do create perverse incentives for insurers to avoid the sick[52] and can cause insurance markets to unravel.[53] Physicians have used insurance-licensing laws to protect their incomes from market forces that would otherwise make health care more affordable.[54] The Congressional Budget Office estimates that state health insurance regulations increase health insurance premiums by 15 percent on average.[55] Eliminating just half of that burden could save families $1,000 or more on their premiums.[56]

Monopolistic Clinician Licensing

Regulation increases health care costs by blocking competition between clinicians as well.[57] As with insurance, each state requires clinicians to obtain a license from that state's government in order to practice within its borders. Those clinician-licensing laws define a "scope of practice" for each type of mid-level clinician, such as nurse practitioners and physician assistants. Those laws give government the power to decide what tasks each type of clinician may perform. Again, that power is inevitably captured by the health care industry—in this case, by competing clinicians, especially physicians.

Clinicians' scopes of practice are a perennial battleground for clinician groups who try to block competition for their members by narrowing the range of services that competing clinicians perform, or the settings in which they practice. Ophthalmologists use licensing laws to prevent optometrists from performing surgical procedures. Anesthesiologists use licensing laws to block competition from nurse anesthetists. Physicians use licensing laws to prevent podiatrists from treating the ankle,[58] as well as to restrict nurse practitioners' ability to prescribe drugs and operate retail clinics.[59] Physicians have even used clinician-licensing laws to block competition from health insurers that contain costs by making more extensive use of mid-level clinicians (e.g., physician assistants, nurse practitioners).[60] There is ample evidence that clinician-licensing laws have increased costs by blocking competition, yet there is little or no evidence that such laws have made patients any healthier.[61]

Some type of regulation is necessary to prevent clinicians (including physicians) from practicing beyond their competence. Like monopolistic insurance licensing, however, monopolistic clinician licensing appears to be an inadequate and even counterproductive form of regulation.

Break up Regulatory Monopolies

Consumer protections are ultimately a product. Like all monopolies, the monopolies that state governments hold over licensing clinicians and insurers produce high-cost, low-quality consumer protections. The most promising way to spur cost-saving competition between clinicians and insurers is to break up those monopolies and force regulators to compete to provide the best set of consumer protections.

With regard to insurance, that means preventing states from using their insurance-licensing laws as a barrier to entry for insurance products licensed by other states. An employer or consumer in Michigan, for example, should be allowed to purchase an insurance policy licensed in Connecticut or any other state, so that the only insurance regulations that would govern that relationship would be Connecticut's. Those regulations could be incorporated into the insurance contract, so that the purchaser could enforce Connecticut's consumer protections in Michigan courts, even with the help of Michigan's insurance commissioner.[62] (States courts frequently enforce other states' laws already.[63])

Allowing state-issued insurance licenses to cross state lines would make insurance more affordable. It would give employers and individual purchasers the freedom to choose only the coverage and regulatory protections they want, and to avoid unwanted regulatory costs. A study by Stephen Parente and colleagues at the University of Minnesota estimated that ending those regulatory monopolies could cover an additional 17 million Americans, or one-third of the most commonly cited estimate of the uninsured.[64] Moreover, it would

do so without creating any new taxes or new government subsidies, and would likely reduce the federal deficit.[65]

With regard to clinicians, breaking up regulatory monopolies means preventing state governments from barring entry to clinicians licensed by other states. Physicians and other clinicians licensed by Virginia should be able to practice in Maryland or Maine or Montana under the terms of their Virginia license, while still subject to local malpractice rules. That change would give physicians and mid-level clinicians more freedom to live and practice where they wish.

The primary benefit of ending this regulatory monopoly, however, would likely come from encouraging competition by corporate providers of care,[66] such as retail clinics and health plans like Kaiser Permanente and Group Health Cooperative. Such providers operate their own facilities and employ their own staff of clinicians. Health plans like Kaiser and Group Health strive to make medical care more affordable, in part by using mid-level clinicians to their full competence. Making state-issued clinician licenses portable would enable such organizations to compete nationwide without facing different regulatory obstacles in each state.

Eliminating both types of regulatory monopoly would force states to compete to provide the protections that consumers demand, while avoiding unwanted regulatory costs. States that want to collect licensing fees and premium taxes would face powerful incentives to find the "right" amount of regulation—not too much and not too little—much like Delaware has made itself the go-to state in the market for corporate chartering laws.

Ideally, state legislatures would take the lead by recognizing the clinician and insurance licenses issued by other states. Yet Congress can act as well, using its powers under the Commerce Clause to tear down these barriers to trade between the states.[67]

"Regulatory federalism," as it is called, would expand the array of health-insurance and medical-delivery choices available to consumers—particularly by allowing competition from more efficient providers and health plans that states' regulatory monopolies hold at bay.

Answering the Critics

Critics fear that breaking up states' regulatory monopolies would spur states to gut essential consumer protections in an effort to capture health insurance premium taxes and clinician licensing fees. The result would be a "race to the bottom" where fly-by-night insurance companies and incompetent clinicians do harm to patients.

Yet political factors and competitive market forces would prevent a race to the bottom by restoring vital consumer protections. Suppose that Delaware gutted its consumer protections and began issuing licenses to sketchy insurers and clinicians, in the hope of collecting lots of premium taxes and licensing fees. Could Delaware get away with it? Not likely. First, some of those insurers and clinicians would inevitably harm Delaware residents, who would demand that their politicians restore those essential consumer protections. Second, competitors would discipline the low-quality clinicians and health plans licensed by Delaware. Higher-quality insurers and clinicians would advertise their credentials, including the fact that they comply with the stronger consumer protections demanded by other states. Third, courts in other states would deter Delaware-licensed insurers and clinicians from bad behavior by enforcing contracts and punishing medical negligence. Regulatory federalism would still allow each state to set its own medical malpractice rules, which provide additional (and perhaps superior) protections against incompetent clinicians. Finally, consumers themselves would discipline low-quality insurers and clinicians after learning of Delaware's reputation through the news, *Consumer Reports*, and other media. Whether Delaware eliminated vital consumer protections deliberately or inadvertently, these self-correcting mechanisms would restore those essential consumer protections.

Critics likewise fear that allowing consumers to avoid state-imposed price controls

"Regulatory federalism" would allow competition from more efficient providers and health plans that states' regulatory monopolies hold at bay.

on health insurance would lead health insurers to dump patients because they need expensive care. Yet markets offer protections against such behavior. First, Mark Pauly and Johns Hopkins University economist Bradley Herring find that absent price controls, insurers set premiums so as to eliminate any incentive for low-risk consumers to avoid pooling with high-risk consumers.[68] Second, the controversy over rescissions in California's individual market demonstrates both that insurers may shirk their commitments to the sick, but also that the courts, media scrutiny, and the forces of reputation and competition check such behavior.[69] If Americans were free to choose their own health plan, the forces of reputation and competition would be even stronger (while administrative costs in the individual market would fall).[70] Third, University of Chicago economist John H. Cochrane explains that a free market would further discipline insurers by offering products that give even sick patients the freedom to flee a disreputable insurer.[71] Indeed, Cochrane explains, it is government price controls—not market forces—that encourage insurers to avoid sick people, because price controls prevent insurers from charging enrollees a premium that covers their cost to the plan.

Monopoly—not competition—produces a race to the bottom. Regulatory federalism will drive a race to equilibrium by finding the best balance between too little regulation and too much regulation.

Congress should reform Medicaid and the State Children's Health Insurance Program with block grants that give states the ability and the incentive to target those resources to the truly needy.

Helping the Needy

A free market would provide better and more affordable health insurance to more Americans, but it would not provide health insurance to every last person. Many would require subsidized health care, either because they did not purchase health insurance when they could have, or because health insurance was never within their grasp.

The first contribution that a free market would make to alleviate the suffering of the needy would be to reduce the number of Americans who find themselves unable to afford medical care. Through greater price competition and innovation, a free market would put health insurance and medical care within the reach for more low- and middle-income Americans. It would also provide more seamless and secure health insurance coverage, so that fewer Americans would find themselves sick and uninsured.

Moreover, subsidizing the needy need not disrupt the crucial progress that markets can make on reducing costs and improving quality. For example, considerable evidence suggests that government programs like Medicaid and the State Children's Health Insurance Program enroll many non-needy people who could obtain coverage on their own.[72] Better management of those programs would make more resources available for the truly needy.

Congress should build on the success of welfare reform by reforming those programs the same way it reformed the Aid to Families with Dependent Children program in 1996: with block grants that give states the ability and the incentive to target those resources to the truly needy.[73] As markets make health insurance more secure and medical care more affordable, fewer people will fall into this vulnerable situation, and it will be easier to care for those who do.

Conclusion

When President Obama said, "We've got to admit that the free market has not worked perfectly when it comes to health care,"[74] he was doubly correct. The free market hasn't worked perfectly, because it hasn't been given a chance to work at all.

But he was also correct in the sense that a free market would fall short of perfection. Contrary to former Vermont governor Howard Dean's assessment that Obama's reform plan is "perfect," perfection is not an option.[75] Former Senate majority leader Tom Daschle more sensibly observes, "Even if we achieve 'universal' coverage, there will be some percentage of people who still fall through the cracks."[76]

The risk of health care reforms that expand government control over health care—including a new "government option,"[77] mandates,[78] and price and exchange controls—is that they would further reduce innovation and lead to even less-prudent resource decisions, both of which will cause those cracks to widen.

The great advantage of a free market is that it encourages innovation and more prudent resource allocations, which fills those cracks in over time. Many believe health care reform should include a government guarantee of "universal coverage," which even supporters often admit isn't universal in reality. If a free market were to save even more people from falling through the cracks, who would hesitate to support it?

At his March 2009 health care summit, Obama also said, "In this effort, every voice has to be heard. Every idea must be considered."[79] At a town hall meeting in June 2009, he said, "I'm very open-minded. And if people can show me here's a good idea and here's how we can get it done and it's not something I've thought of, I'm happy to steal people's ideas. You know, I'm not ideologically driven one way or another about it."[80]

Letting consumers control their health care dollars and choose from a wide array of competing health plans and providers would make health care better, more affordable, safer, and more secure. Medicare reform, tax reform, and regulatory federalism stand ready to put those cornerstones of a free health care market in place.

They await their champion.

Notes

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CRIMINAL JUSTICE

STATE LEGISLATORS SHOULD:

- End the drug war by regulating narcotics in the same way that liquor is controlled;
- Restrict drug sales to minors and arrest only those who pose a danger to others, such as those driving under the influence;
- Abolish plea bargaining, a procedure that prosecutors often use to coerce guilty pleas from the innocent and too often results in unwarranted leniency for violent offenders;
- Reform the indigent criminal defense system by establishing vouchers that would empower poor people to choose their own attorneys;
- Stop the militarization of police tactics by keeping SWAT units away from routine policing;
- Rescind asset forfeiture policies that let police departments keep the assets they seize in raids;
- Justly compensate innocent people who were wrongfully prosecuted and imprisoned.

CATO RESOURCES:

- "The Budgetary Impact of Ending Drug Prohibition," by Jeffrey A. Miron and Katherine Waldock, White Paper (September 27, 2010) 457
- "Reforming Indigent Defense: How Free Market Principles Can Help to Fix a Broken System," by Stephen J. Schulhofer and David Friedman, Policy Analysis 666 (September 1, 2010) 515
- "Drug Decriminalization in Portugal: Lessons for Creating Fair and Successful Drug Policies," by Glenn Greenwald, White Paper (April 2, 2009) 538
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- "Overkill: The Rise of Paramilitary Police Raids in America," by Radley Balko, White Paper (July 17, 2006) 579
- *In the Name of Justice: Leading Experts Reexamine the Classic Article "The Aims of the Criminal Law"*, edited by Timothy Lynch (2009) 679
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CONTACT AN EXPERT:

- Timothy Lynch, Director, Project on Criminal Justice
  - Email - tlynch@cato.org
  - Phone - 202-789-5239

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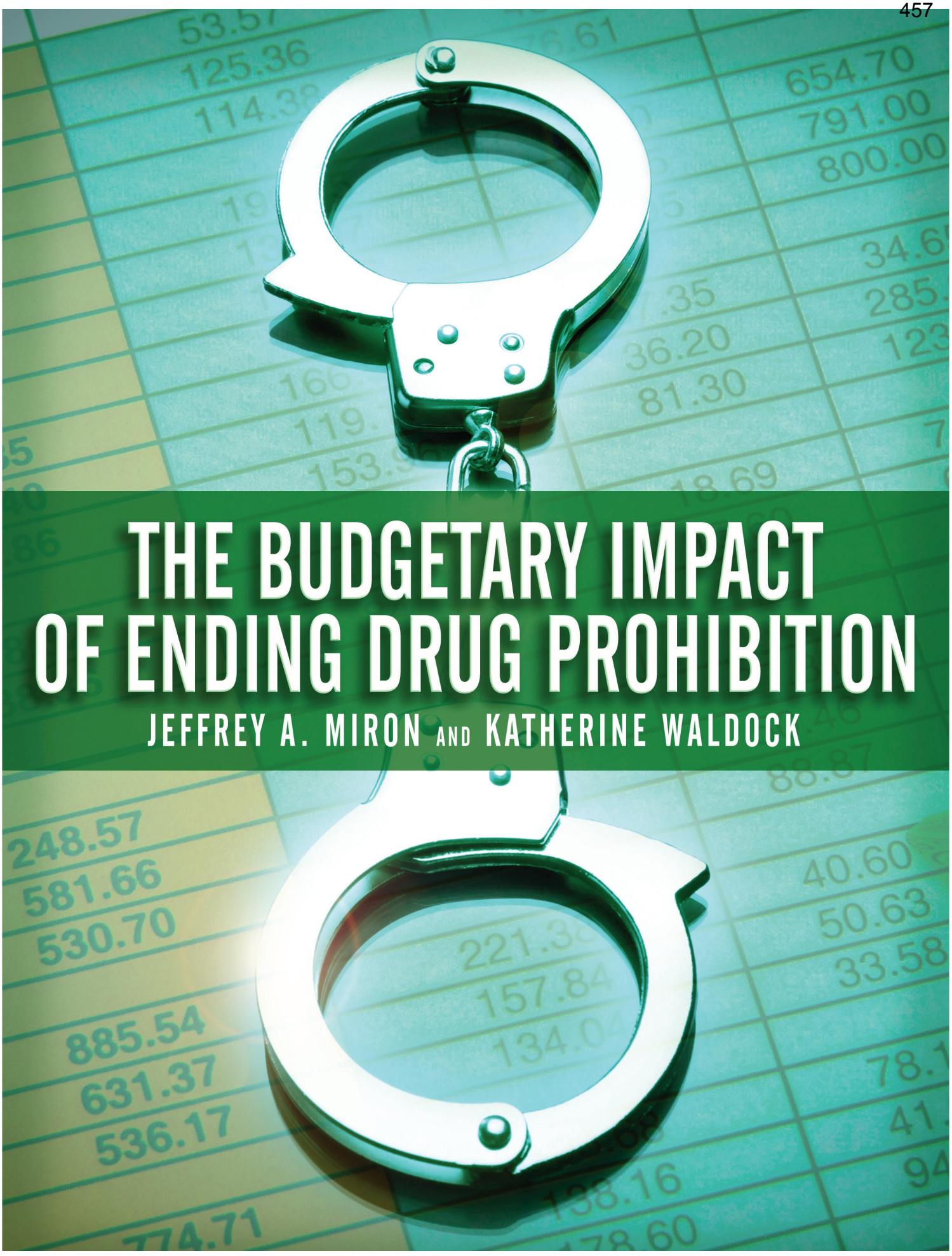

THE BUDGETARY IMPACT OF ENDING DRUG PROHIBITION

JEFFREY A. MIRON AND KATHERINE WALDOCK

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Cover design by Jon Meyers.

Printed in the United States of America.

Cato Institute
1000 Massachusetts Ave., N.W.
Washington, D.C. 20001
www.cato.org

Executive Summary

State and federal governments in the United States face massive looming fiscal deficits. One policy change that can reduce deficits is ending the drug war. Legalization means reduced expenditure on enforcement and an increase in tax revenue from legalized sales.

This report estimates that legalizing drugs would save roughly $41.3 billion per year in government expenditure on enforcement of prohibition. Of these savings, $25.7 billion would accrue to state and local governments, while $15.6 billion would accrue to the federal government. Approximately $8.7 billion of the savings would result from legalization of marijuana and $32.6 billion from legalization of other drugs.

The report also estimates that drug legalization would yield tax revenue of $46.7 billion annually, assuming legal drugs were taxed at rates comparable to those on alcohol and tobacco. Approximately $8.7 billion of this revenue would result from legalization of marijuana and $38.0 billion from legalization of other drugs.

Jeffrey A. Miron is a senior lecturer in economics at Harvard University and a senior fellow at the Cato Institute. Professor Miron earned his Ph.D. from the Massachusetts Institute of Technology and chaired the economics department at Boston University prior to joining the Harvard faculty. Katherine Waldock is a doctoral candidate at the Stern School of Business at New York University.

Introduction

State and federal governments in the United States face a daunting fiscal outlook. The national debt currently stands at 60 percent of GDP, its highest level since World War II, and under current projections this ratio will rise to more than 75 percent of GDP by 2020 and continue increasing thereafter.[1] States are also facing severe budget shortfalls.[2]

Both politicians and the public express concern about the debt, but the standard proposals for expenditure cuts or tax increases garner little support. Understandably, therefore, some politicians, commentators, interest groups, and citizens have embraced unconventional approaches to closing fiscal gaps, such as legalizing drugs. Legalization would reduce state and federal deficits by eliminating expenditure on prohibition enforcement—arrests, prosecutions, and incarceration—and by allowing governments to collect tax revenue on legalized sales.

This potential fiscal windfall is of particular interest because California, which is facing a budget shortfall of $19.9 billion for fiscal year 2011, will vote in November 2010 on a ballot initiative that would legalize marijuana under California law.[3] Advocates of the measure have suggested the state could raise "billions" in annual tax revenue from legalized marijuana, in addition to saving criminal justice expenditure or re-allocating this expenditure to more important priorities.[4] And should the California measure pass and generate the forecasted budgetary savings, other states would likely follow suit.

The fact that legalization might generate a fiscal dividend does not, by itself, make it a better policy than prohibition. Legalization would have many effects, and opinions differ on whether these are desirable on net. Both sides in this debate, however, should want to know the order of magnitude of the fiscal benefit that might arise from legalization.

This report estimates and discusses the reductions in government expenditure and the increases in tax revenue that would result from legalizing drugs. The report concludes that drug legalization would reduce government expenditure by about $41.3 billion annually. Roughly $25.7 billion of this savings would accrue to state and local governments, and roughly $15.6 billion would accrue to the federal government. Approximately $8.7 billion of the savings would result from legalization of marijuana, $20.0 billion from legalization of cocaine and heroin, and $12.6 from legalization of all other drugs. Legalization would also generate tax revenue of roughly $46.7 billion annually if drugs were taxed at rates comparable to those on alcohol and tobacco. Approximately $8.7 billion of this revenue would result from legalization of marijuana, $32.6 billion from legalization of cocaine and heroin, and $5.5 billion from legalization of all other drugs.

This report will begin with an explanation of our estimation methodology. We will then set forth and explain our estimates of the expenditures that can be saved by ending drug prohibition, and then explain our estimate of the tax revenue that would accrue by ending drug prohibition. The report will conclude with a brief discussion of the implications of our research findings.

The Analytic Framework

Analyzing the budgetary impact of legalization requires a number of assumptions about exactly what policy change is being examined. The implications of legalization by one state, with prohibition maintained in all other states and by the federal government, are likely to differ from legalization by a number of states because competition between states would undermine the tax revenue that might accrue to a single state if it were the only legal source of drugs. Legalization by the federal government is likely to have substantially different impacts than legalization by states with federal prohibition still in place, since federal prohibition might hamper state legalization in various ways.

Drug legalization would reduce government expenditure by about $41.3 billion annually.

Legalization would generate tax revenue of roughly $46.7 billion annually.

This report therefore considers the following policy change: simultaneous legalization by all states and the federal government. This policy change is not currently on the table, nor is it likely to occur in the near future. But this hypothetical case is analytically tractable because it circumvents the need for assumptions about cross-border effects or about state versus federal impacts of legalization. More importantly, this hypothetical provides an upper bound on the expenditure savings and revenue increases that might occur from legalization.

The policy change considered here—legalization—is more substantial than decriminalization, which means repealing criminal penalties against simple possession but retaining them against drug smuggling and selling. The budgetary implications of legalization exceed those of decriminalization for three reasons.[5] First, legalization eliminates arrests for drug trafficking in addition to arrests for simple possession. Second, legalization saves prosecutorial, judicial, and incarceration expenses; these savings are minimal in the case of decriminalization. Third, legalization allows taxation of drug production and sale.

The estimates provided here should not be taken as precise estimates of the budgetary implications of a legalized regime for currently illegal drugs. The analysis employs numerous assumptions, some that plausibly bias the estimates downward and some that plausibly bias the estimate upward. Thus, the estimates reported here should be considered "ballpark figures" that indicate what order of magnitude of fiscal benefit policymakers should expect from legalization.

State and Local Expenditure for Drug Prohibition Enforcement

The savings in state and local government expenditure that would result from drug legalization consist of three main components: the reduction of expenditures of police resources from eliminating drug arrests; the reduction in prosecutorial and judicial resources from eliminating drug prosecutions; and the reduction in correctional resources from eliminating drug incarcerations.[6] Other savings in government expenditure might result from legalization, but these are minor or extremely difficult to estimate with existing data.[7]

To estimate the state and local savings in criminal justice resources, this report uses the following procedure. It estimates the percentage of state and local arrests for drug violations and multiplies this percentage by the state and local budget for police (subject to one adjustment discussed below). It estimates the percentage of state and local felony convictions for drug violations and multiplies this percentage by the state and local budget for prosecutors and judges (subject to one adjustment described below). It estimates the percentage of state and local incarcerations for drug violations and multiplies this percentage by the state and local budget for prisons. It then sums these components to estimate the overall reduction in state and local government expenditures. Under plausible assumptions, this procedure yields a reasonable estimate of the cost savings from drug legalization.

Portion of State and Local Police Budget Devoted to Drug Prohibition

The first cost of drug prohibition is the portion of state and local police budgets devoted to drug arrests. This report calculates that expenditure in two steps. It first calculates the percentage of drug arrests due to prohibition. It then multiplies this percentage by state and local expenditure on police, adjusted downward by approximately 9.6 percent to account for police activity unrelated to making arrests.[8]

Table 1 calculates the fraction of state and local arrests due to drug prohibition. Line 1 gives the total number of state and local arrests in 2007. Line 2 gives the number of such arrests for drug law violations. Line 3 gives the fraction of arrests due to drug law violations, defined as Line 2 divided by Line 1. Line 4 gives the percentage of drug arrests

Table 1
Percentage of Arrests Due to Drug Prohibition, 2007

	All Drugs	Heroin/ Cocaine	Marijuana	Synthetic	Other
1. Total Arrests	14,209,365				
2. Arrests for Drug Violations	1,841,182				
3. % of Arrests, Drug Violations	12.96				
4. % of Drug Arrests, Sale/Man	17.50	7.90	5.30	1.50	2.80
5. % of Total Arrests, Sale/Man	2.27	1.02	0.69	0.19	0.36
6. % of Drug Arrests , Possession	82.50	21.50	42.10	3.30	15.60
7. % of Total Arrests, Possession	10.69	2.79	5.46	0.43	2.02
8. 0.5 * % of Arrests, Possession	5.34	1.39	2.73	0.21	1.01

Sources: Total arrests and arrests for drug violations: U.S. Department of Justice, *Crime in the United States: Estimated Number of Arrests* (Washington: Federal Bureau of Investigation, Uniform Crime Reporting Program, 2007), http://www.fbi.gov/ucr/cius2007/data/table_29.html. Drug violation and sale/manufacturing percentages: U.S. Department of Justice, *Crime in the United States: Persons Arrested* (Washington: Federal Bureau of Investigation, Uniform Crime Reporting Program, 2007), http://www.fbi.gov/ucr/cius2007/arrests/index.html.

due to sale or manufacturing violations. Line 5 gives the percentage of overall arrests due to sale/manufacturing violations, defined as Line 3 times Line 4. Line 6 gives the percentage of drug law violations due to possession violations. Line 7 gives the percentage of overall arrests due to possession violations, defined as Line 6 times Line 3.

The information in Lines 5 and 7 is what is required in subsequent calculations, subject to one modification. Some arrests for drug violations, especially those for possession, occur because the arrestee is under suspicion for a non-drug crime but possesses drugs that are discovered by police during a routine search. This means an arrest for drug possession is recorded, along with, or instead of, an arrest on the other charge. If drug possession were not a criminal offense, the suspects in such cases would still be arrested on the charge that led to the search, and police resources would be used to approximately the same extent as when drug possession is a criminal violation.[9]

In determining which arrests represent a cost of drug prohibition, therefore, it is appropriate to count only those that are "stand-alone," meaning those in which a drug violation rather than some other charge is the reason for the arrest. This issue arises mainly for possession rather than trafficking. Few hard data exist on the fraction of "stand-alone" possession arrests, but previous research studies suggest it is between 33 percent and 85 percent.[10] To err on the conservative side, this report assumes that 50 percent of possession arrests are due solely to drug possession rather than being incidental to some other crime. Thus the resources utilized in making these arrests would be available for other purposes if drug possession were legal. Line 8 of Table 1 therefore shows Line 7 divided by 2; this is the fraction of possession arrests attributable to drug prohibition.

Whereas Table 1 presents an overview of the percentages of drug arrests in the United States based on type of violation, Appendix A presents the same data broken down by individual state. Appendices C-G then use these fractions to calculate expenditures attributable to drug prohibition at the state level. Total police expenditure for the U.S. is indicated in the first part of Table 2. Line 1 gives total state and local expenditure on police in

We assume that 50 percent of possession arrests are due solely to drug possession rather than being incidental to some other crime.

Table 2
State and Local Expenditures Attributable to Drug Prohibition, Billions of 2008 dollars

	All Drugs	Heroin/ Cocaine	Marijuana	Synthetic	Other
1. Police Budget	81.03				
2. Police Budget, S/M violations	1.74	0.80	0.52	0.24	0.31
3. Police Budget, Possession violations	4.28	1.13	2.15	0.14	0.86
4. Police Budget, Drug Violations	6.02	1.93	2.67	0.38	1.17
5. Judicial Budget	17.27				
6. % Felony Convictions, Drug Violations	34.00	15.15	9.64	2.85	6.34
7. Judicial Budget, Drug Violations	5.87	2.62	1.66	0.49	1.10
8. Corrections Operating Budget	72.90				
9. % of Prisoners, Drug Charges	19.50	10.05	1.57	5.02	2.86
10. Correct. Budget, Drug Violations	14.22	7.33	1.14	3.66	2.09
11. Gross S/L Expend, Drug Prohibition	26.11	11.88	5.48	4.53	4.35
12. Net S/L Expend, Drug Prohibition*	25.68	11.68	5.39	4.45	4.28

Sources: The data on felony convictions are from Matthew Durose and Patrick A. Langan, Felony Sentences in State Courts, 2000, Bureau of Justice Statistics, Office of Justices Programs, U.S. Department of Justice, NCJ 198821 (2003), p. 2. The data on prisoners are from U.S. Department of Justice, Prisoners in 2007: Estimated Number and Percent Distribution of Prisoners under Jurisdiction of State Correctional Authorities (Bulletin NCJ 219416) (Washington: Federal Bureau of Investigation, 2008), http://www.albany.edu/sourcebook/pdf/t600012005.pdf. The data on budgets are from U.S. Census Bureau, State and Local Government Finances by Level of Government and by State (2008), http://www.census.gov/govs/estimate/0600ussl_1.html. Budgets were originally reported for 2005–2006 and were converted to 2008 dollars with U.S. Department of Labor, "Consumer Price Index—All Urban Consumers" http://www.bls.gov/cpi/home.htm#data.
*See Appendix M.

FY 2008, adjusted for non-arrest activities. Line 2 gives police expenditure due to arrests for sales/manufacturing. Line 3 gives police expenditures due to possession. Line 4 gives total police expenditure due to drug violations, defined as Line 2 plus Line 3.

Portion of State and Local Judicial and Legal Budget Devoted to Drug Prohibition

The second main cost of drug prohibition is the portion of the prosecutorial and judicial budget devoted to drug prosecutions. A possible indicator of this percentage is the fraction of felony convictions in state courts for drug offenses. This indicator likely overstates, however, because the judicial and legal budget encompasses domestic relations, civil, and other case types that are unrelated to criminal activity. We therefore use the fraction of felony convictions multiplied by 41.7 percent of the overall judicial and legal budget, to account only for felony and misdemeanor cases. This fraction came from individual state data on judicial workloads for eight states.[11]

The second portion of Table 2 calculates the judicial and legal budget due to drug prohibition.[12] Line 5 gives 41.7 percent of the state and local judicial and legal budget in 2008, which represents the fraction of that budget that is spent on felony and misdemeanor cases. Line 6 gives the percent of felony convictions in state courts due to drug law violations.[13] Line 7 gives the state and local judicial and legal budget due to drug prosecutions, equal to the product of Line 5 and Line 6.

Portion of State and Local Corrections Budget Devoted to Drug Prohibition

The third main cost of drug prohibition is

the portion of the corrections budget devoted to incarcerating drug prisoners. A reasonable indicator of this portion is the fraction of prisoners incarcerated for drug offenses.

The third portion of Table 2 calculates the corrections budget due to drug prohibition.[14] Line 8 gives the overall corrections budget. Line 9 gives the percent of state prisoners incarcerated for drug law violations. Line 10 gives the corrections budget devoted to drug prisoners, equal to the product of Line 8 and Line 9.[15]

Overall State and Local Expenditure for Enforcement of Drug Prohibition

Line 11 of Table 2 adds Lines 4, 7, and 10 to estimate total state and local government expenditure for enforcement of drug prohibition. The figures in lines 11 are overstatements of the savings in government expenditure that would result from legalization, for two reasons. First, under prohibition the police sometimes seize assets from those arrested for drug violations (e.g., financial accounts, cars, boats, land, and houses), with the proceeds used to fund police and prosecutors.[16] Second, some drug offenders pay fines, which partially offset the expenditure required to arrest, convict, and incarcerate these offenders. Appendix M shows that this offsetting revenue has been at most $0.5 billion per year in recent years at the state and local levels.

Line 12 therefore shows the net state and local expenditure on drug prohibition for 2008 after subtracting out revenue from seizures and fines.[17] For all drugs, the estimate is $25.7 billion; for marijuana, $5.4 billion; for cocaine and heroin, $11.7 billion; and for other drugs, $8.7 billion.[18]

State-by-State Estimates

Table 3 provides the state-by-state breakdown of state-and-local expenditure on drug prohibition for the year 2008, net of seizures and fines. Appendixes C–G provide state-by-

Some drug offenders pay fines, which partially offset the expenditure required to arrest, convict, and incarcerate these offenders.

Table 3
State-Level Expenditures Attributable to Drug Prohibition, Thousands of 2008 Dollars

State	All Drugs	Marijuana	Heroin/Cocaine	Other
U.S.	25,684,407	5,386,753	11,682,223	8,733,307
Alabama	235,438	49,854	108,937	76,602
Alaska	83,573	15,493	39,360	28,697
Arizona	577,941	128,252	244,486	205,093
Arkansas	156,452	31,082	66,978	58,368
California	5,378,683	959,755	2,437,665	2,102,697
Colorado	352,303	74,038	157,694	120,514
Connecticut	296,033	66,673	144,355	84,932
Delaware	100,469	22,101	48,661	29,690
Florida	1,488,538	269,324	757,908	461,040
Georgia	767,281	170,553	346,789	249,827
Hawaii	104,975	26,674	45,005	33,257
Idaho	95,534	18,731	41,580	35,204
Illinois	574,901	89,261	282,209	203,287
Indiana	347,104	74,265	157,169	115,613
Iowa	154,664	36,607	66,926	51,095

Continues next page

Table 3 *Continued*
State-Level Expenditures Attributable to Drug Prohibition, Thousands of 2008 Dollars

State	All Drugs	Marijuana	Heroin/Cocaine	Other
Kansas	165,892	40,646	69,594	55,622
Kentucky	271,032	71,436	112,239	87,309
Louisiana	416,712	91,552	189,688	135,404
Maine	68,972	14,326	30,714	23,920
Maryland	620,413	132,108	320,345	167,874
Massachusetts	480,221	92,326	236,489	151,299
Michigan	768,910	158,914	355,670	254,206
Minnesota	346,809	89,116	143,991	113,629
Mississippi	165,916	36,366	73,996	55,531
Missouri	343,851	93,426	126,532	123,839
Montana	62,562	13,255	27,698	21,596
Nebraska	116,197	32,920	44,322	38,936
Nevada	258,275	53,764	113,639	90,824
New Hampshire	63,308	17,202	26,631	19,461
New Jersey	831,801	183,039	418,332	230,270
New Mexico	181,169	33,112	85,392	62,631
New York	2,370,063	654,247	951,963	763,433
North Carolina	556,719	120,527	264,100	172,018
North Dakota	28,716	6,590	12,285	9,834
Ohio	832,616	204,572	377,656	250,203
Oklahoma	231,650	53,204	96,742	81,670
Oregon	316,804	61,318	138,327	117,114
Pennsylvania	1,016,263	190,445	504,992	320,656
Rhode Island	81,514	20,172	37,884	23,446
South Carolina	260,955	65,333	118,772	76,816
South Dakota	45,287	10,239	19,645	15,397
Tennessee	383,247	96,801	163,584	122,797
Texas	1,673,794	330,606	755,911	587,038
Utah	169,558	31,090	76,291	62,141
Vermont	39,625	8,358	17,395	13,863
Virginia	628,738	125,746	296,411	206,494
Washington	528,774	98,944	231,014	198,728
West Virginia	95,356	20,454	42,956	31,925
Wisconsin	412,066	78,466	191,225	142,311
Wyoming	66,380	12,076	30,217	24,076
D.C.	70,350	11,396	33,860	25,082

Source: Authors' calculations.

state breakdowns for the components of these estimates.

Federal Expenditure for Drug Prohibition Enforcement

This section estimates federal expenditure on drug prohibition enforcement. The estimate relies on data from the Office of Drug Control Policy and equals $16.5 billion for 2007.[19] Adjusting this number for inflation between 2007 and 2008 gives an estimate of $17.1 billion for 2008.

As with state and local revenue, this figure should be adjusted downward by the revenue generated from federal seizures and fines. Appendix M indicates that this amount has been at most $1.5 billion in recent years, implying a net expenditure for the federal government of about $15.6 billion.

Table 4 allocates this $15.6 billion to different drug categories using the percentage of DEA arrests by drug. The fourth line shows that approximately $3.4 billion of the federal expenditure on drug prohibition is due to marijuana prohibition, $8.4 billion to cocaine and heroin, and $3.9 billion to other drugs.

The Tax Revenue from Legalized Drugs

In addition to reducing government expenditure, drug legalization would generate tax revenue from the legal production and sale of drugs. To estimate the revenue, this report employs the following procedure. First, it estimates current consumer (retail) expenditure on drugs under prohibition. Second, it estimates the consumer expenditure likely to occur under legalization. Third, it estimates the tax revenue that would result from that expenditure based on assumptions about the kinds of taxes that would apply to legalized drugs.

Drug legalization would generate tax revenue from the legal production and sale of drugs.

Consumer Expenditure on Drugs under Current Prohibition

The first step in determining the tax revenue under legalization is to estimate expenditures on drugs under current prohibition. ONDCP provides estimates of this expenditure for 2000.[20] These estimates are controversial and rely on a range of assumptions about the drug market. Many analysts have estimated the marijuana market, in particular, to be 10–30 times larger than the ONDCP estimates.

We make three adjustments to the ONDCP estimates. First, we scale them up by the

Table 4
Federal Drug Prohibition Expenditure, Billions of 2008 Dollars

	All	Marijuana	Cocaine	Heroin	Other
1. Federal Expenditure (2008)	15.6				
2. Number of DEA arrests (2007)	26,550	5,700	12,104	2,116	6630
3. Percentage of DEA arrests, by Drug	100.00	21.47	45.59	7.97	24.97
4. Federal Expenditure, by Drug	15.60	3.35	7.11	1.24	3.90

Sources: The data on the fraction of DEA arrests by drug are from U.S. Department of Justice, *Federal Drug-Related Arrests, United States, 2003–2008* (Washington: National Drug Intelligence Center, 2009), http://www.usdoj.gov/ndic/pubs31/31379/appendb.htm#TableB1. Federal expenditures were originally reported in 2007 dollars and were adjusted for inflation to 2008 dollars with Office of National Drug Control Policy, *National Drug Control Strategy* (Washington: ONDCP, 2009), http://www.whitehousedrugpolicy.gov/publications/policy/10budget/fy10budget.pdf.

Table 5
State and Federal Tax Revenues from Drug Legalization, Billions of 2008 Dollars

	All Drugs	Marijuana	Cocaine	Heroin	Other
1. Consumer Expenditure by Drug, 2000	79.50	13.13	44.13	12.50	9.75
2. Consumer Expenditure by Drug, 2008	121.55	18.15	66.12	21.07	16.21
3. Assumed Percent Decline in Price		50.00	80.00	95.00	95.00
4. Assumed Elasticity		-0.50	-0.50	-0.50	-0.50
5. Percent Decline in Expenditure, Legalization		25.00	40.00	47.50	47.50
6. Consumer Expenditure, Legalization	72.86	13.61	39.67	11.06	8.51
7. Consumer Expenditure, Sin Taxation	91.07	17.01	49.59	13.83	10.64
8. Revenue from Sin Taxation	30.36	5.67	16.53	4.61	3.55
9. Consumer Expenditure Subject to Standard Taxation	54.64	10.21	29.76	8.30	6.38
10. Revenue, Standard Taxation	16.39	3.06	8.93	2.49	1.91
11. Tax Revenue	46.75	8.73	25.46	7.10	5.46
12. Federal Tax Collection	31.17	5.82	16.97	4.73	3.64
13. State Collection	15.58	2.91	8.49	2.37	1.82

Sources: http://www.whitehousedrugpolicy.gov/publications/pdf/american_users_spend_2002.pdf; and http://www.census.gov/popest/states/NST-ann-est.html. Consumer expenditures were originally reported in 2000 dollars and were adjusted for inflation to 2008 dollars with http://www.bls.gov/cpi/home.htm#data and for increase in drug usage based on estimates from *Monitoring the Future*, 2009, http://monitoringthefuture.org/pubs/monigraphs/vol2_2008.pdf; Table 418, State and Local Excise Revenue from Alcohol and Tobacco, http://www.census.gov/compendia/statab/cats/state_local_govt_finances_employment.html; Table 457, Federal Excise Tax Revenue from Alcohol and Tobacco, http://www.census.gov/compendia/statab/cats/federal_govt_finances_employment/federal_budget--receipts_outlays_and_debt.html.

increase in population and the increase in the overall price level from 2000 to 2008.[21] Second, we adjust for changes in use rates between 2000 and 2008, which varied by drug.[22] Third, we inflate the ONDCP estimates to account for underreporting. Considerable evidence suggests that underreporting of illicit drug use is not extreme in the National Household Survey on Drug Abuse, the data source utilized by ONDCP, but the evidence does suggest underreporting in the range of 20–30 percent.[23] We inflate the ONDCP estimates by 25 percent to account for underreporting.[24]

Table 5, line 1, gives the ONDCP estimates for 2000, adjusted for underreporting. Line 2 gives these estimates adjusted for inflation, population growth, and changes in use rates between 2000 and 2008.

Consumer Expenditure on Drugs under Legalization

The second step in estimating the tax revenue from legalization is to determine how expenditure on drugs would change as the result of legalization. A simple framework in which to consider various assumptions is the supply and demand model. To use this model to assess legalization's impact on drug expenditure, it is necessary to state what effect legalization would have on the demand and supply curves for drugs.

This report assumes that the demand for drugs would not shift.[25] This assumption likely errs in the direction of understating the tax revenue from legalized drugs since the penalties for possession potentially deter some persons from consuming. Any increase in demand as a result of legalization, however, would plausibly come from casual users, since most heavy users are already consuming despite prohibition. Any increase in use might also come from decreased consumption of alcohol, tobacco, or other goods, so increased tax revenue from legal drugs would be partially offset by decreased tax revenue from other goods. "Forbidden fruit" effects

from prohibition might also tend to offset the demand-decreasing effects of penalties for possession.[26] Thus, the assumption of no change in demand is plausible.[27]

If demand does not shift due to legalization, any change in quantity and price must result from changes in supply conditions. Two main effects would operate.[28] On the one hand, drug suppliers in a legal market would not incur the costs imposed by prohibition, such as the threat of arrest, incarceration, fines, asset seizure, and the like. Other things equal, therefore, costs and prices would be lower under legalization. On the other hand, drug suppliers in a legal market would bear the costs of tax and regulatory policies that apply to legal goods but that black market suppliers normally avoid.[29] This implies an offset to the cost reductions resulting from legalization. Further, changes in competition and advertising under legalization can potentially yield higher prices than under prohibition.

The magnitude of legalization's impact on price is therefore likely to differ across drugs, given differences in supply conditions and in the degree to which prohibition is enforced. For marijuana, the best available evidence comes from comparisons of prices between the U.S. and the Netherlands. Although marijuana is still technically illegal in the Netherlands, the degree of enforcement is substantially below that in the United States, and the sale of marijuana in coffee shops is officially tolerated. The regime thus approximates *de facto* legalization. Existing data suggest that retail prices in the Netherlands are roughly 50–100 percent of U.S. prices.[30] This report assumes that legalized prices for marijuana would be 50 percent of current prices. For cocaine, available evidence suggests that prices might fall to 20 percent of the current level; for heroin, the evidence suggests prices might fall to 5 percent of the current level.[31] For other drugs, this report assumes that prices fall to 5 percent of the current level.[32] Table 5, line 3, shows these assumptions.

The effect of any price decline that occurs due to legalization depends on the elasticity of demand for drugs.[33] "Elasticity" is a concept that economists use to describe the degree of responsiveness of consumers to price changes, which can vary considerably depending on the product. Evidence concerning this elasticity is limited because appropriate data on drug price and consumption are not readily available. Existing estimates, however, suggest an elasticity of at least -0.5 and plausibly more than -1.0.[34] Estimates for other drugs, as well as for alcohol and tobacco, generally suggest an elasticity in the range of -0.5 to -1.0. If the demand elasticity equals -1.0, then expenditure will remain constant. If demand is less elastic, then expenditure will decline.[35] This report assumes an elasticity of -0.5, as shown in Table 5, line 4.

Table 5, line 5, shows the implications of these assumptions about the decline in price combined with an elasticity of -0.5 for the amount of expenditure that would occur for legalized drugs, assuming the economic activity in legalized drugs markets is subject to standard income and sales taxation. The estimates in line 5 do not assume the presence of a sin tax on legalized drugs.

Tax Revenue from Legalized Drugs

To estimate the tax revenue that would result from drug legalization, it is necessary to assume a particular tax structure. This report assumes that legalized drugs would be taxed at rates comparable to alcohol and tobacco. This means that the legalized drug market would be subject to "sin" taxation as well as standard income and sales taxation.[36] Imposing a high sin tax can force a market underground, thereby reducing rather than increasing tax revenue. Existing evidence, however, suggests that relatively high rates of sin taxation are possible without generating a black market. Cigarette taxes in many European countries, for example, account for 70–80 percent of the price.[37]

To estimate the revenue from sin taxation, this report assumes that state and local plus federal governments impose excise taxes on legalized drugs at a rate equal to 50 percent of the retail price. This implies that excise taxation accounts for 33 percent of the final price

We assume that legalized drugs would be taxed at rates comparable to alcohol and tobacco.

Legalized drugs would also generate tax revenue because the income earned by the producers would be subject to standard income and sales taxation.

to consumers.[38] An excise tax of 50 percent on top of the legalized, retail price would increase (tax-inclusive) expenditure by 25 percent given an assumed elasticity of -0.5. Line 7 of Table 5 shows total expenditure on legalized drugs under these assumptions, while line 8 shows the revenue from sin taxation.[39]

Legalized drugs would also generate tax revenue because the income earned by the producers would be subject to standard income and sales taxation. The amount of income earned is roughly equal to the amount of expenditure. For most legal goods, tax revenue as a fraction of expenditure is approximately 30 percent.[40] This figure includes the sales taxation of roughly 5 percent imposed by most state governments as well as income taxation imposed by state and federal governments.

This 30 percent tax share is consistent with the estimates derived above on the relation between prices under prohibition and prices in a legalized market since those prices were based on comparisons that incorporated any costs of legal goods due to standard taxation.

This 30 percent should be applied to an amount equal to 75 percent of the legalized, pre–sin tax expenditure. This is because while the sin tax raises expenditure given that demand is inelastic, the 50 percent higher price combined with an elasticity of -0.5 leads to a 25 percent reduction in (tax-exclusive) expenditure. Assuming constant costs therefore means that expenditure should be 75 percent of pre–sin tax expenditure. Table 5, lines 9 and 10, provide these calculations.

Table 5, line 11, adds the revenue from sin taxation and standard income/sales taxation to provide estimates of the total tax revenue that would accrue from a regime in which drugs are legal but taxed and regulated similarly to alcohol and tobacco. For all drugs, the estimate is $46.7 billion. Of this, $8.7 billion would be attributed to marijuana, $32.6 billion to cocaine and heroin, and $5.5 billion to other drugs. In lines 12 and 13, we attribute two-thirds of this revenue to federal tax collection and one-third to state/local tax collection because that is roughly the ratio for existing tax revenues.

State-by-State Estimates

Table 6 provides state-by-state breakdowns

Table 6
State Drug Tax Revenue—Population Method, Millions of 2008 Dollars

State	All Drugs	Marijuana	Heroin/Cocaine	Other
U.S.	15,583.33	2,910.87	10,852.17	1,820.30
Alabama	238.93	44.63	166.39	27.91
Alaska	35.17	6.57	24.49	4.11
Arizona	333.14	62.23	232.00	38.91
Arkansas	146.34	27.34	101.91	17.09
California	1,883.81	351.88	1,311.88	220.05
Colorado	253.15	47.29	176.29	29.57
Connecticut	179.44	33.52	124.96	20.96
Delaware	44.75	8.36	31.16	5.23
Florida	939.34	175.46	654.16	109.73
Georgia	496.40	92.72	345.69	57.99
Hawaii	66.02	12.33	45.98	7.71
Idaho	78.10	14.59	54.39	9.12
Illinois	661.22	123.51	460.47	77.24

State	All Drugs	Marijuana	Heroin/Cocaine	Other
Indiana	326.82	61.05	227.59	38.18
Iowa	153.88	28.74	107.16	17.98
Kansas	143.61	26.83	100.01	16.78
Kentucky	218.80	40.87	152.37	25.56
Louisiana	226.06	42.23	157.43	26.41
Maine	67.47	12.60	46.99	7.88
Maryland	288.73	53.93	201.07	33.73
Massachusetts	333.03	62.21	231.92	38.90
Michigan	512.68	95.77	357.03	59.89
Minnesota	267.55	49.98	186.32	31.25
Mississippi	150.61	28.13	104.88	17.59
Missouri	302.98	56.59	210.99	35.39
Montana	49.58	9.26	34.53	5.79
Nebraska	91.40	17.07	63.65	10.68
Nevada	133.26	24.89	92.80	15.57
New Hampshire	67.44	12.60	46.96	7.88
New Jersey	444.99	83.12	309.89	51.98
New Mexico	101.70	19.00	70.82	11.88
New York	998.90	186.59	695.63	116.68
North Carolina	472.66	88.29	329.16	55.21
North Dakota	32.88	6.14	22.90	3.84
Ohio	588.66	109.96	409.94	68.76
Oklahoma	186.67	34.87	130.00	21.81
Oregon	194.24	36.28	135.27	22.69
Pennsylvania	637.99	119.17	444.29	74.52
Rhode Island	53.85	10.06	37.50	6.29
South Carolina	229.59	42.89	159.89	26.82
South Dakota	41.22	7.70	28.70	4.81
Tennessee	318.52	59.50	221.82	37.21
Texas	1,246.78	232.89	868.25	145.64
Utah	140.24	26.20	97.67	16.38
Vermont	31.84	5.95	22.17	3.72
Virginia	398.17	74.38	277.29	46.51
Washington	335.65	62.70	233.75	39.21
West Virginia	92.99	17.37	64.76	10.86
Wisconsin	288.44	53.88	200.87	33.69
Wyoming	27.30	5.10	19.01	3.19
D.C.	30.33	5.67	21.12	3.54

Source: Authors' calculations.

Table 7
Summary of Expenditures and Revenues from Drug Legalization, Billions of 2008 Dollars

		All Drugs	Marijuana	Heroin/Cocaine	Other
Expenditures	State/Local	25.7	5.4	11.7	8.7
	Federal	15.6	3.3	8.4	3.9
	Total	41.3	8.7	20.0	12.6
Revenues	State	15.6	2.9	10.9	1.8
	Federal	31.2	5.8	21.7	3.6
	Total	46.7	8.7	32.6	5.5

Source: Authors' calculations.

The total impact of drug legalization on government budgets would be approximately $88 billion per year.

of all the estimates provided in this section, assuming these revenues are proportional to population. These should be regarded as subject to more uncertainty than the national estimates due to data limitations. Alternatively, Appendix Table I utilizes the state-level estimates of drug consumption rates from the 2006 and 2007 National Survey on Drug Use and Health to provide state level estimates based on state use rates.[41] Given the sample sizes involved in estimating these use rates, the estimates based on population are plausibly more reliable.

Conclusion

Table 7 summarizes all the estimates of expenditure reductions and tax increases for both the federal government and the sum of all state governments. Three aspects of these estimates stand out.

First, the total impact of drug legalization on government budgets would be approximately $88 billion per year.

Second, about half of the budgetary improvement from legalization is due to reduced criminal justice expenditure. But for this component of the impact to show up in government budgets, policymakers would have to lay off police, prosecutors, prison guards, and the like. Because such a move would be politically painful, it may not occur. It is certainly true that reduced expenditure on enforcing drug prohibition can still be beneficial if those criminal justice resources are re-deployed to better uses, but that outcome is difficult to achieve.

Third, only about $17.4 billion in budgetary improvement can be expected to come from legalizing marijuana in isolation. Yet the current political climate gives no indication that legalization of other drugs is achievable in the short term. So the budgetary impact from the politically possible component of legalization—marijuana—seems fairly modest.

None of these considerations weakens the critique of drug prohibition since that critique has always rested mainly on other considerations, such as the crime, corruption, and curtailment of civil liberties that have been the side-effects of attempting to fight drug use with police officers and prisons.[42] What the estimates provided here do provide are two additional reasons to end drug prohibition: reduced expenditure on law enforcement and an increase in tax revenue from legalized sales.

Appendixes

Appendix A
State-by-State Arrest Data

	Arrests		Sales and Manufacturing Arrests				
State	Total Arrests	Drug Violation Total Arrests	All Drugs	Cocaine	Marijuana	Synthetic	Other
Alabama	199,688	17,308	1,316	661	131	172	352
Alaska	38,578	1,767	302	109	108	32	53
Arizona	321,503	36,050	5,015	1,675	1,645	811	884
Arkansas	101,694	12,486	2,031	478	634	238	681
California	1,540,894	292,263	45,961	16,885	14,821	0	14,255
Colorado	225,099	19,250	2,061	858	657	122	424
Connecticut	120,182	15,812	2,354	1,523	678	84	69
Delaware	41,350	5,908	2,139	1,367	581	66	125
Florida	1,126,395	79,003	17,269	12,823	4,047	263	135
Georgia	333,657	49,400	10,954	3,839	4,033	687	2,395
Hawaii	213,219	19,507	6,259	683	4,013	38	1,523
Idaho	73,896	5,851	605	54	215	14	322
Illinois	191,268	1,085	192	108	75	5	4
Indiana	215,449	23,363	4,747	2,189	1,556	450	552
Iowa	114,816	9,156	781	179	381	12	209
Kansas	73,904	8,060	1,310	317	568	24	401
Kentucky	63,884	12,538	1,682	534	744	70	334
Louisiana	173,584	23,056	4,145	1,979	1,199	280	687
Maine	57,731	5,731	1,276	431	440	121	284
Maryland	296,861	55,401	13,242	9,597	2,666	848	131
Massachusetts	296,861	21,303	6,021	4,068	1,508	267	178
Michigan	312,777	34,306	7,723	3,256	3,152	210	1,105
Minnesota	215,671	19,167	6,161	619	3,966	53	1,523
Mississippi	85,271	11,709	1,556	669	424	212	251
Missouri	297,234	39,152	5,089	608	1,803	789	1,889
Montana	28,136	1,805	153	20	86	17	30

Possession Arrests					% of Arrests
All Drugs	Cocaine	Marijuana	Synthetic	Other	Drug Violations
15,992	4,664	9,524	1,023	781	8.67
1,465	304	864	146	151	4.58
31,035	3,192	17,888	3,366	6,589	11.21
10,455	1,145	5,711	596	3,003	12.28
246,302	83,727	59,132	0	103,443	18.97
17,189	2,692	11,245	349	2,903	8.55
13,458	5,838	6,652	525	443	13.16
3,769	896	2,582	109	182	14.29
61,734	28,940	31,360	755	676	7.01
38,446	10,744	22,984	2,421	2,297	14.81
13,250	3,386	7,079	510	2,273	9.15
5,246	106	3,328	97	1,715	7.92
893	312	542	12	27	0.57
18,616	3,502	11,695	1,114	2,305	10.84
8,375	749	6,237	137	1,252	7.97
6,750	980	4,364	131	1,275	10.91
10,856	1,512	7,290	580	1,474	19.63
18,911	4,449	11,728	1,111	1,623	13.28
4,455	663	2,814	326	652	9.93
42,159	19,142	22,028	492	497	18.66
15,282	5,372	8,717	538	655	7.18
26,583	6,444	16,288	805	3,046	10.97
13,006	2,809	7,642	480	2,075	8.89
10,153	2,507	5,578	758	1,310	13.73
34,063	2,758	21,247	1,709	8,349	13.17
1,652	46	1,269	57	280	6.42

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Appendix A *Continued*
State-by-State Arrest Data

	Arrests		Sales and Manufacturing Arrests				
State	Total Arrests	Drug Violation Total Arrests	All Drugs	Cocaine	Marijuana	Synthetic	Other
Nebraska	83,957	10,117	1,084	189	307	153	435
Nevada	167,412	14,660	2,729	1,004	731	432	562
New Hampshire	38,396	3,005	508	111	334	27	36
New Jersey	383,797	52,875	12,730	8,907	3,062	447	314
New Mexico	78,484	6,673	2,552	1,534	322	626	70
New York	345,251	63,058	6,112	2,913	1,113	171	1,915
North Carolina	407,663	43,711	6,966	4,220	2,365	149	232
North Dakota	27,359	1,870	283	33	139	13	98
Ohio	256,718	35,808	4,472	2,301	1,381	177	613
Oklahoma	161,719	22,338	3,245	518	1,272	923	532
Oregon	147,335	19,234	1,788	531	552	49	656
Pennsylvania	467,655	58,944	20,744	13,411	5,310	1,340	683
Rhode Island	26,966	3,492	588	363	183	19	23
South Carolina	213,355	31,952	5,964	3,406	1,749	106	703
South Dakota	18,014	1,715	181	18	112	10	41
Tennessee	304,793	43,459	10,998	4,081	4,115	845	1,957
Texas	1,087,325	145,585	15,925	4,637	1,753	7,972	1,563
Utah	120,167	10,263	1,400	577	267	75	481
Vermont	16,731	1,602	245	87	80	16	62
Virginia	313,457	34,498	7,319	3,909	2,157	450	803
Washington	248,676	29,192	3,569	667	1,347	706	849
West Virginia	46,835	4,884	1,042	435	342	88	177
Wisconsin	421,093	25,968	6,096	2,631	2,371	401	693
Wyoming	39,808	3,128	302	29	151	89	33
DC	5,933	80	12	2	8	0	2

Sources: Uniform Crime Reports Drug Arrest Data 2007. Florida (1995): http://fisher.lib.virginia.edu/collections/stats/crime/. Minnesota (2006): http://www.icpsr.umich.edu/cocoon/NACJD/STUDY/23780.xml.
Notes: For data considerations on the 2007 Crime in the US report: http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2007.
Limited arrest data were received from Illinois; i.e., only Chicago and Rockford provided statistics in accordance with UCR guidelines.
No 2007 arrest data were received from the District of Columbia's Metropolitan Police Department. The only agency (Metro Transit Police) in the District of Columbia for which 12 months of arrest data were received has no attributable population.

Possession Arrests					% of Arrests
All Drugs	Cocaine	Marijuana	Synthetic	Other	Drug Violations
9,033	395	7,062	226	1,350	12.05
11,931	1,647	7,118	2,355	811	8.76
2,497	301	1,905	99	192	7.83
40,145	17,043	20,179	935	1,988	13.78
4,121	237	2,947	592	345	8.50
56,946	7,713	37,173	734	11,326	18.26
36,745	10,965	22,746	1,046	1,988	10.72
1,587	52	1,217	50	268	6.84
31,336	9,745	16,928	1,015	3,648	13.95
19,093	2,781	11,845	2,743	1,724	13.81
17,446	2,907	8,493	802	5,244	13.05
38,200	12,887	19,799	1,849	3,665	12.60
2,904	809	1,922	55	118	12.95
25,988	6,550	16,850	632	1,956	14.98
1,534	65	1,282	39	148	9.52
32,461	6,802	19,038	1,904	4,717	14.26
129,660	36,764	67,916	9,038	15,942	13.39
8,863	1,491	3,935	330	3,107	8.54
1,357	153	836	78	290	9.58
27,179	6,752	17,537	532	2,358	11.01
25,623	2,528	12,960	3,800	6,335	11.74
3,842	704	2,344	375	419	10.43
19,872	1,856	15,319	742	1,955	6.17
2,826	114	2,046	333	333	7.86
68	13	52	0	3	1.35

No 2007 arrest data were received from Hawaii. However, arrest totals for this state were estimated by the national UCR Program and were included in Table 29 "Estimated Number of Arrests, United States, 2007."
No 2007 arrest data were received from the New York City Police Department. However, arrest totals for this area were estimated by the national UCR Program and were included in Table 29 "Estimated Number of Arrests, United States, 2007."

Appendix B
State-by-State Sale/Manufacturing and Possession Data

	% of Total Arrests, Sales and Manufacturing				
State	All Drugs	Heroin/ Cocaine	Marijuana	Synthetic	Other
Alabama	0.66	0.33	0.07	0.09	0.18
Alaska	0.78	0.28	0.28	0.08	0.14
Arizona	1.56	0.52	0.51	0.25	0.27
Arkansas	2.00	0.47	0.62	0.23	0.67
California	2.98	1.10	0.96	0.93	0.93
Colorado	0.92	0.38	0.29	0.05	0.19
Connecticut	1.96	1.27	0.56	0.07	0.06
Delaware	5.17	3.31	1.41	0.16	0.30
Florida	1.53	1.14	0.36	0.02	0.01
Georgia	3.28	1.15	1.21	0.21	0.72
Hawaii	2.94	0.32	1.88	0.02	0.71
Idaho	0.82	0.07	0.29	0.02	0.44
Illinois	0.10	0.06	0.04	0.00	0.00
Indiana	2.20	1.02	0.72	0.21	0.26
Iowa	0.68	0.16	0.33	0.01	0.18
Kansas	1.77	0.43	0.77	0.03	0.54
Kentucky	2.63	0.84	1.16	0.11	0.52
Louisiana	2.39	1.14	0.69	0.16	0.40
Maine	2.21	0.75	0.76	0.21	0.49
Maryland	4.46	3.23	0.90	0.29	0.04
Massachusetts	2.03	1.37	0.51	0.09	0.06
Michigan	2.47	1.04	1.01	0.07	0.35
Minnesota	2.86	0.29	1.84	0.02	0.71
Mississippi	1.82	0.78	0.50	0.25	0.29
Missouri	1.71	0.20	0.61	0.27	0.64
Montana	0.54	0.07	0.31	0.06	0.11
Nebraska	1.29	0.23	0.37	0.18	0.52

1/2 * % of Total Arrests, Possession				
All Drugs	Heroin/Cocaine	Marijuana	Synthetic	Other
4.00	1.17	2.38	0.26	0.20
1.90	0.39	1.12	0.19	0.20
4.83	0.50	2.78	0.52	1.02
5.14	0.56	2.81	0.29	1.48
7.99	2.72	1.92	0.00	3.36
3.82	0.60	2.50	0.08	0.64
5.60	2.43	2.77	0.22	0.18
4.56	1.08	3.12	0.13	0.22
2.74	1.28	1.39	0.03	0.03
5.76	1.61	3.44	0.36	0.34
3.11	0.79	1.66	0.12	0.53
3.55	0.07	2.25	0.07	1.16
0.23	0.08	0.14	0.00	0.01
4.32	0.81	2.71	0.26	0.53
3.65	0.33	2.72	0.06	0.55
4.57	0.66	2.95	0.09	0.86
8.50	1.18	5.71	0.45	1.15
5.45	1.28	3.38	0.32	0.47
3.86	0.57	2.44	0.28	0.56
7.10	3.22	3.71	0.08	0.08
2.57	0.90	1.47	0.09	0.11
4.25	1.03	2.60	0.13	0.49
3.02	0.65	1.77	0.11	0.48
5.95	1.47	3.27	0.44	0.77
5.73	0.46	3.57	0.29	1.40
2.94	0.08	2.26	0.10	0.50
5.38	0.24	4.21	0.13	0.80

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Appendix B *Continued*
State-by-State Sale/Manufacturing and Possession Data

	% of Total Arrests, Sales and Manufacturing				
State	All Drugs	Heroin/ Cocaine	Marijuana	Synthetic	Other
Nevada	1.63	0.60	0.44	0.26	0.34
New Hampshire	1.32	0.29	0.87	0.07	0.09
New Jersey	3.32	2.32	0.80	0.12	0.08
New Mexico	3.25	1.95	0.41	0.80	0.09
New York	1.77	0.84	0.32	0.05	0.55
North Carolina	1.71	1.04	0.58	0.04	0.06
North Dakota	1.03	0.12	0.51	0.05	0.36
Ohio	1.74	0.90	0.54	0.07	0.24
Oklahoma	2.01	0.32	0.79	0.57	0.33
Oregon	1.21	0.36	0.37	0.03	0.45
Pennsylvania	4.44	2.87	1.14	0.29	0.15
Rhode Island	2.18	1.35	0.68	0.07	0.09
South Carolina	2.80	1.60	0.82	0.05	0.33
South Dakota	1.00	0.10	0.62	0.06	0.23
Tennessee	3.61	1.34	1.35	0.28	0.64
Texas	1.46	0.43	0.16	0.73	0.14
Utah	1.17	0.48	0.22	0.06	0.40
Vermont	1.46	0.52	0.48	0.10	0.37
Virginia	2.33	1.25	0.69	0.14	0.26
Washington	1.44	0.27	0.54	0.28	0.34
West Virginia	2.22	0.93	0.73	0.19	0.38
Wisconsin	1.45	0.62	0.56	0.10	0.16
Wyoming	0.76	0.07	0.38	0.22	0.08
DC	0.20	0.03	0.13	0.00	0.03

Sources: Uniform Crime Reports Drug Arrest Data 2007. Florida (1995): http://fisher.lib.virginia.edu/collections/stats/crime/. 3. Minnesota (2006): http://www.icpsr.umich.edu/cocoon/NACJD/STUDY/23780.xml.

1/2 * % of Total Arrests, Possession				
All Drugs	Heroin/Cocaine	Marijuana	Synthetic	Other
3.56	0.49	2.13	0.70	0.24
3.25	0.39	2.48	0.13	0.25
5.23	2.22	2.63	0.12	0.26
2.63	0.15	1.88	0.38	0.22
8.25	1.12	5.38	0.11	1.64
4.51	1.34	2.79	0.13	0.24
2.90	0.10	2.22	0.09	0.49
6.10	1.90	3.30	0.20	0.71
5.90	0.86	3.66	0.85	0.53
5.92	0.99	2.88	0.27	1.78
4.08	1.38	2.12	0.20	0.39
5.38	1.50	3.56	0.10	0.22
6.09	1.54	3.95	0.15	0.46
4.26	0.18	3.56	0.11	0.41
5.33	1.12	3.12	0.31	0.77
5.96	1.69	3.12	0.42	0.73
3.69	0.62	1.64	0.14	1.29
4.06	0.46	2.50	0.23	0.87
4.34	1.08	2.80	0.08	0.38
5.15	0.51	2.61	0.76	1.27
4.10	0.75	2.50	0.40	0.45
2.36	0.22	1.82	0.09	0.23
3.55	0.14	2.57	0.42	0.42
0.57	0.11	0.44	0.00	0.03

Appendix C
State and Local Expenditures Attributable to Drug Prohibition, Thousands of 2008 Dollars

State	Total Police Expenditures	Expenditures on Sales/ Manufacturing	Expenditures on Possession	Police Expenditures on Drug Violations	Total Judicial Expenditures	% Felony Convictions, Drug Violations
Alabama	943,030	6,215	37,761	43,976	171,677	34.00
Alaska	236,704	1,853	4,494	6,347	88,517	34.00
Arizona	1,947,729	30,382	94,008	124,390	419,464	34.00
Arkansas	445,832	8,904	22,918	31,822	87,778	34.00
California	13,456,466	401,373	1,075,465	1,476,837	3,865,783	34.00
Colorado	1,312,349	12,016	50,107	62,123	214,840	34.00
Connecticut	899,882	17,626	50,384	68,010	276,024	34.00
Delaware	261,461	13,525	11,916	25,441	64,580	34.00
Florida	6,086,644	93,316	166,794	260,110	960,971	34.00
Georgia	2,072,287	68,033	119,391	187,424	423,937	34.00
Hawaii	302,685	8,885	9,405	18,290	134,439	34.00
Idaho	289,850	2,373	10,288	12,662	70,616	34.00
Illinois	3,832,982	3,848	8,948	12,795	547,628	34.00
Indiana	1,104,945	24,345	47,737	72,082	216,274	34.00
Iowa	554,741	3,773	20,232	24,006	138,855	34.00
Kansas	618,319	10,960	28,237	39,197	114,359	34.00
Kentucky	634,648	16,710	53,924	70,634	181,508	34.00
Louisiana	1,199,311	28,638	65,329	93,967	256,977	34.00
Maine	210,830	4,660	8,135	12,795	46,426	34.00
Maryland	1,664,230	74,236	118,174	192,409	323,515	34.00
Massachusetts	1,665,417	33,778	42,867	76,645	403,103	34.00
Michigan	2,191,695	54,117	93,136	147,253	453,931	34.00
Minnesota	1,379,692	39,413	41,601	81,014	274,181	34.00
Mississippi	543,108	9,910	32,333	42,244	91,688	34.00
Missouri	1,474,301	25,242	84,477	109,719	203,356	34.00
Montana	203,986	1,109	5,989	7,098	53,655	34.00
Nebraska	476,725	6,155	25,646	31,801	68,458	34.00

Judiciary Expenditures on Drug Violations	Corrections Expenditures Total	% Corrections, Drug Violations	Corrections Expenditures on Drug Violations	Gross State and Local Expenditures	Net State and Local Expenditures
58,370	702,569	19.50	137,001	239,347	235,438
30,096	248,805	19.50	48,517	84,960	83,573
142,618	1,643,732	19.50	320,528	587,535	577,941
29,845	499,399	19.50	97,383	159,049	156,452
1,314,366	13,727,037	19.50	2,676,772	5,467,976	5,378,683
73,046	1,143,507	19.50	222,984	358,152	352,303
93,848	713,276	19.50	139,089	300,947	296,033
21,957	280,710	19.50	54,738	102,137	100,469
326,730	4,750,819	19.50	926,410	1,513,250	1,488,538
144,139	2,299,773	19.50	448,456	780,019	767,281
45,709	219,069	19.50	42,718	106,718	104,975
24,009	309,996	19.50	60,449	97,120	95,534
186,194	1,976,700	19.50	385,457	584,446	574,901
73,533	1,062,827	19.50	207,251	352,867	347,104
47,211	441,106	19.50	86,016	157,232	154,664
38,882	464,447	19.50	90,567	168,646	165,892
61,713	734,285	19.50	143,186	275,532	271,032
87,372	1,242,513	19.50	242,290	423,630	416,712
15,785	213,015	19.50	41,538	70,117	68,972
109,995	1,683,629	19.50	328,308	630,712	620,413
137,055	1,407,655	19.50	274,493	488,193	480,221
154,337	2,461,976	19.50	480,085	781,675	768,910
93,222	914,515	19.50	178,330	352,566	346,809
31,174	488,477	19.50	95,253	168,671	165,916
69,141	875,380	19.50	170,699	349,559	343,851
18,243	196,208	19.50	38,261	63,601	62,562
23,276	323,329	19.50	63,049	118,126	116,197

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Appendix C *Continued*
State and Local Expenditures Attributable to Drug Prohibition, Thousands of 2008 Dollars

State	Total Police Expenditures	Expenditures on Sales/ Manufacturing	Expenditures on Possession	Police Expenditures on Drug Violations	Total Judicial Expenditures	% Felony Convictions, Drug Violations
Nevada	974,771	15,890	34,735	50,624	182,822	34.00
New Hampshire	286,089	3,785	9,303	13,088	54,694	34.00
New Jersey	2,789,161	92,513	145,873	238,385	603,122	34.00
New Mexico	544,753	17,713	14,302	32,015	129,697	34.00
New York	7,377,107	130,597	608,393	738,991	1,589,828	34.00
North Carolina	2,003,622	34,237	90,299	124,536	282,143	34.00
North Dakota	107,995	1,117	3,132	4,249	25,228	34.00
Ohio	2,852,685	49,693	174,105	223,798	702,050	34.00
Oklahoma	689,834	13,842	40,722	54,564	127,990	34.00
Oregon	912,114	11,069	54,002	65,071	173,026	34.00
Pennsylvania	2,566,394	113,839	104,817	218,656	645,897	34.00
Rhode Island	286,589	6,249	15,432	21,681	49,601	34.00
South Carolina	885,782	24,761	53,947	78,708	132,701	34.00
South Dakota	127,282	1,279	5,419	6,698	27,837	34.00
Tennessee	1,332,062	48,065	70,933	118,999	246,891	34.00
Texas	5,083,807	74,458	303,114	377,571	906,254	34.00
Utah	578,339	6,738	21,328	28,066	133,829	34.00
Vermont	127,306	1,864	5,163	7,027	29,428	34.00
Virginia	1,817,643	42,441	78,801	121,242	330,161	34.00
Washington	1,308,012	18,773	67,387	86,160	334,427	34.00
West Virginia	282,947	6,295	11,605	17,901	76,572	34.00
Wisconsin	1,402,444	20,303	33,092	53,394	245,426	34.00
Wyoming	153,739	1,166	5,457	6,623	41,201	34.00
DC	533,942	1,080	3,060	4,140	44,939	34.00
Total	81,034,269	1,739,163	4,284,116	6,023,278	17,268,302	34.00

Sources: Police Expenditure and Judicial Budget: 2005–2006 State Government Finance Data, US Census: http://www.census.gov/govs/estimate/. Felony Convictions: http://ojp.usdoj.gov/bjs/pub/html/scscf04/tables/scs04101tab.htm. Corrections Budget: http://www.census.gov/govs/www/estimate06.html; http://www.albany.edu/sourcebook/pdf/t600012005.pdf. Budgets were originally reported for 2005–2006 and were converted to 2008 dollars with http://www.bls.gov/

Judiciary Expenditures on Drug Violations	Corrections Expenditures Total	% Corrections, Drug Violations	Corrections Expenditures on Drug Violations	Gross State and Local Expenditures	Net State and Local Expenditures
62,160	768,096	19.50	149,779	262,563	258,275
18,596	167,566	19.50	32,675	64,359	63,308
205,061	2,062,377	19.50	402,164	845,610	831,801
44,097	554,179	19.50	108,065	184,177	181,169
540,541	5,794,240	19.50	1,129,877	2,409,409	2,370,063
95,929	1,771,779	19.50	345,497	565,962	556,719
8,578	83,926	19.50	16,366	29,192	28,716
238,697	1,968,938	19.50	383,943	846,438	832,616
43,516	704,692	19.50	137,415	235,495	231,650
58,829	1,016,224	19.50	198,164	322,063	316,804
219,605	3,050,636	19.50	594,874	1,033,135	1,016,263
16,864	227,295	19.50	44,323	82,868	81,514
45,118	725,443	19.50	141,461	265,287	260,955
9,464	153,211	19.50	29,876	46,039	45,287
83,943	957,268	19.50	186,667	389,609	383,247
308,126	5,209,661	19.50	1,015,884	1,701,582	1,673,794
45,502	506,695	19.50	98,806	172,373	169,558
10,006	119,233	19.50	23,250	40,283	39,625
112,255	2,080,407	19.50	405,679	639,176	628,738
113,705	1,731,729	19.50	337,687	537,552	528,774
26,034	271,814	19.50	53,004	96,939	95,356
83,445	1,446,503	19.50	282,068	418,907	412,066
14,008	240,259	19.50	46,851	67,482	66,380
15,279	267,174	19.50	52,099	71,518	70,350
5,871,223	72,904,099	19.50	14,216,299	26,110,800	25,684,407

cpi/home.htm#data. Net S/L Expenditure was calculated using total seizures and fines of $426,393,100. Seizures and fines numbers are explained in Appendix M, and are adjusted for inflation to 2008. Note there is a 9.6% downward correction for police officers without general arrest capabilities and a 58.3% downward correction for nonfelony or misdemeanor trials (see Appendix J).

Appendix D
Expenditures Attributable to Heroin/Cocaine Prohibition, Thousands of 2008 Dollars

State	Total Police Expenditures	Expenditures on Sales/ Manufacturing	Expenditures on Possession	Police Expenditures on Drug Violations	Total Judicial Expenditures	% Felony Convictions, Drug Violations
Alabama	943,030	3,122	11,013	14,134	171,677	15.15
Alaska	236,704	669	933	1,601	88,517	15.15
Arizona	1,947,729	10,147	9,669	19,816	419,464	15.15
Arkansas	445,832	2,096	2,510	4,605	87,778	15.15
California	13,456,466	147,455	365,590	513,045	3,865,783	15.15
Colorado	1,312,349	5,002	7,847	12,850	214,840	15.15
Connecticut	899,882	11,404	21,856	33,260	276,024	15.15
Delaware	261,461	8,644	2,833	11,476	64,580	15.15
Florida	6,086,644	69,291	78,191	147,482	960,971	15.15
Georgia	2,072,287	23,843	33,365	57,208	423,937	15.15
Hawaii	302,685	970	2,403	3,373	134,439	15.15
Idaho	289,850	212	208	420	70,616	15.15
Illinois	3,832,982	2,164	3,126	5,291	547,628	15.15
Indiana	1,104,945	11,226	8,980	20,207	216,274	15.15
Iowa	554,741	865	1,809	2,674	138,855	15.15
Kansas	618,319	2,652	4,100	6,752	114,359	15.15
Kentucky	634,648	5,305	7,510	12,815	181,508	15.15
Louisiana	1,199,311	13,673	15,369	29,042	256,977	15.15
Maine	210,830	1,574	1,211	2,785	46,426	15.15
Maryland	1,664,230	53,802	53,656	107,458	323,515	15.15
Massachusetts	1,665,417	22,822	15,069	37,891	403,103	15.15
Michigan	2,191,695	22,815	22,577	45,393	453,931	15.15
Minnesota	1,379,692	3,960	8,985	12,945	274,181	15.15
Mississippi	543,108	4,261	7,984	12,245	91,688	15.15
Missouri	1,474,301	3,016	6,840	9,856	203,356	15.15
Montana	203,986	145	167	312	53,655	15.15
Nebraska	476,725	1,073	1,121	2,195	68,458	15.15

Judiciary Expenditures on Drug Violations	Corrections Expenditures Total	% Corrections, Drug Violations	Corrections Expenditures on Drug Violations	Gross State and Local Expenditures	Net State and Local Expenditures
26,003	702,569	10.05	70,608	110,745	108,937
13,407	248,805	10.05	25,005	40,013	39,360
63,533	1,643,732	10.05	165,195	248,545	244,486
13,295	499,399	10.05	50,190	68,090	66,978
585,521	13,727,037	10.05	1,379,567	2,478,133	2,437,665
32,540	1,143,507	10.05	114,922	160,312	157,694
41,807	713,276	10.05	71,684	146,752	144,355
9,781	280,710	10.05	28,211	49,469	48,661
145,551	4,750,819	10.05	477,457	770,490	757,908
64,211	2,299,773	10.05	231,127	352,546	346,789
20,363	219,069	10.05	22,016	45,752	45,005
10,696	309,996	10.05	31,155	42,270	41,580
82,945	1,976,700	10.05	198,658	286,894	282,209
32,757	1,062,827	10.05	106,814	159,778	157,169
21,031	441,106	10.05	44,331	68,037	66,926
17,321	464,447	10.05	46,677	70,750	69,594
27,492	734,285	10.05	73,796	114,103	112,239
38,922	1,242,513	10.05	124,873	192,837	189,688
7,032	213,015	10.05	21,408	31,224	30,714
49,000	1,683,629	10.05	169,205	325,663	320,345
61,055	1,407,655	10.05	141,469	240,415	236,489
68,754	2,461,976	10.05	247,429	361,575	355,670
41,528	914,515	10.05	91,909	146,382	143,991
13,887	488,477	10.05	49,092	75,224	73,996
30,801	875,380	10.05	87,976	128,632	126,532
8,127	196,208	10.05	19,719	28,157	27,698
10,369	323,329	10.05	32,495	45,058	44,322

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Appendix D *Continued*
Expenditures Attributable to Heroin/Cocaine Prohibition, Thousands of 2008 Dollars

State	Total Police Expenditures	Expenditures on Sales/ Manufacturing	Expenditures on Possession	Police Expenditures on Drug Violations	Total Judicial Expenditures	% Felony Convictions, Drug Violations
Nevada	974,771	5,846	4,795	10,641	182,822	15.15
New Hampshire	286,089	827	1,121	1,948	54,694	15.15
New Jersey	2,789,161	64,730	61,928	126,658	603,122	15.15
New Mexico	544,753	10,647	823	11,470	129,697	15.15
New York	7,377,107	62,243	82,403	144,646	1,589,828	15.15
North Carolina	2,003,622	20,741	26,946	47,687	282,143	15.15
North Dakota	107,995	130	103	233	25,228	15.15
Ohio	2,852,685	25,569	54,144	79,713	702,050	15.15
Oklahoma	689,834	2,210	5,931	8,141	127,990	15.15
Oregon	912,114	3,287	8,998	12,286	173,026	15.15
Pennsylvania	2,566,394	73,597	35,361	108,957	645,897	15.15
Rhode Island	286,589	3,858	4,299	8,157	49,601	15.15
South Carolina	885,782	14,141	13,597	27,737	132,701	15.15
South Dakota	127,282	127	230	357	27,837	15.15
Tennessee	1,332,062	17,836	14,864	32,699	246,891	15.15
Texas	5,083,807	21,680	85,945	107,626	906,254	15.15
Utah	578,339	2,777	3,588	6,365	133,829	15.15
Vermont	127,306	662	582	1,244	29,428	15.15
Virginia	1,817,643	22,667	19,576	42,244	330,161	15.15
Washington	1,308,012	3,508	6,649	10,157	334,427	15.15
West Virginia	282,947	2,628	2,127	4,755	76,572	15.15
Wisconsin	1,402,444	8,763	3,091	11,853	245,426	15.15
Wyoming	153,739	112	220	332	41,201	15.15
DC	533,942	180	585	765	44,939	15.15
Total	81,034,269	800,973	1,132,826	1,933,799	17,268,302	15.15

Sources: Police Expenditure and Judicial Budget: 2005–2006 State Government Finance Data, US Census: http://www.census.gov/govs/estimate/. Felony Convictions: http://ojp.usdoj.gov/bjs/pub/html/scscf04/tables/scs04101tab.htm. Corrections Budget: http://www.census.gov/govs/www/estimate06.html; http://www.albany.edu/sourcebook/pdf/t600012005.pdf. Budgets were originally reported for 2005–2006 and were converted to 2008 dollars with http://

Judiciary Expenditures on Drug Violations	Corrections Expenditures Total	% Corrections, Drug Violations	Corrections Expenditures on Drug Violations	Gross State and Local Expenditures	Net State and Local Expenditures
27,691	768,096	10.05	77,194	115,525	113,639
8,284	167,566	10.05	16,840	27,073	26,631
91,350	2,062,377	10.05	207,269	425,277	418,332
19,644	554,179	10.05	55,695	86,809	85,392
240,799	5,794,240	10.05	582,321	967,767	951,963
42,734	1,771,779	10.05	178,064	268,485	264,100
3,821	83,926	10.05	8,435	12,489	12,285
106,334	1,968,938	10.05	197,878	383,925	377,656
19,386	704,692	10.05	70,822	98,348	96,742
26,207	1,016,224	10.05	102,131	140,623	138,327
97,829	3,050,636	10.05	306,589	513,375	504,992
7,513	227,295	10.05	22,843	38,513	37,884
20,099	725,443	10.05	72,907	120,744	118,772
4,216	153,211	10.05	15,398	19,971	19,645
37,395	957,268	10.05	96,205	166,299	163,584
137,264	5,209,661	10.05	523,571	768,460	755,911
20,270	506,695	10.05	50,923	77,558	76,291
4,457	119,233	10.05	11,983	17,684	17,395
50,007	2,080,407	10.05	209,081	301,331	296,411
50,653	1,731,729	10.05	174,039	234,849	231,014
11,598	271,814	10.05	27,317	43,670	42,956
37,173	1,446,503	10.05	145,374	194,400	191,225
6,240	240,259	10.05	24,146	30,719	30,217
6,807	267,174	10.05	26,851	34,422	33,860
2,615,501	72,904,099	10.05	7,326,862	11,876,162	11,682,223

www.bls.gov/cpi/home.htm#data. Net S/L Expenditure was calculated using total seizures and fines of $426,393,100. Seizures and fines numbers are explained in Appendix M, and are adjusted for inflation to 2008. Note there is a 9.6% downward correction for police officers without general arrest capabilities and a 58.3% downward correction for nonfelony or misdemeanor trials (see Appendix J).

Appendix E
Expenditures Attributable to Marijuana Prohibition, Thousands of 2008 Dollars

State	Total Police Expenditures	Expenditures on Sales/ Manufacturing	Expenditures on Possession	Police Expenditures on Drug Violations	Total Judicial Expenditures	% Felony Convictions, Drug Violations
Alabama	943,030	619	22,489	23,107	171,677	9.64
Alaska	236,704	663	2,651	3,313	88,517	9.64
Arizona	1,947,729	9,966	54,185	64,150	419,464	9.64
Arkansas	445,832	2,779	12,519	15,298	87,778	9.64
California	13,456,466	129,430	258,197	387,627	3,865,783	9.64
Colorado	1,312,349	3,830	32,780	36,610	214,840	9.64
Connecticut	899,882	5,077	24,904	29,981	276,024	9.64
Delaware	261,461	3,674	8,163	11,837	64,580	9.64
Florida	6,086,644	21,869	84,729	106,598	960,971	9.64
Georgia	2,072,287	25,048	71,375	96,423	423,937	9.64
Hawaii	302,685	5,697	5,025	10,722	134,439	9.64
Idaho	289,850	843	6,527	7,370	70,616	9.64
Illinois	3,832,982	1,503	5,431	6,934	547,628	9.64
Indiana	1,104,945	7,980	29,989	37,969	216,274	9.64
Iowa	554,741	1,841	15,067	16,908	138,855	9.64
Kansas	618,319	4,752	18,256	23,008	114,359	9.64
Kentucky	634,648	7,391	36,211	43,602	181,508	9.64
Louisiana	1,199,311	8,284	40,515	48,799	256,977	9.64
Maine	210,830	1,607	5,138	6,745	46,426	9.64
Maryland	1,664,230	14,946	61,745	76,691	323,515	9.64
Massachusetts	1,665,417	8,460	24,452	32,912	403,103	9.64
Michigan	2,191,695	22,087	57,067	79,153	453,931	9.64
Minnesota	1,379,692	25,371	24,444	49,815	274,181	9.64
Mississippi	543,108	2,701	17,764	20,464	91,688	9.64
Missouri	1,474,301	8,943	52,693	61,636	203,356	9.64
Montana	203,986	624	4,600	5,224	53,655	9.64
Nebraska	476,725	1,743	20,050	21,793	68,458	9.64

Judiciary Expenditures on Drug Violations	Corrections Expenditures Total	% Corrections, Drug Violations	Corrections Expenditures on Drug Violations	Gross State and Local Expenditures	Net State and Local Expenditures
16,544	702,569	1.57	11,030	50,682	49,854
8,530	248,805	1.57	3,906	15,750	15,493
40,424	1,643,732	1.57	25,807	130,381	128,252
8,459	499,399	1.57	7,841	31,598	31,082
372,546	13,727,037	1.57	215,514	975,688	959,755
20,704	1,143,507	1.57	17,953	75,267	74,038
26,600	713,276	1.57	11,198	67,779	66,673
6,224	280,710	1.57	4,407	22,468	22,101
92,609	4,750,819	1.57	74,588	273,795	269,324
40,855	2,299,773	1.57	36,106	173,384	170,553
12,956	219,069	1.57	3,439	27,117	26,674
6,805	309,996	1.57	4,867	19,042	18,731
52,775	1,976,700	1.57	31,034	90,743	89,261
20,842	1,062,827	1.57	16,686	75,498	74,265
13,381	441,106	1.57	6,925	37,215	36,607
11,021	464,447	1.57	7,292	41,321	40,646
17,492	734,285	1.57	11,528	72,622	71,436
24,765	1,242,513	1.57	19,507	93,071	91,552
4,474	213,015	1.57	3,344	14,564	14,326
31,177	1,683,629	1.57	26,433	134,302	132,108
38,847	1,407,655	1.57	22,100	93,859	92,326
43,745	2,461,976	1.57	38,653	161,552	158,914
26,423	914,515	1.57	14,358	90,596	89,116
8,836	488,477	1.57	7,669	36,969	36,366
19,597	875,380	1.57	13,743	94,977	93,426
5,171	196,208	1.57	3,080	13,475	13,255
6,597	323,329	1.57	5,076	33,466	32,920

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Appendix E *Continued*
Expenditures Attributable to Marijuana Prohibition, Thousands of 2008 Dollars

State	Total Police Expenditures	Expenditures on Sales/ Manufacturing	Expenditures on Possession	Police Expenditures on Drug Violations	Total Judicial Expenditures	% Felony Convictions, Drug Violations
Nevada	974,771	4,256	20,723	24,979	182,822	9.64
New Hampshire	286,089	2,489	7,097	9,586	54,694	9.64
New Jersey	2,789,161	22,252	73,323	95,576	603,122	9.64
New Mexico	544,753	2,235	10,227	12,462	129,697	9.64
New York	7,377,107	23,782	397,145	420,927	1,589,828	9.64
North Carolina	2,003,622	11,624	55,897	67,521	282,143	9.64
North Dakota	107,995	549	2,402	2,951	25,228	9.64
Ohio	2,852,685	15,346	94,053	109,399	702,050	9.64
Oklahoma	689,834	5,426	25,263	30,689	127,990	9.64
Oregon	912,114	3,417	26,289	29,706	173,026	9.64
Pennsylvania	2,566,394	29,140	54,326	83,467	645,897	9.64
Rhode Island	286,589	1,945	10,213	12,158	49,601	9.64
South Carolina	885,782	7,261	34,978	42,239	132,701	9.64
South Dakota	127,282	791	4,529	5,320	27,837	9.64
Tennessee	1,332,062	17,984	41,602	59,586	246,891	9.64
Texas	5,083,807	8,196	158,771	166,967	906,254	9.64
Utah	578,339	1,285	9,469	10,754	133,829	9.64
Vermont	127,306	609	3,181	3,789	29,428	9.64
Virginia	1,817,643	12,508	50,846	63,354	330,161	9.64
Washington	1,308,012	7,085	34,084	41,169	334,427	9.64
West Virginia	282,947	2,066	7,080	9,147	76,572	9.64
Wisconsin	1,402,444	7,897	25,510	33,406	245,426	9.64
Wyoming	153,739	583	3,951	4,534	41,201	9.64
DC	533,942	720	2,340	3,060	44,939	9.64
Total	81,034,269	517,173	2,150,263	2,667,436	17,268,302	9.64

Sources: Police Expenditure and Judicial Budget: 2005–2006 State Government Finance Data, US Census: http://www.census.gov/govs/estimate/. Felony Convictions: http://ojp.usdoj.gov/bjs/pub/html/scscf04/tables/scs04101tab.htm. Corrections Budget: http://www.census.gov/govs/www/estimate06.html; http://www.albany.edu/sourcebook/pdf/t600012005.pdf. Budgets were originally reported for 2005–2006 and were converted to 2008 dollars with http://www.bls.

Judiciary Expenditures on Drug Violations	Corrections Expenditures Total	% Corrections, Drug Violations	Corrections Expenditures on Drug Violations	Gross State and Local Expenditures	Net State and Local Expenditures
17,619	768,096	1.57	12,059	54,657	53,764
5,271	167,566	1.57	2,631	17,487	17,202
58,123	2,062,377	1.57	32,379	186,078	183,039
12,499	554,179	1.57	8,701	33,662	33,112
153,212	5,794,240	1.57	90,970	665,108	654,247
27,190	1,771,779	1.57	27,817	122,528	120,527
2,431	83,926	1.57	1,318	6,700	6,590
67,657	1,968,938	1.57	30,912	207,968	204,572
12,334	704,692	1.57	11,064	54,087	53,204
16,675	1,016,224	1.57	15,955	62,336	61,318
62,245	3,050,636	1.57	47,895	193,607	190,445
4,780	227,295	1.57	3,569	20,507	20,172
12,788	725,443	1.57	11,389	66,417	65,333
2,683	153,211	1.57	2,405	10,409	10,239
23,793	957,268	1.57	15,029	98,408	96,801
87,336	5,209,661	1.57	81,792	336,095	330,606
12,897	506,695	1.57	7,955	31,606	31,090
2,836	119,233	1.57	1,872	8,497	8,358
31,818	2,080,407	1.57	32,662	127,834	125,746
32,229	1,731,729	1.57	27,188	100,586	98,944
7,379	271,814	1.57	4,267	20,793	20,454
23,652	1,446,503	1.57	22,710	79,768	78,466
3,971	240,259	1.57	3,772	12,277	12,076
4,331	267,174	1.57	4,195	11,585	11,396
1,664,149	72,904,099	1.57	1,144,594	5,476,180	5,386,753

gov/cpi/home.htm#data. Net S/L Expenditure was calculated using total seizures and fines of $426,393,100. Seizures and fines numbers are explained in Appendix M, and are adjusted for inflation to 2008. Note there is a 9.6% downward correction for police officers without general arrest capabilities and a 58.3% downward correction for nonfelony or misdemeanor trials (see Appendix J).

Appendix F
Expenditures Attributable to Synthetic Prohibition, Thousands of 2008 Dollars

State	Total Police Expenditures	Expenditures on Sales/ Manufacturing	Expenditures on Possession	Police Expenditures on Drug Violations	Total Judicial Expenditures	% Felony Convictions, Drug Violations
Alabama	943,030	812	2,416	3,228	171,677	2.85
Alaska	236,704	196	448	644	88,517	2.85
Arizona	1,947,729	4,913	10,196	15,109	419,464	2.85
Arkansas	445,832	1,043	1,306	2,350	87,778	2.85
California	13,456,466	124,487	0	124,487	3,865,783	2.85
Colorado	1,312,349	711	1,017	1,729	214,840	2.85
Connecticut	899,882	629	1,966	2,594	276,024	2.85
Delaware	261,461	417	345	762	64,580	2.85
Florida	6,086,644	1,421	2,040	3,461	960,971	2.85
Georgia	2,072,287	4,267	7,518	11,785	423,937	2.85
Hawaii	302,685	54	362	416	134,439	2.85
Idaho	289,850	55	190	245	70,616	2.85
Illinois	3,832,982	100	120	220	547,628	2.85
Indiana	1,104,945	2,308	2,857	5,164	216,274	2.85
Iowa	554,741	58	331	389	138,855	2.85
Kansas	618,319	201	548	749	114,359	2.85
Kentucky	634,648	695	2,881	3,576	181,508	2.85
Louisiana	1,199,311	1,935	3,838	5,773	256,977	2.85
Maine	210,830	442	595	1,037	46,426	2.85
Maryland	1,664,230	4,754	1,379	6,133	323,515	2.85
Massachusetts	1,665,417	1,498	1,509	3,007	403,103	2.85
Michigan	2,191,695	1,472	2,820	4,292	453,931	2.85
Minnesota	1,379,692	339	1,535	1,874	274,181	2.85
Mississippi	543,108	1,350	2,414	3,764	91,688	2.85
Missouri	1,474,301	3,913	4,238	8,152	203,356	2.85
Montana	203,986	123	207	330	53,655	2.85
Nebraska	476,725	869	642	1,510	68,458	2.85

Judiciary Expenditures on Drug Violations	Corrections Expenditures Total	% Corrections, Drug Violations	Corrections Expenditures on Drug Violations	Gross State and Local Expenditures	Net State and Local Expenditures
4,885	702,569	5.02	35,269	43,382	42,674
2,519	248,805	5.02	12,490	15,653	15,398
11,937	1,643,732	5.02	82,515	109,561	107,772
2,498	499,399	5.02	25,070	29,918	29,429
110,007	13,727,037	5.02	689,097	923,592	908,509
6,114	1,143,507	5.02	57,404	65,246	64,181
7,855	713,276	5.02	35,806	46,256	45,500
1,838	280,710	5.02	14,092	16,691	16,419
27,346	4,750,819	5.02	238,491	269,298	264,900
12,064	2,299,773	5.02	115,449	139,297	137,023
3,826	219,069	5.02	10,997	15,239	14,990
2,009	309,996	5.02	15,562	17,816	17,525
15,584	1,976,700	5.02	99,230	115,034	113,156
6,154	1,062,827	5.02	53,354	64,673	63,617
3,951	441,106	5.02	22,144	26,484	26,051
3,254	464,447	5.02	23,315	27,318	26,872
5,165	734,285	5.02	36,861	45,603	44,858
7,313	1,242,513	5.02	62,374	75,459	74,227
1,321	213,015	5.02	10,693	13,052	12,838
9,206	1,683,629	5.02	84,518	99,857	98,227
11,471	1,407,655	5.02	70,664	85,142	83,752
12,917	2,461,976	5.02	123,591	140,800	138,501
7,802	914,515	5.02	45,909	55,585	54,678
2,609	488,477	5.02	24,522	30,895	30,390
5,787	875,380	5.02	43,944	57,883	56,938
1,527	196,208	5.02	9,850	11,706	11,515
1,948	323,329	5.02	16,231	19,690	19,368

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Appendix F *Continued*
Expenditures Attributable to Synthetic Prohibition, Thousands of 2008 Dollars

State	Total Police Expenditures	Expenditures on Sales/ Manufacturing	Expenditures on Possession	Police Expenditures on Drug Violations	Total Judicial Expenditures	% Felony Convictions, Drug Violations
Nevada	974,771	2,515	6,856	9,371	182,822	2.85
New Hampshire	286,089	201	369	570	54,694	2.85
New Jersey	2,789,161	3,248	3,397	6,646	603,122	2.85
New Mexico	544,753	4,345	2,055	6,400	129,697	2.85
North Carolina	2,003,622	732	2,570	3,303	282,143	2.85
North Dakota	107,995	51	99	150	25,228	2.85
Ohio	2,852,685	1,967	5,639	7,606	702,050	2.85
Oklahoma	689,834	3,937	5,850	9,787	127,990	2.85
Oregon	912,114	303	2,482	2,786	173,026	2.85
Pennsylvania	2,566,394	7,354	5,073	12,427	645,897	2.85
Rhode Island	286,589	202	292	494	49,601	2.85
South Carolina	885,782	440	1,312	1,752	132,701	2.85
South Dakota	127,282	71	138	208	27,837	2.85
Tennessee	1,332,062	3,693	4,161	7,854	246,891	2.85
Texas	5,083,807	37,273	21,129	58,402	906,254	2.85
Utah	578,339	361	794	1,155	133,829	2.85
Vermont	127,306	122	297	418	29,428	2.85
Virginia	1,817,643	2,609	1,542	4,152	330,161	2.85
Washington	1,308,012	3,713	9,994	13,707	334,427	2.85
West Virginia	282,947	532	1,133	1,664	76,572	2.85
Wisconsin	1,402,444	1,336	1,236	2,571	245,426	2.85
Wyoming	153,739	344	643	987	41,201	2.85
DC	533,942	0	0	0	44,939	2.85
Total	81,034,269	238,068	138,622	376,689	17,268,302	2.85

Sources: Police Expenditure and Judicial Budget: 2005–2006 State Government Finance Data, US Census: http://www.census.gov/govs/estimate/. Felony Convictions: http://ojp.usdoj.gov/bjs/pub/html/scscf04/tables/scs04101tab.htm. Corrections Budget: http://www.census.gov/govs/www/estimate06.html; http://www.albany.edu/sourcebook/pdf/t600012005.pdf. Budgets were originally reported for 2005–2006 and were converted to 2008 dollars with

Judiciary Expenditures on Drug Violations	Corrections Expenditures Total	% Corrections, Drug Violations	Corrections Expenditures on Drug Violations	Gross State and Local Expenditures	Net State and Local Expenditures
5,202	768,096	5.02	38,558	53,132	52,265
1,556	167,566	5.02	8,412	10,538	10,366
17,163	2,062,377	5.02	103,531	127,340	125,261
3,691	554,179	5.02	27,820	37,910	37,291
8,029	1,771,779	5.02	88,943	100,275	98,637
718	83,926	5.02	4,213	5,081	4,998
19,978	1,968,938	5.02	98,841	126,425	124,360
3,642	704,692	5.02	35,376	48,805	48,008
4,924	1,016,224	5.02	51,014	58,724	57,765
18,380	3,050,636	5.02	153,142	183,949	180,945
1,411	227,295	5.02	11,410	13,316	13,098
3,776	725,443	5.02	36,417	41,945	41,261
792	153,211	5.02	7,691	8,692	8,550
7,026	957,268	5.02	48,055	62,934	61,906
25,789	5,209,661	5.02	261,525	345,716	340,070
3,808	506,695	5.02	25,436	30,399	29,903
837	119,233	5.02	5,985	7,241	7,123
9,395	2,080,407	5.02	104,436	117,984	116,057
9,517	1,731,729	5.02	86,933	110,157	108,358
2,179	271,814	5.02	13,645	17,488	17,203
6,984	1,446,503	5.02	72,614	82,170	80,828
1,172	240,259	5.02	12,061	14,220	13,988
1,279	267,174	5.02	13,412	14,691	14,451
491,397	72,904,099	5.02	3,659,786	4,527,872	4,453,931

http://www.bls.gov/cpi/home.htm#data. Net S/L Expenditure was calculated using total seizures and fines of $426,393,100. Seizures and fines numbers are explained in Appendix M, and are adjusted for inflation to 2008. Note there is a 9.6% downward correction for police officers without general arrest capabilities and a 58.3% downward correction for nonfelony or misdemeanor trials (see Appendix J).

Appendix G
Expenditures Attributable to Prohibition of Other Drugs, Thousands of 2008 Dollars

State	Total Police Expenditures	Expenditures on Sales/ Manufacturing	Expenditures on Possession	Police Expenditures on Drug Violations	Total Judicial Expenditures	% Felony Convictions, Drug Violations
Alabama	943,030	1,662	1,844	3,506	171,677	6.34
Alaska	236,704	325	463	788	88,517	6.34
Arizona	1,947,729	5,355	19,959	25,314	419,464	6.34
Arkansas	445,832	2,986	6,583	9,568	87,778	6.34
California	13,456,466	124,487	451,678	576,166	3,865,783	6.34
Colorado	1,312,349	2,472	8,462	10,934	214,840	6.34
Connecticut	899,882	517	1,659	2,175	276,024	6.34
Delaware	261,461	790	575	1,366	64,580	6.34
Florida	6,086,644	729	1,826	2,556	960,971	6.34
Georgia	2,072,287	14,875	7,133	22,008	423,937	6.34
Hawaii	302,685	2,162	1,613	3,775	134,439	6.34
Idaho	289,850	1,263	3,363	4,626	70,616	6.34
Illinois	3,832,982	80	271	351	547,628	6.34
Indiana	1,104,945	2,831	5,911	8,742	216,274	6.34
Iowa	554,741	1,010	3,025	4,034	138,855	6.34
Kansas	618,319	3,355	5,334	8,689	114,359	6.34
Kentucky	634,648	3,318	7,322	10,640	181,508	6.34
Louisiana	1,199,311	4,747	5,607	10,353	256,977	6.34
Maine	210,830	1,037	1,191	2,228	46,426	6.34
Maryland	1,664,230	734	1,393	2,128	323,515	6.34
Massachusetts	1,665,417	999	1,837	2,836	403,103	6.34
Michigan	2,191,695	7,743	10,672	18,415	453,931	6.34
Minnesota	1,379,692	9,743	6,637	16,380	274,181	6.34
Mississippi	543,108	1,599	4,172	5,770	91,688	6.34
Missouri	1,474,301	9,370	20,706	30,075	203,356	6.34
Montana	203,986	218	1,015	1,233	53,655	6.34
Nebraska	476,725	2,470	3,833	6,303	68,458	6.34

Judiciary Expenditures on Drug Violations	Corrections Expenditures Total	% Corrections, Drug Violations	Corrections Expenditures on Drug Violations	Gross State and Local Expenditures	Net State and Local Expenditures
10,892	702,569	2.86	20,093	34,491	33,928
5,616	248,805	2.86	7,116	13,520	13,299
26,612	1,643,732	2.86	47,011	98,937	97,321
5,569	499,399	2.86	14,283	29,420	28,939
245,254	13,727,037	2.86	392,593	1,214,013	1,194,188
13,630	1,143,507	2.86	32,704	57,269	56,333
17,512	713,276	2.86	20,400	40,086	39,432
4,097	280,710	2.86	8,028	13,491	13,271
60,966	4,750,819	2.86	135,873	199,395	196,139
26,896	2,299,773	2.86	65,774	114,677	112,804
8,529	219,069	2.86	6,265	18,570	18,267
4,480	309,996	2.86	8,866	17,972	17,679
34,743	1,976,700	2.86	56,534	91,627	90,131
13,721	1,062,827	2.86	30,397	52,859	51,996
8,809	441,106	2.86	12,616	25,459	25,043
7,255	464,447	2.86	13,283	29,227	28,750
11,515	734,285	2.86	21,001	43,156	42,451
16,303	1,242,513	2.86	35,536	62,192	61,177
2,945	213,015	2.86	6,092	11,265	11,081
20,524	1,683,629	2.86	48,152	70,804	69,648
25,574	1,407,655	2.86	40,259	68,669	67,547
28,798	2,461,976	2.86	70,413	117,626	115,705
17,395	914,515	2.86	26,155	59,930	58,951
5,817	488,477	2.86	13,970	25,558	25,140
12,901	875,380	2.86	25,036	68,013	66,902
3,404	196,208	2.86	5,612	10,248	10,081
4,343	323,329	2.86	9,247	19,893	19,568

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Appendix G *Continued*
Expenditures Attributable to Prohibition of Other Drugs, Thousands of 2008 Dollars

State	Total Police Expenditures	Expenditures on Sales/ Manufacturing	Expenditures on Possession	Police Expenditures on Drug Violations	Total Judicial Expenditures	% Felony Convictions, Drug Violations
Nevada	974,771	3,272	2,361	5,633	182,822	6.34
New Hampshire	286,089	268	715	984	54,694	6.34
New Jersey	2,789,161	2,282	7,224	9,506	603,122	6.34
New Mexico	544,753	486	1,197	1,683	129,697	6.34
New York	7,377,107	40,919	121,003	161,922	1,589,828	6.34
North Carolina	2,003,622	1,140	4,885	6,026	282,143	6.34
North Dakota	107,995	387	529	916	25,228	6.34
Ohio	2,852,685	6,812	20,269	27,080	702,050	6.34
Oklahoma	689,834	2,269	3,677	5,946	127,990	6.34
Oregon	912,114	4,061	16,232	20,293	173,026	6.34
Pennsylvania	2,566,394	3,748	10,056	13,805	645,897	6.34
Rhode Island	286,589	244	627	871	49,601	6.34
South Carolina	885,782	2,919	4,060	6,979	132,701	6.34
South Dakota	127,282	290	523	813	27,837	6.34
Tennessee	1,332,062	8,553	10,308	18,860	246,891	6.34
Texas	5,083,807	7,308	37,269	44,576	906,254	6.34
Utah	578,339	2,315	7,477	9,792	133,829	6.34
Vermont	127,306	472	1,103	1,575	29,428	6.34
Virginia	1,817,643	4,656	6,837	11,493	330,161	6.34
Washington	1,308,012	4,466	16,661	21,126	334,427	6.34
West Virginia	282,947	1,069	1,266	2,335	76,572	6.34
Wisconsin	1,402,444	2,308	3,256	5,564	245,426	6.34
Wyoming	153,739	127	643	770	41,201	6.34
DC	533,942	180	135	315	44,939	6.34
Total	81,034,269	307,428	862,395	1,169,823	17,268,302	6.34

Sources: Police Expenditure and Judicial Budget: 2005–2006 State Government Finance Data, US Census: http://www.census.gov/govs/estimate/. Felony Convictions: http://ojp.usdoj.gov/bjs/pub/html/scscf04/tables/scs04101tab.htm. Corrections Budget: http://www.census.gov/govs/www/estimate06.html; http://www.albany.edu/sourcebook/pdf/t600012005.pdf. Budgets were originally reported for 2005–2006 and were converted to 2008 dollars with

Judiciary Expenditures on Drug Violations	Corrections Expenditures Total	% Corrections, Drug Violations	Corrections Expenditures on Drug Violations	Gross State and Local Expenditures	Net State and Local Expenditures
11,599	768,096	2.86	21,968	39,200	38,559
3,470	167,566	2.86	4,792	9,246	9,095
38,263	2,062,377	2.86	58,984	106,753	105,010
8,228	554,179	2.86	15,850	25,761	25,340
100,862	5,794,240	2.86	165,715	428,499	421,502
17,900	1,771,779	2.86	50,673	74,598	73,380
1,601	83,926	2.86	2,400	4,917	4,836
44,540	1,968,938	2.86	56,312	127,931	125,842
8,120	704,692	2.86	20,154	34,220	33,662
10,977	1,016,224	2.86	29,064	60,334	59,349
40,977	3,050,636	2.86	87,248	142,030	139,710
3,147	227,295	2.86	6,501	10,519	10,347
8,419	725,443	2.86	20,748	36,146	35,555
1,766	153,211	2.86	4,382	6,960	6,847
15,663	957,268	2.86	27,378	61,902	60,891
57,495	5,209,661	2.86	148,996	251,067	246,967
8,490	506,695	2.86	14,491	32,773	32,238
1,867	119,233	2.86	3,410	6,852	6,740
20,946	2,080,407	2.86	59,500	91,939	90,437
21,217	1,731,729	2.86	49,527	91,871	90,370
4,858	271,814	2.86	7,774	14,967	14,722
15,570	1,446,503	2.86	41,370	62,504	61,483
2,614	240,259	2.86	6,871	10,256	10,088
2,851	267,174	2.86	7,641	10,807	10,631
1,095,538	72,904,099	2.86	2,085,057	4,350,419	4,279,376

http://www.bls.gov/cpi/home.htm#data. Net S/L Expenditure was calculated using total seizures and fines of $426,393,100. Seizures and fines numbers are explained in Appendix M, and are adjusted for inflation to 2008. Note there is a 9.6% downward correction for police officers without general arrest capabilities and a 58.3% downward correction for nonfelony or misdemeanor trials (see Appendix J).

Appendix H
State Drug Tax Revenue—Population Method in Millions of 2008 Dollars

State	Population	Proportion of Population	All Drugs	Heroin	Marijuana	Cocaine	Other
All States	304,059,724	100.00	15,583.33	2,366.35	2,910.87	8,485.82	1,820.30
Alabama	4,661,900	1.53	238.93	36.28	44.63	130.11	27.91
Alaska	686,293	0.23	35.17	5.34	6.57	19.15	4.11
Arizona	6,500,180	2.14	333.14	50.59	62.23	181.41	38.91
Arkansas	2,855,390	0.94	146.34	22.22	27.34	79.69	17.09
California	36,756,666	12.09	1,883.81	286.06	351.88	1,025.82	220.05
Colorado	4,939,456	1.62	253.15	38.44	47.29	137.85	29.57
Connecticut	3,501,252	1.15	179.44	27.25	33.52	97.71	20.96
Delaware	873,092	0.29	44.75	6.79	8.36	24.37	5.23
Florida	18,328,340	6.03	939.34	142.64	175.46	511.51	109.73
Georgia	9,685,744	3.19	496.40	75.38	92.72	270.31	57.99
Hawaii	1,288,198	0.42	66.02	10.03	12.33	35.95	7.71
Idaho	1,523,816	0.50	78.10	11.86	14.59	42.53	9.12
Illinois	12,901,563	4.24	661.22	100.41	123.51	360.06	77.24
Indiana	6,376,792	2.10	326.82	49.63	61.05	177.97	38.18
Iowa	3,002,555	0.99	153.88	23.37	28.74	83.80	17.98
Kansas	2,802,134	0.92	143.61	21.81	26.83	78.20	16.78
Kentucky	4,269,245	1.40	218.80	33.23	40.87	119.15	25.56
Louisiana	4,410,796	1.45	226.06	34.33	42.23	123.10	26.41
Maine	1,316,456	0.43	67.47	10.25	12.60	36.74	7.88
Maryland	5,633,597	1.85	288.73	43.84	53.93	157.22	33.73
Massachusetts	6,497,967	2.14	333.03	50.57	62.21	181.35	38.90
Michigan	10,003,422	3.29	512.68	77.85	95.77	279.18	59.89
Minnesota	5,220,393	1.72	267.55	40.63	49.98	145.69	31.25
Mississippi	2,938,618	0.97	150.61	22.87	28.13	82.01	17.59
Missouri	5,911,605	1.94	302.98	46.01	56.59	164.98	35.39
Montana	967,440	0.32	49.58	7.53	9.26	27.00	5.79
Nebraska	1,783,432	0.59	91.40	13.88	17.07	49.77	10.68

State	Population	Proportion of Population	All Drugs	Heroin	Marijuana	Cocaine	Other
Nevada	2,600,167	0.86	133.26	20.24	24.89	72.57	15.57
New Hampshire	1,315,809	0.43	67.44	10.24	12.60	36.72	7.88
New Jersey	8,682,661	2.86	444.99	67.57	83.12	242.32	51.98
New Mexico	1,984,356	0.65	101.70	15.44	19.00	55.38	11.88
New York	19,490,297	6.41	998.90	151.68	186.59	543.94	116.68
North Carolina	9,222,414	3.03	472.66	71.77	88.29	257.38	55.21
North Dakota	641,481	0.21	32.88	4.99	6.14	17.90	3.84
Ohio	11,485,910	3.78	588.66	89.39	109.96	320.55	68.76
Oklahoma	3,642,361	1.20	186.67	28.35	34.87	101.65	21.81
Oregon	3,790,060	1.25	194.24	29.50	36.28	105.77	22.69
Pennsylvania	12,448,279	4.09	637.99	96.88	119.17	347.41	74.52
Rhode Island	1,050,788	0.35	53.85	8.18	10.06	29.33	6.29
South Carolina	4,479,800	1.47	229.59	34.86	42.89	125.02	26.82
South Dakota	804,194	0.26	41.22	6.26	7.70	22.44	4.81
Tennessee	6,214,888	2.04	318.52	48.37	59.50	173.45	37.21
Texas	24,326,974	8.00	1,246.78	189.33	232.89	678.93	145.64
Utah	2,736,424	0.90	140.24	21.30	26.20	76.37	16.38
Vermont	621,270	0.20	31.84	4.84	5.95	17.34	3.72
Virginia	7,769,089	2.56	398.17	60.46	74.38	216.82	46.51
Washington	6,549,224	2.15	335.65	50.97	62.70	182.78	39.21
West Virginia	1,814,468	0.60	92.99	14.12	17.37	50.64	10.86
Wisconsin	5,627,967	1.85	288.44	43.80	53.88	157.07	33.69
Wyoming	532,668	0.18	27.30	4.15	5.10	14.87	3.19
DC	591,833	0.19	30.33	4.61	5.67	16.52	3.54

Source: State population estimates (2008): http://www.census.gov/popest/national/files/NST-EST2008-alldata.csv.

Appendix I
State Drug Tax Revenue—Consumption Method in Millions of 2008 Dollars

State	Use Proportion				Tax Revenue			
	All Drugs	Marijuana	Cocaine	Other	All Drugs	Marijuana	Cocaine	Other
All States	100.00	100.00	100.00	100.00	15,583.33	2,910.87	8,485.82	12,672.46
Alabama	1.32	1.19	1.29	1.56	205.17	34.76	109.42	197.86
Alaska	0.30	0.30	0.26	0.23	46.41	8.87	22.12	28.90
Arizona	2.38	1.96	2.84	3.09	371.61	56.93	241.37	391.47
Arkansas	0.99	0.93	0.87	1.20	154.07	26.99	74.02	152.03
California	13.51	13.30	12.29	12.66	2,105.98	387.00	1,042.99	1,604.11
Colorado	2.19	2.06	2.14	1.94	340.85	60.10	181.69	245.74
Connecticut	1.12	1.28	1.16	0.97	174.59	37.26	98.53	123.39
Delaware	0.30	0.31	0.30	0.28	47.00	9.13	25.49	36.10
Florida	5.69	5.57	5.80	6.11	887.41	162.07	492.25	773.88
Georgia	2.94	3.08	3.43	2.76	457.37	89.64	290.67	349.78
Hawaii	0.39	0.37	0.35	0.31	60.42	10.91	29.33	39.07
Idaho	0.46	0.42	0.36	0.44	71.00	12.33	30.78	56.03
Illinois	3.82	3.96	4.23	3.68	595.42	115.17	358.56	465.92
Indiana	2.17	2.03	1.92	2.22	338.06	58.96	163.07	281.77
Iowa	0.63	0.71	0.74	0.66	98.30	20.59	62.41	84.19
Kansas	0.84	0.87	0.86	0.90	130.20	25.46	73.29	114.03
Kentucky	1.39	1.38	1.25	1.44	216.38	40.11	105.69	182.59
Louisiana	1.45	1.42	1.56	1.79	226.33	41.36	132.37	226.66
Maine	0.51	0.53	0.41	0.37	79.57	15.56	34.59	47.25
Maryland	1.60	1.76	1.82	1.68	249.36	51.24	154.59	213.28
Massachusetts	2.57	2.82	2.67	2.29	400.53	82.11	226.87	289.96
Michigan	3.69	3.83	2.79	3.32	574.41	111.60	237.13	420.19
Minnesota	1.75	1.89	1.64	1.45	273.47	55.16	138.99	183.97
Mississippi	0.85	0.74	0.66	0.94	131.73	21.44	55.93	119.59
Missouri	1.91	1.89	1.78	2.11	297.39	55.10	151.18	267.67
Montana	0.40	0.39	0.31	0.32	62.80	11.29	26.21	40.64
Nebraska	0.48	0.50	0.47	0.49	75.57	14.55	39.57	62.65

State	Use Proportion				Tax Revenue			
	All Drugs	Marijuana	Cocaine	Other	All Drugs	Marijuana	Cocaine	Other
Nevada	0.95	0.85	0.85	0.93	147.34	24.79	72.26	117.45
New Hampshire	0.52	0.59	0.47	0.40	81.52	17.03	39.64	50.39
New Jersey	2.27	2.54	2.25	2.24	354.25	74.01	190.61	284.19
New Mexico	0.77	0.72	0.76	0.67	119.57	20.82	64.42	84.87
New York	7.15	7.30	7.43	6.06	1,114.25	212.51	630.43	767.65
North Carolina	2.66	2.74	3.06	2.85	415.17	79.65	259.54	361.23
North Dakota	0.16	0.18	0.15	0.14	25.04	5.16	12.96	17.99
Ohio	3.64	3.95	3.98	3.41	567.69	115.02	337.99	432.34
Oklahoma	1.25	1.00	0.93	1.44	194.47	29.04	79.11	182.40
Oregon	1.56	1.60	1.23	1.38	242.45	46.58	104.45	174.91
Pennsylvania	3.51	3.73	3.39	3.33	547.07	108.68	287.81	422.39
Rhode Island	0.53	0.55	0.59	0.50	82.50	15.87	50.43	63.17
South Carolina	1.19	1.25	1.28	1.23	184.75	36.34	108.28	155.92
South Dakota	0.22	0.22	0.19	0.18	34.08	6.45	16.25	22.37
Tennessee	2.21	1.99	2.35	2.78	343.95	57.98	199.57	351.92
Texas	6.54	6.20	7.73	8.29	1,018.56	180.48	656.20	1,051.05
Utah	0.71	0.63	0.85	0.81	110.78	18.38	72.22	102.40
Vermont	0.29	0.31	0.25	0.22	44.94	9.17	21.55	28.06
Virginia	2.58	2.53	2.81	2.43	401.60	73.72	238.60	307.69
Washington	2.70	2.49	2.30	2.57	420.60	72.45	195.01	325.83
West Virginia	0.54	0.52	0.59	0.65	84.20	14.99	49.79	82.35
Wisconsin	1.87	1.92	1.83	2.04	291.98	55.93	155.10	259.12
Wyoming	0.19	0.19	0.18	0.18	29.08	5.64	15.30	22.49
DC	0.29	0.30	0.42	0.25	45.20	8.71	35.25	31.06

Source: Use proportion (2007): http://www.oas.samhsa.gov/2k7state/AppB.htm#TabB-1.

Appendix J
Adjudications Expenditures Attributable to Misdemeanor/Felony Cases

Since we weight the judicial and legal budget by the proportion of felony cases (and not all cases) that are drug-related, we must accordingly adjust state and local adjudications expenditures to reflect the proportion of cases spent on felonies and misdemeanors. We assume that the proportion of felony cases that are drug-related can be applied to misdemeanor cases as well. There is no aggregate report that reflects the proportion of adjudications expenditures that goes to felony and misdemeanor cases, so we collected data from eight existing state reports.

The unit of measurement for workload varied across reports—for California it was measured by judicial need, and for the other states it was measured in units of time. The fraction of felony and misdemeanor cases for each state was taken by dividing the workload for felony and misdemeanor cases by the workload for all cases. These numbers were then adjusted by state weights based on population. The weighted average for the amount of judicial and legal workload attributable to felony and misdemeanor cases was 41.66%.

State	Year	Jurisdiction Studied	Workload for Felony and Misdemeanor Cases	Workload for All Cases	Fraction of Felony and Misdemeanor Workloads	Population (2009)	Population Weight	Weighted Fraction
California	2002	All judicial officers	987	2254	0.437888199	36,961,664	0.6731833	0.2948
Hawaii	1997	District courts	357,262.1	1,114,524	0.320551285	1,295,178	0.02358909	0.0076
Iowa	2000	All judicial officers	6,136,036.78	16,567,588	0.370363917	3,007,856	0.05478212	0.0203
Nebraska	2006	District and county courts	2,504,782	4,787,784	0.523161028	1,796,619	0.03272185	0.0171
Oregon	1999	Circuit courts	5,295,909	12,711,403	0.41662663	3,825,657	0.06967674	0.029
West Virginia	2007	Circuit courts	1,131970	6,213,660	0.182174435	1,819,777	0.03314362	0.006
Wisconsin	2006	All judicial officers	8,607,237	23,945,697	0.359448171	5,654,774	0.10299048	0.037
Wyoming	1999	County courts	154,607	321,903	0.480290647	544,270	0.0099128	0.0048
					0.386313039			0.4166
						Average:		0.3863
						Weighted Average:		**0.4166**

Source: All reports can be found at http://www.ncsconline.org/wc/CourTopics/StateLinks.asp?id=87&topic=WorkLd.

Appendix K
Percentage of Incarcerated Drug Offenders by Drug Type (Marijuana)

While there is data available on the fraction of drug sales and manufacturing arrests by drug type, there is no aggregate statistic for the fraction of drug-related incarcerations by drug type. This was problematic for calculating corrections expenditures by drug because offenders are not necessarily incarcerated in the same proportion by drug for which they are arrested. This is because some offenses, such as possession of heroin, might be considered more punishable than others, such as possession of marijuana.

In order to calculate a proportion for drug incarcerations by drug, we looked at prisoner population statistics from every state. Only six states classified drug offenders by type of drug, and of those six, only three were specific enough to make distinctions among heroin, cocaine, and other types of drugs.

In order to use all available data, we first constructed a weighted average (by state population) for the proportion of drug offenders that were incarcerated for a marijuana offense. This number came out to be 8.2%, as demonstrated below.

State	Year	% Marijuana	Population (July 2009)	Population %	Weighted Share for Marijuana
California	2008	5.1	36,961,664	48.4	2.468
Colorado	2009	7.4	5,024,748	6.6	0.488
Georgia	2009	18.3	9,829,211	12.9	2.361
Illinois	2009	7.2	12,910,409	16.9	1.217
Indiana	2009	17.7	6,423,113	8.4	1.487
Minnesota	1989–2005	2.1	5,266,214	6.9	0.145
Total			76,415,359		
Average:		9.6			
			Weighted Average:		**8.2**

Sources: California: http://www.cdcr.ca.gov/Reports_Research/Offender_Information_Services_Branch/Annual/CalPris/CALPRISd2008.pdf. Colorado: http://www.doc.state.co.us/sites/default/files/opa/StatRprt_FY09.pdf. Georgia: http://www.dcor.state.ga.us/Reports/Annual/pdf/inmadmFY2009.pdf. Illinois: http://www.idoc.state.il.us/subsections/reports/annual_report/FY09%20DOC%20Annual%20Rpt.pdf. Indiana: http://www.in.gov/idoc/files/CY2009OffenderPopulation.pdf. Minnesota: http://www.corr.state.mn.us/publications/documents/drugbackgrounder.pdf.

Appendix L
Percentage of Incarcerated Drug Offenders by Drug Type (Non-Marijuana)

After the proportion of drug offenders incarcerated for marijuana was calculated, we came up with similar state-level proportions for the three states with data on other drugs, except excluding marijuana. These were then weighted by the populations of these three states. The final proportions were then normalized to account for the inclusion of marijuana. The final weighted share for heroin and cocaine offenders is 51.5%, for synthetic drug offenders is 25.7%, and for all other drug offenders is 14.6%. This is demonstrated in the table below.

State	Year	% Heroin/ Cocaine*	% Synthetic*	% Other*	Population %	Weighted Share for Heroin/ Cocaine	Weighted Share for Synthetics	Weighted Share for Other Drugs
Georgia	2009	58.1	21.3	20.6	0.456778755	26.53885	9.729387	9.409642
Indiana	2009	64.7	15.4	19.9	0.298492072	19.31244	4.596778	5.939992
Minnesota	1989–2005	41.9	55.9	2.2	0.244729173	10.25415	13.68036	0.538404
Averages:	54.9	30.8	14.4					
					Weighted averages:	56.1	28	15.89
					Including marijuana:	**51.5**	**25.7**	**14.6**

Sources: Georgia: http://www.dcor.state.ga.us/Reports/Annual/pdf/inmadmFY2009.pdf. Indiana: http://www.in.gov/idoc/files/CY2009OffenderPopulation.pdf. Minnesota: http://www.corr.state.mn.us/publications/documents/drugbackgrounder.pdf.

* Opiates were categorized as heroin; "cocaine and narcotics" were categorized as cocaine and heroin. When unspecified, drugs were categorized as "other," even though this category might be overestimated because the original figures might have included heroin, cocaine, or synthetic drugs. "Legend drugs" and "Indiana schedule IV substances" are categorized as synthetic drugs. For Minnesota, it was assumed that half of all drugs categorized as "other" were heroin or opiates.

Appendix M
Revenue under Prohibition from Seizures and Fines

Seizures. In 2007, U.S. attorneys received $1.3 billion of forfeiture. This overstates revenue related to drugs because the figure includes seizures for all reasons, such as violation of gun laws, intellectual property laws, and the like. There may also be double-counting between the DEA seizures and the U.S. Customs seizures.

State and local data on forfeiture revenue are not readily available. Katherine Baicker and Mireille Jacobson, "Finders Keepers: Forfeiture Laws, Policing Incentives, and Local Budgets" (manuscript, Department of Economics, Dartmouth College, 2004), however, estimate using a sample of states that state forfeiture revenue per capita was roughly $1.14 during the 1994–2001 period. This implies aggregate state forfeiture revenue of $342 million. Adjusting for inflation implies a number around $400 million.

Fines. In 2007, the total quantity of fines and restitutions ordered for drug offense cases in U.S. District Courts was just under $38.1 million.[1] Assuming the ratio of state/local to federal fine/restitution revenue is similar to ratio of state/local to federal seizure revenue implies that state and local fine/restitution revenue from drug cases is about $10 million.

[1] See http://www.albany.edu/sourcebook/1995 /pdf/t531.pdf.

Notes

The authors would like to acknowledge a grant from the Criminal Justice Policy Foundation in support of research into the budgetary costs of drug prohibition. The authors also wish to thank Ting Zhang, Saria Sheikh, and Sanja Misra for providing excellent research assistance.

1. Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2010 to 2020* (Washington: CBO, 2010), p. xii; Office of Management and Budget, *Analytical Perspectives: Budget of the U.S. Government, Fiscal year 2011* (Washington: OMB, 2010): p. 47.

2. Elizabeth McNichol and Nicholas Johnson, "Recession Continues to Batter State Budgets: State Responses Could Slow Recovery," Center on Budget and Policy Priorities, May 27, 2010.

3. See Office of the Governor, "2010–2011 Budget Proposal: Solving California's $20 Billion Deficit", Fact Sheet, http://gov.ca.gov/index.php?/fact-sheet/14147/. Marijuana would still be prohibited under federal law, which raises constitutional issues as well as complications for estimating the fiscal impact of legalization.

4. See "Yes on Prop 19," http://www.taxcannabis.org/index.php/pages/about.

5. See, for example, the estimates in Jeffrey A. Miron, "The Effect of Marijuana Decriminalization on the Budgets of Massachusetts Governments, with a Discussion of Decriminalization's Effect on Drug Use," Report to the Drug Policy Forum of Massachusetts (October 2002) versus those in Jeffrey A. Miron, "The Budgetary Implications of Marijuana Legalization in Massachusetts," *Report to Change the Climate* (August 2003).

6. This report addresses only the criminal justice costs of enforcing drug prohibition; it does not address any possible changes in prevention, education, or treatment expenses that might accompany legalization. The narrower approach is appropriate because the decision to prohibit drugs is separate from the decision to subsidize prevention, education, and treatment. Drug legalization might nevertheless cause some reduction in government expenditure for demand-side policies. For example, legalization would likely mean reduced criminal justice referrals of drug offenders to treatment; this category accounted for 15–50 percent of drug treatment referrals in 2006, depending on the drug category (U.S. Department of Health and Human Services, 2006, Appendix Table D, p. 14). Thus, the approach adopted here implies a conservative estimate of the reduction in government expenditure from drug legalization.

7. For example, under current rules regarding parole and probation, a positive urine test for drugs can send a parolee or probationer to prison, regardless of the original offense. These rules might change under legalization, implying additional reductions in government expenditure.

8. Only 90.4 percent of paid full-time and part-time police officers have general arrest powers. See the 2003 Sample Survey of Law Enforcement Agencies at http://www.icpsr.umich.edu/cocoon/NACJD/STUDY/04411.xml.

9. To the extent it takes additional resources to process an arrestee on multiple charges rather than on a single charge, there is still a net utilization of police resources in such cases due to prohibition. In addition, there is typically a lab test to determine the precise content of any drugs seized when there is an arrest on drug charges, implying utilization of additional resources due to prohibition. A different issue is that in some cases, police stops for non-drug charges that discover drugs and produce an arrest on drug charges might not have led to any arrest in the absence of the drug charge (e.g., because of insufficient evidence).

10. Jeffrey A. Miron, "The Effect of Marijuana Decriminalization"; Peter Reuter, Paul Hirschfield, and Curt Davies, "Assessing the Crack-Down on Marijuana in Maryland," (manuscript, University of Maryland, 2001). Minchin Lewis, *Report on the Syracuse Police Department Activity for the Year Ended June 30, 2002* (Department of Audit, City of Syracuse, 2004) reports that in 2002 the fraction of stand-alone arrests was 90.5 percent in Syracuse, New York.

11. Appendix J contains more information on the methodology employed to arrive at this percentage.

12. These calculations are for the aggregate of all state and local expenditure in this category because state-level data on the percent of prosecutions due to drug laws are available.

13. This figure is not available by drug. The calculations here assume that the fraction of felony convictions by drug equals the fraction of sale/manufacturing arrests by drug. One study suggests that this assumption overstates judicial and legal budget due to marijuana prohibition because marijuana charges are less likely to be prosecuted than other drug charges. See Beau Kilmer et al., "Altered States? Assessing How Marijuana Legalization in California Could Influence Marijuana Consumption and Public Budgets," Rand Drug Policy Research Center Occasional Paper no. 315, 2010.

14. This report excludes the capital outlays por-

tion of the corrections budget since the available data do not indicate the average rate of such expenditures. This biases the estimates downward. Further, these calculations are for the aggregate of all state and local expenditure in this category because state-level data on the percent of prisoners due to drug laws are not available.

15. The proportion of drug offenders who are incarcerated by drug is not necessarily equivalent to the proportion of sales/manufacturing arrests by drug, since certain drugs might be considered more serious than others. This proportion, however, is not available for all states. In order to come up with an estimate of percentages by drug, we gathered individual state data on incarcerated drug offenders from six state-specific reports. All six included information on the number of marijuana prisoners, but only three reports contained information on the number of incarcerated prisoners for heroin, cocaine, and other drugs. Appendix K gives more information on this weighting methodology.

16. Most seized assets are ultimately forfeited.

17. Since these data are not available by drug, the estimates assume that seizure and fine revenue are roughly proportional to gross expenditure.

18. Inflation rate data used throughout the paper are from the U.S. Department of Labor, Consumer Price Index—All Urban Consumers (Bureau of Labor Statistics, http://www.bls.gov/cpi/home.htm#data). As a check, it is useful to compare the estimate provided here to that derived from an alternative methodology. Office of National Drug Control Policy, *State and Local Spending on Drug Control Activities*, Washington, 1993, reports survey evidence on drug prohibition enforcement by state and local authorities for the years 1990/1991. Adjusting these data for inflation and the percent attributable to drug prohibition yields an estimate similar to that reported above. The 1990 estimate is $23.02 billion for state and local drug expenditures on police/adjudications/corrections combined, and the 1991 estimate is $24.96 billion.

19. Office of National Drug Control Policy, *National Drug Control Strategy* (Washington, 2009), pp. 14 and A1, http://www.whitehousedrugpolicy.gov/publications/policy/10budget/fy10budget.pdf. This consists of expenditures in the following categories: Department of Defense ($1,242.7 million); Department of Homeland Security ($2,934.8 million and $65.0 million for other expenditures); Department of Justice ($2,921.1 million and $4,996.7 million for other expenditures); ONDCP ($421.7 million); Department of State ($1,125.7 million and $3.0 million for other expenditures); Department of Transportation ($2.7 million and $25.7 million for other expenditures); Department of Treasury ($57.3 million and $1,546.8 million for other expenditures); D.C. Court Services and Offender Supervision ($78.5 million); Department of the Interior ($6.6 million); and The Federal Judiciary ($1,025.3 million). Patrick Murphy et al., *Improving Anti-Drug Budgeting* (Santa Monica, CA: Rand, 2000) examine the methods used by ONDCP to estimate this expenditure. They conclude that methodological problems render parts of the estimates biased, by substantial amounts in some cases. However, these issues do not imply major qualifications to the data considered here. Murphy et al. find that the anti-drug budgets of the Coast Guard and the Bureau of Prisons are accurate reflections of the resources expended, whereas the reported expenditure of the Department of Defense probably underestimates its anti-drug budget. The overestimates that they identify occur for demand-side activities. The 2003 *National Drug Control Strategy* adopted a new methodology for estimating the federal drug control budget. This new methodology implies a substantial reduction in supply side expenditure (Office of National Drug Control Policy, *National Drug Control Strategy*, pp. 33–34). For the purposes of this report, however, the old methodology is more appropriate. For example, the new approach excludes expenditures on incarceration of persons imprisoned for drug crimes.

20. Office of National Drug Control Policy, *What America's Users Spend on Illegal Drugs* (Cambridge, MA: Abt Associates, 2001); Table A, p. 3.

21. Inflation data came from http://www.bls.gov/data/inflation_calculator.htm, and population data from http://www.census.gov/popest/states/NST-ann-est.html.

22. Usage rates have increased slightly between 2000 and 2008. Prevalence rates for usage of all illicit drugs have increased from 30.8 percent to 33.8 percent; for marijuana usage, from 27.9 percent to 28.6 percent; for cocaine, from 5.4 percent to 6.0 percent; for heroin, from 0.4 percent to 0.5 percent; for other drugs, from 11.6 percent to 14.3 percent. See *Monitoring the Future 2009*, p. 151, http://monitoringthefuture.org/pubs/monographs/vol2_2008.pdf.

23. Beau Kilmer and Rosalie Liccardo Pacula, *Estimating the Size of the Global Drug Market: A Demand-Side Approach—Report 2* (Santa Monica, CA: RAND Corporation, 2009), http://www.rand.org/pubs/technical_reports/TR711/.

24. Some evidence suggests that underreporting is lower for marijuana than for harder drugs, but for simplicity we apply the same adjustment across drugs. This could mean our marijuana estimates are too large.

25. To be explicit, we assume no shift in the demand curve. If the supply curve shifts, the quantity demanded will change.

26. The "forbidden fruit" effect refers to the idea that some people use drugs *because they are illegal*. If drugs are made legal, these consumers might well stop spending their dollars on drugs.

27. Regulation aimed at drug use and sale (e.g., age limits on purchase or licensing and zoning restrictions on sale) might also reduce demand relative to prohibition because legal sellers face a stronger incentive to obey such regulation than underground sellers, who are already hiding their actions from authorities.

28. Jeffrey A. Miron, "Do Prohibitions Raise Prices? Evidence from the Markets for Cocaine and Heroin," *Review of Economics and Statistics* 85, no. 3 (2003): 522–30.

29. The underlying assumption is that the marginal costs of evading tax and regulatory costs is zero for black market suppliers who are already conducting their activities in secret.

30. Robert MacCoun and Peter Reuter, "Interpreting Dutch Cannabis Policy: Reasoning by Analogy in the Legalization Debate," *Science* 278 (1997): 47–52. Authors report gram prices of $2.50–$12.50 in the Netherlands and $1.50–$15.00 in the U.S. They speculate that the surprisingly high prices in the Netherlands might reflect enforcement aimed at large-scale trafficking. Lana D. Harrison, Michael Backenheimer, and James A. Inciardi, "Cannabis Use in the United States: Implications for Policy," in Peter Cohen and Arjan Sas, eds., *Cannabisbeleid in Duitsland, Frankrijk en do Verenigde Staten* (Amsterdam: Centrum voor Drugsonderzoek, Universiteit van Amsterdam, 1995), pp. 231–36. Harrison et al. note that ONDCP data on marijuana prices in the U.S. are similar to prices charged in Dutch coffee shops. Office of National Drug Control Policy, *The Price of Illicit Drugs: 1981 through Second Quarter of 2000* (Washington: Abt Associates, 2001b) reports a price per gram for small-scale purchases of roughly $9 in the second quarter of 2000, while European Monitoring Centre for Drugs and Drug Addiction, *Annual Report 2002* (2002), http://annualreport.emcdda.u.int/pdfs/2002_0458_EN.pdf, suggests a price of 2–8 Euros per gram, which is roughly $6 on average. Various web sites that discuss the coffee shops in Amsterdam suggest prices of $5–$11 per gram in recent years. These comparisons do not adjust for potency or other dimensions of quality. Kenneth W. Clements and Mert Daryal, "Marijuana Prices in Australia in 1990s" (manuscript, Economic Research Centre, Department of Economics, The University of Western Australia, 2001) report marijuana prices for Australia that are similar to or higher than those in the United States. Since Australian drug policy is noticeably less strict than U.S. policy, this observation is consistent with the view that legalization would not produce a dramatic fall in price.

31. The results in Jeffrey A. Miron, "Do Prohibitions Raise Prices?" pp. 522–30 come from two kinds of evidence. The first is analysis of the relation between farm gate prices and retail prices for "similar" goods such as coffee or chocolate. The second is examination of prices for legal versions of currently illegal drugs, such as those for medical versions of cocaine and opiates like morphine.

32. The report assumes a 5 percent value for other drugs because direct evidence is not available, and this assumption errs on the conservative side.

33. The elasticity of demand is the percentage change in the quantity demanded that results from a one percentage point change in the price. For example, an elasticity of -0.5 means that if price falls by 10 percent, the quantity demanded will increase by 5 percent. An "elastic" demand curve is one for which the elasticity is large (in absolute value).

34. See Charles T. Nisbet and Firouz Vakil, "Some Estimates of Price and Expenditure Elasticities of the Demand for Marijuana among U.C.L.A. Students," *Review of Economics and Statistics* 54 (1972): 473–75. Their estimates that use survey data imply price elasticities of -0.365 or -0.51 in the log and linear specifications, respectively, while the purchase data imply price elasticities of -1.013 and -1.51. The estimates based on purchase data are plausibly more reliable. Moreover, as they note, these estimates are likely biased downward by standard simultaneous equations bias. Clemens and Daryal (1999) estimate a price elasticity of -0.5 for drugs using Australian data. Estimates of the demand for "similar" goods (e.g., alcohol, cocaine, heroin, or tobacco) suggest similar elasticities. Rosalie Liccardo Pacula et al., "Drugs and Youth," National Bureau of Economic Research Working Paper no. 7703 (2000). Pacula et al. summarize the literature on the relation between drug use and factors that can affect use, such as legal penalties. They conclude the evidence is mixed but overall indicates a moderate response of drug consumption to "price." The papers summarized do not provide measures of the price elasticity. The results reported by Pacula et al. suggest an elasticity of drug participation between 0.0 and -0.5; this understates the total elasticity, which includes any change in consumption conditional on participation. The literature since Nisbet and Vakil is thus consistent with the elasticity estimate assumed above.

35. The phrase "if demand is less elastic" can be read as "if demand is less responsive (to price)."

36. R. Keith Schwer, Mary Riddel, and Jason Henderson, "Fiscal Impact of Question 9: Potential State-Revenue Implications" (Center for Business and Economic Research, University of Nevada, Las Vegas, 2002). Schwer et al. estimate the tax revenue from marijuana legalization in Nevada assuming "sin" taxation. Their estimates are not readily comparable to those presented here because they consider the situation in which one state legalizes marijuana while other states and the federal government prohibit marijuana. The same comment applies to Scott W. Bates, "The Economic Implications of Marijuana Legalization in Alaska" (report for *Alaskans for Rights & Revenues*, Fairbanks, Alaska, 2004), who estimates the tax revenue from marijuana legalization in Alaska. See Stephen T. Easton, "Marijuana Growth in British Columbia," *Public Policy Sources*, Fraser Institute Occasional Paper no. 74, 2004. Easton estimates the tax revenue from marijuana legalization in Canada under the assumption of sin taxation. His estimates are comparable but modestly higher than those presented here, adjusted for the different size of the U.S. and Canadian economies. See Michael R. Caputo and Brian J. Ostrom, "Potential Tax Revenue from a Regulated Drug Market: A Meaningful Revenue Source," *American Journal of Economics and Sociology* 53 (1994): 475–90. Authors provide estimates for the overall economy that are similar to those obtained here.

37. U.S. Department of Health and Humans Services, *Reducing Tobacco Use: A Report of the Surgeon General, Tobacco Taxation Fact Sheet* (2000), http://www.cdc.gov/tobacco/data_statistics/sgr/sgr_2000/00_pdfs/CDC-60100788-Tax.PDF. But see Patrick Fleenor, "Cigarette Taxes, Black Markets, and Crime: Lessons from New York's 50-Year Losing Battle," Cato Institute Policy Analysis no. 468 (2003).

38. These assumptions imply an amount of sin taxation as a percent of expenditure that is similar to what currently occurs in the U.S. for alcohol and tobacco. In 2007, federal excise tax receipts from alcohol and tobacco were $8.6 billion and $7.6 billion, respectively (See Table 457 of U.S. Census 2009, http://www.census.gov/compendia/statab/tables/09s0457.pdf), and state and local excise tax receipts from alcohol and tobacco were $5.7 billion and $15.8 billion, respectively (See Appendix Table A of U.S. Census 2007, http://www2.census.gov/govs/estimate/0700ussl_1.txt). This implies total excise taxation on alcohol and tobacco of $14.3 billion and $23.4 billion, respectively. In this same year, consumer expenditure on alcohol and tobacco were $54.9 billion ($457 per consumer unit for 120,171 units) and $33.8 billion ($323 per consumer unit for 120,171 units), respectively (See U.S. Department of Labor 2007, ftp://ftp.bls.gov/pub/special.requests/ce/standard/2007/cusize.txt). These figures imply that excise taxation accounts for roughly 26 percent (alcohol) and 69 percent (tobacco) of expenditure.

39. These amounts are not necessarily attainable given the characteristics of drug production. Small scale, efficient production is possible, so the imposition of a substantial tax might encourage a portion of the market to remain underground. Whether such production is illicit depends on the details of a legalization law. Plausibly, growing small amounts for personal use would not be subject to taxation or regulation, just as growing small amounts of vegetables or herbs is not subject to taxation or regulation. The evidence suggests that the magnitude of such production would be minimal. In particular, alcohol production switched mostly from the black market to the licit market after repeal of Alcohol Prohibition in 1933.

The assumption of a constant demand elasticity in response to a price change of this magnitude is also debatable; more plausibly, the elasticity would increase as the price rose, implying a larger decline in consumption and thus less revenue from excise taxation.

40. In 2001 total government receipts divided by GDP equaled 29.7 percent. See the *2003 Economic Report of the President*, http://www.gpoaccess.gov/usbudget/fy04/pdf/2003_erp.pdf, Tables B-1 and B-92, pp. 276 and 373.

41. Tables can be found at http://www.oas.samhsa.gov/2k7state/AppB.htm#TabB-1.

42. See Jeffrey A. Miron, *Drug War Crimes: The Consequences of Prohibition* (Oakland, CA: Independent Institute, 2004); James Ostrowski, "Thinking about Drug Legalization," Cato Institute Policy Analysis no. 121 (May 25, 1989).

Policy Analysis
No. 666 September 1, 2010

Reforming Indigent Defense
How Free Market Principles Can Help to Fix a Broken System

by Stephen J. Schulhofer and David D. Friedman

Executive Summary

Criminal defense systems are in a state of perpetual crisis, routinely described as "scandalous." Public defender offices around the country face crushing caseloads that necessarily compromise the quality of the legal representation they provide. The inadequacy of existing methods for serving the indigent is widely acknowledged, and President Obama has recently taken steps to give the problem a higher priority on the national agenda.

Proposals for improvement commonly stress the need for more resources and, somewhat less often, the importance of giving indigent defense providers legal independence from the government that funds them. Yet virtually every suggestion for reform takes for granted the feature of the current American system that is most problematic and least defensible—the fact that the indigent defendant is never permitted to select the attorney who will represent him.

The uniform refusal of American jurisdictions to allow freedom of choice in indigent defense creates the conditions for a double disaster. In violation of free-market principles that are honored almost everywhere else, the person who has the most at stake is allowed no say in choosing the professional who will provide him one of the most important services he will ever need. The situation is comparable to what would occur if senior citizens suffering from serious illness could receive treatment under Medicare only if they accepted a particular doctor designated by a government bureaucrat. In fact, the situation of the indigent defendant is far worse, because the government's refusal to honor the defendant's own preferences is compounded by an acute conflict of interest: the official who selects his defense attorney is tied, directly or indirectly, to the same authority that is seeking to convict the defendant.

We see this situation as the source of grave problems. As a corrective, we propose a free market for defense services, one that would, so far as possible, function in the same way that the existing market functions for affluent defendants who are able to retain their own counsel. Though we do not doubt the importance of resource levels, we see budgetary vulnerability and implicit conflicts of interest as inherent in *any* system where the defendant's attorney is chosen for him by the state. We seek to show that at *any* level of resources, freedom of choice for the indigent defendant can produce gains for both himself and for the public at large. We also discuss in detail how such a system could be implemented and why it can be expected to provide a practical and effective cure for many of the major ills of indigent defense organization.

Stephen J. Schulhofer is the Robert B. McKay professor of law at New York University School of Law. David D. Friedman is a professor of law at Santa Clara University School of Law.

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The great majority of people arrested and prosecuted are indigent.

Introduction

Most citizens would consider it shockingly unethical for an attorney representing one side in a lawsuit to be selected or paid, even indirectly, by the opposing party. Yet this gross impropriety occurs daily in this country on a massive scale. In criminal cases, the great majority of defense attorneys are paid directly or indirectly by the prosecuting party—the state.

The great majority of people arrested and prosecuted are indigent, and the Supreme Court has ruled that the government has a constitutional obligation to provide lawyers for people who cannot afford to hire their own.[1] To meet this constitutional obligation, three basic defender systems have emerged in jurisdictions around the country. First, public defender organizations are staffed by government attorneys who represent virtually all the indigents in the jurisdiction. Second, some cities and counties have made contractual arrangements with individual attorneys or private law firms to handle indigent cases for a fixed fee. Third, still other jurisdictions use "assigned counsel" programs. That is, private attorneys are appointed on a case-by-case basis for indigent defendants.

The danger of a publicly funded defense should be obvious: the decisions of the attorney are bound to be affected by the desires of his employer. That is true for public defenders and assigned counsel in criminal cases just as it is for private attorneys in civil cases. While the lawyers and those who assign them to cases—judges, government officials, or private firms contracting with government—are no doubt interested in preventing conviction of the innocent, they are less strongly committed to that objective than are innocent defendants. And they are likely to have other objectives, such as getting criminals off the streets and reducing court backlog, that conflict with that goal.[2]

If attorneys for the indigent are to be paid at all, they must be paid by someone other than their clients. The resulting conflict of interest is clearly undesirable, but how can it be prevented? This paper proposes what we believe is a realistic answer to that question and explores ways in which it might be implemented.

The problem is by no means merely theoretical. Authorities of all stripes routinely conclude that our criminal defense systems are "scandalous."[3] As one expert noted, "year after year, in study after study, observers find remarkably poor defense lawyering."[4] In one Tennessee county, for example, the public defender office had six attorneys handle more than 10,000 misdemeanor cases in a single year.[5] An average of one attorney-hour per case is plainly wrong and unacceptable. To avoid the risk of malpractice charges, public defenders in Missouri started to refuse case assignments after their individual caseload exceeded 395 cases a year.[6] They note that there is simply insufficient time to prepare an adequate defense, which requires time to investigate the case, to interview the client and witnesses, and to scrutinize the prosecutor's evidence. Even as we write, New York's highest court has given a green light to a class-action lawsuit alleging that the state's provision of indigent defense fails to meet constitutional requirements.[7] The grave inadequacy of existing systems for serving the indigent is widely acknowledged and widely discussed.[8] In an effort to give indigent defense reform a higher priority on the national agenda, President Obama recently appointed Laurence Tribe, one of America's leading constitutional law scholars, to a position in the Justice Department as a senior counselor for access to justice.[9]

Our proposed solution differs in two fundamental respects from other proposals for reform of indigent defense.[10] First, although we are aware of the importance of resource levels, our approach largely takes as a given the resources allocated by prior political decision to indigent defense. We seek to show that at *any* level of resources, reorganization of an indigent defense system can produce gains for both the criminal defendant and society as a whole.

The second difference is the most basic. We do not take as our paradigm a large

defender organization providing the lion's share of indigent defense services for a city or county, and do not focus on efforts (desirable though they may be) to write charters that attempt to guarantee such organizations legal independence from the government that funds them.[11] Nor do we see any intrinsic advantage in the principal current alternative—the system in which judges or court administrators assign to the defendant an attorney selected from the private bar. We see budgetary vulnerability and implicit conflicts of interest as inherent in both the large defender model and any other system where the defendant's attorney is chosen for him by the state. Our alternative is a free market for defense services, one that would, so far as possible, function in the same way that the existing market functions for affluent defendants who are able to retain their own counsel.

Indigent defense plays a small role in the budgets of the governments that fund it but a very large role in the lives of indigent defendants. And of all the services that governments provide to the poor, it is arguably the one most defensible on libertarian (as well as other) grounds.[12] Judicial proceedings, including the opportunity to present a defense, are an intrinsic part of a broader service that government provides to the public as a whole—law enforcement and social protection. It is not proposed to leave that broader service to the private sector; that service is one of government's most basic tasks and indeed is typically seen as the primary raison d'être of the state. Within that framework, government support for defense of the indigent becomes essential, since without it the legal system is likely to engage in massive violations of individual rights by convicting defendants who lack the resources to mount an effective defense and punishing them for crimes they did not commit. Such a system is also likely to deliver its social protection services poorly by incapacitating the wrong people. A government that routinely convicts the innocent is failing in one of its most fundamental functions. The state uses the effort of the defense attorney as an input to the production of verdicts, and it is therefore both just and efficient for the government to pay its cost.[13]

The first section of this paper analyzes the structure of the attorney-client relationship and identifies the problems that contractual or institutional arrangements must seek to minimize. The second section describes existing methods for the delivery of indigent defense services and assesses their ability to address these problems. The third and final section describes and defends our alternative, a voucher model for indigent criminal defense. We believe that a voucher model would provide a practical and effective cure for many of the major ills of indigent defense organization, to the ultimate benefit of both defendants and the public at large.

Goals and Problems in the Attorney-Client Relationship

People who are accused of crimes are interested in winning acquittal or, if that fails, the lowest possible sentence, and in achieving these goals at the lowest possible cost. Criminal defendants facing substantial prison terms will spend large sums to produce even small increases in the chance of acquittal, but at some point diminishing returns presumably prompt most defendants to economize on the expenditure of their own or their family's resources. Conversely, defendants of moderate means may run out of funds while a potentially productive defense effort remains unfinished; they may regret the inadequacy of their available savings.

Criminal lawyers, whether assigned to indigent defendants or retained by affluent ones, must make hard choices—including decisions about how much work to do (whether to investigate factual leads, research legal issues, and file particular legal motions in court) and about what advice to render in matters of judgment (whether to recommend accepting a proposed settlement, holding out for a better offer, or going to trial in hopes of an acquittal). For all of these decisions, the lawyer's personal

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interest may diverge from that of his client.[14] In the case of retained counsel, as opposed to public defenders, the problem is mitigated by the fact that the lawyer must attract and keep clients, and will do so by creating and maintaining a reputation for serving their interests even when they conflict with his own. The indigent defendant has no such protection. His counsel is chosen not by him but by the court, the public defender's office, or some private organization which contracts with the government to provide attorneys for the indigent. If the attorney wishes future cases, he must indeed maintain his reputation—but with those who provide him with business, not with potential defendants.

The attorney-client relationship thus poses three sorts of problems—those involving incentives for the attorney to act in his client's interest (incentive problems), the need for information about the quality and loyalty of alternative providers of defense services (information problems), and protection against the risk of unanticipated need for criminal defense services (insurance problems).

Incentive Problems

If the lawyer's fee is based on an hourly rate set at a figure that is low, relative to the lawyer's other opportunities, or if the total resources available for the case are too meager, attorneys may forego useful investigations and may avoid trial even when there are good chances for acquittal. If hourly fees are too generous and the available resources are unlimited, attorneys may pursue expensive and unproductive investigations or hold out hopes for acquittal at trial when a guilty plea would better serve the client's interest.[15] This is a problem for the client if he is paying the bills, and a problem for taxpayers when, as in the case of an indigent defendant, the public is.

Attorneys for the indigent may be selected according to how well they serve the court system, not how well they serve defendants.

As in any situation in which the choices of a buyer and seller are supported by a third-party payer with imperfect monitoring capabilities, expenditure is likely to skyrocket. Health care has been the classic case in point. Where the attorney is chosen and selected by the state, a further incentive problem arises, since it is the state and not the client that the lawyer must satisfy if he wishes future employment.

Information Problems

In order for anyone—judge, state government, or defendant—to choose the best provider of defense services, he must have information on what will be provided. This is a particularly serious problem for the defendant, since he may have had little previous experience with the criminal justice system. The poor may be especially disadvantaged in this regard, since they generally have less access to lawyers and other sources of information about professional competence. On the other hand, because the poor are disproportionately represented among those accused of serious crime, an indigent defendant is more likely than a middle-class defendant to have faced charges before or to know someone who has.[16]

The information problem is less serious if the attorney is chosen by a judge or other court official, by a public defender allocating cases to lawyers under him or by a state agency contracting with an independent provider of defense services. Here the incentive and information problems are in tension. The defendant has the incentive to choose a vigorous, effective advocate but may lack the information to do so. A public official who chooses for the defendant is likely to have better information but a weaker incentive to make the best choice. The official, appraising an attorney's ability from the standpoint of the court system, has incentives to value cooperativeness, a disinclination to work long hours, and other qualities that might not win favor with defendants themselves. Providers may end up being selected according to how well they serve the court system, not how well they serve defendants.

Insurance Problems

Potential criminal defendants—which is to say, all of us—face the risk of having to incur the very high cost of an effective criminal defense. Being accused of crime is not wholly dissimilar to catching a potentially incapaci-

tating or fatal disease. Attempts to combat the problem can be enormously expensive and, in the end, may or may not prove successful. A large share of personal and family resources may be consumed in the effort. Not surprisingly, health insurance to spread the financial risks of catastrophic disease is widely available through the market. Yet insurance against the financial risks of becoming a criminal defendant is not.[17] One function of a public defender system is to provide a substitute for the nonexistent insurance. Public funds are available only to the "indigent." But middle-class or even wealthy individuals can be rendered indigent by the costs of defending against a serious criminal charge. When the affluent defendant runs out of funds, he can qualify for appointed counsel, either to complete his defense at the trial level or to pursue an appeal. The economic effect is comparable to that of an insurance policy with a very high deductible.

In considering how different institutions perform the insurance function, we find it useful to distinguish between two sorts of uncertainty: uncertainty as to whether someone will be arrested (and on what charge); and uncertainty as to how complex the case will be.

The second sort of uncertainty requires further explanation. By a complex case, we mean one in which additional expenditures on defense provide substantial benefits to the defendant up to a high level of expenditure. A simple case is one in which additional expenditures above a fairly low level produce, at most, small benefits for the defendant. Simple cases include both those in which the prosecution's case is so weak that defense expenditures are almost unnecessary and those in which it is so strong that defense expenditures are almost useless.[18]

It is useful to further distinguish between two sorts of uncertainty regarding the complexity of the case. They are uncertainty that can be resolved before the attorney is chosen, and uncertainty that can be resolved only after the attorney begins work.

The various kinds of uncertainties affect the relative advantages and incentive problems of different kinds of payouts that an insurance program might afford. Three basic payout methods may be distinguished: lump-sum payments, variable (fee-for-service) payments, and in-kind payments.

In the lump-sum payment approach, the insurance policy pays a fixed amount or, more commonly, one of several fixed payouts, depending on which of several risks (i.e., what sort of criminal charge) materializes. Lump-sum payments are common in disability insurance. The lump-sum system is also common in indigent defense; as we shall see, many jurisdictions pay appointed counsel a flat fee per case, with different amounts often specified for misdemeanor, felony, and capital cases.

Variable (fee-for-service) payouts are probably the most common form of health insurance coverage, and this system is also used in indigent defense; some jurisdictions compensate appointed counsel on an hourly basis for all reasonable effort both in and out of court. Fee-for-service payouts also exist in some commercial insurance policies for reimbursing counsel fees incurred in defending against civil claims.

In-kind payouts are the predominant form of coverage in health insurance provided by the Veteran's Administration and Health Maintenance Organizations (HMOs), and in pre-paid legal service plans available through unions or employers.[19] In commercial insurance against civil liability, the insurer typically undertakes to defend against any covered claim, using its in-house legal staff or selecting outside counsel at its sole expense. The in-kind payment system is also the dominant form of criminal defense "insurance" in jurisdictions that rely on a public defender.

Variable payouts present large incentive problems. The insured and the service provider have only weak inducements to control costs, and monitoring by the insurer may not be fully effective, as escalating health care costs have made clear. Lump-sum payments avoid the monitoring problem for the insurer (at the cost of possible overpayment on some claims) but leave the beneficiary self-insured for the risk that providers will be unwilling to take on his case because they readily identify it as an

Insurance against the financial risks of becoming a criminal defendant is not available through the market.

exceptionally complex one that cannot be treated for the lump-sum fee.

The problem is different when a complex case cannot be identified as such before a service provider accepts it. In that instance the lump-sum may be adequate to induce a doctor or lawyer to commit to providing the necessary services. The risk of unforeseen complexity then shifts to the service provider, but because the lump-sum fee affects his incentives, the monitoring problem is transformed. Surveillance, directly or through reputation, is no longer necessary to prevent excessive provider services (as in the fee-for-service model) but is now required to ensure that services are sufficient, and the responsibility for monitoring shifts from the insurer to the insured.

Nearly all public defenders are philosophically committed to protecting the indigent.

Unlike lump-sum payments, in-kind payouts protect the insured against the risk of complexity that a service provider could detect at the outset. Their disadvantage is the same as that which the insured faces under a lump-sum payment when complexity is initially disguised. The service provider bears the risk of exceptional complexity, but monitoring by the insured is essential to ensure that adequate service is provided.

The different mix of advantages and drawbacks in each payout method helps explain why all three approaches are found in most forms of insurance for legal and medical services. Lump-sum, variable, and in-kind payout packages coexist in the market, and the insured can select the payout system that best suits his situation. In one respect, however, indigent criminal defense is an exception. As we shall see in the next section, lump-sum, variable, and in-kind approaches are all important forms of indigent defense "insurance," but neither before nor after the risk (the criminal charge) materializes is the person in need of services (the indigent accused) permitted to select the package that best meets his own needs.

The Present System

A series of Supreme Court decisions mandate publicly funded defense for indigent criminal defendants, but not the institutional form of that defense.[20] As previously noted, existing methods are of three basic types: public defender programs, contract defense programs, and assigned counsel programs. In this section we consider the extent to which these approaches successfully address the problems of incentives, information, and insurance.

Public Defender Programs

In a public defender program, an organization staffed by full-time or part-time attorneys represents nearly all indigent defendants in the jurisdiction.[21] In most jurisdictions, the defender organization is an agency of the executive branch of state or county government, and in more than half the others, the public defender is an agency of the judiciary.[22] A minority, roughly 10–15 percent of the defender offices, are organized by private nonprofit corporations, which perform the defender function under contract with the city or county.[23]

Although all defender systems are funded directly or indirectly by the government, there are significant differences in the government's formal control. Usually county officials appoint the chief defender, but in some places he is appointed by a bar association committee, by judges, or in the case of a community defender, by the board of the nonprofit corporation. Public defenders are elected in Florida and in parts of California, Nebraska, and Tennessee.[24] Election of the defender guarantees his independence from county government and the court, but at the cost of accountability to voters who may not regard acquittal or early release of criminal defendants as especially desirable.[25]

The various selection methods do not preclude appointment of chief defenders who will guard the independence and resource needs of their offices. Nearly all defenders are philosophically committed to protecting the indigent. Some have aggressively challenged defective arrangements by declining to accept new cases or suing the court system for inadequate financial support.[26] Defender staffs have sometimes gone on strike to protest excessive

caseloads, which the lawyers felt were forcing them to render inadequate service.[27] Still, most chief defenders temper their zeal with pragmatic instincts for bureaucratic survival; if they did not, they could not keep their jobs.[28] Thus, for most defenders, most of the time, accommodation to the case management and budgetary priorities of the court and county government is a fact of life.[29] And as a result, the great majority of defender systems are understaffed and underfunded; they cannot provide their clients with even the basic services that a nonindigent defendant would consider essential for a minimally tolerable defense.[30]

As a solution to the problems of incentives, information, and insurance considered above, the defender approach is plausible but imperfect. The information effects are straightforward. Subject to his budget constraints, the chief defender can hire the best attorneys possible and can know their abilities firsthand before assigning them to cases. He is probably more able than the defendant to select the best attorney for the case, at least if the meaning of "best" is unambiguous. But if the chief defender values attorneys for their ability to resolve cases quickly and to persuade reluctant defendants to plead guilty, the accused might be better off making his own, poorly informed, choice. This problem is not lost on the supposedly unsophisticated defendants whom the public defender ostensibly protects from exploitation in the market. Indigents commonly mistrust the public defender assigned to them and view him as part of the same court bureaucracy that is "processing" and convicting them. The lack of trust is a major obstacle to establishing an effective attorney-client relationship. The problem was captured in a sad exchange between a social science researcher and a prisoner: "Did you have a lawyer when you went to court?" "No. I had a public defender."[31]

The twin incentive problems are to ensure that defenders do not slight the client's interest in adequate service or the taxpayer's interest in controlling costs. The latter concern is met directly by government power to fix the defender budget and its control or influence over the choice of the chief defender. The chief defender, in turn, may lobby for more resources (just as the district attorney might), but once the appropriation is determined, he will be forced to insist that his staff allocate time and resources carefully to provide the best possible service to the clientele as a whole, within the limits of budget constraints.

The other incentive concern is more problematic. One might ask why the defender or his staff would bother to do *anything* for their clients, beyond the minimal effort required to avoid professional discipline. One answer is personal pride and a commitment to professional values. Many defender offices develop an esprit de corps, in which they view acquittals as victories and severe sentences as defeats in a continuing competition with the prosecutor's office.

To the extent that idealistic motivations are operative, the defender approach provides a distinctive way to reconcile the twin incentive problems. When government controls compensation case-by-case, as in the assigned counsel systems considered below, its need to prevent excessive service is, at every step, in direct tension with the defendant's need to ensure adequate service. In the defender approach, the state exercises its cost control function wholesale, leaving the monitoring function at the "retail" level to the chief defender and other supervisors in his office. Their annual budget leaves them (like the prosecutors) the flexibility to invest enormous resources in a particular case if their sense of justice requires it, free of the chilling effect of case-by-case external review. But even when mediated in this way, the cost-control function constrains the management of nearly all cases nearly all of the time. The annual bottom line may even create a more powerful and pervasive cost-control ethos than would exist for a private attorney who had to justify a single claim for fees in an individual case.

Considerations of narrower self-interest may join with idealism in providing incentives for adequate service. To win the esteem of colleagues, adversaries, and judges, and to pave

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Although idealism motivates many public defenders to seek the best outcome for their clients, the system as a whole is driven by political goals that often conflict with that objective.

the way for subsequent career moves, the staff attorney needs a reputation for vigor and effectiveness.[32] The reputation effect can operate powerfully at trial but is unlikely to constrain an attorney's low-visibility decision to recommend a time-saving plea.[33] The reputation effect may even distort his advice by inducing him to recommend trial in a case that would be a "good vehicle" or to plead out some defendants in order to permit better preparation in high-visibility cases. In any event, self-interested reasons for effective performance, as reinforced by idealism and office esprit de corps, must compete with office attitudes that run in the opposite direction—that of restraining costs and cooperating in the court's desire to move cases. The adversarial attorney thus may *lose* collegial esteem or the chief defender's approval as a result of vigorous efforts. In one highly publicized case, the Atlanta public defender demoted a staff attorney because she had filed a motion asking the local judges to appoint her to no more than six cases per day.[34]

The insurance problems are a function of the incentive issues just canvassed. Like any insurer that provides an in-kind payout, the defender has in-house control to prevent excessive effort, but it bears the risk of unforeseen complexity, and the insured (the accused) must monitor performance to prevent shortcuts and inadequate service. In one respect the criminal defendant is better placed to control counsel's effort because the decision whether to settle is legally his alone to make; the insured defendant in civil litigation often has no such protection. On the other hand, the criminal defendant has less capacity to assess litigation risks than many civil defendants, usually hospitals or manufacturers, with their own legal staffs.

An alternative possibility for monitoring is the after-the-fact suit for malpractice or constitutionally ineffective assistance, roughly analogous to the civil defendant's suit for an insurer's wrongful refusal to settle.[35] But the malpractice suit is virtually a nonexistent remedy for the criminal defendant.[36] An ineffective assistance claim is almost equally improbable as a monitoring device. First, many departures from fully adequate service do not rise to the level of constitutionally ineffective assistance. The constitutional standard is low, and what the defendant wants to ensure is not just a minimally adequate effort, but the effort that an attorney with the right incentives would provide. In addition, the severe penalties that can follow conviction at trial mean that an attorney's recommendation to plead guilty can almost never be proved unreasonable, however much it may be influenced, consciously or subconsciously, by resource constraints.[37] Finally, ineffective assistance claims can often be brought only in post-conviction proceedings, and such claims *must* be brought in a post-conviction proceeding when conviction is on a guilty plea; thus the defendant's only tool for monitoring is one he must invoke without a constitutional right to professional help.[38]

The weakness of available incentives to ensure adequate services and the absence of effective after-the-fact monitoring leave the public defender as a highly flawed solution to the incentive, information, and insurance problems. Although idealism undoubtedly motivates many defenders to seek the best outcome for their clients, the system as a whole is driven by political goals that often conflict with that objective. A court system troubled by full dockets and high crime rates may well decide that lawyers with an idealistic commitment to getting their clients acquitted, a strong aversion to guilty pleas, or a determination to ensure the lowest possible sentences are not the lawyers it wishes to put in charge of indigent defense.

Contract Defense Programs

In a contract defense program, individual attorneys, bar associations, or private law firms agree to handle a specified volume of indigent defense cases for a specified fee.[39] Although a contract defender could, in theory, devote all his time to indigent defense work, contract defenders invariably maintain a substantial private practice. Unlike the public defender, a contract defender normally handles only a part of the jurisdiction's indigent

defense caseload, and counties that use this approach may have several independent attorneys or firms under contract. Contract defender programs are becoming more popular, but nationally only about 10 percent of all counties use this type of program as their primary system for delivering indigent defense services.[40] Many others, however, use the contract method as their back-up system for cases that the public defender cannot accept.

Two types of contracts are common. In the "global fee" approach, the contract defender agrees to accept all cases of a certain type—for example, all felonies or all juvenile cases—for a single annual retainer. Many county officials prefer this approach because it keeps the indigent defense budget predictable and puts a cap on total expenses. That leaves the contract defender with the risk of unforeseen increases in caseload. In effect, he is selling the county not only legal services but insurance. Compared to the county government, the contract defender has much less ability to control the court's caseload, which is largely a function of the district attorney's charging discretion. Yet, about a third of all contract programs take this form.[41]

Information, incentive, and insurance problems arising in contract-defense programs largely parallel those in the public defender service. As in a public-defender program, the accused bears the burden of monitoring, and effective tools for carrying out this function are largely absent.

The information problem in a contract system arises in two stages: officials must award contracts to attorneys and then assign individual cases to one of the previously designated contract recipients. Often the first decision is made by county government and the second decision is made by a court administrator. At both stages, officials are in a good position to evaluate attorney competence. Indeed, competitive bidding focused on quality of service offers a powerful vehicle for ascertaining what qualifications and support services are available through competing providers.[42] And compared to some assigned-counsel programs discussed below, there is more prospect that officials will use their superior knowledge to choose the best available defender, because the county's defense costs are not affected by the choices made—at least when the contract price is fixed in advance and excluded from negotiation or competitive bidding. There is one qualification, however. Although defense costs are independent of which attorneys are selected, total court costs are not. Thus, officials might hesitate to choose attorneys known for filing many motions, driving hard bargains, or insisting on trials, even if the lawyers are providing these services at no extra charge.

Contract programs, like public-defender programs, address only one side of the incentive problem. Because fees are fixed, either per case or per annum, attorneys have a powerful incentive to avoid *unnecessary* service, but there are few direct incentives for *adequate* service. Indeed, fixed-fee contracts give the attorney a powerful disincentive to invest time and resources in his indigent cases. Public defenders may cut costs on some cases to free up resources for others, but they cannot take home unspent cash at the end of the year. The contract defender, in contrast, is in business for a profit. Money saved on defending one case need not be spent on another; it may simply enlarge the Christmas bonus. Perhaps worse, time saved in handling indigent cases is freed up for more lucrative business, and a busy attorney is unlikely to turn away paying clients when he has the alternative of cutting low-visibility corners in his indigent case commitments. These dangers are intrinsic to all contract-defender programs and have produced seriously deficient service in many.[43]

As a result, the contract system is seriously flawed. The existence of competing service providers in the contract system should be advantageous, but the potential benefits are lost because court officials, rather than clients, control the flow of cases to the attorneys.

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Assigned-Counsel Programs

In an assigned-counsel program, a member of the private bar is appointed on a case-by-case basis for each criminal defendant. About 20 percent of American counties use assigned

counsel as their sole method of ensuring indigent defense, and most others rely on assigned counsel for cases in which public and contract defenders are disqualified or unavailable.[44]

The judge responsible for the case, or another court official, usually makes the assignment decision. Sometimes the selection system is entirely informal, and appointments are distributed ad hoc to attorneys the judge knows or to those who happen to be present in court. More typically, the assigned attorney is chosen from a list established in advance by the court, the local bar association, or by each judge for his own cases. The choice may be determined by a formal rotation plan, or it may be less systematic. All members of the bar may be eligible for the list, or there may be a few simple prerequisites, such as a certain number of years of experience. Some of the assigned-counsel jurisdictions have more elaborate systems to screen applicants for inclusion on the list and monitor their performance.[45]

Nearly all courts have authority to appoint an unwilling attorney, and such a power is probably an essential backup for cases that involve extensive conflicts of interest or an extraordinarily unpopular defendant. But in many jurisdictions, conscription of unwilling attorneys is a routine feature of the assignment system; *all* eligible attorneys are included on the list, and they are obligated to serve when called.[46]

A variety of compensation systems are used in assigned-counsel programs. In some, attorneys receive a flat fee per case or per appearance, usually with different amounts specified for juvenile cases, misdemeanors, and felonies. Other jurisdictions pay on an hourly basis, often with one rate for time spent in court and a somewhat lower rate for time spent in preparation.

A June 2007 survey found many jurisdictions still paying only $40 or $50 per hour, which is inadequate to meet an attorney's office overhead.

Hourly rates vary from low in some jurisdictions to derisory in others. A June 2007 survey found many jurisdictions still paying only $40 or $50 per hour,[47] rates that are inadequate even to meet the attorney's office overhead.[48] Low rates are not exclusive to Southern or mainly rural states. Hourly rates for out-of-court time stand at $65 for Connecticut, $50 for Massachusetts and New Jersey, and $40 for Oregon and Wisconsin.[49]

The low caps imposed in the 1980s[50] have been raised considerably.[51] But as of June 2007, the maximum fee for a non-capital felony was still only $650 in New Mexico, $1,250 in Illinois, $1,500 in Tennessee and Kentucky, and only $500 in one county of Oklahoma.[52] In Virginia, the maximum is $445 for felonies carrying a sentence of up to 20 years, and for felonies punishable by sentences over 20 years it is a mere $1,235—enough to fund less than two days' work at the authorized rate of $90 dollars per hour. Some jurisdictions regard indigent defense as a "pro bono" obligation, and appointed counsel, usually conscripts, receive no compensation at all.[53] Although the no-compensation approach is exceptional, flat fees or fee caps are so low in many jurisdictions that hourly compensation in cases that go to trial is virtually nil.

In terms of the information, incentive, and insurance problems we have canvassed, assigned counsel programs pose numerous obvious problems. Judges and court officials who select counsel can obtain good information about attorney effectiveness, but they have little incentive to acquire such information, and even less reason to act upon it. Their own interests are best served by assigning an attorney known to be cooperative rather than aggressively adversarial.[54]

With respect to the attorney himself, the goal for society as a whole is to induce sufficient, but not excessive, effort. Low hourly rates, low fee caps, and mandatory pro bono service nicely solve the latter half of the problem but leave the assigned attorney with powerful reasons to minimize the time and effort devoted to the case. The more generous states—a small minority—face different problems. Hourly rates close to market levels and an absence of fee caps give the right incentives for adequate service, but they risk unnecessary attorney effort and excessive cost. Most of these more generous jurisdictions rely on reputation effects, along with case-by-case review of attorney fee submissions, to provide cost-

control incentives, but monitoring of this sort is expensive and not always successful.[55]

Monitoring may fail for another reason when that responsibility falls to an elected judge, who may benefit less from controlling costs than from encouraging campaign contributions from attorneys who receive well-compensated appointments. In Harris County (Houston) Texas, where all indigent defense is supplied by counsel selected and monitored by an elected judiciary, some attorneys have earned over $300,000 a year from an indigent defense practice in which they enter guilty pleas for large numbers of assigned clients with whom they have minimal contact.[56] And even if not abused, a program of compensation at near-market rates puts unpredictable budget demands on the county and tends to cost more than specialized contract defenders or a public defender.[57]

In terms of insurance problems, the compensation structure is crucial. If fees are paid at near-market levels, the county is, in effect, self-insured for both the risk of unusual case complexity and the risk of unforeseen increases in case volume. The defendant escapes most of the need to monitor the adequacy of service, if he can assume that the assigned attorney has no motivation to cut costs. But the county has an intense need to prevent excessive costs. And since the county may meet that need by assigning attorneys predisposed to be cooperative, the defendant still needs—but largely lacks—some vehicle for effectively monitoring the adequacy of service. In fixed-fee and low-cap systems, the county still bears the risk of unexpected increases in case volume, but the assigned attorney now bears the risk of unusual case complexity, and the burden of monitoring now falls entirely on the party least able effectively to protect his interests—the indigent accused.

The Free Market Alternative: Defense Vouchers

Existing systems resolve, with varying degrees of success, the incentive, information, and insurance problems presented *for the state*, but in all three areas, the indigent defendant is left largely unprotected. There are few reliable mechanisms to ensure that attorneys for the indigent vigorously protect their clients' interests when those clash with the interests of the attorneys themselves, with those of the court system, or with those of the government that pays their fees. Before describing an institutional alternative, we can help focus the issues by describing three general tools for solving the client loyalty problem, which is the central difficulty each approach must address.

One such tool is to rely on incentives other than individual or institutional self-interest, in particular the attorney's personal pride, professional ethics, and idealistic commitment to helping the accused.[58] This is the solution implicit in all existing institutions. Its power is not negligible, but for reasons already discussed, we believe it is by itself an inadequate counterweight to strong organizational and financial pressures that push in other directions. A West Virginia court explained the point with irrefutable force:

> We have a high opinion of the dedication, generosity, and selflessness of this State's lawyers. But, at the same time, we conclude that it is unrealistic to expect all appointed counsel with office bills to pay and families to support to remain insulated from the economic reality of losing money each hour they work. It is counter-intuitive to expect that appointed counsel will be unaffected by the fact that after expending 50 hours on a case they are working for free. Inevitably, economic pressure must adversely affect the manner in which at least some cases are conducted.[59]

While one wants to be sure that institutional reforms do not impair the valuable role of personal and professional ideals, there is a need to supplement idealism with concrete inducements and to diminish the power of countervailing pressures.

There is a need to supplement idealism with concrete inducements.

Consumer sovereignty is the mechanism that most of us use to control the quality of the goods and services we buy.

A second solution is to use direct incentives to align the interests of defense counsel more closely with those of the defendants. This could be done, within a system in which the state selects defense counsel, by making reimbursement in part conditional on the outcome of the case, with outcomes more favorable to the defense resulting in more compensation. But there are at least two problems with this solution—the incentives and the knowledge of those running the program.[60] We want direct incentives because we suspect that the government's interest is in conflict with that of the defendant; setting up a system of discretionary rewards controlled by the state would have a certain air of hiring the fox to guard the chicken coop. Those in charge of administering such a reform could defeat its purpose by writing rules that rewarded the most cooperative lawyers rather than the most effective ones.

Even if the system were run with the intention of serving poor defendants as well as possible, those in charge might not have the information necessary to do so. This is a common problem in institutions that substitute administrative rules for market incentives. How a defendant would wish his counsel to trade off the costs and benefits of different strategies is a complicated issue, especially in deciding whether to accept a particular plea offer. Any administrative rule setting the reward as a function of the outcome will represent only a crude approximation of the correct incentives. What we want, after all, is not to reward attorneys either for persuading their clients to accept plea bargains or for persuading their clients not to accept them, but to reward attorneys for persuading their clients to accept desirable bargains and reject undesirable ones—not an easy thing to measure.

A third solution, and the one we propose, is to transfer the power to select the attorney from the court system to the defendant. So far as his own interests are concerned, the defendant has precisely the correct incentives. If available information is good enough to allow a defendant to appraise alternative providers of defense services, such a system solves the client's problem. Even if the defendant cannot judge perfectly among alternative counsel, at least the decision will be made by someone with an interest in making it correctly; consumer sovereignty is, despite imperfect information, the mechanism that most of us use most of the time to control the quality of the goods and services we buy. And, insofar as judges or others within the court system have relevant expert knowledge, they can always make it available to defendants—as advice offered to them rather than choices imposed upon them.

One can imagine a range of reforms offering more freedom of choice to indigent defendants. We will designate as a voucher model any system in which lawyers who serve the poor have freedom to organize their practice as individuals or firms, with or without specialization, and to compete for the business of indigent clients. The voucher would be the guarantee of state payment that the accused can take with him to any individual or group provider of criminal defense services.

Because government would not control the organizational form employed by indigent defense providers, a number of different approaches would be likely to materialize—solo lawyers, small groups of practitioners, and larger firms. Providers would vary not only by size but by kind of practice, just as they currently do in most areas of legal work. Some might be generalists who occasionally take a criminal case. Most would probably be specialists—in litigation, in criminal practice, or even in a particular kind of criminal practice, such as drunk-driving cases or major felonies. These variations already exist among those who represent nonindigent defendants; the large client pool created by a voucher system would permit further specialization. We expect that most criminal defense specialists, whether individuals or firms, would serve both poor and affluent clients, though some might specialize in serving the indigent.[61] Finally, we would not exclude the possibility of a government-run staff of salaried public defenders, financed by vouchers collected from clients. A public defender of this sort would not com-

promise the value of a voucher system, provided that defendants remained free to reject the public option and that private service providers accordingly emerged as alternatives.

We hypothesize that this proliferation of possibilities for the indigent defendant would provide a much needed spur for innovation, effectiveness, and loyalty to client interests. The principal risk of such an approach is two-edged. Would it successfully protect the state's legitimate interest in avoiding excessive costs, and if so, would it still successfully elicit quality defense services for the poor? To explore these questions, we need to examine in detail the form of reimbursement that the voucher would guarantee. We consider two possibilities: lump-sum payments and variable payments based on services rendered.

Lump-sum Payments

A lump-sum voucher would grant a fixed amount to cover the cost of defense, with the amount presumably depending on the nature of the charge, with different rates for capital cases, other felonies, and misdemeanors. The voucher could be cashed by any provider, chosen by the defendant, who is legally eligible to practice before the relevant court.

When first implemented in a county currently using lump-sum payments for appointed counsel, this approach would cost no more than the prior system of representation; in principle, each voucher would be worth exactly what the county had previously been paying per case for indigent defense services. Over time, plan administrators might find it cost-effective to make the schedule of voucher payments more discriminating—for example, linking lump-sum amounts to the particular offense charged and perhaps to other observable features of the case, such as whether it is resolved by guilty plea or by trial. But initially at least, average payments per case would be no higher than before.

Over time, the voluntary choice features of a voucher system for both attorney and client might exert upward pressure on the indigent defense budget. If the payments offered were insufficient to attract sufficient numbers of qualified attorneys, a county that had previously relied upon conscription would have to raise the amount of its vouchers. The resulting addition to the county's budget would not represent an increase in real economic cost but only a transfer to the public of costs that had previously been borne by attorneys conscripted at below-market rates.

Just as in the market for ordinary legal services, defense firms will wish to establish a reputation for effectiveness in order to attract clients. A lawyer might be tempted to pocket the lump-sum fee and then stint on the time he devotes to the case, but this danger already exists in the fixed-fee appointment systems that a lump-sum voucher would replace. The difference under a voucher plan is that, as in any market transaction for service at a fixed price, stinting on service risks client dissatisfaction and, through reputation, a loss of future business.[62] There is no such prospect for preventing meager service when the flow of future clients is controlled by the county or the court.

How well reputation will work depends in part on how well informed potential clients are about attorney performance. While the state's primary role in such a system is providing the voucher, there is no reason why it cannot also provide information. The court or county government could maintain a list of attorneys and firms it considers particularly well qualified to defend the indigent. Such lists might appear to involve unseemly favoritism, but of course nearly all indigent defense systems bestow such favoritism on designated attorneys already. And the favoritism that currently exists is far more pernicious because it carries not just a positive recommendation, but a guarantee of business. In a voucher system, defendants would be free to discount the recommendation if they suspected that the state was more concerned with its own interests than with their own. Such an arrangement allows defendants to have both the informational advantage of state choice of provider and the incentive advantage of defendant choice.

So long as a lump-sum voucher is set at a level sufficient to make it attractive to crimi-

In a voucher system, indigent defendants would be free to discount the attorney recommendation if they suspected that the state was more concerned with its own interests than with their own.

The Canadian province of Ontario has used hourly-rate vouchers for some time, apparently with considerable success.

nal defense practitioners, this approach provides one way to solve the incentive problem. Not only does it use consumer sovereignty to constrain the lawyer to act in his client's interest, it also fixes the payment obligations of the state and thus eliminates any potential for the lawyer to increase his income at taxpayer expense.

The lump-sum voucher has another valuable incentive characteristic. Since the amount provided will normally increase with the seriousness of the charge, the voucher model would tend to deter prosecutors from inflating the charge. A prosecutor who follows such a strategy, to bluff the defendant into pleading guilty to a lesser count, increases the resources available to the defense and thus makes conviction more difficult.

A lump-sum voucher provides the defendant insurance against the risk that his case will turn out to be unexpectedly complex after an attorney has accepted it. Such insurance is implicit in the provider's agreement to accept the case. Defendants choose providers in terms of the total package they offer, including service for both complex and simple cases. As long as the cases cannot be distinguished in advance, a provider has an incentive to offer good service on complex cases as part of a package intended to attract clients because this is the only way to get simple cases.

The most serious disadvantage of the lump-sum voucher is that it provides no protection for the defendant who has an unusually complex case identifiable as such before the lawyer accepts it. Because the provider gets a fixed payment, he will prefer, so far as possible, either to take only simple cases or to take complex cases only on the understanding that he will not try very hard to win them. One cannot solve this problem by merely requiring providers to agree, like common carriers, to accept all comers. All a firm need do to protect itself against complex cases is do an inadequate job of defending them, thus saving money and developing a reputation that will keep away future clients with complex cases.

This might be a serious argument against a voucher if the current system of indigent defense provided substantial insurance against this danger. But it does not. At present, many counties provide only a lump sum for indigent defense, and thus replicate this disadvantage of the lump-sum voucher without its advantages. Other counties provide variable compensation but with a low ceiling, in effect offering either a lump sum or only minimal insurance. For jurisdictions that currently compensate counsel by a lump-sum payment or an hourly rate with a low cap, a voucher structured in the same way would cost taxpayers no more and would leave defendants unequivocally better off.

Nonetheless, the problem of unusual complexity evident from the outset suggests that the lump-sum voucher is far from ideal. It is therefore important to explore possible ways to improve it. The next section analyzes several more fine-tuned forms of voucher payment.

Hourly-rate Vouchers and Other Variations

One alternative would be for the voucher to authorize payment at a predetermined rate per hour, with a firm or presumptive cap and some possibility for a court administrator to review whether the time spent on the case was reasonable. The Canadian province of Ontario has used such a model for some time, apparently with considerable success.[63]

The hourly-rate voucher improves the system as insurance (because both lawyer and client escape the risk of unusual complexity), but it brings back some of the incentive problems that a lump-sum voucher avoids. If the hourly rate is compensatory, it leaves the attorney with an incentive to work more hours than necessary. Government review of fee claims is therefore essential in an hourly-rate voucher plan, as it is in existing programs that compensate appointed counsel at an hourly rate. Unfortunately, from the taxpayer's perspective, government review is a costly and imperfect monitoring device, while from the defendant's perspective it provides the court system with a tool for punish-

ing attorneys who serve the interests of their clients rather than those of the court.

These drawbacks would count as serious defects in this sort of voucher, except that each of them is equally present in existing hourly-rate plans for appointed counsel. The voucher approach is no worse in these respects and at least has the advantage of using the defendant's power of choice as a reason for the attorney to take his client's interests into consideration. Once a jurisdiction has opted to compensate appointed counsel on an hourly-rate basis, there are unequivocal welfare gains in offering defendants a "portable" voucher with the same compensation structure.[64]

Since an hourly-rate voucher gives the taxpayer less security than a voucher for a lump-sum payment, logic alone cannot dictate the choice between these two methods of compensation. To some extent the relative merits of these alternate approaches will depend on local conditions and on the level at which lump-sum and hourly payments are set. These matters would provide fruitful areas for investigation, perhaps through small demonstration projects, as would the possibility of giving defendants a choice between lump-sum and hourly-rate vouchers. Current experience suggests that hourly rates, combined with after-the-fact monitoring, lead to more responsible and effective representation, without uncalled-for demands on the state budget.[65]

Objections to Voucher-Based Reforms

Will a Voucher Approach Prove Effective in Practice?

Our primary goal in proposing a voucher approach has been to use the engine of free choice and consumer sovereignty to improve the effectiveness of indigent defense services. But several practical concerns raise questions about whether a voucher approach would really work. We examine both economic and noneconomic concerns.

Resource levels. Until now we have put aside the question of how generously indigent defense services will be funded; we have simply argued that, with whatever resources society allocates to indigent defense, freedom of choice will enhance the quality of the services delivered. Among those committed to the improvement of indigent defense, however, there is an understandable preoccupation with funding levels. There are legitimate concerns that without large increases in the resources devoted to indigent defense, other reforms may make little difference. We recognize that funding levels have a major impact on the quality of defense services and will continue to do so under the voucher regimes we propose. But whatever the level of funding, the attorney's independence from his adversary (the government) is the sine qua non of zealous representation, and freedom of choice for the client therefore remains a critical element in any plan for achieving effective defense services.

An attorney's independence from his adversary (the government) is the sine qua non of zealous representation.

If funding levels remain low, the pool of attorneys who serve the indigent will continue to include both able, altruistic lawyers, as well as minimally competent attorneys with few other opportunities, and highly skilled attorneys who are adept at cutting corners so that they can limit the harm to their clients while maintaining a decent income for themselves. Our proposal to end conscription, if combined with low resource levels, might reduce the number of able attorneys serving the poor. But the attorneys lost would be those who prefer not to serve and, if compelled to, can be expected to minimize the time they devote to indigent defendants. The end of conscription would not preclude able attorneys from serving at below-market rates, and in fact would help ensure that those who do serve are participating out of genuine altruism and concern for client interests.

In the absence of some version of a voucher system, raising resource levels would improve the predicament of the indigent accused in some respects and in some jurisdictions. But paradoxically, it could actually make the indigent defendant's position *worse* in others. With increased funding, public defenders and appointed attorneys may no longer find it impos-

sible to devote adequate time to their cases, but apart from altruism, such attorneys will still lack an affirmative incentive to do the best job for their clients. In fact, if compensation is raised, fewer of the attorneys involved will be attracted primarily on the basis of altruism, so the indigent defense lawyers in the pool will have, on average, less motivation to put client interests first and even stronger reasons than at present to curry favor with court officials upon whom their positions depend. So client choice will remain essential, even with ample funding, to ensure that attorneys focus on satisfying clients rather than the court.

Noneconomic concerns. A noneconomic element also affects prospects for a voucher system. What risks do we run in making the profit motive more prominent in indigent defense practice? At present, idealism attracts many able lawyers to serve the poor, and these attorneys provide one of the few bright spots in the otherwise dismal picture of American indigent defense systems. In a more profit-oriented atmosphere, would fewer lawyers of this sort be drawn to this work? Would attorneys in profit-oriented firms lose their idealism? Parallel concerns arise with many other proposals to substitute market arrangements for various forms of public service.

These risks should not be taken lightly, especially in an area where, as in indigent defense, idealism has played a vital role. The structure of a voucher model suggests one answer to the problem. Voluntary arrangements and free choice do not mandate a preoccupation with profit. Bar leaders could still form nonprofit corporations and hire idealistic lawyers on salary, just as happens now in Community Defender Associations. Defenders organized as government agencies could likewise emphasize public service in their recruiting and daily operations. Such organizations should have no difficulty attracting clients (and vouchers) if their performance lives up to their ideals. And if altruism permitted such firms to hire attorneys at below-market rates, they would have an advantage that should translate into larger staffs, lower caseload ratios, and more support services than profit-oriented firms could provide. The market approach we urge in this paper is not inconsistent with preserving what is best in existing systems for indigent defense.

A voucher regime would not be inconsistent with preserving what is best in existing systems for indigent defense.

Are Improvements in Indigent Defense Socially Desirable?

In arguing for freedom of choice and a system of vouchers to improve the quality of defense services, we have taken for granted that such improvements would be a good thing. A substantial portion of the general public may disagree. That disagreement, though seldom openly articulated, may play a large behind-the-scenes role in explaining resistance to improving indigent defense. We believe it useful to try to make explicit the reasons for that resistance and our response to them.

One source of skepticism about the value of an effective defense is a widespread view about the way that an effective lawyer can help his client. Do the special skills of the high-priced lawyer typically serve to demonstrate the innocence of someone who was falsely charged, or do they more often enable a guilty person to get off on a technicality? Much of the resistance to providing better indigent defense no doubt reflects the latter view. If that view is correct, then the main effect of improving the quality of defense services will be to make conviction of the guilty more difficult, thus reducing the deterrent effect of criminal punishment and increasing the amount of crime.

We do not know of any way to establish whether effective lawyers help the guilty more often than they help the innocent. But even if that pessimistic view is empirically correct, it represents an obvious normative mistake. Rules of criminal procedure that permit the guilty to escape on technicalities may need to be reconsidered on their merits, but there is no justification for undermining those rules covertly by making them hard for one subset of defendants—the indigent—to invoke. So long as such rules remain on the books, they reflect presumptively legitimate goals, whether related to or distinct from

protection of the innocent, and counsel for all sorts of defendants should be equally able to invoke those rules effectively in order to promote the social values they serve.

A related but even broader claim is that virtually all defendants presently convicted by our criminal justice system are in fact guilty, so that improvement in the quality of indigent defense is unimportant. Judge Richard Posner, for example, has argued that police and prosecutors, faced with tight budgets and high crime rates, have enough to do convicting the guilty and are therefore unlikely to waste scarce resources trying to convict the innocent.[66]

We find arguments of this sort unconvincing on several grounds. Even if prosecutors consistently select only their easiest cases, there is no guarantee that ease of conviction will correlate closely with actual guilt—especially for poorly represented defendants. Indeed, high crime rates, scarce resources, and a weak system of defense may drive prosecutors to seek an easy conviction of the first suspect at hand rather than pursuing a more thorough investigation that might exonerate the initial suspect.[67]

In addition to making it less likely that innocent defendants will be convicted, an improvement in the quality of defense services has other desirable effects. One is to reduce the injury the legal system does to innocent defendants who are eventually acquitted, but would have been released sooner and at lower cost to themselves if they had been adequately represented.[68] A second effect is to provide more complete information at sentencing and thus to make it more likely that judges will impose appropriate punishments on the guilty.

We recognize that improvements in indigent defense, however desirable, cannot be pursued indefinitely, regardless of cost. But since a voucher system can be instituted with whatever resources a state decides to allocate to defense services, the argument against our proposal is, in effect, an argument that improvements in indigent defense are undesirable even if they entail no additional cost. That argument constitutes an objection to the very nature of our adversary system.[69] It implies that lawyers who try hardest to get their clients acquitted are, on net, an obstacle to justice, even when they are doing their job with very limited resources. This perspective strikes at the heart of our system of criminal justice. It is of interest, in part, because it draws attention to the degree to which our present system has become, at least for indigent defendants, inquisitorial in substance, even if adversarial in form.

Conclusion

Common-law jurisdictions outside the United States have long afforded indigent defendants the right to select their own counsel at government expense, and it may be that only inertia prevents us from bringing that option into American law as well.[70] If so, now is an ideal time to begin moving away from the American status quo. With pressure for reform rising and with unprecedented Justice Department interest in new initiatives, it would be a simple matter to institute a voucher plan on an experimental basis in a few federal districts, or even in cases before selected federal judges who might volunteer to participate. State governments should consider a paradigm shift as well, since most criminal cases are processed at the local level. We do not claim that our voucher proposal will solve every problem—especially if resource constraints generate a wide gulf between the demand for competent defense attorneys and the available supply. What we do claim is that at *any* level of funding, our voucher model can produce gains for both criminal defendants and society generally.

In particular, we maintain that defense vouchers will improve the quality of legal representation for the poor. Better legal representation will, in turn, produce at least three benefits to the community:

- Improving defense services will reduce the likelihood of mistakes. That is, it will be less likely that innocent persons will be wrongfully convicted of crimes.

Improving defense services will reduce the likelihood of mistakes.

- Improving defense services will also minimize adverse consequences to the innocent persons who would have been acquitted under current systems of indigent defense. That is, a better defense means it is more likely that those innocents will be released from custody even sooner (pre-trial) and with less disruption to their lives and the lives of their family members.
- Improving defense services will bring more complete information to the sentencing phase of the criminal justice system—making it more likely that just punishments will be imposed on those who are guilty of committing criminal offenses.

By denying freedom of choice to the indigent defendant, the current system represents a breach of our ideals of personal autonomy and freedom from government control.

We see only two grounds (other than inertia) on which a reasonable person might defend existing institutions for defense of the indigent. One is the belief that defense lawyers are so bound by their professional ethics that they will consistently sacrifice their own interest to the interest of clients to whom they are assigned. Another, and less optimistic, belief is that almost all indigent defendants are guilty, if not of the offense charged then of something else, and that the real business of the court system is the administrative task of allocating punishments while maintaining a polite fiction of concern for defendants' rights.

These arguments are both unconvincing and inconsistent with the underlying premises of our adversary system of justice. Even more, by denying freedom of choice to the indigent defendant in what will often be the most important matter of his lifetime, the current system represents a glaring breach of our ideals of personal autonomy and freedom from unwarranted government control. We conclude that present institutions for criminal defense ought to be replaced with a voucher system, in order to provide indigent defendants with freedom of choice and to provide attorneys with the same incentive to serve their clients that attorneys have always had when they represent clients other than the poor.

Notes

This paper is based in part on an earlier article by the authors, "Rethinking Indigent Defense: Promoting Effective Representation through Consumer Sovereignty and Freedom of Choice for All Criminal Defendants," *American Criminal Law Review* 31 (1993): 73. Readers can find in that article a more detailed discussion of the issues canvassed here.

1. See *Gideon v. Wainwright*, 372 U.S. 335 (1963).

2. One public defender "was . . . told by a county supervisor that he 'should join the District Attorney in his effort to keep the streets of Essex County safe.'" The Constitution Project, "Justice Denied: America's Continuing Neglect of Our Constitutional Right to Counsel," pp. 80–81, http://www.constitutionproject.org/manage/file/139.pdf.

3. See Stephen B. Bright, "Counsel for the Poor: The Death Sentence Not for the Worst Crime but for the Worst Lawyer," *Yale Law Journal* 103 (1994): 1843.

4. Ronald F. Wright, "Parity of Resources for Defense Counsel and the Reach of Public Choice Theory," *Iowa Law Review* 90 (2004): 221.

5. Remarks by Attorney General Eric Holder, Brennan Center for Justice Awards Dinner, November 16, 2009.

6. Ibid.

7. *Hurrell-Harring v. New York*, no. 03798 (May 6, 2010); the appeals court decision permitting the case to proceed is at http://www.courts.state.ny.us/ctapps/decisions/2010/may10/66opn10.pdf.

8. For a detailed presentation of the problem and proposals for dealing with it, see "Justice Denied."

9. See Carrie Johnson, "Renowned Harvard Law Professor Joins Justice Department; Laurence H. Tribe to Lead Efforts to Improve Legal Access for the Poor," *Washington Post*, February 26, 2010; Charlie Savage, "For an Obama Mentor, a Nebulous Legal Niche," *New York Times*, April 7, 2010.

10. In *Strickland v. Washington*, 466 U.S. 668 (1984), the Supreme Court ruled that a person's conviction could be reversed if he could persuade a court that his defense attorney's performance was (a) deficient, and (b) the deficient performance was so bad that it deprived the defendant of a fair trial. This is known as the "ineffective assistance of counsel" doctrine. Many advocates of indigent defense reform argue that the legal threshold for

establishing an ineffective assistance claim has been set too high. Even if that is true, we place little store in reliance on case-by-case litigation of ineffective assistance claims. Though doctrinal change could probably improve the quality of indigent defense services to some extent, claims of ineffective assistance on the record of a particular case can have little influence on the *overall* operations of an indigent defense system.

11. We thus disagree with Attorney General Eric Holder's view that even in present circumstances—which deny defendants a role in choosing their counsel—"every state should have a public defender system." Remarks by Attorney General Eric Holder, National Symposium on Indigent Defense: Looking Back, Looking Forward, 2000–2010.

12. See Loren E. Lomasky, "Aid without Egalitarianism: Assisting Indigent Defendants," in *From Social Justice to Criminal Justice: Poverty and the Administration of Criminal Law*, ed. William C. Heffernan and Jan Kleinig (New York: Oxford University Press, 2000), pp. 84–97.

13. This implies that perhaps the government ought to subsidize defense for the nonindigent as well. We will not consider that question here, beyond noting that the problems of maintaining the independence of defense attorneys paid by the state provide a pragmatic argument for private funding where it is practical.

14. See Stephen J. Schulhofer, "Criminal Justice Discretion as a Regulatory System," *Journal of Legal Studies* 17 (1988): 53–60 (discussing how compensation arrangements for lawyers can lead to conflict with clients); and Albert W. Alschuler, "The Defense Attorney's Role in Plea Bargaining," *Yale Law Journal* 84 (1975): 1179 (asserting that the criminal justice system's reliance on the guilty plea puts defense lawyers in conflict with their clients).

15. Improper action in such situations, whether by prosecutors or defense counsel, need not be the result of conscious misfeasance. Strong financial rewards or penalties may subconsciously color the attorney's judgment on debatable questions of trial tactics or negotiating strategy.

16. Though indigents probably represent no more than 10–20 percent of the population, they account for 80 percent of those charged in felony cases. See Andy Court, "Is There a Crisis?" *American Lawyer* (January/February 1993), p. 46.

17. The principal exception of which we are aware is the availability of limited reimbursement for the cost of defense against certain criminal traffic offenses, as part of the benefits of American Automobile Association membership. See *Chicago Motor Club, Members Handbook* (n.d.), pp. 11–12.

18. See Stephen J. Schulhofer, "Is Plea Bargaining Inevitable?" *Harvard Law Review* 97 (1984): 1080 (noting that in a sample of felony bench trials, defendants won acquittal in 33 percent of cases in which defense counsel made no effort to cross-examine prosecution witnesses and offered no witnesses in defense).

19. Some prepaid legal services programs use an "open panel" plan, in which members select their own attorneys and obtain reimbursement on a fee-for-service basis, often subject to some cap on hourly rates, hours expended, or both. Far more common, however, is the "closed panel" plan, in which members must use attorneys who have been retained or employed in advance by the plan. See Thomas J. Hall, comment, "Prepaid Legal Services: Obstacles Hampering Its Growth and Development," *Fordham Law Review* 47 (1979): 851–57.

20. See *Powell v. Alabama*, 287 U.S. 45 (1932) (requiring state courts to appoint counsel for poor defendants in capital cases); *Johnson v. Zerbst*, 304 U.S. 458 (1938) (establishing the right of indigent defendants to appointed counsel in all criminal proceedings in federal courts); *Gideon v. Wainwright*, 372 U.S. 335 (1963) (extending the right to appointed counsel in state courts to all indigent defendants charged with a felony); *Argersinger v. Hamlin*, 407 U.S. 25 (1972) (extending the right to all criminal prosecutions involving a sentence of imprisonment); and *In re Gault*, 387 U.S. 1 (1967) (according juveniles charged with delinquent acts the right to appointed counsel). Courts have declined, however, to recognize any right of the indigent defendant to a role in selecting his attorney, even where the attorney he prefers is willing, available, and qualified. For a discussion of the cases, the arguments for them, and our response, see Stephen J. Schulhofer and David D. Friedman, "Rethinking Indigent Defense: Promoting Effective Representation through Consumer Sovereignty and Freedom of Choice for All Criminal Defendants," *American Criminal Law Review* 31 (1993): 105–112.

21. Conflicts of interest occasionally preclude appointment of the public defender. The most common conflict situations are those in which the defender already represents a codefendant and those in which one of its staff was a victim of the alleged offense.

22. U.S. Department of Justice, Bureau of Justice Statistics, "Criminal Defense Systems: A National Survey" (August 1984), p. 3.

23. Ibid. These offices are sometimes called community defenders rather than public defenders. See 18 U.S.C. § 3006A(g)(2) (West Supp. 1993) (distin-

guishing between "Federal Public Defender Organization" and "Community Defender Organization").

24. "Criminal Defense Systems," at 17.

25. Ibid. at 216–18.

26. See *Escambia County v. Behr*, 384 So. 2d 147 (Fla. 1980) (public defender won right to withdraw from a case on grounds of excessive caseload, even though Florida statutes imposed duty to represent all indigents); John B. Arango, "Tennessee Indigent Defense Systems in Crisis," *Criminal Justice* (Spring 1992): 42 (Tennessee public defender successfully asked to be relieved from accepting new misdemeanor cases, and thus forced state to assign private counsel).

27. Michael McConville and Chester L. Mirsky, "Criminal Defense of the Poor in New York City," *New York University Review of Law & Social Change* 15 (1986–87): 586–90.

28. See Alison Frankel, "Too Independent," *American Lawyer* (January/February 1993), pp. 67–70, reporting, for example, that the U.S. Court of Appeals for the Fourth Circuit refused to rehire Maryland Federal Defender Fred Bennett. Circuit Judge Paul Niemeyer reportedly argued that Bennett's aggressiveness might make him ineffective. In the words of a Baltimore assistant defender, "[The system] creates an awkward situation for clients. We're representing them, but we're controlled by the court. When the head of our office is essentially terminated by the court [for being too aggressive], it's hard to explain." Id. at 70.

29. An internal study commissioned by the Legal Aid Society of New York in the late 1970s provides one telling illustration. It found:

> Reacting to increased workload and proportionately diminished staff, the management and staff agreed to place greater emphasis on disposing cases through guilty pleas, clearing court calendars, and reducing backlog. . . . [T]he Society's institutional concerns with meeting its contractual obligations triumphed over the need for systemic reform. The Society . . . subordinated vigorous advocacy—'diligent,' 'vigorous,' and 'individualized' defense—to the need for productivity and efficiency.

McConville and Mirsky, at 687–88 (footnotes omitted).

30. Few knowledgeable observers would question the proposition in text, but several cases have illustrated the depth of the problem. See Mark Hansen, "P.D. Funding Struck Down," *ABA Journal* (May 1992), at 18 (New Orleans trial judge held the city's entire indigent defense program unconstitutional because it required public defenders to handle upwards of 300 cases at once); American Bar Association, "Indigent Defense Information" (Spring 1990), at 3 (caseloads in some Florida cities stood at 1,200 misdemeanors per attorney per year and felony caseloads ranged from 371 to 539 per attorney per year, even though national standards suggest caseloads of no more than 400 misdemeanors or 150 felonies per attorney per year); Rodger Citron, note, "(Un)*Luckey v. Miller*: The Case for a Structural Injunction to Improve Indigent Defense Services," *Yale Law Journal* 101 (1991): 490 (in Fulton County (Atlanta), Georgia, some defenders were handling more than 500 felony cases per year). For a dissenting view, see Roger Hanson, *Indigent Defenders Get the Job Done and Done Well*, National Center for State Courts, May 1992, cited in Andy Court, "Is There a Crisis?" *American Lawyer* (January/February 1993), at 46 (arguing that people represented by privately retained counsel on the whole obtain the same results as those represented by publicly financed defenders).

31. Jonathan D. Casper, "Did You Have a Lawyer When You Went to Court? No. I Had a Public Defender," *Yale Review of Law and Social Action* 1 (1971): 4.

32. See Schulhofer, "Plea Bargaining," at 1099–1100 (discussing the need for assertiveness to achieve success within the public defender's office and to move into private practice).

33. Schulhofer, "Criminal Justice Discretion," at 53–60.

34. "Reports and Proposals," *Criminal Law Reporter (BNA)* 51 (June 24, 1992): 1285. At the time of her motion, the attorney had been assigned to handle 45 cases at a single arraignment session, leaving her only 10 minutes for each felony client.

35. See *Consolidated American Insurance Company v. Mike Soper Marine Services*, 951 F.2d 186 (9th Cir. 1991).

36. See *Shaw v. State of Alaska, Department of Administration*, 816 P.2d 1358 (Alaska 1991) (obtaining postconviction relief is prerequisite for filing action against original defense lawyer for malpractice); see also Paul D. Rheingold, "Legal Malpractice: Plaintiff's Strategies," *ABA Section of Litigation* 15 (1989): 13 ("Criminal cases present two barriers that make victory in a later legal malpractice suit almost impossible.").

37. See Stephen J. Schulhofer, "Effective Assistance on the Assembly Line," *New York University*

Review of Law & Social Change 14 (1986): 140–43 (discussing when public defenders recommend guilty pleas for their clients and why); see also Gary Goodpaster, "The Adversary System, Advocacy, and Effective Assistance of Counsel in Criminal Cases," *New York University Review of Law & Social Change* 14 (1986): 80–83 (discussing the difficulty of evaluating whether counsel was effective where the public defender entered a guilty plea on behalf of his or her client).

38. See *Murray v. Giarratano*, 492 U.S. 1 (1989) (holding indigent death row inmate has no constitutional right to appointed counsel to pursue constitutional claim in post-conviction litigation).

39. Almost three-quarters of the contract programs rely on individual practitioners. See Robert L. Spangenberg and Patricia A. Smith, *An Introduction to Indigent Defense Systems* 14 (American Bar Association, 1986).

40. Scott Wallace and David Carroll, "The Implementation and Impact of Indigent Defense Standards," *Southern University Law Review* 31 (2004): 245; Lawrence D. Spears, "Contract Counsel: A Different Way to Defend the Poor," *Criminal Justice* (Spring 1991), at 30.

41. Spangenberg and Smith, at 13.

42. On the other hand, it is harder for third parties to compare quality bids than price bids, and thus harder to judge whether the contract is really being awarded to the best bid.

43. See ABA Standards for Criminal Justice § 5-3.1 at 46 (3d ed. 1992) (discussing "uniformly dismal" results in early contract programs).

44. Caroline Wolf Harlow, *Defense Counsel in Criminal Cases* 4 (U.S. Dept. of Justice 2000).

45. U.S. Department of Justice, Compendium of Standards for Indigent Defense Systems (2000) vol 1-H, http://www.mynlada.org/defender/DOJ/standardsv1/v1h.htm#Attorney; Spangenberg and Smith, at 9.

46. See *State v. Rush*, 217 A.2d 441 (N.J. 1966) (upholding the practice in many New Jersey municipalities of conscripting attorneys to serve without compensation), reaffirmed, *Bolyard v. Berman*, 644 A.2d 1129 (1994) ("our [state] Supreme Court has expressly held that a defendant's right to counsel . . . may be satisfied by the appointment of uncompensated private counsel"). See also *State v. Citizen*, 898 So.2d 331 (La. 2005) ("uncompensated representation . . . is a professional obligation . . . of practicing law" but the court must grant "reasonable" overhead costs); *Office of the Public Defender v. State*, 413 Md. 443 n.6 (Md. 2010) ("a lawyer has no constitutional right to refuse an uncompensated appointment"). See also David Margolick, "Volunteers or Not, Tennessee Lawyers Help Poor," *New York Times*, January 17, 1992 (conscription without pay); "Tennessee Lawyers Balk at Defending the Poor for Free," *Atlanta Journal-Constitution*, January 8, 1992, at 3 (same). Cf. *Nichols v. Jackson*, 55 P.3d 1046–47 (Okl. 2002) (upholding the system of conscripting defense attorneys in capital cases, but mandating "adequate, speedy, and certain compensation").

47. Rebecca A. Desilets, Robert L. Spangenberg, and Jennifer W. Riggs, *Rates of Compensation Paid to Court-Appointed Counsel in Non-Capital Felony Cases at Trial: A State-by-State Overview* (Spangenberg Group, 2007); see also *Mooney v. Trombley*, 2007 U.S. Dist. LEXIS 15298, 30–32 (E.D. Mich. 2007) (flat rate of $590 per case, which averaged less than $6.00 an hour, was not prejudicial); *Martinez-Macias v. Collins*, 979 F.2d 1067 (5th Cir. 1992) (appointed attorney in Texas capital case was paid $11.84 per hour).

48. Even 20 years ago, a court estimated that an attorney needs a fee of $27–$35 per hour just to cover overhead expenses for rent, library, and secretarial services. *State ex rel. Stephan v. Smith*, 747 P.2d 816, 837 (Kan. 1987). See also *Baker v. Corcoran*, 220 F.3d 276. 285-86 (4th Cir. 2000) (overhead for attorney in post-conviction proceedings was $53 an hour); *Sheppard v. Jacksonville*, 827 So.2d 925, 931 (Fl. 2002) ($40 an hour compensation renders counsel unable to cover overhead); *New York County Lawyers' Association v. State*, 763 N.Y.S.2d 397, 416–17 (N.Y. Sup. Ct. 2003) (average overhead in N.Y. was $42.88 an hour, with a range of $26.80 to $62.50 per hour); *State v. Young*, 172 P.3d 138, 140 (N.M. 2007) (overhead costs for a capital case was $73.96 an hour).

49. Spangenberg Group, at 6–10.

50. See "Criminal Defense Systems," at 5 (noting that compensation ceilings of $500–$1,000 were common for non-capital felonies, and in some counties ceilings were as low as $200).

51. Maximums are now set at $3,600 for the District of Columbia, $3,000 for West Virginia and Hawaii, and $2,500 in Florida and Nevada. See Spangenberg Group, at 2, 3, 6, and 9.

52. Ibid. at 1–10.

53. See Margolick (discussing conscription without compensation).

54. An article describing the Detroit Recorder's Court reports:

> Since court-appointed counsel depend upon the 29 Recorder's Court judges for their assignments, the system may discourage the lawyers from doing anything that might alienate the judge by impeding his or her efforts to move the docket.
>
> In testimony given two years ago before a special master appointed by the Michigan Supreme Court in the dispute over the flat fees paid to indigent defenders, Recorder's Court judge David Kerwin spoke of "lawyers who just don't seem to really be interested in recognizing that it's an adversary process . . . that are more interested in presenting to you a situation that accommodates the moving of the docket, as though that's going to endear them to you and cause you, when you are on assignment [duty], to give them more cases."

Andy Court, "Rush to Justice," *American Lawyer* (January/February 1993), p. 58.

55. See Mark Hansen, "Indigent Defense Fee Abuses Found," *ABA Journal* (August 1992), p. 29 (describing abuses resulting from inadequate monitoring of attorney fee submissions).

56. See Judge Charlie Baird and William S. Sessions, "Public Defender Proposal Lacks Checks and Balances," *Houston Chronicle*, June 8, 2010; Texas Fair Defense Project, "Benefits of a Public Defender Office," White Paper, September 2009, pp. 3–4.

57. Ibid.

58. In the course of an opinion upholding conscription without pay, the New Jersey Supreme Court stated, "[A] lawyer needs no motivation beyond his sense of duty and his pride." *State v. Rush*, 217 A.2d 441, 444 (N.J. 1966).

59. *Jewell v. Maynard*, 383 S.E.2d 536, 544 (W.Va. 1989).

60. For a discussion of the same problems in the context of regulating a natural monopoly, see David D. Friedman, *Price Theory: An Intermediate Text*, 2d ed. (Cincinnati: South-Western Publishing Co., 1990), pp. 466–77.

61. The prospect of the legal equivalent of health care's "Medicaid mills" comes to mind as a cautionary note here, though we doubt that firms freely chosen could be any worse in this regard than many existing public-defender systems.

62. An article on Ontario's voucher system reports: "10–15 percent of the criminal certificate bar are 'constant pleader' types who rarely go to trial—and . . . clients know it. Layton Elijah, who has been represented on certificates several times since 1971, agrees that defendants know which lawyers will merely try to plead them out. 'You hear about it in jail about guys who just take the deal, lawyers who lead you astray,' he says." William W. Horne, "Canada's Cadillac," *American Lawyer* (January/February 1993), at 62–66 (discussing 1967 plan that allows qualified applicants to choose from 5,500 lawyers serving on legal aid panels). As of 2009, there were 4,382 private attorneys certified to serve on the legal aid panels. Legal Aid Ontario, "Fact Sheet: Panel Management," 1 (2009), http://www.legalaid.on.ca/en/about/downloads/factsheet_panelmanagement.pdf.

63. The Ontario Legal Aid Plan differs from a simple hourly-rate voucher in several ways. It combines payment by time with lump-sum payments for certain activities. A higher payment is provided to more experienced lawyers. Defendants who are not sufficiently indigent to qualify are in some cases able to get a partial subsidy for their legal expenses. OLAP seems to be widely regarded as a success in terms of the quality of service, but it is hard to tell whether that reflects the organizational structure, the level of funding, or features of the legal environment in which it works. Compared to New York City's legal aid plan, the OLAP is less expensive per taxpayer but substantially more expensive per matter handled. Horne, at 62–66. A recent evaluation shows a high level of satisfaction with the Ontario program among both lawyers and clients. See Legal Aid Ontario, "Fact Sheet: Legal Aid at a Glance" (2009); Legal Aid Ontario, "LAO Common Measurements Tool" (2008), http://www.legalaid.on.ca/en/about/downloads/2008_cmt-overview.pdf.

64. This remains so even though monitoring of attorney fee requests seems likely to be more effective when the state can restrict the pool of attorneys eligible to serve.

65. The comparison between the effectiveness of attorneys compensated on a lump-sum or hourly basis in current, non-choice regimes is clouded, however, by the fact that the level of authorized payments in existing lump-sum systems is typically quite low and the attorneys who serve in such regimes tend to be conscripts with powerful incentives to minimize the time they devote to the case.

66. See Richard A. Posner, *The Problems of Jurisprudence* (Cambridge, MA: Harvard University Press, 1993), p. 216.

67. See, for example, Michael Mello, "Second-guess Death," *National Law Journal* (May 21, 2001).

68. See Anthony Lewis, "The Soul of Justice," *New*

York Times, January 4, 1993, p. A15 (Indianapolis defendant spent 19 months in jail awaiting trial, including four months confined after the charge was dismissed; the public defender never told his client or prison authorities about the dismissal).

69. The argument against improving criminal defense, if correct, has some interesting implications. If improvements in indigent defense are a bad thing, if their main effect is to make it harder to convict the guilty, then so are improvements in defense for nonindigents.

Nonindigents improve their defense by spending more money on it. If even costless improvements in indigent defense, such as those that might result from moving to a voucher system, are undesirable, then costly improvements in defense are undesirable a fortiori. If improvements in indigent defense are undesirable even at the present low level of expenditure, it seems to follow that expenditures on nonindigent defense above that same low level are also undesirable. So the argument holding that our reforms are undesirable precisely because they would provide improved defense for indigents also seems to imply that there should be a cap on defense expenditures by ordinary defendants, set at or below the present level of expenditure for indigents.

70. See Earl Johnson, Jr., "Equality Before the Law and the Social Contract," *Fordham Urban Law Journal* 37 (2010): 189–96 (discussing England, Ontario, and Quebec); Norman Lefstein, "In Search of Gideon's Promise: Lessons from England and the Need for Federal Help," *Hastings Law Journal* 55 (2004): 915–21; Tamara Goriely, "Evaluating Scottish Public Defense Solicitors Office," *British Journal of Law and Society* (Cardiff Law School, Cardiff Wales) 30 (2003): 84. With respect to Ontario, see also Horne.

DRUG DECRIMINALIZATION IN PORTUGAL

LESSONS FOR CREATING FAIR AND SUCCESSFUL DRUG POLICIES

GLENN GREENWALD

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Cover design by Jon Meyers.

Printed in the United States of America.

Cato Institute
1000 Massachusetts Ave., N.W.
Washington, D.C. 20001
www.cato.org

Executive Summary

On July 1, 2001, a nationwide law in Portugal took effect that decriminalized all drugs, including cocaine and heroin. Under the new legal framework, all drugs were "decriminalized," not "legalized." Thus, drug possession for personal use and drug usage itself are still legally prohibited, but violations of those prohibitions are deemed to be exclusively administrative violations and are removed completely from the criminal realm. Drug trafficking continues to be prosecuted as a criminal offense.

While other states in the European Union have developed various forms of de facto decriminalization—whereby substances perceived to be less serious (such as cannabis) rarely lead to criminal prosecution—Portugal remains the only EU member state with a law explicitly declaring drugs to be "decriminalized." Because more than seven years have now elapsed since enactment of Portugal's decriminalization system, there are ample data enabling its effects to be assessed.

Notably, decriminalization has become increasingly popular in Portugal since 2001. Except for some far-right politicians, very few domestic political factions are agitating for a repeal of the 2001 law. And while there is a widespread perception that bureaucratic changes need to be made to Portugal's decriminalization framework to make it more efficient and effective, there is no real debate about whether drugs should once again be criminalized. More significantly, none of the nightmare scenarios touted by preenactment decriminalization opponents—from rampant increases in drug usage among the young to the transformation of Lisbon into a haven for "drug tourists"—has occurred.

The political consensus in favor of decriminalization is unsurprising in light of the relevant empirical data. Those data indicate that decriminalization has had no adverse effect on drug usage rates in Portugal, which, in numerous categories, are now among the lowest in the EU, particularly when compared with states with stringent criminalization regimes. Although postdecriminalization usage rates have remained roughly the same or even decreased slightly when compared with other EU states, drug-related pathologies—such as sexually transmitted diseases and deaths due to drug usage—have decreased dramatically. Drug policy experts attribute those positive trends to the enhanced ability of the Portuguese government to offer treatment programs to its citizens—enhancements made possible, for numerous reasons, by decriminalization.

This report will begin with an examination of the Portuguese decriminalization framework as set forth in law and in terms of how it functions in practice. Also examined is the political climate in Portugal both pre- and postdecriminalization with regard to drug policy, and the impetus that led that nation to adopt decriminalization.

The report then assesses Portuguese drug policy in the context of the EU's approach to drugs. The varying legal frameworks, as well as the overall trend toward liberalization, are examined to enable a meaningful comparative assessment between Portuguese data and data from other EU states.

The report also sets forth the data concerning drug-related trends in Portugal both pre- and postdecriminalization. The effects of decriminalization in Portugal are examined both in absolute terms and in comparisons with other states that continue to criminalize drugs, particularly within the EU.

The data show that, judged by virtually every metric, the Portuguese decriminalization framework has been a resounding success. Within this success lie self-evident lessons that should guide drug policy debates around the world.

Glenn Greenwald is a constitutional lawyer and a contributing writer at Salon. *He has authored several books, including* A Tragic Legacy *(2007) and* How Would a Patriot Act? *(2006).*

Portugal is the only European Union state explicitly to "decriminalize" drug usage.

Introduction

Around the globe, countries approach drug policy in radically different ways. In Communist China and various Muslim nations, drug traffickers and, in some instances, even those found guilty of possession of narcotics, receive draconian prison sentences and are even executed. At the other end of the policy spectrum, most people think of the Netherlands, which has long been perceived as leading the way in drug liberalization and, at least in Amsterdam, has long maintained a drug-tolerant culture, though it has never legalized drugs. Most countries, of course, fall somewhere in between. In the 1980s, the global policy trend was toward harsher criminalization approaches, even at the user level. In recent years, however, as drug policymakers have attempted to formulate policy recommendations for how best to manage drug-related problems exclusively on empirical grounds, there are signs that countries in every region of the world are reversing course.[1] This study will focus on one such reversal in Europe—Portugal's dramatic 2001 decriminalization policy.

Decriminalization, Depenalization, and Legalization

On July 1, 2001, a nationwide law in Portugal took effect that decriminalized all drugs, including cocaine and heroin. Since the enactment of that law, Portugal is and remains the only European Union state explicitly to "decriminalize" drug usage. The statute, in Article 29, uses the Portuguese word *descriminalização*—decriminalization—to describe the new legal framework it implements. "Decriminalization" applies to the purchase, possession, and consumption of all drugs for personal use (defined as the average individual quantity sufficient for 10 days' usage for one person).

Even in the decriminalization framework, drug usage and possession remain prohibited (i.e., illegal) and subject to police intervention. But "decriminalization" means that infractions have been removed completely from the framework of the criminal law and criminal justice system. Instead, they are treated as purely administrative violations, to be processed in a noncriminal proceeding.

It is important to distinguish between "decriminalization," the de jure scheme enacted by Portugal, and mere "depenalization," the prevailing framework in several EU states that have not decriminalized drug usage. The central agency of the European Union for coordinating drug policy data is the European Monitoring Centre for Drugs and Drug Addiction and in 2005, that agency promulgated the following definitional distinction between "decriminalization" and "depenalization":

> "Decriminalisation" comprises removal of a conduct or activity from the sphere of criminal law. Prohibition remains the rule, but sanctions for use (and its preparatory acts) no longer fall within the framework of the criminal law.
>
> [By contrast],"depenalization" means relation of the penal sanction provided for by law. In the case of drugs, and cannabis in particular, depenalization generally signifies the elimination of custodial penalties.[2]

In sum, "decriminalization" means either that only noncriminal sanctions (such as fines or treatment requirements) are imposed or that no penal sanctions can be. In a "depenalized" framework, drug usage remains a criminal offense, but imprisonment is no longer imposed for possession or usage even as other criminal sanctions (e.g., fines, police record, probation) remain available. "Legalization"—which no EU state has yet adopted—means that there are no prohibitions of any kind under the law on drug manufacturing, sales, possession, or usage.

As set forth below, several EU states have developed either formal or de facto forms of depenalization, particularly for personal cannabis usage. But no EU state other than Portugal has explicitly declared drugs to be "decriminalized."

Portugal's Decriminalization Regime: How It Works

The 2001 Portuguese decriminalization statute was enacted to revise the legal framework applicable to the consumption of all narcotics and psychotropic substances, together with what the European Monitoring Center for Drugs and Drug Addiction describes as "the medical and social welfare of the consumers of such substances without medical prescription." The statute's operative decriminalization clause is set forth in Article 2(1), which provides:

> The consumption, acquisition and possession for one's own consumption of plants, substances or preparations listed in the tables referred to in the preceding article *constitute an administrative offence*. (emphasis added)

The referenced preceding article encompasses "narcotics and psychotropic substances" and includes a table of all "plants, substances or preparations" that were previously criminalized.

The key phrase—"for one's own consumption"—is defined in Article 2(2), as a quantity "not exceeding the quantity required for an average individual consumption during a period of 10 days." Decriminalization does not apply to "drug trafficking," which remains criminalized and is defined as "possession of more than the average dose for ten days of use."[3]

No distinction is made between the types of drug (so-called hard drugs or soft drugs), nor does it matter whether consumption is public or private. Personal possession and consumption of all narcotics, no matter where they occur or for what purpose, are now decriminalized in Portugal. As noted, "decriminalization" is not synonymous with "legalization." Drug usage is still prohibited under the law of Portugal, but it is treated strictly as an administrative, not a criminal, offense.

Thus, Article 15 of the law, entitled "Penalties," sets forth the authorized administrative sanctions for violations. In lieu of criminalization, the Portuguese law, in Article 5, establishes "Commissions for Dissuasions of Drug Addiction," the body solely responsible for adjudicating administrative drug offenses and imposing sanctions, if any. The first section of the law's penalty section, Article 15, provides, "Non-addicted consumers may be sentenced to payment of a fine or, alternatively, to a non-pecuniary penalty." Article 17, entitled "Other Penalties," provides in Section (1) that "instead of a fine, the commission may issue a warning."

In theory, offenders can be fined an amount between 25 euros and the minimum national wage. But such fines are expressly declared to be a last resort. Indeed, in the absence of evidence of addiction or repeated violations, the imposition of a fine is to be suspended.

While the Dissuasion Commissions are not authorized to mandate treatment, they can make suspension of sanctions conditioned on the offender's seeking treatment. This is typically what is done, though in practice, there are very few ways to enforce the condition, since violations of a commission's rulings are not, themselves, infractions of any law.[4] In fact, Dissuasion Commissions are directed by Article 11(2) to "provisionally suspend proceedings"—meaning to impose no sanction—where an alleged offender with no prior offenses is found to be an addict but "agrees to undergo treatment."

Where the offender is deemed to be a non-addicted consumer of drugs and has no prior offenses, the commissions are *mandated* by Article 11(1) of the decriminalization law to "provisionally suspend proceedings," whereby no sanction is imposed. Article 11(3) vests the commissions with discretion to "provisionally suspend proceedings" even for an addict who has a prior record, provided he or she agrees to undergo treatment. Alternatively, under Article 14, a commission, in the case of an addict with a prior record, can impose sanctions but then immediately suspend them contingent on ongoing treatment. In the event that treatment is completed and there is no subsequent offense, the proceeding will be deemed closed after a specified time period.

In theory, the Dissuasion Commissions are able to impose on offenders found to be

Personal possession and consumption of all narcotics, no matter where they occur or for what purpose, are now decriminalized in Portugal.

addicts a wider range of sanctions under Article 17, including suspension of the right to practice a licensed profession (doctor, lawyer, taxi driver); a ban on visiting high-risk locales (nightclubs); a ban on associating with specified individuals; requiring periodic reports to the commission to show there is no ongoing addiction or abuse; prohibitions on travel abroad; termination of public benefits for subsidies or allowances; or a mere oral warning.

Article 15(4) sets forth a variety of factors the commissions should consider in determining what sanction, if any, should be imposed. Such factors include the seriousness of the act; the type of drug consumed; whether consumption was public or private; and whether usage is occasional or habitual. The commissions are vested with the sole discretion to determine the extent to which these factors should be considered and how they should determine the appropriate disposition of cases.

Minors who are cited for drug possession or usage enter the same process and, pursuant to Article 3, are aided by a legal representative, who is authorized to make decisions for the minor. But furnishing drugs to a minor (or people with mental illness) continues to be forbidden by the general law that regulates drug issues and is considered an aggravating circumstance to the ongoing prohibition on "trafficking and other illicit activities," which is punishable by imprisonment of between 4 to 12 years.

Furnishing drugs to a minor (or people with mental illness) continues to be forbidden by the general law.

Decriminalization in Practice

Pursuant to the 2001 law, each of the 18 administrative districts in Portugal established at least one Dissuasion Commission to oversee the administrative process for those cited for drug usage or possession (large districts, such as the one encompassing Lisbon, have more than one). As provided for by Article 7 of the decriminalization law, each commission consists of three members—one who is appointed by the Ministry of Justice and the other two members appointed jointly by the Minister of Health and the government's coordinator of drug policy. The member appointed by the Ministry of Justice will have a legal background, while at least one of the other two members (usually both) will have a medical or social services background (physician, psychologist, social worker).

Even in the decriminalization framework, police officers who observe drug use or possession are required to issue citations to the offender, but they are not permitted to make an arrest. The citation is sent to the commission, and the administrative process will then commence. The cited offender appears before the commission within 72 hours of the citation's issuance. If the commission finds compelling evidence of drug trafficking, it will refer the case to criminal court.

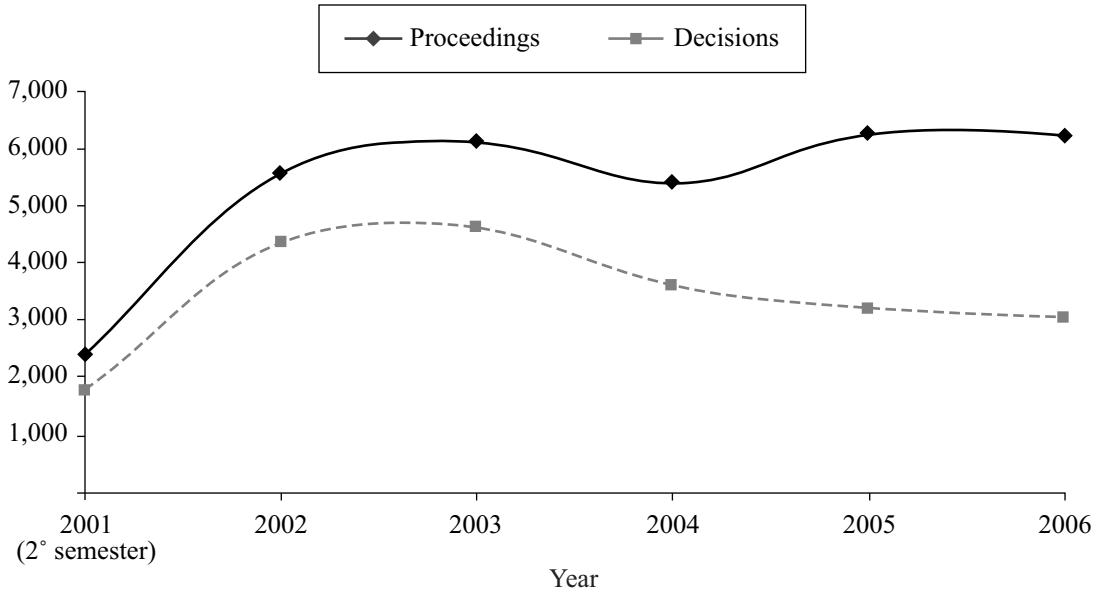
The effect that the decriminalization regime has had on police conduct with regard to drug users is unclear and is the source of some debate among Portuguese drug policy experts. There are, to be sure, some police officers who largely refrain from issuing citations to drug users on the grounds of perceived futility, as they often observe the cited user on the street once again using drugs, leading such officers to conclude that the issuance of citations, without arrests or the threat of criminal prosecution, is worthless.

Other police officers, however, are *more* inclined to act when they see drug usage now than they were before decriminalization, as they believe that the treatment options offered to such users are far more effective than turning users into criminals (who, even under the criminalization scheme, were typically back on the street the next day, but without real treatment options). One 2007 paper contended:

> The law enforcement sector was seen as supportive of the reform, particularly because they perceived decriminalization and referral to education and treatment as offering a better response to drug users than under the previous legislative approach. Key informants asserted law enforcement have embraced the more preventative role for drug users.[5]

Some Portuguese drug officials believe this dichotomized reaction among police officers to be split largely along generational

Figure 1
Administrative Infraction Proceedings and Decisions, by Year*



Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), "The National Situation Relating to Drugs and Dependency," 2006 Annual Report (2007), p. 35.
*Year in which the deed punishable as a misdemeanor occurred. Information gathered as of March 31 of the year after the occurrence of the deed punishable as a misdemeanor.

lines: older officers are inclined to believe that the decriminalization scheme makes issuing citations a waste of their time, whereas younger officers view the administrative process as the best hope for containing addiction. The inability to quantify negative events—that is, officers who refrain from issuing citations on the grounds of perceived futility—renders anecdotal evidence the most reliable for assessing police behavioral reaction to decriminalization.

What is clear is that the number of cases referred to the administrative process has increased slowly and more or less steadily since the enactment of decriminalization in 2001, suggesting (without proving) that officers are issuing citations at least at the same rates, if not more enthusiastically, than when the law was first enacted (see Figure 1).[6]

In theory, under Article 3 of the decriminalization law, both private and government physicians are permitted to notify the Dissuasion Commissions if they have reason to suspect drug use in their patients. In reality, however, such reporting is extremely rare for several reasons, including the widespread belief among physicians that such reporting violates doctor-patient confidentiality.

As noted, the decriminalization law sets forth numerous criteria that Dissuasion Commissions are to consider in determining the proper disposition of each case. Article 10 of the decriminalization law directs the commission to hear from the alleged offender and to "gather the information needed in order to reach a judgment as to whether he or she is an addict or not, what substances were consumed, the circumstances in which he was consuming drugs when summoned, the place of consumption and his economic situation." Which of these are to be weighed, and the weight they are to receive, are left to the sole discretion of the commission members. The alleged offender has the right to request

Many physicians believe that reporting suspected drug use to the authorities would violate doctor-patient confidentiality.

Fears of "drug tourism" have turned out to be completely unfounded.

that a therapist of his choice take part in the proceedings and/or that a medical examination be conducted to aid in determining the various factors the commission might consider.

Portuguese and European officials familiar with the Dissuasion Commission process emphasize that the overriding goal of that process is to avoid the stigma that arises from criminal proceedings. Each step of the process is structured so as to de-emphasize or even eliminate any notion of "guilt" from drug usage and instead to emphasize the health and treatment aspects of the process.

The alleged offender, for instance, can request that notice of the proceedings not be sent to his home in order to preserve privacy. Commission members deliberately avoid all trappings of judges, and the hearing is intentionally structured so as to avoid the appearance of a court. Members dress informally. The alleged offender sits on the same level as the commission members, rather than having the members sit on an elevated platform. Commission members are legally bound to maintain the complete confidentiality of all proceedings. At all times, respect for the alleged offender is emphasized.

In determining what, if any sanction, should be imposed, the commission often takes account of the seriousness of the drug that was used. The EMCDDA identifies the probable sanction for possession of cannabis as "suspension of sanction with probation."[7]

In 2005, there were 3,192 commission rulings. Of those, 83 percent suspended the proceeding; 15 percent imposed actual sanctions; and 2.5 percent resulted in absolution.[8] That distribution has remained constant since the law's enactment.[9] Of the cases where sanctions were imposed, the overwhelming majority merely required the offenders to report periodically to designated locales.[10]

Cannabis continues to be the substance for which the greatest percentage of drug offenders are cited. The percentages for the other substances remain roughly the same (see Figure 2).[11]

Before the enactment of the decriminalization law, opponents insisted that the proposed change in law would make Portugal a center of so-called drug tourism. Paulo Portas, leader of the conservative Popular Party, said: "There will be planeloads of students heading for [Portugal] to smoke marijuana and take a lot worse, knowing we won't put them in jail. We promise sun, beaches and any drug you like."[12] Such fears have turned out to be completely unfounded.[13] Roughly 95 percent of those cited for drug offenses every year since decriminalization have been Portuguese.[14] Close to zero have been citizens of other EU states (see Table 1).[15]

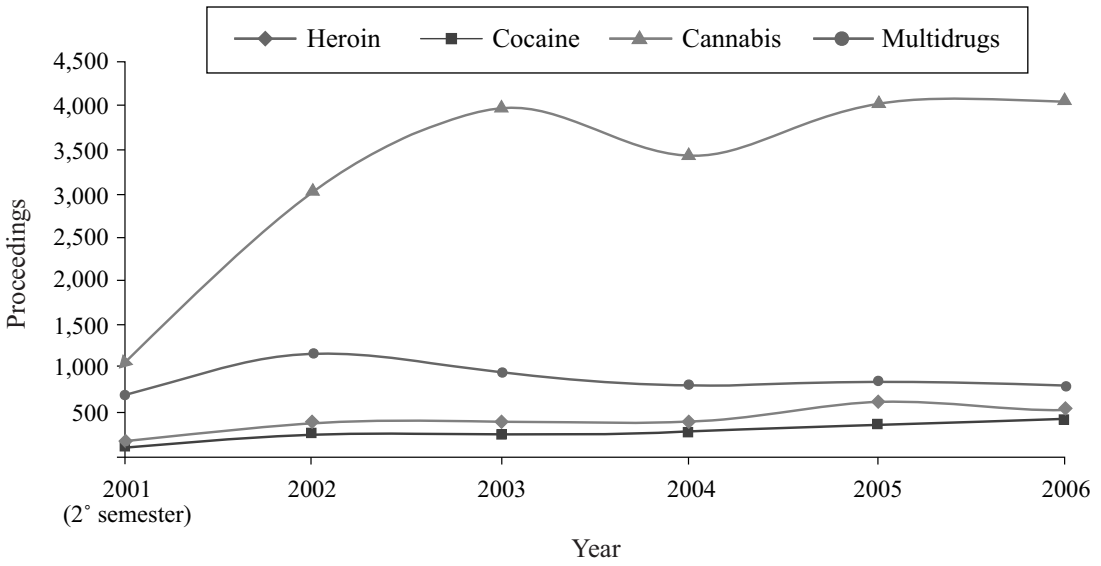
Political Climate in Portugal Pre- and Postdecriminalization

The political impetus for decriminalization was the perception that drug abuse—both in itself and its accompanying pathologies—was becoming an uncontrollable social problem, and the principal obstacles to effective government policies to manage the problems were the treatment barriers and resource drain imposed by the criminalization regime. Put another way, decriminalization was driven *not* by the perception that drug abuse was an insignificant problem, but rather by the consensus view that it was a highly significant problem, that criminalization was *exacerbating* the problem, and that only decriminalization could enable an effective government response.

In fact, Portuguese decriminalization occurred only after extensive study by an elite commission, Comissão para a Estratégia Nacional de Combate à Droga (Commission for a National Anti-Drug Strategy). That commission was created "in response to a rapidly rising drug problem in the 1990s, principally, but not exclusively, involving heroin use."[16] Notably, the 2001 change to the Portuguese legal framework was intended to implement "a strong harm-reductionistic orientation," and "the flagship of these laws is the decriminalization of the use and possession for use of drugs."[17]

In its 1998 report, the Portuguese commission ultimately recommended decriminalization as the optimal strategy for combating Portugal's growing abuse and addiction problems. The commission emphasized that the

Figure 2
Administrative Infraction Proceedings, by Year,* by Type of Drug



Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), "The National Situation Relating to Drugs and Dependency," 2005 Annual Report (2006), p. 37.
*Year in which the deed punishable as a misdemeanor occurred. Information gathered as of March 31 of the year after the occurrence of the deed punishable as a misdemeanor.

objective of its decriminalization strategy was to *reduce drug abuse and usage*. Thus, as its report stated, its recommendations were intended to

- redirect the focus to primary prevention;
- extend and improve the quality and response capacity of the health care networks for drug addicts so as to ensure access to treatment for all drug addicts who seek treatment;
- guarantee the necessary mechanisms to allow the enforcement by competent bodies of measures such as voluntary treatment of drug addicts as an alternative to prison sentences.[18]

The commission concluded that legalization, as opposed to mere decriminalization, was not a viable option due, in large part, to the fact that numerous international treaties impose the "obligation to establish in domestic law a prohibition" on drug use. Decriminalization was consistent with that obligation as Portuguese law continued to prohibit usage, but simply no longer classified violations as a criminal offense.

Following issuance of the commission's report, the federal government's Council of Ministers, in 1999, approved the commission's report almost in its entirety. In 2000, the council produced its own policy recommendations, which were consistent with the commission's, including recommending full-scale decriminalization.

With both the expert commission and the government's council agreeing on the need for a harm-reduction approach generally, and decriminalization specifically, the proposal encountered relatively little political resistance. Thereafter, in October 2000, the Portuguese Parliament, supported by the national president, enacted legislation implementing the council's recommendations in full, and decriminalization took effect on July 1, 2001.

Interviews with Portuguese drug officials confirmed that before decriminalization, the most substantial barrier to offering treatment to the addict population was the addicts' fear

In its 1998 report, the Portuguese commission recommended decriminalization as the optimal strategy for combating addiction problems.

Table 1
Individuals* in Misdemeanor Case, according to Year, Country of Nationality**

Country of Nationality	Year				
	2001 (2nd half)	2002[a]	2003[a]	2004[a]	2005
Europe	2,113	4,923	5,445	4,844	5,556
European Union	2,104	4,910	5,426	4,825	5,533
Germany	6	13	10	16	13
Spain	6	14	16	18	12
France	26	36	17	22	25
Netherlands	..	2	..	1	3
Portugal	2,057	4,831	5,372	4,751	5,461
United Kingdom	6	6	5	10	8
Other EU countries	3	8	6	7	11
Other European Countries	9	13	19	19	23
Ukraine	4	7	9	14	13
Others	5	6	10	5	10
Africa	55	143	135	114	203
Angola	24	64	66	59	72
Cabo Verde	8	39	37	23	63
Guinea-Bissau	4	11	11	12	24
Mozambique	13	14	14	9	29
São Tomé and Principe	2	2	..	2	1
Others	4	13	7	9	14
America	15	41	29	29	46
Bolivia	..	..	1	..	..
Brazil	10	26	17	21	40
Colombia	..	1	1	..	1
Venezuela	1	4	4	4	2
Others	4	10	6	4	3
Asia	2	7	2	4	8
Oceania	..	1	..	..	..
Unknown	19	8	4	7	11
Total	2,204	5,123	5,615	4,998	5,824

Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), "The National Situation Relating to Drugs and Dependency," 2005 Annual Report (2006), p. 99.

*Individuals acquitted and repeat offenders (repeat offenders are only entered one time for the year in question) are not included for analysis purposes.

**Year in which the deed punishable as a misdemeanor occurred.

[a]Information gathered as of March 31 of the year after the occurrence of the deed punishable as a misdemeanor. Between March 31, 2002, and March 31, 2003, commissions entered 282 more cases from the courts, with a date of occurrence of the deed punishable as misdemeanor referring to the year 2001; between March 31, 2003, and March 31, 2004; 496 more cases from the courts referring to the year 2002; between March 31, 2004, and March 31, 2005, 725 more cases from the courts referring to 2003, and between 3/31/2005 and 3/31/2006, 770 more cases from the courts referring to 2004.

The most substantial barrier to offering treatment to the addict population was the addicts' fear of arrest.

of government officials as a result of criminalization. João Castel-Branco Goulão, the chairman of Portugal's principal drug policy agency, the Institute on Drugs and Drug Addiction (Instituto da Droga e da Toxicodependência—or IDT), emphasized that before the 2001 decriminalization law, his principal challenge was drug addicts' fear of seeking treatment—

particularly from the state agencies offering it—because they were afraid of being arrested and prosecuted. One prime rationale for decriminalization was that it would break down that barrier, enabling effective treatment options to be offered to addicts once they no longer feared prosecution. Moreover, decriminalization freed up resources that could be channeled into treatment and other harm-reduction programs.

A related rationale for decriminalization was that removal of the stigma attached to criminal prosecution for drug usage would eliminate a key barrier for those wishing to seek treatment. Even in those nations where drug users are not typically punished with prison—such as Spain—the stigma and burden of being convicted of a criminal offense remain. "It is this stigmatization that the Portuguese policy explicitly aims to prevent."[19]

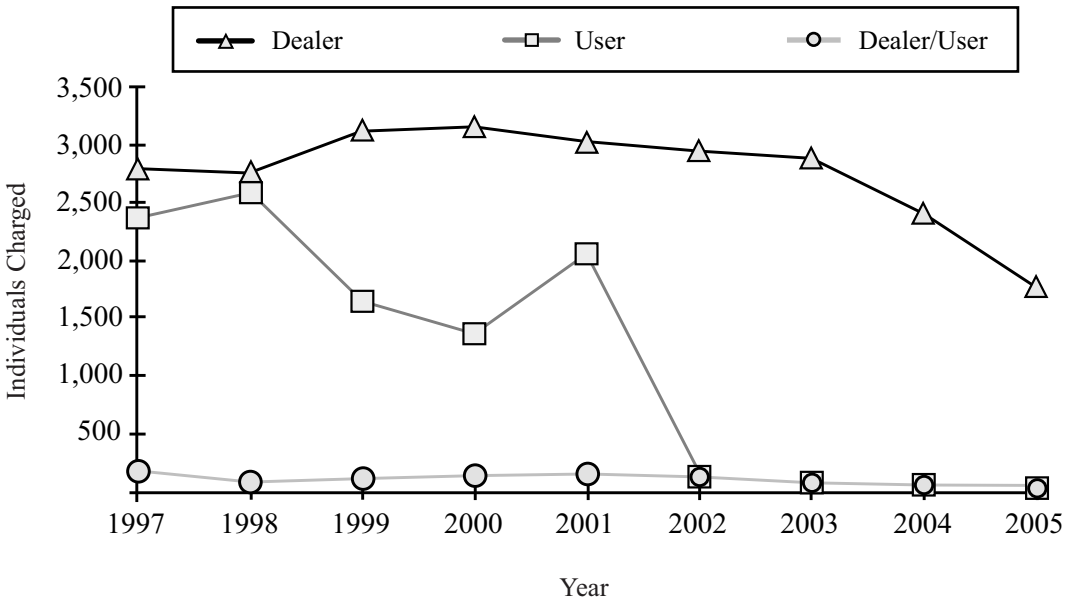
Even before decriminalization, prosecution—and certainly imprisonment—for mere possession or use were rare, but not unheard of. At times, the use of the criminal process against those accused solely of usage approached the levels of those accused of trafficking (see Figure 3).[20] The citizenry's fear of being identified as a user was thus immense, and the stigma attached to such accusations was substantial, even in the absence of a prison sentence.

Indeed, interviews with Portuguese political officials and drug policy experts confirm that they did not embrace decriminalization *despite* their belief that it would lead to increased usage. Rather, they embraced decriminalization as the best option for minimizing all drug-related problems, including addiction:

> Decriminalization is not expected to increase the amount of drugs available or the use of new types of drugs. However, there is a general belief that decriminalization increases the need for prevention, for example, to com-

The citizenry's fear of the stigma attached to such accusations was substantial, even in the absence of a prison sentence.

Figure 3
Individuals Charged, By the Year and Drug-Related Status



Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), "The National Situation Relating to Drugs and Dependency," 2005 Annual Report (2006), p. 150.

> municate to the public that decriminalization does not condone drug use. . . . There is a consensus that decriminalization, by destigmatizing drug use, will bring a higher proportion of users into treatment, thereby increasing the need for treatment.[21]

Put another way, Portuguese decriminalization was never seen as a concession to the inevitability of drug abuse. To the contrary, it was, and is, seen as the most effective government policy for reducing addiction and its accompanying harms. For that reason, the *National Plan against Drugs and Drug Addictions for 2005–2012* (prepared in 2004) centers on ongoing strategies for prevention, demand reduction, and harm-reduction, as well as maximizing treatment resources and availability for those who seek it.

Portuguese decriminalization was never seen as a concession to the inevitability of drug abuse.

The Institute on Drugs and Drug Addiction remains the leading agency in Portugal for overseeing drug policy. It continues to define its core mission, and the core purpose of the decriminalization law, as follows:

> This law reinforces the resources in the context of demand reduction by sending to treatment drug addicts and [includes] those that are not addicts but need a specialized intervention. With this Law, we expect to contribute to the resolution of the problem in an integrated and constructive way, looking at the drug addict as a sick person, who nevertheless must be responsible for a behavior that is still considered an offense in Portugal.[22]

As the institute puts it, "Demand reduction is clearly IDT's central task."[23]

Portugal Viewed in the Context of the European Union

Although there is still wide variance in drug policy among the EU states, there are certain clear trends that have emerged in the EU generally, particularly with regard to how the law ought to deal with personal drug consumption. Although many EU states continue to emphasize criminal aspects in dealing with drug users, many states are increasingly moving toward a health-based approach, viewing personal drug usage as a health problem rather than a criminal one.

Danilo Balotta, the institutional coordinator for the EMCDDA, uses the French term "healthification" to describe the clear trend in the EU's consensus approach to drug policy. Specifically with regard to cannabis, a de facto move away from criminalization is virtually unanimous. The EMCDDA's 2007 annual report put it this way: "A general trend in Europe has been to move away from criminal justice responses to the possession and use of small amounts of cannabis and towards approaches oriented towards prevention or treatment."[24] An excerpt from the EMCDDA's 2005 paper, *Illicit Drug Use in the EU: Legislative Approaches,* observes:

> In the EU Member States, notwithstanding different positions and attitudes, we can see a trend to conceive the illicit use of drugs (including its preparatory acts) as a relatively "minor" offence, to which it is not adequate to apply "sanctions involving deprivation of liberty."[25]

Despite this, the agency warns that "it would be a mistake to define [these changes] as a trend in a 'relaxation' or a 'softening' of the drug laws in Europe."[26] Even where there is a strong de-emphasis on incarceration and other criminal sanctions for drug use, the aim in most EU countries is merely to formulate more efficient and proportionate sanctions—not legalize drug use.

The ongoing generalized belief in criminalization notwithstanding, all EU states have agreed within the last several years to broad principles for formulating drug policy. The EMCDDA refers to this consensus as GBE: a global, balanced, evidence-based ap-

proach to drug policy. In this formulation, "global" designates an acknowledgment that all aspects of drug policy—prevention and anti-trafficking efforts—require international efforts. "Balanced" requires a sense of both proportion and a roughly equal emphasis on supply reduction and demand reduction. "Evidence-based" requires that all policy judgments be grounded in data and exclude moral and ideological considerations.

This trend is evident not only in the slow de facto movement away from criminalization of small amounts of cannabis, but also in the increasing acceptance across the EU of even more controversial "harm reduction" policies. As EMCDDA's 2007 annual report documented:

> Historically, the topic of harm reduction has been more controversial. This is changing, and harm reduction as a part of a comprehensive package of demand reduction measures now appears to have become a more explicit part of the European approach. This is evident in the fact that both opioid substitution treatment and needle and syringe exchange programmes are now found in virtually all EU Member States. . . .[27]

In 10 years, the availability of harm-reduction measures, such as opioid substitution treatment, has increased tenfold across the EU.[28]

As noted above, other EU nations have adopted what amounts to de facto decriminalization, but have not explicitly declared drug usage "decriminalized." In Spain, for instance, "a drug consumer will still be judged by a criminal court, although he or she will never be sent to prison for drug consumption alone."[29] Moreover, a gap in Spain's drug laws exists whereby *public* drug consumption is prohibited, but *private* drug usage is not, and Spanish legislatures have left this gap standing.

Other forms of de facto decriminalization have occurred in Germany, where a court ruled that imprisonment for petty drug possession offenses implicates constitutional concerns, and in Luxembourg, which only permits punishment by a fine for cannabis usage. Nonetheless, Portugal remains the only EU state to decriminalize explicitly, and the criminalization framework continues to predominate in the EU for most drug offenses.

Effects of Portuguese Decriminalization

Since Portugal enacted its decriminalization scheme in 2001, drug usage in many categories has actually *decreased* when measured in absolute terms, whereas usage in other categories has increased only slightly or mildly. None of the parade of horrors that decriminalization opponents in Portugal predicted, and that decriminalization opponents around the world typically invoke, has come to pass. In many cases, precisely the opposite has happened, as usage has declined in many key categories and drug-related social ills have been far more contained in a decriminalized regime.

The true effects of Portuguese decriminalization can be understood only by comparing postdecriminalization usage and trends in Portugal with other EU states, as well as with non-EU states (such as the United States, Canada, and Australia) that continue to criminalize drugs even for personal usage. And in virtually every category of any significance, Portugal, since decriminalization, has outperformed the vast majority of other states that continue to adhere to a criminalization regime.

Effects Viewed in Absolute Terms

Usage Rates. Since decriminalization, lifetime prevalence rates (which measure how many people have consumed a particular drug or drugs over the course of their lifetime) in Portugal have *decreased* for various age groups. For students in the 7th–9th grades (13–15 years old), the rate decreased from 14.1 percent in 2001 to 10.6 percent in 2006.[30] For those in the 10th–12th grades (16–18 years old), the lifetime prevalence rate, which increased from 14.1 percent in 1995 to 27.6 percent in 2001, the year of decriminalization,

Prevalence rates for the 15–19 age group have actually decreased in absolute terms since decriminalization.

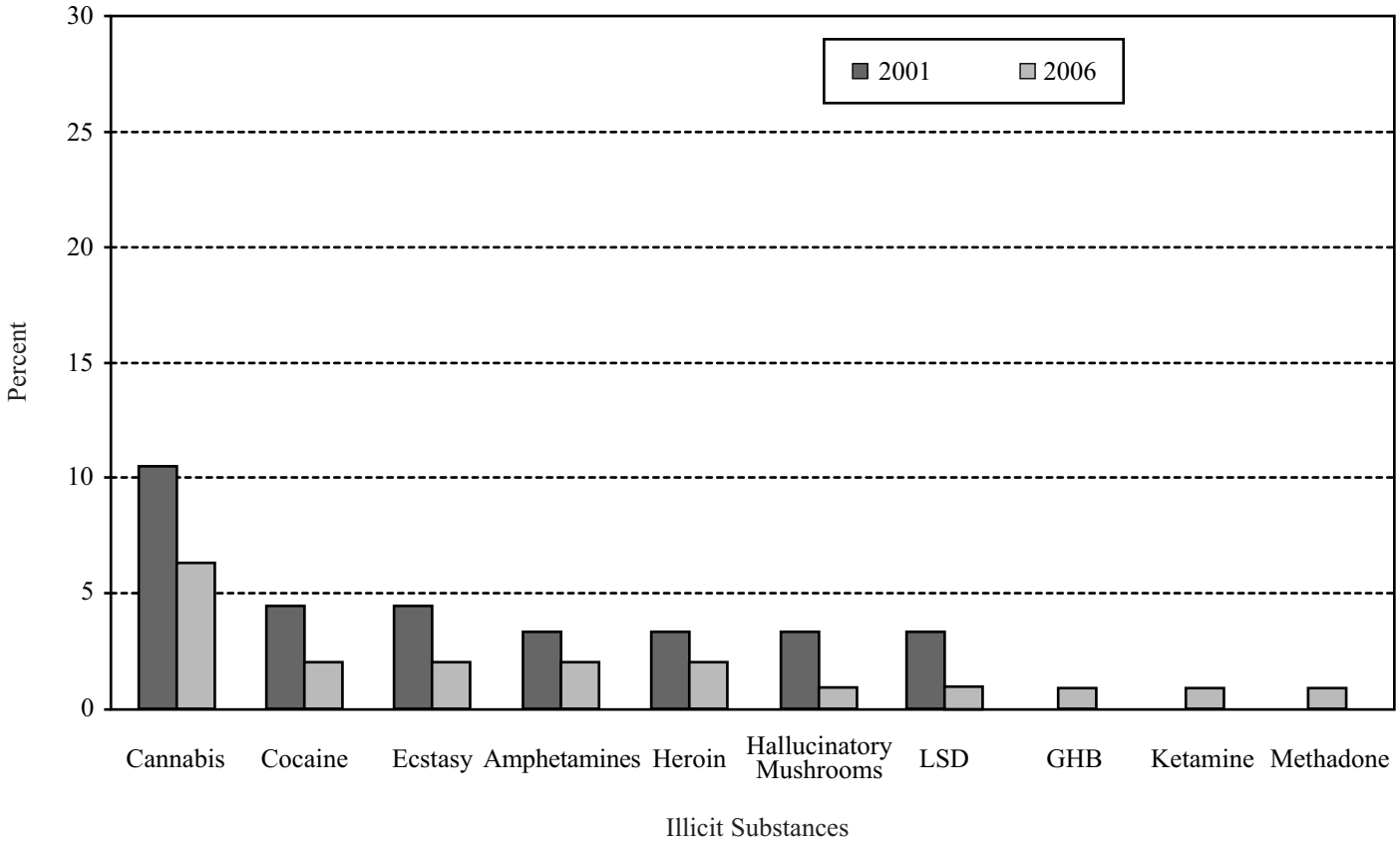
has decreased subsequent to decriminalization, to 21.6 percent in 2006.[31] For the same groups, prevalence rates for psychoactive substances have also decreased subsequent to decriminalization.[32]

In fact, for those two critical groups of youth (13–15 years and 16–18 years), prevalence rates have declined for virtually every substance since decriminalization (see Figures 4 and 5).[33]

For some older age groups (beginning with 19- to 24-year-olds), there has been a slight to mild increase in drug usage, generally from 2001 to 2006, including a small rise in the use of psychoactive substances for the 15–24 age group,[34] and a more substantial increase in the same age group for illicit substances generally.[35] For other age groups of older citizens, increases in lifetime prevalence rates for drugs generally have ranged from slight to mild. Such an increase in lifetime prevalence rates for the general population is virtually inevitable in every nation, *regardless of drug policy and regardless of whether there is even an actual increase in drug usage*. The IDT's Goulão explained why:

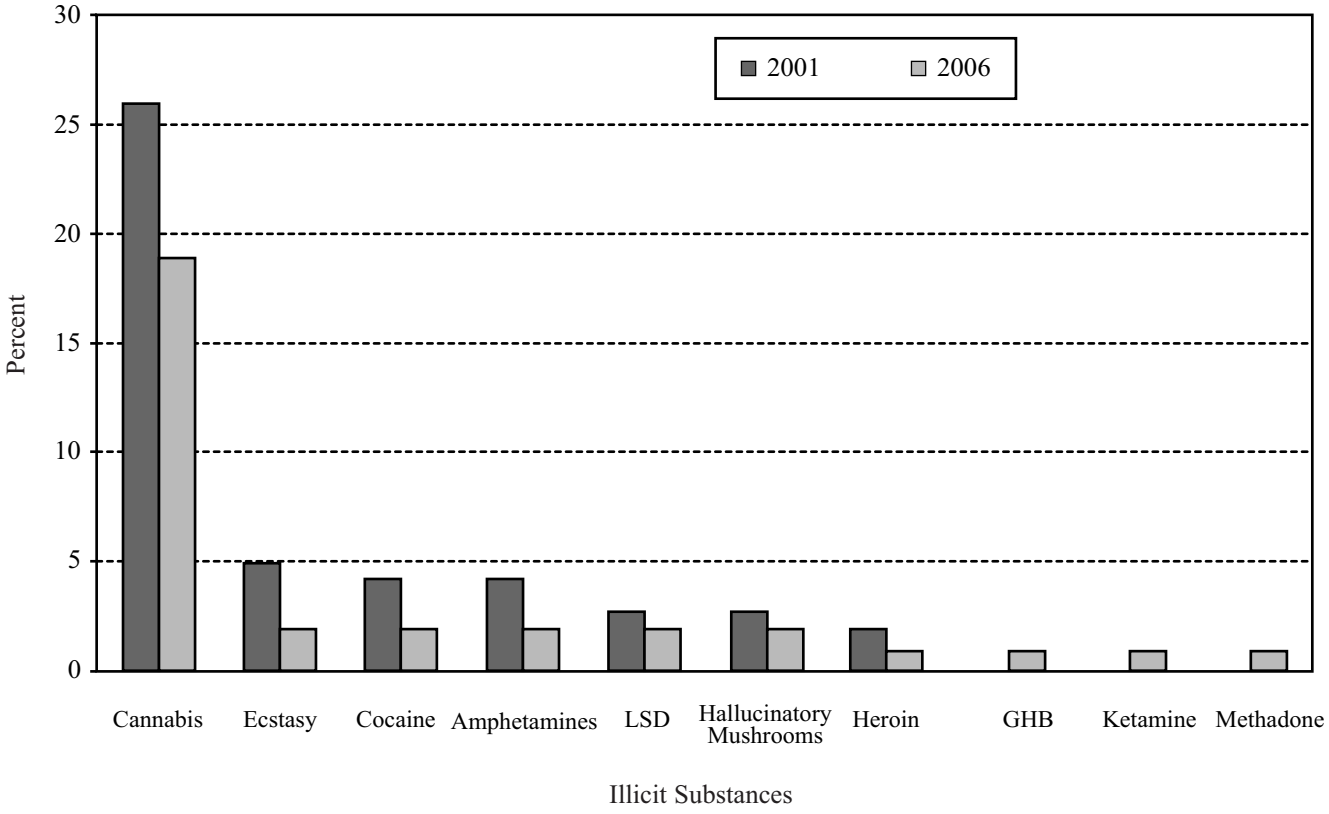
> This is an expected result, even when there is not an increase in drug use, because of the cohort effect (in the sample, from one study to the other, older people that never try drugs are replaced for a new generation among whom a significant percentage already had that experience).[36]

Figure 4
National Investigation in School Environment, 2001 and 2006, 3rd Cycle (7th, 8th, and 9th years), Portugal, Prevalence Over Entire Life



Source: Instituto da Droga e da Toxicodependência de Portugal, Draft 2007 Annual Report, slide 13.

Figure 5
National Investigation in School Environment, 2001 and 2006, Secondary (10th, 11th, and 12th years), Portugal, Prevalence Over Entire Life



Source: Instituto da Droga e da Toxicodependência de Portugal, Draft 2007 Annual Report, slide 14.

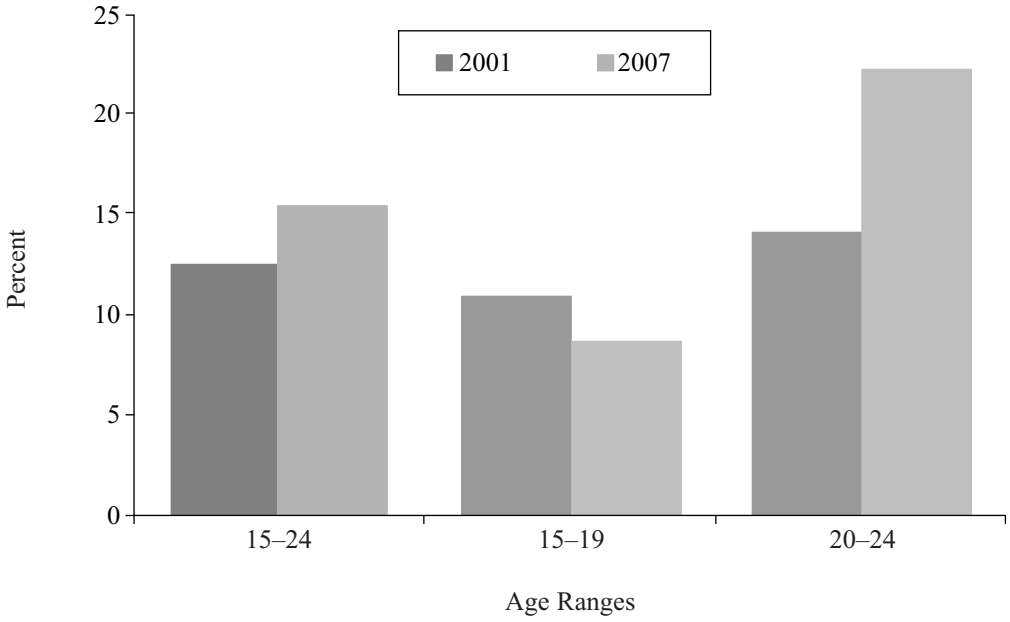
When it comes to assessing the long-term effects of drug policy and treatment approaches, Portuguese drug policy specialists, like policy specialists in most countries, consider the adolescent and postadolescent age groups (15–24) to be the most significant. The behavior of those younger age groups is widely considered by drug policymakers around the world to be the most malleable, and trends that appear during those years are far and away the most potent harbingers for long-term behavioral changes. The University of Michigan's Lloyd Johnston, the principal researcher behind a 2003 study revealing some increasing trends in the drug usage rates among American youth, put it this way:

> The 8th-graders have been harbingers of change observed later in the upper grades, so the fact that they are no longer showing declines in their use of a number of drugs could mean that the declines now being observed in the upper grades also will come to an end soon.[37]

A 2008 study of drug usage trends in 17 nations on five different continents similarly found that the late adolescent years are key in determining future, lifelong drug usage:

> In most countries, the period of risk for initiation of use was *heavily concen-*

Figure 6
Portugal, 2001 and 2007, General Population (15–24 years old), Lifetime Prevalence (any illicit drug)



Source: Instituto da Droga e da Toxicodependência de Portugal, Draft 2007 Annual Report, slide 8.

> *trated in the period from the mid to late teenage years*; there was a slightly older and more extended period of risk for illegal drugs compared to legal drugs.[38]

As one would expect, then, Portuguese officials emphasize the dramatic trends seen in these younger groups since the decriminalization law was enacted. Prevalence rates for the 15–24 age group have increased only very slightly, whereas the rates for the critical 15–19 age group—critical because such a substantial number of young citizens begin drug usage during these years—have actually *decreased in absolute terms since decriminalization* (see Figure 6).[39]

In almost every category of drug, and for drug usage overall, the lifetime prevalence rates in the predecriminalization era of the 1990s were higher than the postdecriminalization rates.

Perhaps most strikingly, while prevalence rates for the period from 1999 to 2005, for the 16–18 age group, increased somewhat for cannabis (9.4 to 15.1 percent) and for drugs generally (12.3 to 17.7 percent), the prevalence rate decreased during that same period for heroin (2.5 to 1.8 percent),[40] the substance that Portuguese drug officials believed was far and away the most socially destructive:

> At the time of introducing decriminalization the Portuguese drug problem was notable due to a high level of problematic drug use and drug-related problems. This was associated primarily with use of heroin, with a particular problem of injecting drug use and the related risks of HIV/AIDS and viral hepatitis.[41]

These postdecriminalization decreases were preceded by significant increases in drug-related problems in Portugal in the 1990s. Throughout the 1990s, the number of arrests for drug offenses generally, and heroin use specifically, rose steadily.[42] By 1998, more than 60 percent of drug-related arrests were for use or possession, rather than for sale or possession to sell. The amount of drugs seized during that decade rose significantly as well.[43]

In almost every category of drug, and for

drug usage overall, the lifetime prevalence rates in the predecriminalization era of the 1990s were *higher* than the postdecriminalization rates.[44] Moreover, the level of drug trafficking, as measured by the numbers of those convicted of that offense, has steadily declined since 2001 as well (see Figure 7).[45]

Drug-Related Phenomena. As predicted, and desired, when Portugal enacted decriminalization, treatment programs—both in terms of funding levels and the willingness of the population to seek them—have improved substantially.[46] That, in turn, has enhanced the ability of local and state government officials to provide disease-avoiding services to the population:

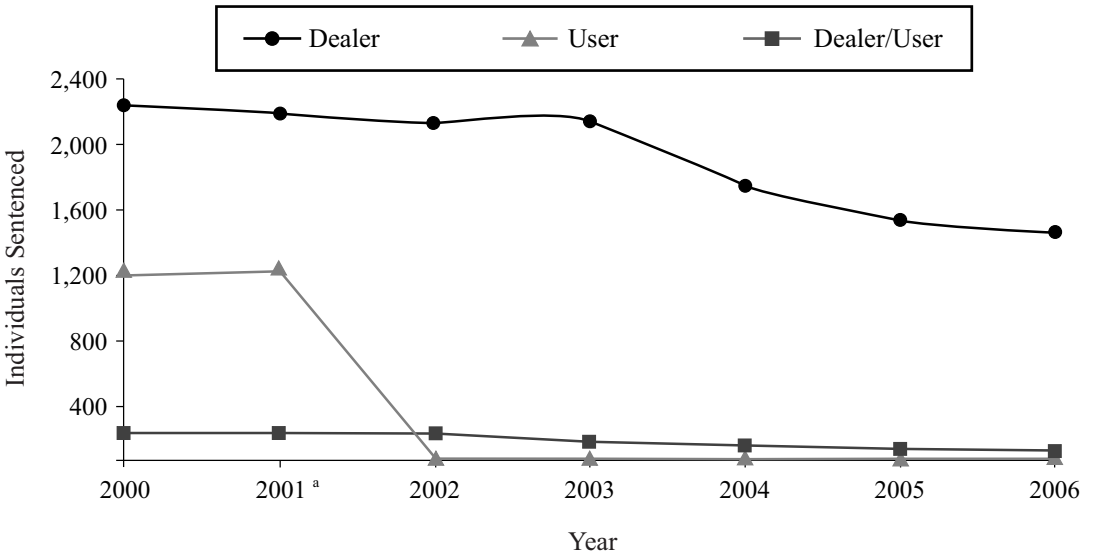
> The number of people in substitution treatment leapt from 6,040 in 1999 to 14,877 in 2003, an increase of 147% . . . . The number of places in detoxification, therapeutic communities and half-way houses has also increased. . . . The national strategy has led directly to increases in the scale of treatment and prevention activities in Portugal.[47]

While proponents of criminalization sometimes depict an increase in the number of individuals seeking treatment as indicative of worsening drug problems, empirical evidence suggests that the opposite is almost certainly true. Between (a) addicts who are afraid to seek treatment due to fear of criminal penalties and (b) addicts who freely seek treatment in a decriminalized framework, the latter option is clearly preferable, as such increased treatment decreases the amount of addiction and, as important, enables the management and diminution of drug-related harms. For precisely that reason, as treatment enrollment has increased in the postdecriminalized setting, drug-related harms have decreased substantially.

According to the 2006 report of the Institute on Drugs and Drug Addiction of the Portuguese Health Ministry, "Available indicators continue to suggest effective responses at

The number of newly reported cases of HIV and AIDS among drug addicts has declined substantially every year since 2001.

Figure 7
Individuals Sentenced by Year, and by Drug-Related Status



Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), "The National Situation Relating to Drugs and Dependency," 2006 Annual Report (2007), p. 53.
[a]With the entry into effect, starting July 1, 2001, of Law no. 30/2000 of November 29, the use of illegal drugs was decriminalized and became a misdemeanor. However, growing drugs—as provided under Article 40 of Legislative Decree no. 15/93 of January 22—continues to be considered a felony.

Drug-related mortality rates have decreased as well.

treatment level . . . and [at] the harm reduction level."[48] Moreover, the percentage of drug users among newly infected HIV-positive individuals continues to decline.[49] Since 2004, general infection rates for HIV have remained stable—a positive trend, which, according to the 2006 report,

> may be related . . . to the implementation of harm reduction measures, which may be leading to a decrease in intravenous drug use . . . or to intravenous drug use in better sanitary conditions, as indicated by the number of exchanged syringes in the National Programme "Say no to a second hand syringe."[50]

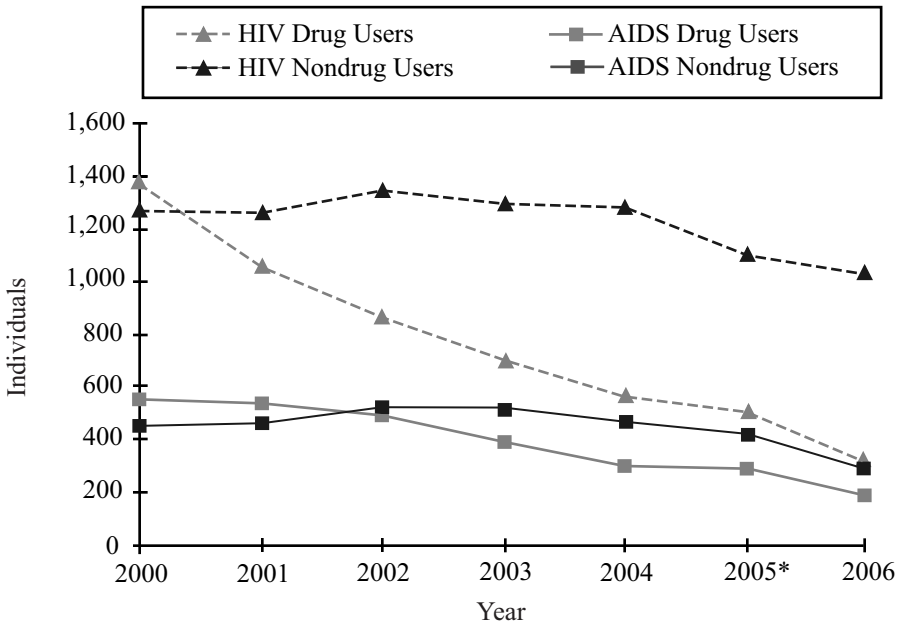
Most significant, the number of newly reported cases of HIV and AIDS among drug addicts has declined substantially every year since 2001 (see Figure 8).[51]

The percentage of newly diagnosed HIV and AIDS patients who are drug addicts has steadily decreased over the same time (see Figure 9).[52]

Likely for the same reasons, there has been, since 2000, a mild decrease in the rates of new hepatitis B and C infections nationwide,[53] all of which are attributed by analysts to the enhanced treatment programs enabled by decriminalization:

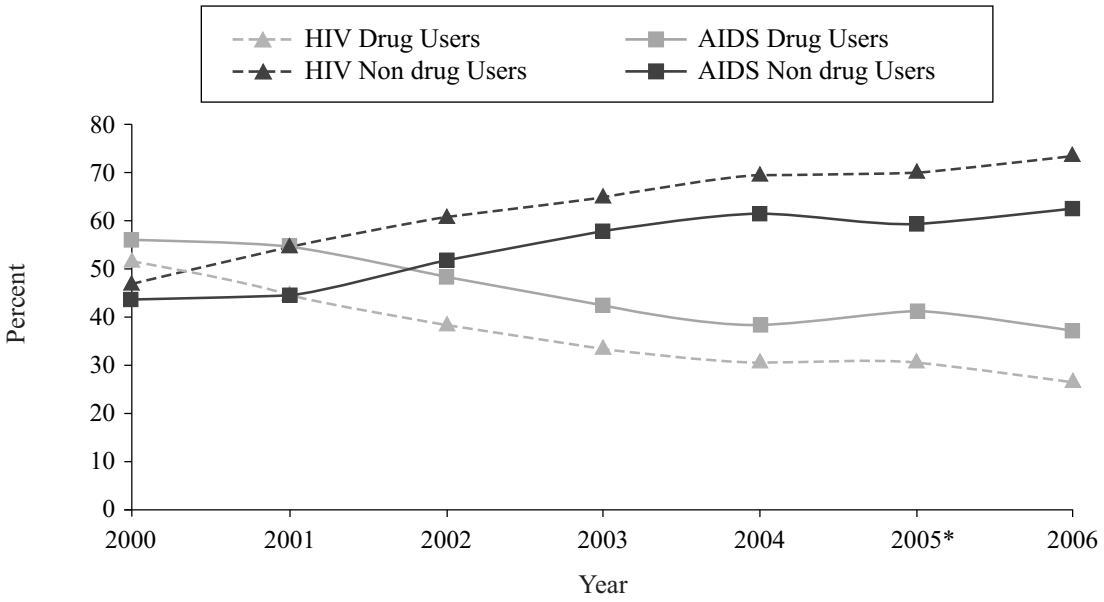
> With its relatively high rates of heroin use by injection, Portugal has had a serious problem with the transmission of HIV and other blood-borne viruses. For example, in 1999 Portugal had the highest rate of HIV amongst injecting drug users in the European Union . . . . This is a major target of a public health approach to drug use, with opiate substi-

Figure 8
HIV/AIDS Notifications: Drug Users and Nondrug Users, by Year of Diagnosis



Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), "The National Situation Relating to Drugs and Dependency," 2006 Annual Report (2007), p. 26.
*Infection by HIV was integrated into the list of diseases of mandatory declaration.

Figure 9
HIV/AIDS Notifications, Percent Drug Users and Nondrug Users, by Year of Diagnosis



Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), "The National Situation relating to Drugs and Dependency," 2006 Annual Report (2007), p. 26.
*Infection by HIV was integrated into the list of diseases of mandatory declaration.

tution treatment and needle exchange being an important element of the Portuguese response. *Between 1999 and 2003, there was a 17% reduction in the notifications of new, drug-related cases of HIV . . . . There were also reductions in the numbers of tracked cases of Hepatitis C and B in treatment centres*, despite the increasing numbers of people in treatment.[54]

Beyond disease, drug-related mortality rates have decreased as well. Although the number of toxicological exams undertaken as part of postmortem investigations has increased substantially every year since 2002, the number of positive results is far lower than the levels during 2000 and 2001 (see Figure 10).[55]

In 2001, for instance, 280 toxicological tests found a positive result (out of 1,259 tests undertaken). In 2006, the number of positive results was only 216 (out of a much higher 2,308 tests undertaken).

In absolute numbers, drug-related deaths from 2002 to 2006 for every prohibited substance have either declined significantly or remained constant compared with 2001. In 2000, for instance, the number of deaths from opiates (including heroin) was 281. That number has decreased steadily since decriminalization, to 133 in 2006 (see Figure 11).[56]

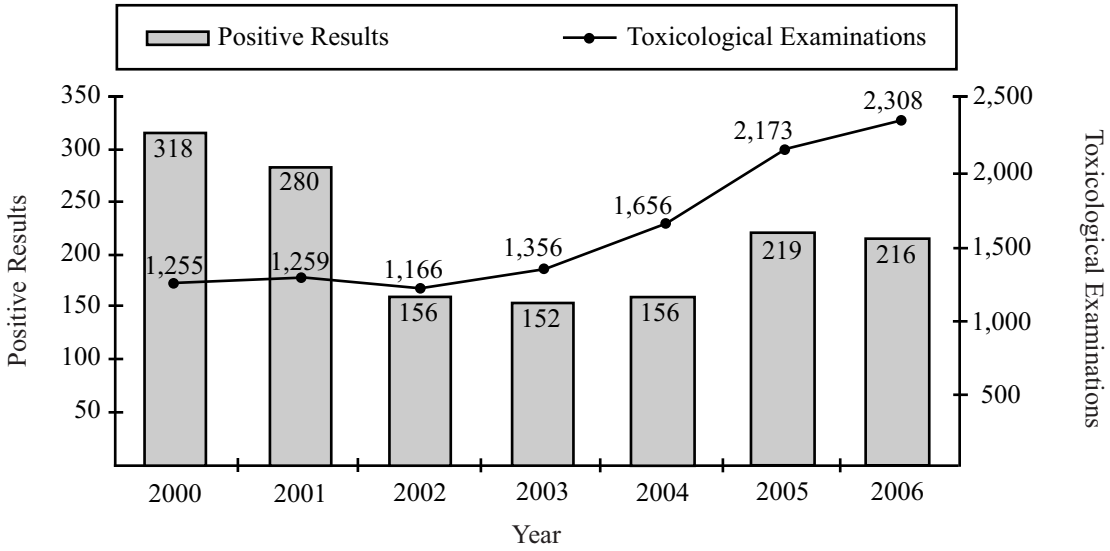
As is true for drug usage rates, these post-decriminalization decreases were preceded by significant increases in drug-related problems in Portugal throughout the 1990s. Throughout the predecriminalization 1990s, the number of acute drug-related deaths increased every year, increasing more than tenfold from 1989 to 1999, reaching a total of almost 400 by 1999 (see Figures 12 and 13).[57]

The total number of drug-related deaths has actually *decreased* from the predecriminalization year of 1999 (when it totaled close to 400) to 2006 (when the total was 290).

Like drug-related deaths, predecriminalization drug-related AIDS cases skyrocketed throughout the 1990s,[58] while the prevalence

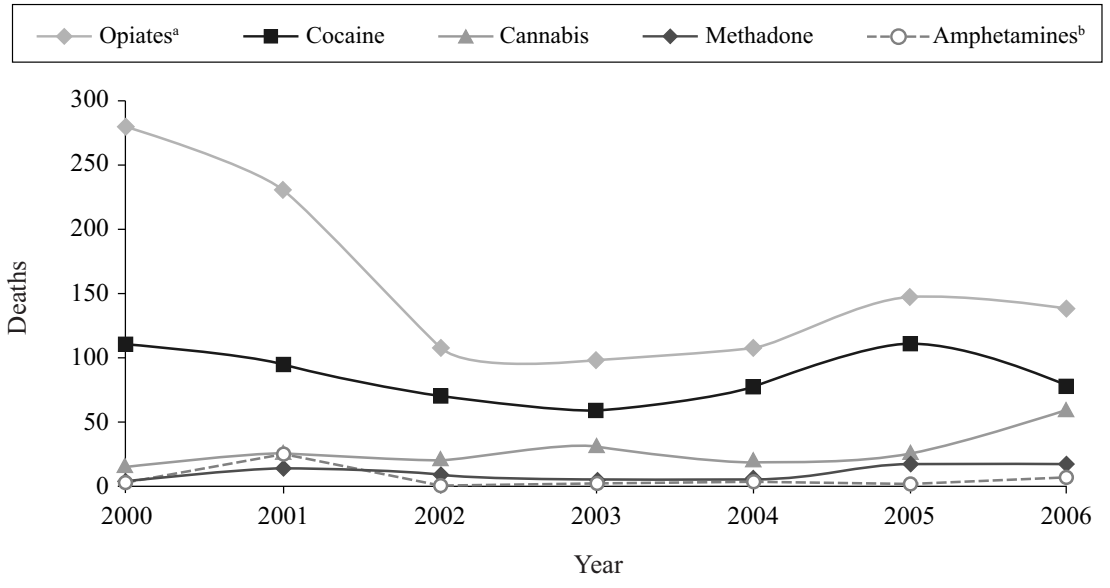
The total number of drug-related deaths has actually *decreased* from the predecriminalization year of 1999 (when it totaled close to 400) to 2006 (when the total was 290).

Figure 10
Toxicological Examinations and Positive Results, by Year



Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), "The National Situation Relating to Drugs and Dependency," 2006 Annual Report (2007), p. 30.

Figure 11
Deaths,* by Year, by Substance



Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), "The National Situation Relating to Drugs and Dependency," 2006 Annual Report (2007), p. 31.
*Cases of death with positive results in toxicological exams of drugs or narcotics conducted in the National Institute of Legal Medicine.
[a]Includes heroine, morphine, and codeine.
[b]Includes amphetamines, methamphetamines, MDA, and MDMA.

rates for HIV and hepatitis were far higher.[59] Thus, even in those drug-related categories that have worsened in absolute terms since decriminalization, those categories compare quite favorably with predecriminalization trends in the 1990s.

Although education and awareness efforts in the 1990s began to stem the tide of HIV infection and those of other sexually transmitted diseases even before decriminalization, these trends, as demonstrated above, accelerated even more favorably postdecriminalization. Researchers who interviewed numerous drug policymakers in Europe generally and Portugal specifically found unanimity in support of the view that these positive trends were due to decriminalization, and specifically to Portugal's ability to provide more extensive and effective treatment and education programs:

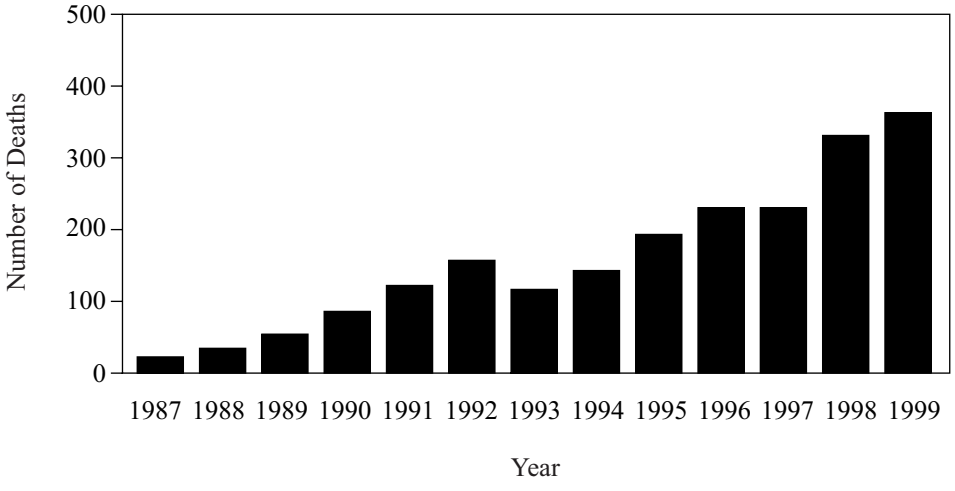
> All the interviewees agreed that decriminalization has been beneficial for existing drug users, principally because decriminalization has resulted in earlier intervention and the provision of more therapeutic and targeted responses to both drug and drug-related problems. Through providing problematic drug users with a better system of detection and referral to treatment, the [Dissuasion Commissions] increase the ability to address the causes of and harms from problematic drug use.[60]

Decriminalization Effects Viewed in Context of Trends in the European Union

Beyond comparing postdecriminalization trends in Portugal with predecriminalization trends, the effects of Portuguese decriminalization should be assessed in the context of trends in Europe generally during the same period. There is, however, a serious difficulty in undertaking such a comparison. Although the EMCDDA is tasked with coordinating the compilation of uniform drug statistics among EU states, its lack of compulsory authority, as well as the lack of resources in many EU states, means that there is very little real reporting uniformity. Many EU states, particularly the poorer ones, often allow many years to elapse before undertaking

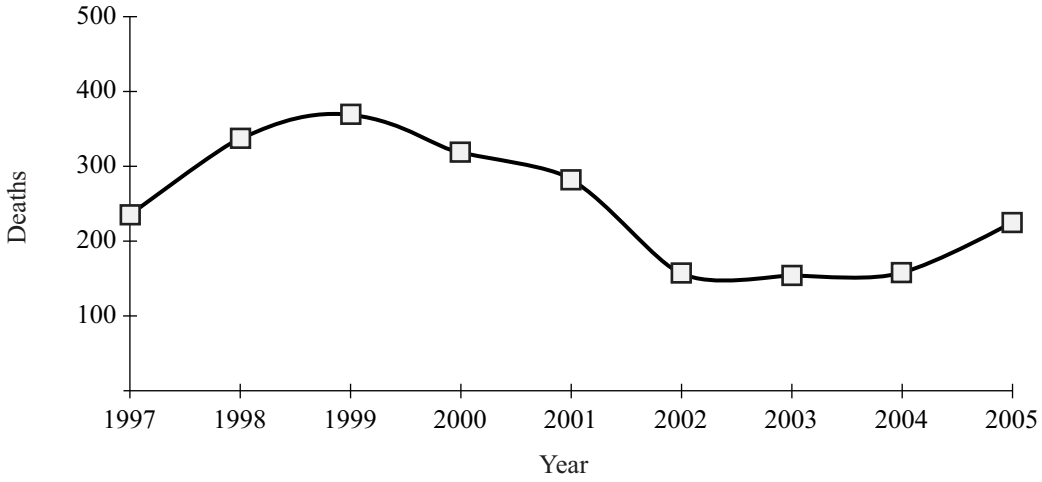
The effects of Portuguese decriminalization should be assessed in the context of trends in Europe generally during the same period.

Figure 12
Number of Acute Drug-Related Deaths, 1987–1999



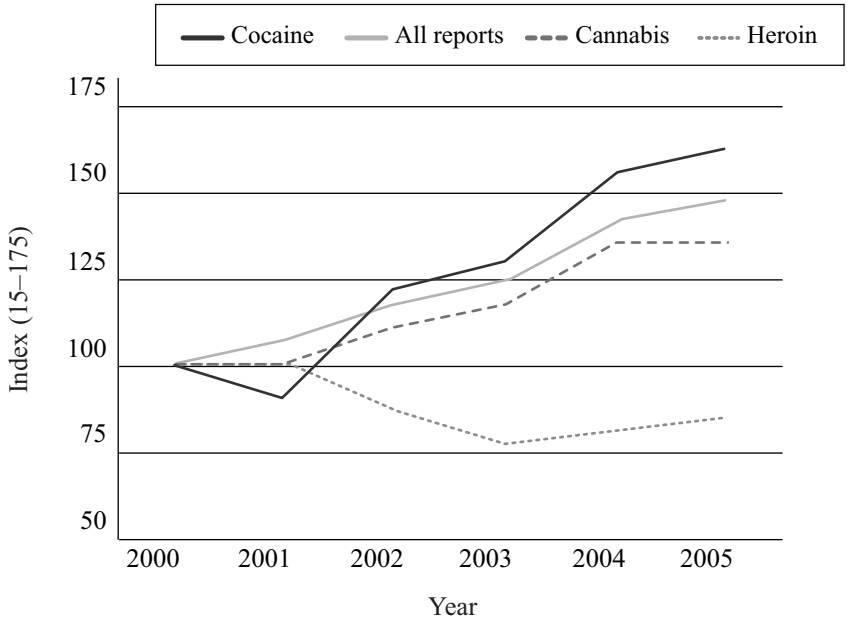
Source: Mirjam van het Loo, Ineke van Beusekom, and James P. Kahan, "Decriminalization of Drug Use in Portugal: The Development of a Policy," *Annals of the American Academy of Political and Social Science* 582, Cross-National Drug Policy (July 2002): 53.

Figure 13
Deaths,* According to Year



Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), "The National Situation Relating to Drugs and Dependency," 2005 Annual Report (2006), p. 71.
*Cases of death with positive results in drug toxicological exams conducted in the National Institute of Legal Medicine.

Figure 14
Indexed Trends in Reports for Drug Law Offenses in EU Member States, 2000–2005



Source: European Monitoring Center for Drugs and Drug Addiction, "The State of the Drug Problem in Europe," Annual Report (2007), p. 25.

comprehensive drug-related surveys, and even those states that report more regularly often measure metrics that are slightly different—when compared with both prior metrics they surveyed and the metrics surveyed by other EU states.

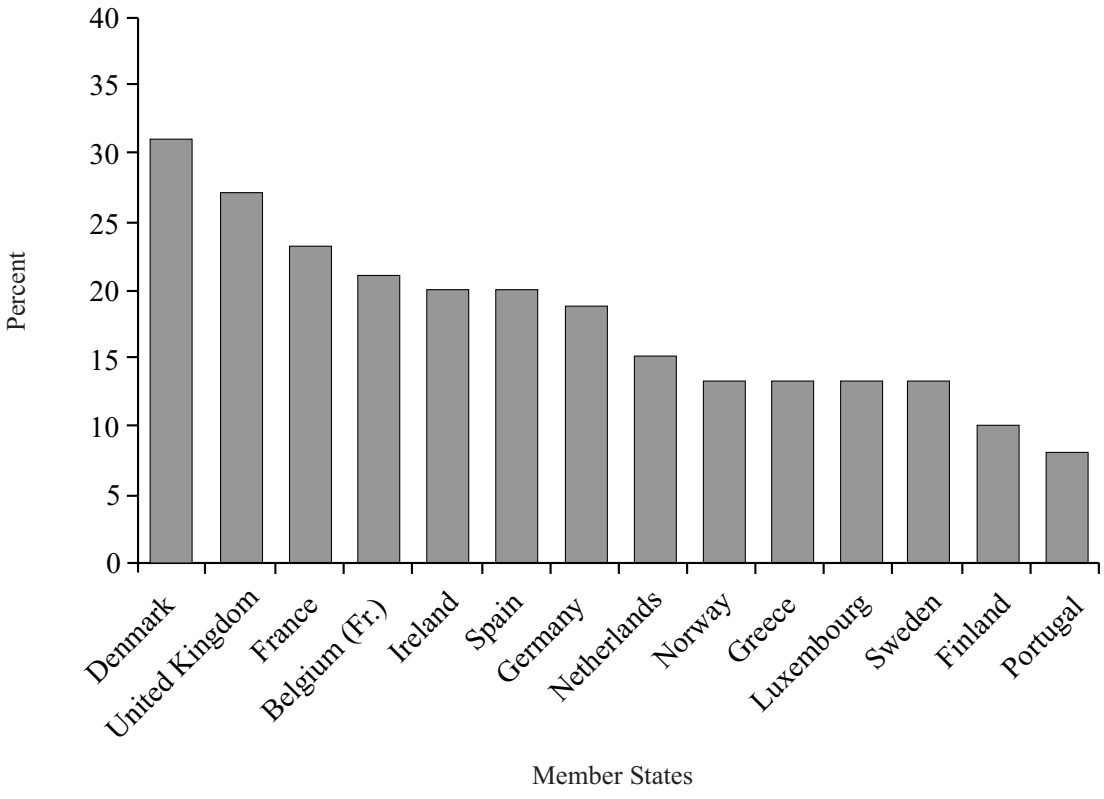
Despite these difficulties, some meaningful comparisons can still be made. Drug statistics rarely change radically from one year to the next. Thus, comparisons between EU states of metrics such as prevalence rates and drug-related social problems can still be useful even if they are taken from different years or measuring population clusters that are defined slightly differently. Comparisons with slightly different statistics lack mathematical exactitude, but they still afford substantial analytical utility.

Across EU states, according to the EMCDDA's 2007 annual report ("The State of the Drug Problem in Europe"), "drug use in general remains at historically high levels, but it has stabilised in most areas, and in some areas there are even signs that merit cautious optimism."[61] That EU trend of historically high usage rates can be seen for cannabis and cocaine, the two most widely used drugs in the EU, respectively (followed far behind by ecstasy and amphetamines; usage of crack cocaine remains negligible in the EU).[62] Across the EU, the number of drug offenses in absolute terms has risen steadily since 2000 (see Figure 14).[63]

For cannabis usage, "current levels are by historical standards very high" ("although only a relatively small proportion of cannabis users are using the drug on a regular and

Despite difficulties, some meaningful comparisons can still be made.

Figure 15
European Union (2001–2005), General Population (15–64 Years), Cannabis, Prevalence over Entire Life



Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), Draft 2007 Annual Report, slide 9.

The majority of EU states have rates that are *double and triple* the rate for post-decriminalization Portugal.

intensive basis").[64] For cocaine, it is estimated that in 2007, 4.5 million Europeans used it, up from 3.5 million the year before.[65] All metrics point to an "upward trend" in cocaine usage across the EU.[66]

In the context of these EU-wide trends, usage rates in postdecriminalization Portugal are notably low. Indeed, as a 2006 report on Portuguese drug policy concluded, five years after decriminalization, "The prevalence of drugs in Portugal, both in general and the school populations, is *below EU average*."[67]

For the period 2001–2005, Portugal—for the 15–64 age group—has the absolute lowest lifetime prevalence rate for cannabis, the most used drug in the EU. Indeed, the majority of EU states have rates that are *double and triple* the rate for postdecriminalization Portugal (see Figures 15 and 16).[68]

Similarly, for usage rates of cocaine (the second-most commonly used drug in Europe) for the same period and the same age group, only five countries had a lower prevalence rate than the Portuguese rate. Most EU states have double, triple, quadruple, or even higher rates than Portugal's, including some with the harshest criminalization schemes in the EU (see Figure 17).[69]

Indeed, subsequent to decriminalization in Portugal, for almost every narcotic, the lifetime prevalence rates—the percentage of adults who will use a particular drug over the course of their lifetime—is far lower in Portugal than in Europe generally. For cannabis, compare the 2006 lifetime prevalence rate for Portugal (8.2 percent)[70] with the rate in Europe generally (25 percent).[71] Indeed, the 8.2 percent *lifetime* prevalence rate in Portugal (meaning 8.2 percent of Portuguese citizens in the studied age range consumed cannabis at least once in their life) is almost the equivalent of the prevalence rate for EU states *just from the last year alone* (7.1 percent) (meaning that 7.1 percent of EU citizens have consumed cannabis in the last year).[72]

Country-by-country prevalence rates in the EU for amphetamine[73] and ecstasy usage similarly show Portugal with among the lowest usage rates in the EU (compare, for instance, Portugal's ecstasy prevalence rate [1.6 percent] with the higher rates in virtually every EU country).[74] One finds the same conclusions for the EU country-by-country prevalence rate for heroin and injection usage (compare the 2006 prevalence rate for students for heroin use in Portugal of 2.6 percent[75] with the several EU countries with substantially higher rates; see Figure 18).[76]

For cocaine, the lifetime prevalence rate for the student age group in Portugal is 1.6 percent whereas for Europe generally, it is substantially higher—4 percent.[77] As the EMCDDA reported in its 2007 report, "Based on recent national population surveys in the EU and Norway, it is estimated that cocaine has been used at least once . . . by more than 12 million Europeans, representing almost 4 percent of all adults."[78]

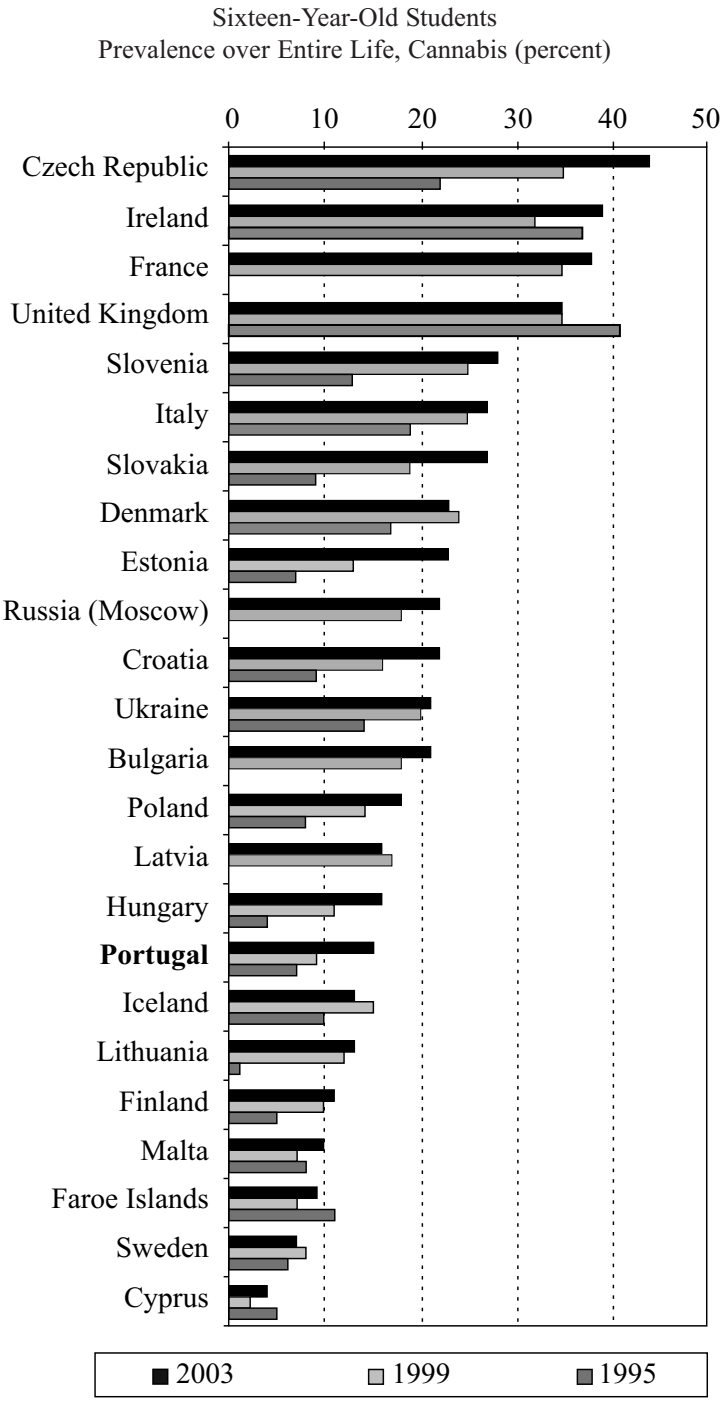
Again, postdecriminalization, Portugal—with 1.6 percent—is near the bottom of prevalence rates, whereas across the EU, "national figures on reported lifetime use range from 0.2 percent to 7.3 percent, with three countries reporting values of more than 5 percent (Spain, Italy, the United Kingdom)."[79] For cocaine usage, Europe is generally experiencing an "overall increase in use."[80] Increases (in the 15–34 age group) can be seen in most EU states (see Figure 19).[81]

By and large, usage rates for each category of drugs continue to be lower in the EU than in non-EU states with a far more criminalized approach to drug usage:

> Estimated cannabis use is, on average, considerably lower in the European Union than in the USA, Canada or Australia. As regards stimulant drugs, levels of ecstasy use are broadly similar worldwide, although Australia reports high prevalence levels, and, in the case of amphetamine, prevalence is higher in Australia and the USA than in Europe and Canada. The prevalence of cocaine use is higher in the USA and Canada than in the European Union and Australia.[82]

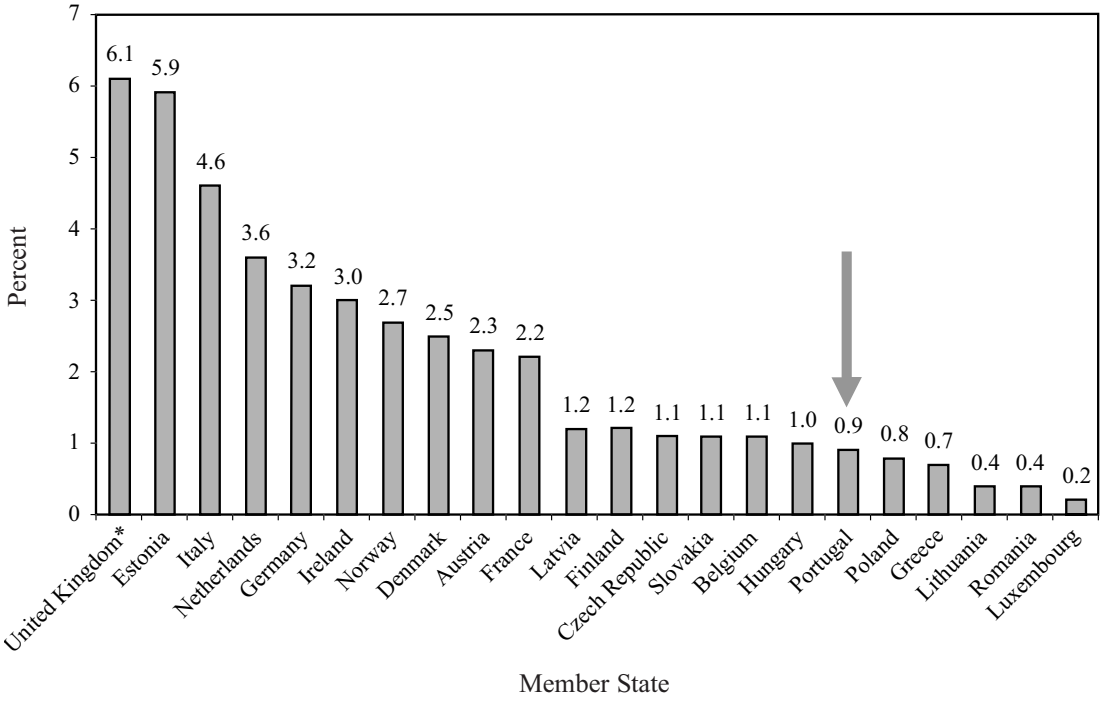
Indeed, a 2008 survey of drug usage among Americans found that the United States has the

Figure 16
European School Survey Project on Alcohol and Other Drugs



Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), "Os Adolescentes e a Droga" ("Adolescents and Drugs"), 2003, p. 6.

Figure 17
European Union (2001–2005), General Population (15–64 Years), Cocaine, Prevalence over Entire Life



Source: Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), Draft 2007 Annual Report, slide 10.
*Excludes Scotland and Northern Ireland.

highest level of illegal cocaine and cannabis use in the world. The findings were the result of surveys conducted in 17 countries, in the Americas (Colombia, Mexico, and the United States), Europe (Belgium, France, Germany, Italy, the Netherlands, Spain, and Ukraine), the Middle East and Africa (Israel, Lebanon, Nigeria, and South Africa), Asia (China and Japan), and Oceania (New Zealand).[83] As reported by *Science Daily* on July 1, 2008:

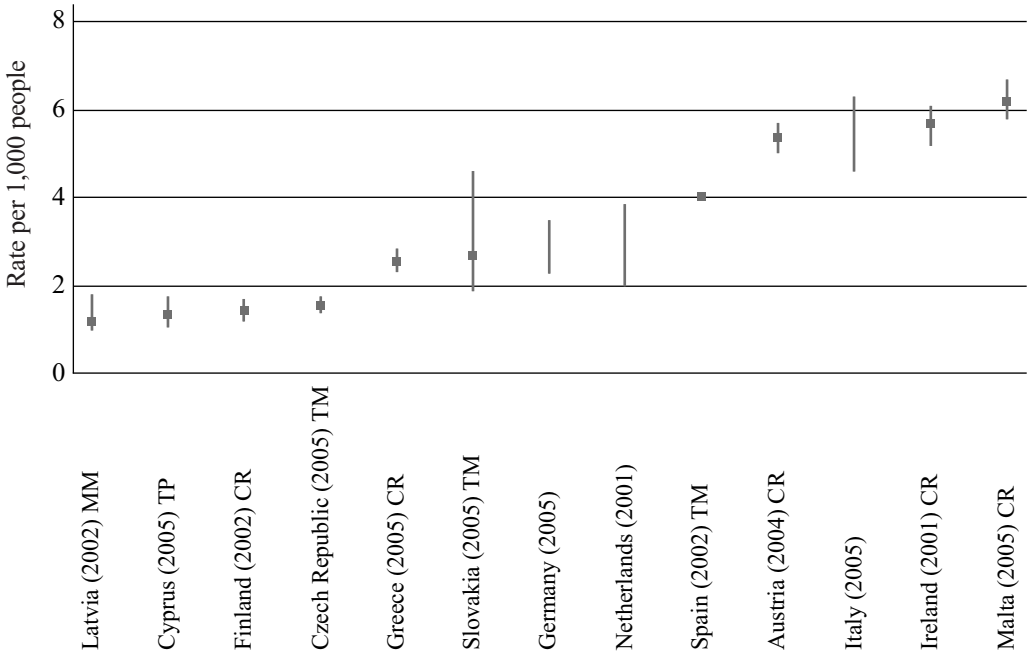
> A survey of 17 countries has found that despite its punitive drug policies the United States has the highest levels of illegal cocaine and cannabis use. The study, by Louisa Degenhardt (University of New South Wales, Sydney, Australia) and colleagues, is based on the World Health Organization's Composite International Diagnostic Interview (CIDI) and is published in this week's Plos Medicine.
>
> The authors found that 16.2% of people in the United States had used cocaine in their lifetime, a level much higher than any other country surveyed (the second highest level of cocaine use was in New Zealand, where 4.3% of people reported having used cocaine). Cannabis use was highest in the US (42.4%), followed by New Zealand (41.9%).[84]

By and large, usage rates for each category of drugs continue to be lower in the EU than in non-EU states with a far more criminalized approach to drug usage.

The prevalence rate for cocaine usage in the United States was so much higher than the other countries surveyed that the researchers formally characterized it as an "outlier":

> The US was an outlier in lifetime cocaine use, with 16% of respondents reporting that they had tried cocaine at least once compared to 4.0%–4.3% in Colombia, Mexico, Spain, and New Zealand, and

Figure 18
Estimates of the Prevalence of Problem Opioid Use, Ages 15–64, 2001–2005



Source: European Monitoring Centre for Drugs and Drug Addiction, "The State of the Drug Problem in Europe," 2007 Annual Report (2007), p. 65.
Note: The symbol indicates a point estimate; a bar indicates an estimation uncertainty interval, which can be either a 95% confidence interval or an interval based on sensitivity analysis. Target groups may vary slightly owing to different estimation methods and data sources; therefore, comparisons should be made with caution. Where no method is indicated, the line given represents an interval between the lowest lower bound of all existing estimates and the highest upper bound of them. Estimation methods: CR = capture–recapture; TM = treatment multiplier; TP = truncated Poisson; MM = mortality multiplier.

> extremely low proportions in countries in the Middle East, Africa, and Asia.[85]

The study also found that "the proportions of respondents who ever used cannabis were highest in the US (42%)."[86] The magnitude of the United States' drug usage rates compared with every other country surveyed is illustrated in Table 2, which shows the lifetime prevalence rates for cannabis and cocaine for each.

A similar table (Table 3), reflecting prevalence rates in each country among the nations' youth (15 years and younger and, separately, 21 years and younger), also reflects the vastly higher rates in the United States.

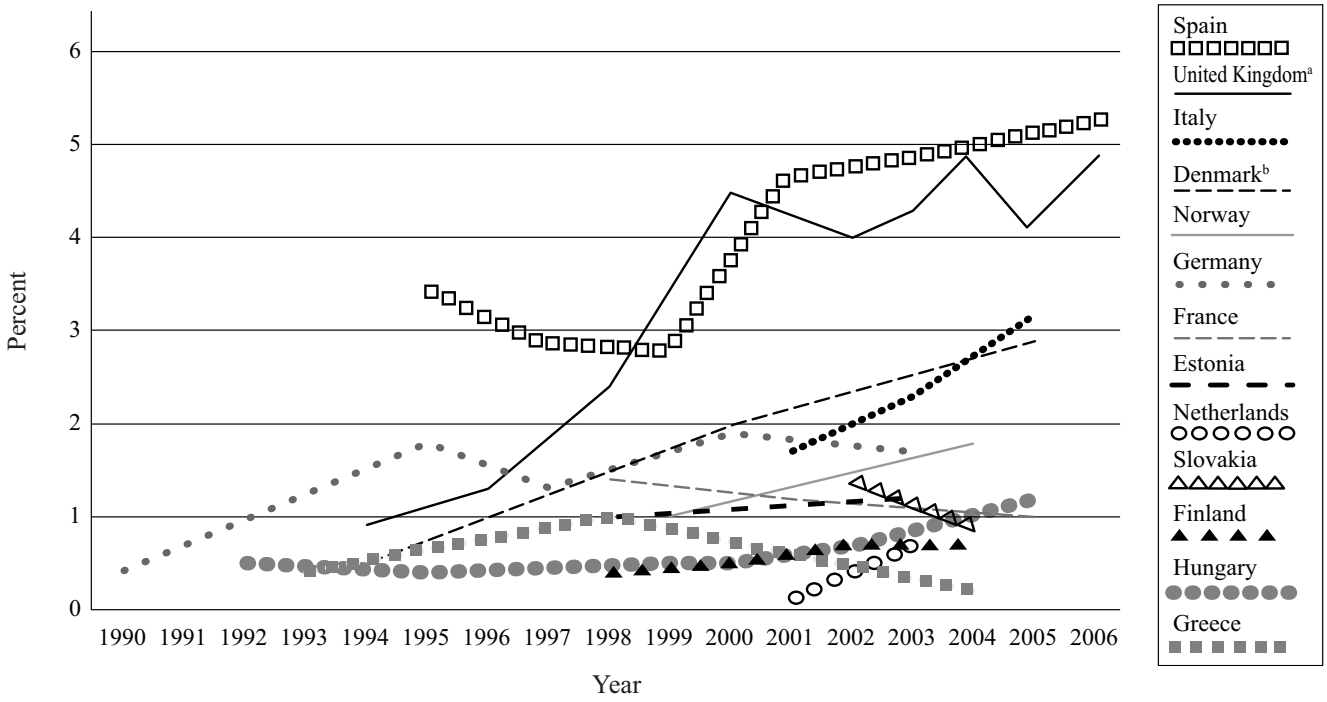
The report explicitly found that stringent criminalization laws do not produce lower drug usage, and that some data suggest the opposite may be true:

> Countries with more stringent policies towards illegal drug use did not have lower levels of such drug use than countries with more liberal policies. In the Netherlands, for example, which has more liberal policies than the US, 1.9% of people reported cocaine use and 19.8% reported cannabis use.[87]

A draft of this Cato report was submitted to several U.S. drug policy officials—in the U.S. Drug Enforcement Administration's headquarters, the DEA office in Madrid (which has jurisdictional responsibility for interacting

A 2008 survey of drug usage among Americans found that the United States has the highest level of illegal cocaine and cannabis use in the world.

Figure 19
Trends in Last Year Prevalence of Cocaine Use among Young Adults, Ages 15–34



Sources: European Monitoring Centre for Drugs and Drug Addiction, "The State of the Drug Problem in Europe," Annual Report (2007), p. 59.
[a]England and Wales.
[b]In Denmark, the value for 1994 corresponds to "hard drugs."

Table 2
Alcohol, Tobacco, Cannabis, and Cocaine Use in Selected Countries, 2008

Region	Country	Unweighted *n*	Alcohol		Tobacco		Cannabis		Cocaine	
			Percent	SE	Percent	SE	Percent	SE	Percent	SE
Americas	Colombia	4,426	94.3	0.5	48.1	1.2	10.8	0.6	4.0	0.4
	Mexico	5,782	85.9	0.6	60.2	0.9	7.8	0.5	4.0	0.4
	United States	5,692	91.6	0.9	73.6	1.2	42.4	1.0	16.2	0.6
Europe	Belgium	1,043	91.1	1.8	49.0	2.2	10.4	1.6	1.5	0.6
	France	1,436	91.3	1.2	48.3	2.1	19.0	1.6	1.5	0.4
	Germany	1,323	95.3	0.9	51.9	1.9	17.5	1.6	1.9	0.5
	Italy	1,779	73.5	1.8	48.0	1.3	6.6	0.8	1.0	0.3
	Netherlands	1,094	93.3	1.4	58.0	1.9	19.8	1.3	1.9	0.2
	Spain	2,121	86.4	1.1	53.1	1.8	15.9	1.3	4.1	0.7
	Ukraine	1,719	97.0	0.6	60.6	1.8	6.4	1.0	0.1	0.0
Middle East and Africa	Israel	4,859	58.3	0.8	47.9	0.7	11.5	0.5	0.9	0.1
	Lebanon	1,031	53.3	3.0	67.4	2.6	4.6	0.9	0.7	0.3
	Nigeria	2,143	57.4	1.6	16.8	1.1	2.7	0.5	0.1	0.1
	South Africa	4,315	40.6	1.2	31.9	1.1	8.4	0.6	0.7	0.3
Asia	Japan	887	89.1	1.6	48.6	2.0	1.5	0.4	0.3	0.3
	China	1,628	65.4	1.8	53.1	1.8	0.3	0.1	0.0	0.0
Oceania	New Zealand	12,790	94.8	0.3	51.3	0.7	41.9	0.7	4.3	0.3

Source: Louisa Degenhardt and others, "Toward a Global View of Alcohol, Tobacco, Cannabis, and Cocaine Use: Findings from the WHO World Mental Health Surveys," *Public Library of Science Medicine* 5, no. 7 (2008): p. 1057.

Table 3
Alcohol, Tobacco, Cannabis, and Cocaine Use for Youths 15 Years and Younger and 21 Years and Younger in Selected Countries, 2008

Region	Country	Unweighted *n*	Alcohol				Tobacco				Cannabis				Cocaine			
			By 15 years old		By 21 years old		By 15 years old		By 21 years old		By 15 years old		By 21 years old		By 15 years old		By 21 years old	
			Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE
Americas	Colombia	4,426	57.4	2.3	92.2	1.2	12.3	1.3	37.5	1.9	2.9	0.6	10.2	1.2	0.8	0.3	3.1	0.8
	Mexico	5,782	29.0	1.9	77.5	1.2	21.4	1.4	52.5	1.6	2.2	0.5	8.0	1.1	0.6	0.3	4.1	0.7
	United States	5,692	50.1	2.5	93.1	1.3	43.6	2.4	71.6	2.8	20.2	1.8	54.0	2.8	2.5	0.8	16.3	1.6
Europe	Belgium	1,043	67.0	8.3	88.5	6.1	—[a]	—	—[a]	—	4.7	2.5	22.2	6.6	0.0	0.0	0.6	0.4
	France	1,436	68.2	3.2	94.5	2.2	—[a]	—	—[a]	—	15.3	4.3	44.1	5.3	0.0	0.0	1.9	1.3
	Germany	1,323	82.1	3.2	97.8	1.1	—[a]	—	—[a]	—	13.0	3.3	41.0	4.8	0.0	0.0	6.1	2.7
	Italy	1,779	44.9	3.6	76.3	3.6	—[a]	—	—[a]	—	3.3	1.1	13.7	2.5	0.0	0.0	0.9	0.6
	Netherlands	1,094	59.6	7.7	89.7	6.4	—[a]	—	—[a]	—	7.0	3.0	34.6	7.1	0.0	0.0	1.0	0.6
	Spain	2,121	52.8	4.8	92.1	2.1	—[a]	—	—[a]	—	8.5	2.6	27.7	4.4	0.1	0.1	5.3	1.8
	Ukraine	1,719	39.3	3.9	98.5	1.1	46.0	4.9	72.1	3.9	1.3	0.7	12.3	2.6	—[b]	—	—[b]	—
Middle East and Africa	Israel	4,859	15.2	1.2	62.7	1.6	8.9	0.9	43.2	1.6	0.3	0.2	13.7	1.1	0.0	0.0	0.5	0.2
	Lebanon	1,031	24.3	5.2	45.8	6.5	18.0	2.8	51.1	6.4	0.4	0.3	5.7	2.7	—[b]	—	—[b]	—
	Nigeria	2,143	31.4	3.2	52.5	3.1	6.9	1.7	10.1	1.7	0.2	0.2	1.9	0.9	—[b]	—	—[b]	—
	South Africa	4,315	9.4	1.4	39.5	2.0	11.0	1.6	31.0	1.6	1.6	0.5	11.0	1.4	—[b]	—	—[b]	—
Asia	Japan	887	30.4	6.7	91.9	5.8	—[a]	—	—[a]	—	—[b]	—	—[b]	—	—[b]	—	—[b]	—
	China	1,628	31.7	5.1	73.6	5.2	15.2	3.7	54.7	5.0	—[b]	—	—[b]	—	—[b]	—	—[b]	—
Oceania	New Zealand	12,790	74.1	1.5	94.1	0.9	—[a]	—	—[a]	—	26.8	1.4	61.8	1.5	0.1	0.1	5.0	0.8

Source: Louisa Degenhardt et al., "Toward a Global View of Alcohol, Tobacco, Cannabis, and Cocaine Use: Findings from the WHO World Mental Health Surveys," *Public Library of Science Medicine* 5, no. 7 (2008): 1059.
[a]Not asked in this country.
[b]Fewer than 30 persons in the entire sample of this country used this drug, so estimates have not been produced.

with Portuguese drug officials), and the Office of National Drug Control Policy—along with a list of specific questions for which a response was requested. Those questions focused on the rationale for the U.S. approach to drug criminalization in light of the far higher drug usage rates among Americans, trends that, in general, appear to be worsening, contrasted with the far better rates in decriminalized Portugal. Despite repeated requests, none responded to those questions.

According to EU drug policy officials, the United States has displayed very little interest in understanding the improving trends in Europe generally, and in Portugal specifically, that have clearly resulted in an environment of drug liberalization and decriminalization. Quite the contrary, over the last two decades, the United States has single-mindedly agitated for greater criminalization approaches and appears, at least to EU officials, interested solely in enforcement actions, rather than empirically vindicated policy changes at the user level designed to manage usage rates and ameliorate drug-related harms.

Around the world, it is apparent that stringent criminalization policies do not produce lower drug usage rates. If anything, the opposite trend can be observed. The sky-high and increasing drug usage rates in the highly criminalized United States, juxtaposed with the relatively low and manageable rates in decriminalized Portugal, make a very strong case for that proposition.

Conclusion

None of the fears promulgated by opponents of Portuguese decriminalization has come to fruition, whereas many of the benefits predicted by drug policymakers from institut-

There is no serious political push in Portugal to return to a criminalization framework.

ing a decriminalization regime have been realized. While drug addiction, usage, and associated pathologies continue to skyrocket in many EU states, those problems—in virtually every relevant category—have been either contained or measurably improved within Portugal since 2001. In certain key demographic segments, drug usage has *decreased in absolute terms in the decriminalization framework*, even as usage across the EU continues to increase, including in those states that continue to take the hardest line in criminalizing drug possession and usage.

By freeing its citizens from the fear of prosecution and imprisonment for drug usage, Portugal has dramatically improved its ability to encourage drug addicts to avail themselves of treatment. The resources that were previously devoted to prosecuting and imprisoning drug addicts are now available to provide treatment programs to addicts. Those developments, along with Portugal's shift to a harm-reduction approach, have dramatically improved drug-related social ills, including drug-caused mortalities and drug-related disease transmission. Ideally, treatment programs would be strictly voluntary, but Portugal's program is certainly preferable to criminalization.

The Portuguese have seen the benefits of decriminalization, and therefore there is no serious political push in Portugal to return to a criminalization framework. Drug policymakers in the Portuguese government are virtually unanimous in their belief that decriminalization has enabled a far more effective approach to managing Portugal's addiction problems and other drug-related afflictions. Since the available data demonstrate that they are right, the Portuguese model ought to be carefully considered by policymakers around the world.

Notes

1. See Elisabeth Malkin and Marc Lacey, "Mexican President Proposes Decriminalizing Some Drugs," *New York Times*, October 2, 2008; Helen Popper, "Argentina Eyes Legalizing Paco," *Toronto Sun*, August 19, 2008; "Swiss Voters Back Legalized Heroin," *New Zealand Herald,* December 1, 2008; and "Canadian Government Tries Anew to Decriminalize Marijuana," Reuters, November 2, 2004. Note also Jose De Cordoba, "Latin American Panel Calls U.S. Drug War a Failure," *Wall Street Journal*, February 12, 2009.

2. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), "Illicit Drug Use in the EU: Legislative Approaches," 2005, p. 4.

3. Mirjam van het Loo, Ineke van Beusekom, and James P. Kahan, "Decriminalization of Drug Use in Portugal: The Development of a Policy," *Annals of the American Academy of Political and Social Science* 582, Cross-National Drug Policy (July 2002): 59.

4. Ibid.

5. Caitlin Hughes and Alex Stevens, "The Effects of Decriminalization of Drug Use in Portugal," Briefing Paper no. 14, the Beckley Foundation Drug Policy Programme, December 2007, p. 6.

6. Instituto da Droga e da Toxicodependência de Portugal (IDT), "The National Situation Relating to Drugs and Dependency," 2006 Annual Report (2007), p. 35.

7. EMCDDA, "Illicit Drug Use in the EU," (2005) p. 27.

8. Instituto da Droga e da Toxicodependência de Portugal (Institute on Drugs and Drug Addiction of Portugal), "The National Situation Relating to Drugs and Dependency," 2005 Annual Report (2006), p. 87.

9. IDT, "The National Situation," (2007) p. 88.

10. IDT, "The National Situation," (2006) p. 35.

11. Ibid., p. 37.

12. Quoted in Daniel McGrory, "Portugal Police Won't Arrest Drug Takers," *Times* (London), July 14, 2001.

13. Fernando Negrão, a former police chief and the head of Portugal's Institute on Drugs and Drug Addiction, says, "There were fears Portugal might become a drug paradise [for tourists], but that simply didn't happen." Quoted in Alison Roberts, "How Portugal Dealt with Drug Reform," *BBC News*, December 29, 2007.

14. IDT, "The National Situation," (2006) p. 39.

15. Ibid., p. 99.

16. Van het Loo, van Beusekom, and Kahan, "Decriminalization of Drug Use in Portugal," p. 54.

17. Ibid., p. 49.

18. Ibid., p. 54.

19. Ibid., p. 58.

20. IDT, "The National Situation," (2006) p. 150.

21. Van het Loo, van Beusekom, and Kahan, "Decriminalization of Drug Use in Portugal," p. 60.

22. Instituto da Droga e da Toxicodependência de Portugal, pamphlet intended for public consumption by the citizenry.

23. Ibid.

24. European Monitoring Centre for Drugs and Drug Addiction, "The State of the Drug Problem in Europe," 2007 Annual Report, pp. 12–13.

25. EMCDDA, "Illicit Drug Use in the EU," (2005) p. 22.

26. Ibid.

27. EMCDDA, "The State of the Drug Problem in Europe," (2007) p. 13.

28. Ibid., p. 33.

29. Van het Loo, van Beusekom, and Kahan, "Decriminalization of Drug Use in Portugal," p. 58.

30. Instituto da Droga e da Toxicodependência de Portugal, Draft 2007 Annual Report, slide 3.

31. Ibid., slide 4.

32. Ibid., slides 5–6.

33. Ibid., slides 13–14.

34. Ibid., slide 7.

35. Ibid., slide 8.

36. Communication with author, July 2008.

37. Quoted in Bob Curley, "Youth Drug Use Declines, but Alcohol, Future Trends Are Concerns," *Join Together*, December 19, 2003.

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41. Hughes and Stevens, "The Effects of Decriminalization of Drug Use in Portugal," pp. 2, 5.

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45. IDT, "The National Situation," (2007) p. 53.

46. IDT, "The National Situation," (2006) p. 3.

47. Hughes and Stevens, "The Effects of Decriminalization of Drug Use in Portugal," pp. 2, 5.

48. IDT, "The National Situation," (2006) p. 3.

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53. IDT, "The National Situation," (2006) p. 4.

54. Hughes and Stevens, "The Effects of Decriminalization of Drug Use in Portugal," p. 3.

55. IDT, "The National Situation," (2007) p. 30.

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59. IDT, "The National Situation," (2006) pp. 59–60.

60. Hughes and Stevens, "The Effects of Decriminalization of Drug Use in Portugal," p. 6.

61. EMCDDA, "The State of the Drug Problem in Europe," (2007) p. 5.

62. Ibid., p. 14.

63. Ibid., p. 25. The figures refer to cited offenses—the number of people ticketed or arrested for drug law violations, not convictions.

64. Ibid., p. 13.

65. Ibid., p. 14.

66. Ibid.

67. IDT, "The National Situation," (2006) p. 2.

68. IDT, Draft 2007 Annual Report, slide 9; IDT, "Os Adolescentes e a Droga" ("Adolescents and Drugs"), (2003) p. 6.

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70. IDT, "The National Situation," 2007, p. 63. The last study to determine lifetime drug prevalence rates for the general population of Portugal was undertaken in 2001. The 2006 study referenced here examined the prevalence rates for students 18 years old or younger. Typically, the prevalence rate for the general population is *slightly lower* than the prevalence rate for the student population.

71. EMCDDA, "The State of the Drug Problem in Europe," p. 12.

72. Ibid.

73. Ibid., p. 51.

74. Ibid., p. 53.

75. IDT, "The National Situation," (2007) p. 69.

76. EMCDDA, "The State of the Drug Problem in Europe," (2007) p. 65.

77. Ibid., p. 13.

78. Ibid., p. 57.

79. Ibid.

80. Ibid., p. 14.

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83. Degenhardt and others, "Toward a Global View of Alcohol, Tobacco, Cannabis, and Cocaine Use," p. 1053.

84. *Science Daily*, July 1, 2008, http://www.sciencedaily.com/releases/2008/06/080630201007.htm.

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Cato Handbook for Policymakers

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7TH EDITION

33. The War on Drugs

Congress should

- repeal the Controlled Substances Act of 1970,
- repeal the federal mandatory minimum sentences and the federal sentencing guidelines,
- direct the administration not to interfere with the implementation of state initiatives that allow for the medical use of marijuana, and
- shut down the Drug Enforcement Administration.

Ours is a federal republic. The federal government has only the powers granted to it in the Constitution. And the United States has a tradition of individual liberty, vigorous civil society, and limited government. Identification of a problem does not mean that the government should undertake to solve it, and the fact that a problem occurs in more than one state does not mean that it is a proper subject for federal policy.

Perhaps no area more clearly demonstrates the bad consequences of not following such rules than does drug prohibition. The long federal experiment in prohibition of marijuana, cocaine, heroin, and other drugs has given us crime and corruption combined with a manifest failure to stop the use of drugs or reduce their availability to children.

In the 1920s, Congress experimented with the prohibition of alcohol. On February 20, 1933, a new Congress acknowledged the failure of alcohol prohibition and sent the Twenty-First Amendment to the states. Congress recognized that Prohibition had failed to stop drinking and had increased prison populations and violent crime. By the end of 1933, national Prohibition was history, though many states continued to outlaw or severely restrict the sale of liquor.

Today, Congress confronts a similarly failed prohibition policy. Futile efforts to enforce prohibition have been pursued even more vigorously

since the 1980s than they were in the 1920s. Total federal expenditures for the first 10 years of Prohibition amounted to $88 million—about $1 billion in 2008 dollars. Drug enforcement costs about $19 billion a year now in federal spending alone.

Those billions have had some effect. Total drug arrests are now more than 1.5 million a year. Since 1989, more people have been incarcerated for drug offenses than for all violent crimes combined. There are now about 480,000 drug offenders in jails and prisons, and about 50 percent of the federal prison population consists of drug offenders.

Yet, as was the case during Prohibition, all the arrests and incarcerations haven't stopped the use and abuse of drugs, or the drug trade, or the crime associated with black-market transactions. Cocaine and heroin supplies are up; the more our Customs agents interdict, the more smugglers import. And most tragic, the crime rate has soared. Despite the good news about crime in recent years, crime rates remain at high levels.

As for discouraging young people from using drugs, the massive federal effort has largely been a dud. Every year from 1975 to 2006, at least 82 percent of high school seniors said they found marijuana ''fairly easy'' or ''very easy'' to obtain. During that same period, according to federal statistics of dubious reliability, teenage marijuana use fell dramatically and then rose significantly, suggesting that cultural factors have more effect than the ''war on drugs.''

The manifest failure of drug prohibition explains why more and more political leaders, such as Governors Jesse Ventura and Gary Johnson and Rep. Barney Frank (D-MA), have argued that drug prohibition actually causes more crime and other harms than it prevents. Senator Jim Webb (D-VA) has also been outspoken in his criticism of federal drug policies. In his 2008 book, *A Time to Fight,* Webb wrote: ''Drug addiction is not in and of itself a criminal act. It is a medical condition, indeed a disease, just as alcoholism is, and we don't lock people up for being alcoholics.''

Repeal the Controlled Substances Act

The United States is a federal republic, and Congress should deal with drug prohibition the way it dealt with alcohol prohibition. The Twenty-First Amendment did not actually legalize the sale of alcohol; it simply repealed the federal prohibition and returned to the several states the authority to set alcohol policy. States took the opportunity to design diverse liquor policies that were in tune with the preferences of their citizens.

After 1933, three states and hundreds of counties continued to practice prohibition. Other states chose various forms of alcohol legalization.

The single most important law that Congress must repeal is the Controlled Substances Act of 1970. That law is probably the most far-reaching federal statute in American history, since it asserts federal jurisdiction over every drug offense in the United States, no matter how small or local in scope. Once that law is removed from the statute books, Congress should move to abolish the Drug Enforcement Administration and repeal all the other federal drug laws.

There are a number of reasons why Congress should end the federal government's war on drugs. First and foremost, the federal drug laws are constitutionally dubious. As previously noted, the federal government can exercise only the powers that have been delegated to it. The Tenth Amendment reserves all other powers to the states or to the people. However misguided the alcohol prohibitionists turned out to have been, they deserve credit for honoring our constitutional system by seeking a constitutional amendment that would explicitly authorize a national policy on the sale of alcohol. Congress never asked the American people for additional constitutional powers to declare a war on drug consumers. That usurpation of power is something that few politicians or their court intellectuals wish to discuss.

Second, drug prohibition creates high levels of crime. Addicts commit crimes to pay for a habit that would be easily affordable if it were legal. Police sources have estimated that as much as half the property crime in some major cities is committed by drug users. More dramatically, because drugs are illegal, participants in the drug trade cannot go to court to settle disputes, whether between buyer and seller or between rival sellers. When black-market contracts are breached, the result is often some form of violent sanction, which usually leads to retaliation and then open warfare in the streets.

Our capital city, Washington, D.C., became known as the ''murder capital'' even though it is the most heavily policed city in the United States. Make no mistake about it, the annual carnage that accounts for America's still high murder rates has little to do with the mind-altering effects of a marijuana cigarette or a crack pipe. It is instead one of the grim and bitter consequences of an ideological crusade whose proponents will not yet admit defeat.

Third, since the calamity of September 11, 2001, U.S. intelligence officials have repeatedly warned us of further terrorist attacks. Given that

danger, it is a gross misallocation of law enforcement resources to have federal police agents surveilling marijuana clubs in California when they could be helping to discover sleeper cells of terrorists on U.S. territory. The Drug Enforcement Administration has 10,000 agents, intelligence analysts, and support staff members. Their skills would be much better used if those people were redeployed to full-time counterterrorism investigations.

Fourth, drug prohibition is a classic example of throwing money at a problem. The federal government spends some $19 billion to enforce the drug laws every year—all to no avail. For years, drug war bureaucrats have been tailoring their budget requests to the latest news reports. When drug use goes up, taxpayers are told the government needs more money so that it can redouble its efforts against a rising drug scourge. When drug use goes down, taxpayers are told that it would be a big mistake to curtail spending just when progress is being made. Good news or bad, spending levels must be maintained or increased.

Fifth, drug prohibition channels more than $40 billion a year into a criminal underworld that is occupied by an assortment of criminals, corrupt politicians, and, yes, terrorists. Alcohol prohibition drove reputable companies into other industries or out of business altogether, which paved the way for mobsters to make millions in the black market. If drugs were legal, organized crime would stand to lose billions of dollars, and drugs would be sold by legitimate businesses in an open marketplace.

Drug prohibition has created a criminal subculture in our inner cities. The immense profits to be had from a black-market business make drug dealing the most lucrative endeavor for many people, especially those who care least about getting on the wrong side of the law.

Drug dealers become the most visibly successful people in inner-city communities, the ones with money and clothes and cars. Social order is turned upside down when the most successful people in a community are criminals. The drug war makes peace and prosperity virtually impossible in inner cities.

Students of American history will someday ponder the question of how today's elected officials could readily admit to the mistaken policy of alcohol prohibition in the 1920s but recklessly pursue a policy of drug prohibition. Indeed, the only historical lesson that recent presidents and Congresses seem to have drawn from Prohibition is that government should not try to outlaw the sale of booze. One of the broader lessons that they should have learned is this: prohibition laws should be judged

according to their real-world effects, not their promised benefits. If the 111th Congress will subject the federal drug laws to that standard, it will recognize that the drug war is not the answer to problems associated with drug use.

Respect State Initiatives

The failures of drug prohibition are becoming obvious to more and more Americans. A particularly tragic consequence of the stepped-up war on drugs is the refusal to allow sick people to use marijuana as medicine. Prohibitionists insist that marijuana is not good medicine, or at least that there are legal alternatives to marijuana that are equally good. Those who believe that individuals should make their own decisions, not have their decisions made for them by Washington bureaucracies, would simply say that that's a decision for patients and their doctors to make. But in fact there is good medical evidence of the therapeutic value of marijuana—despite the difficulty of doing adequate research on an illegal drug. A National Institutes of Health panel concluded that smoking marijuana may help treat a number of conditions, including nausea and pain. It can be particularly effective in improving the appetite of AIDS and cancer patients. The drug could also assist people who fail to respond to traditional remedies.

More than 70 percent of U.S. cancer specialists in one survey said they would prescribe marijuana if it were legal; nearly half said they had urged their patients to break the law to acquire the drug. The British Medical Association reports that nearly 70 percent of its members believe marijuana should be available for therapeutic use. Even President George Bush's Office of National Drug Control Policy criticized the Department of Health and Human Services for closing its special medical marijuana program.

Whatever the actual value of medical marijuana, the relevant fact for federal policymakers is that 12 states have authorized physicians licensed in those states to recommend the use of medical marijuana to seriously ill and terminally ill patients residing in the states, without being subject to civil and criminal penalties.

The Bush administration paid lip service to the importance of federalism, but its actions in Congress and at the state and local levels undermined that principle. Federal police agents and prosecutors continue to raid medical marijuana clubs—especially in California and Arizona. And both of the president's drug policy officials, drug czar John Walters and DEA chief Karen Tandy, used their offices to meddle in state and local politics.

If it is inappropriate for governors and mayors to entangle themselves in foreign policy—and it is—it is also inappropriate for federal officials to entangle themselves in state and local politics. In the 110th Congress, Reps. Barney Frank (D-MA), Dana Rohrabacher (R-CA), and Ron Paul (R-TX) jointly proposed the States' Rights to Medical Marijuana Act, which would have prohibited federal interference with any state that chose to enact a medical marijuana policy. The 111th Congress should enact a similar bill without delay.

One of the benefits of a federal republic is that different policies may be tried in different states. One of the benefits of our Constitution is that it limits the power of the federal government to impose one policy on the several states.

Repeal Mandatory Minimums

The common law in England and America has always relied on judges and juries to decide cases and set punishments. Under our modern system, of course, many crimes are defined by the legislature, and appropriate penalties are defined by statute. However, mandatory minimum sentences and rigid sentencing guidelines shift too much power to legislators and regulators who are not involved in particular cases. They turn judges into clerks and prevent judges from weighing all the facts and circumstances in setting appropriate sentences. In addition, mandatory minimums for nonviolent first-time drug offenders result in sentences grotesquely disproportionate to the gravity of the offenses.

Rather than extend mandatory minimum sentences to further crimes, Congress should repeal mandatory minimums and let judges perform their traditional function of weighing the facts and setting appropriate sentences.

Conclusion

Drug abuse is a problem for those involved in it and for their families and friends. But it is better dealt with as a moral and medical problem than as a criminal problem—''a problem for the surgeon general, not the attorney general,'' as former Baltimore mayor Kurt Schmoke puts it.

The United States is a federal republic, and Congress should deal with drug prohibition the way it dealt with alcohol prohibition. The Twenty-First Amendment did not actually legalize the sale of alcohol; it simply repealed the federal prohibition and returned to the several states the

authority to set alcohol policy. States took the opportunity to design diverse liquor policies that were in tune with the preferences of their citizens. After 1933, three states and hundreds of counties continued to practice prohibition. Other states chose various forms of alcohol legalization.

Congress should repeal the Controlled Substances Act of 1970, shut down the Drug Enforcement Administration, and let the states set their own policies with regard to currently illegal drugs. They would do well to treat marijuana, cocaine, and heroin the way most states now treat alcohol: It should be legal for stores to sell such drugs to adults. Drug sales to children, like alcohol sales to children, should remain illegal. Driving under the influence of drugs should be illegal.

With such a policy, Congress would acknowledge that our current drug policies have failed. It would restore authority to the states, as the Founders envisioned. It would save taxpayers' money. And it would give the states the power to experiment with drug policies and perhaps devise more successful rules.

Repeal of prohibition would take the astronomical profits out of the drug business and destroy the drug kingpins who terrorize parts of our cities. It would reduce crime even more dramatically than did the repeal of alcohol prohibition. Not only would there be less crime; reform would also free federal agents to concentrate on terrorism and espionage and free local police agents to concentrate on robbery, burglary, and violent crime.

The war on drugs has lasted longer than Prohibition, longer than the Vietnam War. But there is no light at the end of this tunnel. Prohibition has failed, again, and should be repealed, again.

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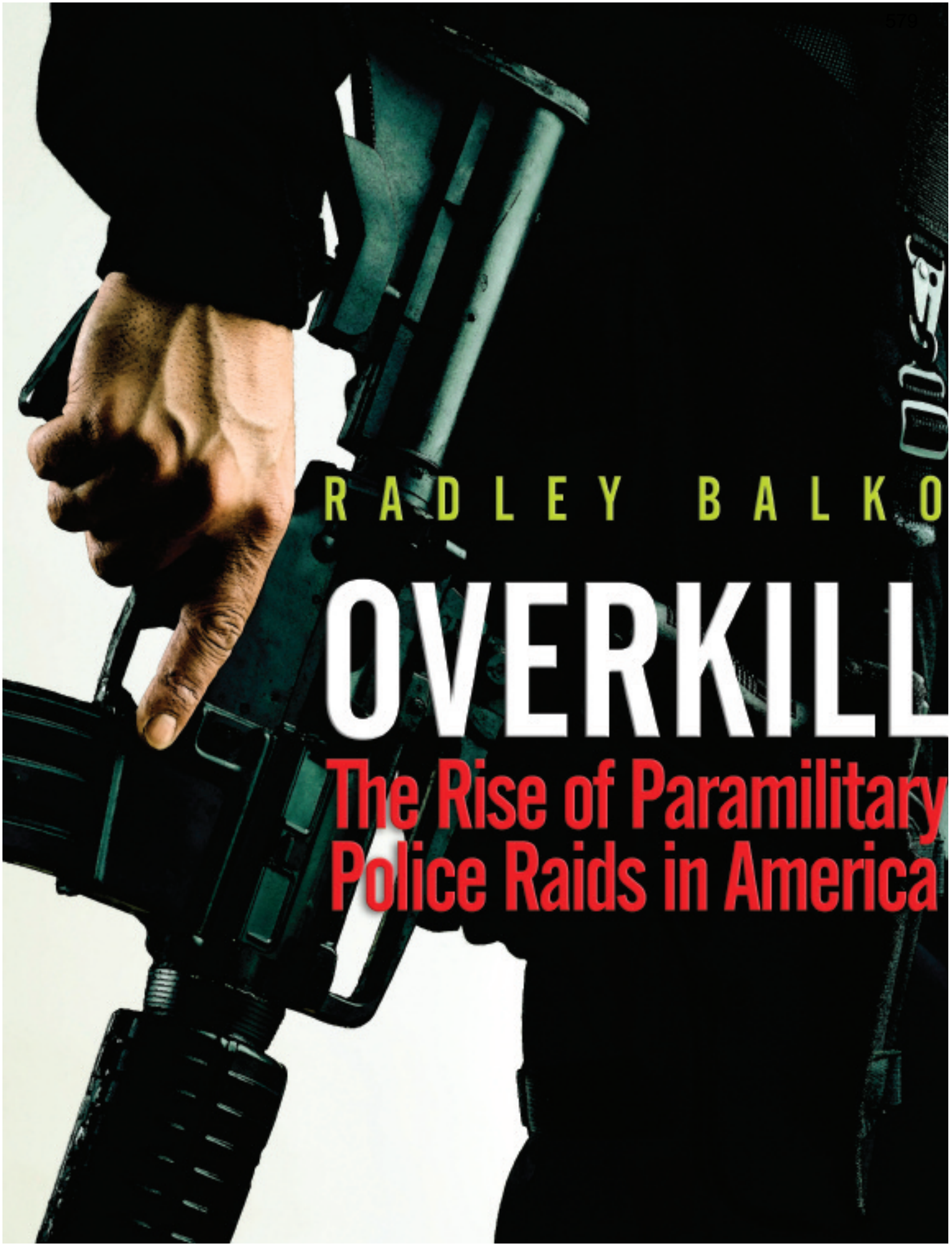
—Prepared by David Boaz and Timothy Lynch


RADLEY BALKO
OVERKILL
The Rise of Paramilitary Police Raids in America

View the interactive map that accompanies this paper at
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Cover design by Jon Meyers.

Printed in the United States of America.

CATO INSTITUTE
1000 Massachusetts Ave., N.W.
Washington, D.C. 20001
www.cato.org

Executive Summary

Americans have long maintained that a man's home is his castle and that he has the right to defend it from unlawful intruders. Unfortunately, that right may be disappearing. Over the last 25 years, America has seen a disturbing militarization of its civilian law enforcement, along with a dramatic and unsettling rise in the use of paramilitary police units (most commonly called Special Weapons and Tactics, or SWAT) for routine police work. The most common use of SWAT teams today is to serve narcotics warrants, usually with forced, unannounced entry into the home.

These increasingly frequent raids, 40,000 per year by one estimate, are needlessly subjecting nonviolent drug offenders, bystanders, and wrongly targeted civilians to the terror of having their homes invaded while they're sleeping, usually by teams of heavily armed paramilitary units dressed not as police officers but as soldiers. These raids bring unnecessary violence and provocation to nonviolent drug offenders, many of whom were guilty of only misdemeanors. The raids terrorize innocents when police mistakenly target the wrong residence. And they have resulted in dozens of needless deaths and injuries, not only of drug offenders, but also of police officers, children, bystanders, and innocent suspects.

This paper presents a history and overview of the issue of paramilitary drug raids, provides an extensive catalogue of abuses and mistaken raids, and offers recommendations for reform.

Radley Balko is a policy analyst for the Cato Institute specializing in civil liberties issues and is the author of the Cato study, "Back Door to Prohibition: The New War on Social Drinking."

Police say that Diotaiuto's concealed-carry permit indicated he was potentially dangerous, which necessitated the involvement of the SWAT team.

Introduction

"They [police officers] made a mistake. There's no one to blame for a mistake. The way these people were treated has to be judged in the context of a war."

—Hallandale, Florida, attorney Richard Kane, after police officers conducted a late night drug raid on the home of Edwin and Catherine Bernhardt. Police broke into the couple's home and threw Catherine Bernhardt to the floor at gunpoint. Edwin Bernhardt, who had come down from his bedroom in the nude after hearing the commotion, was also subdued and handcuffed at gunpoint. Police forced him to wear a pair of his wife's underwear, then took him to the police station, where he spent several hours in jail. Police later discovered they had raided the wrong address.[1]

On August 5, 2005, at 6:15 a.m., a SWAT team converged around the Sunrise, Florida, home of Anthony Diotaiuto. They came to serve a search warrant based on an anonymous tip and an informant's purchase of a single ounce of marijuana from the 23-year-old bartender and part-time student.

Friends acknowledge that Diotaiuto was a recreational marijuana smoker, but they deny he was a drug dealer in any real sense of the term.[2] They would later tell the media that Diotaiuto had just bought the modest home with his mother after taking a second job and selling off his prized sports car—good evidence, they say, that he wasn't running any lucrative criminal enterprise. Also a part-time student in community college, Diotaiuto was described by the parents of one of his friends as "a gem," by a neighbor as a "beautiful person," and by others as a churchgoing, family-oriented man.[3] He had one previous conviction for possession of marijuana, when he was 16. Otherwise, Diotaiuto had no criminal record, and no history of violence or criminal conduct.

By 7 a.m. the raid was over. Police had broken down Diotaiuto's front door, and turned his home upside down looking for drugs, weapons, and drug paraphernalia. Diotaiuto lay dead in a bedroom closet. He had 10 bullet holes in his head, chest, torso, and limbs.

What happened between the time police arrived at his home and the time Anthony Diotaiuto's body arrived at the coroner's office is in dispute. Police say they announced themselves before breaking down Diotaiuto's door, consistent with the requirements of a "knock and announce" search warrant. Neighbors say they heard no such announcement.[4] The officers who conducted the raid also say Diotaiuto fled from the living room to the bedroom as the raid commenced, where he armed himself with a handgun. An investigative committee has yet to issue its final report, but police accounts of the raid have continued to change. Immediately after the raid, for example, Lt. Robert Voss, spokesman for the Sunrise Police Department, told reporters that Diotaiuto "had a gun and pointed it at our officers." Later the same day Voss revised, "In all likelihood, that's what happened. I know there was a weapon found next to the body."[5]

Police also found a BB gun, a shotgun, the handgun in question, and a rifle, all of which Diotaiuto owned legally. Diotaiuto also had a valid conceal-carry permit for the handgun.[6]

There are nagging questions about the account of the Diotaiuto raid given by Sunrise police. For example, police say that Diotaiuto's concealed-carry permit indicated he was potentially dangerous, which necessitated the involvement of the SWAT team and the early-morning raid.[7] But common sense suggests the opposite. Applicants for concealed-carry permits in Florida are required to fill out a variety of paperwork, undergo a criminal background check and fingerprinting, pay a fee, and enroll in a class on gun safety and firearms law.[8] If Diotaiuto were a hardened, professional drug dealer dangerous enough to merit the use of such overwhelming force, it seems unlikely that he'd go to the trouble of obtaining a permit for his guns. Diotaiuto's permit should have indicated to Sunrise police that, if anything, Diotaiuto was more likely a nonviolent, occasional drug user, rather than a volatile offender necessitating use of a SWAT team.

If, indeed, police had given sufficient notice of their presence, as mandated by a "knock and announce" warrant, it's difficult to understand why Diotaiuto's immediate reaction would be to flee to his bedroom to arm himself, given the small amount of marijuana in his possession. It's even more difficult to imagine him then knowingly pointing his weapon at police for such an insignificant amount of the drug. An ounce of marijuana hardly merits a lethal shootout. If Diotaiuto was indeed armed when police entered his home, it seems more likely that his neighbors' account is correct: The police didn't give sufficient notice of their presence and identity. Unaware that the armed men breaking down his door were law enforcement, Diotaiuto quickly retrieved his gun to defend himself and his property from what he likely thought were criminal intruders.

Finally, even assuming everything Sunrise police say to be correct, the outcome in the Diotaiuto case is simply unacceptable. As is often the case, the local police department assured the media soon after the shooting that the officers involved had stellar performance records. The *Ft. Lauderdale Sun-Sentinel* reported that both officers who shot Diotaiuto routinely received "above-average" or "excellent" reviews, garnered dozens of recommendations, and earned multiple "officer of the month" distinctions.[9] That may well be. But the problem with these types of drug raids is rarely that the officers themselves were in error in defending themselves in what was certainly a highly volatile situation. The problem is that bad policies made the situation unnecessarily volatile. As Eleanor Shockett, a retired Miami-Dade circuit judge, put it to *Fort Lauderdale Sun-Sentinel* columnist Michael Mayo with respect to the Diotaiuto case, "What in the hell were they doing with a SWAT team? To break into someone's home at six in the morning, possibly awaken someone from a deep sleep, someone who has a concealed weapons permit? What did they expect to happen?"[10]

The Diotaiuto case is far from unusual. Just a few months before the raid in Sunrise, in March 2005, police on a drug raid in Omao, Kauai, Hawaii, broke into the home of Sharon and William McCulley, at home at the time with their grandchildren. Police were tracking a box that allegedly contained marijuana, and believed it to be in the McCulleys' possession. After breaking down the elderly McCulleys' door, police threw the couple to the ground. They handcuffed Sharon McCulley and held her to the floor with a gun to her head—her grandchild lying next to her. William McCulley —who uses a walker and has an implanted device that delivers electrical shocks to his spine to relieve pain—began flopping around the floor when the device malfunctioned from the trauma of being violently thrown to the ground.[11]

Police had the wrong address. In fact, they conducted a *second* "wrong door" raid before finally tracking down the package.[12]

The use of hyper-militarized, heavily armed police units to carry out routine search warrants has become increasingly common since the 1980s. These raids leave a very small margin for error. A wrong address, bad timing, or bad information can—and frequently does—bring tragedy. The information giving rise to these raids is typically collected from confidential informants. These informants are sometimes no more than well-meaning members of the community who want to tip police to illicit activity. But more often they're professional "snitches"—people who regularly seek out drug users and dealers and tip off the police in exchange for cash rewards. A third, even more common class of informants is actual convicted or suspected drug dealers themselves, who are then rewarded with leniency or cash in exchange for information leading to other arrests. The folly of using informants of such questionable repute, who hold such obvious ulterior motives to conduct raids with such high stakes and such little room for error, would seem to be self-evident. Yet the practice grows more and more common, and the judges whom the criminal justice system entrusts to oversee the warrant process have grown more and more complacent.

Policymakers seem to be oblivious to this disturbing trend in police work. Few are will-

The folly of using informants of such questionable repute would seem to be self-evident. Yet the practice grows more and more common.

ing to question the policies that make the raids possible. Going to back to the Diotaiuto case, for example, one might ask why the town of Sunrise, Florida, a town with a population of just 90,000 and which reported only a single murder for all of 2003, would need a SWAT team in the first place. And why would the town use that SWAT team, first thing in the morning, to break into the home of a young man with no history of violence?

The use of paramilitary police units began in Los Angeles in the 1960s. Through the 1970s, the idea slowly spilled out across the country. But at least until the 1980s, SWAT teams and other paramilitary units were used sparingly, only in volatile, high-risk situations such as bank robberies or hostage situations. Likewise, "no-knock" raids were generally used only in situations where innocent lives were determined to be at imminent risk. America's War on Drugs has spurred a significant rise in the number of such raids, to the point where in some jurisdictions drug warrants are only served by SWAT teams or similar paramilitary units, and the overwhelming number of SWAT deployments are to execute drug warrants.

The Diotaiuto case is a prime example of the inherent danger in "no-knock" and "quick-knock" raids because it exemplifies so many of their troubling characteristics, including the following:

- The militarization of domestic policing, not just in big cities, but in small towns, suburbs, and exurbs like Sunrise.
- The increasingly frequent use of heavily armed SWAT teams for proactive policing and the routine execution of drug warrants, even for simple marijuana possession.
- The use of anonymous tips and reliance on dubious informants to obtain no-knock search warrants in the first place.
- Executing warrants with "dynamic entry," diversionary grenades, and similarly militaristic tactics once reserved for urban warfare.
- A tragic outcome resulting from these circumstances.

At least until the 1980s, SWAT teams and other paramilitary units were used sparingly, only in volatile, high-risk situations such as bank robberies or hostage situations.

In addition to nonviolent offenders like Anthony Diotaiuto such tragic outcomes also frequently involved people completely innocent of any crime. On September 4, 1998, for example, police in Charlotte, North Carolina, deployed a flashbang grenade and carried out a no-knock warrant based on a tip that someone in the targeted home was distributing cocaine.[13] When police got inside, they found a group of men playing cards. One of them, 56-year-old Charles Irwin Potts, was carrying a handgun, which he owned and carried legally. Potts was not the target of the raid. He had visited the house to play a game of cards. Police say Potts drew his gun and pointed it at them as they entered, at which time they opened fire, killing Potts with four shots to the chest. The three men in the house who saw the raid say the gun never left Potts's holster. Police found no cocaine in the home, and made no arrests.

The men inside the house at the time of the raid thought criminals were invading them. "Only thing I heard was a big boom," said Robert Junior Hardin, the original target of the raid. "The lights went off and then they came back on . . . everybody reacted. We thought the house was being robbed."[14] Despite Potts's death, an internal investigation found no wrongdoing on the part of the raiding officers.[15]

Of course, a paramilitary raid doesn't have to end in death to bring harm. Because of shoddy police work, overreliance on informants, and other problems, each year hundreds of raids are conducted on the wrong address, bringing unnecessary terror and frightening confrontation to people never suspected of a crime. On March 31, 2004, for example, six officers toting riot shields and assault weapons rapped on the door to the Brooklyn apartment of 84-year-old Martin Goldberg and his wife Leona, 82. When Goldberg opened the door, police stormed the apartment, pushing Mr. Goldberg aside and ordering him to the floor. "They charged in like an army," Goldberg, a decorated World War II vet, told the *New York Post*. "They knocked pictures off the wall."[16]

The police had the wrong apartment. The investigation apparently veered off course 10 days earlier, when an informant pointed police to one of two housing project buildings as the home of a drug dealer. Police stormed the wrong building. Shortly after the raid, Leona Goldberg was hospitalized with an irregular heartbeat.[17] "It was terrible. . . . It was the most frightening experience of my life. . . . I thought it was a terrorist attack," Mrs. Goldberg told the *New York Post*.[18] One officer would later tell the paper, "Obviously, there was a breakdown in communication. These were relatively inexperienced officers, and they may have been less than vigilant."

There are, of course, legitimate uses for both SWAT teams and forced entry. But those uses—barricades, hostage situations, and terror attacks, for example—are exceptionally rare. This study will not recommend the abolition of SWAT teams or unannounced police raids. Rather, it will critique the increasingly pervasive use of both, particularly when it comes to executing routine drug warrants, as well as the effect of an increasing presence of military equipment, training, and tactics on America's police departments.

This study will begin with an overview of how no-knock and quick-knock raids came into common practice. It will then examine the legal issues surrounding the use of such tactics; examine the problem of using information from anonymous, sometimes paid informants to obtain warrants; and prescribe the reforms needed to limit the use of paramilitary raids to the small set of emergency situations that warrant their use. Finally, the Appendix will give details of scores of documented examples in which these raids have gone awry, disproving the conventional belief that botched raids are infrequent "isolated incidents."

Overview

The typical SWAT team carries out its missions in battle fatigues: Lace-up, combat-style boots; black, camouflage, or olive-colored pants and shirts, sometimes with "ninja-style" or balaclava hoods; Kevlar helmets and vests; gas masks, knee pads, gloves, communication devices, and boot knives; and military-grade weapons, such as the Heckler and Koch MP5 submachine gun, the preferred model of the U.S. Navy Seals. Other standard SWAT-team weaponry includes battering rams, ballistic shields, "flashbang" grenades, smoke grenades, pepper spray, and tear gas. Many squads are now ferried to raid sites by military-issue armored personnel carriers. Some units have helicopters. Others boast grenade launchers, tanks (with and without gun turrets), rappelling equipment, and bayonets.[19]

Paramilitary raids are generally carried out late at night, or just before dawn. Police are technically bound by law to "knock and announce" themselves, and give occupants time to answer the door before forcing entry. But as will be discussed in this study, that requirement is today commonly either circumvented through court-sanctioned loopholes, ignored completely with little consequence, or only ceremoniously observed, with a knock and announcement unlikely to be noticed by anyone inside.

Police generally break open doors with a battering ram, or blow them off their hinges with explosives. Absent either, police have pried doors open with sledgehammers or screwdrivers, ripped them off by attaching them to the back ends of trucks, or entered by crashing through windows or balconies. After an entryway is cleared, police sometimes detonate a flashbang grenade or a similar device designed to disorient the occupants in the targeted house. They then enter the home under its cover. SWAT teams have entered homes through fire escapes, by rappelling down from police helicopters, and by crashing through second-story windows. Once police are inside, the occupants are quickly and forcefully incapacitated. They're instructed to remain in the prone position, generally at gunpoint, while police carry out the search warrant. Any perceived noncompliance is typically met with force, which can potentially be lethal, depending on the nature of the noncompliance.

"It was terrible. . . . It was the most frightening experience of my life. . . . I thought it was a terrorist attack."

Once rare, these procedures are now performed dozens of times per day in cities and towns all across the country.

The Birth of SWAT

Longtime Los Angeles police chief Daryl F. Gates is widely credited with inventing the SWAT team in early 1966, though there's some evidence that the idea was brought to Gates a year earlier, when he was inspector general, by Los Angeles Police Department officer John Nelson. The inspiration for the modern SWAT team was a specialized force in Delano, California, made up of crowd control officers, riot police, and snipers, assembled to counter the farm worker uprisings led by Cesar Chavez.[20]

Public horror at Whitman's slaughter quickly turned into support for Gates's idea of training elite teams to complement city policing in dangerous situations.

In search of new methods to counter the snipers and guerrilla tactics used against L.A. police during the Watts riots, Gates and other L.A. police officials quickly embraced the idea of an elite, military-trained cadre of law enforcement officers who could react quickly, accurately, and with overwhelming force to particularly dangerous situations. Gates brought in a team of ex-Marines to train a small group of police officers Gates handpicked for the new endeavor. Gates called his unit the Special Weapons Attack Team, or SWAT. City officials liked the idea, including the acronym, but balked at the word "attack." They persuaded Gates to change the units name to Special Weapons and Tactics, though the new moniker was purely cosmetic—no change in training or mission accompanied the name change.[21]

SWAT quickly gained favor with public officials, politicians, and the public. In August 1966, former Marine Charles Whitman barricaded himself at the top of a clock tower at the University of Texas and opened fire on the campus below. Whitman shot 46 people and killed 15. Police struggled for more than 90 minutes to remove Whitman from his tower perch. Public horror at Whitman's slaughter quickly turned into support for Gates's idea of training elite teams to complement city policing in dangerous situations like the Whitman massacre. SWAT teams subsequently began to pop up in larger urban areas across the country.[22]

Three years later, the L.A. SWAT team engaged in a highly publicized shootout with the city's Black Panther militia. Publicity from the standoff won the L.A. SWAT team and the concept of SWAT teams in general widespread public acclaim. In a recent interview with National Public Radio, Gates affirmed that the Black Panther shootout propelled the SWAT concept into the mainstream. "It was the first time we got to show off," Gates said.[23] The incident also earned the unit a measure of glamour, and inspired yet more police departments across the country to begin training their own SWAT-like units. Gates's L.A. SWAT team would again be featured in a celebrated standoff five years later, in May 1974, when SWAT officers traded thousands of rounds of gunfire with the Symbionese Liberation Army on live national television.[24]

The SLA and Black Panther shootouts brought continued public fascination with the SWAT mystique. Gates's experiment soon became a celebrated part of American pop culture. A SWAT-themed television show debuted in 1975, and the show's theme song hit the Billboard Top Forty. In 1995, Gates launched a SWAT video game franchise with Sierra Entertainment. The SWAT series spawned several award winning "first-person" style shooter games, the most recent version of which was released in early 2005. In January 2006, cable television channel A&E debuted a new reality television show called *Dallas SWAT*, which follows the lives of the members of a Dallas, Texas, SWAT team. Court TV now carries the show *Texas SWAT*, in which seasoned war journalist Jeff Chagrin tags along with several SWAT teams across the state.

But despite the American public's fascination with SWAT, until the 1980s, actual deployments of the paramilitary units were still largely confined to extraordinary, emergency situations such as hostage takings, barricades, hijackings, or prison escapes. Though the total number of SWAT teams gradually increased throughout the 1970s, they were mostly limited to larger, more urbanized areas, and the terms surrounding their deployment were still for the most part narrowly and

appropriately defined. That changed in the 1980s.

The Rise of Military Policing

The election of Ronald Reagan in 1980 brought new funding, equipment, and a more active drug-policing role for paramilitary police units across the country. Reagan's new offensive in the War on Drugs involved a more confrontational, militaristic approach to combating the drug supply, a policy enthusiastically embraced by Congress.[25] During the next 10 years, with prodding from the White House, Congress paved the way to widespread military-style policing by carving yawning drug war exceptions to the Posse Comitatus Act, the Civil War–era law prohibiting the use of the military for civilian policing. These new exceptions allowed nearly unlimited sharing of drug interdiction intelligence, training, tactics, technology, and weaponry between the Pentagon and federal, state, and local police departments.

The first of these exemptions was the Military Cooperation with Law Enforcement Act, passed in 1981.[26] This wide-reaching legislation encouraged the military to give local, state, and federal police access to military bases, research, and equipment for drug interdiction. It also authorized the military to train civilian police officers to use the newly available equipment, and not only encouraged the military to share drug-war–related information with civilian police but authorized the military to take an active role in preventing drugs from entering the country.

In a 1999 paper for the Cato Institute on the militarization of American policing, Diane Cecilia Weber outlined ensuing laws passed in the 1980s and 1990s that further eroded the clear demarcation between military and civilian drug enforcement set forth by Posse Comitatus. Among the laws cited by Weber are the following:

- In 1986, President Reagan issued a National Security Decision Directive, which declared drugs a threat to U.S. "national security." The directive allowed for yet more cooperation between local, state, and federal law enforcement and the military.
- In 1988, Congress ordered the National Guard to assist state drug enforcement efforts. Because of this order, National Guard troops today patrol for marijuana plants and assist in large-scale anti-drug operations in every state in the country.
- In 1989, President Bush created a series of regional task forces within the Department of Defense, charged with facilitating cooperation between the military and domestic police forces.
- In 1994, the Department of Defense issued a memorandum authorizing the transfer of equipment and technology to state and local police. The same year, Congress created a "reutilization program" to facilitate handing military gear over to civilian police agencies.[27]

Despite the fact that these laws were a significant departure from longstanding domestic policy, most were passed without much media attention or public debate. What debate there was was muted by assurances from politicians and drug war supporters that (a) the scourge of drugs was too threatening and too pervasive to be fought with traditional policing and (b) critics who feared for the civil liberties of American civilians under a more militarized system were alarmist and overstating their case. Rep. Charles Bennett (D-FL), for example, called the century-old Posse Comitatus Act—a law whose principles can be traced directly to concerns expressed by the Founding Fathers—a "sinful, evil law."[28] In 1989, Drug Enforcement Agency administrator Francis Mullen forthrightly asserted that Congress should green-light the use of the U.S. military in law enforcement because "there is sufficient oversight on the part of Congress and others to deter infringement on individual liberties."[29] Also in 1989, then–secretary of defense Dick Cheney declared, "The detection and countering of the production, trafficking and use of illegal drugs is a high priority national security mission of the Department of Defense."[30]

Reagan's new offensive in the War on Drugs involved a more confrontational, militaristic approach to combating the drug supply.

In 1997 alone, the Pentagon handed over more than 1.2 million pieces of military equipment to local police departments.

After each of these policies was enacted, police departments across the country helped themselves to the newly available equipment, training, and funding. By the late 1990s, the various laws, orders, and directives softening Posse Comitatus had added a significant military component to state and local police forces. Between just 1995 and 1997, the Pentagon distributed 3,800 M-16s, 2,185 M-14s, 73 grenade launchers, and 112 armored personnel carriers to civilian police agencies across the country.[31]

In 1997 alone, the Pentagon handed over more than 1.2 million pieces of military equipment to local police departments.[32] The same year, even as critics were beginning to question the growing militarism of civilian policing, Congress made it even easier for Main Street police departments to acquire military hardware from the Pentagon. The National Defense Authorization Security Act of 1997, commonly called "1033" for the section of the U.S. Code assigned to it, created the Law Enforcement Support Program, an agency headquartered in Ft. Belvoir, Virginia. The new agency was charged with streamlining the transfer of military equipment to civilian police departments. It worked. Transfers of equipment took off at an even greater clip than before. The *National Journal* reports that between January 1997 and October 1999, the agency handled 3.4 million orders of Pentagon equipment from over 11,000 domestic police agencies in all 50 states.[33] By December 2005, the number was up to 17,000.[34] The purchase value of the equipment comes to more than $727 million.[35] The *National Journal* reported that included in the bounty were

> 253 aircraft (including six- and seven-passenger airplanes, and UH-60 Blackhawk and UH-1 Huey helicopters), 7,856 M-16 rifles, 181 grenade launchers, 8,131 bulletproof helmets, and 1,161 pairs of night-vision goggles.[36]

Civilian police departments suddenly found themselves flush with military arms. The Los Angeles Police Department was offered bayonets.[37] The city of St. Petersburg, Florida, bought an armored personnel carrier from the Pentagon for just $1,000.[38] The seven police officers of Jasper, Florida—which has all of 2,000 people and hasn't had a murder in 14 years—were each given a military-grade M-16 machine gun, leading one Florida paper to run the headline, "Three Stoplights, Seven M-16s."[39] The sheriff's office in landlocked Boone County, Indiana, was given an amphibious armored personnel carrier.[40]

The *New York Times* reported in 1999 that the Fresno, California, SWAT team had two helicopters with night-vision goggles and heat sensors, a turret-armed armored personnel carrier, and an armored van.[41] In a similar article on the Fresno police department, the *Washington Post* reported that members have access to "battering rams, diversionary devices known as 'flashbangs,' chemical agents, such as pepper spray and tear gas, and . . . assault rifles." They wear "subdued gray-and-black urban camouflage and body armor," the *Post* reported, "and have at the ready, ballistic shields and helmets, M17 gas masks and rappelling gear."[42] A retired police chief in New Haven, Connecticut, told the *Times* in the 1999 article, "I was offered tanks, bazookas, anything I wanted."[43]

In a 1997 *60 Minutes* segment on the trend toward militarization, the CBS news magazine profiled the Sheriff's Department of Marion County, Florida, a rural, agricultural area known for its horse farms. Courtesy of the various Pentagon giveaway programs, the county sheriff proudly showed reporter Lesley Stahl the department's 23 military helicopters, two C-12 luxury executive aircraft (often called the "Rolls Royce with wings"), a motor home, several trucks and trailers, a tank, and a "bomb robot." This, in addition to an arsenal of military-grade assault weapons.[44]

With all of this funding and free or discounted equipment and training from the federal government, police departments across the country needed something to do with it. So they formed SWAT teams—thousands of them. SWAT teams have since multiplied and spread across the country at a furious clip.

In a widely cited survey, criminologist Peter Kraska found that as of 1997, 90 percent of cities with populations of 50,000 or more had at least one paramilitary police unit, twice as many as in the mid-1980s.[45] The increase has been even more pronounced in smaller towns: In a separate study, Kraska found that the number of SWAT teams serving towns with populations between 25,000 and 50,000 increased 157 percent between 1985 and 1996.[46] They've popped up in college towns like South Bend, Indiana, and Champaign, Illinois, where they're increasingly used for routine marijuana policing.[47] The University of Central Florida's campus police department actually has its own, separate SWAT team, independent of the city and county.[48] As of 1996, 65 percent of towns within the 25,000-50,000-population range had a SWAT team, with another 8 percent planning to form one.[49] Given that the trends giving rise to SWAT proliferation in the 1990s haven't gone away, it's safe to assume that all of these numbers have continued to rise and are significantly higher today. In fact, SWAT teams are increasingly popping up in even *smaller* towns. Harwich, Massachusetts (population: 11,000), has a 10-member SWAT team, as do Middleburg, Pennsylvania (population 1,363), Leesburg, Florida (population: 17,000), Mt. Orab, Ohio (2,701), Neenah, Wisconsin (24,507), and Butler, Missouri (4,201), to name just a few.[50]

In 2002, more than three years before the Diotaiuto shooting, the *Miami Herald* ran a prophetic report about the SWAT teams proliferating across small-town Florida, including in Broward County suburbs like Miramar (population 101,000), Pembroke Pines (150,000), and Davie (82,579). "Police say they want [SWAT teams] in case of a hostage situation or a Columbine-type incident," the paper reported, "But in practice, the teams are used mainly to serve search warrants on suspected drug dealers. Some of these searches yield as little as few grams of cocaine or marijuana."[51] The paper even cited experts who warned that the copious use of SWAT teams could eventually bring tragic consequences, foretelling the Diotaiuto shooting (though there had already been a number of botched paramilitary drug raids in Florida by that time).[52]

A subsequent investigation by the *St. Petersburg Times* found that many Florida police departments even fudged crime statistics and exaggerated local drug crimes in an effort to get more military weaponry. The "panhandle town of Lynn Haven (pop. 12,451) reported a 900 percent rise in armed robberies," the paper wrote, "without telling regulators that the raw number of robberies rose from one to 10, then fell to one again just as quickly."[53] The investigation also found that without the military's sophisticated anti-theft system tracking the weapons once they reached the police departments, many went missing or were stolen, meaning many officers could potentially later encounter the same weapons in the hands of criminals.[54]

As the *Miami Herald* reported was happening in Florida, it's commonplace for police officials who want a SWAT team to attempt to assuage community concerns by arguing the units are necessary to thwart the possibility of terrorism, school shootings, or violent crime. Once in place, however, SWAT teams are inevitably used far more frequently, mostly in the service of drug warrants. When the town of Ithaca, New York, reformulated its SWAT team in 2000, Assistant Commander Peter Tyler answered questions as to why the small town, which has virtually no violent crime, would need a paramilitary force by instructing critics to consider news reports of mass shootings and other violence all over the country. "I think it's naïve for anyone to think it couldn't happen here in Ithaca," Tyler added. Later, in the same article, Police Chief Richard Basile noted that Ithaca's newer, smaller team would be more efficient, because it would save the town money when serving drug warrants, the unit's primary function.[55]

In 2004, officials in the New York counties of Oswego and Cayuga defended their new SWAT teams (referred to by public officials by the less menacing moniker "Special Operations Units") as necessary in a post–September 11 world. "We're in a new era, a new time,

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here," said one sheriff. "The bad guys are a little different than they used to be, so we're just trying to keep up with the needs for today and hope we never have to use it." The same official later said in the same article that the unit would be used "for a lot of other purposes, too. High-profile arraignments. Just a multitude of other things, too."[56]

In 2001, Madison, Wisconsin's *Capital Times* reported that as of 2001, 65 of the state's 83 local SWAT teams had come into being since 1980, 28 since 1996, and 16 since 2000. Many of those newly established teams had popped up in absurdly small towns like Forest County (population 9,950), Mukwonago (7,519), and Rice Lake (8,320).[57]

Given that small towns generally don't have the money for high-tech military gear, this explosion of SWAT teams is almost certainly the result of the Pentagon's giveaway program, as well as federal programs that provide money to local police departments for drug control. In Wisconsin alone during the 1990s, local police departments were given nearly 100,000 pieces of military equipment valued at more than $18 million. Columbia County, Wisconsin (population: 52,468), was given more than 5,000 military items valued at $1.75 million, including, according to the *Capital Times*, "11 M-16s, 21 bayonets, four boats, a periscope, and 41 vehicles, one of which was converted into a mobile command center for the SWAT team." The county also received "surveillance equipment, cold weather gear, tools, battle dress uniforms, flak jackets, chemical suits, computers, and office equipment."[58]

Like the *Miami Herald* and upstate New York examples, the *Capital Times* investigation found that though paramilitary units are often justified to town councils and skeptical citizens as essential to fight terrorism, deal with hostage situations, and diffuse similarly rare but volatile situations; once established, they're rarely deployed for those reasons. Instead, they're almost always sent to serve routine search warrants, make drug arrests, and conduct similar drug-related proactive policing.[59]

Columbia County, Wisconsin, was given more than 5,000 military items valued at $1.75 million.

One sheriff, for example, convinced his county to give him a SWAT team after one of his deputies was killed in a shootout. Now, he told the *Capital Times*, he uses the unit primarily for "drug searches and stuff." A police captain in Green Bay noted that armed barricades are happening "less and less," and so the SWAT team instead "assists the drug task force on a regular basis." The Jackson County, Wisconsin, SWAT captain likewise told the paper that the most common use of the teams is for "drug search warrants." Columbia County, Wisconsin, put its $1.75 million Pentagon bounty to use at "Weedstock" in nearby Saulk County, where cops in full SWAT attire stood guard to intimidate while, as the *Times* reports, "hundreds of young people gather[ed] peacefully to smoke marijuana and listen to music."[60]

The *Capital Times* also found that in addition to free equipment, the federal government gave money to the states for drug control, primarily through the Byrne Justice Assistance Grant program, as well as various federal law enforcement block grants. The states then disbursed the money to local police departments on the basis of each department's number of drug arrests. The extra funding was *only* tied to anti-drug policing. In some cases, the funding could offset the entire cost of establishing and maintaining a SWAT team, with funds left over. The paper found that the size of the disbursements was directly tied to the number of city or county drug arrests, noting that each arrest in theory would net a given city or county about $153 in state and federal funding. Jackson County, Wisconsin, for example, quadrupled its drug arrests between 1999 and 2000. Correspondingly, the county's federal subsidy quadrupled, too.[61]

Drug arrests, then, made cities and counties eligible for federal money. And federal money and equipment allowed for the creation of SWAT teams. Non-drug-related policing brought *no* federal dollars, even for violent crime. The result: Federal policies allowed small police departments to claim surplus military equipment, which many then decided to put to use by forming a SWAT team.

Federal funding for drug arrests then created an incentive for officials to then increasingly deploy those units for drug crimes, the only kind of crime for which arrests brought in money.[62]

Perhaps most perversely, the *Times* found that in several cases new SWAT officers were hired under President Clinton's "community policing" program.[63] Community policing was originally billed as a less authoritarian, more civil-minded form of law enforcement designed, in Clinton's words, "to build bonds of understanding and trust between police and citizens."[64] Part of that program was Clinton's resurrection of the Vietnam era "Troops to Cops" programs, which promised federal funding for local police departments who hire and train war veterans as civilian police officers, a program embraced by both Democrats and Republicans.[65] It's not impossible, of course, for a former solider to be trained as an effective civilian police officer. But that the federal government would be encouraging an en masse transition from the battlefield to Main Street displays a lack of understanding of the differences between the ideal military mindset and the ideal mindset of a civilian police officer.

Clinton's "community policing" program was distorted in other areas of the country, too. In Portland, for example, from 1989 to 1994, the ratio of common patrol officers to citizens in Portland actually *fell*. But the number of police in the paramilitary Tactical Operations Branch of the Portland Police Bureau increased from 2 to 56.[66]

In one survey of law enforcement officers who worked in departments with paramilitary units, nearly two-thirds responded that those units "play an important role in community policing strategies."[67] Most criminal justice experts reject that possibility. "Community policing initiatives and stockpiling weapons and grenade launchers are totally incompatible," one criminal justice professor at the University of Wisconsin-Milwaukee told the *Capital Times*.[68]

Thanks to the federal subsidies for drug arrests, then, not only did the number of SWAT teams soar through the 1980s and 1990s, so too did the frequency with which they were deployed. In 1972, there were just a few hundred paramilitary drug raids per year in the United States.[69] According to Kraska, by the early 1980s there were 3,000 annual SWAT deployments, by 1996 there were 30,000, and by 2001 there were 40,000.[70] The average city police department deployed its paramilitary police unit about once a month in the early 1980s. By 1995, that number had risen to seven.[71] To give one example, the city of Minneapolis, Minnesota, deployed its SWAT team on no-knock warrants 35 times in 1987. By 1996, the same unit had been deployed for drug raids more than 700 times that year alone.[72]

In small- to medium-sized cities, Kraska estimates that 80 percent of SWAT callouts are now for warrant service. In large cities, it's about 75 percent. These numbers, too, have been on the rise since the early 1980s.[73] Orange County, Florida, deployed its SWAT team 619 times during one five-year period in the 1990s. Ninety-four percent of those callouts were to serve search warrants, not for hostage situations or police standoffs.[74]

Many SWAT teams are now deployed for routine police duties beyond even the drug war. For several years, the heavily armed Fresno SWAT team mentioned earlier was used for routine, full-time patrolling in high-crime areas. The Violent Crime Suppression Unit, as it was called, was given carte blanche to enter residences and apprehend and search occupants in high-crime, mostly minority neighborhoods. The unit routinely stopped pedestrians without probable cause, searched them, interrogated them, and entered their personal information into a computer. "It's a war," one SWAT officer told a reporter from the *Nation*. Said another, "If you're 21, male, living in one of these neighborhoods, and you're not in our computer, then there's something definitely wrong."[75] The VCSU was disbanded in 2001 after a series of lawsuits alleging police brutality and wrongful shootings, though officials claim the unit was dissolved because it had "fulfilled its goals."[76]

By the early 1980s there were 3,000 annual SWAT deployments, by 1996 there were 30,000, and by 2001 there were 40,000.

But this incorporation of paramilitary tactics into routine, even non-drug-related policing goes well beyond Fresno. Paramilitary units now also conduct routine patrols in cities such as Indianapolis and San Francisco, a development one *Boston Globe* reporter remarked gives these communities "all the ambience of the West Bank."[77] The Bay Area in California has a separate SWAT team just to guard its subway system.[78] About 18 percent of paramilitary units across the country now at least periodically conduct roving patrols in high-crime areas.[79] Explains one official in what Peter Kraska describes as a "highly acclaimed community policing department":

> We're into saturation patrols in hot spots [high-crime areas]. We do a lot of our work with the SWAT unit because we have bigger guns. We send out two, two-to four man cars, we look for minor violations and do jump-outs, either on people on the street or automobiles. After we jump-out the second car provides periphery cover with an ostentatious display of weaponry.[80]

"We stop anything that moves," the commander said. "We'll sometimes even surround suspicious homes and bring out the MP5s."

Another SWAT commander in a medium-sized Midwestern town sends paramilitary units out on routine patrols in an armored personnel carrier. "We stop anything that moves," the commander said. "We'll sometimes even surround suspicious homes and bring out the MP5s."[81] Another official, a police chief, explained his department's "community policing" efforts in particularly militaristic jargon:

> It's going to come to the point that the only people that are going to be able to deal with these problems [in high-crime areas] are highly trained tactical teams with proper equipment to go into a neighborhood and clear the neighborhood and hold it; allowing community policing and problem oriented policing officers to come in and start turning the neighborhood around.[82]

The deployment of SWAT teams for routine police work, even independent of the drug war, has reaped unfortunate—though predictable—results, from general police overreaction to mass raids on entire neighborhoods, to the deaths of innocent people. In January 1999, for example, a SWAT team in Chester, Pennsylvania, outraged the local community when it raided Chester High School in full tactical gear to break up a half dozen students who had been loitering outside the school in the early afternoon.[83]

An incident like that is troubling enough. But the use of heavily armed police tactics in response to nonviolent offenses can have far more tragic consequences. In 1998, the Virginia Beach SWAT team shot and killed security guard Edward C. Reed in a 3 a.m. gambling raid on a private club. Police say they approached the tinted car where Reed was working security, knocked, and identified themselves, at which point Reed refused to drop his handgun. Reed's family insists that the police version of events is unlikely, given that Reed was a security guard and had no criminal record. More likely, they say, Reed mistakenly believed the raiding officers were there to do harm, particularly given that the club had been robbed not long before. According to police, Reed's last words were, "Why did you shoot me? I was reading a book."[84] Club owner Darrin Hyman actually shot back at the SWAT team. Prosecutors would later decline to press felony charges against Hyman, concluding he had good reason to believe he was under attack.[85] Hyman was convicted of a misdemeanor gambling offense (playing a game of dice with friends) and of discharging a firearm.[86]

A similar scene unfolded in Virginia in January 2006, when police in Fairfax used a SWAT team to serve a search warrant on Salvatore Culosi Jr., whom they suspected of gambling on sporting events. When the SWAT team confronted Culosi as he came out of his home, one officer's gun discharged, striking Culosi in the chest and killing him. Police concede that Culosi had no weapon and made no menacing gestures as police prepared to arrest him. The *Washington Post* reported that Fairfax

County, Virginia, conducts nearly *all* of its search warrants with a SWAT team, including those involving white-collar and nonviolent crime.[87] Fairfax County prosecutor Robert Horan declined to press charges against the officer despite the fact that tests found no defect in the officer's weapon.[88]

SWAT teams are also increasingly—and oddly—being called in to negotiate with suicide cases, again sometimes yielding tragic results.[89] In one case that made national headlines in 1995, the family of a depressed 33-year-old Albuquerque, New Mexico, man named Larry Harper called police out of fear that Harper was about to commit suicide. Police responded with a nine-member SWAT team, dressed in full military gear and armed with automatic rifles and flashbang grenades. Harper's family overheard one member say, "Let's go get the bad guy," before the SWAT team chased Harper through the woods of a local park. According to the *New York Times*, Harper died when the SWAT team "found him cowering behind a juniper tree and shot him to death from 43 feet away."[90]

Even Larry Glick, former executive director of the National Tactical Officers Association, an organization that represents the interests of SWAT teams and paramilitary police units, told the *National Journal* in 2000: "The original mission of SWAT teams has changed. If the SWAT team is not busy responding to initial barricades, people say they're lazy. Departments want to give them something to do. Some agencies have given them too much to do. Some are overused."[91] The article went on to report that SWAT teams are now being used to respond even to calls about angry dogs and domestic disputes.

The proliferation of SWAT teams has extended to the federal government, too. In addition to the much-criticized, high-profile use of federal paramilitary troops in the 1993 siege at Waco and the use of more than 150 SWAT officers to seize six-year-old Cuban refugee Elian Gonzalez in 1999, federal SWAT teams are proliferating in other odd departments. As of 2000, at least 10 federal agencies had SWAT teams, including such unlikely agencies as the Department of Energy, the National Park Service, and the State Department. Former FBI director William Webster told NBC News in 2000 that the federal government is becoming "too enamored with SWAT teams, draining money away from conventional law enforcement."[92]

SWAT proliferation is also having another effect: it's introducing the military culture, military equipment, and the military mindset even to parts of the civilian police force not involved in SWAT teams or like paramilitary units. In 2004, the Washington, D.C., police department switched to military-style uniforms. The uniforms are dark blue, similar to those worn by the city's SWAT team, and feature a cap patterned after that worn by the U.S. Marines.[93] Patrol officers in Indianapolis are now armed with M-16 rifles supplied by the military. The officers are trained at the Camp Atterbury military base in Edinburgh, Indiana.[94] Several Chicago-area police departments now use the M-16 as well, including police in Waukegan, Zion, Mundelein, and Lake Zurich, Illinois. A spokesman for the Illinois Association of Chiefs of Police cited the 1999 Columbine High School massacre as justification for the high-powered weaponry.[95] Patrol officers in Orlando, Portland, and even tiny Pinole, California, now carry military-grade weapons.[96]

Private suppliers of military equipment have been eager to tap their new clients. *Covert Action Quarterly* reported in 1997 that "gun companies, perceiving a profitable trend, began aggressively marketing automatic weapons to local police departments, holding seminars and sending out color brochures redolent with ninja-style imagery."[97] Suppliers of paramilitary gear frequently sponsor "SWAT games" around the country, in which members of paramilitary teams compete in shooting, strength, endurance, and rescue competitions.[98] Websites and brochures from sponsor-suppliers at these competitions make little distinction between cop and soldier, blending battle images with photos and depictions of SWAT raids and civilian policing. NTOA actually publishes its own magazine, *Tactical Edge*, though civilians are prohibited from subscribing to it.[99] Another, *SWAT*

SWAT teams are now being used to respond even to calls about angry dogs and domestic disputes.

Heckler and Koch's slogan for the MP5 is, "From the Gulf War to the Drug War—Battle Proven."

magazine, abounds in ads featuring soldiers in full military garb and features articles such as "Polite, Professional, and Prepared to Kill" (to its credit, *SWAT* magazine at least does invite writers with contrarian points of view to submit critiques of police militarization).[100]

NTOA spokesman Glick told the *Washington Post* in 1997 that Heckler and Koch, makers of the popular MP5 used by Navy SEALs and SWAT teams across the country, puts on some of the most popular tactical seminars in the business. Most seminars feature "retired military personnel who don't know what they're doing," Glick said, while Heckler and Koch's is "very successful and credible, among the best. Their ultimate goal is to sell guns."[101]

Heckler and Koch's slogan for the MP5 is, "From the Gulf War to the Drug War—Battle Proven."[102] As the Independence Institute's David Kopel points out, such baldly militaristic marketing has real-world consequences:

> When a weapon's advertising and styling deliberately blur the line between warfare and law enforcement, it is not unreasonable to expect that some officers—especially when under stress—will start behaving as if they were in the military. That is precisely what happened at Waco when BATF agents began firing indiscriminately into the building, rather than firing at particular targets. . . . It is ironic that many city governments, at the behest of the gun prohibition lobbies, are suing gun manufacturers for truthful advertising stating that firearms in the responsible hands of law-abiding citizens can provide important protection. At the same time, many American cities are equipping their police departments with machine pistols and other automatic weaponry whose advertising (like Heckler & Koch's) encourages irresponsible, military-style use of weapons in a civilian environment.[103]

As if outfitting soldiers in war gear weren't enough, many SWAT teams and paramilitary units now train with elite military units. In 1989, then–defense secretary Dick Cheney created Joint Task Force Six, a unit based in Fort Bliss, Texas, that conducts highly specialized military-style training for domestic law enforcement in such areas as helicopter attacks, sniping, and urban combat techniques. The unit was established to provide military assistance in drug interdiction and border control. In addition to Joint Task Force Six, the U.S. Army Military Police, the Marine Corps, the Navy SEALs, and the Army Rangers also each provide training for domestic police departments, respectively.[104] Two years after Joint Task Force Six's creation, one assistant secretary of defense said at an army conference, "We can look forward to the day when our Congress . . . allows the Army to lend its full strength toward making America drug free."[105]

Forty-six percent of the paramilitary units surveyed by Kraska in the 1990s reported that their SWAT teams or paramilitary units had been trained by current or former members of a military special forces unit—generally either the Navy SEALs or the Army Rangers. According to one commander: "We've had teams of Navy SEALs come here and teach us everything. We just have to use our own judgment and exclude the information like: 'at this point we bring in the mortars and blow the place up.'"[106]

Before 1993, the U.S. Army held a prohibition against teaching close-quarters, urban combat techniques to civilian police forces.[107] In part because of political pressure to mount a more aggressive approach to the drug war, that prohibition was lifted. The U.S. military now routinely conducts joint paramilitary training operations with civilian police departments.[108]

The National Guard, an organization that in some ways brides the gap between the federal military and state and local police forces, has also become more involved in drug interdiction efforts. In 1992, the chief of the Drug Demand Reduction Section of the National Guard asserted that "the rapid growth of this drug scourge has shown that military force

must be used to change the attitudes and activities of Americans who are dealing and using drugs."[109] At about that time, the National Guard was making 20,000 drug arrests, searching more than 100,000 automobiles, entering more than 1,000 privately owned buildings, and encroaching on private property in drug search operations more than 6,500 times per year.[110] In 1998, the Indiana National Guard helped raze more than 40 suspected crack houses in Gary, Indiana.[111] And by 2000, the National Guard was routinely making sweeps of open fields in California, Kentucky, and several other states looking for marijuana.[112] The Coast Guard is also now routinely used in drug intervention efforts on waterways.[113] And in some instances, the Navy SEALS and Army Rangers themselves have been called in to provide assistance on drug efforts.

Problems with Paramilitary Drug Raids

The next two sections will scrutinize both the increasing militarization of civilian policing and the practice of using paramilitary police units to conduct the routine execution of drug warrants.

Criticism of Military Policing in General

The most obvious problem with the militarization of civilian policing is that the military and the police have two distinctly different tasks. The military's job is to seek out, overpower, and destroy an enemy. Though soldiers attempt to avoid them, collateral casualties are accepted as inevitable. Police, on the other hand, are charged with "keeping the peace," or "to protect and serve." Their job is to protect the rights of the individuals who live in the communities they serve, not to annihilate an enemy. Former Reagan administration official Lawrence Korb put it more succinctly: soldiers are "trained to vaporize, not Mirandize."[114]

Given that civilian police now tote military equipment, get military training, and embrace military culture and values, it shouldn't be surprising when officers begin to act like soldiers, treat civilians like combatants, and tread on private property as if it were part of a battlefield. Of course, it's hard to overlook the fact that the soldiering-up of civilian police forces is taking place as part of the larger War on Drugs, which grows more saturated with war imagery, tactics, and phraseology every day.

Many longtime police officials are concerned. The new organization Law Enforcement Against Prohibition, for example, has grown to more than 3,500 members since its inception in 2003.[115] LEAP represents current and former police officers and prosecutors who support drastic reforms in the nation's drug laws. The organization's president, retired narcotics officer Jack Cole, cites the pervasiveness of mistaken SWAT raids as one regrettable consequence of the War on Drugs. "There are too many WRONG houses," Cole writes. "It does not need to happen."[116] In 1997, one retired sergeant wrote a letter to the editor of the *Washington Post* in protest of the move toward a more militarized police force. "One tends to throw caution to the wind when wearing 'commando-chic' regalia, a bulletproof vest with the word 'POLICE' emblazoned on both sides, and when one is armed with high tech weaponry," he warned. "We have not yet seen a situation like [the British police occupation of] Belfast. But some police chiefs are determined to move in that direction."[117]

Though most military officials tend to support the idea of separate policing and fighting forces, the sentiment isn't universal. One prominent military scholar, in fact, confirmed the worst fears of the retired sergeant in Washington, D.C., by *recommending* a Northern Ireland approach to high-crime areas in the United States. Thomas A. Marks, a widely published expert and consultant and adjunct professor at the U.S. Joint Special Operations University in Florida, wrote that crime in certain areas of the United States is worse than it was in Northern Ireland at the height of the province's struggles with the British. "What we have, then, are human

It's hard to overlook the fact that the soldiering-up of civilian police forces is taking place as part of the larger War on Drugs, which grows more saturated with war imagery, tactics, and phraseology every day.

cesspools—in every sense already centers of criminal activity, as well as economic and spiritual poverty, well beyond anything Northern Ireland can throw up in terms of misery and death—waiting for some jolt to create waves that leap out of the pool." That jolt, Marks believes, is a permanent military policing presence. He recommends domestic police forces adopt an approach similar to what the British utilized in Northern Ireland, a military policing force to "seize and clear" areas, and adopt a warlike counterinsurgency strategy in high-crime areas.[118]

But most military officials understand the threat such a presence would pose to civil society. In the 1980s, as Congress was preparing to gut the Posse Comitatus Act, several U.S. military officials protested. Marine major general Stephen G. Olmstead, for example, the deputy assistant secretary of defense for drug policy, told a U.S. Senate subcommittee in 1987 that it was about to make a grave mistake:

> One of [America's] greatest strengths is that the military is responsive to civilian authority and that we do not allow the Army, Navy, and the Marines and the Air Force to be a police force. History is replete with countries that allowed that to happen. Disaster is the result.[119]

Col. Charles J. Dunlap, a distinguished graduate of the National War College, has written prolifically on the dangers of the creeping militarization of civilian life. "[U]sing military forces for tasks that are essentially law enforcement requires a fundamental change in orientation," he writes. "To put it bluntly, in its most basic iteration, military training is aimed at killing people and breaking things. . . . Police forces, on the other hand, take an entirely different approach. They have to exercise the studied restraint that a judicial process requires; they gather evidence and arrest 'suspects.' . . . These are two different views of the world."[120]

There are also at least a few police officials that understand the threat of overly militarized policing. Nick Pastore, a New Haven police chief, now retired, was one of few police chiefs to turn down the Pentagon's military bounty. Pastore told the *New York Times* that outfitting cops in soldier gear "feeds a mind-set that you're not a police officer serving a community, you're a soldier at war. I had some tough-guy cops in my department pushing for bigger and more hardware. They used to say, 'It's a war out there.' They like SWAT because it's an adventure."[121] Pastore warned that the military approach paints civilians as the enemy in the eyes of police officers. "If you think everyone who uses drugs is the enemy, they you're more likely to declare war on the people."[122] In an interview with the *Nation*, Pastore recalled that before he took over, New Haven's SWAT team was being called out several times per week. "The whole city was suffering trauma," he said. "We had politicians saying 'the streets are a war zone, the police have taken over,' and the police were driven by fear and adventure. SWAT was a big part of that."[123] After Pastore's reforms, New Haven's SWAT team was called out just four times in all of 1998. Defying SWAT supporters who say "get tough" policing is responsible for the recent drop in crime rates, New Haven's crime rate dropped at rates greater than the rest of Connecticut, from 13,950 incidents in 1997 to 9,455 in 2000.[124]

Another chief who bucked the tide was Marquette County, Wisconsin's, sheriff, Rick Fullmer. He disbanded his county's SWAT team in 1996. "Quite frankly, they get excited about dressing up in black and doing that kind of thing," Fullmer told a local media outlet. "I said, 'this is ridiculous.' All we're going to end up doing is getting people hurt."[125]

More evidence for the effect militarization is having on the mindset of civilian police officers can be found in the words and actions of civilian officers and police officials themselves. Los Angeles police chief Daryl Gates, for example, once suggested that casual drug use amounts to "treason," and that offenders should be "be taken out and shot."[126] Marion County, Florida's, Ken Ergle, the sheriff *60*

"Quite frankly, they get excited about dressing up in black and doing that kind of thing. I said, 'this is ridiculous.' All we're going to end up doing is getting people hurt."

Minutes profiled for having accumulated a hangar full of free helicopters and luxury planes, explained to Lesley Stahl, "Well, with any county, with any state, with any nation, you always have to prepare for the threat of war. . . . My war is on the streets, fighting the criminals."[127]

Of course, police officials like Gates and Ergle are only following the lead of elected officials and appointed policymakers. War imagery and the endorsement of indiscriminate, military battle tactics for the War on Drugs has become common in political discourse. For example, the nation's first Drug Czar, William Bennett, recommended in 1989 that the United States abolish habeas corpus for drug offenders.[128] "It's a funny war when the 'enemy' is entitled to due process of law and a fair trial," Bennett later told *Fortune* magazine.[129] On the *Larry King Show* Bennett suggested that drug dealers be publicly beheaded.[130]

In 1986, President Ronald Reagan issued a directive declaring illicit drugs a threat to national security. "We're taking down the surrender flag that has flown over so many drug efforts," Reagan said. "We're running up a battle flag."[131] In the same speech, he likened the drug war to the World War I battle of Verdun, an analogy that journalist Dan Baum notes in his book *Smoke and Mirrors* is both amusing and appropriate: "[T]he battle is famous for killing half a million people on each side," Verdun writes, "while resolving absolutely nothing."[132] Battle rhetoric continued through the George H. W. Bush and Clinton administrations and certainly continues through the current Bush administration, which has run national ad campaigns equating recreational drug use with support for international terrorism.

Given such rhetoric, it isn't all that surprising when civilian agencies police drug crimes like soldiers instead of peacekeepers and treat civilians like combatants instead of citizens with rights. Under Bennett's reign as Drug Czar, cities like Boston declared the equivalent of a state of war in some areas (mostly inhabited by minorities), with all the accompanying civil liberties restrictions. One judge criticized Boston's efforts as "a proclamation of martial law . . . for a narrow class of people—young blacks." Baum reports that Bennett was supportive of such efforts, attributing them to "the overriding spirit of our front-line drug enforcement officers—which we should be extremely reluctant to restrict within formal and arbitrary lines."[133]

Twenty-five years of an infusion of military hardware, training, and tactics has also trained police officers—particularly SWAT officers and drug police—to adopt the win-at-all-costs mentality of a soldier. The Hoover Institution's Joseph McNamara, a former police chief for Kansas City, Missouri, and San Jose, California, told the *National Journal* in 2000 that he's seen the battle mentality on display at the increasing number of SWAT conventions and SWAT competitions now held across the country. Speaking about a trip to a recent NTOA convention, McNamara said: "Officers at the conference were wearing these very disturbing shirts. On the front, there were pictures of SWAT officers dressed in dark uniforms, wearing helmets, and holding submachine guns. Below was written: 'We don't do drive-by shootings.' On the back, there was a picture of a demolished house. Below was written: 'We stop.'"[134]

Peter Kraska saw similar attitudes while doing field research with paramilitary units. As officers trained in preparation for the formation of a regional paramilitary unit in the Midwest and shot at "head-sized jugs of water," one officer wore a T-shirt emblazoned with an image of a city in flames. Beneath it were the words, "Operation: Ghetto Storm."[135] The two military reserve officers who conducted the training operation offered Kraska a glimpse into the minds of the civilian police officers they were training. "This shit [the creation of paramilitary units] is going on all over. Why serve an arrest warrant to some crack dealer with a .38?" one told Kraska. "With full armor, the right shit [pointing to a small case that contained a nine-millimeter Glock], and training, you can kick ass and have fun." The other officer added, "Most of these guys just like to play war; they get a rush

"With any nation, you always have to prepare for the threat of war. . . . My war is on the streets, fighting the criminals."

out of search-and-destroy missions instead of the bullshit they do regularly."[136] Another SWAT commander told Kraska, referring to his unit, "When the soldiers ride in, you should see those blacks scatter."[137]

Such us-versus-them, search-and-destroy sentiment has been on display in a number of incidents in which drug agents have invaded entire streets, city blocks, and even entire towns in drug interdiction efforts, which commonly include no-knock raids. In 1998, more than 90 police officers in San Francisco in full SWAT attire raided 13 apartments in the city's Martin Luther King–Marcus Garvey housing co-op. Police blew doors off their hinges, deployed flashbang grenades, and, according to residents, slapped, beat, and stepped on the necks of the people inside. Police put gun muzzles against the heads of some occupants. One family's pet dog was shot in front of its owners, then dragged outside and shot again. Children as young as six were handcuffed, which Police Chief Fred Lau said was to done to prevent them from "running around." The raid was apparently conducted to scare and intimidate a local gang.[138]

"The rate of killings by police was just off the charts," Walker would later report. The SWAT team "had an organizational culture that led them to escalate situations upward rather than de-escalating."

In the late 1990s, things got so bad in Albuquerque, New Mexico, the city had to hire an outside investigator. After a series of botched drug raids and shootings such as the Larry Harper suicide call, the city hired University of Nebraska criminologist Sam Walker to conduct an investigation of the city's police tactics. Walker was astounded. "The rate of killings by police was just off the charts," Walker would later report. The SWAT team "had an organizational culture that led them to escalate situations upward rather than de-escalating."[139] In response to Walker's and the city's own investigation, Albuquerque hired a new police chief, Jerry Galvin. Galvin immediately concluded that a city of some 400,000 didn't need a full-time paramilitary unit. He also began to demilitarize the city's police force and instill a sense of community policing. Galvin told the *New York Times* in 1999, "If cops have a mind-set that the goal is to take out a citizen, it will happen."[140] In 1999, Albuquerque also instituted a crisis counseling division in lieu of the SWAT team to handle suicides and domestic disputes.[141]

Reforms in places like New Haven and Albuquerque have unfortunately been the exception. Much of the rest of the country has marched forth with police militarization. The weapons, training, and federal money are too lucrative to turn down. And once they've acquired the equipment and training, police officials feel compelled to put it to use. Lt. Tom Gabor of the Culver City, California, police department began noticing the phenomenon in the early 1990s and criticized the practice in a 1993 article for the FBI's *Law Enforcement Bulletin*. Gabor wrote that increases in the deployments of SWAT teams have more to do with "justifying the costs of maintaining units" than with ensuring public safety. Even back in the early 1990s, Gabor noticed, "In many organizations, patrol leaders feel pressured to call for SWAT assistance on borderline cases, even though field supervisors believe that patrol personnel could resolve the incident."[142]

And the trend continues. In 2003, police in Goose Creek, South Carolina, conducted a schoolwide commando-style raid on Stratford High School. Police lined students face down on the floor at gunpoint while officers searched their lockers and persons for drugs. Some were handcuffed. Police dogs sniffed students, lockers, and backpacks. The incident made national news and was captured on videotape by the school's security cameras. It's difficult to see why such tactics were necessary. Police found no illegal drugs, and the school was described in media reports as having one of the best academic reputations in the state.[143] The principal of the school later resigned, and the city recently settled a class-action suit with the affected students.[144]

Another troubling development is the use of SWAT teams and other paramilitary units to search and arrest medical marijuana and prescription painkiller offenders. In some cases, these people are abiding by state law, or even working for the state. Yet the federal

government insists not only on prosecuting them, but on using SWAT teams to arrest them. It's difficult to understand why SWAT teams and paramilitary tactics are necessary to apprehend sick patients, convalescent center workers, and white-collar doctors. But it's common practice.

On September 5, 2002, for example, a DEA SWAT team clad in flak jackets and armed with M-16s raided the Wo/Men's Alliance for Medical Marijuana, a treatment center operated by medical marijuana activists Michael and Valerie Corral. One patient there, Suzanne Pfeil, who suffered from post-polio symptoms, awoke in her bed to find five federal agents pointing assault weapons at her head. When agents yelled at her to get up from the bed, Pfeil responded that she wasn't physically able. They ordered her up again. Again, she answered that she couldn't. The agents handcuffed Pfeil to her bed and proceeded to search her belongings. Pfeil, who is allergic to most pharmaceutical drugs, uses marijuana for the muscle and nerve pain brought on by her condition.[145]

Since the DEA has begun targeting physicians who the agency believes are prescribing too many prescription painkillers, these suspects too are generally apprehended and arrested by paramilitary units, despite the fact that most all of them are white-collar, professional doctors in private practice, with no history of violence. The *Village Voice* reported in 2003 that the DEA's tactics include "storming [pain treatment clinics] in SWAT-style gear, ransacking offices, and hauling doctors off in handcuffs."[146]

Dr. Cecil Knox of Roanoke, Virginia, is one example. When federal agents came to arrest Knox for overprescribing prescription painkillers, they stormed his office in flak jackets. A clinic employee reported: "I thought I was going to die. My husband was helping out that day, and a DEA agent came in and pointed a gun at his head and said, 'Get off the phone, now.'"[147] The *Voice* reported that in June 2003, DEA agents raided a Dallas pain clinic, where they "kicked own doors, ransacked the office, and handcuffed patients, including an elderly woman with a stroller and an oxygen tank."[148] And when federal agents arrested pain specialist Dr. William Hurwitz after years of investigation, they did so with 20 paramilitary agents who raided his home with assault weapons and arrested him in front of his two young daughters.[149]

David Brushwood, a pharmacy scholar and expert on pain care at the University of Florida, says that where federal agents once worked with doctors to single out problem patients, they now go after doctors with SWAT teams. Agents "watch as a small problem becomes a much larger problem. They wait, and when there is a large problem that could have been caught before it got large, they bring the SWAT team in with bullet-proof vests and M16s, and they mercilessly enforce the law," Brushwood told one reporter.[150]

It's difficult to come up with a reason why such brazen shows of force against suspects who pose no risk of violence and present no threat of harm to anyone around them would be necessary, other than simply to intimidate. This, again, is a trait more associated with an occupying army than with a civilian police force.

Why Paramilitary Drug Raids Are Problematic

Escalation of Violence. The most obvious criticism of paramilitary drug raids is that, contrary to assertions from proponents that they minimize the risk of violence, they actually *escalate* provocation and bring unnecessary violence to what would otherwise be a routine, nonviolent police procedure. SWAT teams typically serve drug warrants just before dawn, or late at night. They enter residences unannounced, or just seconds after announcing. Targets, then, are suddenly awoken from sleep, and confronted with the prospect that their homes are being invaded. Police sometimes deploy diversionary devices such as flashbang grenades, designed to cause temporary blindness and deafness, intentionally compounding the confusion.

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first instinct upon waking under such conditions would be to disregard whatever the intruders may be screaming at him, and reach for a weapon to defend himself. Even public officials have expressed that sentiment. In 1992, police in Venice, Illinois, mistakenly raided the wrong home on a paramilitary narcotics raid. Fortunately, no one was home. But the house turned out to be the home of Tyrone Echols, Venice's mayor. "To tell the truth, I don't remember what they said because I was furious," Echols told the *St. Louis Post-Dispatch*. "If I'd been here and heard that going on I probably would have taken my pistol and shot through the door. I'd probably be dead. And some of the officers would probably be dead, too."[151]

Even former police officers have instinctively reached for their weapons when SWAT teams have mistakenly entered their homes on faulty, no-knock search warrants.[152] So have many civilians—some guilty of drug crimes, some completely innocent—who were then shot and killed by police officers who understandably mistook an otherwise nonviolent suspect's attempt to defend himself as an act of aggression. Should a suspect or any occupant of the residence be asleep in a room far away from the point of entry, or perhaps on another floor, it's not difficult to see how he might be awoken by the commotion but not hear the announcement that the intruders are police (assuming such an announcement was made in the first place).

The intentionally inflicted confusion and disorientation, the forced entry into the home, and the overwhelming show of force, then, make these raids excessively volatile, dangerous, and confrontational. Were they only utilized against violent criminals who pose an immediate threat to the community and public safety, one could argue that their utility outweighed their risk. But the vast majority of paramilitary raids are executed against drug offenders, and many of those against marijuana offenders with no history of violence. Which means that far from defusing violent situations, most SWAT raids actually create them.

Posing as Police. Another problem with military-style, late-night drug raids is that there's good reason for civilians to suspect late night intruders *aren't* police. Spurred on in part by the frequent nature and popularization of surprise drug raids, it is not uncommon for criminals to disguise themselves as raiding police to gain entry into homes and businesses.

One infamous example took place in 1994, when a group of men entered the home of Lisa Renee and abducted her as retribution for a drug deal, which they'd conducted with her brothers, gone wrong. In a chilling 911 call, as Renee pleads with the operator to send help, one of the men announces through the door that he's the "FBI." Renee says to the operator, "Oh, they're the FBI." One intruder then says, "Open the door and we'll talk." Renee says again, "They're the FBI. They say they're the FBI, ma'am," and opens the door. The call ends with screaming.[153] The men kidnapped Renee, raped and beat her over the next several days, then buried her alive in a shallow grave.[154] Given its sensational elements, the Renee case is perhaps the most famous case of armed intruders posing as police. But it's by no means the only example. New York City alone reports *more than 1,000 cases each year* of people pretending to be police officers, many of them in attempts to rob homes and businesses.[155] Here are just a few examples from recent headlines:

- In January 2006, Jonathan Dodson of Des Moines, Iowa, was charged with impersonating a public official in burglary after he and another man gained entry to a home by claiming to be U.S. Marshals.[156]
- In October 2005, a couple in Clay County, Kansas, broke into a 79-year-old man's home while pretending to be police officers. They ransacked his home and stole a wallet, credit cards, and two bottles of medication.[157]
- On July 15, 2005, two intruders claimed to be police officers to gain entry to a home in Oak Park, Michigan. Once

inside, the assailants forced residents to the floor and made off with cash, jewelry, and a shotgun.[158]

- On November 29, 2005, two men staged a fake drug raid while holding up a residence in Syracuse, New York. Authorities believe the men had conducted similar phony raids four or five times before.[159]
- In January 2005, an Alexandria, Virginia, lawyer was dragged from his home by three gunmen, who gained access after telling the man's son they were police. Kenneth Labowitz was kidnapped after gunmen—still claiming to be federal agents—shocked his wife with a stun gun. Labowitz was beaten, hit with a stun gun, and taken to a remote area where the men said they had already prepared his grave. Labowitz eventually escaped, and the gunmen were prosecuted.[160]
- In October 2004, five men pretending to be police invaded a home near Collierville, Tennessee. The men broke open the door at 3 a.m., then yelled "FBI!" to throw the couple inside off-guard. All were wearing black shirts emblazoned with the word "POLICE." Michael and Katrina Perry were then bound, beaten, and tortured. The intruders then searched the home for valuables and left in the couple's SUV.[161]
- In July 2004, several men stormed a home near Houston, Texas, screaming "HPD, HPD!" referring to the Houston Police Department. Once inside, they took cash and jewelry and shot both of the home's occupants. One was grazed, the other was critically injured.[162]
- In January 2003, at 1 a.m. on a Sunday, several men in ski masks claiming to be police knocked on a window, then broke open the door to a home in Edinburg, Texas. It was the latest in a string of incidents in which drug dealers had broken into homes posing as police on fake drug raids. Once inside, the men tied up six young men they found inside and in an adjacent shed and shot them to death.[163]

These are just a few examples. There are dozens more from just the last several years.[164]

Informants and Forfeiture. An overwhelming number of mistaken raids take place because police relied on information from confidential informants. These informants are notoriously unreliable. Most tend to be drug dealers themselves looking to knock off competitors, convicted criminals or charged suspects looking to trade information for a reduction in sentence or less serious charges, or professional informants who get a cut of any money or assets seized. After a 1998 "wrong door" raid on an elderly couple in New York City, for example, one police source told the *New York Times* that the informant in the case, one described in police affidavits as reliable, wasn't so reliable after all. Just 44 percent of the tips he'd given police over the years had produced actual drug evidence.[165]

A 1999 investigation by the *Chicago Tribune* detailed dozens of cases in which jailhouse informants blatantly lied to win shortened sentences, some in cases that resulted in the death penalty.[166]

Police routinely secure warrants for paramilitary drug raids on the basis of a tip from a single, confidential informant, many of whom are paid, or rewarded with leniency in their own criminal cases. Back in 1995, *National Law Journal* estimated that money paid to informants jumped from $25 million in 1985 to about $97 million in 1993.[167] It's safe to assume that number's significantly higher now. Those figures also don't include money seized by police from drug suspects, a portion of which often gets filtered back to informants. In a scathing editorial, the publication warned, "Criminals have been turned into instruments of law enforcement, while law enforcement officers have become criminal co-conspirators." The piece warned that judges weren't doing a satisfactory job of verifying the credibility of informants, some of whom are "invented out of whole cloth."[168]

One of the more egregious examples of how the informant system can lead to tragedy is the case of Pedro Oregon Navarro. In the summer

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of 1998, two police officers in Houston pulled over a car with three men inside. One of them was subsequently arrested for public intoxication. Already on probation, the suspect came up with a bargain for the arresting officers. He'd give them a tip on a drug dealer if they'd let him off. They agreed. The man made up a story and gave police Navarro's address. At 1:40 a.m., six police from the city's anti-gang task force raided Navarro's house. The informant knocked on the door, and Navarro's brother-in-law answered. At that point, the officers stormed Navarro's bedroom, where the man awoke, startled and frightened, and reached for his gun. Police opened fire. They shot Navarro 12 times, killing him. Navarro never fired his gun.[169] The officers who shot Navarro were eventually terminated. In August 2005, two of them applied for reinstatement, adding that they'd hoped to be "vindicated" in the Navarro shooting.[170]

Rev. Accelyne Williams is perhaps the most infamous case of a bad tip leading to a fatally flawed no-knock raid. Williams, a 75-year-old retired minister, died of a heart attack on March 25, 1994, after struggling with 13 members of a heavily armed Boston SWAT team that had stormed his apartment in black masks.[171] One police source told the *Boston Herald*, "Everything was done right, except it was the wrong apartment."[172]

Police later discovered that an informant had given them incorrect information. The *Herald* reported:

> A warrant authorizing the raid was approved by Suffolk County Assistant District Attorney Mary Lou Moran, even though the application supporting the warrant did not specify which apartment on the building's second floor was to be targeted. It also failed to provide any corroboration of the confidential informant's tip that a Jamaican drug posse operated out of the building.[173]

One police source told the *Herald*: "You'd be surprised at how easily this can happen. An informant can tell you it is the apartment on the left at the top of the stairs and there could be two apartments on the left at the top of the stairs. Or people could rent rooms within an apartment that the informant doesn't know about. You are supposed to verify it, and I'm not making excuses, but mistakes can be made."[174]

A week after the Williams raid, media investigations discovered that three of the officers involved had been accused in a 1989 civil rights suit of using nonexistent informants to secure drug warrants. The three had erroneously raided the home of Jean-Claude and Ermite David in 1989, resulting in a $50,000 settlement from the city of Boston. According to one witness, Philbin apologized as officers were leaving the scene, telling the home's occupants, "This happens all the time."[175] Five years before the Williams raid, Boston detective Sherman C. Griffiths was killed in another late night drug raid gone wrong. A jury acquitted the man who shot Griffiths when Detective Carlos A. Luna confessed that, to speed up the warrant process, he had made up the informant whose alleged tip led to the raid.[176]

In the fall of 1995, the First Circuit Court of Appeals affirmed the conviction of a man on charges precipitated by an informant but warned of the increasing abuse of the informant system. Appellate Judge Michael Boudin cautioned:

> In his dual role as both instigator and witness, the informant has a special capacity—as well as strong incentive—to tilt both the event itself and his testimony about it. If the government is going to use its informants in a role just short of provocateur, it would be well advised to consider devising restrictions that will at least lessen the likelihood for abuse. Otherwise, the lesson of history is that the courts themselves are likely to take precautions and their adjustments are usually more rigid and far-reaching.[177]

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Accelyne Williams and Sherman Griffiths cases, the *Boston Globe* ran a story in 1995 that profiled several men who lived entirely off of the fees they collected as police informants and who, consequently, often used entrapment to generate new tips for police.[178] Other examples of informant corruption abound, including these recent examples:

- In 2005, Oregon's *News-Register* ran a lengthy profile of career informant Marc Craven, who befriended immigrants and other low-wage workers, then tempted them with promises of high-paying construction jobs if they could find him small amounts of marijuana or methamphetamine. In some cases, he badgered his targets for weeks, playing off their dreams of a better life, then tipped off police when his targets managed to get him minuscule amounts of illicit drugs.[179]
- In 2005, the *Denver Post* reported that the Denver DEA had an ongoing relationship with an informant dating back to 1993, and continued to let the informant deal drugs as he gave up rival dealers. By 2003, the local U.S. Attorney's office had become concerned enough with informant Gerardo Guitierrez-Velazquez's credibility that they told the DEA they would stop prosecuting cases based on tips that originated with him. Of course, by that time, Velazquez had already put several people in prison.[180]
- In 2004, Riverside County, California, prosecutors had to review more than 15 convictions after it was revealed that a confidential informant routinely used in narcotics sting operations had been kept secret from judges. Among other transgressions, the informant allegedly planted drugs in a suspect's car, then smashed one of the car's taillights to give police reason to pull the suspect over. Prosecutors insisted on keeping the informant secret despite the fact that serious questions arose about his credibility in a number of cases. "The DA resisted every attempt we made to identify the informant even though it was clear from the beginning that he was a material witness," one defense lawyer told the Associated Press.[181] The informant problems came to light after a Riverside officer was implicated in an incident in which an informant was permitted to steal money from a drug suspect. In the ensuing investigation, one detective said informants routinely played key roles in drug raids, and prosecutors and defense attorneys were kept in the dark about their involvement.[182]
- In 2001, a scandal broke in Dallas in which a police drug informant had been planting fake cocaine on dozens of Mexican immigrants. Dallas police would then conduct field tests on the "drug," which in many cases was ground-up billiards chalk. Miraculously, tests repeatedly showed the substance to be cocaine. After the scandal broke, investigators found more than 80 cases that had been manufactured by the informant. He made $1,000 for every kilo of cocaine seized from his tips.[183] Only one street-level detective was charged in the case, and he was later acquitted in federal court. The subsequent city investigation, closed to the public and conducted by city officials and no outside investigators, was described by one journalist as "a tight-lipped whitewash."[184] In 2005, the *Dallas Morning News* reported that three years before the scandal a police lieutenant had issued a blistering report on the Dallas Police Department's informant system, noting that informants were frequently paid under false Social Security numbers, some informants were never documented at all, and in many cases, supervisor signatures approving the use of informants were forged, post-dated, or never obtained at all.[185]

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A 2000 *Denver Post* investigation found that judges exercise almost no discretion at all when it comes to issuing no-knock warrants.

tice system entrusted with safeguarding the Fourth Amendment. In truth, the process has become little more than a rubber stamp exercise.

The 2003 botched New York City raid that killed Alberta Spruill was also based on information from a confidential informant. For years, activists, citizens, and media outlets had warned about the city's reliance on informants before conducting such volatile raids. This was particularly true of the city's Civilian Complaint Review Board, billed as an agency designed to act on citizen complaints of police brutality. Review board members were growing increasingly concerned about botched drug raids emanating from faulty informant tips but were powerless to do anything about it. A *New York Times* article warned about the increasing number of no-knock police raids and use of confidential informants. It was published five years before the raid ending in Alberta Spruill's death:

> Confidential informers—called snitches and rats by the narcotics officers who depend on them—are a central, if little-discussed, weapon in the war on drugs. Since the apartments many drug dealers now use are difficult and dangerous to infiltrate, investigators have come to rely more and more on their underworld contacts. Interviews with police officials, prosecutors, judges, and lawyers paint a picture of a system in which police officers feel pressured to conduct more raids, tips from confidential informants are increasingly difficult to verify, and judges spend less time examining the increasing number of applications for search warrants before signing them.[186]

There isn't much data available on just how often judges or prosecutors turn down search warrants because of the untrustworthiness of a confidential informant or on how often they turn down drug search warrants in general. But most criminal justice experts agree that it's rare.

One study of Chicago-area judges, prosecutors, drug police, and public defenders conducted in 1992 by University of Minnesota law professor Myron Orfield, for example, suggests that the system of administering search warrants is far from the careful balance of crime control and civil liberties many Americans might envision.[187] Orfield found that more than a fifth of Chicago judges believe police lie in court more than half the time when it comes to Fourth Amendment issues. Ninety-two percent of judges said police lie "at least some of the time." Thirty-eight percent of judges said they believe police superiors encourage subordinates to lie in court. More than 50 percent of respondents believed that at least "half of the time" the prosecutor "knows or has reason to know" that police fabricate evidence at suppression hearings. Another 93 percent (including 89 percent of the prosecutors) reported that prosecutors had knowledge of perjury "at least some of the time." Sixty-one percent of respondents, including half of the surveyed prosecutors, believed that prosecutors know or have reason to know that police fabricate evidence in case reports, and half of prosecutors believe the same to be true when it comes to warrants. Prosecutors also described several techniques in dealing with police that would probably surprise much of the public, including articulating cases to police in terms such as, "if this happens, we win. If this happens, we lose."[188]

A 2000 *Denver Post* investigation found that judges exercise almost no discretion at all when it comes to issuing no-knock warrants. The *Post* found that Denver judges had denied just five of 163 no-knock applications over a 12-month period (local defense attorneys were surprised to learn there were even five).[189] "No-knock search warrants appear to be approved so routinely that some Denver judges have issued them even though police asked only for a regular warrant," the *Post* wrote. "In fact, more than one of every 10 no-knock warrants issued over the past seven months *was transformed from a regular warrant*

with just a judge's signature."[190] Among the paper's other findings:

- In 8 of 10 raids, police assertions in affidavits that weapons would be present turned out to be wrong.
- Just 7 of the 163 affidavits for no-knock warrants offered specific allegations that a suspect had actually been seen with a gun, evidence that's essential to procuring a no-knock warrant. Even here, police found weapons in just two of the seven searches.
- About one-third of the no-knock warrants were never reviewed by a district attorney before going to a judge, a violation of the police department's stated policy. Many of the prosecutor reviews that did take place took place over the telephone.
- Nearly all of the warrants were for narcotics and were granted solely on the tip of an anonymous informant and an officer's assertion (minus any corroborating evidence) that weapons would be found at the scene or that the suspect was likely to dispose of evidence.[191]

Judge Robert Patterson, the presiding judge for Denver's criminal court system provided an astonishing defense. "We are not the fact gatherers," he said. "It's pretty formulaic how it's done. If you sign your name 100 times, you can look away and sign in the wrong place. We read a lot of documents. We may, just like anyone else, sign something and realize later that it's the wrong place or the wrong thing. Is it wrong not to be paying attention? No. It's just that we're doing things over and over again."[192]

It's difficult to say just how often SWAT raids are precipitated on information from confidential informants, but anecdotal evidence suggests it's disturbingly common. One 1998 review in the Raleigh-Durham area, for example, found that 87 percent of drug raids in that city originated from tips from confidential informants.[193]

Asset Forfeiture. Civil asset forfeiture generally refers to the policy that allows police departments to seize assets found in a drug raid, auction them off, then keep the proceeds for the department's budget, even though the property owner may never have been convicted of any crime. The policy creates questionable incentives, invites corruption, and can push departments to be extra aggressive in their drug policing, if for no other reason than to make up for budgetary shortfalls or to outfit the department with amenities and equipment.[194]

In 1999, for example, the El Monte, California, police department conducted a botched drug raid in which police shot and killed Mario Paz, an innocent grandfather who had no idea the men invading his home were police. The El Monte police department was renowned in California for its prowess in seizing cash and assets from drug raids. Even after Paz was determined to be innocent, police attempted to seize the $10,000 they found at the Paz home, invoking forfeiture laws that put the burden of proof on the Paz family to show the money *wasn't* earned from drug sales (the Paz family later produced receipts confirming the money had been obtained through legitimate means).[195] Immediately after the Paz raid, El Monte assistant police chief Bill Ankeny said that though police had already nabbed their main suspect in the investigation, they nonetheless went on to the Paz home "to further the investigation . . . to find further evidence and proceeds." In the 10 years prior to the Paz raid, the small town's police department had seized some $4.5 million from drug suspects.[196]

Subsequent investigations also determined forfeiture to be the main motivation behind the raid on millionaire Donald Scott's home in Malibu, California. Scott, who feared that authorities had designs on taking his home, was gunned down in a joint no-knock drug raid conducted by several local police organizations. Police found no illicit drugs anywhere on Scott's property. Friends of Scott's would later tell reporters that Scott in fact abhorred drug use.[197]

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Of 146 no-knock raids conducted in Denver in 1999, only 49 produced charges of any kind. And of those, just 2 resulted in prison time for the targets of the raids.

Asset forfeiture has a long and troubling history in drug cases and has been frequently and thoroughly assailed by critics. But it has a unique application in the case of paramilitary raids. SWAT teams are typically expensive to maintain. Federal grants and free equipment get them up and running, but local departments are often then forced to foot the costs of keeping members up to date on tactics and weapons training as well as the upkeep of equipment. Because the more traditional uses of SWAT teams—emergency situations like barricades, hostage takings, and bank robberies—don't bring lucrative forfeiture opportunities (or federal funding), police officials feel increasing pressure to send SWAT teams out on drug assignments, where the assets seized come back to the department and can help offset the costs of having a SWAT team in the first place. As the *New York Times* summarized in a 1999 article on SWAT proliferation:

> Most of the [SWAT] squads stay in existence because there is too much incentive not to, police officers say. Forfeiture laws passed by Congress at the height of the crack scare were designed to take the profit out of drug dealing; assets like cars, boats, guns, and cash can be seized, regardless of whether the person who owns them is later convicted.[198]

The trend of using SWAT teams for routine drug policing, which then leads to forfeiture funds used in turn to support the SWAT team, is common across the country.[199]

Raids Are Ineffective. Perhaps what's most troubling about the use of no-knock and quick-knock raids is that for all the peril and confrontation associated with them, the little evidence available suggests they aren't even all that effective. The public scrutiny that followed the botched no-knock raid in Denver that killed immigrant Ismael Mena in 2000, for example, enabled Denver's *Rocky Mountain News* to get access to warrants and court records for all of the no-knock raids conducted in the city in 1999. The paper's findings were alarming: Of 146 no-knock raids conducted in the city that year, only 49 produced charges of any kind. And of those, just 2 resulted in prison time for the targets of the raids.[200] In comparison, the paper noted that while 21 percent of the city's felony defendants on average are sent to prison, just 4 percent of its no-knock defendants were. One former prosecutor said of the results, "When you have that violent intrusion on people's homes with so little results, you have to ask why." The *Rocky Mountain News* continued:

> Almost all of the 1999 no-knock cases were targeted at people suspected of being drug dealers. . . . Often the tips went unsubstantiated, and little in the way of narcotics was recovered. The problem doesn't stem only from the work of inexperienced street cops, which city officials have maintained. Even veteran narcotics detectives sometimes seek no-knock warrants based on the word of an informant and without conducting undercover buys to verify the tips.[201]

A 1997 investigation by the *Palm Beach Post* found that in a sampling of 50 of the 309 arrests made by Palm Beach County's 12 SWAT teams, the longest jail sentence meted out from any of the raids was five years. The vast majority produced sentences of less than six months, parole, or no sentence at all.[202] Of the defendants actually found guilty, most were sentenced to less than six months in jail, suggesting they were hardly the hardened, violent, dangerous criminals police and prosecutors say require the use of a heavily fortified paramilitary team. Reporters found similar results in Orange County, Florida. A 1998 *Orlando Weekly* investigation found that SWAT raids resulted in actual arrests in just 47 percent of callouts. A broader review of teams in Orange, Osceola, Orlando, and Maitland, Florida, found that they're typically called out to serve warrants for crimes that are misdemeanors, resulting in only small fines, or no charges at all.[203]

After the New York City raid that killed Alberta Spruill, Police Chief Raymond Kelly estimated that at least 10 percent of the city's 450+ monthly no-knock drug raids were served on the wrong address, under bad information, or otherwise didn't produce enough evidence for an arrest. Kelly conceded, however, that NYPD *didn't keep careful track* of botched raids, leading one city council member to speculate the problem could be even worse.[204]

More broadly, this increased militarization of drug policing hasn't done much to diminish either the drug supply or the use of illicit drugs. The percentage of people reporting illicit drug use in their lifetimes, for example, rose from 31.3 percent in 1979 to 35.8 percent in 1998. Between 1999 and 2001, the figure went from 39.7 to 41.1 percent (data prior to 1998 aren't comparable to data after 1998 due to changes in methodology).[205] The percentage of college students reporting having used marijuana in the last year went from 27.9 percent in 1993 to 33.7 percent in 2003; the number using in the past month went from 14.2 percent to 19.3 percent; and the number reporting daily use went from 1.9 percent to 4.7 percent. There were similar increases in percentages reporting use of cocaine.[206]

Answering Proponents of Paramilitary Drug Raids. Supporters of the increased use of paramilitary tactics often say that such aggressive tactics are necessary because drug dealers are increasingly arming themselves with heavier and more sophisticated weaponry. The only way to counter that trend, they say, is to keep police well ahead in the arms race, and to show overwhelming force when serving drug search and arrest warrants. Supporters often cite the decreasing number of police shootings over the last 20 years, and among SWAT teams in particular, as evidence that increased militarization is working.

Of course, a reduction in police shootings correlating with a rise in SWAT teams doesn't mean SWAT teams are responsible for the decline in police shootings. It's more likely that the decline in police shootings and shootings by police officers (if the latter is actually true, as will be discussed below) have coincided with an overall drop in violent crime over the last 15 years, a drop explained in part by a strong economy, falling unemployment, and changing demographics.

Moreover, there's simply not much evidence that criminals are arming themselves with heavy weaponry. In a paper by David Kopel and Eric Morgan published by the Independence Institute in 1991, about a decade into the militarization of civilian policing that began in 1980, the authors point to a number of statistics showing that high-powered weapons, which are often cumbersome and difficult to conceal, simply aren't favored by criminals, including drug peddlers.[207] The authors surveyed dozens of cities and found that, in general, less than 1 percent of weapons seized by police fit the definition of an "assault weapon." Nationally, they found that fewer than 4 percent of homicides across the United States involved rifles of any kind. And fewer than one-eighth of 1 percent involved weapons of military caliber. Even fewer homicides involved weapons commonly called "assault" weapons. The proportion of police fatalities caused by assault weapons was around 3 percent, a number that remained relatively constant throughout the 1980s.[208] It was during the 1980s that SWAT teams first began to proliferate.

Kopel and Morgan also interviewed police firearms examiners. The examiners in Dade County, Florida—home to Miami—for example, found that contrary to the *Miami Vice* depiction of the South Florida drug trade in the 1980s, the use of assault weapons in shootings and homicides in Miami was in *decline* throughout the decade. One lieutenant from the Washington, D.C., police department told the authors that the preferred weapon of criminals in the nation's capital was the pistol.[209]

In 1995, the Justice Department released a study showing that 86 percent of violent crimes in the United States involved a handgun. The most popular weapon used in homicides at the time wasn't an automatic weapon but the large-caliber revolver. Just 3 percent of

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murders in 1993 were committed with rifles, and just 5 percent with shotguns.[210]

The 1997 *Palm Beach Post* investigation cited earlier also found that of the 309 arrests made by the 12 SWAT teams in Palm Beach County, Florida, only 60—or 19 percent—produced weapons of *any* kind.[211] A five-year investigation in Orange County, Florida, in the mid-1990s likewise found that just 13 percent of SWAT raids turned up weapons of any kind.[212]

Just before the federal assault weapons ban was set to expire in 2004, the National Institute for Justice released a study looking at the use of assault weapons in the commission of violent crimes. Drawing on crime data from several American cities, the report found that assault weapons were "rarely used in gun crimes, even before the ban" was put in place. Moreover, because assault weapons are so rarely used by criminals, it found that "should it be renewed, the ban's effects on gun violence were likely small at best, and perhaps too small for reliable measurement." The report also found that the use of such high-powered weaponry to kill police officers was "very rare."[213]

As for alleged declines in shootings by police over the past 25 years, the truth is, there simply isn't much data available. One CBS News survey of SWAT encounters between 1994 and 1998 suggested a 34 percent *increase* in the use of deadly force by police over that five-year period.[214] But truly comprehensive data are difficult to come by. Just as police and prosecutors don't keep track of botched paramilitary drug raids, they also don't keep statistics on the number of times police officers shoot at, strike, or kill a suspect. As criminologist and University of Georgia law professor Donald Wilkes Jr. writes, "Although the government collects and disseminates gigabytes of crime statistics on crimes or acts of violence committed by citizens against other citizens, or by citizens against police, there are hardly any official statistics on crimes or acts of violence committed against citizens by police."[215]

The *New York Times* reported in 2001, "Despite widespread public interest and a provision in the 1994 Crime Control Act requiring the attorney general to collect the data and publish an annual report on them, statistics on police shootings and use of nondeadly force continue to be piecemeal products of spotty collection, and are dependent on the cooperation of local police departments." The paper added, "No comprehensive accounting for all the nation's 17,000 police departments exists."[216]

Despite the 1994 law requiring the federal government to *compile* data on policing shootings, Attorney General Janet Reno acknowledged in 1999 that there's no federal law requiring local police agencies to *provide* it. And many haven't.[217] University of South Carolina criminology professor Geoffrey Alpert called the lack of reporting "a national scandal," adding, "These are public servants who work for us and are paid to protect us."[218] While it's far from clear that it should be a federal undertaking, Alpert is correct that we should demand accountability and transparency from local police departments when it comes to police shootings and use of force.

Of course, if it's true that the percentage of SWAT shootings in relation to the total number of callouts is low or in decline, a big reason for that would be that SWAT teams are increasingly being called out to apprehend nonviolent offenders. In other words, measuring the percentage of times a SWAT callout leads to the discharge of a weapon is probably not the best way to measure the harm done by the increasing use of SWAT teams. If SWAT teams were limited to the role originally envisioned for them, and that critics recommend for them—volatile, dangerous situations in which a suspect posed a direct and immediate threat to the community—one would expect the percentage of callouts leading to some sort of gunfire to be *high*, not low.

Measuring the threat posed by paramilitary raids solely in terms of the number of police shootings, then, misses the point. There's harm done each time a SWAT team raids the home of an innocent person or family, even if no deaths or serious injuries result.

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There's also harm done when the raid is directed at the correct home of a nonviolent offender who poses no real threat to the community. Recreational marijuana users are breaking the law, but the offense certainly doesn't merit their homes being invaded by a battalion of police officers.

The massive increase in SWAT callouts over the last two decades ought to be of concern for reasons other than the fact that it presents more opportunities for a botched raid on an innocent person to end in gunfire. It represents the needless terrorizing of American citizens and an increased perception that the drug war is just that: a war. It suggests that in terms of civil liberties, American citizens are given little more consideration than the citizens of a country with which the United Sates is at war: No real rights or protections against unwarranted searches, and in some neighborhoods, the real possibility that lives and homes could become collateral damage. It's striking how many police and government officials have responded to paramilitary raids on the homes of innocents by dismissing them as regrettable, but inevitable and acceptable, consequences of the War on Drugs.

A final, similar argument from supporters of paramilitary police squads is that even if botched raids occur as frequently as critics suggest, they're still a very small percentage of the total number of raids executed. Of course, even a small percentage of the 40,000 annual SWAT callouts is a large number. Taking such thinking to its logical conclusion, we could double or triple or quadruple the number of SWAT callouts, or expand them to include policing for misdemeanor crimes and traffic offenses, so long as the overall *percentage* of innocents harmed remains low. One police chief responded to criticisms of his department's botched drug raids by observing that he'd only see reason for concern if the number of botched paramilitary raids approached 25 percent or more of the total number of raids.[219] Such thinking is the recipe for a police state. The idea of sending battalions of men dressed, trained, and armed like soldiers to do civilian police work *should* give us great discomfort. It's not a tactic that should be employed by free societies except in the imminent peril situations discussed earlier.

The American criminal justice system is rooted in the principle that every citizen has certain rights and protections, and the government is obligated to respect those rights, even when doing so proves inconvenient to broader crime control goals.

Legal Background

The roots of the common law principle that a man has the right to defend his home as his castle, and that police should announce themselves before entering private residences, are generally accepted to extend back to 17th-century English common law, as recognized in *Semayne's Case*.[220] The common law has long recognized a man's home as his "castle of defence and asylum" and requires authorities to identify themselves before entering. But in the United States, that principle has come under attack.[221]

It took nearly four decades after its first knock-and-announce case in 1958 for the Supreme Court to finally affirm that the common-law principle of announced entry is ingrained in the Fourth Amendment.[222] Justice Clarence Thomas wrote in a unanimous opinion in the landmark 1995 case *Wilson v. Arkansas* that the "common-law 'knock and announce' principle forms a part of the reasonableness inquiry under the Fourth Amendment," adding that while "the common-law principle of announcement is 'embedded in Anglo-American law,' . . . we have never squarely held that this principle is an element of the reasonableness inquiry. We now so hold."[223]

Unfortunately, in the same opinion, the Court created significant exceptions to the announcement requirement (exceptions that, admittedly, also share a long tradition in common law). Just after holding that the principle of knock-and-announce is embedded in the

The massive increase in SWAT callouts represents the needless terrorizing of American citizens and an increased perception that the drug war is just that: a war.

Fourth Amendment, Justice Thomas laid out a series of "exigent circumstances" under which police could skip the requirement and enter a home unannounced. The first exception concerns searches in which police reasonably believe that announcing themselves could imperil the safety of police officers. The second allows entry without announcement when police are pursuing a fleeing suspect into a home. And the third exception is when an announcement would give suspects the opportunity to destroy important evidence.[224]

The Court has largely left it up to the states to hash out when these circumstances exist. Most states have since shown an unhealthy deference to the judgment of police officers at the scene of a search and subsequently put few real restraints on the proliferation of heavily armed no-knock or short-notice execution of search warrants. In effect, the exceptions to knock-and-announce have overwhelmed the rule.[225]

Most states have shown an unhealthy deference to the judgment of police officers and put few real restraints on the proliferation of heavily armed no-knock or short-notice execution of search warrants.

The federal statute governing "knock and announce" procedures states that an officer may forcibly enter a home "if, after notice of his authority and purpose, he is refused admittance."[226]

In the 1998 *U.S. v. Ramirez*, the Supreme Court found that the "exigent circumstances" exceptions Thomas articulated in *Wilson* are part of the federal statute, even though the statute itself doesn't specifically mention them.[227] The Court reasoned that the absence of language outlining the exigency exceptions in the federal law doesn't mean Congress didn't intend for those exceptions to be available. The Court concluded that the law is intended to broaden police authority, not to limit it.[228]

The two circumstances under which police may enter a home unannounced most pertinent to this paper are the "destruction of evidence" exception and the "apprehension of peril" exception. They're worth considering separately.

Destruction of Evidence

Until 1997, courts had generally taken two approaches in establishing parameters to the "destruction of evidence" exception. The first, often called the "blanket approach," assumes that certain kinds of evidence, drugs or bookkeeping records, for example, are by their very nature susceptible to destruction upon a police knock at the door. Therefore, such cases create a per se exception for any warrants involving evidence that's easily destroyed. Until the mid-1990s, several states, including Wisconsin, issued no-knock warrants on just about any case involving narcotics.

In the 1997 case *Richards v. Wisconsin*, the Supreme Court repudiated the blanket approach.[229] The Court overturned a Wisconsin law stipulating that police could break down a suspect's door without announcing themselves in any search or arrest warrant pertaining to possession or distribution of drugs. Justice John Paul Stevens wrote that "If a *per se* exception were allowed for each category of criminal investigation that included a considerable—albeit hypothetical—risk of danger to officers or destruction of evidence, the knock-and-announce element of the Fourth Amendment's reasonableness requirement would be meaningless."[230]

Even in ending one bad policy, however, *Richards* created a new one. After striking down the blanket policy, the Court struck a blow against judicial oversight over the initiation of no-knock and knock-and-announce raids, writing that "a magistrate's decision not to authorize a no-knock entry should not be interpreted to remove the officers' authority to exercise independent judgment concerning the wisdom of a non-knock entry at the time the warrant is being executed."[231] Perhaps most disturbing, the Court found in *Richards* that police only need to have "reasonable suspicion" that one of the three exigent circumstances exists, and that the standard of evidence for "reasonable suspicion" is "not high."[232]

The net effect of *Richards*, then, is to give extraordinary leeway to police in determining at the scene whether or not to execute a search warrant without first announcing themselves, regardless of instructions from a court. Like *Wilson*, the decision in *Richards*,

while on its face an obstacle to no-knock raids, in effect made them easier to execute.

Of course, states are free to pass their own restrictions limiting the use of no-knock entries. But local police departments can—and have—gotten around those restrictions simply by bringing federal agents along on raids, thereby invoking the less restrictive federal laws.[233]

After *Richards*, courts fell back on the alternate method of determining if the threat of the destruction of evidence warrants an exception to the knock-and-announce rule. This alternate method is often called the "particularity approach." Under this approach, police and judges are required to determine on a case-by-case basis if a suspect is likely to destroy evidence. The particularity approach, while preferable to the blanket approach, is also troubling in that it sets no reliable, predictable standard as to when a no-knock raid is and isn't warranted. In the absence of such guidelines the emerging default position seems to be substantial deference to the judgment of police.

To give one example, prosecutors and police have argued that the mere presence of indoor plumbing at a drug suspect's residence is sufficient to satisfy the destruction of evidence exception, because drug suspects routinely flush evidence down the toilet once police announce themselves.[234] The particularity approach has also created a patchwork of rulings applying different standards to different scenarios. Different jurisdictions have determined exigent circumstances differently, depending, for example, on the time of day of the raid, whether lights are on in the home, and where informants have reported the suspect normally stores the drug supply. The particularity approach gives police no set guidelines, and instead determines the legitimacy of an unannounced entry *after* the fact.

Even when no-knock warrants go horribly wrong, so long as police make a reasonable effort to show why an entry without announcement was necessary, courts have been reluctant to second-guess their judgment.

Apprehension of Peril

Like the destruction of evidence exception, the "apprehension of peril" exception outlined in *Wilson* has been interpreted in vastly different ways by courts in different jurisdictions. But there's also a more fundamental problem with the exception: Its logic is precisely backward. No-knock raids don't decrease the violence associated with serving a search warrant, they aggravate it—not just for suspects, but for police and anyone else who happens to be in or around the home at the time of a raid.

The idea that breaking into someone's home late at night without an announcement might incur a violent reaction would seem to be intuitive. And indeed, at least some on the Court have recognized as much. In a widely cited dissent in the 1963 case *Ker v. California*, Justice William Brennan wrote:

> Rigid restrictions upon unannounced entries are essential if the Fourth Amendment's prohibition against invasion of the security and privacy of the home is to have any meaning. . . . First, cases of mistaken identity are surely not novel in the investigation of crime. The possibility is very real that the police may be misinformed as to the name or address of a suspect, or as to other material information. That possibility is itself a good reason for holding a tight rein against judicial approval of unannounced police entries into private homes. Innocent citizens should not suffer the shock, fright or embarrassment attendant upon an unannounced police intrusion. Second . . . [w]e expressly recognized in *Miller v. United States* that compliance with the federal notice statute "is also a safeguard for the police themselves who might be mistaken for prowlers and be shot down by a fearful householder." Indeed, one of the principal objectives of the English requirement of announcement of authority and purpose was to protect the arresting officers

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"We do bang on the door and make an announcement—'It's the police'—but it kind of runs together. If you're sitting on the couch, it would be difficult to get to the door before they knock it down."

> from being shot as trespassers, " . . . for if no previous demand is made, how is it possible for a party to know what the object of the person breaking open the door may be? He has a right to consider it as an aggression on his private property, which he will be justified in resisting to the utmost."[235]

As previously explained, police typically serve these warrants just before dawn, or in the hours just before sunrise. They enter the residence unannounced or with very little notice. The subjects of these raids, then, are awoken from deep sleep, and their waking thoughts are confronted with the prospect that their homes are being invaded. Their first reaction is almost certainly alarm, fear, and a feeling of peril. Disorienting devices like flashbang grenades only compound the confusion.

It isn't difficult to see why a gun owner's first instinct upon waking to a raid would be to disregard whatever the intruders may be screaming at him and reach for a weapon to defend himself. This is particularly true of someone with a history of violence or engaged in a criminal enterprise like drug dealing. But it's also true of a law-abiding homeowner who legally owns guns for the purpose of defending his home and family.

The "apprehension of peril" exception fails, then, because no-knock raids make violent confrontation and, consequently, peril, *more* likely than apprehending suspects with less aggressive tactics. No-knock and short-notice raids *invite* violence and confrontation, they don't mitigate them. And the tactics used in their deployment are by their very nature designed to catch victims at their most vulnerable, disoriented, and in a state of mind least capable of sound judgment.

A Distinction without a Difference?

If the legal landscape surrounding the issue of *no-knock* warrants is murky, the circumstances surrounding *knock-and-announce* warrants only further complicate the picture. The knock-and-announce procedure has become so watered-down by court decisions, and is in practice so abused and misused by police, there's really become no practical distinction between "no-knock" and "knock-and-announce."

For example, if police knock and quietly announce themselves at 3 a.m. at a home where the occupants are asleep upstairs, then break down the door a few seconds later, it's difficult to see how such a scenario is really different than a no-knock raid. There's certainly no real distinction for the people inside.

After a SWAT raid that led to the shooting death of California resident Mario Paz, Bill Ankenny, assistant police chief for the town of El Monte, told the *Los Angeles Times*, "We do bang on the door and make an announcement—'It's the police'—but it kind of runs together. If you're sitting on the couch, it would be difficult to get to the door before they knock it down."[236] More so for someone upstairs, and/or asleep.

Given that defenders of so-called dynamic entry say the aggressive tactics are necessary to preserve the element of surprise, it shouldn't be surprising that police aren't offering full-throated notice before breaking down a suspect's door. It's absurd for lawmakers to give the okay to paramilitary raids on the justification that the element of surprise is crucial to securing officer safety, but then require police to knock before entering in order to fulfill the requirements in *Wilson*. On the ground, police have done exactly what one might expect them to do. They've fulfilled the letter of the announcement requirement but preserved the element of surprise. Of course, that renders the entire reasoning behind the announcement requirement useless.

Like the legal mess of what defines "exigent circumstances," just how much time is necessary to legally distinguish a knock-and-announce raid from a no-knock raid also varies from state to state and between federal circuits. In general, courts have found that less than 5 seconds isn't enough time, but more than 10 usually is.[237]

What is clear is that in dozens of the knock-and-announce raids gone wrong where police had the wrong address, occupants of a targeted home were rarely given the opportunity to answer the door before the SWAT team broke it down. Police typically wait no more than 10 or 15 seconds, even at times of day when the occupants of a home are likely to be asleep. If the knock-and-announce rule is intended to give innocent people the chance to answer the door before being subject to the violence of a forced entry, the dozens of examples where they weren't given such an opportunity provide yet more evidence that even if there's some begrudging respect for the letter of the knock-and-announce rule among courts and police officers, its spirit is all but dead.

As UCLA law professor Sharon Dolovich wrote in the *Los Angeles Times* after a raid resulting in the accidental shooting death of an 11-year-old boy, the concern "is not the type of warrant issued but the use of military tactics."[238] Whether or not police officers knock and perfunctorily utter "police" before crashing in matters little to the people inside.

In 2003, the Supreme Court ruled in *U.S. v. Banks*, a narcotics case, that a 15–20 second wait after knocking before making forced entry was sufficient to satisfy Fourth Amendment protections against unreasonable search and seizure.[239] Oddly, the Court specifically noted that drug cases might justify a shorter wait than warrants for other crimes, given the disposability of drug evidence—suggesting a blanket approach might be appropriate when it comes to determining wait times. More disturbing, however, is the way Justice Souter came to determine that 15–20 seconds is sufficient and the method of analysis he suggests for further jurisprudence on the matter:

> On the record here, what matters is the opportunity to get rid of cocaine, which a prudent dealer will keep near a commode or kitchen sink. The significant circumstances include the arrival of the police during the day, when anyone inside would probably have been up and around, and the sufficiency of 15 to 20 seconds for getting to the bathroom or the kitchen to start flushing cocaine down the drain. That is, when circumstances are exigent because a pusher may be near the point of putting his drugs beyond reach, *it is imminent disposal, not travel time to the entrance, that governs when the police may reasonably enter*; since the bathroom and kitchen are usually in the interior of a dwelling, not the front hall, there is no reason generally to peg the travel time to the location of the door, and no reliable basis for giving the proprietor of a mansion a longer wait than the resident of a bungalow, or an apartment like Banks's.[240]

Souter's emphasis on *disposal* time instead of *travel* time to the door is directly at odds with the long-held common law view that the purpose of announcement is to give innocents (or even the guilty) the chance to compose themselves and answer police before having their doors broken down. As recently as the *Richards* case, for example, the Court wrote:

> The common law recognized that individuals should be provided the opportunity to comply with the law and to avoid the destruction of property occasioned by a forcible entry. These interests are not inconsequential.
>
> Additionally, when police enter a residence without announcing their presence, the residents are not given any opportunity to prepare themselves for such an entry, The State pointed out at oral argument that, in Wisconsin, most search warrants are executed during the late night and early morning hours. The brief interlude between announcement and entry with a warrant may be the opportunity that an individual has to pull on clothes or get out of bed.[241]

Souter's reasoning in *Banks* disregards these concerns. It doesn't account for the pos-

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sibility that police may target the wrong home, or give a wrongly targeted suspect the opportunity to explain to police that they have the wrong address. Instead, it suggests that all targets of drug raids be treated as guilty offenders and potential disposers of evidence. After *Banks*, police no longer need to consider the possibility that the people inside aren't guilty and consider the time they may need to compose themselves. Instead, police need only calculate the time it might take someone in the house to find a sink or toilet. Though acknowledging that the call in *Banks* was "a close one," Souter left the door open to allowing for even shorter wait times between announcement and entry.[242] The Supreme Court's requirement of a police announcement set forth in *Wilson* was further eroded in the 2006 case, *Hudson v. Michigan*.[243] In *Hudson*, the Court ruled that evidence seized in a clearly illegal no-knock raid can still be used against a defendant at trial. In removing the only real sanction for illegally conducted no-knock raids, the suppression of evidence (successful lawsuits against police in such cases are unheard of), *Hudson* obliterated the already weak knock-and-announce rule put forth in *Wilson*.[244] Entering without announcement is still in theory against the law, but with no sanction for breaking it, police no longer have any incentive to follow the law. And they have plenty of incentive to ignore it. The long-established common law requiring announcement before forced entry is effectively dead. The *Hudson* ruling may in practice turn every drug search warrant into a no-knock raid.

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Ignoring the Law

Even with the already-considerable leeway courts have given police to obtain no-knock warrants, many police departments still conduct no-knock searches without even going through the perfunctory motions. In addition, many departments also continued to conduct no-knock raids despite the fact that the warrant they've been issued specifically calls for them to announce or that they operate in states where most no-knock raids are illegal. A few examples follow:

- In the 1997 Bethlehem, Pennsylvania, raid on the home of John Hirko, police knocked, announced their presence, broke down the door, and tossed a flashbang grenade, "all within a few seconds," according to trial transcripts reported in the *Allentown Morning Call*.[245] That's in direct defiance of a 1992 Pennsylvania Supreme Court decision finding a 10- to 15-second pause insufficient. Police shot Hirko 11 times, most of them in the back. Once the police stopped firing, a SWAT officer threw a second flashbang in Hirko's direction, setting fire to both Hirko and his home. Hirko's body was burned beyond recognition.[246] In a lawsuit filed by Hirko's estate against the city and police, experts testified that the disorienting effects of the grenade and its deployment in such close proximity to the alleged announcement, along with the lack of clear police insignia on the black, military-style uniforms would make most anyone unable to determine whether they were being invaded by police or unlawful intruders. In 2004, a federal jury found the SWAT team guilty of violating Hirko's civil rights.[247] The city of Bethlehem settled with Hirko's estate for $8 million.[248] Just months earlier, Bethlehem police had broken down the door of another apartment on a drug warrant. After handcuffing a half-dressed woman in front of her sleeping toddler, they realized they'd made a mistake.
- In 2003, a federal judge in Kansas overturned the conviction of a drug offender because police conducted a no-knock raid on his home without ever explaining to a court why it was necessary to enter without announcing. Kansas City police testified at the time that they *routinely* conduct no-knock raids in drug cases without specifically articulating why they're necessary, an approach that clearly amounts to a blanket drug exception to the knock-and-announce requirement, in defiance of *Richards*. Legal experts said at the time that the magis-

trate's ruling could have affected "hundreds" had it been applied more broadly.[249]

- An investigation into the 1999 SWAT shooting of drug suspect Troy Davis found that police in North Richland Hills, Texas, routinely served all narcotics search warrants with no-knock raids, again in direct defiance of *Richards*.
- The *Denver Post* investigation into the Ismael Mena shooting found that no-knock warrants on narcotics cases in Denver were rubber-stamped by the city's judges in a way that amounted to the kind of blanket approach prohibited by *Richards*. "Along with an officer's anonymous source, nearly all no-knock warrant requests over the past seven months—most of which involved narcotics cases—were approved merely on police assertions that a regular search could be dangerous for them or that the drugs they were seeking could be destroyed," the paper wrote. "That violates the spirit of a 1997 U.S. Supreme Court decision that requires specific allegations behind every no-knock request."[250]
- In the criminal trial of a woman who says she shot at SWAT team members because she thought they were criminal intruders, Muncie, Indiana, police testified they typically wait only five seconds after announcing before entering a residence by force, an allotment of time deemed too short by nearly all courts, and that effectively renders every warrant a no-knock warrant.[251]

These examples were revealed only after investigations into high-profile or locally publicized shootings and botched raids. It's unlikely that they're the only places in the country where police continue to defy the guidelines set out in *Wilson* and *Richards*. That is particularly troubling given that those guidelines were rather easy to comply with in the first place.

A System Stacked against Victims

The prevailing legal standard states that if a police officer reasonably believes his life to be in peril, he's permitted to use deadly force to defend himself.[252] Given the high-stakes, adrenalin-fueled nature of highly militarized drug raids, that standard allows police to shoot at suspects in such situations with virtual impunity, even in cases where it was clearly an error on the government's part that led police to the wrong residence. Grand juries and prosecutors have neglected to press criminal charges against police even in cases where they shot unarmed victims, much less victims who were armed but justifiably in fear for their lives.

On the surface at least, those decisions not to prosecute were probably correct. Given the high stakes and volatile nature of drug raids, and the predicament in which they put both officers and targets, it wouldn't seem to take much for someone to reasonably believe his life was in danger.

The fault lies with the bad public policy that puts police officers in such unnecessarily perilous situations in the first place. Worse, the *victims* of erroneous raids are forced to determine in their first waking moments if the intruders into their homes are police or someone there to do them harm. It's a good bet that some of the targets of these raids are going to fire back, and it's a good bet that police are going to return fire. The fault lies not with the officers who fire out of fear for their lives but with the judges, prosecutors, politicians, and police officials who have let highly militarized no-knock and short-notice raids become so common in the first place.

To make matters worse, while courts have been extremely deferential to police who fire on innocent civilians, they've been far less forgiving of citizens—even completely innocent citizens—who fire at police who have mistakenly raided their homes. Victims who have used force to defend themselves from improper raids have been prosecuted for criminal recklessness, manslaughter, and murder and have received sentences ranging from probation, to life in prison, to the death penalty.

The dichotomy is troubling. Victims of botched paramilitary raids are expected to

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show remarkable poise and composure, exercise good judgment, and hold their fire, even as teams of armed assailants are swarming their homes. Victims of paramilitary raids have no training in how to act or what to expect as a raid transpires. The police officers who conduct the raids, on the other hand, are usually required to undergo at least an hour of training per month.

Yet civilians who fire back at police officers who wrongly conduct forced-entry raids on their homes are frequently prosecuted, whereas police who erroneously fire at innocents during botched raids are almost never disciplined, let alone fired or charged with a crime. Civilians are expected to exhibit extraordinary judgment. Egregious mistakes by raiding police officers are readily forgiven.

Unless a botched raid generates significant media coverage, the civilians on the other end can expect little compensation for their trauma.

There are accountability problems, too. Botched raids on innocent people are frequently dismissed as unfortunate by-products of the War on Drugs. Unless a botched raid generates significant media coverage, the civilians on the other end can expect little compensation for their trauma. Though judgments like the one in the Hirko case do occur, they're generally only granted in high-profile cases. Worse, they're rarely followed up by any meaningful reform. In cases where victims aren't seriously injured or killed, they have no legal recourse, nor are there any mechanisms put in place to follow up on the errors to be sure they don't happen again. Many victims aren't even repaid for the damage police do to their homes.

Search warrants—even for erroneous raids—are too often sealed. This not only denies victims of these raids knowledge of where the system went wrong but prevents the media and watchdog groups from peeking into the system to make sure that, for example, judges, prosecutors, or police aren't getting lax in ensuring the reliability of the information they've collected to obtain the warrant.

Again, the New York City case of Alberta Spruill provides a good example. Throughout the mid- and late-1990s, media outlets in New York began to report a disturbing trend in the number of no-knock drug warrants served on the wrong residence. As the number of no-knock raids in New York City increased during the 1990s, authorities told victims that their only recourse was the city's Civilian Complaint Review Board. But the review board's jurisdiction was so limited. The agency was essentially powerless to give victims the information they needed to seek compensation or at least an apology and an admission of error. The review board was only permitted to review cases in which police themselves act improperly. It wasn't allowed to look at the substance of an individual warrant to determine, for example, if it was proper for a judge to have issued it in the first place.

As media reports throughout the mid- and late-1990s continued to highlight cases in which innocent families in New York were being terrorized by police donning assault weapons and paramilitary gear, and as the same stories were also pointing out the disturbing frequency with which police were relying on tips from shady confidential informants, the review board's jurisdiction remained limited only to the conduct of police *after* the warrant was issued. If police followed proper procedures in conducting the raids, the review board was powerless to act. It wasn't permitted to investigate if a raid should ever have been conducted in the first place.

A 2003 *Newsday* article interviewed several former investigators on the board and found that many of them were frustrated, feeling powerless to address a growing problem:

> In a series of interviews, former review board investigators told *Newsday* the agency could have done more over the years to draw attention to the frequency of wrong-door raids and the kind of errors highlighted in the Spruill case, such as faulty tips from confidential informants or the failure to double-check the information before a raid.
>
> "There were instances in which the information given was totally erroneous, and the policy was the same,"

said former review board investigator Earl George. "It didn't matter whether the information was false or inaccurate, we had to exonerate." A current review board member who did not want to be identified conceded that such complaints were usually exonerated, but added, "We can't look behind the warrant. . . . If the warrant said 'no knock,' there is no direct abuse of authority."[253]

Supervisors also told the review board that it lacked the authority to investigate broader, policy-related issues such as lax evidentiary standards for warrants and the disturbing increase in the number of botched raids.[254] As *Newsday* reported in a subsequent article, "One of the difficulties in the debate about wrong-door cases is that there are no available statistics on their frequency or studies analyzing parallels in cases."[255] In fact, *Newsday* found that many courts in the city didn't even keep no-knock warrants on file after they were issued and executed. According to the paper, Judge Juanita Bing Newton, who oversees New York's criminal courts, said, "She doesn't necessarily believe the court's role in record-keeping is as a 'Big Brother,' to check the police and district attorney."[256]

The tragedy here is that despite media reports and concerns from review board members clearly indicating a foreboding trend, nothing was done. Then came the raid that killed Alberta Spruill. In 2003, an error from an informant caused police to conduct a mistaken no-knock raid on the home of the 57-year-old Spruill. The woman, who had done nothing wrong, suffered a heart attack as police broke into her home and deployed a flashbang grenade. She died hours later.

It was a raid that included all of the questionable tactics that had been raising red flags among media critics and helpless review board members for nearly a decade. And it could have been prevented.

But even *after* Spruill's death, despite a flood of media coverage, a judge would continue the trend of covering up the details of paramilitary raids gone wrong. New York State Supreme Court judge Brenda Soloff found there was "no significant need" to unseal affidavits and the search warrant leading up to the raid on Spruill's home.[257] She cited concerns about the safety of the confidential informant, despite the fact that that informant's "faulty tip" was why Spruill was dead. The mention of the informant's identity also seemed disingenuous, given that the media requests she ruled against didn't ask for the informant's identity, only for the supporting evidence that led to the warrant. In fact, Judge Soloff didn't even bother to hear the case from lawyers for the media petitioners. When they showed up for oral arguments, they were handed the ruling, which she had already written.[258]

Despite public outcry, intense media coverage, and promises for reform by public officials, change in New York City after the Spruill raid was slow and spare.

There were a few positive developments. The city did implement a few procedures that increased the amount of time it takes to obtain a drug raid warrant from 2 to 24 hours. Consequently, the total number of drug raids did drop, from 5,117 in 2002 to 3,577 in 2003.[259] Judges and police were also forced to attend training workshops on proper drug investigation techniques and the issuance of narcotics warrants.[260]

But there's still no oversight or transparency in New York. In January 2003, months before the Spruill raid, the review board requested that NYPD set up a database to track search warrants, from application through execution. The review board recommended the database include the name of the prosecutor who drafted the warrant, whether the affidavit for the warrant was based on information collected from a confidential informant, the name of the office and unit that obtained the warrant, the address of the premises to be searched, evidence seized during the search, and that the database track errors in the entire process, including cases in which those errors led to searches of the wrong residence.[261]

Despite media reports and concerns from review board members clearly indicating a foreboding trend, nothing was done.

Matos, who is deaf and speech-impaired and has asthma, was handcuffed at gunpoint in front of her children, ages eight and five. Police had the wrong apartment.

It wasn't until May 2003, likely in reaction to public outrage over the death of Spruill, that NYPD finally acted on that request, announcing it would spend $24,000 to implement the database. By July 1, 2003, the database was up and running. The problem is that it's limited to internal use. The review board can access it only under limited circumstances and still has no authority to look into why a warrant was issued in the first place or to scrutinize the judges and prosecutors who sign off on warrants. The database is also largely off limits to the public and the media, even for warrants that have run their course.[262]

So despite the existence of the database, it's still difficult for parties outside the police department to monitor the way search warrants are issued and executed in New York. It's still impossible for the media or any outside groups to scrutinize (a) the way prosecutors collect information from confidential informants, (b) the accuracy and thoroughness of their applications for search warrants, or (c) the track records of judges in reviewing and approving those warrants.

Consequently, mistaken raids still happen in New York, although they do seem to be less frequent. On January 15, 2005, nearly two years after Spruill's death, NYPD officers conducted a botched predawn, no-knock raid on the Coney Island home of Mini Matos and her two children. The three were pulled from their beds early in the morning. Matos, who is deaf and speech-impaired and has asthma, was handcuffed at gunpoint in front of her children, ages eight and five. Police had the wrong apartment.[263] Less than a year earlier, police conducted the aforementioned botched raid on the home of Martin and Leona Goldberg.[264]

The New York example is typical. In most jurisdictions, search warrants are sealed, accessible only by court order. As Paul Rogosheske, attorney for the victim of a botched no-knock in St. Paul, Minnesota, told the alternative weekly *Minneapolis City Pages* in 1997: "Judges will sign anything at 3 in the morning, especially when they know they have complete immunity. You think that you're safe in your house, that cops and judges are liable for their mistakes. . . . They aren't."[265]

Here are some other examples of how cities have failed to reform the warrant process, even after high-profile tragedies and corruption scandals:

- In 1998, after complaints about the increase in forced-entry drug raids, Colorado state senator Jim Congrove (R), a retired undercover narcotics detective, introduced legislation that would have put tighter regulations on the deployment of SWAT teams, the issuance of no-knock warrants, and the use of no-knock raids. The bill was rejected, due in large part to lobbying from the District Attorneys Association.[266] The next year a Denver SWAT team would shoot and kill 45-year-old Ismael Mena in a mistaken raid.
- In 2002, the *Miami Herald* conducted an investigation into the city's SWAT team and the police department's internal affairs division. The report came after 13 Miami officers were indicted on federal charges of inventing stories and planting evidence to justify questionable shootings by the city's SWAT team. The report found that that officers were permitted to stay on the city's SWAT teams despite repeated incidents of questionable conduct, including incidents in which officers planted guns on unarmed civilians shot by the SWAT team. From 1994 to 2001, in fact, an officer who ran the SWAT team also ran the department's internal affairs unit, which, according to the paper, he filled with SWAT-friendly officers he could trust.[267] The result: the Miami police department rarely found wrongdoing on the part of its SWAT team, even in cases where officers were later indicted by federal prosecutors for planting evidence.[268] By 2003, four Miami officers had been convicted on federal charges of corruption, planting evidence, and cover-up. The *Miami Herald*

reported more than 290 allegations of excessive force against the four officers, including planting drugs at the scene of drug raids. One federal investigator told the paper that shootings were never thoroughly investigated by the department. "It's too political," he said. "They never fired dirty cops."[269]

- The *Los Angeles Times* found a similar pattern in the L.A. police department. Like New York, Los Angeles has a civilian review commission that investigates police shootings. Members are appointed by the mayor. The commission was meant to serve as a check on internal affairs investigations, or the conflict of interest problems that arise when police officers investigate other police officers.

  But a *Times* investigation in October 2004 found significant flaws in the review process. "In at least 28 shootings, 15 of them fatal, the commission ruled that the use of force was justified—without knowing about evidence that pointed to the opposite conclusion," the *Times* reported. "The practice of sanitizing shooting reports has persisted under successive mayors and police chiefs. It reflects an entrenched resistance to civilian oversight at LAPD that dates back decades."[270]

  The investigation found 101 police shootings that later resulted in jury awards or settlements to victims, amounting to $68.5 million in compensation, funded by Los Angeles taxpayers. In 77 of those cases, the civilian review commission had determined the shootings to be "in policy," meaning that officers had acted properly. The *Times* detailed several cases in which police reports described a shooting victim as armed despite evidence (never shown to the review commission) to the contrary. One former commission president told the paper, "I never felt we received 100% of the story."[271]

  The *Times* reviewed several cases in which significant evidence contradicting the police department's account of a shooting was withheld from the review commission. When asked to explain the discrepancies, one assistant police chief told the paper: "There are multiple possible explanations, and they go all the way from very evil people at the department hiding facts to very poor or incompetent people. . . . The truth is probably somewhere in the middle."[272]

- In the course of a year, police in Pinellas County, Florida, shot and killed two suspects in cases that generated public outrage. In one case, a police officer shot Jarrell Walker to death in front of his three-year-old son during a paramilitary drug raid. Walker was unarmed, though police did find a gun on the other side of the room. In the other case, police shot 17-year-old Marquell McCullough 14 times while he was sitting in his truck. In McCullough's case, police later conceded they had the wrong man. In October 2005, Pinellas County Sheriff Jim Coats, after promising to take a "hard look" at police procedures, announced a new deadly force policy for his officers. Remarkably, the new policy actually *broadened* the parameters under which police could fire, adding such categories as "escapes," and authorizing the use of deadly force on people suspected only of misdemeanors and/or nonviolent offenses.[273]
- After the accidental shooting death of 11-year-old Alberto Sepulveda in a joint raid carried out by federal agents and the Modesto, California, SWAT team, California attorney general Bill Lockyer assembled a blue-ribbon commission to review procedures, guidelines, and performance of the state's hundreds of SWAT teams. The *Modesto Bee* reported in 2001 that the commission would look at the way SWAT teams are deployed, the use of intimidating clothing and equipment, and, in the words of one commissioner, the "overbearing-type attitudes" of SWAT teams. The panel's co-chair, Stanislaus County sheriff Les Weidman, remarked as the commission proceeded that the sheer

The department rarely found wrongdoing on the part of its SWAT team, even in cases where officers were later indicted by federal prosecutors for planting evidence.

number of SWAT teams across the state surprised him. The commission also found that although SWAT teams are generally justified, defended, and thought of as responders to emergency situations such as hostage crises and terror attacks, they are most commonly used for drug search and arrest warrants.[274]

But the panel's final recommendations stopped well short of reining in the frequent deployment of paramilitary units. The panel's chief complaints were that SWAT teams were undertrained and underfunded, clearly implying that states and municipalities should be directing *more* funding toward SWAT teams, not less.[275] The recommendations consisted largely of standardizing procedures, definitions, and guidelines, and communicating better with the public. The commission didn't address the most pertinent issues, including the use of SWAT teams to serve routine search warrants, the lack of sufficient supervision or oversight of warrant procedures, the problem of bystanders and children caught in SWAT raid crossfire, and the use of SWAT teams to apprehend suspects with no history of violence. There were also no recommendations aimed at bringing more transparency to the informant and warrant processes. In fact, it's unlikely that any of the panel's recommendations would have prevented the death of Alberto Sepulveda, the reason the panel was assembled in the first place.[276]

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Recommendations

The unsettling trend of paramilitary drug raids is of course an outgrowth of the War on Drugs. Troubling as they are, these raids are merely one small part of a wholesale assault on individual liberty and the Bill of Rights brought on by America's futile, 30-year attempt to eradicate the drug supply. The awful consequences of the drug war have been recognized even by many leading conservatives, such as *National Review*'s William F. Buckley Jr., former secretary of state George Shultz, and the Hoover Institution's Thomas Sowell. Renowned intellectuals like Milton Friedman and Thomas Szasz have also voiced support for an end to the drug war, as have mainstream politicians such as former New Mexico governor Gary Johnson and former Baltimore mayor Kurt Schmoke.[277]

While ending the drug war would be the most obvious and prudent recommendation, politicians don't seem to be anywhere near ready to admit the futility of America's drug laws.

Thus, here are some other, second-best recommendations for policy changes to phase out the use of paramilitary tactics for drug policing.

Policy Changes for the Federal Government

End the Pentagon Giveaways. The primary reason so many police departments across the country can afford SWAT teams is the Pentagon's policy of making surplus military equipment available to those departments for free, or at steep discounts. The Pentagon used its defense budget to buy that equipment, a budget given to it by Congress on behalf of American taxpayers for the purpose of defending Americans from threats from abroad. It's perverse to then use that equipment against American citizens as part of the government's war on domestic drug offenders.

Set a Good Example. Some of the most egregious and infamous abuses of paramilitary police tactics have come courtesy of the federal government, including the infamous raid of the Branch Davidian compound in Waco, Texas, and the Miami, Florida, raid on the family of Cuban refugee Elian Gonzalez. In addition, the DEA also routinely conducts SWAT-style paramilitary raids on suspected drug offenders, including medical marijuana offenders, and professional doctors the agency has accused of prescribing too many prescription painkillers. Such heavy-handed tactics are especially deplorable when they're conducted

in communities that have approved marijuana for medicinal use, or have chosen to make the treatment of pain a higher priority than the diversion of narcotic painkillers.

Let Federalism Rule. In states and localities where policymakers have put tight restrictions on the use of paramilitary police units, local police can merely call up the DEA, which then sends an agent or two along for the raid.[278] The investigation then becomes a "federal" investigation, governed by more lax federal policing standards instead of more stringent local standards. Congress should end this practice. DEA agents should be forced to abide by the policing standards of the communities in which they're conducting drug investigations.

Recommit to Posse Comitatus. The military is—and should be—trained only to annihilate a foreign enemy. Civilian police are trained to keep the peace and to protect our rights while upholding our civil liberties. The federal government's gradual erosion of these principles in pursuit of fighting the drug war needs to be halted and reversed. Congress should forbid the military from engaging in civilian policing, including drug policing, and revoke the license it has granted over the years for cooperation between the military and the police in the sharing of training, intelligence, and technology. Elite military units shouldn't be training civilian police, and civilian police shouldn't be using military tactics and weaponry on U.S. citizens.

Policy Changes for State and Local Governments

Return SWAT Policing to Its Original Function—defusing those rare, emergency situations in which a suspect presents an immediate threat to someone's life or safety. SWAT teams should not be executing search or arrest warrants, conducting routine police patrols, or engaging in similarly proactive police work. SWAT teams should never be used to serve search warrants on drug offenders with no history of violence.

Rescind Asset Forfeiture Policies. Letting police departments keep the assets they seize in drug raids creates perverse incentives and leads to aggressive policing and a disregard for civil liberties. State and local policymakers should remove the temptation for police officials or individual officers to "seek out" drug offenses for the purpose of generating revenue for their departments.

Pass Legislation Protecting the Right to Home Defense. If police have invaded a home illegally, the homeowner should never be prosecuted for mistaking them for intruders and lawfully defending his property and family. States should look at so-called Make My Day laws, which indemnify civilians from criminal charges for certain conduct in defending their home from intruders with no legal right to be there.[279]

Policy Changes for Government at All Levels

Strict Liability. Congress and state legislatures should pass legislation holding the police agencies involved with carrying out a forced-entry drug raid strictly liable for any mistakes they make. Should police target the wrong home, wrongly shoot an innocent person, or wrongly injure or kill a nonviolent offender, damages would come directly from the budgets of the responsible police organizations. Such a policy would put financial pressure on police and city officials to balance drug policing priorities with civil liberties, and to take seriously the consequences of the overuse of paramilitary teams. Too many mistakes would cause taxpayers and municipal insurers to call for reform.

Tighten Search Warrant Standards. Search warrants—particularly those that lead to paramilitary raids—shouldn't be issued on the basis of tips from a single confidential informant, no matter how reliable police might assume that informant to be. Police should be required to find corroborating information. Police and prosecutors should also be required to reveal to judges and magistrates—and later to defense attorneys—if an informant has a criminal record, if a tip was given in exchange for leniency in sentencing or charging, and whether or not the informant was paid. Judges and magistrates

Elite military units shouldn't be training civilian police, and civilian police shouldn't be using military tactics and weaponry on U.S. citizens.

should ask more questions and exercise more scrutiny of police and prosecutors seeking warrants.

More Transparency. All forced raids should be videotaped. A video recording of each raid would serve to clear up any doubts about whether or not police knocked and announced themselves or how long they waited between announcement and entry.

Police departments should track warrants from the time they're applied for to the time they're executed, in a database that's accessible to civilian review boards, defense attorneys, judges, and in some cases, the media (acknowledging that the actual identities of confidential informants need not be revealed). Botched executions of warrants should be documented, including warrants served on the wrong address, warrants based on bad tips from informants, and/or warrants that resulted in the death or injury of an officer, a suspect, or a bystander. Police departments should also keep running tabs of how many warrants are executed with no-knock entry versus knock-and-announce entry, how many required a forced entry, how many required the deployment of a SWAT team or other paramilitary unit, and how many used diversionary devices like flashbang grenades. Local police departments that receive federal funding should also be required to keep records on and report incidents of officer shootings and use of excessive force to an independent federal agency such as the National Institute for Justice or the Office of the Inspector General.

A video recording of each raid would serve to clear up any doubts about whether or not police knocked and announced themselves or how long they waited between announcement and entry.

Civilian Review Boards. In cases of shootings or allegations of excessive force, civilian review boards are a good idea and are always preferable to internal police investigations. But review boards need to be given comprehensive access to all documents related to botched raids, including search warrants, affidavits, and information about confidential informants. Review boards should be permitted to subpoena and question judges and prosecutors, given that both are critical parties to the process of obtaining warrants for paramilitary raids. In most jurisdictions today, prosecutors and judges are completely free from oversight when a raid goes wrong. Review boards' jurisdiction, therefore, should not only cover the actions of police officers but should extend to every aspect of investigating, procuring, issuing, and executing a warrant.

No Intimidation. Policymakers should make sure that the threat of criminal charges isn't used against the victims of botched raids in an effort to intimidate them from filing civil lawsuits. Lawmakers should rescind any law or regulation stating that a suspect who pleads guilty of a minor charge stemming from a botched raid is barred from later filing a civil lawsuit for excessive force or violation of the suspect's civil rights.

More Accountability. Police officers are rarely, if ever, disciplined for mistakes that lead to botched raids. If a botched raid resulted from an officer relying on a bad informant, the informant should be dropped, and the officer should be disciplined. Officers who misread, miscopy, or poorly communicate an address or the location of a raid resulting in a wrong-door raid on innocent civilians should be punished as well. Shootings are more difficult. A botched raid ending in a needless death—officer or civilian—is quite often the result of a bad policy that puts well-meaning people in volatile, unpredictable, no-win situations.

Certainly, to the extent that an officer was shown to be careless or callous, he should be disciplined. But to the extent that an officer fired after justifiably believing himself to be in danger, even from a citizen whose home was wrongly raided, the blame belongs with the officers, prosecutors, and judges whose actions wrongly put him in that situation, not with the officer himself.

Conclusion

This paper isn't intended to be a critique of police officers themselves. Rather, it's a critique of bad policies that over the last two decades have created a military mindset among civilian police departments, a sense among civilians that they're under siege, and

a litany of botched paramilitary raids that have resulted in the needless terrorizing, injuring, and killing of innocent citizens, police officers, and nonviolent offenders. The vast majority of police officers are well-meaning public servants. Unfortunately, they've been led to overly militaristic policing habits by politicians and policymakers too enamored with the idea of a warlike approach to fighting drugs.

Periodically over the last 25 years, a high-profile incidence of a botched drug raid ending in the death of an innocent person has given rise to public debate and reflection on these policies. But with just a few exceptions, any resulting reforms have been spare, inconsequential, and localized. Meanwhile, the list of victims of botched paramilitary raids continues to grow longer.

Policymakers, media outlets, and citizens across the country should use the Supreme Court's unfortunate recent ruling the *Hudson* case as an opportunity to evaluate the state of their own local police departments. They should gauge whether they're becoming too militaristic in tactics and attitude. They should encourage the creation of civilian review boards and force transparency. They should consider the possibility that ever increasing "get tough" drug policing has perhaps unwisely tipped the balance toward crime fighting, to the detriment of civil liberties. Finally, they should put an end to the kinds of police practices outlined in this paper, practices that 25 years of experience have shown that, should they continue, will inevitably end in more tragedy.

Appendix of Case Studies

Paramilitary drug raids have been growing in number for 25 years. As they've become more frequent, so too have incidents in which these raids have gone wrong. Criminologist Peter Kraska says his research shows that between 1989 and 2001, at least 780 cases of flawed paramilitary raids reached the appellate level, a dramatic increase over the 1980s, where such cases were rare, or earlier, when they were practically nonexistent.[280] Yet despite the ongoing reporting of botched raids in media outlets, the phenomenon is still consistently dismissed by supporters of paramilitary policing as a series of "isolated incidents."

The truth is, mistaken raids continue to happen with disturbing regularity. They can't all be isolated incidents. This section will catalogue an extensive list of botched raids between 1995 and April 2006 found over the course of several months of research. It is by no means comprehensive.

The Cato Institute has also plotted an expanded list of cases on an interactive map, which can be found at http://www.cato.org/raidmap.

The aim of this section is to demonstrate that botched paramilitary drug raids—and the death, injury, and terrorizing of innocents that come with them—aren't merely a regrettable, infrequent consequence of an otherwise effective police tactic. Rather, they're the inevitable consequence of a flawed, overbearing, and unnecessary form of drug policing.

Wrong Address

The botched drug raids that seem to generate the most public outrage are those in which police force entry into a home that turns out to be the wrong address. It's bad enough to have a system in place that is needlessly violent and provocative for known or suspected drug offenders. But it's particularly frustrating to see wholly innocent people terrorized, injured, and killed because police, policymakers, and judges cling to a flawed policy.[281]

No case better illustrates the preventable, tragic consequences of this flawed system than the death of Alberta Spruill.

Alberta Spruill. On May 16, 2003, a dozen New York City police officers stormed an apartment building in Harlem on a no-knock warrant. They were acting on a tip from a confidential informant who told them a convicted felon was dealing drugs and guns from the sixth floor. There was no felon. The only resi-

With just a few exceptions, any reforms have been spare, inconsequential, and localized.

The officers who conducted the raid did no investigation whatsoever to corroborate the informant's tip.

dent in the building was Alberta Spruill, described by friends as a "devout churchgoer."[282] Before entering, police deployed a flashbang grenade. The blinding, deafening explosion stunned the 57-year-old city worker. As the officers realized their mistake and helped Spruill to her feet, the woman slipped into cardiac arrest. She died two hours later.

A police investigation would later find that the drug dealer the raid team was looking for had been arrested days earlier and was still in police custody. He couldn't possibly have been at Spruill's apartment. The officers who conducted the raid did no investigation whatsoever to corroborate the informant's tip.[283] Worse, a police source later told the *New York Daily News* that the informant had offered police tips on several occasions, none of which had led to an arrest. His record was so poor, in fact, that he was due to be dropped from the city's informant list.[284] Nevertheless, police took his tip on the ex-con in Spruill's building to the Manhattan district attorney's office, which approved the application for a no-knock entry. A judge then issued the warrant resulting in Spruill's death. The entire process took only a matter of hours.

After the Spruill case, the media began to take notice of other victims of botched no-knocks, including the following three cases in the fall of 2002, about six months before the raid that killed Spruill.

- **Williemae Mack.** On September 3, 2002, police broke down the door of Brooklyn resident Williemae Mack in a pre-dawn drug raid. Her twin 13-year-old sons were asleep at the time. One, frightened by the noise and the explosive device police used to gain entry, hid under the bed. Police pulled him out and put a gun to his head. Police then handcuffed both boys at gunpoint. They found no drugs. They had raided the wrong address.[285]
- **Robert and Marie Rogers.** On October 15, 2002, about 20 police armed with pistols and shotguns served a no-knock warrant on the home of retired police officer Robert Rogers and his wife Marie. The two were watching television when the officers stormed their home in Queens. Mr. Rogers initially grabbed his handgun, believing the police to be intruders. Once he recognized they were law enforcement, he dropped his weapon and covered it with his body. Rogers later told *Newsday* that had the raiding officers seen his gun, "I'd be dead." Again, the police had the wrong address.[286] Marie Rogers would take the news of Alberta Spruill's death especially hard. "When I heard about what happened to this woman, I broke down and cried," Rogers later told the *New York Post*, "You would have thought that I knew her. Then I was angry."[287]
- **Michael Thompson.** A day before the raid on the Rogerses, police also burst into the home of Michael Thompson, also of Queens. That raid left the man's large mahogany front door broken into pieces. The police then trained their guns on Thompson's chest while they searched his home and the upstairs apartment of a tenant for drugs. Once again, they had raided the wrong address.[288]

The victims of the above three raids were represented in civil suits filed by Norman Siegel, former director of the New York Civil Liberties Union. Mr. Siegel told the *New York Times* in the fall of 2003 that according to police data, police were conducting about 460 such searches of private residences each month, with the vast majority of those served under no-knock warrants.[289]

In fact, just days after the raid on the Rogerses' home, Siegel held a press conference and pled with police to end the practice of no-knock raids. Nearly predicting the Spruill raid that would happen a year later, Siegel warned: "We must do a better job of no-knock search warrants. Otherwise, someone might wind up dead as a result of how we implement this procedure."[290]

- **Timothy Brockman.** Just two days before the Spruill raid, police from NYPD and the federal Bureau of Alcohol, Tobacco and Firearms displayed extraordinary ineptitude in executing another botched no-knock raid, this time on the home of former Marine Timothy Brockman. Acting on a tip from a confused anonymous informant, police stormed the public housing apartment of the 61-year-old Brockman, who used a walker to get around.

  Police deployed a flashbang grenade, setting Brockman's carpet on fire, then handcuffed the man and threw him to the floor while they searched his home for drugs. They had the wrong address. Brockman would later be cleared of all charges.[291]

The Brockman case is another illustration of how the mishmash of court precedents governing the use of no-knock raids can lead to errors. In Brockman's case, New York police wanted to raid the apartment on the basis of the testimony of a single informant who had visited the targeted residence on just one occasion. State law required more evidence for a no-knock warrant. Federal law, however, is more deferential to police and, in this case, allowed for a no-knock entry. New York investigators merely called the U.S. attorney for the Southern District of New York, who sent an agent from Alcohol, Tobacco and Firearms along for the raid. The Brockman raid was now a federal case, governed by federal guidelines.

Miscommunication between local and federal police led to series of errors that caused the police to mistakenly break down Brockman's door. Though a potentially grave and inexcusable error on the part of federal and local police, the Brockman case was ignored by the media and treated with indifference by the police. As the *Times* writes, "At the time, the incident received no publicity and no serious attention from the police leadership."[292]

In a follow-up piece published months after Spruill's death, the *Village Voice* reported that complaints about police abuses with respect to no-knocks had been pouring in for years. "Until Spruill's death, the NYPD had done nothing to stem the number of incidents," the *Voice* wrote, "despite receiving a memo from the Citizen Complaint Review Board in January noting the high number of raid complaints. Last March, the NAACP also approached NYPD commissioner Raymond W. Kelly about the raids."[293]

Indeed, the *New York Times* ran a story back in 1998, a full five years before Spruill's death, headlined, "As Number of Police Raids Increase, So Do Questions."[294] The paper noted that the number of narcotics search warrants issued in New York City doubled from 1,447 in 1994 to 2,977 in 1998. Most of these, according to the *Times*, were no-knock warrants.[295] The *Times* also profiled several cases of botched no knocks from the late 1990s. Among them were the following:

- **Mary and Cornelius Jefferson.** The article began with a description of a botched no-knock on the home of Cornelius and Mary Jefferson, a couple in their 60s, in which police used a battering ram to obliterate the front door of an apartment "where plastic slipcovers protect the sofas and diplomas and awards line the walls." Cornelius told the *Times*, "I thought they were coming to rob us, coming to kill us." They had the wrong address.[296]
- **Ellis Elliott.** On February 27, 1998, police conducted a no-knock raid on the Bronx home of Elliott, on the basis of information they later determined to be "miscommunication with an informant." As police attempted to break down his door, Elliott feared he was being attacked and fired a shot through the door. Police responded with a barrage of 26 bullets, all of which miraculously missed Elliott. Elliott was then dragged out of his home, naked, allegedly peppered with racial epithets, then arrested on charges of possessing an unlicensed weapon. Police later admitted their error

The *Village Voice* reported that complaints about police abuses with respect to no-knocks had been pouring in for years.

and paid $1,000 to have Elliott's door repaired.[297] Elliott pled guilty to disorderly conduct for firing at the officers and was given a conditional discharge. No police officers were charged or disciplined for the error.[298]

- **The Crown Heights Raid.** On May 1, 1998, police broke down the door to a home in Brooklyn's Crown Heights neighborhood in a no-knock raid that was based on the word of a single confidential informant. They expected to find a drug den. Instead, according to the *Times*, police found "a retired banker, a home health attendant, and their two daughters." One of the daughters was mentally disabled, and was showering at the time of the raid. Police pulled her from the shower, handcuffed her, and despite her pleas to the officers that she was menstruating, refused to give her a sanitary pad until she began visibly bleeding.[299]
- **Sandra Soto.** On June 5, 1997, police carried out a no-knock warrant based on information from an anonymous informant in the East New York area of Brooklyn. The warrant instructed them to raid a gray door marked "2M." Finding no such door, they simply broke down the nearest door, which was red and marked "2L." They found a woman, Sandra Soto, and her two children—but no drugs.[300]
- **Shaunsia Patterson.** *New York Times* columnist Bob Herbert later reported that on the *same day* as the raid on Ellis Elliott's home, New York City police raided the Bronx apartment of Shaunsia Patterson and her two children, ages three and two. Patterson was eight months pregnant. Police first grabbed Patterson's sister Misty, 15, who was also in the room, and threw her to the floor. They then confronted Patterson, who was sitting on her bed. One officer pushed Patterson onto her back. Another jumped on top of her. Patterson was eventually pushed to the floor and handcuffed while, in Patterson's words, "one of the cops stepped on the side of my face and pressed my face into the floor." When Patterson asked what the police wanted, she says, she was told to "shut the fuck up."

  Police handcuffed Patterson while she wore only her underwear. Officers then screamed expletives at the two women while they scoured the apartment for drugs—demolishing the furniture, kitchen, and floor in the process. The raid so frightened Patterson, she urinated on herself. The police refused to allow her to change. Police also refused to show her a warrant. Hours later, an officer told her, "We got the wrong apartment," and released her from her handcuffs. One confidential police source told *New York Times* columnist Bob Herbert, referring to the Patterson and Elliott raids, "Two in one day—that's bad. But I'll tell you what I honestly believe—I don't think this happens that often."[301]

Those kinds of assurances from police officials are common in New York and elsewhere. Despite repeated media reports of "wrong door" raids throughout the late 1990s, city officials continued to insist such incidents were uncommon—and nothing to be alarmed about. But in February 1998, the New York Police Department circulated a memo among the city's police officers instructing them how to contact locksmiths and door repair services should they break down the door to the wrong address, suggesting that mistakes were in fact fairly common.[302]

As discussed earlier, the review procedures New York City had in place to deal with police brutality failed as well. The Civilian Complaint Review Board, hamstrung by bureaucracy, limited jurisdiction, and squabbles with the police union, was helpless to effect any real change to stem the tide of "wrong door" warrants. New York had plenty of warnings that a case like Spruill's might happen. The city's public officials did little to heed them.

The review procedures New York City had in place to deal with police brutality failed.

Just after Spruill's death and ensuing media coverage, Manhattan Borough President C. Virginia Fields set up a hotline for victims of erroneous no-knock raids. For the first time, city officials encouraged victims of mistaken raids to come forward. The hotline received more than 100 calls in its first week of operation.[303] Fields's staff followed up with many of those calls, and her office published a report detailing its findings. Among the cases included in that report are the following:

- **Lewis Caldwell.** On March 6, 2003, six police officers in riot gear broke down the door to the home of Lewis Caldwell. Police handcuffed Caldwell, a lung cancer patient, and forced him to the floor. Caldwell's wife returned home from work to find her home filled with police officers and dogs. She pled with the officers to release her husband from the handcuffs. They kept him restrained for more than an hour. Caldwell says police were "laughing and joking" while searching his apartment. When the Caldwells filed a complaint, a lieutenant called to tell them the raid was justified, and "there's nothing you can do about it." No drugs were found, and no criminal charges were ever filed against either of the Caldwells.[304]
- **Kim Stevenson.** On April 9, 2003, about 20 police officers broke down the door of the West Harlem home of Kim Stevenson, asking "where the drugs were." They handcuffed Stevenson and took her to another room, while other officers kept their weapons fixed on her 12-year-old daughter. Stevenson pled with police to explain why they were in her home, but they refused to answer her. A female officer took Stevenson into a bathroom to do a body search. After finding no drugs on her, the officers again handcuffed her while other officers finished searching her apartment. According to Stevenson, officers "made jokes and ridiculed" her during the search. When they left, they told her to "have management fix her door." Her landlord refused. At the time the Fields report was published, Stevenson's door had yet to be repaired. She was never charged with a crime.[305]
- **Kim Yarbrough.** On May 2, 2003, police broke into the Staten Island home of Kim Yarbrough, an employee at the city's Department of Corrections. No one was home at the time, but Yarbrough's son was told by his brother-in-law that "20 to 30" police had raided his mother's home. When her son came to the house to investigate, he was handcuffed and thrown on the couch. Yarbrough came home from work with a supervisor to see that her door had been broken down and her home trashed. She and her son say police laughed and made jokes when she asked for names and badge numbers. Neither Yarbrough nor her son was ever charged with a crime.[306]
- **Margarita Ortiz.** On February 29, 2003, police broke into the home of Margarita Ortiz. Police handcuffed the woman and her 12-year-old son for two and a half hours while searching the apartment. After five hours of searching, police left without explanation. Ortiz says that the police knew "within 15 minutes" that her apartment had no drugs and that they never showed her their badges or provided a search warrant. At the time of the Fields report, Ortiz had been unable to get any information from the city regarding the raid on her home.[307]
- **Sara Perez.** On November 27, 2001, police broke into the Harlem home of. Sara Perez and put a shotgun to her head. They held her children and grandchildren at gunpoint, including one-month-old twins. Police never showed Perez a search warrant, nor did they explain why they were in her home. Perez later learned that the raid was based on faulty information supplied by a 15-year old informant. After five months, the police department paid to repair her door.[308]

The hotline for victims of erroneous no-knock raids received more than 100 calls in its first week of operation.

Swanson got a copy of the search warrant in the mail three years later. Police had mistakenly entered the wrong apartment building.

- **Jeanine Jean.** On May 7, 1998, police broke down the door and deployed a flashbang grenade in the home of Jeanine Jean. Frightened, Jean ran into a closet with her six-year-old son and called 911. Police pulled Jean from the closet, handcuffed her, then questioned her at gunpoint in front of her son. Jean, who had had surgery the day before, began bleeding when her surgical wound ruptured during the raid. After 90 minutes, police realized they had the wrong apartment and left without explanation. They left Jean's door hanging from its hinges.[309]
- **Atlee Swanson.** On July 9, 1997, police conducted a 6 a.m. no-knock raid at the East Harlem home of Atlee Swanson. Police broke into Swanson's home and demanded to know where "Joey, Jason, and Sean" were. Swanson said she knew no one by those names. The officers refused to show Swanson a search warrant, handcuffed her, and told her she faced 7 to 15 years in prison for selling drugs from her home. Police then put her in a holding cell for 31 hours. She returned home to find her apartment "trashed and vandalized." Swanson got a copy of the search warrant in the mail *three years* later. Police had mistakenly entered the wrong apartment building.[310]

The following raids weren't mentioned in the Fields report, but they also occurred at about the same time as the Spruill raid.

- **Cynthia Chapman.** Chapman was in the shower at about 6 a.m. on April 2, 2003, when police broke open her door and deployed a flashbang grenade. The grenade struck Chapman's son Bobby, 15, in the foot. Police found Chapman in the bathroom, forced her to the ground, and put a gun to her head. According to Chapman, one officer asked, "Where is it," and when Chapman responded that she didn't know what he was talking about, he replied, "Don't get smart with me or I'll kill you." Chapman and her son were handcuffed, taken to a police station, and released hours later when police discovered they'd raided the wrong home. In 2004, Chapman settled with the city of New York for $100,000.[311]
- **Ana Roman.** In 2004, the family of Ana Roman filed an $11 million lawsuit against the city of New York. The suit stemed from a September 12, 1996, no-knock raid on the home Roman, then 70, shared with her husband and adult son. Police were acting on a faulty tip from a confidential informant that drugs were being dealt from Roman's home. Roman emerged from her bedroom to find police pointing assault weapons at her, her husband, and her son. Roman had a heart attack and spent the following two weeks in a cardiac unit. Her family maintains that Roman never fully recovered and died of congestive heart failure six years later as a direct result of the attack she suffered during the raid.[312]
- **Mary Bardy.** Bardy went to the city council hearings to give her account of a January 2002 botched raid on her home. Police mistakenly believed her son was dealing drugs. The raiding officers broke down her door and, at gunpoint, ordered everyone inside—including her 2-year-old granddaughter—to lie down.[313] "I saw what happened to that poor woman [Spruill] and I said, this is crazy. This can't keep happening," Bardy told the *New York Daily News*.[314] Bardy, who had recently retired after an administrative career with the NYPD, said she wrote "dozens of letters" and "made lots of phone calls" after the raid on her home but found no one who could give her answers about the circumstances of the investigation leading to the night police broke into her home. Her son was never charged.[315]

A day after the Spruill city council hear-

ings, Manhattan Borough President Fields held hearings of her own. According to the *Village Voice*:

> Dozens of black and Latino victims—nurses, secretaries, and former officers—packed her chambers airing tales, one more horrifying than the next. Most were unable to hold back tears as they described police ransacking their homes, handcuffing children and grandparents, putting guns to their heads, and being verbally (and often physically) abusive. In many cases, victims had received no follow-up from the NYPD, even to fix busted doors or other physical damage.

The *Voice* then echoed the *Newsday* report:

> Some complainants reported that they had filed grievances with the [Citizen Complaint Review Board] and were told there was no police misconduct. Unless there is proven abuse, the CCRB disregards complaints about warrants that hold a correct address but are faulty because of bad evidence from a [confidential informant].[316]

The key recommendation from the Fields report was that NYPD produce an annual report detailing "all statistics regarding the execution of warrants." Fields believed such a report would provide some transparency and accountability in the issuance and execution of drug warrants, particularly those authorizing no-knock raids. NYPD issued no such report in 2005. Less than a year after Spruill's death, NYPD was back in the headlines with the mistaken raid on Martin and Leona Goldberg, mentioned earlier.[317]

Another high-profile wrong-door raid that provoked local media and public officials to take a harder look at the use of paramilitary drug raids was the Denver, Colorado, case of Ismael Mena.

Ismael Mena. On September 29, 1999, a Denver SWAT team executed a no-knock drug raid on Mena's home. Mena, a Mexican immigrant, believed he was being robbed and confronted the SWAT team with a gun. Police said they fired the eight shots that killed Mena only after Mena ignored repeated warnings to drop his weapon and first fired at them. Mena's family says police never announced themselves, and that it was the police who fired first.[318]

Police later discovered they had raided the wrong home, on the basis of bad information from a confidential informant.[319] They found no drugs in Mena's house, nor were any found in his system.[320] Subsequent investigations by the city police department's internal affairs division and by a special prosecutor found no wrongdoing on the part of the SWAT team.

But weeks later, new details began to emerge about the Mena case. An aide to the special prosecutor, for example, said that Mena's body had been moved at least 18 inches after he was shot. A lab report then found that the gunshot residue found on Mena's hand didn't match Mena's gun but was instead only consistent with the residue given off by the submachine guns the SWAT team uses. Police found no fingerprints on Mena's gun, or on the ammunition inside it, raising speculation that the gun was tampered with or planted.[321]

An internal affairs investigation cleared the SWAT team of wrongdoing but did find that the officer who prepared the search warrant for Mena's home falsified information.[322] As the shooting gained traction in the media, Denver city officials began to portray Mena as a Mexican criminal refugee wanted for murder (Mena had shot a man in Mexico in self-defense but had been cleared of any wrongdoing), a "blame the victim" strategy unfortunately common in police brutality cases.[323] Members of the police department also later started what local media would call a "spy file" on a citizens' organization agitating for a more thorough investigation of Mena's death. Worse, the head of the police intelligence unit that kept a "spy file" on Mena's supporters was also the head of the SWAT team that conducted the raid on Mena's home.[324]

"Most were unable to hold back tears as they described police ransacking their homes, handcuffing children and grandparents, putting guns to their heads, and being verbally (and often physically) abusive."

"One of them put a knee on my head and ground it into the floor."

Mena's family eventually hired former FBI agent James Kearney to conduct a private investigation. Over the course of that investigation, Kearney became convinced that Denver police murdered Mena, then planted the gun to cover up the botched raid. Kearney found evidence not uncovered by previous investigations, including two slugs in the floor of Mena's apartment that suggest the raid didn't happen as SWAT officials said it did. Kearney made his accusations on a local radio station, leading to a lawsuit against the station and Kearney by members of the SWAT team. The radio station settled. Kearney in turn filed suit against the SWAT team and sought to prove his allegations of a cover-up in court.[325] The suit was thrown out in federal court, but as of November 2005 Kearney was still waiting on word of his appeal.[326]

Mena's family ultimately settled with the city of Denver for $400,000.[327] To its credit, the city of Denver instituted some strong reforms in response to Mena's death. The reforms drastically cut down on the number of no-knock warrants carried out in the city, though reforms stopped short of an outright prohibition on no-knock warrants for drug raids.[328]

Denver is the exception, however. Most high-profile SWAT tragedies temporarily put reporters on the scent for similar abuses, light a fire under activists, and put policymakers on the defensive. But that public scrutiny is usually followed by a return to business as usual.

The case that spurred the *Capital Times* in-depth investigation of SWAT team proliferation to small-town Wisconsin stemmed from an incident in tiny Dalton, a rural town 50 miles north of Madison.

Wendy and Jesus Olveda. Wendy Olveda, who was five months pregnant, her husband Jesus, and their three-year-old daughter Zena were at home one evening in October 2000 when a black-clad SWAT team broke down their front door and threw the couple face-first to the floor. Zena Olveda looked on from the couch. Jesus Olveda told the paper that as he lifted his head to tell police they had the wrong address, "one of them put a knee on my head and ground it into the floor."[329]

Police had the wrong address. When they realized their error, they rushed through the Olveda's garage door to the home next door. The *Times* reported that one officer went back to the Olveda's home minutes later to retrieve the search warrant. The Olvedas filed a claim for compensation against the police departments in charge of carrying out the raid. The claim was rejected.[330]

Two years before the Olveda raid, police in another small Wisconsin town mistakenly raided the home of Daniel and Cythia Cuervo, holding the couple at gunpoint while the officers ransacked their home. The Cuervos eventually accepted a settlement in their lawsuit against the responsible local police agencies. The mistaken raid on their home inspired a significant reorganization of the Multi-jurisdictional Enforcement Group narcotics unit in the Lake Winnebago area of Wisconsin.[331]

But the rash of media reports of botched raids in Wisconsin in the year 2000 came a full five years after the state had already done some introspection on paramilitary police tactics when such tactics had ended with a man's death.

Scott Bryant. On April 17, 1995, police in Dodge County, Wisconsin, forcefully entered the mobile home of Scott Bryant after finding traces of marijuana in his garbage. The officers would later say they knocked and announced before entering, but neighbors who witnessed the raid say police entered without doing either. Moments later, Detective Robert Neuman shot an unarmed Bryant in the chest, killing him. Bryant's eight-year-old son was asleep in the next room. Neuman told investigators he "can't remember" pulling the trigger.[332] Dodge County sheriff Stephen Fitzgerald compared the shooting to a hunting accident.[333]

Two years later, Bryant's family was awarded a $950,000 settlement by Dodge County.[334] After the Bryant case made headlines, three victims of a similar raid by the Dodge County Sheriff's Department also

filed suit. According to that lawsuit, police raided a home in Juneau, Wisconsin, after finding traces of marijuana and material "suspected of packing cocaine" in garbage bags outside the house. Police entered the home "suddenly and violently" at 2:45 a.m., threw the three occupants to the floor, and handcuffed them. Police then searched the house for more than three hours. No charges were filed.[335]

After the settlement in the Bryant case, and a year after the shooting, Sheriff Fitzgerald seemed remorseful. He told the *Milwaukee Journal-Sentinel* that his own department would make substantial changes to the way it conducts searches. "It's safe to say any time there's a tragic accident like this that people would want to do things differently," he said.[336] Unfortunately, that message didn't make it to other small towns in Wisconsin. According to the *Capital Times*, 18 new SWAT teams have been formed across the state since the Bryant shooting.[337]

Although the case studies listed here cut off in the mid-1990s, the epidemic of botched military-style drug raids goes back to the early 1980s.[338] As far back as 1990, an article in *Playboy* magazine took note of a curious rise in media accounts of botched drug raids and published a list of more than a dozen documented "wrong door" raids from the 1980s.[339] In 2004, *USA Today* ran an editorial citing the Spruill and Goldberg raids and calling for reform in the execution of drug warrants. But the same paper ran a similar story more than a decade earlier, in 1993 (and even earlier, in 1989), ticking off a list of botched raids and a critique of no-knock and paramilitary raids in general, including the problems with confidential informants, asset forfeiture, lack of oversight, and the militarization of civilian policing described in this study.[340] The editorial also included responses from law enforcement officials dismissing botched raids as "isolated incidents."[341]

So not only is the problem of mistaken raids not new, neither is the cycle of media and public officials temporarily taking notice of them, then neglecting to enact any real reforms. Here, in reverse chronological order, is a partial list of other documented wrong-door raids dating back to 1995:

- **H. Victor Buerosse.** On December 30, 2005, police in Pewaukee, Wisconsin, broke into the home of 68-year-old H. Victor Buerosse in a predawn raid. Buerosse was thrown into a closet door, then to the ground, and hit in the head with a police shield. Despite his protests that police had the wrong address, they didn't concede their mistake until a sergeant arrived later. They left without an apology. The SWAT team eventually raided the correct residence, where they found a small amount of marijuana. Buerosse, a retired attorney, told a local reporter: "SWAT teams are not meant for simple pot possession cases. The purpose of SWAT teams it to give police departments a specially trained unit to react to a violent situation, not to create one. This should not happen in America. To me you can't justify carrying out simple, routine police work this way."[342]
- **Michelle Clancy.** At 5:30 a.m. on December 21, 2005, police in Paterson, New Jersey, stormed the home of Michelle Clancy on a drug warrant, breaking off her doorknob. Clancy, her 65-year-old father, and her 13-year-old daughter were home at the time. Police later confirmed they had raided the wrong apartment. Police spokesman Lt. Anthony Traina told one reporter, "These things do happen."[343]
- **The Baker Family.** Early in the morning on September 30, 2005, police in Stockbridge, Georgia, conducted a no-knock raid on the home of Roy and Belinda Baker. Officers broke down the couple's front door with a battering ram and tossed in flashbang grenades. The police held the couple at gunpoint, handcuffed them, and then sent them out onto their porch, only partially

The epidemic of botched military-style drug raids goes back to the early 1980s.

clothed. Police ruined a family Bible and antique coffee table during the raid. The raiding officers eventually realized the intended target of their raid lived next door. Police Chief Russ Abernathy called the raid "inexcusable" and "not acceptable" and blamed poor street lighting for the mistaken address. But Abernathy added that no one would be fired and that the raids would go on, albeit after "reviewing procedures." The Bakers are considering a lawsuit.[344]

- **Harold and Carolyn Smith.** In September 2005, police in Bel Aire, Kansas, raided the home of Harold Smith, the town's *former mayor*, after mistaking sunflowers in the man's backyard for marijuana plants. Police had taken pictures of the plants and showed them to a judge, who then approved the search warrant. Police rifled through the mayor and his wife's belongings and took videotape of their home before realizing their mistake.[345]
- **David Scheper.** On August 18, 2005, police in Baltimore, Maryland, forced their way into the home of David Scheper and Sascha Wagner. Thinking they were being robbed, Wagner called 911, telling the operator, "There's someone breaking into my house." Scheper had already slammed the door on the officer, who never announced they were police. The police then shattered the glass on the home's front door.

  Scheper stood just inside, holding his 12-gauge shotgun. He didn't have ammunition but hoped that racking the gun within earshot of the door would scare off the intruders. When they wouldn't leave, Scheper retreated to his basement and grabbed the only functioning weapon in his house, a CZ-52 semiautomatic. As Scheper struggled to load the weapon, it accidentally discharged, sending a round into the floor of his basement.

  Police took $1,440 in cash Scheper says he had recently withdrawn to buy a used truck. According to the *Baltimore City Paper*, police also "hit a 70-year-old art-deco-style metal desk with an ax. They took 18 of Scheper's guns—mostly inoperable antiques, he says. 'They threatened to blow up my safe,' Scheper says, so he opened it for them."

  The police were mistaken. They were looking for a tenant Scheper had evicted weeks earlier. Nevertheless, police still put Scheper's antique gun collection on display for the local news as part of a "roundup" of illegal weapons they'd found in two raids. Police charged Scheper for firing the weapon in his basement, a charge that carried a possible $1,000 fine and a year in prison. Prosecutors eventually dropped that charge, but only after Scheper's lawyer successfully fought to get Wagner's 911 call admitted as evidence.[346]
- **Cedelie Pompee.** In August 2005, police in Newark, New Jersey, raided a home owned by 59-year-old Cedelie Pompee while looking for drugs and guns. Pompee, her family, and the family to whom she rents an apartment said police cursed them while ravaging through their belongings. Officials from the state police SWAT team and the DEA later realized they had raided the wrong address. The Associated Press reports that state police had made a similar mistake four months earlier.[347]
- **John Simpson.** On June 15, 2005, Nampa, Idaho, police serving a search warrant tossed a flashbang grenade into the home of Vietnam veteran John Simpson. The frightened Simpson first took cover and attempted to protect his wife. He then composed himself, assumed he was being attacked by intruders, and ventured out with the only weapon he could find, the hose from his vacuum cleaner. The police had targeted the wrong side of Simpson's duplex. "I guess we're going to have to seek psychological help, I hate to say that," Simpson told the Associated Press. "I'm not nuts or anything, but I'm still shaking.

Police raided the home of the town's *former mayor*, after mistaking sunflowers in the man's backyard for marijuana plants.

Put a shotgun next to your ear and pull the trigger to get an idea of the noise." Police later picked up Simpson's neighbor with four ounces of marijuana.[348]

- **The Chidester Family.** In May 2005 in Utah County, Utah, Larry Chidester awoke to hear explosions at the home next to his. He went outside and saw members of a local SWAT team preparing to raid his neighbor's home. According to a lawsuit filed by the Chidester family, one of the SWAT officers spotted Larry Chidester, pointed at him, and exclaimed, "There's one!" Chidester threw his hands in the air and repeatedly said, "I'm not resisting." The officer tackled Chidester and, according to Chidester, "shoved his face into the ground and rocks." Larry Chidester was later taken to the emergency room for treatment. Police then kicked open a side door to the Chidester home and swarmed the bedroom where Lawrence Chidester—Larry's father—was dressing. They threw him to the floor and trained a gun to the back of his head. SWAT officers later conceded they had raided the wrong home.

  Utah County sheriff Jim Tracy later admitted the Chidester home wasn't the original target of the raid, but that police decided to raid their home as "an ancillary issue." He said police disputed the accuracy of the Chidesters' account of the raid, but wouldn't give details.[349]
- **Queen Moore.** On October 10, 2004, police in Omaha, Nebraska, conducted a narcotics raid on the home of Queen Moore, an elderly woman. When Moore filed suit for the damage officers did to her home, the police initially refused to be interviewed, on advice from the police union. Worse, the police department told Moore her complaint wasn't valid because union rules required it to be handwritten, not typewritten. Moore's lawyer responded that requiring her to personally write out her complaint "is not only illegal, but unduly burdensome and harassing," as Moore could barely sign her own name. Police found no contraband in Moore's home. She was never charged or arrested.[350]
- **Teresa Guiler and James Elliott.** In September 2004, a SWAT team in Clarksville, Tennessee, erroneously raided the home of Teresa Guiler, 55, and James Elliott, 54. Elliot, who is deaf, was recovering from a liver transplant at the time of the raid. The warrant had identified the wrong home. Police Chief Mark Smith said he would investigate to make sure the same mistake didn't happen again.[351]
- **Blair Davis.** On July 27, 2004, police in Houston, Texas, broke open the door of Blair Davis, a landscape contractor. Police screamed "Down on the Floor! Down on the Floor!" while pointing an assault weapon at Davis's head. Davis's first thought was that the invaders were criminals dressed as police, a continuing problem in the Houston area. A team of 8–10 police officers pushed Davis to the ground and handcuffed him while they searched his home. They were acting on a tip from a confidential informant who said Davis was growing marijuana in his home. The plants in question turned out to be hibiscus plants. Police never apologized to Davis. Dan Webb, operations commander for the police team that conducted the raid, later said it was "unfortunate" that Davis "got caught up in this situation," but that "if the situation came up today, we would've probably done the same thing." Webb added, "It's not a mistaken search warrant . . . if we believe it's marijuana, until we go look at it, we're not really going to know for sure," overlooking the fact that an innocent person was needlessly terrorized due to his unit "not knowing for sure."[352]
- **Donald and Amber Mundy.** In February 2004, police in San Bernardino, California, looking for cocaine broke open the door to an apartment occupied

Police were acting on a tip from a confidential informant. The plants in question turned out to be hibiscus plants.

Police handcuffed Perez and her 13-year-old daughter, while her 11-year-old daughter and three-year-old son watched in horror as police destroyed her house looking for drugs. They found nothing.

by Donald Mundy and his twin sister, Amber. When officers realized they had raided apartment "204" instead of apartment "214" as specified in the warrant, they conducted a search anyway and arrested Amber Mundy on charges of misdemeanor marijuana possession.[353]

- **Marion Waltman.** In September 2003, an informant's tip led police in Gulfport, Mississippi, to raid land leased by Marion Waltman. Waltman was growing kenaf plants, which are commonly used for deer food. Police raided the property and mistakenly destroyed more than 500 plants, believing they were marijuana. A judge later ruled that the city wasn't obligated to compensate Waltman for the destruction of his property because the sheriff's department made an "honest mistake."[354]
- **Earline Jackson.** At 3 a.m. on September 5, 2003, a dozen Chicago police officers used a battering ram to break down the door of 73-year-old widow Earline Jackson's apartment. "I asked them, 'What did I do?' And they told me to get out of the way because they were looking for drugs," Jackson told the *Chicago Tribune*. A warrant for Jackson's address said police believed a man was using her apartment to sell drugs. Police had mistaken Jackson's apartment for an apartment one block south.[355]
- **Francisca Perez.** On August 2, 2003, police from the Bexar County, Texas, sheriff's department raided the home of Francisca Perez and her children. The raid was based on a tip from an informant that a woman named Rosalinda Mendez was selling cocaine from the house. Police handcuffed Perez and her 13-year-old daughter, while her 11-year-old daughter and three-year-old son watched in horror as police destroyed her house looking for drugs. They found nothing incriminating. Four weeks later, police still hadn't told Perez whether or not she was under investigation. According to the latest media reports available, Perez, the widow of a Gulf War veteran, was still attempting to get the police to clear her name. She told a local newspaper that she was reluctant to take legal action because her children were terrified that if she did, the police would come back to raid their home again.[356]
- **Gabrielle Wescott.** On July 29, 2003, police in Montana raided the home of Gabrielle Wescott and her daughter Annabelle Heasley. According to a 2005 lawsuit, agents from the Northwest Drug Task Force donned black hoods and SWAT gear and raided their home at 7:30 a.m. on a marijuana warrant. Police forced the two to the ground, handcuffed them, and according to the lawsuit, "mistreated, threatened, cursed at, and terrorized" them, while police "ransacked the house" and "cut pieces of drywall out of the basement." The complaint alleges that the police affidavit leading to the search warrant "contains half-truths and inaccuracies and clearly was not completed in good faith," and that police never identified themselves. The women were never charged.[357]
- **The Phoenix Hell's Angels.** In July 2003, police in Phoenix, Arizona, conducted a pre-dawn drug raid on a Hell's Angels club. Police knocked, then waited just six seconds before deploying a flashbang grenade and forcing their way into the clubhouse. Michael Wayne Coffelt, who was asleep at the time, awoke to the grenade and quickly armed himself with a pistol. When Coffelt, who thought the clubhouse was being robbed, approached the door, Officer Laura Beeler shot and wounded him. Beeler claims Coffelt fired at her, though a ballistics test later confirmed that Coffelt never discharged his gun. Police did not find any drugs in the clubhouse. Prosecutors later brought charges against Coffelt for assaulting a police officer. In dismissing the charges, Maricopa Superior Court judge Michael

Wilkinson described the raid as an "attack" in violation of the Fourth Amendment, and said Coffelt's actions were "reasonable behavior, given the hour and the fact that the house was under attack." Wilkinson also determined that Beeler's mistaken belief that Coffelt had fired at her was also understandable, given the volatility of such a raid and that the officer may have misinterpreted the flashbang grenade for a gunshot.[358]

- **The Holguin Family.** According to court documents filed in conjunction with a lawsuit, the Holguin family of Albuquerque, New Mexico, say police blew their door off its hinges, deployed flashbang grenades, then stormed their home on June 5, 2003. Carmen Holguin, 80, required medical treatment for injuries she sustained during the raid. The lawsuit also alleges that Julia Holguin, 55, was injured when an officer stepped on her back, and that police kicked an unnamed 14-year-old girl while executing the warrant. None of the four were charged, and police seized nothing from the home. A paralegal for the family's lawyer told the Associated Press that police had made a controlled cocaine buy on the street where the Holguins lived and indicated they may have mistaken the family's home for the place they had bought the drugs.[359]
- **Sandy Cohen.** In 2002, police in Philadelphia raided the home of 85-year-old Sandy Cohen as she was taking a shower. Cohen got to her door just as police were blowing it off its hinges. When she protested to police that they had raided the wrong home, one replied, "That's what they all say." Police later conceded they'd made a mistake. Cohen's neighbors had told the raiding officers they were making a mistake while they were planting the explosives outside her door.[360]
- **The Huerta Family.** On November 20, 2002, a San Antonio, Texas, SWAT team deployed tear gas canisters, shattered a glass door with bullets, then stormed an apartment occupied by three Hispanic men. "We were kicked and punched at least 20 times. I couldn't talk. I was good and scared," Salvador Huerta told the *San Antonio News-Express*. His cousin Marcos Huerta was taken to the hospital with a cut face and bruised head. Vincent Huerta added, "The way they entered, I never thought it could be police." All three thought the raid was a robbery. Police had the wrong address.[361] Police later blamed the mistake on darkness, and "a cluster of look-alike buildings," despite the fact that officers stated on the warrant that they had conducted surveillance on the suspected residence for two days.[362]
- **Irene Gilliam Hensley.** On August 14, 2002, police in La Porte, Texas, stormed the home of 88-year-old Irene Gilliam Hensley on a paramilitary raid after a tip that her grandson Charles Gilliam was growing marijuana in her backyard. The tip came from an aunt who had had an argument with Gilliam, and police decided to raid after an officer peeked over Hensley's fence and confirmed the presence of marijuana. According to the *Houston Chronicle*, the warrant specifically stated that the officer who peeked over the fence had experience identifying marijuana plants. The plants turned out to be okra. Police found no drugs in the home.[363]
- **The Gilbertson Family.** In February 2002, a SWAT team in Denver's Highland neighborhood shattered a window in anticipation of a raid. Upon looking inside, they discovered they had broken into the wrong townhouse. They were preparing to deploy a flashbang grenade in the home, occupied by Erik Gilbertson and his pregnant wife. The couple was at the opera at the time of the raid. A police spokesman called the raid an "understandable mistake."[364]
- **Maria Flores.** In May 2001, police in Austin, Texas, raided the home of Maria Flores, a grandmother. A flashbang

"We were kicked and punched at least 20 times. I couldn't talk. I was good and scared."

The plants turned out to be tomatoes.

grenade shattered her window, and the SWAT team entered behind by kicking in her door. Police shoved Flores to the ground, bound her, and held her at gunpoint while they tore apart her home in a search for cocaine. They had mistaken her house for the house next door. Flores was taken to the hospital with internal bruising. "For about 20 minutes, I was on the floor crying, wondering 'What's going on?'" Flores told the *Austin American Statesman*. "I'm just glad my grandkids weren't here." Six months after the raid, police acknowledged the raid was a "terrible mistake." Assistant Police Chief Jim Fealy said, "We violated that woman's privacy and needlessly [*sic*] by mistake." He attributed the error to "sloppy police work."[365]

- **Estelle Newcomb.** In October 2001, a drug task force in Middlesex, Virginia, broke down the door of 50-year-old Estelle Newcomb and her 80-year-old aunt. Police had targeted the wrong home after miscommunicating with an informant. The investigating officer told the Associated Press: "I knew this was not right. To be honest with you, it was sloppy police work—not being thorough enough." The previous July, the same task force, along with the National Guard and state police, conducted a raid on a suspect they thought was growing marijuana. The plants turned out to be tomatoes.[366]
- **Charles and Debora Alexander.** On August 17, 2001, police in Waco, Texas, served a drug warrant on the home of Debora and Charles Alexander. According to the *Waco Tribune-Herald*, police charged the residence with guns drawn, yelling "Police, search warrant!" before realizing they had entered the wrong apartment. The Alexanders' visiting nine-year-old grandson, who has Down's Syndrome, went into a seizure. Debora Alexander fainted. Charles Alexander says that upon realizing their mistake, police left without apologizing, or offering to help either Debora or the grandson. Just seconds before the raid, Debora had been unpacking boxes, one of which contained her husband's gun. Charles told the *Tribune-Herald*, "God only knows what would have happened if they would have walked down that hall with her holding that gun." Remarkably, on August 20—three days after the raid—Lieutenant Gary McCully told the paper he wasn't aware that his own officers had entered the wrong apartment until a reporter had called and told him.[367]
- **Sandra Smith.** In May 2001, a Travis County, Texas, SWAT team conducted a raid on the home of Sandra Smith for suspicion of growing marijuana. After departing from a helicopter, storming Smith's home, kicking her dog, ransacking her belongings, and holding her and three visitors at gunpoint, police discovered the plants were ragweed. "This is the most terrifying thing that's ever happened to me in my life," Smith said. "I've never been in trouble with the law." Smith filed a lawsuit against the city for damage to her home. At the time the suit was filed in 2002, her name was in the department's database as a narcotics offender. Travis County settled with Smith and her visitors for $40,000. The Travis County SWAT team was later dissolved after a series of questionable raids.[368]
- **Henry and Denise McKnight.** On February 27, 2001, at about 10:30 p.m., police in Topeka, Kansas, kicked open the front door, detonated a flashbang grenade, and held Henry and Denise McKnight and their seven children at gunpoint on a drug warrant. They had mistaken the McKnight's home for the home next door. The McKnights' subsequent lawsuit alleged that police questioned them at gunpoint and continued to search the home even after realizing they'd made a mistake. Police Chief Ed Klumpp acknowledged the mistake and said that the police department would

make "minor adjustments" to its procedures, though he wouldn't say what those adjustments would be "because it would jeopardize the safety of our officers." The Topeka City Council eventually settled with the family for $95,000.[369]

- **Susan Wilson.** On February 15, 2001, a SWAT team dressed in full-assault attire stormed the home of Muskego, Wisconsin, resident Susan Wilson, 49. Wilson was standing in her driveway with her dog when the Waukesha County Metro Drug Enforcement Group apprehended her. Police forced her face down on her snow-covered drive, handcuffed her, and held her at gunpoint while police searched her home. They had the wrong address.[370]
- **Sandra Hillman.** On January 19, 2001, police from Russellville and Franklin County, Alabama, raided the home of Sandra Hillman and her daughter Marquita. Agents with a no-knock warrant kicked down the door to Hillman's apartment and held the two women handcuffed and at gunpoint while conducting their search. Police never identified themselves. Hillman made two subsequent trips to an emergency room for heart problems related to the raid. Police had the wrong address.[371]
- **John Adams.** On October 4, 2000, at about 10 p.m., police in Lebanon, Tennessee, raided the home of 64-year-old John Adams on a drug warrant. In what Lebanon police chief Billy Weeks would later say was a "severe, costly mistake," police had identified the wrong house. According to Adams's wife, police would not identify themselves after knocking on the couple's door. After she refused to let them in, they broke down the door and handcuffed her. Adams met the police in another room with a sawed-off shotgun. Police opened fire and shot Adams dead. One officer was fired after the incident, and several others were suspended, but no criminal charges were filed.[372] Adams's widow eventually won a $400,000 settlement from the city.[373]
- **Daniel and Rosa Unis.** In 2000, federal agents in Pueblo, Colorado, stormed the home of Daniel and Rosa Unis after suspecting their sons of cocaine distribution. With no warrant, police in black ski masks broke into the Unis home at gunpoint and arrested Marcos and David Unis. The two were kept in custody for two days but were never charged. When the Unis family filed a federal lawsuit in 2005, the lawyer for the agent in charge of the raid conceded that the raid was illegal. One officer described the incident as "unfortunate" and said "miscommunication" led to the wrongful raid, arrests, and detainments.[374]
- **William and Geneva Summers.** On May 22, 2000, police in Pulaski, Virginia, conducted a 4 a.m. raid on the home of William and Geneva Summers. The SWAT team broke through the couple's back door, woke them, and held them at gunpoint. Police had the wrong address. They had raided the home on the basis of a tip from a "reliable" informant that there was a methamphetamine lab inside. Magistrate Judge Jill Long concluded that police assertions that the informant was "reliable" were sufficient to establish probable cause for a pre-dawn, forced-entry search. The informant later admitted he had lied.[375]
- **Brandon and Richelle Savage.** On April 6, 2000, police in Chicago raided the apartment of Brandon and Richelle Savage on bad information from an informant. Police broke down the door and ordered the couple out of bed at gunpoint before realizing their mistake. Police officials then ignored the Savages' request to pay for damage done to their apartment until a columnist reported the incident in the *Chicago Sun-Times*.[376]
- **Dovie Walker.** On December 4, 1999, police in El Dorado, Arkansas, conducted a drug raid on the home of Dovie Walker. Officers tore the woman's front door from its hinges with a battering ram, damaged another door to her bed-

One officer was fired after the incident, and several others were suspended, but no criminal charges were filed. Adams's widow eventually won a $400,000 settlement from the city.

room, broke a latch on a third door, overturned and broke Walker's furniture, and generally "demolished" her house. Police officers had handcuffed Walker's three children at gunpoint before realizing they had mistaken her house for the one next door. Walker was also babysitting children of ages one, two, and three at the time of the raid. When a police department spokesman told a local newspaper police had no intention of paying for the damage they did to Walker's home, El Dorado's mayor promised four days later to begin work on the damage to Walker's house "as soon as possible."[377]

- **The Tyson Family.** On October 20, 1999, police from the DEA, the FBI, and Connecticut Department of Public Safety conducted 30 drug raids at locations around the Hartford area. One of those raids was on the home of 59-year-old Emma Tyson, her daughter-in-law, and her 13-year-old grandson. Twelve police officers broke into Tyson's home, causing her to have an asthma attack. Police were looking for a suspected drug dealer who had moved out of the home four months earlier, when Tyson bought it. Tyson filed a lawsuit two years later, when federal and local police authorities had yet to apologize or make an effort to clear her name.[378]
- **Mario Paz.** On August 9, 1999, 20 police officers from the El Monte, California, SWAT team conducted a late-night raid on the home of 65-year-old Mario Paz. By the end of the raid, Paz had been fatally shot in the back by police. The police version of events changed several times from the night of the raid. Police first said Paz was armed. They next said he wasn't armed but was reaching for a gun. Their final account was that Paz was reaching not for a gun but to open a drawer where a gun was located.

By the end of the raid, Paz had been fatally shot in the back by police.

Paz was unarmed when he was shot. Police later revealed that they had conducted the raid after finding the Paz address on the driver's license, vehicle registration, and an old cell phone bill of suspected drug dealer Marcos Beltran Lizarraga (charges against Lizarraga were subsequently dropped, in part because the videotape that was supposed to contain a recording of the search of his home turned up blank).[379] As mentioned earlier, one El Monte police official would later say that anticipated "proceeds" from the Paz family in asset forfeiture also played a part in the raid.

The Paz family explained that Lizarraga had lived next to them in the 1980s and had convinced Mario Paz to let him receive mail at their residence after he moved. Three weeks after the raid, the El Monte Police Department announced that they had no evidence that anyone in the Paz family was involved in any illicit drug activity, nor did the SWAT team have any reason to think so on the night Paz was shot.[380]

During the raid, police seized more than $10,000 in cash and announced plans to claim the money for themselves via asset forfeiture laws. Police backed off those plans when the Paz family proved the money to be their life savings.

Shortly after the Paz shooting made headlines, El Monte police conducted another raid on the home of an immigrant family. Police confronted Rosa Felix on September 22, 1999, after breaking into her home. According to a lawsuit Felix would later file, the officers told her that they knew her family was trafficking drugs, that they had information that she knew Paz, and that unless she gave them incriminating information about Paz, they would handcuff her, arrest her, and take away her children. Felix refused, insisting that her only interaction with Paz was from buying used cars from him. Charges were never filed against Felix.[381]

In October 2001, the officer who shot Paz was exonerated in investigations by

both the Department of Justice and the LAPD. A county prosecutor insisted that Officer George Hopkins "acted lawfully in self-defense" during the raid.[382]

El Monte's police department was known to be highly militaristic—but also effective. The town's police department boasted an assault vehicle with gun turret dubbed the "peacekeeper," as well as a helicopter. In 1992—five years before the Paz shooting—a federal appeals court had found "Chief Wayne Clayton, as a policymaker, acquiesced in a custom of complacency, if not hostility, toward allegations of misconduct by the department's officers." One mayor who tried to clean up the police department was voted out of office with help from the town's police union. "They run city hall. Nobody has control over the police," former El Monte mayor Pat Wallach told the *Los Angeles Times*. "They can do as they damn well please. They have a helicopter, a tank. They have carte blanche."[383]

In 2002, the city of El Monte settled with the Paz family for $3 million. The city also agreed to 13 conditions put forth by the family, mostly reforms in the way it carries out search warrants and deploys its SWAT team. Even in agreeing to the settlement, however, many city officials insisted the police did nothing wrong. "We don't view it as whether we were liable for his death," said city attorney Clarke Moseley. "We believe the family was involved [in narcotics trafficking] to some extent." No member of the Paz family was ever charged with a crime.[384]

- **Ralph Garrison.** On December 16, 1996, a SWAT team wearing black balaclavas raided a rental property owned by 69-year-old Ralph Garrison. Police were acting on a tip that the property contained equipment being used by methamphetamine addicts to print counterfeit checks and currency. Police conducted the 6 a.m. raid with the aid of a helicopter from U.S. Customs and two K-9 units. As the raid commenced, Garrison confronted the police and asked why they were on his property. Raiding officers claim they told Garrison they were police executing a warrant. Just how clear they were is in dispute. Garrison immediately returned to his home to call 911. He asked the dispatcher to send police, because vandals with "axes and all kinds of stuff" were breaking into his rental property. Garrison later told the dispatcher, "I've got my gun. I'll shoot the son of a bitch." According to raiding officers, Garrison then emerged from his house with a gun, whereupon three officers opened fire on him with AR-15 assault rifles, killing him. Police handcuffed Garrison after shooting him, then searched his home. They also shot his dog, a 14-year-old chow, and handcuffed his wife, 69-year-old Molly Garrison, who said police didn't remove their hoods or identify themselves until after the raid. Police made no arrests.

  One of the officers involved in the Garrison raid, Howard Neal Terry, had been subject to three federal excessive-force lawsuits in the previous six years, causing the city of Albuquerque to pay a total of $375,000 in settlements.

  In 1999, a federal court dismissed the Garrison estate's lawsuit against the police department, holding that the officers had "qualified immunity," which protects them from civil damages in any lawsuit where it is determined that police did not clearly violate any established constitutional protections.[385]
- **Catherine Capps and James Cates.** In May 1999, police stormed the Durham, North Carolina, home of 73-year-old Catherine Capps. Also in the house at the time was Capps's friend, 71-year-old James Cates. Police say they obtained a warrant for the home after a confidential informant bought crack cocaine there. Capps had poor vision, was deaf, and according to her family, "could not even cook an egg without being extremely out of breath." When police raided the

"They can do as they damn well please. They have a helicopter, a tank. They have carte blanche."

Cates, 79, wasn't permitted to use the bathroom during the search, causing him to urinate on himself.

home, they ordered Cates to stand. Hobbled by a war wound and frightened, Cates stumbled at the order and fell into a police officer. Sgt. L. C. Smith apparently mistook Cates's stumble as a lunge for the officer's pistol. Smith responded by punching the elderly man twice in the face.

Cates, 79, wasn't permitted to use the bathroom during the search, causing him to urinate on himself. Both Cates and Capps were also strip-searched. No drugs were found in the home or on Capps's or Cates's person.[386]

Capps later died from health maladies her family says she incurred during the raid. She was never charged with selling crack cocaine to the informant because, according to prosecutors, trying her would have required them to release the informant's name.[387] Subsequent investigations conducted by the Durham Police Department, the FBI, and the local district attorney found no wrongdoing on the part of police.[388]

About six months prior to the Capps-Cates raid, the city of Durham had set up a citizens' review board, in part due to community complaints about other allegations of excessive force on the part of police. But like similar review boards in other parts of the country, proceedings were often conducted in secret, complainants weren't given access to witnesses or evidence, and laws regarding search warrants kept vital information sealed. When Capps's family attempted to file a complaint with the review board, the board instituted a new rule denying a hearing to any complainant who had previously sought financial compensation from the city, and applied the rule retroactively. Though neither Capps nor her family had asked for compensation, Cates had, giving the review board cause to refuse to even listen to a complaint about the raid.[389]

- **Tina and Margie Peterson.** On April 4, 1999, police conducted a drug raid on a home in Kaysville, Utah, four days after obtaining the warrant and three weeks after obtaining the information to get the warrant. Despite the fact that a moving van sat in front of the apartment the officers carried on with the raid. They burst in on Tina and Margie Peterson, two sisters who were just moving into the apartment. Police charged in with guns drawn, and ordered the sisters and their two guests to the floor. According to the Petersons, officers continued to detain and question them even after they showed identification and proof that they were new tenants. The sisters filed suit against the police department in 2004.[390]
- **Edwin and Catherine Bernhardt.** On February 9, 1999, police in Hallandale, Florida, conducted a late-night raid on the home of Catherine and Edwin Bernhardt. Edwin, whose job requires him to get up at 4 a.m., was asleep. Catherine was on the couch. Police busted open the Bernhardt's window and jammed an assault rifle inside. Edwin Bernhardt woke up and ran downstairs in the nude. Police pushed Catherine to the floor and handcuffed her at gunpoint. They then subdued, handcuffed, and forced Edwin Bernhardt down into a chair, while a police officer outfitted him with a pair of his wife's underwear. He was arrested and spent several hours in jail, still clad only in the underwear, until police realized their mistake and drove him home.

  When the couple later filed suit, the city of Hallandale fought back. City attorney Richard Kane told the *Miami Herald* that citizens should expect such tactics as the price of the drug war. "They made a mistake. There's no one to blame for a mistake," Kane said. "The way these people were treated has to be judged in the context of a war." When asked to comment on the suit, Fort Lauderdale police captain Tom Tiderington said: "There's no perfect formula for success. It could happen at any time." The *Herald* reported

recent similar "wrong door" raids in Seminole County (twice), Largo, and Tampa.[391]

A year later, police in Hallandale made another botched raid, storming the home of a pregnant woman and her three young children. Police insisted they had the correct house, based on a tip from an informant who said he'd bought drugs there. They didn't find any drugs. The woman whose home was raided, Tracy Bell, had complained to police about drug activity in the neighborhood and says police had confused her home with the one next door. Bell's neighbor, who had a criminal record, admitted to having friends involved in drug distribution. Bell had no record.

Hallandale police insisted that this time, unlike with the Bernhardt raid, they had the correct address. Bell's attorney noted that police seem to have made the same mistakes, and offered the same excuse, for this raid as they had with the Bernhardt raid. Attorney Gary Kollin told the *Miami Herald*, "It appears that they continue to use informants as their scapegoats when they mess up and then they hide behind the confidentiality of the informants to avoid a proper investigation into who is telling the truth."[392]

- **Earl Richardson.** In June 1998, police in Raleigh, North Carolina, broke down the door of 66-year-old Earl Richardson in a mistaken drug raid. Police ordered Richardson to the floor while they rummaged through his belongings. They had meant to raid an unmarked apartment to the rear of Richardson's home. After an apology from Raleigh mayor Tom Fetzer, Richardson said: "I don't have anything against the city. I'm just glad I didn't get shot."[393] Five months later, Raleigh police would conduct another botched raid at the home of Priscilla Clark. "I looked out my bedroom door and saw this big gun coming down the hall and a man dressed in black," said Clark, who was pregnant at the time. Police locked Clark and her two children in a bedroom for more than hour before realizing they'd raided the wrong home.[394]
- **LaDana Ford.** In March 1998, state troopers and local police in Harvey, Illinois, deployed a flashbang grenade then initiated a no-knock raid on the home of LaDana Ford. Police handcuffed Ford's 13-year-old and questioned her 7-year-old, while keeping the entire family at gunpoint. They later realized they'd raided the wrong address. Harvey police chief Phil Hardiman was unapologetic. "We make out search warrants when we get information from drug informants," he told the *Chicago Sun-Times*. "Sometimes they give us incorrect information, and warrants are made out for one house when we're really looking for the house next door. I think that's what happened here. That happens from time to time in any police department." When asked if the department would apologize, Hardiman replied: "I don't know if we'd apologize. It's not unusual for that to happen sometimes, but I will say it doesn't happen that often."[395]
- **The Fulton Family.** On March 18, 1998, police raided the Bronx apartment of a grandmother, her daughter, and her six-year-old grandson. The Fulton family was watching television when police pounded on the door, then broke it open and began tearing through the apartment looking for drugs. They had the wrong apartment.[396]
- **Jennifer Switalski and Tenants.** On February 2, 1998, police in Milwaukee conducted a 6:30 a.m. raid on a building owned by Jennifer Switalski. Switalski wasn't home at the time, but her two tenants were. After breaking down the door, police handcuffed the two tenants while a terrified two-year-old girl looked on. Police had the wrong address. Switalksi later tried to sue the city for emotional distress and loss of income after her

A year later, police in Hallandale made another botched raid, storming the home of a pregnant woman and her three young children.

"The taxpayer should not have to pay for hurt feelings because those deputies inadvertently entered the wrong home."

frightened tenants moved out. City officials balked. "If it happened to me, I would be upset, too," said city attorney Louis Elder. "But the taxpayer should not have to pay for hurt feelings because those deputies inadvertently entered the wrong home." Elder also said Switalski was filled with "grandiose ideas" for attempting to sue the city, though she herself hadn't witnessed the raid.[397]

- **The Baines Family.** On November 8, 1997, police in Suffolk County, New York, received a tip from a drug suspect that residents of a home in Wyandanch were stashing " a black automatic pistol, two machine guns, a stainless steel sawed-off shotgun, ammunition, bullet-proof vests, crack cocaine, proceeds from drugs sales and drug paraphernalia." Within hours of the tip, and with no corroborating investigation, a judge issued a no-knock warrant and police executed a raid on the address given by the informant. The address turned out to be the home of Denise Baines and her two sons. Baines's 10-year-old son's bedroom was trashed in the raid. Police apologized to the Baineses upon realizing they'd raided the wrong home but defended the practice of executing quick, no-knock raids based on the tip of a single informant, even one who himself was a drug suspect.[398]
- **June Nixon.** On August 19, 1997, police in Kaufman County, Texas, kicked down the door to the home of June Nixon, her daughter Melissa Cheek, and her granddaughter. Police handcuffed the women and strip-searched them at gunpoint before realizing they'd raided the wrong house. The same sheriff's department was forced to apologize to two families in 1989 for mistaken drug raids that, according to the *Dallas Morning News*, "turned up no drugs, but left houses damaged and family members shaken."[399]
- **Salt Lake Tortilla Factory Raid.** In 1997, police in Salt Lake City, Utah, raided a tortilla factory and restaurant owned by Rafael Gomez, a naturalized citizen. Seventy-five heavily armed police officers stormed the business on a tip from a confidential informant. Expecting to find heroin and cocaine, they found only two 24-pill packs of the painkiller Darvon and two bottles of penicillin. Gomez says he was struck in the face and knocked to the floor, and that police trained a gun on his six-year-old son. One secretary says she was dragged to the floor by her hair. Police handcuffed 80 people, mostly Hispanic, in the raid and forced them to lie down for up to three hours as police searched the premises. Gomez spent a large sum of money fighting charges resulting from the raid, which were later dismissed. Bad publicity from the raid and the length of time it took to clear his name killed Gomez's business and dashed his hopes of opening a large shopping center in the area. He settled with the city of Salt Lake in 2004 for $290,000.[400]
- **The Tarkus Dillard Family.** In June 1996, police raided the Pontoon Beach, Illinois, home of Tarkus Dillard, Vickie Blakely, and the couple's two young children. According to Dillard and Blakely, one officer pointed a gun directly in the face of their three-year-old daughter. Police had mistakenly raided their home instead of the home next door. Police Chief Michael Crouch apologized to Dillard and Blakely but insisted police had done nothing wrong. A federal judge threw out a $1 million lawsuit against the police department in 1998. A lawyer for the police officers called the suit's dismissal a "tremendous vindication" of the officers' actions and said he was contemplating suing Dillard and Blakely, to recoup the city's legal costs.[401]
- **Jeffrey and Phyllis Hampton.** In May 1995, police in Concord, North Carolina, mistakenly stormed the home of Jeffrey and Phyllis Hampton. The Hamptons were relaxing at around 9:30 p.m. when

police broke down the Hamptons' door, came into the house with assault weapons, and ordered the couple to the floor. Police realized their mistake after about a half hour of interrogation.[402]

Three years later, Concord police would wrongly raid another home, that of Leonard Mackin, Charlene Howie, and their four children. Police burst into that home with guns drawn on the night of May 22, 1998, and ordered the family to the floor. After repeated pleas by Mackin to police that they had the wrong house, Detective Larry Welch recognized Mackin as a co-worker with the city and asked, "Leonard, is that you?" A confidential informant had given police the wrong address.[403]

In 1999, police in the same town shot 15-year-old Thomas Edwards Jr. in the back while he was on his hands and knees under orders from another police paramilitary unit on a drug raid. Edwards and five other children, all aged 13–17, were at the house playing video games when police conducted the raid. Officer Lennie Rivera shot Edwards just below the hip when, according to an internal police investigation, "a sudden movement jolted his gun, causing him to tighten his grip on it and pull the trigger." Police found a small amount of marijuana and cocaine at the home. Police Chief Robert E. Cansler said that his officers had done surveillance on the home an hour or two prior to the raid and that "at that time there were no indications of a group of children present." Officer Rivera was found to have improperly held his finger on the gun's trigger and was assigned to more training.[404]

- **Richard Brown.** On March 12, 1996, acting on a tip from an informant, a Miami SWAT team fired 122 rounds into the home of 73-year-old Richard Brown, while his 14 year-old great-granddaughter feared for her life in the bathroom. Brown was killed in the gunfire.[405] Police found no drugs in Brown's home. The city has since paid a $2.5 million settlement to Brown's survivors, and police on the SWAT team that raided Brown's home were later indicted for lying about the details of the raid. Internal Affairs supervisor and 25-year police veteran John Dalton, now retired, told the *Herald* that the head of internal affairs at the time, a former SWAT team member, discouraged a thorough investigation of the Brown case. "They were very defensive about this shooting from the beginning," Dalton said, adding that he'd been "chewed out" for asking difficult questions.
- **Charles Inscor.** In March 1995, police in Oldsmar, Florida, smashed through a glass door, deployed flashbang grenades, and stormed what they thought was the apartment of a drug dealer. Instead, they found 31-year-old Charles Inscor, a wheelchair-bound man with a respiratory problem. The SWAT team soon realized it had raided the wrong home. Inscor was hospitalized for a week as a result of the raid. An ensuing investigation found that though deputies made many mistakes during the investigation and raid, no disciplinary action would be taken because no rules were broken. According to the *St. Petersburg Times*, police couldn't be disciplined because "the Sheriff's office had no policies concerning how the SWAT team should serve search warrants."[406]

A Miami SWAT team fired 122 rounds into the home of 73-year-old Richard Brown. Police found no drugs in Brown's home.

Caught in the Crossfire

Even when police have the correct address and have identified the correct suspect, and even if the suspect is correctly considered dangerous, too often they don't take note of innocent relatives, acquaintances, neighbors, or children who may be present during the raid and unnecessarily put in harm's way. Perhaps the most notable example of an innocent caught in drug raid crossfire is the case of 11-year-old Alberto Sepulveda.

Alberto Sepulveda. Early in the morning on September 13, 2000, agents from the DEA, the

FBI, and the Stanislaus County, California, drug enforcement agency conducted raids on 14 homes in and around Modesto, California after a 19-month investigation. According to the *Los Angeles Times*, the DEA and FBI asked that local SWAT teams enter each home unannounced to secure the area ahead of federal agents, who would then come to serve the warrants and search for evidence. Federal agents warned the SWAT teams that the targets of the warrants, including Alberto Sepulveda's father Moises, should be considered armed and dangerous.[407]

After police forcibly entered the Sepulveda home, Alberto, his father, his mother, his sister, and his brother were ordered to lie face down on the floor with arms outstretched. Half a minute after the raid began, the shotgun that officer David Hawn had trained on Alberto accidentally discharged, instantly killing the 11-year-old. No drugs or weapons were found in the home.[408]

The *Los Angeles Times* reports that when Modesto police asked federal investigators if there were any children present in the Sepulveda home, they replied, "Not aware of any."[409] There were three. A subsequent internal investigation by the Modesto Police Department found that the DEA's evidence against Moises Sepulveda—who had no previous criminal record—was "minimal." In 2002 he pled guilty to the last charge remaining against him as a result of the investigation—using a telephone to distribute marijuana.[410] The city of Modesto and the federal government settled a lawsuit brought by the Sepulvedas for the death of their son for $3 million.[411]

When Modesto police asked federal investigators if there were any children present in the Sepulveda home, they replied, "Not aware of any." There were three.

At first, Modesto police chief Roy Wasden seemed to be moved by Sepulveda's death toward genuine reform. "What are we gaining by serving these drug warrants?" Wasden is quoted as asking in the *Modesto Bee*. "We ought to be saying, 'It's not worth the risk. We're not going to put our officers and community at risk anymore.'"[412]

Unfortunately, as part of the settlement with the Sepulvedas, while Modesto announced several reforms in the way its SWAT team would carry out drug raids, there was no mention of discontinuing the use of paramilitary units to conduct no-knock or knock-and-announce warrants on nonviolent drug offenders.[413]

Here are some other cases of people caught in drug-raid crossfire who weren't suspects:

- **Michael Meluzzi.** On July 8, 2005, a Sarasota, Florida, SWAT team conducted a drug raid on a home where several children were playing in the front yard. The SWAT team descended from a van, deployed flashbang grenades in front of and inside the house, then swarmed the home. Forty-four-year-old Michael Meluzzi, who had a criminal record, fled when he saw the armed agents exit the van. Police chased Meluzzi down and fired a Taser gun at him, only partially hitting him.

  According to Officer Alan Devaney, Meluzzi then reached into his waistband, leading Devaney to believe Meluzzi was armed. Devaney opened fire, killing Meluzzi. Police found no weapon on or near Meluzzi's body.[414]
- **Ronnie Goodwin.** On May 26, 2005, a SWAT team conducted a drug raid on the Syracuse, New York, home of Sonya Goodwin while looking for drug suspect Angelo Jenkins. Police had Ronnie Goodwin, 13, on the living room floor at gunpoint when a deputy on the SWAT team fired off several shots at the Goodwin's dog. One of those bullets ricocheted, striking the boy in the leg. Goodwin's mother later filed a lawsuit, claiming the boy suffered "severe and debilitating" injuries as a result of the bullet.[415]
- **Cheryl Lynn Noel.** On January 21, 2005, Baltimore County, Maryland, police raided the Dundalk neighborhood home of Charles and Cheryl Noel at around 5 a.m. on a narcotics warrant. They'd obtained the warrant after finding marijuana seeds and stems in the

Noels' trash. They deployed a flashbang grenade, then quickly subdued the first-floor occupants—a man and two young adults. When officers entered the second-floor bedroom of Cheryl Lynn Noel, they broke open her door to find the middle-aged woman in her bed, frightened, pointing a handgun at them. One officer fired three times. Noel died at the scene.[416] Friends and acquaintances described Noel as "a wonderful person." One man collected 200 signatures from friends, neighbors, and coworkers vouching for her character.[417]

One possible reason Noel brandished a gun to defend herself: Nine years earlier, her stepdaughter had been murdered.[418] Police charged Noel's husband and two children with misdemeanor possession of marijuana and marijuana paraphernalia.[419] A subsequent investigation found no wrongdoing on the part of the police.[420]

- **Rhiannon Kephart.** In January 2005, 18-year-old Rhiannon Kephart was hospitalized in serious condition after she received severe burns during a pre-dawn paramilitary raid on a Niagara Falls apartment.

  Kephart—who wasn't the target of the raid—suffered second- and third-degree burns on her chest and stomach after the flashbang grenade tossed through a window by the raiding officers landed on the bed where she was sleeping. The grenade ignited the bed sheets, setting off a fire in the apartment.[421]
- **James Hoskins.** On February 6, 2004, Middletown, Pennsylvania, police stormed the home of James Hoskins on a drug warrant. They were looking for Hoskin's brother Jim, whom they eventually arrested for possessing "a small amount of marijuana, a glass pipe, and about $622," according to the *Philadelphia Inquirer*.[422]

  When Hoskins heard the loud thud of police breaking into his home, he got up from his bed to investigate, naked and unarmed. As he approached the bedroom door, a Middletown detective pushed his way into Hoskins' bedroom. Hoskins and his girlfriend say the detective never identified himself. Later explaining that he mistook the T-shirt Hoskins was using to cover his genitalia for a gun, the detective fired. The bullet entered Hoskins' abdomen, then ripped through his stomach, small intestine, and colon. It eventually lodged in his leg, which later had to be amputated. It wasn't until weeks later, after he emerged from a coma, that Hoskins learned the man who shot him was a police officer, not a criminal intruder.[423]

  Weeks later, after he emerged from a coma, Hoskins learned the man who shot him was a police officer, not a criminal intruder.

  Remarkably, the Middletown Township police department saw no need to conduct an internal investigation of the shooting until prodded by the district attorney.[424] The district attorney's own investigation found no evidence of wrongdoing on the part of the shooting officer.[425] Hoskins settled a lawsuit with the city of Middletown in 2005 for an undisclosed amount of money. He settled with the local township for $250,000.[426]
- **Desmond Ray.** On December 11, 2002, police in Prince George's County, Maryland, were preparing for a SWAT raid on a suspected drug dealer. Just as the raid commenced, Desmond Ray—who wasn't the target of the raid—got out of a parked car. Cpl. Charles Ramseur says Ray reached for his waistband when exiting the car. Ray says he put his hands in the air.

  Ramseur fired his weapon at Ray, striking him in the spine and paralyzing him. Ray wasn't armed and was never charged with a crime.

  In April 2004, an "Executive Review Panel" found that Ramseur had no justification for shooting Ray and recommended administrative charges against him for using excessive force. But that recommendation was overruled when the internal police review board later found no wrongdoing. Ramseur was reinstated. The county police settled a

civil suit with Ray for an undisclosed sum of money.[427]

- **Meredith "Buddy" Sutherland.** On October 4, 2002, police raided a home in Windsor, Pennsylvania, on suspicion of drug activity. According to news reports, the raid was doomed from the start—the SWAT team was aware that someone inside the home had spotted them, meaning they'd lost the element of surprise SWAT proponents say is the main reason for conducting paramilitary drug raids in the first place. Police raided anyway.

  Once inside, police went from room to room in the dark home. Trooper Gregory Broaddus entered a bedroom where Meredith "Buddy" Sutherland Jr. was sleeping. Sutherland didn't live in the house, but was visiting a friend. Officer Broaddus mistakenly thought Sutherland was clutching a weapon when he entered the room, and fired, striking Sutherland. Sutherland had no weapon and was never charged with a crime.

  Other occupants were eventually charged with drug crimes. Sutherland sued in June 2004 for compensation for his injuries. The state attorney general asked that the suit be dismissed, arguing that the officer in question had immunity and that Sutherland was ultimately responsible for his own injuries.[428]
- **Julius Powell.** On August 22, 2001, police conducted a paramilitary marijuana raid on the Powell family in North Minneapolis, Minnesota. As they were approaching the house to conduct the raid, police shot and killed a pit bull a man was walking just outside the house. One of the bullets ricocheted and struck the forearm of 11-year-old Julius Powell, who at the time was taking out the family trash. Police did find some marijuana in the home. The incident—the latest in a series of police shootings in the city—sparked riots and protests.[429]
- **Tony Martinez.** On December 20, 2001, police in Travis County, Texas, stormed a mobile home on a no-knock drug warrant. Nineteen-year-old Tony Martinez, nephew of the man named in the warrant, was asleep on the couch. When Martinez rose from the couch as police broke into the home, deputy Derek Hill shot him in the chest, killing him.[430] Martinez was unarmed and never suspected of a crime.

  A grand jury later declined to indict Hill in the shooting.[431] The shooting occurred less than a mile from the spot of a botched drug raid that cost Deputy Keith Ruiz his life a year earlier. Hill was also on the raid that ended with the death of Ruiz.[432] The same Travis County paramilitary unit would later erroneously raid a woman's home after mistaking ragweed for marijuana plants.

When Martinez rose from the couch as police broke into the home, deputy Derek Hill shot him in the chest, killing him.

- **Lynette Gayle Jackson.** On September 22, 2000, police in Riverdale, Georgia, shot and killed Lynette Gayle Jackson in an early morning, no-knock drug raid.

  A few weeks earlier, Jackson had been at home alone when burglars broke into her house. She escaped out a window and called the police while the intruders ransacked her home. When police arrived to answer the burglary call, they found a small amount of cocaine in the bedroom, which belonged to Jackson's boyfriend. While the quantity of cocaine wasn't sufficient to press charges, police began a subsequent investigation of Jackson's boyfriend. That investigation led to the September no-knock raid. Jackson, believing she was again being robbed, was holding a gun in her bedroom when the SWAT team entered. Her maintenance man said Jackson had been frightened by the previous burglary, telling the *Atlanta Journal and Constitution*, "I think she was scared and she probably thought it was another break-in."[433]
- **Willie and Charles Alford.** On February 27, 2002, police raided the home of 77-year-old Willie Alford on a narcotics warrant issued for his daughter and two

grandchildren. Police from the federal Drug Enforcement Agency; the Cumberland County, North Carolina, Sheriff's Office; and the North Carolina State Bureau of Investigation broke into the home at 8 p.m. and, according to Alford, "came in shooting." Two children were also present in the home. Police shot Alford's son Charles, a truck driver visiting from out of town who wasn't a suspect, in the arm, legs, and side. Police found no weapons in the home. Two suspects named in the warrant were arrested at the site of the raid, and one was arrested the following day.[434]

- **Jose Colon.** On April 19, 2002, police were preparing to conduct a heavily armed late-night drug raid (it included a helicopter) on a home in Bellport, New York. As four paramilitary unit officers rushed across the front lawn, 19-year-old Jose Colon emerged from the targeted house. According to the police account of the raid, as officers approached, one officer tripped over a tree root, then fell forward and into the lead officer, causing his gun to accidentally discharge three times.[435] One of the three bullets hit Colon in the side of the head, killing him. Police say they screamed at Colon to "get down" as they approached, though two witnesses told a local newscast that (a) their screams were inaudible over the sound of the helicopter. The witnesses also stated that (b) the officers appeared to be frozen before the shooting—no one tripped.[436] Though he was visiting the house at the time, Colon was never suspected of buying or selling drugs. Police proceeded with the raid and seized eight ounces of marijuana. A subsequent investigation found no criminal wrongdoing on the part of police.[437] Colon had no criminal record and was months away from becoming the first member of his family to earn a bachelor's degree. His family is pursuing a lawsuit.[438]
- **Christie Green.** In December 1998, police in Richmond, Virginia, conducted a paramilitary drug raid on an apartment whose occupant was suspected of drug activity. During the raid, Sgt. George Ingram fired "breaching round" shotgun shells—intended to blow the locks off doors—into the door leading to the apartment's kitchen. Ingram fired five rounds, one of which went through the door, striking 18-year-old Christie Green in the chest. Green later died from the wound.

  Green didn't live at the apartment, and police concede they had no reason to believe she was involved in any drug activity or that she knew any was going on in the apartment. Green's family sued both the city of Richmond and the manufacturer of the round, which is designed to dissolve on impact. In 2002, a circuit court jury found that the manufacturer of the round wasn't liable for Green's death. Then, in 2004, a judge in Richmond found that the officer who fired the round wasn't liable either.[439] In March 2005, the Virginia State Supreme Court reinstated the case against the city and the officer, ruling that a jury, not a judge, should make the determination of liability. In January 2006, a jury found Officer Ingram grossly negligent in the raid and awarded the Green family $1.5 million in damages.[440]
- **Delbert Bonar.** On October 15, 1998, deputies in Washington County, Ohio, made an unannounced nighttime entry into the home of 57-year-old Delbert Bonar, a retired school janitor. Police had a search warrant to look for stolen weapons and marijuana in the possession of Albert Bonar, Delbert's son. Police claim that upon their entering the home, the elder Bonar grabbed a shotgun and ignored orders to release it. Albert Bonar's wife disputes this account of the raid. Police shot Delbert Bonar eight times, killing him. Police found a small amount of marijuana in the house. Though the Washington County sheriff insisted his men acted

"I think she was scared and she probably thought it was another break-in."

Though never charged, Cauthorne served more than six weeks in jail.

properly, the county paid the Bonar family a $450,000 settlement in 2003.[441]

The Threat to Law Enforcement

Because SWAT raids escalate the violence associated with executing a search warrant, they not only increase the odds of unintended civilian casualties, but they can lead—and have led—to tragic consequences for police officers, too. The volatility of these raids means that the slightest of errors—not just in ensuring that the information on the warrants is correct but in the actual execution of the raids—can be catastrophic for everyone involved. The following is a partial list of raids in which police officers were killed or injured:

- **The Jillian King Raid.** On January 14, 2003, Jillian D. King shot and wounded a Muncie, Indiana, police officer as a SWAT team in black masks and camouflage conducted a raid on her boyfriend's home. Officers were serving a no-knock warrant after finding cocaine inside the car of another resident of the house. King, who had been previously robbed at gunpoint, fired at what she thought were intruders.[442] "I saw what appeared to be a burglar jerking at the door," she told the court. "I ran down and got a gun and shot out a window." King was never charged with drug possession but was charged with felony criminal recklessness. During her trial, King said if she had known the intruders were police, "I would have opened the door." The prosecutor described her as having "an itchy trigger finger." Though individual Muncie SWAT team members testified they "always" announce themselves and wait before entering a residence, they also said they typically wait just five seconds between knocking and forcing entry, clearly not enough time for a suspect in another room or asleep to answer. Video of the raid in question showed officers prying open doors *before* knocking or announcing.[443] King originally pled guilty to the charge, but a judge refused to accept her plea. The jury deadlocked in her trial.[444]
- **The Lewis Cauthorne Raid.** On January 7, 2003, prosecutors in Baltimore, Maryland, announced they would *not* seek charges against Lewis S. Cauthorne for firing a .45-caliber handgun at police who broke down his door during a no-knock raid in November 2002. Cauthorne, at home with his mother, girlfriend, and three-year-old daughter, heard screaming when police broke open the door to his home and began searching for drugs without identifying themselves. Prosecutors determined that Cauthorne, who had no arrest record and whose father had been robbed and killed as a cab driver, had reason to believe his life was in danger when he fired and wounded four of the raiding police officers. Police fired back, but fortunately, no one in the family was hurt.

  Police were acting on a tip from a confidential informant and claim to have found six bags with traces of marijuana, empty vials, a razor with cocaine residue, and two scales in Cauthorne's home. But the ensuing investigation found peculiarities with the evidence that precluded Cauthorne from being charged with even a misdemeanor. There was no record of where exactly in the home the drugs had been found, for example, and police told crime lab technicians not to photograph the evidence. The officers who conducted the raid were also unavailable for interviews with investigators until days or weeks after the raid took place. Though never charged, Cauthorne served more than six weeks in jail before the charges against him were dismissed.[445]
- **Officer Ron Jones.** On December 26, 2001, police in Prentiss, Mississippi, served search warrants on two apartments in a duplex. One apartment was occupied by Jamie Smith, named in the warrant as a "known drug dealer." The other was occupied by Cory Maye, who had no criminal record and wasn't

named in the warrants. At the time of the raid, Maye was asleep with his 18-month-old daughter. After attempting to enter through the front door, police moved to the back and broke down the door to Maye's bedroom. Officer Ron Jones was the first police officer to enter. Maye, who says he feared for his life, fired three times, striking Jones once. Maye's bullet hit Jones in the abdomen, just below his bulletproof vest. Jones died a short time later. Police found only traces of marijuana in Maye's apartment, after first telling reporters they'd found no drugs at all. Officer Jones was the only officer who conducted the investigation leading up to the raid and apparently kept no notes of his investigation. According to the district attorney and prosecutor in the Maye case, all evidence of the investigation leading to the raid on Maye's home "died with Officer Jones."[446] In January 2004, Maye was convicted of capital murder for the death of Jones and sentenced to die by lethal injection.[447]

- **Deputy Keith Ruiz.** On February 15, 2001, police raided the Del Valle, Texas, mobile home of Edwin Delamora, where he lived with his wife and two children. As two deputies beat down his door with a battering ram, Delamora fired, fearing he was under attack. One bullet from his gun struck and killed sheriff's deputy Keith Ruiz. Delamora had no previous criminal record and his defense attorney says the raid on his home was influenced by an anonymous informant who turned out to be the brother of two sheriff's deputies. Information about the informant's relationship with the police was suppressed at trial. Delamora was eventually convicted of capital murder and sentenced to life in prison. Police found less than an ounce of methamphetamine and one ounce of marijuana in his home. Prosecutors declined to seek the death penalty because of substantial doubt over whether Delamora knew the officers were police or whether he genuinely believed them to be intruders.[448]
- **Deputies James Moulson and Philip Anderson; George Timothy Williams.** On January 3, 2001, Jerome County, Idaho, sheriff's deputies James Moulson and Phillip Anderson conducted a raid on the home of George Timothy Williams. The warrant for the raid contained information from a confidential informant asserting that Williams was one of the leading suppliers of marijuana in the county. Moulson and Anderson conducted the raid at night, wearing camouflage. It's unclear whether they announced themselves before entering. Williams fired when the deputies entered, and the deputies returned fire. All three died in the shootout. A subsequent search turned up less than four grams of marijuana. Lawsuits brought by the families of both slain deputies and by Williams's family revealed that the informant was a woman who lived with Williams. One suit alleges that the sheriff's department threatened to take away the woman's child if she didn't give them the information they needed to get the warrant. The county settled with the family of one deputy.[449] A federal court dismissed the lawsuit brought by Williams's family. An Idaho state police investigation found no wrongdoing on the part of the sheriff's department or the deputies who conducted the raid.[450]
- **Officer David Eales.** On September 24, 1999, police in Sallisaw, Oklahoma, procured a no-knock warrant on the home of Eugene Barrett, suspected of trafficking methamphetamine. As the police vehicles descended upon his home, Barrett opened fire. One bullet struck and killed Oklahoma Highway Patrol Officer David Eales. Barrett claims he was acting in self defense. After a state jury declined to give Barrett the death penalty, he was tried again in federal court, convicted, and sentenced to death.[451]

At the time of the raid, Maye was asleep with his 18-month-old daughter.

- **The Mary Lou Coonfield Raid.** In August 1996, Tulsa police raided the home of 70-year-old Mary Lou Coonfield on a drug warrant. Coonfield awoke to find a man in black standing in her bedroom, holding a gun. She grabbed a .22-caliber pistol and fired, wounding Tulsa County Deputy Sheriff Newt Ellenbarger. The warrant for Coonfield was later thrown out, ruled in both 1996 and 1997 to be illegal. In 1999, a jury acquitted Coonfield of assault and battery with a dangerous weapon and feloniously pointing a weapon. Coonfield was acquitted because of Oklahoma's "Make My Day" law, which states that "an occupant of a house is justified in using physical force, including deadly force, against another person who has unlawfully entered the house if the occupant reasonably believes that the other person might use any physical force, no matter how slight, against any occupant of the house." Coonfield, who's both hard of hearing and has poor eyesight, says she didn't hear police announce themselves before entering, and thought she was being robbed.[452]
- **Officer James Jensen.** On March 13, 1996, the Oxnard, California, SWAT team conducted an early morning drug raid on a home that turned out to be unoccupied. In the maze of smoke and light that followed the deployment of a flashbang grenade, a fellow SWAT team member, who would later reveal that his judgment was clouded by Vicodin, mistook Officer James Jensen for a hostile occupant of the house and shot him dead. Jensen's family won a $3.5 million settlement from the city of Oxnard in 1999.[453]
- **The Andre Madison Raid.** On November 7, 1995, police in North Minneapolis, Minnesota, raided the home of Andre Madison. After local media merely recounted the police version of events, *Minneapolis City Pages* conducted an in-depth investigation. According to the paper's account, police obtained a no-knock warrant on Madison's home after a confidential informant allegedly purchased some marijuana at the residence.[454]

At about 8 p.m., the Minneapolis paramilitary unit, called ERU, deployed flashbang grenades at the front of Madison's home. At the same time, police from the city's housing unit were entering the home from the rear. Reports at the time say police began firing when Madison fired his shotgun at them. But a forensics team later determined that Madison's gun was never fired the night of the raid. Instead, an investigation conducted by a police chief from a nearby county speculated that the housing unit officers mistook the flashbang grenades deployed by the ERU unit for gunfire from the suspect and opened fire themselves. The two police units then mistook one another for assailants and began to fire upon one another. When Officer Mark Lanasa went down, shot in the neck by a colleague, the commanding officer called for "suppressive fire," giving officers carte blanche to shoot at will. Upon hearing that a fellow officer had gone down, more police soon arrived at the scene. They too joined in the shooting. Hundreds of rounds were fired into the building. There were bullet holes found in neighboring buildings, as well. Madison, the suspect, was shot in the neck and the arm. Miraculously, no one was killed.[455]

The two police units then mistook one another for assailants and began to fire upon one another.

Police found only a small amount of marijuana in Madison's home. He was never charged with a drug crime. He was charged with four felony counts of second-degree assault with a firearm—not for shooting, but for *pointing* his shotgun at police. He could have been sentenced to 12 years in prison. Madison insists he thought the police were intruders. Prosecutors then offered to let Madison plead to a misdemeanor count of reckless use of a firearm, which carries a sentence of just 90 days. The

hitch was that a guilty plea to the lesser charge would have prevented Madison from suing the city.

The subsequent investigation and report from the outside police chief concluded that Minneapolis's ERU unit "executes too many warrants and relies too heavily on dynamic (door-ramming) raids," explaining that "there are other alternative tactics that ERU is aware of. However when so many raids are conducted using dynamic entry, other tactics may be forgotten."[456]

Confronting Nonviolent Offenders with Violent Tactics

Drug war supporters and casual observers often find it difficult to criticize paramilitary raids ending in the death or injury of nonviolent drug users or dealers, noting that those people are, after all, breaking the law. If drugs are found at the scene, even raids ending in a suspect's death are somehow deemed less troubling than raids ending in the deaths of innocents. The case against the suspect and in favor of the decision to raid with a paramilitary unit seems to grow stronger if the suspect also possesses weapons, or worse, points them at or attempts to use them against the raiding police officers. Perhaps it's true that such scenarios shouldn't trouble us as much as raids on the homes of innocents. But they're still troubling, for two reasons.

First, by some estimates, more than 96 million Americans have consumed marijuana at some point in their lives.[457] The overwhelming majority of them have done so peacefully and at the expense of no one else. Legalizing marijuana is a debate for another time. But it would be absurd to suggest that the 96 million Americans who have tried or continue to smoke marijuana have effectively given up their Fourth Amendment rights. Smoking marijuana, or even selling it to someone else, isn't a violent crime and, consequently, doesn't merit a home invasion by police armed with the weaponry and mindset of soldiers. It certainly doesn't merit death. Yet a troublingly high number of these raids are aimed at marijuana offenders.

Second, as discussed earlier, given the tactics associated with no-knock warrants, it isn't difficult to see why people might grab weapons to defend themselves and their families when police violently storm a home late at night or just before dawn. That a suspect pointed a weapon at police serving a no-knock warrant doesn't prove that the suspect was violent or a threat to the public. It only proves that someone in the privacy of his own home was understandably threatened by the presence of armed intruders.

The fact that police find weapons or marijuana at the scene of a raid, then, still doesn't mean paramilitary tactics and forced entry were justified. It's possible—likely, even—that millions of Americans are both harmless recreational marijuana users and legal gun owners. The presence of both doesn't make them a threat to the community. And the only legitimate use of paramilitary units like SWAT teams, indeed the reason they were originally implemented, is to deal with real, immediate, and obvious threats to the public safety.

Perhaps the best example of how such violent tactics unleashed on nonviolent drug users invite tragedy is the case of Clayton Helriggle.

Clayton Helriggle. Helriggle, 23, lived in a house with four roommates in West Alexandria, Ohio. In September 2002, a local SWAT team conducted a no-knock raid on the house. Local police had only recently put the SWAT team together—the most experienced members of the team had less than four hours of tactical training. Others had never trained with the SWAT team before. A post-raid report would later find that "wrong dates were used in an affidavit, and investigators questioned why so little time was provided for surveillance of the house and why there were no controlled narcotic purchases from the house."[458] According to the *Dayton Daily News*, the search warrant was "largely based on overheard conversations, a few hours of surveillance, and the word of a convicted felon who

The search warrant was "largely based on overheard conversations, a few hours of surveillance, and the word of a convicted felon."

"Wow, they took down a farm of unarmed hippies."

had recently lied to a court to remain free on bond." Informant Kevin Leitch insisted there were "pounds and pounds" of marijuana at the residence and specifically identified Helriggle as a dealer. Leitch later told investigators he was mistaken. Helriggle's family says he was a recreational marijuana smoker, though not a dealer.[459]

On September 27, 2002, 25–30 police officers emerged from nearby woods and swarmed the farmhouse. SWAT officers detonated several flashbang grenades on the first floor, then used a battering ram to force their way into the rented farmhouse. As police in shields and body armor subdued three of the house's occupants, Helriggle, asleep in an upstairs bedroom, was awakened by the commotion and descended the stairs. Police at the scene say he was carrying a handgun at the time. Helriggle's roommates insist that while Helriggle did own a licensed handgun, he'd left it in the bedroom and was holding a blue cup of water. Whatever Helriggle was holding, his last words—"What's going on?"—indicate he wasn't aware that the armed intruders in his home were police. A SWAT team member interpreted the item in his hand to be a gun and put a single shotgun blast into Helriggle's chest. He died at the scene, in the arms of one of his roommates.[460]

Immediately after the raid, police told local reporters that they'd found marijuana, pills, weapons, drug paraphernalia, and drug "packaging materials" at the home. The pills proved to be a bottle of prescribed codeine. The weapons were Helriggle's legal handgun, an old shotgun, and a .22-caliber rifle, not particularly unusual for an Ohio farmhouse. The "packaging materials" turned out to be a box of sandwich bags. And police found less than an ounce of marijuana. No charges were filed against any of the house's occupants.[461]

In addition to the tip from an unreliable informant, police raided the farmhouse on the basis of evidence they say they collected while conducting surveillance. As it turns out, that evidence too was questionable. Officer George Petitt, who both conducted the surveillance and planned the raid, told investigators he concluded the farmhouse was a "dope house, just by the activity" of cars pulling in and out of the driveway. But when pressed, he conceded that he had no first-hand knowledge of a single marijuana deal that took place at the farmhouse.[462] The absurdity of using a highly armed, poorly trained SWAT team to carry out a violent, volatile raid on a house rented by recreational marijuana users was captured by Ian Albert, a resident of the farmhouse who also happened to have just completed Navy SEAL training. It was Albert who held Helriggle in his arms as he bled to death. According to the *Dayton Daily News* Albert's first thought at the time was "Wow, they took down a farm of unarmed hippies."

"If they would have come to the door and said, 'Give us your dope, hippies,'" he added, "we'd have gotten about a $100 ticket."[463]

A grand jury and internal investigation later found no criminal wrongdoing on the part of police officers but did find the SWAT team "ill prepared" and "lack[ing] experience in dangerous searches."[464] The grand jury report also noted that the officers who conducted the raid had refused to cooperate with investigators.[465]

In January 2004, Greene County, Ohio, prosecutor Bill Schenk suggested the possibility of reopening the Helriggle case, saying that he was concerned that Helriggle had been publicly portrayed as a drug dealer. "I think it's fair to say that there was no drug dealing by Mr. Helriggle," he told the *Dayton Daily News*.[466]

Despite the fact that he was at the time awaiting sentencing for more than a dozen crimes, including forgery, theft, burglary, breaking and entering, and safecracking, informant Kevin Leitch was never charged for lying to police officers, nor was he charged for lying under oath to the grand jury investigating the raid.[467] These kinds of cases are increasingly common. It's now routine for police to deploy SWAT teams to serve search warrants on nonviolent marijuana suspects for crimes that in many cases barely qualify as misdemeanors. These unnecessari-

ly violent and confrontational tactics are, also, increasingly bearing tragic results. Some examples:

- **Leesburg, Virginia.** In January 2006, police in Leesburg used flashbang grenades while raiding the home of a marijuana suspect. Police obtained the warrant after sifting through trash bags outside the house. They found one small bag of marijuana.[468]
- **Decatur, Alabama.** In October 2005, police in Decatur raided a family home on a marijuana warrant. Police shot and killed two of the family's dogs and, according to the targets of the raid, made jokes about the dead pets while the suspects were in custody. Police seized eight grams of marijuana, or about enough to fill a ketchup packet.[469]
- **Shannon Hills, Arkansas.** In February 2005, police in Shannon Hills stormed a home with their guns drawn during a toddler's birthday party. The target was a pregnant woman attending the party. Police arrested her on suspicion of distributing marijuana. Police Chief Richard Friend told one reporter, referencing the birthday, "We got them something they wish they could return."[470]
- **Angela King.** On May 17, 2004, Perry County, Kentucky, police raided the home of Dennis Ray and Angela King on suspicion of marijuana distribution. Deputy Sheriff John Couch shot Angela King twice, once in the head, in the course of the raid. Police say King fired a weapon at them first, though the couple's 14-year-old-son—also in the home at the time of the raid and who was subdued with a policeman's foot on his shoulder—says he heard only two shots. The police were cleared of all wrongdoing in the shooting. Dennis Ray was arrested on charges of distributing marijuana.[471]
- **Linda Florek.** On December 7, 2004, at 10 p.m., police in Mundelein, Illinois, broke down the door to the home of 48-year-old Linda Florek. They then ordered Florek and her son to the floor and handcuffed them. Shortly into the raid, Florek—who has a cardiac condition—told police she was having chest pains, possibly a heart attack. According to a lawsuit later filed by Florek, police refused to let her take an aspirin or to call an ambulance. Ninety minutes later, the officers finally believed her and called an ambulance. Florek was eventually admitted to a hospital, where doctors determined she'd had a heart attack and needed immediate surgery. Police issued Florek a ticket and fine for the misdemeanor possession of less than 2.5 grams of marijuana.[472]
- **Shay Neace.** On March 22, 2003, police in SWAT attire raided a home in Canton, Ohio, on a marijuana warrant, looking for a man with a history of marijuana distribution. There was a party at the home that night. As the raid commenced, Officer William Watson of the Perry Township Police Department made his way to the home's second floor, and pulled open the door to a bathroom. Inside, 24-year-old Shay Neace and his brother Seth were smoking marijuana. Watson pushed a gun through the door and ordered everyone in the bathroom to the floor. Neace and his brother say Watson never announced himself. They thought they were being robbed. Shay Neace grabbed Watson's gun and pushed it away. He then pushed the gunman—Watson—out into the hall. At that point, Watson fired, hitting Neace in the shoulder and in the back. The second shot left Neace paralyzed. Officer Watson was cleared of all charges by a grand jury. Neace was indicted by a separate grand jury, then acquitted in a criminal trial of obstructing an investigation and resisting arrest. Neace's civil suit against Watson is still pending.[473]
- **Robert Filgo.** On September 2, 2003, police in Fremont, California, forced open the door of 41-year-old marijuana

Police entered, forced Filgo to the floor at gunpoint, then shot his pet Akita nine times, killing it.

When Monroe asked if she could put on some clothing, one officer put a black bag over her head and tightened it around her neck.

patient Robert Filgo, who had both a doctor's prescription and a certificate from the city of Oakland permitting him to possess the drug. Police entered, forced Filgo to the floor at gunpoint, then shot his pet Akita nine times, killing it. The Alameda County District Attorney's Office later declined to press charges against Filgo.[474]

- **Marcella Monroe and Tam Davage.** In October 2002, police in Eugene, Oregon, assembled a massive show of force—52 police officers from four agencies in full SWAT attire, assault weapons, shotguns, and an armored vehicle borrowed from the Oregon National Guard—to conduct a raid on three homes in the Whitaker neighborhood they suspected of growing marijuana. All three homes were owned by one couple, Marcella Monroe and Tam Davage. Davage and Monroe lived in one of the homes, with two tenants. They were renovating the other two houses, which had been destroyed in a windstorm. Police officers were aware that there were likely to be only three or four people at most in the three homes, despite the force of 52 officers they brought for the raid.[475]

  The massive SWAT team was dressed in black or in camouflage and wore ski masks. They deployed flashbang grenades, then forced entry into the home occupied by Davage, Monroe, and their tenants without announcing themselves. They pulled the two couples out of bed and wrestled them to the ground. They put assault weapons to residents' heads, tightly handcuffed them, and refused to let the two women, who were partially nude, cover themselves (they also took photos of the women before allowing them to dress).[476]

  When Monroe asked if she could put on some clothing, one officer put a black bag over her head and tightened it around her neck. Because police at that point had still failed to identify themselves, Monroe says she believed she was about to be executed (as for the black bag tactic, the Eugene Police Department had been warned to discontinue the practice by the National Tactical Officers Association, who cautioned that "this practice is not acceptable in the law enforcement community," that it "has no lawful purpose," and though it is commonly used in military operations, "it has no place in civilian operations").[477] Monroe also sustained a cut on her head after one officer pushed her to the ground and put a boot on the back of her neck.[478]

  Police found no plants, no weapons, and only "residue" of marijuana in a couple of plastic bags, for which the couple's tenant was issued a misdemeanor citation. Neither Monroe nor Davage had a criminal record, and none of the occupants had any history of violent crime.[479]

  Nevertheless, police still charged Davage and Monroe with felony manufacture of a controlled substance. They cited the evidence they'd found: fans, fluorescent lights, plastic sheeting, timers, potting equipment, sandwich bags, a scale, 24 electrical outlets, and a shop vacuum. Of course, none of those items is illegal, and in the case of Davage and Monroe, all were perfectly sensible to have around: Davage was a work-at-home jeweler, explaining the lights and the outlets. Monroe owned a landscaping business, explaining the potting supplies and vacuum. Of course, as noted, the two were also renovating all three houses, as police could have easily ascertained, both during the raid and during the undercover visit one officer paid to the couple (posing as a potential tenant) before securing a warrant for the raid.[480] Monroe had come to the attention of police when they'd busted a marijuana growing operation in Portland, where they found cashier's checks made payable to her. What the officer failed to mention in the affidavit, however, was

that the checks were clearly identified as payment for landscaping services and were made in the name of Monroe's business. The most recent check was dated 1997, five years before the raid.[481]

In a subsequent lawsuit, Monroe and Davage outlined a host of other misleading assertions and questionable omissions in the affidavit that led to the raid on their home. The officer, for example, cites unusually the high use of electricity, the presence of potting soil, an electrical cord, and a "humming noise," as grounds to suspect cultivation of marijuana. The affidavit never mentioned Monroe's landscaping business, Davage's jewelry business, or the fact that the couple was repairing their home from storm damage, though the officer was aware of all three. The affidavit also makes no mention of the possibility of weapons, disposability of evidence, or violent tendencies of any of the home's occupants, all of which would have been required to justify a no-knock raid.[482]

Police defended the raid as entirely necessary and appropriate, given the well-known danger posed by people who grow marijuana. The spokesman for one of the task forces involved in the raid added that "the community at large" approved of such tactics. The Whitaker Community Council later condemned the raid at a public neighborhood meeting, as well as in a press release.[483]

- **Jeffery Robinson.** On July 30, 2002, police stormed the home of Jeffery Robinson, a 41-year-old gravedigger in South Memphis, Tennessee. Robinson lived in a small building on the site of the cemetery that employed him. Police conducted the raid on the basis of an anonymous tip that someone was selling marijuana on the cemetery grounds. Raiding officers kicked in Robinson's bedroom door and immediately shot Robinson in the neck. Robinson died three weeks later. Police say Robinson charged them with a box cutter. They also found a small amount of marijuana near a camper in Robinson's backyard and charged him with possession, even as he lay in a hospital fighting for his life. A review by the Memphis police department's internal affairs unit and the Attorney General's Office found no wrongdoing on the part of the police. For two and a half years, the officers who participated in that raid remained on the Memphis police force. But in October of 2004, the jury in a federal civil suit brought by Robinson's family made some striking findings:

  The jury concluded that the box cutter police say Robinson charged them with—which was never fingerprinted—was planted on Robinson after the raid. During the trial, a medical examiner and blood spatter expert also testified that the shooting couldn't possibly have happened the way the officers say it did. Further, the shirt Robinson wore, as well as the shirt of the officer who shot him, vanished after the raid. Trial testimony revealed that police bought a new polo shirt, still in its wrapper, and tagged it as the shirt Robinson wore the night he was shot.

  The federal jury concluded that the officers shot Robinson without justification, then tampered with the evidence to cover up their mistakes. The jury also cast doubt on the ensuing investigation by the police department's internal affairs division.[484] In February 2005, the eight officers involved in the raid were finally suspended, more than two years after the raid.[485] Robinson's family won a $2.85 million verdict against the officers and negotiated a $1 million settlement from the city of Memphis.[486]

- **Vernard Davis.** In January 2001, police in Rochester, New York, conducted a late-night drug raid at the home of Vernard Davis. During the raid, Officer David Gebhardt's shotgun accidentally

The eight officers involved in the raid were finally suspended, more than two years after the raid.

discharged as he stumbled through a dark room. The blast hit Davis in the chest, killing him. Davis left behind two toddlers and one six-year-old. Police did find a significant amount of drugs in the room, but no weapons. In 2004, the city of Rochester awarded Davis's children a $300,000 settlement. The presiding judge called the shooting "a tragic, unintended accident."[487]

- **Jacqueline Paasch.** In early 2000, a SWAT team from the Milwaukee County, Wisconsin, sheriff's department broke into the home of Jacqueline Paasch and her two brothers on a no-knock drug warrant for suspicion of marijuana possession. Paasch says she heard footsteps rumbling up the stairs, but before she could figure out what was happening, her door was kicked in, a gun went off, and she was on the floor, bleeding.

  Paasch was hit in the leg, incurred $19,000 in medical expenses, endured a year of rehabilitation, and was told she'll always walk with a limp. Police found a "very small amount of marijuana and a pipe" in the house, according to local news reports, though not enough to press charges against anyone in the house. In 2000, Paasch settled with the Village of West Milwaukee for $700,000. "The fact that this can happen to me and my family has made me realize that it can happen to anyone," Paasch told one media outlet. "And that's really frightening because the police are the ones you're supposed to count on to protect you."[488]
- **Troy Davis.** On December 15, 1999, police in North Richland Hills, Texas, raided the home of Troy Davis, the son of a well-known "true crime" writer. The raid was based on the word of a single, anonymous informant that Davis was growing marijuana in one of the house's closets. That informant turned out to be Davis's uncle, who had tipped off police after a long-running dispute with Davis's mother.

According to officers at the scene, Davis's last words were, "I didn't know. I didn't know."

A local municipal judge had originally denied Sgt. Andy Wallace's initial attempt to obtain the no-knock warrant, citing insufficient evidence. So Wallace merely went to a second judge in Fort Worth and got his approval. On the night of the raid one team pried open (with some difficulty) Davis's back door, while another team went around to the front. According to police, Davis came to investigate the noises outside his home while carrying a gun (his family denies he was holding a weapon). Upon seeing the gun, raiding officers shot Davis in the chest, killing him. According to officers at the scene, Davis's last words were, "I didn't know. I didn't know."

Though police did find three marijuana plants, GHB, and a few small bags of marijuana in Davis's home, ensuing investigations revealed significant problems in the way Richland Hills police executed the search warrant. In fact, further investigation found flaws in the way the same police department conducted nearly all of its drug raids.

First, attorneys for the Davis family found that the police department had a policy of conducting no-knock raids for every narcotics search warrant issued, a clear violation of the Supreme Court's ruling in *Richards*. Second, according to the *Ft. Worth Star-Telegram*, "A year before the [Davis raid], two of the team's members told superiors they were concerned that lax standards for the unit could leave it vulnerable to lawsuits." Team leader Joe Walley later told a court that he was "very uncomfortable" about the Davis raid and that he felt the team was "doing a tactical operation without anything to go on." Another officer came back from sniper school and told superiors that nearly everything the North Richland Hills SWAT team was doing was wrong. Yet another later said in a deposition of the Davis raid, "We should never have been there." According to

court records reviewed by the *Star-Telegram*, Sergeant Wallace did little corroborating investigation after getting the tip from Davis's uncle. There were no controlled buys or surveillance.[489]

After the Davis raid, the two officers who had warned superiors about inadequacies with the SWAT team were suspended. Another officer who told the media and the Davis family attorneys about his concerns quit five months after the raid, citing harassment by superiors. Two other officers who were forthcoming with criticism of the police department also quit.[490]

In 2004, a state appeals court ruled the warrant for the raid that killed Davis was invalid. The court found that the warrant failed to show that the informant for the raid was reliable, and that Sgt. Wallace failed to do any independent investigation to corroborate the informant's tips.[491]

Even after the raid and ensuing revelations about poor training and preparation, North Richland Hills officials couldn't or wouldn't say what changes police had implemented to be sure a similar mistake wouldn't occur again. The *Forth Worth Star-Telegram* reported that in 2005, during depositions for the civil suit brought by Davis's family, responses from city officials indicated that raid procedures were never examined after the raid. Attorney Mark Haney, representing the Davis family, expressed frustration that no one from the city would claim responsibility for overseeing police procedures.

"Is there anybody? . . . Who is it? Who can talk about this topic?" he asked of North Richland Hills city attorney Greg Staples.

Staples replied, "That's not my problem. That's your problem."[492]

The mayor of North Richland Hills testified that neither he nor the city council were responsible for oversight of the city's police department. The city manager testified that he oversaw hiring and firing but that police procedures were determined by the police chief. The police chief said he answered to the city manager.

When Haney asked the city manger if he had ordered any investigation into the death of Davis, he replied, "No I did not." When asked if he had knowledge of any subsequent city investigation, he answered, "I'm not aware of any."[493]

- **Linda Elsea.** Elsea smoked marijuana to treat her fibromylagia after the successful campaign for Initiative 692, a Washington State measure authorizing the use of cannabis for medical purposes. In 1999, she came out of the bathroom to find a team of SWAT soldiers armed with assault weapons barreling up her driveway. She was handcuffed, subject to a body cavity search, and taken to the police station.[494]
- **Rusty Windle.** In early 1999 in Wimberly, Texas, a paid police informant and former felon befriended electrician's assistant Alexander "Rusty" Windle after meeting him at a bar frequented by tradesmen. The informant had been working the area for more than four months, winning friends by throwing parties stocked with beer and food. The informant convinced Windle to get him two half-ounce bags of marijuana, the Texas minimum for a felony charge. When Windle delivered, police obtained an arrest warrant. One witness said of the informant, "He asked everybody to get him pot, he practically begged you for it."[495]

  On May 17, 1999, nine police officers conducted a pre-dawn raid on Windle's home. Officer accounts differ on whether or not they announced they were police, though the other targets of raids that night (based on information gathered from the same informant) say police never announced themselves before executing the warrants.

  The police who raided Windle's home were dressed entirely in black. Windle

One witness said of the informant, "He asked everybody to get him pot, he practically begged you for it."

awoke, and came to the door with a gun. Police say that when they heard the slide action of a rifle bolt, Officer Chase Strapp backed away from the door. As he did, he tripped over a potted plant. Seeing armed men in black approaching his house, and watching one retreat from his porch, Windle pointed his weapon at Strapp. Strapp fired four rounds, hitting Windle three times, killing him.

Police found less than an ounce of marijuana in Windle's home.[496]

- **Lisa Swartz and the Medical Marijuana Raids.** In August 2004, 38 medical marijuana patients filed simultaneous lawsuits against state law enforcement agencies in California for seizing marijuana from their homes in violation of state law. One of them was Lisa Swartz, who described a raid on her home to the online publication *AlterNet*:

> During the conference call, she told of being raided at gunpoint in 1999. "They came with a narc SWAT team, pointing semi-automatic weapons at my grandkids' heads," she said before breaking into tears. "It was a terrible experience and totally changed my view of everything. I used to believe the police were there to protect and defend us. It is just so bizarre that they do this to people," said Swartz. "Even if we get our property back, this still takes a terrible toll on our families."

Swartz spent 18 months and $50,000 on her defense before authorities dropped the charges. "They never apologized and they never gave me my medicine back," she said.[497]

- **Willie Heard.** On February 13, 1999, police in Osawatomie, Kansas, conducted a 1:30 a.m. raid on the home of 46-year-old Willie Heard. Police say they announced themselves, though Heard's daughter, who was home at the time, told the *Topeka Capital-Journal*, "[A]ll I heard them say was 'Get Down! Freeze!'"

Heard awoke, and met officers in his bedroom with a .22-caliber rifle. Seeing the gun, a raiding officer opened fire and shot Heard dead. Though the search warrant was for crack cocaine and related paraphernalia, police found only the burnt remnants of an herb that couldn't be tested. If it had been marijuana, it would have barely been enough for two cigarettes.[498] Prosecutors declined to press charges against the police who conducted the raid.[499] In 2001, Heard's family won a $3.5 million settlement from Miami County and the cities of Osawatomie and Paola. The lawsuit contended that police had targeted the wrong home. At least one member of the SWAT team later apologized to Heard's family for their mistakes.[500]

- **David Doran.** In August 1998, police in Kansas City, Missouri, conducted a no-knock raid on the home of David Doran on suspicion that he was dealing methamphetamine. Doran says he was asleep when police entered and that because he thought he was being robbed, he came out of his bedroom holding a gun.

Police say Doran didn't comply with orders to get down. Doran says he tried to surrender. Raiding officers shot Doran, inflicting injuries that required a two-week hospital stay and the loss of his only functioning kidney. A jury subsequently awarded Doran $2 million, but in June 2005 the Eighth Circuit Federal Appeals Court overturned the award, concluding that police were justified in conducting a no-knock raid on Doran's home. Police found no methamphetamine, nor did they find any evidence that Doran had ever operated a methamphetamine lab. They did find a small amount of marijuana.[501]

- **Michael Swimmer.** In the summer of 1998, police in Orange County, Florida, shot and killed 27-year-old Michael Swimmer in a 2:30 a.m. drug raid. Police

Raiding officers shot Doran, inflicting injuries that required a two-week hospital stay and the loss of his only functioning kidney.

shot Swimmer six times after he confronted the raiding SWAT team with a handgun. Police conducted the raid after a tip from a confidential informant that Swimmer, an amateur bodybuilder, was selling ecstasy.[502]

- **Chinue Tao Hashim.** On February 21, 1998, a deputy in Greenville County, South Carolina, shot and killed unarmed drug suspect Chinue Tao Hashim during a SWAT raid. While negotiating a drug deal with Hashim, one undercover officer said over the radio that "a gun is on the table," meaning that a gun was part of the bargain. When the SWAT team raided, Master Deputy John Eldridge interpreted the radio remark about the gun to mean that Hashim was armed. As the raid commenced, Eldridge thought he saw Hashim reaching for a gun and opened fire. A subsequent investigation revealed that what Eldridge thought was a gun was actually the glint from a wristwatch.[503] Prosecutors declined to press charges against Eldridge.[504]
- **Barry Hodge.** On August 4, 1997, police in Selmer, Tennessee, broke down the door to the home of Barry and Sheila Hodge on a no-knock drug raid. According to a $25 million lawsuit filed by Hodge's widow in 1998, police never announced themselves before entering. By the time the raid was over police had shot Barry Hodge in the arm and chest, killing him. Sheila Hodge claims she was thrown to the floor and handcuffed, and the Hodge's daughter was locked in her bedroom. Press accounts don't say if police found marijuana in the home.[505]
- **Richard Paey.** In March 1997, police in Pasco County, Florida, arrested Richard Paey on charges of prescription fraud. Paey, a multiple sclerosis patient suffering from the effects of a car accident and subsequent botched back surgery, is wheelchair-bound and paraplegic. His various ailments required him to take significant quantities of painkillers to lead a normal life. Unfortunately, Florida law made it difficult for him to get the medication he needed. Prosecutors accused Paey of forging prescriptions, though they conceded that there's no evidence he was selling or distributing. Despite Paey's condition, and the fact that he obviously posed no threat to anyone, prosecutors sent a SWAT team to arrest him. Officers in ski masks and body armor, armed with assault weapons, broke down the door to Paey's home, needlessly terrorizing him, his wife, and their children.[506]
- **Doug Carpenter and Carlos LeBron.** On January 11, 1996, a SWAT team in Maitland, Florida, used a 60-pound steel ram to break down the door to the apartment of Doug Carpenter and his roommate, Carlos LeBron. Police conducted the raid after a member of Maitland's police "New Resident Visitation Team" came to their apartment shortly after the two had moved in and noticed "a strong odor of what he believed to be cannabis." The two men were handcuffed at gunpoint for three hours while police searched their apartment. The search turned up 3.5 grams of marijuana, and earned each a $150 fine. Police didn't suspect either man of dealing marijuana, nor were there any complaints from neighbors. Maitland police chief Ed Doyle said the warrant was executed because the two men were new to the area and were renters, which together present "a potential problem to be nipped in the bud." Doyle added that the raid wasn't "one we're going to put on the mantle."[507]

Other Incidents of Paramilitary Excess

Finally, there are several examples from the past decade in which SWAT teams and paramilitary tactics have been used unnecessarily and recklessly, but that defy easy categorization. Here are a few of those incidents:

- **The Utah Rave Raid.** In August 2005, more than 90 police officers from sever-

A subsequent investigation revealed that what Eldridge thought was a gun was actually the glint from a wristwatch.

"You get to play with a lot of guns. That's what's fun. You know, everybody on this teams is—you know, loves guns."

al state and local SWAT teams raided a peaceful outdoor dance party in Utah attended by 1,500 people. Police were armed with assault weapons, full-SWAT attire, police dogs, and tear gas. Many in attendance say police beat, abused, and swore at partygoers. Police deny the allegations, though amateur video audio clearly captures police issuing orders laced with profanity. Police also arrested security guards on drug possession charges, though the guards possessed the drugs because they'd *confiscated* them from partygoers.[508]

- **The Easton, Pennsylvania, SWAT Team.** The small town of Easton, Pennsylvania, chose to disband its SWAT team in 2005 after a series of incidents, including the shooting death of one SWAT team member. An editorial in the *Allentown Morning Call* praised the decision, noting that the SWAT team had become "rude, arrogant, and disrespectful," and had "lost the confidence of the civilians who supervise them and sign their paychecks."[509]
- **The Ahwatukee Raid.** In 2004, police in Ahwatukee, Arizona, conducted a massively armed, thoroughly bumbling raid on a home they suspected contained illegal assault weapons and ammunition. In a densely populated, upscale neighborhood, a SWAT team from the Maricopa County Sheriff's Department, complete with an armored personnel carrier, used grenade launchers to fire at least four rounds of tear gas into the windows of the home. The home then caught fire. As the owners of the home evacuated, police officers actually chased the family's dog back into the burning house with a fire extinguisher, where it perished in the flames. Andrea Baker, the dog's owner, says police laughed as she cried at their cruelty. Later, the brakes would fail on the SWAT team's armored personnel carrier, causing it to lurch down the street and smash into a parked car. The car was owned by Julie Madrigal, who had fled the car just moments earlier with her nine-year-old daughter after the two grew frightened at the sight of the SWAT team as it fired canisters of tear gas.

  The fire completely destroyed the home, putting homes nearby in the dense neighborhood at risk, too. For all of this, police found no assault weapons. They found only an antique shotgun and a 9-millimeter pistol, both of which were legally owned. They still arrested 26-year-old Erik Kush, on outstanding traffic violations.[510]

  CBS News reported in 1997 that the Maricopa County Sheriff's Department's SWAT team was doing an average of one callout per week. In an on-camera interview, one member of the team told reporter Jim Stewart the best part of being on the SWAT team was that, "you get to play with a lot of guns. That's what's fun. You know, everybody on this teams is—you know, loves guns." Another added, "Hey, the bottom line is it's friggin' fun, man. That's the deal. Nobody wants to take burglary reports."[511]
- **The Racine Rave Raid.** In 2002, police in Racine, Wisconsin, conducted an early-morning raid on a rave dance party, kicking in doors, dragging young people from bathroom stalls, throwing others to the floor, and holding them all at gunpoint. Police issued more than 450 citations to partygoers for merely *attending* a party where some drugs were present, but made only 3 arrests. The city of Racine later dismissed nearly all of the charges but still faces a civil lawsuit from attendees who claim police violated their civil rights.[512]
- **The Farmerville Raids.** In 2002, 40 police offices from more than 10 different agencies conducted a pre-dawn raid on a suspected drug hub in Farmerville, Louisiana, in what one local sheriff called "a dream come true." The raid did yield ten arrests, but the violent tactics enraged the local community. Around 100 people marched through the small

town the next day to protest the operation, in which police forced entry into several homes. "They could have arrested them any time and any day," protest organizer Sheila Lewis told the Associated Press. "They are not violent, they are just normal people. . . . It was like a war zone. People were scared to death."[513]

- **The Colorado–Colorado State Football Game.** In 1999, a SWAT team took the field when rowdy fans attempted to bring down the goalposts—a tradition in college football—after a Colorado State–Colorado football game. Armed with weapons and mace, police roughed up dozens of fans for 30 minutes after the game, including Colorado State student Britney Michalski, who nearly died after an allergic reaction to the mace. When one of Michalski's friends attempted to get aid for her from one of the police, she too was maced.[514]
- **"Operation Jump Start."** In 1997, a multitude of police officers from three separate SWAT teams conducted a massive raid on multiple low-income neighborhoods in New Britain, Connecticut. The *New Haven Advocate* reported:

> They wore navy blue camouflage fatigues over their body armor. Kevlar helmets covered their heads; black masks covered all but the noses and eyes of their faces.
>
> A state trooper flew above the scene in a small Cessna aircraft, keeping in radio contact with commanders on the ground. The state troops swept onto city streets inside "Peacekeepers," trucks with battering rams in the front.[515]

"Operation Jump Start" netted 49 arrests.[516]

- **Ramon Gallardo.** In 1997, a SWAT team from Dinuba, California, a town with just 12 regular police officers and 15,000 people and which hadn't a single reported homicide in its history, shot and killed 64-year-old farm worker Ramon Gallardo.[517] Officers in black masks broke down Gallardo's bedroom door while he and his wife were sleeping. Carmen Gallardo told the *Los Angeles Times* she thought the police "were robbers" when they entered. According to police, Gallardo reached for a folding knife to defend himself, though his family says Gallardo didn't own the knife. Gallardo was shot 12 times. Gallardo had no criminal history. Police were looking for a stolen gun they say was in the possession of Gallardo's son. The gun was never found. A subsequent investigation by the Tulare County district attorney found no improper behavior on the part of police. A federal jury later ordered the town of Dinuba to pay the Gallardo family $12.5 million in compensation. Dinuba later dissolved its SWAT team.[518]
- **The Heflin Family.** In 1996, a SWAT team in La Plata County, Colorado, descended on a ranch owned by Samuel Heflin. They were looking for evidence related to a bar brawl—a cowboy hat, shirt, and a pack of cigarettes. On the way in to Heflin's home, police forced two children to the ground at gunpoint. They then trained a laser-sighted assault weapon on Heflin's four-year-old daughter as she ran screaming into the house. Upon asking to see a search warrant, Heflin was told by SWAT officers to "shut the fuck up."[519]
- **The Fitchburg SWAT Incidents.** In 1996, the Fitchburg, Massachusetts, SWAT team burned down an apartment complex after deploying flashbang grenades in a no-knock raid. The fire left six police officers injured and 24 people homeless.[520] In an article on the raid and fire, the *Boston Globe* noted the that the Fitchberg SWAT team was formed in 1990 with the charge, "To establish an organized response to unusual high-risk situations, barricaded suspects, hostage situations, and other similar life-threatening events where citizen safety or officer safety is at risk."[521]

In 1997, a SWAT team from Dinuba, California, which hadn't a single reported homicide in its history, shot and killed 64-year-old farm worker Ramon Gallardo.

But the 1996 raid wasn't the first time the unit had come under criticism. The team had a history of botched raids and faced at least one suit for violating the civil rights of a group of loiterers the SWAT team was called to break up.[522]

Notes

The Cato Institute thanks the JEHT Foundation for its support of this research.

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