

# JOB PROTECTION IN URBAN MASS TRANSIT

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## Introduction

The urban mass transit industry in the United States has been a declining industry, especially since the Second World War, despite massive subsidies for the acquisition of capital equipment and facilities and for the operating expenses of the system.<sup>1</sup> Rising real income that caused the ownership of automobiles to become more common, the improvement of the highway capital stock, and the growth of suburban residential areas, coupled with the qualities of accessibility and convenience, caused the privately owned automobile to become the overwhelmingly preferred mode of transportation to and from work and for shopping and leisure travel within cities.

Before World War II, urban mass transit service was mainly provided by privately owned companies that held monopoly franchises and were subject to the regulation of the public authorities with respect to service quality and rates. With the spread of the automobile as a competitive mode of transit, it became clear that the socially efficient response would be the shrinkage of the urban mass transit industry, the withdrawal of monopoly franchises, and the free entry of paratransit modes into the interstices of the system where demand

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<sup>1</sup>For the general treatment of the urban mass transit system and its subsidization, see John R. Meyer and José A. Gómez-Ibáñez, *Autos, Transit and Cities* (Cambridge, Mass.: Harvard University Press, 1981); Alan Altshuler (with James P. Womack and John R. Pucher), *The Urban Transportation System, Politics and Policy Innovation* (Cambridge, Mass.: MIT Press, 1979); George W. Hilton, *Federal Transit Subsidies* (Washington, D.C.: American Enterprise Institute, 1974); Wilfred Owen, *The Metropolitan Transportation Problem* (Washington, D.C.: The Brookings Institution, 1966); John R. Meyer, John F. Kain, and Martin Wohl, *The Urban Transportation Problem* (Cambridge, Mass.: Harvard University Press, 1965).

was sufficiently intense to yield a normal return on the provision of transit services.

This process was begun in the mid-1940s and 1950s with the withdrawal from the industry of private companies that were encountering operating losses. But this shakeout came to an end when the Congress, in 1964, enacted the Urban Mass Transportation Act that provided federal funds for urban transit capital acquisitions. State and local public agencies were established to use federal grants for the acquisition of the capital assets of the withdrawing private companies and the monopoly franchises were transferred to the new public sector agencies.

In 1940 there were only 20 publicly owned urban transit systems; in 1982 there were 581.<sup>2</sup> In 1940 publicly owned systems owned and leased only 7 percent of all the vehicles used by the industry; in 1982 this had become 91 percent. In 1945 there were 23.2 billion passenger rides; in 1980 this had shrunk to 8.2 billion. Despite the diminution in passenger load, the number of vehicles employed by the industry has remained much more constant between the beginning and end of this period; in 1945 the industry used 75 thousand vehicles and in 1982, 74 thousand, with light rail vehicles being displaced by motor buses.

The urban transit industry suffers immense losses each year. Its passenger fare and other operating revenues in 1982 covered only 40 percent of its operating expenses. To cover operating losses, the system received in 1982, \$4.6 billion in subsidies—about 80 percent from local and state governments and the remainder from federal operating grants. Since 1975 the federal government has provided almost \$6 billion in grants to cover operating deficits. In addition to operating subsidies, the system is also heavily subsidized for capital acquisitions and improvements. Since 1965 the federal government has provided over \$20 billion to the industry in capital grants.

Given that urban mass transit systems produce transport services for local users in the communities in which they operate, it is questionable whether the subsidization of those systems by the federal government is warranted. The subsidies imply massive income transfers from nonusers to users of the transit systems and from residents in other parts of the country to residents in the large urban concentrations.

<sup>2</sup>These and other data are derived from the American Public Transit Association, *Transit Fact Book, 1981* (updated by APTA telephone interview) and John R. Meyer and José A. Gómez-Ibáñez, *Autos, Transit and Cities*.

A goodly share of the subsidies have been siphoned off by employees of the urban transit systems who, through their unions, have exercised monopoly power in the urban transit labor markets and, thus, gained economic rents for themselves. Although the number of passenger trips has been reduced from 23 billion in 1945 to 8 billion in 1980, the number of transit system employees has fallen during the same period, from 242,000 to 189,000. Despite widely fluctuating demand for transit service over the hours of the day, which would seem to warrant the intensive employment of part-time workers, the unions of the industry raise obstacles to the employment of part-time workers, so that, in 1980, there were only 4,600 part-time employees out of a total of 189,000 employees. While the skills necessary for operating transit vehicles are widely diffused in the country's adult population—so that one would expect compensation rates in the industry to be relatively low—the exercise of union monopoly power, reinforced by the availability of government subsidies and by the existence of monopoly power in the system's product market, has caused earnings of employees in the industry to be similar to those of persons with advanced graduate schooling. It has been estimated that, from 1970 to 1980, 33 percent of federal government operating subsidies in urban transit were siphoned off by employees in the form of increased compensation; 21 percent of the subsidies were consumed by increased utilization of labor, as a result of work rules enforced by the unions and other inefficiencies generated by subsidies; and only 27 percent of the subsidies were reflected in benefits to transit system users in the form of fare reductions and additional trips.<sup>3</sup>

Monopoly on the selling side of the urban transit labor market is entrenched and reinforced by section 13(c) of the Urban Mass Transportation Act of 1964. That act, as amended, authorizes the Secretary of Transportation to make grants to urban transit systems for capital acquisitions and modifications, for transit systems operations, and for other purposes related to the "development of comprehensive and coordinated mass transportation systems, both public and private, in metropolitan and other urban areas."

Section 13(c) of that act makes provision for the protection of

<sup>3</sup>Douglas B. Lee, *Evaluation of Federal Operating Subsidies to Transit*, Staff Study SS-67-U.3.03, U.S. Department of Transportation, Transportation Systems Center, Cambridge, Mass., July 1983, duplicated. The remainder of federal operating subsidies not reported above were used to cover price increases for fuel and materials, fuel consumption, and for the provision of unutilized service.

workers who may be affected. It reads:

It shall be a condition of any assistance under section 3 of this Act that fair and equitable arrangements are made, as determined by the Secretary of Labor, to protect the interests of employees affected by such assistance. Such protective arrangements shall include, without being limited to, such provisions as may be necessary for (1) the preservation of rights, privileges, and benefits (including continuation of pension rights and benefits) under existing collective bargaining agreements or otherwise; (2) the continuation of collective bargaining rights; (3) the protection of individual employees against a worsening of their positions with respect to their employment; (4) assurances of employment to employees of acquired mass transportation systems and priority or reemployment of employees terminated or laid off; and (5) paid training or retraining programs. Such arrangements shall include provisions protecting individual employees against a worsening of their positions with respect to their employment which shall in no event provide benefits less than those established pursuant to section 5(2) (f) of the (Interstate Commerce Act of 1877) (which provides that for a period of four years employees who are affected will not be in a worse position with respect to their employment.) The contract for the *granting of any such assistance shall specify the terms and conditions of the protective arrangement.*

### Politicization of Mass Transit

Since 1964 urban mass transportation essentially has become an exclusively public sector activity; a large number of private firms offering transit services survive, but they carry a very small proportion of all passengers. When the industry was privately owned, it was based on monopoly franchises awarded by the public authorities; its fares and the level of services it was required to offer were regulated. As a public sector activity, fares and service levels are responsive to pressures emanating from political sources. In both the private franchise and the ensuing public-ownership services, the mass transportation system has operated essentially as a monopoly in the transit product market.

The transit industry has been declining since the end of World War II, although the number of passengers carried stabilized and rose slightly in the 1970s. Apparently in response to rising incomes, the construction of road networks, and the diffusion of population within urban areas, the automobile has become the primary mode of passenger transport, and it appears that it will continue to perform this role. Mass transit is numerically important only in a handful of large, densely populated metropolitan areas.

The number of passengers carried by conventional mass transit vehicles varies greatly among routes and across hours of the day; the mass transit industry is faced with demand peaks and troughs when seen in the contexts of both time of day and routes served. Within this context, the industry has experienced ever-enlarging operating deficits since about 1965. Operating revenues have risen slightly, but operating expenses have risen at a much more rapid rate since the late 1960s. The deficits have been covered by enlarged subsidies from federal, state, and local sources. Mean fares have diminished in real terms in the 1970s. Capital costs also have been covered, almost completely, by public subsidies.

The mass transit industry is labor-intensive. A very large fraction of operating costs are labor costs, paid partly in cash wages and partly as fringes of various kinds. Of \$6 billion in transit operating costs in 1980, 73 percent was expended for salaries, wages, and fringe benefits.<sup>4</sup> It has long been characteristic of the industry that its workers have been represented by unions in the joint determination of rules of work and levels of compensation. That pattern, established when the industry was privately owned, was prolonged into the period of public ownership by the labor protection provisions of the Urban Mass Transportation Act of 1964. By the exercise of monopoly power in the urban transit labor market, the unions have been able to produce rents for the industry's employees. These rents take the form of earnings that appear to be greatly in excess of those that would be necessary in a competitive labor market to attract the relevant number of workers to accept employment in the industry. As noted, the skills for the operation of motor vehicles are commonly possessed by almost all adults in the country's population.

Mass transit seems to have a comparative advantage over alternative modes of travel for commuting trips to and from work on densely traveled radial routes to central cities and for short trips within central cities that serve low-income neighborhoods. But conventional mass transit services are now grossly extended beyond those limits.

Many of the routes that are now served by large, regularly scheduled vehicles of the transit system appear to be more appropriate to service by paratransit vehicles of various kinds, including passenger-driven vans and car-pools. Paratransit service could also be fruitfully employed as a complement to conventional transit service on the radial and other routes at peak demand hours where conventional service is most productively employed. Thus, paratransit might offer both parallel and feeder services.

<sup>4</sup>American Public Transit Association, *Transit Fact Book*, 1981, p. 48.

The shrinking of routes and neighborhoods that are served by conventional mass transit might well involve substantial reductions in the operating and maintenance personnel and, hence, the operating costs of the systems. But labor protection arrangements, designed to prevent adverse effects on workers or requiring the compensation of adversely affected workers to "make them whole," inhibit the kinds of adjustments that are necessary to achieve a socially optimal transit system. Such arrangements tend to perpetuate real resource inefficiencies in the organization and operation of urban mass transit systems.

### Circumventing Section 13(c)

Grants to which section 13(c) protections are attached cause real and money costs in mass transit to be higher than they otherwise would be.<sup>5</sup> Either the services that the grants generate must be administered in ways that do not occasion the dismissal of transit workers (even if the services can be provided at lower real cost and with equal efficiency with fewer workers) or dismissed workers must be compensated for their dismissal, retrained, or relocated. Section 13(c) also requires collective bargaining in transit operations that are covered by federal subsidies, which reinforces the monopoly power that collective bargaining has produced in this industry.

The real and money costs of transit operations might be reduced if 13(c) costs could be avoided by making no (or fewer) operating subsidy grants to transit systems. If conventional transit systems were then to contract (as, for example, by a diminution of routes served), the gaps in the transit service pattern might be filled by a diverse set of alternative modes that would be free of 13(c) constraints. These include passenger-driven van and car-pools, employer-provided van-pool services, and, in densely traveled periods and routes, privately owned commercial transit operations that would charge fares sufficient to cover operating and capital expenses. These alternatives would be much cheaper than the existing capital-intensive strategies for reducing labor costs that are generated by 13(c) protections against adverse effects and 13(c) reinforcement of collective bargaining modes.

<sup>5</sup>Real costs occur when real resources used by the transit system (including labor) have alternative uses that society finds valuable. "Higher real costs" means that more resources are used than otherwise would be the case for the production of a given quantity of transit services. Money costs are money expenditures of the transit system. They may be used to pay for the resources the system employs, but they include, in addition, transfer payments, such as monopoly rents paid to transit employees that are *not* payments for labor services, and compensation payments made to dismissed workers.

### Rent Seeking under 13(c)

It seems to be clear on its face that the money cost of operating the transit system is much enlarged because its employees are paid rents. Labor market rents are payments made in excess of those that would be necessary to induce the desired number of people to make their services available to a trade or occupation, provided there were competition in the labor market and no constraints on entry into or exit from the relevant occupation. Rents come into existence only when the labor market becomes less than fully competitive; they cannot exist in conditions of competition.

A very large fraction of the employees of the transit industry are motor vehicle operators. Successful performance in that occupation requires motor vehicle operating skill, a calm and courteous demeanor, good moral character, and capacity to read and to tell time. These are skills and personality traits that are commonly possessed by the country's adult population. Virtually every adult possesses some motor vehicle operating skills; only a short period of additional training would seem necessary to operate larger vehicles such as motor buses. In a competitive labor market the payments for the performance of vehicle operating services would be very low, given the ubiquity of the skill in the population. Under competition, the required number of operating personnel ought to be able to be attracted to the industry at very low wages.

The earnings of vehicle operating personnel are, however, much higher. Not only are base hourly wages higher than those that would occur under competition, but earnings are additionally enlarged by premium payment arrangements of various kinds, including overtime, spread-time, and shift premiums. The earnings include, additionally, payments for time, service, and status that do not represent vehicle operation time.<sup>6</sup>

In addition, the collective bargaining practice of the industry commonly links the earnings of employees in other occupational classes to the earnings of vehicle operators. Rents paid to operators, therefore, will be compounded by rents paid to nonoperator employees.

That a rent component is included in the payments made to transit employees is corroborated by the existence of the priority of reemployment provision in section 13(c) of the act and of seniority pre-

<sup>6</sup>In the idiomatic usage of the transit industry, vehicle operators are paid for report time, turn-in time, travel time between an operating station and a point of relief, intervening time, paid break time, minimum guarantees, student training time, stand-by time, time spent on union duties, and run-selection time.

scriptions in 13(c) agreements and in collective agreements that rank-order workers in the allocation of various kinds of opportunities. Such provisions are rationing devices. They determine who receives preference in a situation where there are more qualified applicants than there are jobs to be filled. They necessarily imply that earnings are in excess of those that would prevail under competition, since competitive markets clear and there is no role for nonprice rationing.

Additional evidence of the existence of rents in the payments made to transit employees occurs in the form of relatively low voluntary separation rates in that industry. More attractive relative earnings opportunities in an industry will be associated with lower rates of voluntary quits in that industry. The payment of economic rents to labor will cause voluntary separations to be lower than in other industries where the payment for labor does not include a component of rent.

The rent component in the payments to transit labor is, of course, produced by the collective bargaining process. Section 13(c) affirms and entrenches collective bargaining in the industry and intensifies the monopoly power on the supply side of the transit labor market that produces the rents.

That section explicitly affirms in its text that “the continuation of collective bargaining rights” shall be a condition for the grant of assistance. It thus opens opportunities for the use of the 13(c) agreement as an instrument for securing, in the collective bargaining agreement, more favorable terms of employment than might otherwise be achieved. Furthermore, the grant of assistance under the Act is conditional on the signing of a 13(c) agreement by the relevant trade unions of the transit industry and by transit management.

Additionally, 13(c) agreements sometimes contain clauses that relate not to the forestalling of adverse effects upon employees as a result of transit assistance, but rather, have substantive implications themselves. A not unrepresentative clause provides, for example, that “in the event of *any* labor dispute,” arbitration might be requested by either party to the 13(c) agreement. The term “labor dispute” is defined by the clause “to include, but not be limited to, any controversy concerning wages, salaries, hours, working conditions or benefits, including health and welfare, sick leave, insurance or pension and retirement provisions, the making or maintaining of collective bargaining agreements and the interpretation and application of such collective bargaining agreements, any grievance that may arise.” The provision in a 13(c) agreement of arbitration for the settlement of all disputes is seemingly a case of the use of 13(c) agreements—intended by the legislation to protect labor from adverse effects arising from



grant assistance—to affect the substantive terms of the collective bargaining relationship.

### Extending Inefficient Work Rules under 13(c)

Work rules in the transit industry that have developed over a long period of history of collective bargaining have introduced inefficiencies in the deployment and use of labor resources. Section 13(c) prolongs and extends those inefficiencies into sequential periods when projects are undertaken with federal assistance. The section does so because it requires that a condition of the receipt of assistance shall be “the preservation of rights, privileges and benefits under existing collective bargaining agreements or otherwise,” and “the protection of individual employees against a worsening of their position with respect to their employment.”

The demand for transit service peaks twice daily in the early morning and late afternoon or early evening hours. It is reported that, typically, there are twice as many transit motor vehicles operating during the peaks than in the daytime hours between the peaks. The ratio of peak to off-peak operations is even higher than two for the hours of the day between the evening and morning rush hours.

In circumstances such as these, the efficient use of labor, which is a resource having valuable alternative uses for society, would suggest the widespread employment of part-time labor. In such an arrangement, many workers would be employed to perform transit industry service during peak periods and would then be released for the performance of services in other occupations and crafts during other hours of the day.

Such arrangements are not uncommon. Within the transit industry itself school bus drivers are employed for short periods of service each day and are then released to other activities. Similarly, casual labor is employed in many industries, workers are taken on for seasonal peaks and then released, and workers in many occupations are employed for the performance of defined daily tasks and are released upon their completion. When time-peaks and time-troughs occur in the demand for labor services, arrangements such as these imply efficient use of labor and the maximization of the economy's output, given the quantum of resources that society commands.

The transit industry would seem to be extraordinarily suited to the employment of part-time labor. In fact it employs very few part-time workers and it is inhibited from doing so by work rules that appear

in the industry's collective agreements.<sup>7</sup> Those work rules sometimes put explicit numerical constraints, as well as a wide range of other restrictions, on the employment of part-time labor. These include minimum work hour guarantees for part-time drivers, maximum allowable times in a day or a week part-time drivers may actually be employed in vehicle operation, maximum number of hours per day for the interval between the beginning and the end of part-time drivers' service, and constraints on the place at which part-time drivers may begin and end their daily service.

These work rules forestall the employment of part-time personnel and encourage, instead, the employment of full-timers. Since part-time service is especially appropriate to an industry confronted with a widely fluctuating demand for its service, some transit labor is, in consequence, bid away from more highly valued service in other occupations and into transit employments in which part of their days are spent in relatively unproductive work or in idleness. The output of the economy is diminished, as is the productivity of the transit industry, and the operating costs of the transit industry are increased.

These work rules also have adverse effects upon transit industry efficiency. They increase the number of personnel that must be employed for a given level of service. They diminish the fraction of hours paid for that is actually devoted to vehicle operation. And they generate less efficient scheduling of service and less efficient deployment of labor.

Because it provides for the persistence of collective bargaining, per se, and of the rights, privileges, and benefits under existing collective bargaining agreements, section 13(c) tends to perpetuate and entrench work rules such as these, and, therefore, the inefficiencies they produce.

### Constraints on Subcontracting

It is characteristic of many industries that some intermediate products and services and even some proportion of an industry's final product are not produced "in house" but, rather are purchased from supplying firms. This is sometimes called subcontracting. Firms that subcontract are, of course, motivated to do so because they can diminish their total production costs and achieve higher levels of overall efficiency by purchasing the services of supplier firms.

In general, the transit industry is foreclosed from subcontracting by 13(c) agreements. The "model" 13(c) agreement that has been

<sup>7</sup>See Kenneth M. Chomitz and Charles A. Lave, *Part-Time Labor, Work Rules, and Transit Costs* (Washington, D.C.: U.S. Department of Transportation, 1981).

used very heavily as a condition for the receipt of operating grants says that the recipient "shall be the sole provider of mass transportation services to the project and such services shall be provided exclusively by employees of the recipient." Services that had been previously secured from others through purchase, lease, or other arrangements are permitted to continue; but newly arranged subcontracting is not permitted.

Thus new subcontracting that would diminish transit costs because subcontractors are more efficient producers of the relevant service is not permitted. Neither can transit systems avoid the payment of rents to their employees by subcontracting to firms with lower labor costs.

### Labor Protection Standards

Section 13(c) does not prohibit the making of changes that will render the transit industry more efficient, even when those changes have adverse effects upon transit employees. Section 13(c) and the 13(c) agreements do, however, inhibit such changes by making them more costly than they would be in the absence of 13(c) protections. If the incremental costs are high enough, relative to the efficiency gains they will produce, such changes will not be carried out. That is to say, by increasing the cost of efficiency changes, 13(c) causes fewer changes to be made and prolongs some inefficiency.

Section 13(c) provides that arrangements be made to protect the interests of employees affected by assistance grants. Those agreements must include the protection of individual employees against the worsening of their positions with respect to their employment. As a result, section 13(c) agreements contain detailed, and sometimes elaborately defined, definitions of adversity effects and of the remedies that are intended to make whole those employees who are affected adversely by changes that are part of or incidentally produced by projects for which assistance has been given. Remedies include, among others, displacement allowances for workers placed in a worse position, dismissal allowances for workers laid off for as long as six years, the continuation of fringe benefits for dismissed employees during the period when dismissal allowances are paid, the payment of moving expenses in some circumstances, reimbursement for losses upon sale of a home or from the failure to occupy a leased dwelling for the full period of a lease, and lump-sum payments to employees who resign when they have received dismissal notice.

It can be seen that changes in the organization of transit services are made more costly by the labor protection constraints imposed by section 13(c). Principles of rational, maximizing management will,

in these circumstances, foreclose some changes that would otherwise have occurred; less efficient methods will sometimes be preferred to more efficient methods because the latter will be encumbered by costs produced by the labor protection standards of the act.

Changes in the organization of work or in the level or organization of services performed by a transit system may diminish the number of employees or move some employees into a different occupational class or into a different period for the performance of service. It serves the interests of employees, therefore, if the area within which the labor protection provisions of the act are to be applied is given the broadest possible definition. Transit employees can be expected to make the claim that any adjustments that adversely affect them are project-connected, even if the connection is loose and amorphous.

Since the adverse effects tend to forestall change when labor protection arrangements apply, a broad interpretation of the area of effect of assistance projects can be expected to raise strong impediments to adjustments that affect the number of employees or the properties of their work assignments. Hence, a not uncommon prescription in 13(c) agreements is that "the term 'project' . . . shall not be limited to the particular facility assisted by federal funds, but shall include any changes, whether organizational, operational, technological, or otherwise, which are traceable to the assistance provided whether they are the subject of the grant contract, reasonably related thereto, or facilitated thereby."

## The Labor Department's Role

It is possible that the Department of Labor has constructed administrative procedures that have intensified the employment of 13(c) as an instrument for the production of rents for the workers of the transit industry.

Section 13(c) says that "it shall be a condition of assistance . . . that fair and equitable arrangements are made, as determined by the Secretary of Labor, to protect the interests of employees affected by such assistance." The section then goes on to specify the minimum limits of the protective arrangements.

*The Department of Labor has, in general, relied on the negotiation and signing of 13(c) agreements by the relevant transit managers and trade unions for the specification of the detailed protections that shall suffice for certification by the Secretary of Labor that the 13(c) conditions have been met. Only in rare instances does the secretary certify on his own initiative, and then only when the negotiators have not been able to reach agreement.*

The Department of Labor apparently designed this procedure in response to its perception of congressional intent. The Senate Banking and Currency Committee Report on the Urban Mass Transportation Act of 1963 (88th Cong., 1st sess. Report no. 82, Calendar no. 69, p. 28) does say:

The Committee does not believe that it is feasible to enumerate or set forth in great detail the provisions that may be necessary to assure the fair and equitable treatment of employees in each case. In this respect, it is expected that specific conditions normally will be the product of local bargaining and negotiation, subject to the basic standard of fair and equitable treatment. The Committee expects that the Secretary of Labor . . . will assume responsibility for developing criteria as to the types of provisions that may be considered as necessary to insure that worker interests are adequately protected against the kinds of adverse effects that may reasonably be anticipated in different types of situations.

The congressional intent to be inferred from this passage in the committee report seems capable of supporting reasonable alternative interpretations for the design of administrative practice. The inference can be drawn that the Congress intended local negotiation of the details of labor protection provisions as an a priori condition for the grant of assistance. But another, equally reasonable interpretation of congressional intent is that the Secretary of Labor certifies the general fulfillment of the labor protection conditions of the statute on the initiative of his own examination of the circumstances, and that detailed and specific labor protection provisions be the subject of local bargaining and negotiation, after the grant of assistance has been given. While it is clear that the Congress intended that specificities and details be locally negotiated, the Congress did not seem to specify at what point in the process the negotiation would occur.

By constructing the administrative process so that, generally, negotiation and agreement must take place prior to the secretary's certification, section 13(c) was transformed from an instrument for the mere protection of labor from adverse effects of transit assistance to an instrument for enlarging the power of the unions of transit employees to extract rents in the payment for their services. Since assistance to transit systems cannot be given until the unions have agreed to sign a 13(c) agreement, the unions are able to make their willingness to sign without protracted delays conditional upon understandings about the terms of collective bargaining agreements when they are next negotiable.

The process of transit grant assistance involves a time sequence of operations. The point in this sequence at which detailed local nego-

tiations are placed can be expected to affect the consequences produced by the negotiations. Of the alternatives that are available, the prudent course for the Department of Labor would have been to arrange certification procedures so that they would tend to achieve *only* the fundamental congressional intention of the Urban Mass Transportation Act. With respect to labor standards, this means that labor be protected from the possible adverse effects of transit assistance. Instead, the procedures were organized in a way that permits the 13(c) agreement negotiation to have enlarged effects beyond that purpose and to intrude, as well, upon the definition of the terms of employment independently of the effects of transit assistance.

### Mass Transit Viewed as a Public Service

The deficit of transit system operating expenses over operating revenue has been rising over time and the rate of increase of the operating deficit has been especially large in recent years. This has been a result of the more rapid rise of transportation and maintenance costs than of passenger revenue. The number of passenger trips has increased somewhat in recent years, but the mean fare charge to users has been quite stable and has, indeed, declined recently in real terms.

It is sometimes said that the rise in costs of operation and the consequential increase in the magnitude of the deficits, ought not be a matter of concern because mass transit is a "public service." The charge for its operation, it is said, is properly assessed upon the whole community, rather than users of the service. Thus, if it is appropriate that the cost of the system be borne from appropriations from the community's general revenue, it is a matter of indifference that deficits are large and rising. If the entire cost of a "public service" should be paid for by the public as a whole, it is surely proper that less than the total cost be covered by public subsidy. Therefore, rising deficits cannot be taken as a signal that costs are rising too quickly, nor do rising deficits suggest that steps should be taken to diminish operating costs.

This argument has no merit from an efficiency point of view because it involves a misunderstanding of the theory of public goods. It is true that price theory instructs that if an activity produces a public good, it should receive a public subsidy in order to secure an efficient allocation of resources. For such public goods, competitive markets will generate underinvestment, and subsidies are necessary to secure a socially optimal size for the industries that produce them.

A public good has the properties that it is impossible, or administratively very difficult and costly, to exclude anyone from consuming it and that its consumption by one does not diminish the quantity of it that is available for consumption by another. Mass transit services, however, are not a public good. The fare box is an efficient exclusionary instrument. Those who pay the fares are admitted and those who do not are excluded from the consumption of the service. When a unit of the service is consumed, it ceases to be available to others. The occupancy of a seat by one deprives another of its use; increments of transit service are not produced at a zero cost. It follows, since transit service is not a public good (even if transit systems are publicly owned), that user-fee revenue systems will generate a socially optimal scale and a socially optimal allocation of resources in the mass transit industry. This means that if public subsidies are paid to the mass transit industry, they need to be defended on income-and-wealth-transfer grounds and not on "public service" grounds; subsidies may, of course, produce scale suboptimalities.

It flows from this line of argument that transit operating costs are, indeed, an object upon which it is appropriate to concentrate attention. It is desirable that costs be diminished because the magnitude of operating costs affects the magnitude of the transfer payments that are made by subsidy systems from non-users of the transit system to users and from light users to heavy users of its services. Therefore, if section 13(c) increases the operating costs of the system, it is proper that its effects be examined.

### Securing a Proper Accounting of 13(c) Costs

A number of studies of the effects of 13(c) have been undertaken.<sup>8</sup> Some of them have found that, while generalized complaints have been made by transit system managers, few have been able to specify in detail changes in systems operations that would have been undertaken, but that were forestalled by fear of 13(c) costs.

<sup>8</sup>See, for example, Frederic B. Siskind and Ernst W. Stromsdorfer, *The Economic Cost Impact of the Labor Protection Provisions of Section 13(c) of the Urban Mass Transportation Act of 1964* (Washington, D.C.: U.S. Department of Labor, May 1978); U.S., Comptroller General, *Program to Certify the Agreements to Protect Employees Affected by Grants Made under the Urban Mass Transportation Act of 1964* (Washington, D.C., 1976); Jefferson Associates, *Report to the U.S. Department of Labor: Administration of Section 13(c)—Urban Mass Transportation Act* (Washington, D.C.: Jefferson Associates, 1972); James L. Stern et al., *Labor Relations in Urban Transit* (Madison, Wis.: Industrial Relations Research Institute, 1977); Robert C. Lieb, *Labor in the Transit Industry* (Washington, D.C.: U.S. Department of Transportation, 1976).

It is not difficult to resolve this paradox. In recent years, almost the whole of capital cost and a very large fraction of operating cost of the mass transit system has been covered by public subsidies which have been growing over time. This has been coupled with political pressure for the expansion of service and the promotion of the idea that it is singularly important to diminish the consumption of fossil fuels and to improve environmental quality, and that mass transit services are efficient instruments for the achievement of those purposes.

As a result, both the management and the unions in the mass transit industry have found a coincident interest in the expansion of transit services. This is true even if it implies running conventional, scheduled services on lightly traveled routes in lightly traveled periods of the day, the cross-subsidization of some transit passengers by others, and the performance of service by conventional systems that might be more efficiently subcontracted or performed by others if conventional systems withdrew from some service sectors and left gaps to be filled by a transit service market. In addition, if the public authorities are perceived to be willing to increase the magnitudes of subsidies as operating deficits become larger, system managers, given their product market monopoly, will be less reluctant to consent to increases in worker compensation than if the industry were expected to cover its costs with its fare revenues or if it were operating in a competitive product market.

*In sum, transit system management operates in a world which prods it with only weak incentives to make changes that would tend to achieve increments of efficiency and would tend to displace labor or otherwise to produce adverse effects for labor. Since the structure of incentives in the industry tends to forestall changes that would have adverse labor effects, the managers of the system are hard put to suggest changes they would have made but did not make because 13(c) costs would have been incurred.*

To secure a proper accounting of 13(c) costs, it is inappropriate to ask system managers, motivated by weak efficiency incentives, whether 13(c) forestalled changes and imposed costs upon transit system operations. More appropriately, the accounting of 13(c) costs should be responsive to other questions. These include: What is the magnitude by which payments to mass transit employees exceed the levels of payments that would occur if 13(c) did not reinforce the collective bargaining mode? What changes in the forms of organization of labor services in the industry would occur if 13(c) did not reinforce the collective bargaining mode? What is the magnitude by which, given the current levels of service, the number of workers employed by the system exceeds the number that would be employed if a different



set of work rules instructed organization of work? To what extent would part-time labor or labor of less skill replace full-time labor and labor with more skill if a different set of work rules than that enforced by the collective bargaining mode were to become effective? To what extent would conventional transit service shrink if efficiency incentives were stronger? And by how much would the magnitude of that shrinkage be diminished because 13(c) would impose costs upon the system if shrinkage occurred?

The cost to society of section 13(c) is the increment in the quantity of real resources, of which labor resources are the most important component, that is consumed by the transit industry and, therefore, rendered unavailable to other industries, as a result of the effects of section 13(c). They include additional resources consumed by higher levels of service that are induced by section 13(c), as when a lower-level service requiring a smaller number of employees or part-time employees may be introduced with grant assistance under the act but is made more costly by section 13(c) prescriptions. They include, also, the additional resources consumed at given levels of service as a result of less efficient arrangements than would otherwise have been made, had they not been forestalled by section 13(c).

The money cost to transit systems of section 13(c) is the increment in operating expenses under 13(c) constraints over what those expenses would have been in the absence of that section.

Both of these costs are extraordinarily difficult to quantify. This is so because, if there were no 13(c) prescriptions to fortify collective bargaining in the industry, assist in the production of rents in the industry's labor market, and make the adjustment of transit industry practice more difficult, departures from competitive market incentive structures would still survive. These include the survival of the collective representation of the workers of the industry, the exercise of monopoly power in the labor market, the existence of rents paid to labor, the diminished incentives of managers of publicly owned and subsidized properties administering a monopoly in the sale of scheduled transit service to reduce costs and introduce more efficient methods, and the political impediments that make it difficult to shrink service levels and raise user fares.

In these circumstances it can be expected that even in the absence of a section 13(c) the resources employed by the transit industry would be larger, the level of efficiency of its operations lower, and its money costs higher than if competition existed in both product and labor markets, and if the managers of the industry were required to secure revenues from users of its services that would cover costs and provide a normal return on investment in the industry's assets.

The difficulty in measuring the cost of section 13(c), thus, derives from the difficulty of estimating the scale of the industry, the forms of its organization, the levels of its service, and the payments that would be made by it for the inputs it purchased, in a state of the world in which the enumerated conditions diminish competition in markets and diminish the role of profit-maximization and cost-minimization principles in instructing management behavior and choice among alternatives.

### Efficiency and Equity Aspects of Job Protection

A price-theoretic analytical treatment of labor protection provisions associated with changes in public policy raises serious questions about such protection on both efficiency and equity grounds.

Labor protection arrangements are a tax on change; they specify, in the urban mass transit assistance case, that assisted projects shall not have adverse effects on employees currently employed in transit enterprises or, if they do, then adversely affected current employees shall be reimbursed for the losses they suffer from changes that are project-induced. By imposing costs on change, such an arrangement diminishes the quantity of change that will occur, impedes the achievement of more efficient organizational forms, and misallocates resources employed in the production of transit services.

Principles of efficiency do not, however, completely instruct the design of public policy. The community may be prepared to experience some negative increment of efficiency that is generated by a public policy, if that policy tends toward the achievement of some equitable purpose. In a trade-off such as this, attention should be given, of course, to the magnitudes of the variables that are involved in the exchange. Even if the community seeks to promote equity as well as efficiency, a policy might be rejected if the efficiency losses are large and the equity gains are small.

But the equity argument for labor protection is questionable. Pragmatically, labor protection arrangements advantage incumbent employees of transit systems but disadvantage other workers. Such arrangements give priority rights to incumbents at the expense of other workers who aspire to transit employment directly or, indirectly, through subcontract agreements. Job protection provisions in the transit industry also give compensation rights to workers who are adversely affected by transit assistance, but not to workers who are adversely affected by other causes. For example, no job protection is afforded to workers who are employed in a declining industry or

whose skills have been rendered obsolete and their capital values diminished by the progress of technology. Finally, labor protection arrangements aid transit workers who are adversely affected by assistance grants, but they provide no protection for owners of physical assets who might be adversely affected by those grants.

Firms are given the option of continuing to operate according to prevailing practice with respect to the organization of work or of introducing change, subject to the constraint that currently employed workers who are made redundant by change receive compensation payments. A tax is imposed on change. This tax produces disincentives that may make it not worthwhile to introduce change. The incidence of such a tax on change is distributed among consumers of the industry's product, owners of complementary resources employed in its production (including complementary labor), and substitute classes of labor that may have been employed in the now-estopped new process. It is also borne by the taxpaying community when the deficits arising from the compensation payments are covered from the community's general revenue funds.

Once it is seen that the gains of some are secured at a cost to others, it is not certain that equity is achieved by making incumbents the beneficiaries of policy. It is understandable, of course, that incumbents should combine to lay claim to benefits for themselves and, indeed, that they should assert multiple grounds in its defense. It is not surprising that each values his own interest more highly than that of others. But there is no reason why neutral persons should rank equitable priorities in the same way.

The equity argument for the protection of labor from the adverse effects of policy is also rendered questionable by the operation of labor market forces. If there are two classes of employments alike in all respects except that the prospective adverse effects from public policy are expected to be large for one of them and small for the other, a well-functioning market will arrange to pay a higher wage on current account for each hour worked to those in the employment that will suffer large adverse effects and a lower wage on current account to those in the employment that will suffer small adverse effects. Since the future is not known with certainty, the market makes estimates of future occurrences with uncertainty. This does not mean that the risks of adverse effects are not paid for in market transactions but only that some will be underpaid and others will be overpaid for those risks. There is no reason to expect systematic underpayment and, on average, workers will have been compensated for risk. The market will already have paid workers for the adverse experiences that they confront. Labor protection arrangements

therefore involve compound payments for those adverse experiences. On this ground, too, the case for labor protection provisions is not a strong one.

In sum, if the protection of labor diminishes efficiency and this is not clearly offset by the service of equitable purpose, it is not certain that the protection of incumbent labor is consistent with the public interest.