

withhold taxes because of this relation. Should we pay FICA taxes? We have now defined that situation, and that is to the good of the industry and, therefore, the public. But some uneasiness persists.

The frequent entry-exit problem is best illustrated by the taxi service in Washington, D.C. That city has 8,000 licensed taxis and an estimated 1,500 on the streets in the best of times for the industry and, therefore, the worst of times for the rider. That city is full of part-time people. What does that do to the industry? I think it gives us a bad reputation. The problem in Washington is that there has been a loss of aim, a loss of purpose in what taxis are trying to do. There is no central coordination, and to improve the situation is difficult.

New York City has no less a problem. Painting all the cars yellow is a wonderful idea for making 17,000 illegal operators legal. An incredible situation! The people who have the fleet operations in New York tell us that most of the equipment that is used in the illegal operation is ripped off from them and then employed against them.

The taxi industry is moving from an emphasis on having 1 or 2 persons in the car to shared riding. Our conventions during the last 3 years have indicated an amazing trend toward change. We want to be around, and so we are adjusting fast—but we must have some financial help in one form or another.

Robert Samuels, Yellow Cab Company, Chicago

Governmental regulation emanates from every level of government and spans the entire spectrum from statutes to ordinances, from regulations to taxes. Federal regulation includes antitrust, social welfare, minimum wage, labor, equal employment opportunity, ecology, vehicle design, and fuel allocation. Federal taxes include income tax, withholding tax, social security tax, unemployment compensation tax, and gasoline tax. State regulation includes vehicle and chauffeur licensing, insurance regulation, unemployment compensation, workmen's compensation, labor, and minimum wage. State taxes include income tax, withholding tax, vehicle tax, use tax, real estate tax, personal property tax, gasoline tax, and unemployment compensation tax. Local regulation includes vehicle and chauffeur licensing, liability insurance, method of operation and fares to be charged, record keeping, inspection of vehicles, and regulating vehicle numbers. Local taxes include vehicle tax, inspection tax, income tax, head tax, gross receipts tax, and use tax.

All in all they constitute a melange of regulation, taxation, and reporting obligations that are difficult to administer, impossible of total compliance, and frustrating of any attempt by the industry at modernization of demand-responsive transportation service or meeting the swiftly intensifying needs of every community.

For most of 3 centuries, the regulated taxi industry has provided demand-responsive transportation, entirely by limousine and taxicab! That is to say, there has literally been no other legal DRT service! True, there have been a few legitimate jitneys, and only a few cities, such as the District of Columbia, Baltimore, and Chattanooga, have permitted taxicabs to group load at will. Lately, there have been a few DRT experiments whose legal authority is not always clear.

Governmental regulation at every level must be reviewed to permit the inclusion of more modern concepts of the 3 major areas of regulatory concern: chauffeurs, vehicles, and service. This review must come soon because the almost invariable thrust of recommendations of academia and legislators alike is to provide additional DRT service by some illegal or antisocial device or other rather than to provide the means for existing businesses to meet the problem, as reason, logic, or practicality suggests. Recommendations are largely the result of lack of reliable information concerning the capabilities of the industry.

REGULATION OF CHAUFFEURS

Few, if any, chauffeurs of DRT service are subject to federal regulation (49 CFR 391.1 and 391.2). These regulations are detailed and organized; if they were ever enforced in toto in the DRT industry, the already grave shortage of chauffeurs would be even further increased.

Similarly, few chauffeurs are regulated by state governments except those that drive school buses, for example. But most states license chauffeurs, and here the regulations run the entire gamut. In some states you can be a chauffeur if you are as young as 16 years or as old as Methuselah. Some states bar mental degenerates, narcotics addicts, and drunkards; others do not. Some states bar ex-convicts; others do not.

At the municipal level, where virtually all chauffeurs of DRT vehicles are licensed and regulated, wider variations are found and need to be reevaluated. For example, great effort is expended on rehabilitating criminals and finding jobs for them. A severe shortage of chauffeurs exists, but most cities bar felons from being chauffeurs for a long time or forever. Reason suggests that this sort of restriction is overly simplistic. For my part, I would rather take a chance with a felon check-forger as a chauffeur than with a person who has a string of misdemeanors for drunken driving. And I have never seen a 16-year-old who has the maturity to drive a public passenger vehicle with all of the concomitant responsibilities. Moreover, few regulations restrict the issuance of licenses to persons with a history of (or, indeed, confinement because of) mental illness. I recognize that there are all kinds of mental illnesses and all kinds of confinement, but some kinds could render a person totally unsuited to be a public chauffeur.

Adequate and reasonable regulation must be in force everywhere because too many licensees depend entirely on the licensing procedure to screen their chauffeurs. Indeed, some licensees never even see their chauffeurs, for example, those who are hired to drive a second shift.

REGULATION OF VEHICLES

Few types of DRT vehicles and equipment are subject to federal regulation (49 CFR 393).

State regulation of DRT vehicles is the subject of a current study by the International Taxicab Association. Except for school buses and ambulances, DRT vehicles have little regulation by the states. Regulations concerning design and construction of school buses range from less than adequate to deplorable, being, all too often, limited to color of the body, size of letters in the signs, flashing lights, and seating capacity. Requirements of seat and head restraints, safe design of seats, and physically safe construction of the vehicles are few. I have seen van type of vehicles used by schools and day camps as buses that are best described as rolling coffins, but perfectly legal vehicles nonetheless.

Municipal regulation of the vehicles used to provide DRT service is also the subject of a research project of the International Taxicab Association now in progress. The preliminary results indicate that regulation of the design and construction of vehicles, other than limitation of seating capacity, is practically nonexistent. Regulations concerning age and condition of vehicles is common but is generally left to administrative judgment.

Too much emphasis cannot be put on the fact that lack of design and construction regulation has permitted poorly designed and uncomfortable vehicles to be used to render DRT service in far too many cities. In short, municipal regulation of vehicles rendering DRT service has largely been limited to seating capacity and equipment. Passengers are usually limited to a maximum of 7 in taxicabs, 8 in limousines, and more than 12 or 16 in buses. In most cases, the van type of vehicle has been omitted, and as a result vehicles rendering jitney and DRT services often go unregulated.

REGULATION OF DRT SERVICE

And now I come to the core of the whole topic of DRT service: Taxicabs and limousines are virtually the only unsubsidized forms of transportation of any sort, and, aside from ambulances and school buses, taxicabs and limousines render virtually all of the existing demand-responsive transportation service.

The problem of rendering new kinds of or additional demand-responsive transportation stems from a lack of information available to regulatory bodies of the underlying restrictions that inhibit the existing potential of the industry to render DRT service. Taxicabs and limousines have historically been vehicles for transporting 1 person or a self-created group of persons privately to their destination. This industry has decades of experience, financial stability, radio and vehicular equipment, administrative staffs, and know-how to operate any type of demand-responsive service. It must follow, therefore, that this industry should, at least, have the opportunity to provide any additional or new DRT service.

To fill the obvious and rapidly growing gap between public transit and DRT has been the subject of a great deal of research and study. Clearly, taxicabs cannot furnish individualized service at public transit prices. And, just as clearly, public transit cannot furnish individualized service at any price. Unfortunately, to fill the gap attention seems to be focused on types of services that in most localities are illegal, rather than on modifying existing regulations so that existing facilities are permitted to try.

Rendering Innovative DRT Service

A taxicab, under almost every regulation, is a vehicle for hire by 1 person or 1 group of persons, whom it will transport wherever desired within the limits prescribed for a prescribed fare. It usually is equipped with a meter to measure the fare and a radio through which it can be dispatched to the passenger.

Whether it is hailed on the street or ordered by telephone, it becomes the private vehicle of the person who hires it. Only a few cities permit group riding, i.e., the indiscriminate taking on of additional passengers [District of Columbia, Rules and Regulations, Title 14, Sec. 310.1(a)]. The obvious possibilities of improper charges or passenger molestation have impelled most cities to prohibit this practice (e.g., Minneapolis, Sec. 264.030; Chicago, Ch. 28.29; Cleveland, 9-4316; and Houston, Sec. 45-11).

A type of demand-responsive service has been considered as a supplement to public transit. Indeed, the U.S. Department of Transportation, through the Urban Mass Transportation Administration, has spent some \$7.4 million on experimentation with proposed DRT services. But with rare exception (8) has a taxicab operator been called on or, indeed, permitted by existing regulation to provide them. The vehicles were available; the equipment was in existence; the expertise was available; but regulations prevented the rendering of the service.

It has been demonstrated that the average DRT vehicle load is well within taxicab vehicle capacity. (The Davenport DRT system carries 4 to 5 passengers/hour in Checker Motors Corporation taxicabs.) Operating costs of buses are substantially higher than taxicabs (1, p. 202). For that matter, a jitney service could easily be rendered by a taxicab, as is being demonstrated daily in cities where illegal jitney service is being rendered. The perplexing (and, to the taxicab operator, the frustrating) aspect is the repeated advocacy of illegal operations by legislators (in contrast to revision of inhibitory regulations) as a means of solving this social problem.

Others have alluded to services such as package delivery for which taxicabs are so well suited if the package is small and time is important. In some communities this activity is forbidden; in some, certificates of public convenience and necessity are required and are difficult to obtain. Taxi drivers have often been arrested while carrying emergency deliveries of blood!

A partnership with public transit is another possibility often mentioned. Yet a project suggested by a congressman to provide transportation from a rail rapid transit

terminal to residences during late hours when buses were sparsely operated never got off the ground, even though the small subsidy necessary to try the idea was readily available. It would have required cooperation from the public transit agency and a change in the law.

Limitation of Numbers of Vehicles

A second major regulatory feature of the industry concerns the limitation of the number of vehicles to be licensed. The number is usually fixed by a finding of the public convenience and necessity for licenses and the effect of additional licenses on traffic, safety, and earnings of chauffeurs and licensees. In Chicago, an unusual provision permits additional licenses to be issued (as an alternative to reduction of the rates of fare) whenever operators' earnings exceed a certain rate [Municipal Code, Sec. 28.22.1(c)].

However, the operation of the licensing regulatory process is often so slow that progress is impeded. An inquiry of taxicab operators showed a nearly unanimous agreement with that statement; only those regulated by state public utilities commissions dissented. Moreover, regulation of the number of existing licenses has had the unintended effect of inhibiting the licensing of previously unknown or unused forms of DRT service. Certainly improvement in these areas is necessary and long overdue.

Financial Responsibility

A third major regulatory feature of the industry is the requirement of financial reliability. This is achieved by requiring insurance policies to assure the public that the licensee will be able to respond in case injuries are sustained as a result of the operation of the licensed vehicle. The regulations for the most part need updating since verdicts of \$100,000 commonly occur and verdicts of \$1,000,000 are not unknown. The required limits generally vary from \$10,000 coverage for 1 person, \$20,000 coverage for more than 1 person and \$5,000 for property damage (the most common) to \$100,000/\$300,000/\$25,000 (the most rare). One state requires only \$5,000/\$10,000/\$5,000 and allows a fleet to self-insure if it has \$15,000 to deposit! Regulations that require that the insurers be solvent are rare indeed, and those that do exist are seldom effective.

The facts are that in large urban centers the population is "claim-conscious," ambulance chasers flourish, verdicts are high, and insurance premiums are costly.

Unfortunately, regulation has chosen, by accident or design, to remain behind the reality, behind the times, and behind the verdicts. Thus a recently published report notes that "... the regulations in this respect often do not have sufficient bite to protect the public adequately." And it comments on the habit of fragmenting fleets in New York City to avoid paying damages in excess of the \$10,000 bond (1, p. 141). The limits simply must be raised to be in line with the verdicts.

I cannot leave this topic without remarking that the one way to reduce accident costs (and premium costs at the same time) is enactment of no-fault insurance legislation. Even in the few communities where such laws are in effect, they could be improved. It is surely remarkable to note the amount of resistance to the passage of these laws—from the legislators themselves and, of course, the bar.

Rate Regulation

A fourth major regulatory feature of the DRT industry is the fixing of rates of fare. In general, rates of fare are fixed by the regulatory body and are "reasonable" in terms of either operating ratio or return on capital investment. A study by an accounting firm indicates that the operating ratio method is more common and more reasonable (1, p. 100). In this industry (unlike the transit industry with large investment in fixed and movable assets), rates of fare are related of necessity solely to operating ratios.

In spite of the fact that the industry suffers from an endemic and chronic shortage

of drivers in all but a few communities and in spite of the fact that economists uniformly urge that larger earnings would attract more drivers, only a few regulations such as those in New York City (Sec. 2304) and Chicago (Sec. 28.22.1) take earnings of employees into account in fixing rates of fare or numbers of licenses.

Taxicab passengers are charged a fare, which is calculated by distance traveled, time, and occasionally number of passengers in excess of one. Limousines usually charge a fixed fare for the trip or time. In a few communities, taxicabs calculate the fare on the basis of zones traversed, but the possibility of improper charges has made this method comparatively rare. (Of cities having more than 200,000 population, only Washington, D.C., has zone rates in effect; of cities having more than 100,000 population, 8 cities have zone rates.)

This uniformity of method of charging indicates its general acceptance by the various communities. However, the emergence of more innovative DRT modes may create the necessity for an entirely new approach to the subject.

The obvious distinction between taxicabs and limousines on the one hand and other proposed DRT service on the other is the sharing of the ride. The vehicle and the administration of the service remain the same, the administrative expertise and financial responsibility of taxicab operators are available at lower unit cost, and the vehicle is therefore available to render service at comparatively lower cost. Clearly, any innovative DRT service that takes advantage of unused taxicab or limousine seating capacity takes a practical approach to the problem, and any DRT service that takes advantage of the expertise and financial investment already made in the taxicab industry can render its type of service at a financial advantage and at a lower cost to the community. But only if governmental regulation permits.

Rate structures must be revised so that any new DRT service can be provided, at the outset at least, by taxicabs or limousines of existing operators or other vehicles provided by those operators. Every rate-making body should keep in mind a most appropriate comment made by Avery (2) a few years ago: "It was not understood that those powers are of little avail where the carrier is so preoccupied with maintaining basic viability that seeking to extract innovation or a bold approach to risky new ventures is completely unrealistic."

CONCLUDING REMARK

After the preparation of this necessarily sketchy presentation of a broad and most important topic, I found its theme well stated in the paratransit report to which I have referred previously (1, p. 16): "An important operating characteristic of taxi, dial-a-ride, and jitney services is that, regulations permitting, they can all be provided by a common and very pervasive public transportation vehicle, the taxicab."

REFERENCES

1. R. F. Kirby, K. U. Bhatt, M. A. Kemp, R. G. McGillivray, and M. Wohl. Paratransit: Neglected Options for Urban Mobility. The Urban Institute, Rept. UI-4800-8-2, June 1974.
2. G. Avery. Public Transportation Problems in Urban Areas. HRB Special Rept. 144, 1974, pp. 12-19.

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I believe that shared riding and door-to-door service will be the future in transportation no matter how sophisticated and exotic the fixed transit program becomes. I be-