



TRANSPORTATION

BY COLIN GRABOW

THE ISSUE: U.S. POLICY CONTRIBUTES TO AN INEFFICIENT AND COSTLY TRANSPORTATION SYSTEM THAT REDUCES WORKERS' TIME AND INCOMES

Travel within the United States is unnecessarily frustrating and expensive, with many parts of the country suffering from gridlocked streets and highways, unreliable and unpleasant mass transit, and rail and airline transport that often compare unfavorably with their overseas counterparts. American workers are all too familiar with domestic transport's subpar state. Between 2006 and 2019, commutes in the United States increased from 25 minutes to 27.6 minutes, while commutes in the European Union stayed at 25 minutes.¹ Wasted time is a wasted resource. Transport analytics firm INRIX calculated the total cost of auto congestion at \$87 billion in 2018, or an amount equal to \$1,348 per driver.² The cost of transportation is felt in more direct ways, too, ranging from higher prices for automobiles and gasoline to ballooning price tags for infrastructure projects that must be paid for with either increased taxes or user fees—costs that American workers usually can't avoid.

Unfortunately, U.S. policy inflates these costs in numerous ways, forcing American workers to pay more and get less for their transportation dollars.

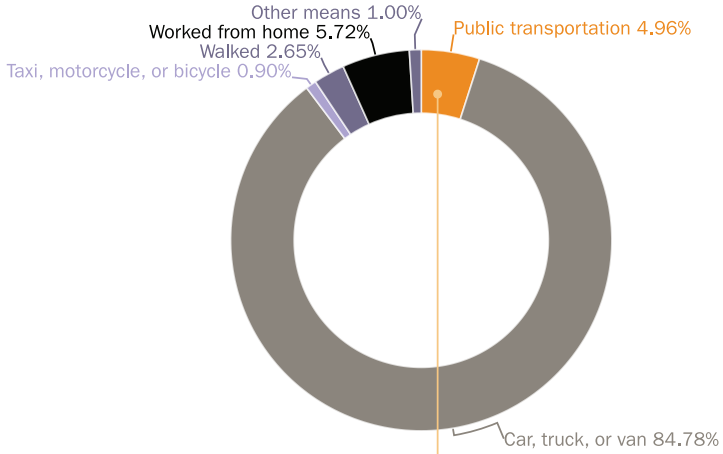
A prime example is federal policies that increase the domestic price of automobiles—by far the primary transport mode for workers. As shown in Figure 1, nearly 85 percent of all commutes take place in cars, trucks, or vans, but acquiring a vehicle is expensive: the average price of a new automobile is now more than \$47,000 (\$20,000 for even a small car), and used car prices now average more than \$27,000.³

While these prices reflect supply-demand dynamics and the cost of increasingly advanced features, they are also boosted by misguided government policies. For starters, there are tariffs: imported cars face a default 2.5 percent tax rate, while light trucks face a whopping 25 percent rate, thus increasing the price of these vehicles and diminishing consumer choice.⁴ These harms are particularly pronounced for trucks, where the 25 percent tariff effectively bars many smaller, cheaper imports from the American market.⁵ Many auto parts are also subject to tariffs, typically of 2.5 percent, while those from China face an extra 25 percent tariff pursuant to the “Section 301” case begun by the Trump administration. The United States also imposes antidumping duties on tire imports from South Korea, Taiwan, and Thailand and Section 301 tariffs on Chinese tire imports.⁶ All of these duties further burden American drivers.⁷

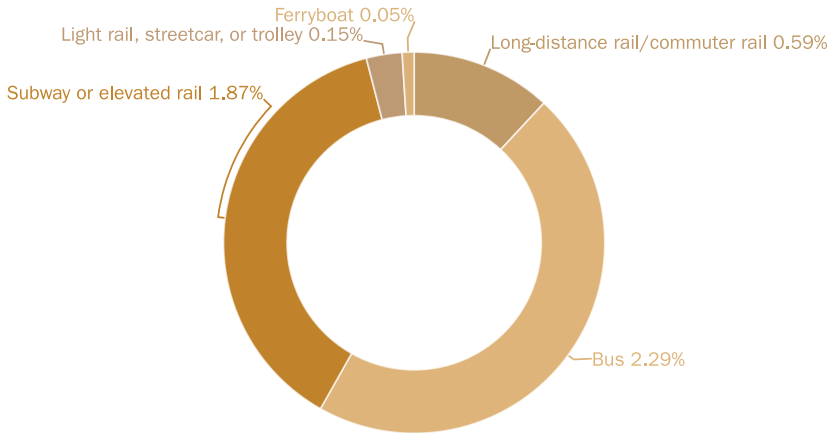
Free trade agreements (FTAs) reduce or eliminate some of these added costs, but they often suffer from lengthy schedules for tariff elimination (for example, the U.S.-South Korea FTA's multidecade phaseout of the 25 percent truck tariff) or restrictive rules of origin containing various content, and even wage, mandates that reduce production efficiency and raise prices.⁸ The latter rules, in fact, were found by the U.S. International Trade Commission to likely raise U.S. vehicle

FIGURE 1 Automobiles remain workers' primary means of getting to work

Percentages of all forms of transportation (2019)



Breakdown of public transportation (2019)



Source: Michael Burrows, Charlynn Burd, and Brian McKenzie, "Commuting by Public Transportation in the United States: 2019," American Community Survey Reports, U.S. Census Bureau, April 2021.

prices or decrease consumption, while the Congressional Budget Office found that the rules would actually increase U.S. tariff (tax) revenue by billions of dollars.⁹ Revisions to the North American Free Trade Agreement implemented in the United States-Mexico-Canada Free Trade Agreement, meanwhile, were found by an International Monetary Fund working paper to result in higher vehicle prices and to harm the automotive industries of all three countries.¹⁰

Automobile prices are further inflated by Corporate Average Fuel Economy (CAFE) standards. Enacted by Congress in 1975, CAFE standards require manufacturers to achieve a sales-weighted fuel economy average for their car and light-truck fleets. For autos that will be produced in model year 2026, an industry-wide fleet average of 49 miles per gallon will be required.¹¹ While these measures are meant to reduce fuel consumption—thus saving Americans money (according to CAFE proponents)—they are widely considered to impose a net cost on consumers because they increase automobile prices (a result of the high fixed-cost investments that automakers must undertake to comply with the rules). The regulations' environmental benefits are also dubious.¹²

CAFE standards' implicit tax in 2012 was estimated to be around \$180 per vehicle (\$225 in 2022 dollars) for those in the poorest income quintile; that amount would likely be higher today because the standards have become much more stringent over the last decade. Other studies find even more damaging effects in the longer term, with a per vehicle cost of \$225 to \$450 in 2018 prices for every one-mile-per-gallon increase in vehicle fuel economy.¹³

Government policies also interfere in the efficient distribution and sale of automobiles. Most notably, state laws restrict direct-to-consumer sales by automobile manufacturers; require auto dealers to be licensed; restrict when franchise relationships can be terminated, canceled, or transferred; restrict new dealerships in existing market areas; and require that manufacturers buy back vehicles or other accessories when a dealership franchise is terminated. Such measures are clear restraints on competition that result in higher vehicle prices and few, if any, consumer benefits. Estimates of these costs range anywhere from 2.2 percent to 8 percent of a car's value—adding hundreds, if not thousands, of dollars to a vehicle's sticker price.¹⁴

Policies also inflate the cost of driving and maintaining an automobile after its purchase. For example, Section 27 of the Merchant Marine Act of 1920, better known as the Jones Act, restricts domestic shipping to vessels that are U.S.-flagged and -built, as well as mostly U.S.-crewed and -owned. Owing to substantially higher crewing and construction costs, Jones Act-compliant tankers that move oil and refined products typically charge rates significantly higher than those of non-Jones Act vessels, ultimately manifesting themselves in increased gas prices.¹⁵ Other laws, such as the Renewable Fuel Standard that mandates the blending of expensive biofuels into gasoline, tack on additional costs, while state and federal gas taxes further increase pain at the pump.¹⁶

In addition, there are increasing reports of shortages of qualified mechanics, undoubtedly aggravated by immigration restrictions and state occupational licensing laws (see the Occupational Licensing chapter).¹⁷ These labor restrictions likely result in higher repair and maintenance costs for American drivers.

Next, government policies increase the cost and reduce the quality and supply of infrastructure in the United States, thus lengthening commutes and reducing economic activity. Congested transportation networks mainly reflect insufficient infrastructure or excess demand. Legislators have unsurprisingly focused their policy efforts on the former cause, as new infrastructure projects invariably bring opportunities for ribbon-cuttings and the touting of job numbers associated with these undertakings.

Unfortunately, numerous policies prevent the efficient provision of infrastructure. Protectionist Buy America requirements, which mandate the use of American materials (including iron and steel) in federally funded infrastructure projects, add both time and cost to infrastructure projects, as the price of materials is increased, competition is restricted, and finite resources are devoted to compliance instead of output. These laws might also impose indirect costs by inviting retaliatory measures from U.S. trading partners that restrict market access to American exports.

Tariffs on infrastructure-related items and materials further increase infrastructure costs. The United States still imposes 25 percent tariffs on steel and 10 percent tariffs on aluminum from most countries (see Table 1), with the notable exceptions of Japanese steel and European Union/UK steel and aluminum, which are now subject to less costly but still burdensome tariff rate quotas. A March 2022 analysis from the American Action Forum found that these tariffs imposed nearly \$51 billion in additional costs—not including higher domestic prices resulting from tariff protection—in 2021 alone.¹⁸ American steel prices remain well above those in Europe or global markets.¹⁹

Infrastructure projects are also hampered by laws such as the Davis–Bacon Act and the National Environmental Policy Act (NEPA). Passed in 1931, the Davis–Bacon Act requires that public works funded by the federal government pay at least the prevailing wage rates on nonfederal construction projects in the same locality as determined by the Department of Labor. However, as both think tank analysts and the Government Accountability Office (GAO) have pointed out, such determinations can be significantly higher than actual local prevailing wages, resulting in artificially high labor expenses and a 9.9 percent increase in infrastructure project costs, according to one estimate.²⁰

The National Environmental Policy Act, which was passed in 1970, meanwhile, requires federal agencies to review the environmental impact of major projects that are funded by the federal government or require a federal permit, and the law lets opposition groups bring lawsuits challenging environmental reviews. Increased litigation, and the threat of even more litigation, has caused NEPA reviews to steadily become more onerous. As a report prepared for the Treasury

TABLE 1 Tariffs on infrastructure-related items and materials increase infrastructure costs

Tariffs	Value of affected U.S. imports (2021)	Tariff rate, percent	Additional tariff cost burden
Section 232, steel	7.2 billion	25.0	1.8 billion
Section 232, aluminum	6.1 billion	10.0	612.8 million
Section 232, derivative steel articles	418.9 million	25.0	104.7 million
Section 232, derivative aluminum articles	239.7 million	10.0	24.0 million
Section 301, List 1	24.7 billion	25.0	6.2 billion
Section 301, List 2	10.4 billion	25.0	2.6 billion
Section 301, List 3	126.4 billion	25.0	31.6 billion
Section 301, List 4A	105.1 billion	7.5	7.9 billion
Section 301, List 4B	206.3 billion	Suspended	0
Total	280.6 billion	7.5–25.0	50.8 billion

Source: Tom Lee and Jacqueline Varas, “The Total Cost of U.S. Tariffs,” American Action Forum, March 24, 2022.

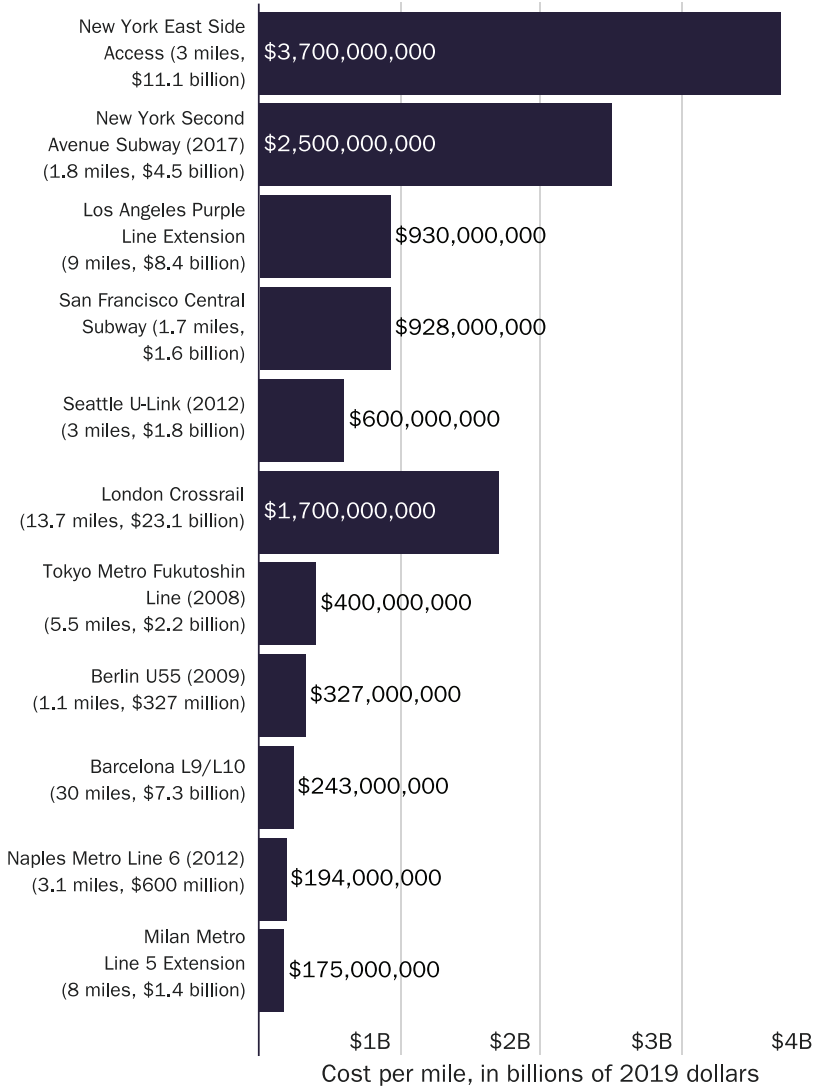
Department pointed out in 2017, the average time to complete a NEPA study increased from 2.2 years in the 1970s, to 4.4 years in the 1980s, to 5.1 years in the 1995 to 2001 period, to 6.6 years in 2011.²¹ Such delays bring added costs and can even thwart important infrastructure projects.²² State NEPA equivalents, such as the California Environmental Quality Act, which requires additional environmental impact analyses and further encourages litigation, can cause similar harms.²³

The federal government’s role in funding infrastructure is itself a contributor to higher transportation costs. By funding state and local infrastructure projects with no obvious federal nexus (in contrast, for example, to the interstate highway system), the federal government effectively functions as a costly and unnecessary middleman with no apparent value added to the process.

These policies help to explain why a 2021 Eno Center for Transportation study of transit projects in the United States, Canada, and Western Europe found U.S. projects to cost nearly 50 percent more on a per mile basis than their international counterparts (see Figure 2 for examples of American and international subway construction costs).²⁴

Insufficient or degraded infrastructure, however, is only one element in the congestion puzzle. Further aggravating matters are policies that increase the demand for driving. One such example is a failure to apply pricing to the usage of roads and highways, leading to their overconsumption—and thus congestion—during periods of high demand.

FIGURE 2 U.S. underground subway projects typically cost more than their international counterparts



Source: Ben Bradford, “Why Are Subways in the U.S. So Expensive?,” Marketplace, April 11, 2019.
 Notes: Costs were converted into U.S. dollars using the exchange rate for April 11, 2019.
 Parentheses show year of completion, length of project in miles, and estimated total cost of project.

Also spurring demand for roads and highways are high housing prices that force commuters to flee to ever more far-flung suburbs as part of the “drive until you qualify” phenomenon. As discussed in the Housing Affordability chapter, a major driver of housing prices is zoning and other land-use regulations that restrict housing density and thus supply, which pushes workers farther from city centers and lengthens their commutes. The Entrepreneurship and Home Businesses chapter adds that zoning policies can prohibit even modest commercial enterprises, such as small retail stores, from operating in residential areas, increasing distance between consumers and businesses and thus placing needless demands on infrastructure and mass transit while boosting congestion. Finally, the aforementioned Jones Act discourages the use of coastal shipping owing to its high costs, and thus the law shifts cargo to land-based transportation modes such as trucking, which adds to congestion and increases road maintenance costs and air pollution.

Government policies also needlessly increase the cost and decrease the quality and availability of mass transit and air travel in the United States. In 2019, approximately 7.8 million Americans commuted via bus, subway, elevated rail, long-distance train, commuter rail, light rail, streetcar, trolley, and ferryboat. While comprising just 5 percent of all workers overall, those reliant on public transportation comprise significantly higher percentages in some of the country’s major cities, including New York (55.6 percent); Chicago (28.4 percent); San Francisco (36.3 percent); Seattle (25.1 percent); Philadelphia (25.5 percent); Washington (34.2 percent); and Boston (32 percent).²⁵

As with automobiles and infrastructure, public transport is hampered by protectionist policies that increase the cost and difficulty of providing quality service. Buses and rolling stock, for example, are both subject to Buy America requirements. Transit buses acquired with federal public transportation funding are required to have at least 70 percent of their cost manufactured domestically, with final assembly taking place in the United States.²⁶ Rolling stock—including train control, communication, traction power equipment, and rolling stock prototypes—are subject to the same requirements.²⁷ The inefficiency and added cost of such protectionism contributes to higher prices—perhaps even dramatically so. Li et al. (2014), for example, found buses in Tokyo and Seoul to be half the price of American buses, and those produced in China were cheaper still; the paper’s authors speculated that Buy America restrictions were a major driver of the cost differential.²⁸

Ferries, meanwhile, are also made costlier by the Jones Act and the Passenger Vessel Services Act of 1886, which mandate domestically produced vessels for transporting of cargo (including cars) and passengers on U.S. waterways. State policy can add further costs. Washington State Ferries, which operates the largest ferry system in the United States, is required by state law to purchase new ferries constructed in state and at shipyards with state-sponsored apprenticeship

programs. Given such restrictions, no more than two bids have been obtained for new ferries constructed during the last 35 years.²⁹

Beyond increasing the cost of capital equipment through protectionist measures, government operation of transit services and a lack of market pressures can lead to waste and inefficiencies. This is no trivial matter: one pair of analysts calculated that more than 80 percent of the waste from suboptimal urban transit fares and frequencies can be attributed to political influences.³⁰ Notably, Jerch et al. (2016) found that the full privatization of public bus service alone could result in cost savings of \$5.7 billion (2011 dollars), largely owing to a resulting reduction in public union power.³¹ Once realized, such savings could be passed on to consumers/taxpayers or used to improve service offerings.

Amtrak offers a glaring example of the shortcomings of public transportation management. Suffering from inflated labor costs—the passenger rail operator’s more than 20,000 employees racked up over \$200 million in overtime in 2011—Amtrak also managed to lose money on 40 of 44 routes, according to a 2012 Cato Institute analysis.³² It even lost \$834 million over a 10-year period from food and beverage services.³³

Public management also helps explain the low regard in which many of the country’s airports are held and their typically poor showings in international comparisons.³⁴ Air travel miseries are compounded by an air traffic control regime that has fallen behind that of Canada and other countries on a variety of metrics.³⁵ Choice and competition among airlines, meanwhile, are restrained by cabotage laws that prevent foreign carriers from operating domestic routes. These inefficiencies and reduced competition inevitably result in higher prices and less flexibility for domestic airline travel. For example, airfares in the United States are substantially more expensive than similar flights in less-regulated Europe.³⁶ Although most workers are compensated by employers for the cost of business travel, they must still endure higher fares for personal travel, while increased worker travel costs for employers mean less money for employee compensation.

THE POLICY SOLUTIONS: REMOVE TARIFFS AND RED TAPE TO IMPROVE INFRASTRUCTURE AND GET AMERICA MOVING

Numerous policy options exist to improve the state of domestic transportation and make travel cheaper, faster, safer, and a more pleasant experience. To lessen the burden of auto ownership, federal policymakers should remove tariffs on autos and auto parts and repeal costly mandates such as the Renewable Fuel Standard and CAFE standards. Immigration rules and state occupational licensing requirements should be relaxed to ensure an adequate supply of mechanics and related

personnel to service and maintain Americans' cars. At the state level, dealer franchise laws that boost car prices by reducing competition in auto sales should be eliminated. (Several states have already changed their laws to enable direct sales from manufacturers, such as Tesla.³⁷)

Once Americans acquire their automobiles, they should have first-class infrastructure on which to drive them. Toward that end, both federal and state Buy America requirements for materials used to build infrastructure and the Davis–Bacon Act should be repealed to reduce the cost of new construction and maintenance. Federal and state lawmakers should also examine the NEPA and state-level equivalents with an eye toward, if not repealing them, then at least streamlining their requirements, limiting frivolous or self-interested litigation, and ensuring that compliance with the law is not a multiyear ordeal.

Traffic congestion, meanwhile, can be ameliorated via congestion pricing in cities and dynamic tolling on highways that can replace the use of gas taxes and be efficiently administered by private entities instead of by the government. By implementing such surcharges during periods of high demand, such as rush hour, drivers can be encouraged to travel at alternative times or to use other forms of transportation. Such an approach has already been used in Stockholm, Sweden, where an approximately \$3 fee paid for travel in the city center reduced traffic by 25 percent.³⁸ In the Washington, DC, area, meanwhile, the introduction of dynamic tolling on Interstate 66 has led to reduced travel times.³⁹

More fundamentally, state and local governments should rethink and review zoning laws and the entire built environment—including the transportation network—with an eye toward maximum transportation flexibility and freedom. In addition to allowing mixed use buildings that give Americans the option of living in closer proximity to their workplaces, stores, and amenities, governments should allow their constituents to choose among modes by which to travel, including walking and bikes. Where demand for these modes exists, new alternatives could emerge and eliminate the need for a car, thus reducing congestion, the expense of auto ownership, and infrastructure maintenance.

On the federal level, repeal or a significant relaxation of the Jones Act has the potential to achieve multiple aims by reducing the cost of gas, alleviating traffic congestion by shifting more transport from trucks to coastal shipping, and reducing wear and tear on highways and bridges. Similarly, repeal or reform of this law and the Passenger Vessel Services Act could reduce the cost of travel for Americans that rely on ferries.

More commonly used forms of public transit can also be improved. Buy America requirements imposed on the purchase of transportation goods such as transit buses and light rail—thus raising costs and decreasing quality—should be removed. Privatization of publicly owned transit should also be embraced as a means of spurring greater efficiencies and removing politics from the provision of transportation services. On the heavy rail side, Amtrak is a leading candidate

for outright privatization. As a privately managed entity in principle, the company could more easily shed staff and rein in labor costs while shuttering unprofitable lines. Those tasks are made far more difficult, however, by being a government entity in practice, subject to political pressures.

Beyond exiting its role in Amtrak, the federal government should seek ways to extricate itself from the provision of transportation and infrastructure by leaving such duties, wherever possible, to the marketplace or state and local governments. Congress should reexamine the federal government's purview of transportation and infrastructure provision and look for ways to devolve these responsibilities. In most instances, these are fundamentally local issues that should be provided at that level without the added inefficiency of an unnecessary layer of government involvement. Several privately administered toll roads have operated successfully in the United States for decades, and some infrastructure can even be provided without the government. The Dulles Greenway toll road in Northern Virginia, for example, was privately financed and built from 1993 to 1995 and today is owned by Macquarie Atlas Roads and operated by a U.S. subsidiary of Italian-based Autostrade per l'Italia S.p.A.⁴⁰ Privately financed infrastructure can also be found abroad. Switzerland, for example, is home to the construction of a \$30–35 billion, 500-kilometer (approximately 310 miles) tunnel system that will transport freight 24/7 via driverless electric vehicles. The ambitious project is being fully funded by private investors, both foreign and domestic.⁴¹

Regarding airline travel, Congress should improve efficiency and quality by transferring air traffic control duties to privately managed entities, as is done in numerous countries. A 2005 Government Accountability Office study, for example, concluded that commercialized air traffic control systems in Australia, Canada, Germany, New Zealand, and the United Kingdom had cut costs, boosted investment in new technologies, and either maintained or increased safety after being reformed.⁴² The federal government can also promote more efficient and competitive commercial airline operations through the repeal of prohibitions on foreign-owned airlines operating domestic routes. Notably, air cabotage liberalization within the European Union has yielded numerous benefits: along with the aforementioned price savings, a 2015 discussion paper found that liberalization increased the number of routes and flight frequencies; encouraged the entry of low-cost airline carriers, producing a more balanced distribution of airlines across EU airports; and improved overall accessibility.⁴³ A possible starting point could be opening the domestic airline market to countries with which the United States already has existing free trade agreements.

Local governments also can bolster the country's air transportation network through the privatization of government-owned airports. A 2016 Cato Institute report found that privatization and increased competition would boost the performance of U.S. aviation infrastructure, including reducing costs and encouraging more efficient pricing structures for airport and air traffic control usage.⁴⁴ A 2021

Reason Foundation analysis, meanwhile, noted that the majority of the 39 largest investor-owned airport companies accounted for one or more major airports selected by Skytrax passengers as among the world's 100 best.⁴⁵

ACTION PLAN

Efficient transportation is vital to economic and human flourishing and essential for most American workers. We should be able to travel within the United States, be it to a local office or across the country, as easily as possible. Legislators at every level of government should move the conversation beyond simply spending more of American workers' hard-earned tax dollars on roads and bridges and look for ways to remove government barriers to a higher quality, lower cost, more robust, and more convenient transportation vision.

In particular, Congress should

- remove all tariffs on imports of automobiles and auto parts;
- reform U.S. antidumping laws to consider the costs for American consumers and other businesses, such as automakers and auto mechanics;
- repeal CAFE standards or dramatically lower them;
- repeal the Jones Act—alternatively, the law's impact can be mitigated by exempting energy shipments from the law or repealing its U.S.-built requirement, which dramatically raises the cost of purchasing new vessels, including tankers;
- repeal the Passenger Vessel Services Act;
- repeal Buy America requirements mandating the use of American materials and products in the construction of infrastructure projects as well as U.S. assembly and domestic content requirements for capital equipment;
- repeal the Davis–Bacon Act and related prevailing-wage requirements.
- if repeal of NEPA is impossible, reform the law to expedite all environmental reviews (e.g., subjecting them to a one-year deadline) and to limit litigation (e.g., providing a finite list of both actionable issues and parties allowed to bring a suit, a short statute of limitations for challenging a project, and a deadline for completing any such challenge). Only parties with a direct interest in a specific project should be able to challenge it. Lawsuits must also demonstrate not just that there has been environmental harm, but that such harm significantly exceeds a project's anticipated benefits. It is imperative that reform be wholesale and comprehensive rather than piecemeal efforts (such as solely truncating review timelines), as such reforms could perversely generate more litigation and delay;⁴⁶
- repeal air cabotage laws restricting the ability of foreign airlines to offer domestic service, provided they comply with U.S. safety and labor requirements;

- privatize the U.S. air traffic control services; and
- privatize Amtrak.

State and local governments should

- repeal laws preventing direct auto manufacturer sales, dealer licenses, and other measures that limit competition in auto sales;
- revise occupational licensing laws to expand the available supply of auto mechanics;
- adopt congestion pricing to better account for externalities generated by increased traffic and to promote efficient vehicle flows during times of peak demand;
- substantially reduce or eliminate gas taxes and more efficiently meet revenue needs via dynamic tolling and private administration of major highways;
- reform state-level NEPA equivalents to expedite environmental reviews and limit litigation;
- eliminate zoning laws that severely restrict housing density and home businesses and prevent the development of mixed-use projects that could let workers live closer to their places of employment, other businesses, and amenities;
- accommodate alternative means of transportation, such as walking and bicycling, to alleviate pressure on roads and highways; and
- privatize airports and mass transit systems.

NOTES

1. "Census Bureau Estimates Show Average One-Way Travel Time to Work Rises to All-Time High," U.S. Census Bureau, March 18, 2021; and "Majority Commuted Less than 30 Minutes in 2019," Eurostat, October 21, 2020.
2. "INRIX: Congestion Costs Each American 97 hours, \$1,348 A Year," INRIX, February 11, 2019.
3. Michael Burrows, Charlynn Burd, and Brian McKenzie, *Commuting by Public Transportation in the United States: 2019* (Washington: U.S. Census Bureau, April 2021); Sebastian Blanco, "New Car Price Keeps Climbing, with Average Now at Almost \$47,100," *Car and Driver*, January 12, 2022; Kelley Blue Book, "Best Cars of 2022 and 2023: Best Compact Cars"; and Sean Tucker, "Average Used Car Price Drops," Kelley Blue Book, February 22, 2022.
4. *Harmonized Tariff Schedule of the United States* (Washington: U.S. International Trade Commission, October 30, 2020), pp. 87-1–87-33.
5. See Scott Lincicome, "America's Truck Shortage Reveals the Folly of Pandemic Protectionism," *Cato at Liberty* (blog), Cato Institute, October 21, 2020; and Daniel Griswold, "Why Are Pickups So Expensive? Blame the Chicken Tax," *Dallas Morning News*, March 13, 2022.
6. "Passenger Vehicle and Light Truck Tires from Korea, Taiwan, and Thailand, and Subsidized Passenger Vehicle and Light Truck Tires from Vietnam, Injure U.S. Industry, Says USITC," United States International Trade Commission, News Release no. 21-081, June 23, 2021. See "Notice of Action and Request for Public Comment concerning Proposed Determination of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation," 83 Fed. Reg. 33608 (July 17, 2018); and also see "Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation," 83 Fed. Reg. 47974 (September 24, 2018).
7. The tariffs on Chinese tire imports alone, for example, were estimated to produce an annual cost increase on tires of \$816.7 million in 2009. See Gary Clyde Hufbauer and Sean Lowry, "US Tire Tariffs: Saving Few Jobs at High Cost," Peterson Institute for International Economics Policy Brief no. PB12-9, April 2012.
8. "Fact Sheet on U.S.-Korea Free Trade Agreement Outcomes," Office of the United States Trade Representative Archives; and Brian Picone, Francisco de Rosenzweig, Gregory Spak, and David E. Bond, "United States Trade Alert: Mexico Requests Consultations With United States Concerning Automotive Rules of Origin Under US-Mexico-Canada Agreement," White & Case, August 24, 2021.
9. Liana Wong and M. Angeles Villarreal, "USMCA: Motor Vehicle Rules of Origin," Congressional Research Service, IF12082, April 21, 2022.
10. Mary E. Burfisher, Frederic Lambert, and Troy D. Matheson, "NAFTA to USMCA: What Is Gained?," IMF Working Paper no. 2019/073, March 26, 2019.
11. "USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024–2026," National Highway Traffic Safety Administration, press release, April 1, 2022.
12. See, e.g., Jinjoo Lee, "Americans Should Pay More for Gas, Not Less," *Wall Street Journal*, January 21, 2022.
13. Ryan Bourne, "Government and the Cost of Living: Income-Based vs. Cost-Based Approaches to Alleviating Poverty," Cato Institute Policy Analysis no. 847, September 4, 2018, pp. 12–14.
14. Bourne, "Government and the Cost of Living," p. 14.
15. U.S. Maritime Administration, *Comparison of U.S. and Foreign-Flag Operating Costs* (Washington: U.S. Department of Transportation, 2011); John Frittelli, "Shipping Under the Jones Act: Legislative and Regulatory Background," Congressional Research Service, R45725, November 21, 2019; and Gregory Meyer, "Why the US East Coast Imports Oil Despite Shale Boom," *Financial Times*, October 11, 2017.
16. Christopher M. Matthews, "As American Gasoline Prices Soar, Some Blame Ethanol," *Wall Street*

Journal, November 24, 2021.

17. Ed Garsten, "Repair Tech Shortage Costing Motorists Time and Money, CCC Study Shows," *Forbes*, March 15, 2022; and "Auto Mechanic Shortage, Delays Seen Growing," *Automotive News*, April 10, 2022.
18. Tom Lee and Jacqueline Varas, "The Total Cost of U.S. Tariffs," *American Action Forum*, May 10, 2022.
19. "Price History: Tables and Charts," *SteelBenchmarker Report no. 391*, July 25, 2022.
20. James Sherk, "Why the Davis–Bacon Act Should Be Repealed," *Heritage Foundation*, January 12, 2012; and *Statement Before the Subcommittee on Labor Standards of the House Committee on Education and Labor*, 96th Cong., 1st sess. (June 14, 1979) (statement of Elmer B. Staats, Comptroller of the United States).
21. Toni Horst et al., *40 Proposed U.S. Transportation and Water Infrastructure Projects of Major Economic Significance* (Washington: AECOM, Fall 2016).
22. Jerusalem Demsas, "Why Does It Cost So Much to Build Things in America?," *Vox*, June 28, 2021.
23. Brian Balkus, "Why America Can't Build," *Palladium Magazine*, June 9, 2022.
24. Romic Aevaz et al., *Saving Time and Making Cents: A Blueprint for Building Transit Better* (Washington: Eno Center for Transportation, July 2017).
25. Burrows, Burd, and McKenzie, "Commuting by Public Transportation."
26. Bill Canis and William J. Mallett, "Buy America and the Electric Bus Market," *Congressional Research Service*, IF10941, August 6, 2018.
27. "Buy America," *Federal Transit Administration*, U.S. Department of Transportation.
28. Shanjun Li, Matthew E. Kahn, and Jerry Nickelsburg, "Public Transit Bus Procurement: The Role of Energy Prices, Regulation and Federal Subsidies," *National Bureau of Economic Research Working Paper no. 19964*, March 2014.
29. Madeline Barch and Neil Bania, *Washington State Ferry Vessel Procurement* (Olympia, WA: Washington State Institute for Public Policy, December 2016).
30. Clifford Winston, "Have Car Won't Travel; The Sober—and Sobering—Case for Privatizing Urban Transportation," *Brookings Institution*, April 1, 1999.
31. Rhiannon Jerch, Matthew E. Kahn, and Shanjun Li, "Efficient Local Government Service Provision: The Role of Privatization and Public Sector Unions," *National Bureau of Economic Research Working Paper no. 22088*, March 2016.
32. Amtrak, *National Fact Sheet FY 2016* (Washington: Amtrak, July 2017); Amtrak, Office of Inspector General, "Management of Overtime: Best Practice Controls Can Help in Developing Needed Policies and Procedures," *OIG-A-2013-009*, March 26, 2013; and Randal O'Toole, "Stopping the Runaway Train: The Case for Privatizing Amtrak," *Cato Institute Policy Analysis no. 712*, November 13, 2012.
33. Ron Nixon, "Amtrak Losing Millions Each Year on Food Sales," *New York Times*, August 2, 2012.
34. Vanessa Barford, "Why Do So Many People Hate US Airports?," *BBC*, November 30, 2015.
35. Chris Edwards, "Air Traffic Control," in *Cato Handbook for Policymakers*, 9th ed. (Washington: Cato Institute, 2022).
36. Scott Lincicome, "How U.S. Air Travel Can Get (a Little of) Its Groove Back," *The Dispatch*, June 29, 2022.
37. Kristy Hartman and Laura Shields, "State Laws on Direct-Sales," *National Council of State Legislatures*, August 2021.
38. Justine Jablonska, "How Stockholm Broke Its Gridlock with Congestion Pricing," *IBM*, October 17, 2019.
39. Amir Nohekhan, Sara Zahedian, and Kaveh Farokhi Sadabadi, "Investigating the Impacts of I-66 Inner Beltway Dynamic Tolling System," *Transportation Engineering 4* (June 2021): Article 100059.
40. See "Project Profile: Dulles Greenway," *Federal Highway Administration Center for Innovative Finance Support*; and Robert W. Poole, Jr., *Should Governments Lease Their Toll Roads?* (Los Angeles: Reason Foundation, August 2020).

41. "Switzerland's Underground Freight Project Gets Start Date," *Le News*, June 24, 2022.
42. "Air Traffic Control: Preliminary Observations on Commercialized Air Navigation Service Providers," U.S. Government Accountability Office, GAO-05-542T, April 2005.
43. Guillaume Burghouwt, Pablo Mendes de Leon, and Jaap De Wit, "EU Air Transport Liberalisation: Process, Impacts and Future Considerations," International Transport Forum Discussion Paper no. 2015-04, January 2015.
44. Robert W. Poole Jr. and Chris Edwards, "Privatizing U.S. Airports," Cato Institute Tax and Budget Bulletin no. 76, November 21, 2016.
45. Robert W. Poole Jr., *Annual Privatization Report 2021: Aviation* (Los Angeles: Reason Foundation, July 2021).
46. As of September 2022, Congress was considering NEPA reform, but specifics were limited and reforms were speculated to be less than comprehensive. Passage was also far from guaranteed. It is therefore uncertain at the time of this book's publication whether 2022 permitting reform efforts would result in meaningful improvements.