more streamlined system of regulation with major emphasis on their parochial interests. Some authorities require comprehensive fare studies before they make decisions, while others make dramatic fare decisions without the evaluation and analysis that are warranted. The same is true regarding service, routings, general policy, and so on. Great inconsistencies are often demonstrated. Strange political considerations are often suggested in the decision-making process.

Some transit systems suffer from the requirement that permission be requested from several levels of authority before decisions are made. Regulations may be administered at as many as five different levels of government. Related indirect regulations provide additional problems.

The role of the transit authority as a regulatory body has become very important. Therefore, it appears essential that some clear, concise direction and assistance be developed and provided to the authority. Many authorities have been faced with making major regulatory decisions without having the needed expertise and data to handle the question adequately.

The regulatory role needs to be clearly defined to reflect a broader outlook. In today’s world, it would seem that there is far more to the regulation of modern local transit and that there is a need for a changing role in regulation. There is ample evidence that many current regulatory practices and procedures do not encourage determination of public interest in its broad definition. It is well recognized by many officials concerned with the planning and operation of local public transit and other urban functions that local transportation regulatory bodies can and should play a more positive, key role in contributing to overall urban development and transit service objectives. Not only should regulatory bodies decide on controls over transit, but they should also be making recommendations and assisting in a positive way. They can do this only by looking ahead and realistically adjusting to the times.

Regulation of Urban Transportation

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The famous case of Munn v. Illinois (1877) occurred on the eve of widespread introduction of three technologies that involved significant economies of scale: the telephone, generation of electric power for lighting and other purposes, and the electric street railway. This case, which established state power to regulate prices in businesses that affect the public interest, thus occurred just in time to establish state regulation of enterprises of a character that, according to most textbook analyses, justified some form of state intervention.

The electric street railway was the last of the three to have widespread adoption. Although electric streetcars were developed experimentally in the early 1880s, the technology did not become more economic than its rivals (the horsecar and the cable car) for general application until Frank J. Sprague’s installation of his direct current technology in St. Joseph, Missouri, in September 1887 and Richmond, Virginia, in February 1888. By 1893, the electric streetcar had demonstrated its superiority in costs and quality of service over both its rivals, and by the turn of the century conversion of American street railways to Sprague’s technology was virtually complete.

Previously there had been no apparent economies of scale for horsecar or cable car operation. The cable car, in particular, had an inflexible relation between the powerhouse and the line. The optimal arrangement was to place a powerhouse about 4 km (2.5 miles) outside of the central business district (CBD) to run approximately 8 km (5 miles) of cable lines. The alternative of locating a powerhouse in the CBD, so that it would power the lines radially, entailed buying land in the CBD, typically the most expensive land in the city. There appears to have been no economy of scale in proliferating powerhouses. St. Louis was typical: Each major street out of the CBD was served by a separate company, of which five used cable cars and the rest horsecars. When the electric streetcar was introduced, the most economical way of distributing power was to have a single power station with a citywide grid of electrical facilities. After 1907, this consisted of three-phase generation of alternating current with a series of substations around the city to convert the alternating to direct current with the positive in the overhead wire and the negative in the track. This arrangement combined the economies of generation and transmission of alternating current with the excellent acceleration properties of direct current. In St. Louis the six powerhouses of the five cable companies were replaced with a single powerhouse capable of operating all the former cable lines and the city’s previous horsecar lines when they were electrified. In St. Louis, as in most cities, the street railway system was rapidly unified into a citywide monopoly.

The technological improvement of the electric streetcar— which was a very great one—manifested itself not in a fall in the traditional 5-cent fare but rather in improved quality of service and in citywide transfer privileges, which municipal governments typically extracted from the transit companies as a quid pro quo for the monopoly powers granted them. In some cities the 5-cent
In the case of the street railway, the discrimination was, as pointed out, is essentially a form of taxation. The pricing system is dissipated in cross-subsidies of some direct or indirect form of discrimination, since presumably the people who traveled longer distances paid a higher fare per block than those who traveled shorter distances. This was a rational form of discrimination, since presumably the people who used streetcars for shorter distances in preference to walking were people who gave high value to their time and so had a lower elasticity of demand for the service than people who traveled the longer distances.

The process of regulation set forth in Smyth v. Ames has been subjected to a great deal of academic condemnation, especially in recent years. Most basically, the process is founded on the presumption that the monopoly characteristics of the regulated industry were permanent, but this could never be a justifiable assumption. Any industry will decline if given enough time. The regulated industries were particularly likely to do so, however, because of their discriminatory rate structures. These rate structures give the economy the incentive to develop some alternative to the regulated service that is capable of competitive organization and that has a comparative advantage for the sort of service against which the discrimination is directed. In the case of the street railway, the discrimination was directed against passengers who traveled longer distances. This was a rational form of discrimination, since presumably the people who used streetcars for shorter distances in preference to walking were people who gave high value to their time and so had a lower elasticity of demand for the service than people who traveled the longer distances.

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The economy was not long in developing a carrier to engage in cheap skinning, i.e., a carrier with a comparative advantage for moving passengers less than 4 km. This carrier arose in the form of the jitney in Los Angeles in mid-1914. The early jitneys were simply Model T Ford touring cars used as common carriers. The service was, in general, provided by owner-operators as a casual employment. People went into the activity as they became unemployed or as their alternatives otherwise became unsatisfactory. At any given time about 40 percent of jitney operators performed the service full time and 60 percent operated part time. The part-time operators were divided into some who drove 2 h in the morning and 2 h in the evening and others who simply carried passengers as common carriers on their trips between home and work. The jitneys were a competitive market in transportation: They manifested the quick response to changing demand conditions and the absence of monopoly gain that are characteristic of such markets.

Had the jitneys been allowed to survive they would have constituted a competitive bus industry. In the year and a half or thereabouts in which they were tolerated, the vehicles evolved toward specialized carriers, mainly truck and automobile chassis fitted with wooden bodies specifically designed to carry passengers. As is universally recognized, this was really the origin of the bus in America. Previously there had been only one successful bus operation in the country, the Fifth Avenue Coach Company in New York. This was, however, a special case because of New York's unwillingness to allow electric streetcars on its principal north-south thoroughfare. Although the origin of the bus in a technological sense in the jitney movement has long been recognized, it has not in general been recognized that the jitney movement of 1914 to 1915 demonstrated the technological sense in the jitney movement has long been recognized, it has not in general been recognized that the jitney movement of 1914 to 1915 demonstrated the versatile economic organization.

Had the jitneys been allowed to survive they would probably have driven the electric streetcars out of existence except on the most heavily traveled routes by the mid-1920s. The urban transportation system in our major cities would consist mainly of competitive owner-operated vehicles. These would range from private automobiles registered as common carriers through specialized vehicles like Volkswagen microbuses and American van vehicles run by full-time operators to a smaller number of 40 to 50-passenger diesel buses like those that currently operate in the industry. Jitneys would operate without restriction as to route, schedule, or fare. They could accordingly operate faster because of free choice of route, and, being in the main smaller, they would be able to operate longer distances without stopping. Judging from the tolerated jitney service on the Martin Luther King Drive in Chicago, they could apparently provide a higher standard of service than such entities as the Chicago Transit Authority for about 60 percent of the cost and still yield a profit.

The jitneys, of course, were not allowed to survive but were put down in every city in the country. They were tolerated on Martin Luther King Drive in Chicago, on Pacific Avenue in Atlantic City, and on Mission Street in San Francisco, but they were restricted to linear routes and thus did not constitute the free-roaming competitive market in urban transportation that the jitneys had been and could have continued to be. The reason for the universal suppression stems in part from the nature of regulation. According to Smyth v. Ames the regulatory commission is obligated to provide a regulated firm with a fair return on a fair value of investment. Nothing in Smyth v. Ames indicates that the regulated firm can be expected to decline, but, as I have said before, the nature of the pricing structure was such as to assure the decline of regulated firms. The jitney episode was simply the earlier manifestation of what should have happened predictably in the late nineteenth century when regulation was taking shape. Partly out of the common-law obligation under Smyth v. Ames and partly out of the city's desire to preserve the cross-subsidy in the 5-cent fare,
every city opted to protect its street railway by putting down the jitneys.

It should also have been predictable that such a course of action would be very largely self-defeating. Putting down the jitney meant that the public would turn to the automobile as a private carrier rather than as a common carrier. The policy of putting down the jitney was the analog on the municipal level of a federal policy of simply prohibiting common carriage by truck. The federal government mercifully did not engage in such a policy but rather put trucking into the same cartel as the railroads under the Interstate Commerce Commission. 

The trucks were arising simultaneously with the jitneys in response to the incentives in railroad tariffs to find some competitive device to move goods that were high in value in relation to their weight, for those were the goods against which the discrimination in railroad tariffs was directed.

The consequence of putting down the jitneys was to cause the conversion from streetcar to bus to be made within the economic organization of the street railways. Costs moved steadily in favor of the bus and against the electric streetcar over the course of the second quarter of the twentieth century. The bus was also more flexible in being able to pass other buses on the line, in making empty return trips in rush hours to gather up additional loads, and in being able to avoid such impediments on the line as fire equipment.

The street railways exhibited some symptoms of being a declining industry (notably chronically depressed rates of returns) as early as 1918. Passenger counts peaked in 1923 and thereafter declined quite steadily. The quality of the service that streetcars offered was such that, except in the lowest income brackets, people tended to turn away from the service in favor of automobiles as their incomes increased. The industry was confronted with a relatively low price elasticity, so that losses could be minimized by a policy of raising the fare and contracting the rate of output. Accordingly, this became one of the most conspicuous declining industries in the economy. It was the first of the major regulated industries to confront its regulatory commissions with the situation in which a target rate of return could not reasonably be sought.

Increasingly, the regulatory commissions were confronted with the problem of simply keeping the transit companies in business. Indeed, most of those located in the smaller cities have already gone out of existence. By the mid-1950s, most were unprofitable enough that municipalities had to assume their operation. By the mid-1970s, they are typically unprofitable enough that cities are unable to support them; the federal government has thus begun a policy of first investing in them and more recently bearing a portion of their operating losses. Regulation contributed to the problems, at least peripherally. Given an elasticity of demand estimated at -0.3 to -0.4 for the industry, it appears that the transit firms are not able to maximize net receipts. They would be better off to raise fares to a level at which demand is elastic—which is to say at which the elasticity is absolutely greater than -1—and to contract the output. Regulatory commissions appear to have been reluctant to see accelerated rates of decline of output in the industry. The conversion of the Chicago transit system to public ownership in the form of the Chicago Transit Authority in 1974 is widely attributed to the unwillingness of the state regulatory commission to allow rate increases to the predecessor private enterprises.

The conversion of most major transit systems to public ownership has reduced the significance of regulation. Many of them are free of regulatory control, and for most of the rest the regulation is nominal. The enterprises are, in the main, public authorities that do not attempt to maximize net receipts and whose administrators are in no position to capture an entrepreneurial gain from effective resource allocation within the system.

American transit enterprises remain what the policy of putting down the jitneys assured: a monopolistic organization, a linear pattern of routes mainly radial to the CBDs, a relatively large vehicle (a 40 to 50-passenger diesel bus) as the standard equipment, service provided on a schedule with approximately the quality of service of the old streetcar system, and a unionized labor force. The monopolistic organization of the transit system tends to produce a strong union by putting a small group of the drivers in a crucial position to tie up the entire operation. Accordingly, the Amalgamated Transit Union is a relatively strong one with a monopoly gain estimated at from 1 percent to 18 percent of drivers' earnings. Conversion from private to public ownership strengthened the unions by replacing profit-seeking entrepreneurs with public servants who have lower incentives to resist wage increases. In addition, when federal funds are provided for the conversion under the Urban Mass Transportation Act, section 13c of the statutory authority assures extensive protection of job rights.

In turn, the strength of the union in the industry gives the operators in large cities (both public and private) the incentive to choose a relatively large vehicle (the current 40 to 50-passenger diesel bus) instead of the Volkswagen or van vehicles that jitney operators in a competitive transit industry would probably use. Thus, the transit industry is overcapitalized—a situation that a federal transit subsidy program tends to make worse because bus replacement programs and the replacement of major bus lines with rapid transit rail lines are the investments to which most of the funds in the program are allocated.

As economists have recognized for at least 15 years, rate-base regulation also tends to make regulated industries more capital intensive than they would otherwise be. This probably is not a major consideration in transit, since regulation in transit has not been in any real sense directed to an effort to secure a target rate of return since 1918. The misallocations of funds to the transit system stem from the decision to put down the jitney (which in turn stems from the obligation of Smyth v. Ames), at least in part from local decisions to establish transit authorities, and from a federal program that helps fund such decisions.

Accordingly, one must conclude that regulation of transit is no longer highly significant. The damage it did is in the past. The appropriate course for public policy is to undo that past damage by abolishing the transit authorities, ending the Urban Mass Transportation Assistance Program, and allowing competitive markets in urban transportation. Anyone who wishes to provide urban transportation should be allowed to do so, provided only that he demonstrates a competence in driving (e.g., by qualifying for a chauffeur's license), makes a show of financial responsibility, and meets safety requirements for his vehicle. He should then be allowed to operate without limitation on routes, fares, or schedules. If such policies were implemented, along with variable user charges on streets and taxation of noxious emissions, what appear to be severe problems of the urban transportation industry would rapidly disappear.