

# The Small-City Taxi Industry: Policy Approaches for Preserving a Mobility Resource

One of the fundamental dilemmas facing planners today is knowing when the public sector should supplement or even replace the private sector as providers of certain essential human services. Whether the service is housing or health care, transportation or economic development, the problem is similar: the free market of private service providers at times does not--or cannot--provide essential services to all segments of the population. In many instances, this dilemma has led to an increased role of the public sector as a private provider.

## GROWING ROLE OF THE PUBLIC SECTOR IN URBAN TRANSPORTATION

Nowhere is this dilemma more apparent than in the case of urban transportation. At one time, private transit operators were the rule rather than the exception. As late as 1959, 1173 of the 1225 transit systems in the United States were privately owned. Seventeen years later, the situation was reversed; only 580 of 955 transit systems were still in private ownership. In 1976, only 9% of all transit trips in the country were served by private transit operations (American Public Transit Association, 1978).

What has happened to the transit industry is a story not unlike what has occurred in other service sectors. Basically, private transit operators could no longer achieve a profit in the free market. Higher personal incomes, higher auto ownership rates, and lower density land development have all contributed to lower transit ridership since World War II. Faced with these challenges, private transit operators responded by raising fares and decreasing service (and hence, costs) in an attempt to show a profit. The result, though, was decline of a once-healthy industry.

Two aspects of this decline deserve special attention. First, the private operators chose higher fares and less service, rather than innovative services, as their primary response to post-war conditions. Second, city after city purchased its transit system when faced with cessation of transit service. The Urban Mass Transportation Act of 1964, which provided funds for public take-overs, contains a section intended to protect the private operators. Yet this section has served to hasten the public take-overs of private operators as a way of "protecting" their rights.

Under public ownership, the transit industry is still far from profitable. In fact, the industry deficit in 1976 was \$1.86 billion and growing at an alarming rate (American Public Transit Association, 1978). Confronted with ever-increasing costs, many transit systems are now coming full-circle and experimenting with contracts with private operators as a way to cut costs.

## TAXIS FACE PROBLEMS OF THE PRIVATE TRANSIT INDUSTRY

Today the taxi industry seems to be following the path of the private transit industry. The taxi industry is still privately-owned and apparently strong. It carries twice as many passengers as all the urban rail systems and three-fourths as many as all the urban bus systems. It operates in more than 3500 cities

---

*Elizabeth H. Ellis is currently a transportation consultant with DAVE Systems, Inc., in Anaheim, California. She prepared a resource paper on the North Carolina taxi industry for the North Carolina Taxicab and Transit Conference held in Winston-Salem in April, 1978.*

and towns, over 2600 of which have no other form of public transportation. In North Carolina, 191 cities are served only by taxis (Garland, 1977).

Unfortunately, financial decay is now beginning to erode the taxi industry. A national survey of taxi operations found that one-half of the operations failed to generate revenues sufficient to cover operating and depreciation costs in 1975 (Wells, 1977). Likewise, the number of taxis is declining as more and more operations go bankrupt. In one attempt to combat this decline, taxi operators are pushing for rebates on state and federal motor fuel taxes. So far, North Carolina and seven other states have provided a fuel tax rebate. Beginning January 1, 1979, qualified taxicabs (those that carry nine or fewer passengers and permit shared-riding) have been eligible for rebates of the federal fuel tax.

The analogy between the taxi and transit industries is striking. Like the transit industries of the 1950s, taxi operators are raising fares in an attempt to offset costs. Also like their counterparts in the transit industry, the taxi operators are finding that higher fares are prohibitive to the low-income persons who depend on taxis. The request for public fuel tax relief, while in itself

---

"THE DECLINE OF THE TAXI INDUSTRY, AND ITS SIMILARITY TO THE DEMISE OF THE PRIVATE TRANSIT INDUSTRY, RAISES A NUMBER OF IMPORTANT POLICY ISSUES."

---

seemingly fair, reflects increasing government involvement and may eventually lead to public take-over of taxi systems.

The decline of the taxi industry, and its similarity to the demise of the private transit industry, raises a number of important policy issues. The most pressing is the impact of taxi-system decline on smaller cities where taxis are the only form of public transportation. This article addresses some of these policy questions by examining the condition of the taxi industry in North Carolina and recent changes taking place in the industry. From this analysis, policy issues are addressed in an effort to show how local planners might respond to the current situation.

### THE TAXI INDUSTRY IN NORTH CAROLINA

Taxi registration figures available from the North Carolina Division of Motor Vehicles show that a good proportion of the state enjoys



Many people prefer to use taxicabs rather than other forms of transit.

taxi service. Eighty-seven of the 100 counties in the state had taxicab service in 1977, which represents about 30% of the total 508 cities and towns. Of the towns with populations less than 5,000, 26% have taxi service; in towns of 5,000 to 10,000 population, the percentage increases to 89%. All cities larger than 10,000 population have taxi service (Garland, 1977).

To examine the taxi industry in North Carolina more thoroughly, an extensive telephone survey of ninety-five cities and towns throughout the state was conducted in the spring of 1978. The telephone survey included all cities and towns with 1970 populations of 5,000 and over having taxi service, and a non-random sample of smaller towns which had taxi service in 1977. The information solicited included: the number of licensed cabs; the number of cabs actually operating; changes in the number of taxi firms in the last five years; changes in the number of taxicabs in the last five years; and any regulatory limits on the number of taxicabs allowed to operate. Taxi firms were not contacted directly as this would have been too expensive and time-consuming. Instead, the local taxi regulator or other knowledgeable city official was called. Police departments and city clerks were the most frequent sources of information.

### SUPPLY OF TAXI SERVICE

The survey showed that the number of licensed cabs per city or town varies widely, from a low of one cab to a high of 153 cabs. The gross number of licensed cabs in a city does not, however, indicate the amount of taxicab service available. The most commonly used measure of such service is the ratio of population to taxis or taxi service. Figure 1 shows the ratio of taxis to population for five city-size classes. The ratios reveal a trend of increasingly larger ratios of persons to taxicabs with increasing city size. The smaller cities, particularly those with populations less than 10,000, have more taxi service available per capita than the larger cities,

FIGURE 1 PERSONS PER TAXICAB IN NORTH CAROLINA		
City Population Category*	Number of Cities Contacted	Mean Persons Per Taxicab
under 5,000	27	1,070
5,000 to 10,000	26	1,036
10,000 to 25,000	23	1,171
25,000 to 50,000	9	1,408
over 50,000	10	1,421
Total of all Cities	95	1,154
* Based on 1977 population projections		

especially those with populations of 25,000 and above. Even the high large-city ratios, however, are lower than those found in many U.S. cities, as shown in Figure 2. These data indicate that on the whole North Carolina cities and towns have greater taxi availability than a number of out-of-state areas.

All of the population-to-taxi ratios must, however, be interpreted with caution. First, the ratio may be unrealistically high, implying less taxi availability than is true, because the "official count" may underestimate the city's total number of operating cabs. Second, a ratio may be misleadingly low if the number of *licensed* cabs is used to calculate the ratio, as the number of licensed cabs is often higher than the number of operating cabs. A ratio may also be unrealistically low because the figure does not reflect the fact that much taxi service is supplied only part-time.

#### REGULATION OF TAXI SUPPLY

One reason for the trends shown in Figures 1 and 2 may be entry restrictions on the number of taxicabs allowed to operate within a city. These restrictions are said to produce a lower supply of cabs than would exist under free market entry, and much of the literature on taxicab supply has focused on the effects of entry restrictions.

Of the cities contacted in the North Carolina study, many regulators mentioned a specific entry limit but added that the effective limit depended upon the city council's assessment of the local need for taxi service. The entry restrictions varied considerably. Many of the smaller cities have no limits at all. In cities with populations of 10,000 to 25,000, there are some effective limits; in

---

"...ON THE WHOLE, NORTH CAROLINA CITIES AND TOWNS HAVE GREATER TAXI AVAILABILITY THAN A NUMBER OF OUT-OF-STATE AREAS."

---

Monroe, for example, the limit is thirty-five licenses, and a waiting list for licenses exists. In cities with populations over 25,000, it was not clear, in many cases, how elastic the limit is. Greensboro and Fayetteville, for example, recently raised their limits because of increasing city population.

It seems that while entry restrictions do suppress taxi supply in some North Carolina cities, the limits are not as fixed as in some of the nation's larger cities. The result contributes to the fact that cities and towns in North Carolina show greater taxi availability.



## SIZE OF TAXI FIRMS

The majority of taxicab firms in North Carolina are quite small. When developing innovative services to help preserve this mobility resource, planners must remember that small-firm management is often very unsophisticated and few written records are kept. Additionally, many small-firm operators provide service only sporadically or in addition to a regular full-time job. If innovative taxi

"WHEN DEVELOPING INNOVATIVE SERVICES... PLANNERS MUST REMEMBER THAT SMALL-FIRM MANAGEMENT IS OFTEN VERY UNSOPHISTICATED AND THAT FEW WRITTEN RECORDS ARE KEPT..."

services are to be offered dependably and responsibly, the services must be tailored so that small-firm operators can provide them regularly; the operators must also be encouraged to change their attitudes and patterns of service delivery.

Most available data on taxi-firm size are from nationwide surveys of large firms in large cities. One nationwide survey (Wells, 1975) showed that 33% of the nearly 700 firms surveyed operated twenty-five or more cabs; in a more recent survey (Wells, 1977), this figure increased to 40%. In contrast, only 3% of the approximately 546 firms identified in the North Carolina study operate twenty-five or more cabs. This represents only fourteen firms in

the entire state. Moreover, approximately 90% of the North Carolina firms operate less than ten cabs. Wells' 1977 survey indicated that only 25% of the sampled firms nationwide operated less than ten cabs. The North Carolina study also examined the relationship between taxi-firm size and the population of a city. The finding, not surprisingly, was that the number of larger firms within a city tends to increase with city size.

The following picture of the taxi industry emerges from the North Carolina study: in the smaller cities with populations of less than 10,000, most taxi service is provided by single, independent owner-operators. In the medium-sized cities with populations of 10,000-50,000, the relative number of single owner-operators decreases, but the firms are nonetheless quite small; nearly 75% of the taxi firms in these cities operate four or fewer cabs. Even in the larger cities with populations of 50,000 or more, more than 50% of the firms operate four or fewer cabs, and approximately 25% more operate between five and fourteen cabs.

## DECLINE OF THE TAXI INDUSTRY

Taxicabs traditionally have been applauded for their ability to make profits in the urban transportation business. However, rising costs and decreasing profits are changing this tradition. The International Taxicab Association's 1976 survey showed that about one-half of the taxi operators did not generate enough revenue in 1975 to cover operating and capital costs, and that about one-quarter did not even cover operating costs. The number of firms in

FIGURE 2  
TAXICAB SUPPLY

Area	Sample	Population/Taxi	
		Median	Mean
Pennsylvania	29 cities	1,654	2,102
Illinois	6 counties	4,762	2,857
Wisconsin	13 urban areas	3,195	4,101
North Carolina	95 cities & towns	850	1,154

SOURCE: Brown 1973; Northeastern Illinois Planning Commission 1976; Wisconsin Department of Transportation 1976; Webster et al., 1974; Kirby et al., 1974.

the Association's file of taxi operations decreased 16% between 1974 and 1976 (Wells, 1977).

North Carolina taxi registrations data also show losses. In 1970, there were 3,296 taxis registered; by 1977, the figure had decreased to 2,541. In the year 1976 to 1977, the decline in taxi registrations represented almost a 9% loss in taxi service. In the same year, the number of cities with taxi service declined from 231 to 209. It was the smaller cities, with populations of 10,000 or less, that lost their taxi service.

**"MANY USERS IN THE SMALLER CITIES HAVE NO ALTERNATIVE TO THE TAXICAB FOR TRANSPORTATION."**

Why are these declines occurring? From both national data and the North Carolina survey, it seems that rising operating costs are a primary cause. Increased fuel, maintenance, and insurance costs contribute to escalating operating costs. Taxi operators combat such rising costs with increased fares, which frequently produce ridership losses and exacerbate their financial difficulties. Competition from other public transportation providers also cuts into taxi patronage. City bus systems, and more importantly demand-responsive transportation services designed for special target groups (such as the elderly or handicapped), often provide lower costs or even free transportation for former taxi riders.

### USERS OF TAXI SERVICE

The characteristics of taxicab users are also important to transportation planners interested in preserving this mobility resource. Previous research in North Carolina revealed major differences between taxicab users in the large cities of the nation and those in smaller cities of the state (Gilbert et al., 1976). While taxis frequently are considered luxury goods in the larger U.S. cities, Gilbert et al. showed that small-city taxi users in North Carolina tend to be low-income, predominantly female, largely black, and without access to an automobile. Many users in the smaller cities have no alternative to the taxi for transportation. Even if alternative mass transit is available, taxi users rarely use transit. Most of these small-city users can truly be considered "taxi-dependent."

### POLICY ISSUES

The character and current condition of the North Carolina taxi industry raise several policy issues. An important factor in policy

discussions is that the taxi industry in small cities differs substantially from that in larger cities. Differences include the regulation of the number of taxis allowed to operate, the size structure of the firms, and the users of taxi service.

Regulation in most large cities nationwide includes a limit on the number of taxis, which restricts the supply of taxi service. In North Carolina, few cities have imposed strict numerical limits. Additionally, the size structure of North Carolina taxi firms is skewed toward small firms; the result is that North Carolina taxi firms are really a "mom-and-pop" industry. Finally, the predominant users of taxi service in the many small North Carolina cities are low-income and taxi-dependent. These users often have no other choice of transportation; taxi service for them is not a luxury good.

A more pressing policy issue, and one which should cause alarm among transportation planners in the state, is that this "mom-and-pop" industry is shrinking. Many North Carolina taxi operators function at exceedingly low overhead rates--sometimes without offices--and work long hours in order to make minimal wages. These operators tenuously survive in cities where no other unsubsidized local transportation provider remains. As these operators disappear, the many taxi-dependent persons in the smaller cities face increasing mobility problems.

While it is clear that small-city taxi operators are an important transportation resource, it is also clear that not all small-city taxi operations should be preserved. The lack of strict entry restrictions in most North Caro-



The public sector now operates most transit systems. Will the troubled taxicab industry require public take-over?





For a small firm, a single disabled taxicab can severely impair business.

lina cities, which effectively allows anyone to enter the taxi industry, has produced an oversupply of taxis in some areas. This fact is demonstrated in the comparatively low population-to-taxi ratios displayed by North Carolina cities and towns. Because of oversupply, some shrinkage in the taxi industry can be seen as a natural and desirable adjustment.

However, not all the current shrinkage can be viewed with such confidence. Small-city operators are definitely facing economic problems far in excess of mere rectification of oversupply. Since many small-city taxi users in North Carolina have low incomes, taxi fares cannot be raised high enough to recover increased operating costs (Gilbert et al., 1976). The result is an economic vise that seriously threatens the future of the small-city taxi industry.

How might transportation planners respond to this situation? In the case of the founding private transit industry two decades ago, the public response led to subsidization and takeovers. Can this result be avoided in the case of the troubled small-city taxi industry? Are there better ways of helping taxis preserve mobility in small cities? The answer to both of these questions is yes.

---

"...IT IS ALSO CLEAR THAT NOT ALL SMALL-CITY TAXI OPERATIONS SHOULD BE PRESERVED."

---

One such response would allow the market system to operate more freely and would permit the taxi operator to compete more fairly with competitors. Currently, the taxi operator's major competitors are publicly funded, human service programs that provide transportation for their clients. Over 100 federal agencies

provide more than \$10,000,000 per year for transportation in North Carolina (Garland, 1977). Such programs are well meaning and designed to serve needy groups; often, however, these efforts result in fragmentation and duplication of transportation services. Moreover, the programs not only siphon passengers from local taxi operators, but also receive heavy subsidies to compete with the taxis.

One way in which planners could improve this situation is by promoting coordination and fairness among various human service transportation programs. Fairness means that private taxi operators be given the opportunity to compete equally with human service transportation programs. One step toward fairness would be a "truth in transportation" policy whereby local providers--private and public--would be required to state the total, true costs of their services. The "truth in transportation" provision would include all public subsidies as actual costs. As a result, a public provider might well find that the total, true cost of its personnel time, maintenance,

---

"INSTEAD OF BEING A 'SUPPLIER' OF TRANSPORTATION, THE PLANNER SHOULD BE A FACILITATOR HELPING BOTH PRIVATE AND PUBLIC TRANSPORTATION PROVIDERS..."

---

fuel, and other expenses would exceed the cost of contracting with a taxi operator to provide service.

A second planning response would be to update the local taxi ordinances. In North Carolina, as in most states, taxis are regulated locally. A recent review of local North Carolina taxi ordinances found the average ordinance was twenty-three years old (Bland, 1978). Much has happened in these twenty-three years to make the ordinances obsolete. At the very least, the ordinances should be revised to encourage shared-rides and other innovative services. Currently only two of the thirty-three local ordinances reviewed explicitly permit shared-ride service.

There is one other public policy response that would help preserve local mobility; new funding mechanisms. In assisting the transit industry, public funds went directly to the providers--the publicly-owned transit systems. An alternative is to assist the passengers directly. This concept, called a user-side subsidy, has the advantage of simplicity and leaves the taxi industry in the private sector. Projects in Macon County and Kinston, North Carolina currently employ user-side subsidies.



Taxicabs are often the only form of public transportation available in small cities.

### CONCLUSION

The precarious financial condition of the small-city taxi operator poses a real threat to the mobility of many taxi-dependent persons. This article has suggested ways in which the small-city taxi industry in North Carolina might be assisted without public ownership resulting. The suggestions may also be useful to transportation planners in other small-to-medium-sized Southeastern cities facing similar declines in their taxi industries. What these recommendations also imply is a new role for transportation planners. Instead of simply focusing on public programs and public provision of transportation services, the planner should be more aware of, and sensitive to, private sector providers. Instead of being a "supplier" of transportation, the planner should be a facilitator helping both private and public transportation providers operate cooperatively and more efficiently.

### REFERENCES

- American Public Transit Association. 1978. *Transit Fact Book 1977-78*. Washington, DC: American Public Transit Association.
- Bland, Thomas. 1978. *A Review of Local Taxicab Ordinances in North Carolina*. Working Paper #7. Chapel Hill: Department of City and Regional Planning, University of North Carolina.
- Brown, T.A. 1973. "Economic Analysis of the Taxicab Industry in Pennsylvania: Demand and Cost." Middletown, Pennsylvania: The Pennsylvania State University, Capital Campus.
- Garland, Alice. 1977. *Transportation Options for Rural and Small Community Populations in North Carolina*. Working Paper #1.
- Raleigh, North Carolina: North Carolina Department of Transportation.
- Gilbert, G., R. Bach, F. DiIorio, and F. Fravel. 1976. *Taxicab User Characteristics in Small and Medium-Size Cities*. Report No. UMTA-NC-11-0003, United States Department of Transportation.
- Gilbert, G., C. Garber, and J. Foerster. 1977. *Establishing Innovative Taxicab Services: A Guidebook*. Report No. UMTA-NC-11-0005, United States Department of Transportation.
- Kirby, R.F., K.U. Bhatt, M.A. Kemp, R.G. McGillivray, and M. Wohl. 1974. *Paratransit: Neglected Options for Urban Mobility*. Washington, DC: The Urban Institute.
- Northeastern Illinois Planning Commission. 1976. *Taxicabs and Dial-a-bus: Demand-Actuated Transportation in Northeastern Illinois*. Chicago: Northeastern Illinois Planning Commission.
- North Carolina Department of Administration. 1977. *North Carolina Municipal Population of 1976*.
- Webster, A.L., E. Weiner, J.D. Wells. 1974. *The Role of Taxicabs in Urban Transportation*. Office of Transportation Planning Analysis, Assistant Secretary for Policy, Plans, and International Affairs, United States Department of Transportation.
- Wells, J.D. 1975. *An Analysis of Taxicabs' Operating Characteristics*. Rockville, Maryland: International Taxicab Association.
- Wells, J.D. 1977. *Taxicab Operating Characteristics*. Prepared for the Office of Transportation Systems Analysis, Assistant Secretary for Policy, Plans, and International Affairs, United States Department of Transportation.
- Wisconsin Department of Transportation. 1976. *Wisconsin Taxicabs*. Volumes 1-5. Madison, Wisconsin: Wisconsin Department of Transportation.