

JITNEY OPERATIONS IN THE UNITED STATES

Arthur Saltzman, Transportation Institute, North Carolina Agricultural and Technical State University; and
Richard J. Solomon, Monson, Massachusetts

An analysis of the history of jitneys in the United States is important to the understanding of the current situations faced by demand-responsive transit systems such as dial-a-ride. This paper focuses on the lessons that are applicable to innovations in demand-responsive transit systems. Within a few years of their introduction in 1910 as ad hoc motorized stagecoaches, jitney operations had spread across the country and were diverting as much as 50 percent of the peak-hour streetcar passengers. The transit industry reacted by getting legislation passed that regulated most jitneys out of existence. Many of these regulations still exist and could prove to be a major stumbling block to the implementation of systems such as dial-a-ride. Transit operators seemed to take the attitude that they were in the electric street railway industry as opposed to being in the business of urban transportation. Early conventional motor buses were slow in being introduced by those transit operators. In fact, most of the impetus for change came from outside of the established industry. There are illegal jitney operations that are now serving unfulfilled travel demands of inner-city residents. It is suggested that there is a need to create a favorable climate for more experimentation with jitney operations.

•MODIFIED 5- or 6-passenger touring cars were used for common-carrier service between some western American cities by 1910 (1, p. 2). These were ad hoc operations, and because they used the public roads they were initially ignored by both the regulatory bodies and the railroads. In essence, they were considered motorized stagecoaches.

One of the operators, who provided service between San Diego and Los Angeles, established a similar motorized "stage" operation between central Los Angeles and several suburban towns by 1911. A 5-passenger Ford Model T would cruise along the route of a downtown trolley line and pick up passengers who were destined toward some vaguely defined suburban location, such as Long Beach. A practice was made to deliver those passengers as close to their destination as was deemed feasible (by the driver) without a major diversion for the other passengers. These vehicles were called "jitneys," referring to the jitney (5 cents) charged per ride.

Within 2 or 3 years, these ideas caught on and spread across the country, principally among owners of automobiles who wished to add additional income to help pay for their vehicles. Some jitney operations—such as those in Paterson, New Jersey; Bridgeport, Connecticut; and Detroit, Michigan—diverted as many as 50 percent of the streetcar passengers in the peak hour and more in the off-peak hour along the corridors traversed (2, p. 425; 3, 4, p. 217). In some smaller cities, such as Bridgeport and Atlantic City, where the street railway company was on precarious financial grounds, the jitneys helped put the street railway out of business in the post-World War I era. As admitted by the spokesmen for the street railway industry, the jitney's prime attractions were its frequency of service, its flexibility of route to meet changing, sometimes daily, demands, and its inability to accommodate standees (5, p. 295).

Shortly before the entry of the United States into World War I, a recession attracted many men into the jitney business, particularly those who had recently bought automobiles but found themselves without jobs. By counting its subscribers and assuming as many nonsubscribers, The Motor Bus magazine estimated that some 24,000 jitneys were in operation in the United States by 1916. By 1917, franchised street railway operators were going to great lengths to prove that the jitney was a serious menace to conventional transit. Their case rested on allegations that jitney operators were so unreliable and unbusinesslike that they actually lost money in providing the service. This was undoubtedly true for many naive operators, for depreciation was often omitted from their costs; the Fords would be run into the ground, and the would-be transit entrepreneurs would then find themselves without funds for replacement. [This discussion of the early days of jitneys is based on several documents (4, 5) published during that period. Doolittle particularly chastises lack of depreciation accounting. Also a contemporary short-lived periodical, The Motor Bus (not to be confused with a later periodical having a similar name), captured much of the flavor of the pioneering days. Farmer (6) reviews some of the early material but does not follow jitney progress after World War I.]

The large increase in the number of inexperienced operators, scarcity of parts and fuel, and particularly harassment from the streetcar interests were to decimate the jitney industry. According to Farmer (6), "By 1919, streetcar companies had effectively defeated the jitney mode through special legislation and statutes." However, the resurgence of jitneys took place many more times, though few cities reported jitney operations after that year.

Instead of trying to compete by introducing better and more variegated public transportation services, the transit industry's response to recognized competition was to attempt to regulate the innovations out of existence. This early legislation temporarily reestablished the public transportation monopoly position of the electric railways in almost all areas except noncommon carrier and single-use taxicab operations. Almost every city had some form of restrictive anti-jitney-bus ordinance. They required either high bonding levels for vehicle operations or franchise rules for fixed routes to be established according to the determination "of public convenience and necessity" (7).

It is relevant to the introduction of all innovative systems in public transportation that those regulations still exist and could prove to be a major stumbling block to the implementation of systems such as dial-a-ride by other than the public authorities or the established transit operator. This regulatory atmosphere has probably contributed to stifling the private funding of research and development in urban transportation much more than has been recognized.

DEVELOPMENT OF JITNEYS INTO MOTOR-BUS OPERATIONS

Many of the jitney operators who were able to survive the first repressive regulations assumed streetcar operating characteristics. The Motor Bus magazine often implored its readers in the early days to establish fixed routes and schedules and build "streetcarlike" bus bodies so that they would appear more "legitimate" to both the public and the authorities. Some jitney operators became feeders to streetcar and electric inter-urban truck routes; other jitney operators sold out to the electric railway interests and accepted employment as the managers of a railway's motor-bus division.

In a few rare cases, the existence of weak laws or lack of enforcement of anti-jitney ordinances permitted jitneys to survive and continue to offer more flexible, if not more reliable or comprehensive, services than those offered by the established, conventional transit operator. (Flexible scheduling permitted demand-responsive headways with an ease that more rigid operations could not assume.) For example, Mayor Frank Hague of Jersey City was powerful enough to prevent the Public Service Railway Company (a giant in its own right) from enforcing or having enacted such ordinances. As a result, Hudson County had a proliferation of jitneys that eventually settled into the pattern of the several dozen, small 1- and 2-vehicle bus operators found in Hudson County today. There is little indication that service is worse there under this method than in neighboring New York City where most of the transit operations come under one publicly operated monolith. (Public Service Railway Company seemed to learn its lesson early;

it was one of the first operators to accept the motor bus and, apparently stimulated by its earlier losses, was eager to experiment with new technology.)

In Atlantic City, New Jersey, the jitney operation (which can trace its origin back to the jitney craze of 1916) is an example of a more catholic type of operation, which yet managed to persist up to today (8). Vehicles are individually owned and, through a cooperative association, are somewhat dynamically dispatched. Until 15 years ago, Atlantic City jitney operators would take passengers to their destinations for twice the prevailing fare (regular fares were usually lower or the same as the local conventional transit operation fares) under the following conditions: (a) the operator was near the end of his route and (b) the destination was not more than a few blocks off the route. Similar legalized jitney operations can be found in a ghetto area in San Francisco and several resort type of beach communities around the country.

INTRODUCTION OF THE CONVENTIONAL MOTOR BUS

The first applications of the internal combustion engine to roadable public transport vehicles occurred soon after the introduction of the gasoline-powered automobile in both Europe and America near the turn of the century. [Glaeser (9, p. 84) noted that Chicago Street Railways experimented with the internal combustion engine on streetcars during the 1893 World's Columbian Exposition, and the American Electric Railway Association made a great point of citing the Ford Motor Company experiments (1910-1920) with gasoline-driven streetcars (4, p. 2).] By 1905, motor buses, which had designs not too dissimilar from those of contemporary streetcars, albeit somewhat smaller, were running on regular routes in London and in New York. A 34-passenger double-deck bus had been imported to the United States in 1905 for a trial, and in 1907 Fifth Avenue Coach in Manhattan had 14 more in service (10, 11, 12).

It is true that early buses were noisy, uncomfortable, and quite a bit more expensive than later versions (to both the operator and the passenger who often paid a double fare on a bus), but their use in New York, London, and many other European cities indicates that satisfactory equipment for innovation was available. In fact, by 1914, the London horse-drawn omnibuses had been entirely supplanted by more than 3,000 motor buses designed, built, and operated by the London General Omnibus Company (the company that trained Yellow Truck and Coach's chief designer).

In contrast, horse-drawn streetcars remained in service on some crosstown routes in Manhattan until 1923 because the operator could not afford to electrify and was not amenable to the motor bus. The horse cars were replaced with battery-powered streetcars. The motor-bus situation in Europe was not entirely unnoticed in the United States. In a paper read at the Sixth National Conference on City Planning in May 1914, McCollum (13, p. 5) stated:

The operating efficiency of the motor bus in London . . . probably exceeds the efficiency of many street railway systems. In Paris there are more than 1,000 vehicles of a type unlike those in London, operating under different conditions, but performing nevertheless an efficient passenger service. New motor-bus routes are being established daily in European cities. Some are being added to street railway systems and are designed to supplement the railway services by extension into districts where the traffic does not warrant the permanent investments of the large sums necessary for the operation of a railway.

Probably, the main reason that motor buses did not take hold was that the so-called "transit trusts" had vast sums invested in their streetcar lines and were not willing to make their investment obsolete or to take a chance on new technology. Those operators, with some exceptions, seemed to take the attitude that they were in the electric railway industry as opposed to being in the business of urban transportation. [Glaeser (9, p. 86) noted, "Philadelphia is unique in that under the former 'Mitten Management' a completely coordinated urban transportation system has been achieved. It consists of elevated, subway, streetcar, trolley-bus, gas-bus, and taxicab service." This coordination seems to have ended by the late 1940s. In Newark and Camden during the 1920s and 1930s, Public Service Railway of New Jersey also operated significant portions of the taxicab fleets coordinated with transit; and in Hamburg, Germany, a transfer and

reduced fare pass was recently introduced for coordinated use with the local, independent taxicab and transit systems.]

A member of the motor-bus industry attended an American Electric Railway Association convention in 1922 as the representative of a bus manufacturer in Chicago. He reports (14, p. 2) that there was enough ill feeling toward the motor-bus industry at the convention that he was "testing the hardness of some red apples, being comforted in their possibilities as weapons of defense, if necessary, in covering our retreat from the convention." A few years later in 1925, the same representative was to praise the progress made by the street railway industry in changing its attitude toward the motor bus (14, pp. 3-5).

Although consistent and accurate statistics are not readily available on independent lines, the use of motor buses by electric railway companies accelerated from 370 buses on 700 route-miles in 1922 to 8,277 buses on 14,300 route-miles in 1927 (15). In 1923, buses carried 661 million revenue passengers, which was only about 5 percent of the total of 10 billion urban passengers for the entire industry. The urban transit industry hit its peak ridership between the World Wars in 1927 with about 12 to 13 billion revenue passengers; buses accounted for 2.4 billion, and streetcars and rapid transit carried the remainder. [The data collected in that period were very poorly stratified between urban and interurban operations and failed to distinguish intermodal transfer passengers. Figures are often quoted, i. e., from Moody's Public Utilities Manual or Transportation Manual, showing revenue passengers as high as 17 billion for 1927. Much more reliable are data given by Barger (16) or by the American Transit Association (17). The latter attempts to compensate for these figures.]

Streetcar companies were eventually forced to make the change to the motor bus. By the 1930s, streetcar equipment was badly in need of replacement, but investment money had been difficult to attract since the industry's growth had been stemmed after World War I and was even more so during the Depression. Buses were generally cheaper to purchase than streetcars, and the restricted capital available made the wisdom of changing over to the motor bus clearer.

However, most of the impetus for change came from outside of the established industry. This was primarily caused by the lack of financial and management resources within the transit companies and was exacerbated, perhaps, by the vacuum created during the forced divestitures of operating properties from the power trusts (18).

In some colorful reporting in 1936 (10, p. 63), the virtues of the bus are contrasted with those of the streetcar.

Over the past fifteen years or so, the city bus has clawed, butted, and fought its way through traffic-glutted streets, through spongier and more perilous politic-glutted operating franchises, until it is, today, a phenomenon of mass transportation. You see city buses everywhere—mastodonic metal hulks gliding in and out of traffic with a soft hissing of air brakes, a rich sound of balloon tires on asphalt, a resonant hum of engines concealed within their structures. And the main reason this almost brand-new vehicle became a phenomenon is because the faithful electric trolley had sunk into such a state of obsolescence as to be scarcely tolerable. During the fifteen years the bus was growing, the trolley, as an invention, virtually stood still. It just grew older and the street it was still suffered to haunt grew noisier with its clanking decrepitude. Half the trolleys now in use are twenty years old or older: the average age is around sixteen.

The streetcar industry did band together beginning in 1929 to build an ideal trolley. The group, called the Electric Railway President's Conference Committee (PCC), did an extremely good job in producing the PCC car. By the late 1930s, PCC cars were in wide use and proved to be capable performers. Drivers, operators, and the public all liked the PCC's, but their introduction has not averted the steady abandonment of streetcar lines.

The replacement of trolleys by buses ("bustitution" as it is acrimoniously described by trolley fans) has almost been complete in the United States although there are still operations in a few cities such as Boston, Newark, Pittsburgh, Philadelphia, San Francisco, and New Orleans.

RESURGENCE OF JITNEYS

Jitneys had a resurgence during the 1930s as unregulated or semiregulated operations, although a degree of regulation was often imposed by high insurance bonds. [In 1932, *The Motor Bus* magazine, in an article on the St. Louis operation, indicated that the service car-jitney concept was still prevalent in a number of cities well after the enactment of repressive antijitney ordinances of the early 1920s. Similar articles appeared elsewhere (7, 19, 20, 21). In 1929 Hunter (22) noted that "the taxicab business . . . with lowering of rates and introduction of lightweight cabs, gives promise of increasing competition with street railways. This is particularly true of short-haul travel where the taxicab rate for three or four persons may compare with or actually be less than the streetcar fare." He was referring to the generally illegal practice of taxis operating as transit common carriers, known as cut-rate cabs in some places, and essentially the same as jitney operations.]

There were probably 2 major reasons why jitneys reappeared in large numbers. First and most important was the same pressures from unemployment that had caused the original jitney boom in 1915-16. Many automobile owners who were out of work decided to operate their vehicles as jitneys. The second reason was that urban travel was reorienting itself spatially, temporally, and quantitatively, and the transit industry was not changing its routes and services rapidly enough to meet new demands.

During the 1930s public referenda were held in several cities to approve jitneys as a supplement or replacement for conventional transit; undoubtedly, the intention of creating new jobs underlay many of those proposals, but the fact that the transit operators fought very bitterly indicated that they anticipated a severe economic threat from the flexible jitney service. In Los Angeles, which was served by 2 major, nationally powerful trolley companies, the referendum was won by the traction interests by a hair (23)—the proposal was to turn all transit over to individually owned jitney buses.

ST. LOUIS SERVICE CARS

Few numerical data have been found on the impact of unregulated jitneys, but we do have some data on the service cars in St. Louis.

The St. Louis jitney operators had banded together in the 1920s to provide an insurance base and a means of internal self-regulation for various purposes. The jitneys, known as service cars, ran on fixed routes set by the Consolidated Service Cars Association itself. Service could be adjusted to demand and routes could be changed more easily by the association than by the conventional operator. Fares initially were the same as those on the streetcars but apparently could vary much more easily, according to economic factors, than the transit company's fares (24). In 1957, a number of years before the St. Louis service-car operators were bought out by Bi-State Transit System, which was the public transit operator, a survey conducted by Gilman (25) indicated that on the routes with which they competed the service cars carried some 70 percent of the total public transport load during midday and about 50 percent during the rush hours. [Although the numbers and following quote are from Gilman's study (25), the observations are from Lewis Schneider, an acute observer of the scene who spent many years riding the service cars. Only 3 service-car routes remained in 1957.] The 20-cent fare was the same as the streetcar fare (for a weekly pass on the streetcars, the fare was 20 cents per ride), but service cars guaranteed seats to all who could ride (during the peak the streetcars showed a passenger per seat ratio ranging from 1.2 to 1.6), ran more frequently, and, because of fewer intermediate stops and ability to dodge traffic, usually made better time than the streetcars despite the latter's private right-of-way over portions of the routes. However, Gilman recommended against continuation of the service cars, stating:

With the exception of three half-hour periods during the p.m. rush . . . the combined passengers of both St. Louis Public Service and the Consolidated Service Cars could be carried on existing St. Louis Public Service transit service at acceptable service standards.

Although the service cars offer a more frequent service than could be given a similar passenger volume by either street cars or buses, this is not sufficient justification for their parasitical ac-

tivity. Operation of this type of transit service is extremely wasteful of street space as each service has a capacity of only eight persons as compared to the 50 or more seats in a transit vehicle. Since individually operated vehicles cannot be expected to exchange transfers, general coverage of the city by service cars, instead of transit, would require about half of the riders to pay two fares.

Competitive services of this character should not be permitted. They can survive only in areas where there is heavy transit riding, and these are the areas in which an area-wide transit system needs all of the business to average out the thin areas in which noncompensatory service is being operated.

This consultant report is typical of the established transit industry's position. In the face of competition, the industry tries to eliminate the competition and regain its monopoly position. The lesson that better service draws more customers seems to be difficult to translate into operating practice by the transit operator. He often sees the new system only as a threat to his operation, and one that must be eliminated by prohibition rather than by innovation.

The service cars basically served white, middle-class neighborhoods during the 1930s. By the late 1950s, the service cars were primarily serving black patrons. The reasons for this change were not established in any of the published reports, but demographic changes in St. Louis and increased automobile ownership among whites were probably the major factors. It is worth noting that the private transit operators had repeatedly attempted to take over the service cars while the patronage was predominantly white and had failed. When the dominant power structure was using the service, the service was allowed to exist even against the protests of the transit company. When minority groups were the main patrons, the service was eliminated. In all fairness, it should be noted that there was another factor that caused the service takeover in 1965. The incoming mayor owned Consolidated Service Cars in conjunction with several other prominent St. Louis businessmen. The threat of conflict of interest was certainly another factor that influenced the owners of Consolidated to sell out to Bi-State Transit System.

THE FUTURE OF JITNEYS IN THE UNITED STATES

A major resurgence of jitney operations cannot take place in the United States unless the restrictive regulations that originally decimated the industry are removed from the law books. Undoubtedly, the established transit operators and regulatory agencies will block any changes in the antijitney ordinances to preserve their transit monopoly. However, various pressures may eventually force changes in those regulations. One example of that pressure is the constant complaints about lack of adequate transit facilities in ghetto areas and in low-density central city sections that are not on center-city arterials. [Farmer (6, pp. 272-273) gives other examples of pressures that could force changes in antijitney regulations.]

Current shifts in transportation demand trends would tend to indicate a need for the more diffused routes that jitneys could service. The suburban explosion has put a larger and larger portion of the population in less dense areas. The jitney seems to be better able than conventional transit to provide economical service in less dense areas. Jitneys may be an alternative to many bus routes that are unprofitable. In most low-density areas, present transportation systems either operate unprofitable routes or provide no service at all. Many bus routes have been discontinued when there was still sufficient demand along these routes to support jitney operations. No detailed analysis shall be made to justify the ability of jitneys to operate where buses have failed, but it should be evident that, because of their smaller size, lower overhead, and non-unionized workers, jitneys are less expensive to operate per mile than buses: Jitneys need lower revenues per mile than buses to cover costs and make a profit and can therefore be viable along less densely traveled routes. An additional point in favor of jitneys is that because of their superior service characteristics they could attract more passengers than buses would along any given route. It is true that jitneys in the past have tended to serve densely traveled corridors. Perhaps regulations would be necessary to restrict jitneys to the low-density areas so that they do not skim the cream off bus transit operations. Jitney operators being locally attuned may also discover innumerable new routes

that are viable for them but have never been exploited by the established area-wide transit operator.

The presence of "gypsy" taxis and illegal jitney operations in low-income ghetto areas all over the United States from the Hill District in Pittsburgh to Watts in Los Angeles is further evidence of the demand for this type of service. Those gypsy taxis often appear where the established transit operation has failed to provide a needed service. Few hard data are available on the extent of such operations, but an example is the route established a few years ago in Queens, New York City, by a black surgeon to aid ghetto dwellers in reaching his hospital (26; 27, p. 58). The city eventually forced him to stop running his tailored service, but there is no evidence that the public transit operator has yet responded to this community need. It should be noted that almost every poverty transportation project has made reference to legalizing such operations. For example, the latest progress report (28) from one of those projects refers twice to jitneys, and suggests "an entirely new approach with consideration being given to less organized and more ad hoc arrangements such as the encouragement of car pools... or through the establishment of low-fare, owner-operator, jitney or taxi-type services for the carless population." Many who could not previously afford a private automobile could then own one based on its potential for producing income. Allowing jitneys to operate in any area could bring significant new employment possibilities to the poor or jobless and supplemental income opportunities for anyone who had a vehicle in good condition.

Farmer (6, pp. 273-279) has presented a thorough discussion of how jitney operations could be experimentally established at very little cost to any governmental agency that is willing to support such an experiment. Since 1965, when his article was published, there has been no known jitney experiment, yet the current proliferation of nonlegal jitneys in many urban poverty areas could precede some relaxation of restrictive legislation.

REFERENCES

1. Motor Transportation. Internat. Textbook Co., Scranton, Penn., 1930.
2. Cabot, P., and Mallot, D. W. Problems in Public Utility Management. McGraw-Hill, New York, 1930.
3. Public Service Railway Company of New Jersey, unpublished repts., 1921-1922.
4. Proc., Federal Electric Railway Commission. U.S. Govt. Printing Office, Washington, D. C., 1919.
5. Doolittle, F. Studies in the Cost of Urban Transportation. American Electric Railway Assn., New York, 1916.
6. Farmer, R. N. What Happened to the Jitney? Traffic Q., April 1965, pp. 264 ff.
7. Anti-Jitney Legislation. American Electric Railway Assn., mimeo., Oct. 1, 1924, and American Transit Assn., updated to 1932.
8. Guenther, K., and Urbanik, T., II. Atlantic City Jitneys. M. I. T., Cambridge, CARS Rept. EC-33, Sept. 1969.
9. Glaeser, M. G. Public Utilities in American Capitalism. MacMillan, New York, 1957.
10. Yellow Truck and Coach. Fortune, July 1936.
11. Rowsome, F., Jr. Trolley Car Treasury. Bonanza Books, New York, 1956.
12. Hecker, G. C. The History of Urban Transportation. In Principles of Urban Transportation (Mossman, F. H., ed.), Western Reserve Univ., Cleveland, 1951.
13. McCollum, J. A. Utility of the Motor Bus and Municipal Problems Pertaining to Its Operation. 6th Internat. Conf. on City Planning, Toronto, May 1914.
14. Dahl, T. A. The Field of the Motor Bus in the Trolley Industry. AERA Magazine, March 1925.
15. Census of Electrical Industries, 1922 and 1927.
16. Barger, H. The Transportation Industries, 1889-1946: A Study of Output, Employment, and Productivity. National Bureau of Economic Research, New York, 1951.
17. The Urban Transportation Problem. American Electric Railway Assn., 1931.
18. Saltzman, A., and Solomon, R. J. Historical Overview of the Decline of the Transit Industry. Highway Research Record 417, 1972, pp. 1-11.

19. Tompkins, R. The Taxi Runs Amuck. American Mercury, Aug. 1932.
20. Simpson, H. Trends in Traffic and Taxi Regulation. Transit Jour., Jan. 1936.
21. Service Car Challenge. Bus Transportation, July 1932.
22. Behling, B. Competition and Monopoly in Public Utility Industries. Univ. of Illinois Press, Urbana, 1938.
23. Jitney and Bus Proposals Defeated. Transit Jour. News, May 11, 1935.
24. St. Louis Service Cars. Motor Bus Magazine, 1932.
25. Gilman, W. C. St. Louis Metropolitan Transportation Study. 1957.
26. New York Times, July 26, 1967.
27. Ornati, O., Whittaker, J., and Solomon, R. Transportation Needs of the Poor. Praeger, New York, 1969.
28. People, Transportation, Jobs. Tri-State Transportation Commission, New York, Prog. Rept. 4, Oct. 1969.