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Taxicab Operating Characteristics

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Taxicab Operating Characteristics

Final Report
September 1982

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16. Abstract Privately owned and operated, the taxi industry is an important but vulnerable segment of the urban transportation industry--vulnerable to adverse economic conditions stemming from rising costs and governmental subsidies to its competitors. Trends such as industry decline and shift from employee-driver to owner and lease drivers generated serious concern among policymakers and others interested in urban transportation. This report documents the national survey of taxicab operators conducted in the spring of 1982 to assess operational and economic conditions in the industry. Survey questionnaires were sent to each known taxicab operator on the mailing list of the International Taxicab Association. Over 900 operators (30 percent of the industry) responded. Every state is represented in the sample, and no state produced more than 9.3 percent of the responses. The survey shows that the taxicab industry is an important provider of transportation services. It includes, at a minimum, over 3,000 taxi organizations that operate over 100,000 vehicles and carries at least 30 percent as many passengers as all urban buses in the U.S., and at least 76 percent as many as all rail vehicles. Taxis generate more revenue than the entire public transit industry. Areas charted and discussed in this survey report are: 1) industry structure/size; 2) labor/work force; 3) vehicles and fuel; 4) productivity and economy; and 5) fare structures.					
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Summary

A national survey of taxicab operators was conducted in the spring of 1982 to assess operational and economic conditions in the industry. Over nine hundred operators, or nearly thirty percent of the industry, responded. This response rate is considerably higher than either of two previous surveys in 1974 and 1976.

The survey shows that the taxicab industry is an important provider of transportation services. The industry includes, at a minimum, over 3,000 taxi organizations which operate over 100,000 vehicles. It carries at least thirty percent as many passengers as all the urban buses in the U.S. and at least seventy-six percent as many as all the rapid rail vehicles. Taxis generate more revenue than the entire public transit industry.

On average taxicab organizations operate thirty-five vehicles, of which thirty are taxicabs. The average number of vehicles and taxis per operator has been decreasing in recent years. In addition, it should be noted that the typical taxicab operation is much smaller than the averages would indicate. Average values are skewed upward by the relatively few very large taxi organizations. In fact, over half of the taxi organizations have fewer than ten taxicabs, and nearly ten percent have fewer than three taxis. Further, small operations are growing as a percent of the industry. Large operations, however, account for most of the passengers, vehicles, revenue, and trips of the industry. For example, firms with one hundred or more cabs carry fifty-three percent of all passengers carried.

Taxis operate in all sizes of cities and towns with twenty percent of the operators located in cities smaller than ten thousand population and thirteen percent located in cities over one half million. Slightly over one-third of the operators are the sole taxi operator in the city they

serve. Most taxi organizations are individual proprietorships or closely held corporations; only five percent are cooperatives or associations.

Taxi operators are moving rapidly toward the use of independent contractors. In the past three years the percentage of taxis driven by employees has declined from forty-five percent to twenty-nine percent. During the same time, the percent of taxis driven by lease drivers has increased from thirty-seven percent to forty-eight percent. Currently, fifty-eight percent of the drivers are independent contractors.

The taxicab industry remains an important employment opportunity for minority workers. They account for forty-four percent of the lease drivers and thirty-six percent of the commission drivers. These percentages are higher for cities over fifty thousand population.

Although the mix of vehicles operated by taxi organizations is changing slightly, it is still dominated by the taxi sedan. Over eighty-seven percent of the vehicles are sedans, of which fifty-four percent are standard size vehicles. The percentages of smaller sedans and vans have increased slightly in recent years. The average fuel economy of taxi vehicles in 1981 was 12.9 miles per gallon, up 1.0 mpg from three years earlier.

Productivity in the industry has increased slightly since 1975. The percent of miles that are paid increased from 51.6 in 1975 to 60.0 in 1981, and the number of passengers per trip increased from 1.46 to 1.56. The industry has also moved strongly into contract services in order to achieve profitability. Contracts provide twenty-three percent of the revenues of the industry. While productivity and operating ratios vary with size of taxi operations, there are no observable economies of scale.

1.0 INTRODUCTION

1.1 Background

This report contains the results of a national survey of taxicab operators conducted in the spring of 1982. Funded by the Urban Mass Transportation Administration and conducted in cooperation with the International Taxicab Association, this survey was directed toward all known taxi operators in the United States. Each operator was asked to respond to a series of questions regarding services provided and the costs, revenues, and operating characteristics of these services.

There are many reasons why taxi operating characteristics are a public policy concern. Privately owned and operated, the taxi industry is an important but vulnerable segment of the urban transportation sector. The number of passengers it carries is comparable to the public transit industry. It also provides a variety of other regular and emergency services at all hours and in many communities too small to support bus service. Because it is located in the private sector, the taxicab industry is vulnerable to adverse economic conditions brought on by rising costs and governmental subsidies to its competitors. As a result, it is widely reported that the industry is declining in size and attempting to cut costs by switching from employee drivers to owner and lease drivers.

These trends, if true, are a matter of interest to policy makers concerned with urban transportation. A decline of the industry means that many smaller cities and towns are likely to be left with no taxi service and taxi-dependent persons will suffer. As real fares rise, many of these same persons are likely to be unable to afford exclusive-ride taxi service if it is available.

How policy makers respond to these changes is uncertain and will no doubt vary from place to place. Some cities have responded by changing local taxi ordinances in significant ways. Others have encouraged public agencies to contract with taxi operators rather than to set up services which compete with them. Still other cities and towns--perhaps uncertain of how to respond --have done little but watch as the industry changes.

The problem of knowing how to respond to these changes is in a large way a result of poor information about the taxicab industry. Is the industry declining in size? Are operators switching from employee-drivers? Is the industry size structure changing? These are but a few of the questions upon which public policy must be based. National surveys of taxi operators were conducted in 1974 and 1976.* Much has changed since these surveys, and their value to public policy makers has eroded with time.

The survey described in this report was undertaken to fill this need for timely information. It is similar, in some respects, to the two Wells surveys, and where possible comparisons are made. However, there are two major differences. First, the current survey is broader in scope and includes questions not included in the Wells survey. In these cases, comparisons with the earlier Wells' data are obviously not possible.

Second, the response rate for the current survey is much higher than for the earlier surveys. As a result, comparisons between this survey and the earlier ones are difficult because it is impossible to determine whether observed differences are due to differences in samples of taxi operators or to changes in the industry over time.

* Control Data Corporation and Wells Research Company (1977) "Taxicab Operating Characteristics," and John Wells (1975) "An Analysis of Taxicab Operating Statistics," prepared for U.S. Department of Transportation. (Referred to herein as Wells (1977) and Wells (1975).

1.2 Survey and Sampling Procedure

The survey was conducted by mail in the spring of 1982. Questionnaires were sent to each taxicab operator on the mailing list of the International Taxicab Association. This list is not a membership list but rather a list of all known taxi operators. The questionnaire used is included in Appendix A.

The survey procedure was carefully timed and controlled. An initial questionnaire, cover letter, and business reply envelope were mailed to the entire sample on January 11, 1982. One week later a post card was mailed to the entire sample thanking those who had responded for their help and reminding nonrespondents to return their questionnaire. Approximately three weeks after the initial mailing a follow-up letter and replacement questionnaire were mailed to taxi operators who had not yet responded. Seven weeks after the initial mailing a certified letter and another replacement questionnaire were sent in a final attempt to induce firms to respond.

1.3 Sample Characteristics

The questionnaire was mailed to 3,649 names on the I.T.A. mailing list. Of these, 562 were returned as undeliverable. A total of 906 usable responses were received before the final cut-off date. Subtracting the undeliverable questionnaires means that the response rate was 29.3 percent. The earlier Wells surveys achieved response rates of 10.8 percent in 1974 and 4.7 percent in 1976.

The geographical distribution of the responses is shown in Table 1.1. Every state is represented in the sample, and no state produced more than 9.3 percent of the responses.

The sample does not appear to be biased by membership in the International Taxicab Association. For organizations with fewer than ten taxis,

TABLE 1-1

DISTRIBUTION OF SAMPLE BY REGION AND STATE, 1981

Region and State	Percent of Sample	Percent of Mailing List
NORTHEAST	31.0	29.9
Connecticut	1.6	1.7
Maine	0.7	0.6
Massachusetts	5.3	5.6
New Hampshire	0.6	0.8
New Jersey	6.2	5.8
New York	9.3	8.8
Pennsylvania	6.2	5.4
Rhode Island	0.3	0.6
Vermont	0.8	0.6
NORTH CENTRAL	25.6	21.6
Illinois	4.1	4.1
Indiana	1.9	1.7
Iowa	1.1	0.8
Kansas	1.4	0.6
Michigan	3.8	3.2
Minnesota	1.8	1.5
Missouri	2.4	2.3
Nebraska	0.8	0.5
North Dakota	0.1	0.3
Ohio	4.6	4.1
South Dakota	0.3	0.3
Wisconsin	3.3	2.2
SOUTH	26.4	35.4
Alabama	0.6	1.4
Arkansas	0.2	0.8
Delaware	0.2	0.1
District of Columbia	0.3	0.5
Florida	3.7	4.8
Georgia	2.3	3.7
Kentucky	1.8	2.0
Louisiana	1.1	1.8
Maryland	1.7	1.5
Mississippi	1.0	1.1
North Carolina	3.1	4.1
Oklahoma	0.8	1.0
South Carolina	0.9	2.0
Tennessee	0.8	2.0
Texas	3.4	4.1
Virginia	3.1	3.2
West Virginia	1.4	1.3

TABLE 1-1 (continued)

Region and State	Percent of Sample	Percent of Mailing List
WEST	17.0	12.7
Alaska	1.0	0.7
Arizona	0.5	0.6
California	8.3	5.7
Colorado	1.1	0.7
Hawaii	0.6	0.7
Idaho	0.3	0.2
Montana	0.8	0.4
Nevada	0.9	0.6
New Mexico	0.6	0.5
Oregon	1.4	0.8
Utah	0.2	0.3
Washington	1.1	1.2
Wyoming	0.2	0.3

only 25 percent are I.T.A. members. For other size categories the percentage varies between 52.4 percent and 65.0 percent. In all, 56.8 percent of the taxicabs in the sample are operated by organizations belonging to the I.T.A.

2.0 INDUSTRY STRUCTURE

2.1 Size of Industry

Table 2-1 contains several measures of the size of the taxi industry. However, each of these measures depends upon the number of taxi operators in the United States. That is, these measures were computed by multiplying the per-operator averages from the survey by the number of taxi operators estimated in the United States. For the values in Table 2-1, the number of taxi operators is assumed to be 3,089. This number results from removing from the I.T.A. mailing list those operators for which questionnaires were returned as undeliverable.

TABLE 2-1
MINIMUM SIZE OF INDUSTRY, 1981

Industry	Size
Operators	3,089
Taxicabs	94,023
Other Vehicles	13,814
Drivers	165,867
Other Workers	25,685
Passengers (regular taxi and contract)	1,728,927,623
Trips (regular taxi service only)	1,012,047,720
Vehicle Miles (regular taxi and contract)	6,352,497,804
Revenues (regular taxi and contract)	\$3,379,876,652

While the number of taxi organizations is obviously crucial in estimating industry size, there is much uncertainty about the number of operators. Taxi operators change company names and enter and leave the industry, making it nearly impossible to maintain an accurate listing of all operators. The fact that some operators may not be included in the list means that 3,089 is a minimum value; hence, the size indicators in Table 2-1 should be construed as minimum values of industry size.

The extent to which these values underestimate industry size is difficult to determine. No public agency or private firm counts either taxicabs or taxi operators in the U.S.* The International Taxicab Association has surveyed the one hundred largest cities in the country and found there to be a total of 70,274 taxis licensed in these cities and their suburbs. This number suggests that the 94,023 value in Table 2-1 is indeed low. For example, there are 1,780 cities between 10,000 and 50,000 population. Assuming an average of 30,000 and one taxi per 1,000 persons yields 26,700 taxis in this size category alone. This estimate is, of course, only approximate; some of these cities are suburbs of the one hundred largest cities surveyed by I.T.A., and both the number of people per taxicab and the average size of cities in this group are unknown. However, this method of estimation yields approximately 125,000 taxicabs in the U.S.

To make the estimates of industry size more meaningful, it is helpful to compare them to the corresponding values for the urban transit industry.** For 1980, there were 1,055 transit operators who operated 59,411 buses and

*Wells reports estimates from the Automobile Vehicle Manufacturers Association. However, these estimates are not based on sampling or enumeration techniques.

**These values come from Transit Fact Book 1981, published by the American Public Transit Association, Washington, D.C.

9,693 rapid rail vehicles. The taxi industry carries at least 30 percent as many passengers as all the buses and at least 76 percent as many as all the rapid rail vehicles. Taxis travel far more vehicle miles than either buses or rapid rail cars: 3.79 times as many as buses and 16.54 times as many as rapid rail vehicles. The taxi industry generates slightly more revenues (106 percent) than the entire public transit industry. As a provider of service, the taxicab industry is an important segment of the urban transportation sector.

2.2 Trends in Industry Size

Regardless of how industry size is measured, the taxi industry is shrinking. One important measure, the number of taxi operators, is clearly decreasing. Even allowing for the conservative bias in the estimate of 3,089 taxi operators, the number of operators is down compared with earlier years. The I.T.A. mailing list of all taxi operators contained 6,467 operators in 1974 and 5,387 in 1976.

A second very important indicator of size is the number of vehicles operated by the industry. It is possible that while the number of taxi operators is decreasing, the remaining taxi organizations are becoming larger, meaning that the aggregate amount of service might not be decreasing. Table 2-2 shows that this phenomenon is not occurring. The mean size of a taxi organization is decreasing. Moreover, this trend is a steady one. The current survey included a question about how many taxis were operated three years ago (September, 1978). The mean number was 31.8 taxis per organization, a higher value than for 1981. The 1975 values in Table 2-2 are likely to be over-estimated because of the low response rate for that survey and the proportionally higher response rates for larger operators that year. Thus, it is not clear whether the average firm size really increased between

TABLE 2-2
TRENDS IN INDUSTRY SIZE

Mean Values	1973	1975	1981
Taxicabs/Operator	40.5	55.4	30.4
Passengers/Operator	527,100	626,800	559,705
Vehicle Miles/Operator	2,087,000	2,261,000	2,056,490
Revenues/Operator	\$599,000	\$966,700	\$1,094,165
Workers/Operator	76.4	117.7	62.0

1973 and 1975. What is clear is that in 1981 it is lower than it was in 1973, 1975, or 1978.

With both the number of operators and the number of taxis per operator decreasing, it is not surprising that the aggregate numbers of taxis, vehicle miles, and workers are also decreasing. For example, Wells estimated that in 1975 there were between 193,000 and 298,000 taxicabs in the country. The current estimate of the number of taxicabs is 94,023. Even allowing for the fact that the 1975 estimate may be high and the 1981 estimate may be low, the difference between these estimates is considerable and not likely to be attributable entirely to biases. It is safe to conclude that the number of taxicabs has decreased.

Table 2-2 presents further evidence on how the size of taxicab organizations is declining. The mean number of passengers, vehicle miles, and workers per taxi organization are all decreasing. Only the revenues per operator appears to be showing some increase compared to 1973. However, this increase is not real but rather due to inflation, which has driven up taxi fares.

The values in Table 2-2 should be carefully interpreted. They are means, not medians. That is, they represent the averages per operator not what the "typical" taxi organization is like. For example, the mean number of taxis per operator is 30.4, but the median value is only 8.25. The difference in these values is understandable when one considers the size distribution within the industry.

2.3 Size Distribution

The taxi industry size distribution is heavily skewed toward small operators (see Table 2-3). Over half of the taxi organizations have fewer than 10 taxicabs. Nearly 10 percent have fewer than 3 taxis. There is, therefore, a major portion of the industry which is composed of very small businesses.

This segment of the industry is also growing. Table 2-4 compares the size distribution of the industry for four years. With the exception of 1975 the percentage of small taxi organizations has steadily increased.

It is not clear what has caused this shift toward smaller organizations. Several mechanisms are possible. Operations in the ranges of 10-24 taxicabs and 25-44 taxicabs have decreased in proportion to other size categories; some of these may be shrinking in size and now are in the 0-9 taxicab category while others may be simply going out of business. The growth in small operations may also be a result of owner-operators who have left taxi organizations in any of the other size categories. Which of these factors is the most important is impossible to tell from the survey.

The importance of the many small taxi organizations must be kept in perspective. Table 2-3 shows that the large taxi organizations account for most of the passengers, vehicles, revenue, and trips. For example, firms with 100 or more taxis carry 53.4 percent of the passengers carried by the

TABLE 2-3
SIZE DISTRIBUTION, 1981

Measure	Number of Taxicabs in Organization								
	0-2	3-9	10-24	25-49	50-74	75-99	100-199	200+	All
Percent of Operators	17.8	36.3	22.5	9.4	5.3	2.5	3.7	2.2	100.0
Percent of Taxicabs	0.7	6.4	11.2	10.5	10.1	6.9	16.2	38.1	100.0
Percent of Passengers (Regular Service)	0.9	5.9	10.8	10.4	8.9	9.7	14.3	39.1	100.0
Percent of Trips (Regular Service)	0.8	5.6	14.6	10.9	7.2	7.9	15.5	37.5	100.0
Percent of Vehicle Miles (Regular Service)	0.7	4.4	10.7	11.7	7.4	9.7	13.7	41.7	100.0
Percent of Revenue (Regular Service)	1.1	5.4	16.3	13.1	7.6	6.6	17.8	32.1	100.0
Percent of Total Revenues from Contracts	30.4	25.1	21.5	19.5	25.0	21.1	15.0	10.2	23.4

TABLE 2-4
TRENDS IN SIZE DISTRIBUTION

Measure	Number of Taxicabs in Organization							
	0-9	10-24	25-49	50-74	75-99	100-199	200+	All
Percent of Operators								
1973	36.0	31.0	15.1	7.4	4.3	3.5	2.7	100.0
1975	24.9	37.1	15.9	9.4	4.9	3.7	4.1	100.0
1978	52.9	23.3	10.7	4.8	2.8	2.9	2.6	100.0
1981	53.5	22.5	9.4	5.3	2.5	3.7	2.2	100.0
Percent of Taxis								
1973	4.3	11.0	13.3	11.4	8.9	12.5	38.6	100.0
1975	2.2	10.6	9.1	10.0	7.7	8.7	51.7	100.0
1978	6.3	10.7	11.4	8.9	7.3	12.2	43.2	100.0
1981	7.1	11.2	10.5	10.1	6.9	16.2	38.1	100.0

industry. Conversely, taxi operations with less than 10 taxis carry only 6.8 percent of the passengers. On the other hand, these small operations often exist in communities which have no transit service and in which many residents are dependent upon taxis for a variety of services. In fact 20.4 percent of the taxi operators serve communities under 10,000 population. The importance of these operators is much greater than Table 2-3 shows.

2.4 Organizational Characteristics

There are a variety of ways in which taxi operations are organized. Table 2-5 shows the major organizational forms and how the industry is distributed among them. Over 90 percent are either proprietorships or closely held family corporations.

TABLE 2-5
DISTRIBUTION OF ORGANIZATION FORMS, 1981

Form of Organization	Percent
Individual Proprietorship/Partnership	34.6
Closely Held or Family Corporation	56.5
Public Corporation	2.7
Association or Cooperative	4.6
Other	1.6

The taxi operations have been in business for an average of 22 years. One-fifth of the operators have entered the industry in the past 5 years; 47 percent have been in business 20 years or more. Thirty-eight percent of the organizations trade under more than one name.

2.5 Areas Served

Taxi operators report serving a variety of areas. Over 75 percent provide service to central business districts, while 67.9 percent serve nondowntown parts of central cities. Suburbs are served by 78.2 percent, and 75.0 percent serve small towns.

The populations of the cities served by taxi operators is also known from the survey. Cities under 10,000 are the home locations of 20.4 percent of the operators; corresponding percentages for larger cities are 49.7 percent for 10,000-99,999; 16.1 percent for 100,000-499,999, and 13.7 percent for larger cities. Nearly 62 percent of the operators are located in Standard Metropolitan Statistical Areas.

Table 2-6 shows that monopolies do occur but are not frequent in the taxicab industry. Almost half of the operators (49.9 percent) operate fewer than 75 percent of the taxis serving their areas, and only about a third (34.6 percent) are the only taxi operator in their service area.

TABLE 2-6
DEGREE OF LOCAL COMPETITION, 1981

Proportion of Taxis in Area Operated by Respondent	Percent of Respondents
0 - 0.09	9.9
0.1 - 0.24	8.6
0.25 - 0.49	15.4
0.50 - 0.74	16.0
0.75 - 0.99	15.5
1.00	34.6

2.6 Services Provided

The taxi industry continues to provide a wide variety of services. Table 2-7 shows the percentage of taxi operations that provide each of thirteen services. These percentages generally are similar to Wells' results for 1975. There are increases in dial-a-ride and handicapped services compared with 1975.

TABLE 2-7
SERVICES PROVIDED, 1981

<u>Service Provided</u>	<u>Percent of Operators</u>
Regular Demand Services	
Exclusive Ride	82.0
Shared Ride	46.5
Limousine	17.3
Package	72.6
Contract Services	
Company Employee	39.6
School Children	54.1
Hospital Patients	40.7
Government Employees	11.7
Blood and Hospital Supplies	52.1
Senior Citizens	40.9
Public Aid Recipients	38.4
Handicapped	42.0
Community Dial-a-Ride	9.0

The results in Table 2-7 represent services which taxi operators provide. They do not show which services account for the most revenue. This topic is considered in Section 6.0.

One of the little publicized facts about the industry is that some operators on their own provide discounts to certain groups of users. The percentage of operators who provide exclusive-ride fare discounts to elderly passengers without being reimbursed for the discounts is 17.3 percent. For handicapped and low income passengers the percentages are 4.8 percent and 0.6 percent. Other operators provide such discounts but the discounts are absorbed by a public agency. A total of 36.6 percent of the operators provide fare discounts to the elderly.

3.0 LABOR

3.1 Composition of Work Force

The basic characteristics of the taxi industry work force are shown in Table 3-1. The industry obviously depends heavily upon its drivers: 86.6 percent of the workers are drivers. Among these drivers, 41.9 percent are employees, and 58.1 percent are independent contractors.

TABLE 3-1
WORKERS BY CATEGORY, 1981

Category	Percent of Workers	Percent of Drivers
Managerial, Office, and Maintenance	12.6	NA
Drivers:		
Commission	33.4	38.6
Hourly	2.9	3.3
Lease	41.8	48.3
Owner-Drivers	8.5	9.8
Others	0.8	NA

The taxi industry presents a major employment opportunity for minority workers. See Table 3-2. For taxi operations located in urban areas, these proportions are even higher. Operators in cities of 50,000 population or more account for 64.2 percent of all black drivers. Comparing only black

TABLE 3-2
RACIAL DISTRIBUTION OF DRIVERS, 1981

Race	Percent of Drivers	
	Lease	Commission
White	56.1	64.1
Black	31.1	20.0
Hispanic	8.2	13.3
Others	4.6	2.6

and white drivers, the cities of 50,000 population or more have 47.9 percent black drivers while smaller cities have 18.4 percent black drivers.

3.2 Leasing

The transition to independent contractors is illustrated by the trends in operators switching to leasing. Table 3-3 shows the distribution of times that firms switched to leasing. In all, 35.9 percent of the operators lease to at least some of their drivers. As shown in Table 3-3, 28.5 percent of these operators began leasing since 1980. Conversely, only 30.4 percent of the organizations now leasing began to do so before 1975.

Leasing is proportionately more prevalent in larger cities. For cities under 50,000 population the drivers that either lease or receive a commission are equally split between the two categories. For larger cities this pool of drivers includes more lease drivers (64.3 percent) than commission drivers (35.7 percent).

3.3 Unionization

While only 8.9 percent of the taxi organizations are unionized, the percentage of the work force which is unionized is 34.1 percent. Managerial,

TABLE 3-3
LONGEVITY OF LEASING*

Year Began Leasing	Percent of Organizations That Lease
1980-81	28.5
1975-79	41.1
1970-74	16.2
1960-69	6.8
1950-59	3.7
Before 1950	3.7

office, and maintenance workers are slightly less unionized (31.0 percent) than are drivers (34.3 percent). Among commission drivers, 51.0 percent are unionized while for hourly, lease, and owner-drivers the unionization rates are 12.4 percent, 28.3 percent, and 19.4 percent respectively.

3.4 Driver Turnover

The amount of driver turnover can be measured by the length of time that drivers have worked for the organizations for which they are now employed. Drivers show a fairly uniform distribution of longevity: 30.0 percent have worked for their organization for one year or less; 20.8 percent for between one and two years; and 26.1 percent for over four years. The mean length of time with the organization is 46.7 months, and the median is 24.4 months.

*Table 3-3 includes only those organizations (35.9 percent of the industry) that lease.

3.5 Consultants

The taxi industry uses marketing advisors or consultants to a very minor degree; only 5.9 percent of the organizations report using these outside specialists.

3.6 Commission Rates

Among the drivers who are paid a commission of total revenues, there is relatively little variation in the commission rates paid new drivers. In fact, 46 percent of the operators who have commission drivers start their new drivers at 40 percent commission. The mean commission rate is 41.1 percent. Only 16.6 percent of the organizations employing commission drivers increase their commission rates with a driver's seniority.

4.0 VEHICLES AND FUEL

4.1 Types of Vehicles

Table 4-1 shows the distribution of vehicles by type for 1981 and for selected vehicle types for 1978. The 1978 figures are based on responses to questions on the 1981 survey which asked operators about their fleets for 1978. The figures in Table 4-1 are the average numbers of each type of vehicle per taxi organization.

TABLE 4-1
VEHICLE TYPE PER ORGANIZATION

Type	1978		1981	
	Mean	Median	Mean	Median
Taxicabs	31.80	8.52	30.44	8.25
Limousines			0.56	0.05
Buses			0.34	0.02
School Buses			0.23	0.02
Ambulances			0.05	0.01
Vans (with lifts)	0.26	0.04	0.44	0.06
Vans (no lifts)	0.76	0.18	0.88	0.12
Tow Trucks			0.21	0.09
Supervisory Vehicles			0.47	0.14
Other			1.29	0.05
Total			34.91	9.67

It is evident from these values that slight changes are occurring in the vehicle mix. Overall the number of vehicles per organization is decreasing, but small increases are occurring for vans. Still, the taxicab vehicle predominates; 87.2 percent of the vehicles are of this type. Table 4-2 shows the percentage breakdown for the industry vehicles in 1981.

TABLE 4-2
DISTRIBUTION BY VEHICLE TYPE, 1981

Type	Percent of Total Vehicles
Taxicab	87.2
Limousine	1.6
Bus	1.0
School Bus	0.7
Ambulance	0.1
Van (with lift)	1.3
Van (no lift)	2.5
Tow Truck	0.6
Supervisory Vehicle	1.3
Other	3.7

4.2 Size of Vehicles

The distribution of vehicle sizes for the taxi industry is shown in Table 4-3. The "mini or subcompact" category includes vehicles such as the Chevette, Fiesta, Rabbit, and Horizon. The "compact or midsize" includes the Malibu, Fairmont, Nova, and Volare. The "large" category includes all standard size vehicles, such as the Checker, Impala, and LTD.

While Table 4-3 shows that the taxi industry uses a substantial number of small vehicles, it is not clear whether this trend toward smaller vehicles is increasing. No previous data on vehicle size within the industry are available for comparison, although it is safe to assume that the industry has reflected the trend of American consumers toward smaller vehicles. Judging from the mean number of vehicles purchased in 1981, it seems that the size distribution is not changing. That is, the distribution of new vehicles purchased in 1981 is similar to that of the vehicles in use in 1981, meaning that the size distribution in 1982 is essentially unchanged from 1981.

TABLE 4-3
FLEET REPLACEMENT

	Vehicle Size		
	Mini or Subcompact	Compact or Midsize	Large
Percent of all Taxis	9.8	35.9	54.3
Number Purchased In 1981 Per Operator:			
Mean	1.3	6.1	8.2
Median	0.1	0.8	0.6
Average Replacement Cycle (months)	34.8	34.4	37.5

4.3 Ownership of Vehicles

As discussed in Section 3.2, there has been a major transition within the industry toward independent contractor drivers. The most dramatic evidence of this change is shown in Table 4-4. Here the percentages of vehicles

in each ownership category are shown for 1981 and 1978. As with other data for 1978, these, too, come from the 1981 survey.

The most striking feature of Table 4-4 is the change in the first category: firm-owned, employee-driven taxis have declined abruptly with the other categories all increasing. Thus, the image of the industry as commission drivers driving vehicles owned by a fleet owner is no longer appropriate. Moreover, this transition away from employee-driven vehicles has occurred with remarkable speed, having decreased from 44.9 percent to 29.0 percent in just three years.

TABLE 4-4
VEHICLE OWNERSHIP AND OPERATION

Type of Ownership and Operation	Percent of Taxicabs	
	1978	1981
Firm-owned; employee driven	44.9	29.0
Firm-owned; lessee-driven	37.3	47.7
Driver-owned and driven	15.6	18.8
Driver-owned and leased	1.9	4.2
Other	0.3	0.2

4.4 Fuel Use and Economy

As expected, gasoline is still the dominant fuel used by the taxi industry. However, as shown in Table 4-5, there are other fuels which are also now being used. Nearly three out of every one hundred report that LPG is now the fuel which they use the most.

TABLE 4-5
FUELS USED BY INDUSTRY, 1981

Fuel	Percent of Organizations Using Fuel	Percent of Organizations For Which Fuel is Most Used
Gasoline	98.1	95.2
Gasohol	2.7	0.6
Diesel	5.2	1.0
LPG	7.1	2.9
Other	0.3	0.2

The taxi industry purchases gasoline both in bulk and from pumps. Bulk purchases are made by 40.7 percent of the operators; these operators paid an average of \$1.25 per gallon in 1981. Gasoline was purchased at the pump by 67.1 percent of the operators at an average price of \$1.30 in 1981. The average fuel economy for the industry rose from 11.9 miles per gallon in 1978 to 12.9 in 1981. Some operators (7.8 percent) use both purchasing methods.

4.5 Taxes and Rebates

Motor fuel taxes are levied at the federal, state, and sometimes the local level. The federal taxes are rebated to taxi operators who apply for the rebate and who meet certain qualifications. In addition, some states also rebate the state fuel tax to taxi operators who apply for the rebate.

The industry does not take full advantage of the available federal and state fuel tax rebates. Only 51.1 percent of the operators applied in 1981 for the federal rebate, and only 30.0 percent of the operators in states which offer a state tax rebate applied for it in 1981.

5.0 PRODUCTIVITY AND ECONOMICS

5.1 Productivity

The productivity of taxi service can be measured in several different ways. Four productivity measures are displayed in Tables 5-1 and 5-2. Table 5-1 and the top portion of Table 5-2 apply only to non-contract taxi services; the bottom portion of Table 5-2 includes regular and contract services.

TABLE 5-1
TAXICAB PRODUCTIVITY, REGULAR TAXI SERVICE, 1981

Measure	25th Percentile	Median	75th Percentile	Mean
Annual Trips Per Taxicab (000)	3.55	6.75	10.00	8.51
Paid Miles Per Trip (meter only)	2.31	3.00	4.67	4.18
Paid Miles Per Vehicle Mile	0.46	0.55	0.74	0.64
Passengers Per Trip	1.23	1.50	1.85	1.56

These productivity measures show some differences compared with the 1973 and 1975 survey data. The trips per taxi per year values are similar to those for 1975 and 1973 with the 1981 median value slightly less than for the earlier years, but the mean value slightly higher than for the earlier years. As should be expected given the fact that taxis operate different lengths of time per year, the variation in the annual trips per taxi is large.

TABLE 5-2

PRODUCTIVITY BY SIZE OF ORGANIZATION, 1981

Measure	Taxicabs in Organization								
	0-2	3-9	10-24	25-49	50-74	75-99	100-199	200+	All
<u>Regular Taxi Service</u>									
Annual Trips Per Taxi (000)	4.79	9.64	8.56	8.86	8.43	8.78	7.70	12.02	8.51
Passengers Per Trip	1.50	1.52	1.63	1.52	1.68	1.78	1.55	1.53	1.56
Paid Miles Per Trip (meter only)	6.22	4.61	3.83	3.90	3.35	3.28	4.42	3.69	4.18
Paid Miles Per Vehicle Mile	0.65	0.62	0.60	0.54	0.55	0.55	0.52	0.55	0.60
<u>Total Operations</u>									
Annual Passengers Per Passenger Vehicle (000)	9.45	11.14	15.56	11.41	12.76	16.77	10.16	8.26	12.74
Passengers Per Vehicle Mile (contract plus regular service)	.51	.90	.53	.44	.70	.55	.43	.35	.63

The other three productivity measures in Table 5-1 are all slightly higher than values for the two earlier surveys. For example, in 1975 the mean number of paid miles per vehicle mile was 0.516, and the passengers per trip averaged 1.60 in 1973 and 1.46 in 1975.

In Table 5-2 these productivity measures are disaggregated by size of organization. The purpose of this table is to determine whether any apparent economies of scale exist in the industry. Most of the measures show little variation across the size categories, and the variation does not provide any apparent pattern. Based upon these data, there are no observable economies of scale.

5.2 Costs and Revenues

Comparing costs and revenues is of obvious importance since the profitability of the industry is essential to its survival. Taxi operators normally keep careful records of their costs, and it is presumed that this case is reflected in the responses to this survey. Revenue data, however, are not collected for most vehicles that are leased. This is a result of an IRS regulation which prohibits taxicab companies from monitoring the wages of lease drivers. Thus, one of the impacts of the switch to leasing is that fewer taxi organizations have accurate (or any) records of the revenues received by lease drivers. Consequently, the quality of the revenue data collected in this survey is poorer than that of the cost data.

Tables 5-3 and 5-4 present the cost and revenue data. As expected, the values in Table 5-3 show considerable variation for all the measures. The operating ratio, the ratio of costs to revenues, is shown at the bottom of Table 5-3. While the mean and median are both below 1.0, many operators are above 1.0, meaning that they are not profitable. Except for the bottom line in Table 5-3, all values are for non-contract taxi services.

TABLE 5-3
COSTS AND REVENUES, 1981

Measure	25th Percentile	Median	75th Percentile	Mean
Cost Per:				
Taxicab (000)	\$12.50	\$22.47	\$37.48	\$26.97
Vehicle Mile	.47	.62	.82	.66
Trip	2.20	3.33	5.58	4.76
Passenger	1.36	2.26	3.88	3.29
Revenues Per:				
Taxicab (000)	12.75	20.77	30.00	23.24
Vehicle Mile	.39	.56	.72	.66
Trip	2.15	3.14	4.44	3.65
Passenger	1.40	2.06	3.24	2.89
Cost Per Revenue:				
Regular Service	.70	.95	1.17	.96
Contract Service	.40	.77	1.00	.76

These same cost and revenue measures are shown in Table 5-4 for various sizes of taxi organizations. As with Table 5-3, this table shows a considerable variation in measures. Profitability varies with smaller firms experiencing little or no profits and larger firms experiencing slightly higher profits. Firms in the 75-99 size category show the largest profits.

Again, the uncertainty in the revenue data means that the operating ratios should be interpreted with care. Also, the survey asked for

TABLE 5-4

COSTS AND REVENUES BY SIZE, 1981

Measure	Taxicabs in Organization								
	0-2	3-9	10-24	25-49	50-74	75-99	100-199	200+	All
Costs Per:									
Taxicab (000)	\$18.63	\$24.25	\$31.42	\$28.86	\$28.98	\$35.88	\$28.97	\$37.31	\$26.97
Vehicle Mile	.65	.69	.64	.66	.58	.54	.76	.70	.66
Trip	7.13	4.33	4.47	4.16	3.89	3.78	5.07	4.77	4.76
Passenger	4.74	3.24	2.92	2.90	2.51	2.16	3.62	3.15	3.29
Revenues Per:									
Taxicab (000)	15.77	21.07	25.72	29.53	25.26	25.76	25.72	31.31	23.24
Vehicle Mile	.56	.69	.68	.65	.64	.78	.61	.67	.66
Trip	4.51	3.42	4.14	4.07	3.35	4.61	4.20	3.96	3.90
Passenger	3.61	2.66	2.95	2.97	2.12	2.81	2.97	2.93	2.89
Cost Per Revenue:*									
Regular Service	.91	1.01	.98	.95	.85	.71	.97	.95	.96
Contract Service	.84	.69	.88	.68	.47	.63	1.07	.88	.76

*Computed using only those operators who reported both costs and revenues on a per-mile basis.

"operating costs," which means that depreciation may or may not have been included by operators in their responses. Thus, the operating ratios should be viewed as approximate with the greater reliability attributed to trends across size categories.

5.3 Contract Services

The taxi industry has made a major move into contract services. Contract services provide 23.4 percent of the revenues of the industry, and 62.2 percent of the taxi organizations report having at least one contract. The sources of these contracts vary widely. Table 5-5 shows the percentages of taxi operators that contract with various organizations or institutions. This table also shows which types of contracts are reported by taxi operators as accounting for the largest portions of their contract revenues but not necessarily the largest portion of their profits. Table 2-7 shows the percentages of taxi organizations which provide various types of contract services.

Several conclusions result from these tables. One is that the percentages of organizations providing services to handicapped, elderly, and low income persons have increased greatly since 1975. Second, only 14.4 percent of the operators report contracts with transit authorities. Third, blood and hospital supplies are carried under contract by many more operators than in 1975. The other categories have largely held constant since 1975.

TABLE 5-5
SOURCES OF CONTRACT REVENUES, 1981

Sources	Percent of Taxi Organizations
Contracts With:	
Private Company	66.3
Private Individual	37.9
Hospital	51.1
School District	41.6
Social Service Agency	56.1
City Agency	28.0
Transit Authority	14.4
Other Public Agency	12.9
Most Contract Revenues From:	
Company Employees	11.4
School Children	20.4
Hospital Patients	4.0
Government Employees	0.7
Blood, Hospital Supplier	6.2
Senior Citizens	10.0
Public Aid Clients	12.6
Handicapped	6.4
Dial-a-Ride	3.6
Packages	16.8
Other	8.0

6.0 FARE STRUCTURES

6.1 Exclusive Ride Fares

Tables 6-1 and 6-2 describe the fare-setting methods used by the taxi industry in computing exclusive-ride fares. As shown in Table 6-1, the meter-only method of fare computation remains the most common and is used slightly more often than in 1976.* Nonmeter methods have also increased in usage. The combinations of meters and other fare computation methods have declined. For nonmeter methods, the zonal method of fare computation is by far the most prevalent.

TABLE 6-1
FARE SYSTEMS, 1976 and 1981

Fare System	Percent	
	1976	1981
Meter Only	47.2	50.8
Meter with Other System	<u>23.8</u>	<u>4.4</u>
Total with Meter System	71.0	55.2
Other Systems	29.0	44.8

*In this section the dates of the earlier two surveys are 1974 and 1976 since the surveys asked operators for their fare structures for these years. Much of the other information from those surveys was for the calendar year 1973 and 1975.

TABLE 6-2
FARE COMPUTATION METHODS, 1981

Type of Fare System	Percent
Meter Only	50.8
Meter in Combination with:	
Odometer	0.1
Zone	1.0
Flat	0.2
Other Multiple Combinations	3.1
Non-metered Systems	
Zone Only	23.8
Zone and Other Non-metered	1.3
Flat Rate Only	3.6
Odometer Only	7.3
Other Combinations	8.8

6.2 Flag Drop Rates

The flag drop rate is a combination of the drop charge and the initial distance covered by the drop. Table 6-3 shows the distribution of charges and distances for the survey respondents with meters. A comparison with the corresponding data for 1976 shows that the most prevalent drop distances have remained about the same (1/5 and 1/6 of a mile) since 1976, but that the drop charge has increased. In 1976 the most prevalent drop charges were 70¢ and 80¢; in 1981 they were 90¢ and \$1.00.

6.3 Mileage Charges

The distribution of mileage charges for 1981 is shown in Table 6-4. As with the drop charges, the most common increments by which mileage rates are computed are 1/5 and 1/6 mile. Compared with the corresponding data for 1976, the results in Table 6-4 show a higher incidence of 1/10 mile as the basis for mileage charges. The most common mileage charge in 1981 was \$0.20

TABLE 6-3

FLAG DROP CHARGE AND DISTANCE, 1981
(Number of Taxi Firms)

Initial Flag Drop Charge	Distance (miles) Included in Initial Drop Charge																Taxi Organizations		
	1/20 .05	1/12 .07	1/12 .08	1/12 .09	1/10 .10	1/8 .13	1/7 .14	1/6 .17	1/5 .20	1/4 .21	1/4 .25	1/4 .29	1/3 .30	1/3 .33	1/2 .40	1/2 .43		> .50	> .50
\$0.75						1			3	1							1	6	
0.80		1			3	4		1	2		1	1		1			1	15	
0.85					1	1	4	1	5		1		3			1	2	19	
0.90			1		10	4	5	7	7		8		1			1	3	47	
0.95	1			3	7	2	2	3	5		1			2				26	
1.00	4		2	2	17	8	8	10	22	1	8		2	4	1	4	9	102	
1.05					3		2	2	3					1		1		12	
1.10		1		1	3	1		3								1	1	11	
1.15								1	1								1	3	
1.20	1		2		3	1		10	7	7				1			3	36	
1.25					4	2		3	2		1					3	2	17	
1.30			2			5	1	2			1			1		1	1	14	
1.35									3		1					2		6	
1.40				1			2	14	2								4	24	
1.45								1										1	
1.50				1	7	3		1	2							1	1	16	
1.55									1									1	
1.60			1					3		1								5	
1.65									1		3							4	
1.75		1		1	1											1	1	5	
1.80																	1	1	
1.85								1								1		2	
1.90									2							1	1	4	
1.95																1		1	
2.00					1		2	1								1		5	
2.10						1												1	
Number of Taxi Organizations	6	2	9	8	60	35	29	61	69	2	32	1	1	5	10	1	18	35	384

TABLE 6-4

MILEAGE CHARGE, 1981
(Number of Taxi Firms)

Charge Per Fraction of a Mile	Distance Included in Charge Per Mile														Number of Taxi Organizations	
	1/12 .07	1/12 .08	1/10 .09	1/10 .10	1/8 .13	1/7 .14	1/6 .17	1/6 .18	1/5 .20	1/5 .21	1/4 .25	1/3 .33	1/3 .40	1/2 .50		1 1.0
\$0.10	1	10	4	47	30	18	10		1							121
0.15				5	1	1	3									10
0.18				1					2							3
0.20			1	1	2	22	50	2	89		27			1		195
0.25					1				2	2	5	1	1			12
0.30							1				1					2
0.35													2	1		3
0.40									1							1
0.50														1		1
0.60				1												1
0.70						1			1						1	3
0.80											1				1	2
0.90															3	3
1.00															7	7
1.10			1													1
1.20							1		1						1	3
1.25															1	1
>1.25															2	2
Number of Taxi Organizations	1	10	6	55	34	42	65	2	97	2	34	1	3	2	17	371

per 1/6 mile.

6.4 Fares for Fixed Trip Distances

To understand how taxi fares have changed, the costs of trips of one mile, three miles, and four and one-half miles were calculated for each respondent. Table 6-5 shows the results, along with similar results for the two earlier Wells surveys.

TABLE 6-5
FARES FOR SELECTED TRIP DISTANCES

Length of Trip	Cost of Trip			
	25th Percentile	Median	75th Percentile	Mean
<u>One-Mile Trip</u>				
1974	NA	NA	NA	NA
1976	\$1.10	\$1.20	\$1.35	\$1.24
1981	1.65	1.85	2.13	1.96
Increase (1976-81)	50%	54%	58%	58%
<u>Three-Mile Trip</u>				
1974	2.04	2.24	2.45	2.27
1976	2.25	2.45	2.70	2.54
1981	3.50	3.85	4.40	4.22
Increase (1976-81)	56%	57%	63%	66%
<u>Four-and-One-Half Mile Trip</u>				
1974	2.75	3.09	3.42	3.15
1976	3.10	3.34	3.75	3.51
1981	4.75	5.35	6.20	5.90
Increase (1976-81)	53%	60%	65%	68%

NA = Data not available.

Table 6-5 leads to two important conclusions regarding taxi fares. One of these is that shorter trips are more expensive on a per-mile basis than are longer trips. For example, the mean per-mile price for a three-mile trip in 1981 was \$1.41 compared with \$1.96, for a one-mile trip. The four-and-one-half mile trip in 1981 cost a passenger \$1.31 per mile. Thus, the longer the trip, the lower the per-mile price. This fact is to be expected given the necessity for operators to cover their fixed and dead-head costs through fares. However, it is interesting to note the magnitude of the savings incurred by longer-trip passengers. For 1981 the ratio of the per-mile prices for three-mile and one-mile trips was 0.72, and for the 4 1/2 and one-mile trips the ratio was 0.67. A passenger saves 28 percent on the per mile fare by increasing his trip distance from one to three miles but saves only an additional 5 percent by extending his trip still another one and one-half miles.

The other conclusion from Table 6-5 is that taxi fares since 1976 have not quite increased as fast as inflation. From 1976 to 1981 the consumer price index rose by about 58 percent while the portion of the index referring to the cost of operating an automobile rose by 68 percent. The increase in fares, however, was slightly less than the increase in automobile operating costs. The taxi operators in the country have therefore not gained on inflation through fare increases during 1975-81.

6.5 Waiting Time and Traffic Delay Charges

In 1981 the most common waiting time charge was \$10 per hour, and the most common traffic delay charge was \$12 per hour. The distributions of these charges are shown in Table 6-6. Waiting time charges are imposed by 93 percent of the operators while traffic delay charges are used by 26 percent of the operators.

TABLE 6-6

DISTRIBUTIONS OF WAITING AND TRAFFIC DELAY CHARGES, 1981

Amount	Percent of Those Operators Who Use Charges	
	Waiting Time	Traffic Delay
Less than \$5	1.2	1.0
\$5 - \$7	11.1	7.8
\$7 - \$9	11.9	14.6
\$9 - \$12	64.2	8.3
\$12 and over	11.6	68.3

6.6 Nonmeter Fare Systems

Table 6.2 showed that the most common nonmetered fare systems are zonal (23.8 percent), odometer (7.3 percent), and flat (3.6 percent). Zonal systems are difficult to analyze or compare because of the varying dimensions of the zones. The mean and median rates for the first zone are \$1.60 and \$1.50, respectively, and the additional zone charges are \$0.61 and \$0.49, respectively.

Two forms of odometer rates are used by the sample firms. Sixty percent use an odometer rate with a form of "drop" or first mile charge, and forty percent use a straight per-mile rate. For those firms with a "drop" charge, the mean charge is \$2.06 and the median is \$1.80. For those with a straight mileage rate, the charge is about \$1 per mile. Extra miles, when a drop is used, and out-of-town rates also tend to be about \$1 per mile. For those firms with a flat or per-person rate, the mean fare is \$1.88, and the median \$1.77.

6.7 Shared-Ride Fare Systems

There are several ways to charge for shared-ride services. Among the 46.5 percent of the firms that offer shared-riding, zones are used by 20.7 percent, flat-rates by 10.8 percent, and per mile charges by 7.0 percent. The remaining firms (61.5 percent) use a variety of other methods of charging shared-ride customers. Many of these other methods are impossible to categorize because of the ambiguity in the descriptions provided by the survey respondents. However, the most common other method is some form of splitting a meter rate.

6.8 Fare Increases

Almost 76 percent of the firms have received a fare increase in the past two years, and 22.5 percent have received two or more increases during the period.

6.9 Reduced Fares

Taxi operators commonly offer fare reductions to a variety of users. Table 6-7 shows that elderly passengers are the most frequent recipients of such reductions. Further, fare reductions are most often absorbed by taxi operators rather than by some other entity.

6.10 Extra Charges

There are several other types of charges sometimes imposed by taxi operators. Night-time surcharges are used by 10 percent of the firms with the most frequent charge being \$0.50 per hour or per trip. Over half of the operators (51 percent) impose a charge for extra passengers, and 24 percent have a surcharge for airport trips. Extra baggage is the subject of charges for 29 percent of the taxi operators.

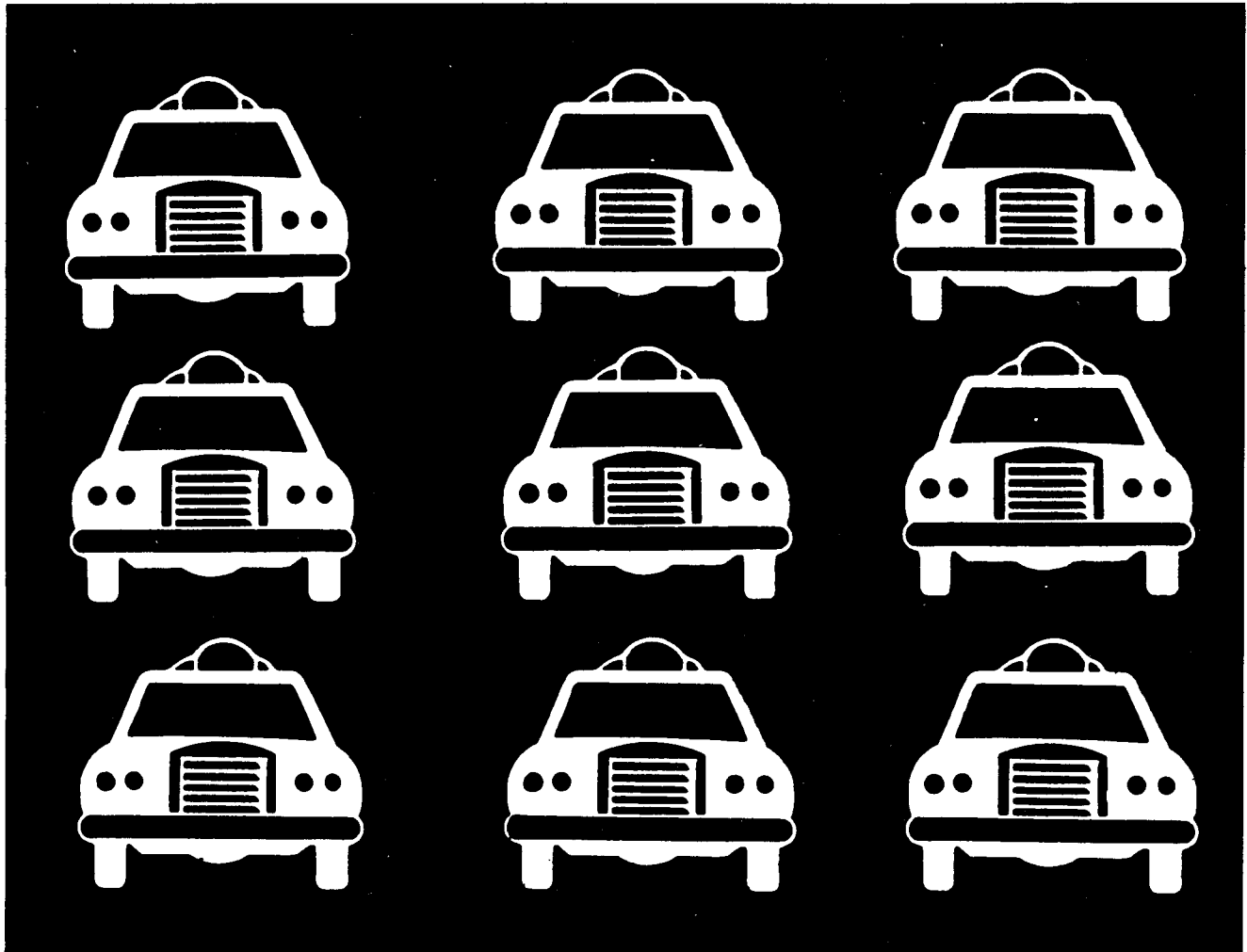
TABLE 6-7
 REDUCED FARES FOR SPECIAL USERS, 1981

Organization Absorbing Cost of Discount	Percent of Population Group Receiving Discount		
	Elderly	Handicapped	Low Income
Taxi Operator	17.3	4.8	0.6
Local Government	5.6	2.4	0.4
Transit Authority	2.0	1.3	0.3
Other	11.7	12.6	6.4
Total Operators Offering Fare Reduction (%)	36.6	21.1	7.7

APPENDIX A
NATIONAL TAXICAB SURVEY



NATIONAL TAXICAB SURVEY



Conducted by

**International Taxicab Association
11300 Rockville Pike
Rockville, Maryland 20852**

Sponsored by

**Office of Policy Development
Urban Mass Transportation Administration
U.S. Department of Transportation**

The International Taxicab Association has developed this questionnaire in cooperation with the U.S. Department of Transportation. Information and statistics gathered in this survey will help establish the role of the taxicab industry in the public transportation sector and will illustrate the importance of taxicab operations to various government agencies, as well as to the Congress of the United States. In addition, this survey will provide a means for taxicab operators and government officials to learn about recent trends in the industry.

Please answer the questions by circling the number corresponding to the appropriate response, or by filling in the blanks. If you do not know exact figures for some of the questions, make your BEST ESTIMATE and continue to the next question. The information you provide will be treated with the strictest confidence. Thank you for your help.

Vehicle Fleet

The first set of questions deals with the fleet your organization operates. By fleet we mean all vehicles owned, operated, leased and/or dispatched by your organization.

1. How many vehicles of the following types did your organization operate in September 1981?

- _____ # Taxicabs (carries 9 passengers or less)
- _____ # Limousines (carries more than 9 passengers)
- _____ # Buses (except school buses)
- _____ # School buses
- _____ # Ambulances
- _____ # Vans equipped for handicapped
- _____ # Vans not equipped for handicapped
- _____ # Tow trucks
- _____ # Supervisory vehicles
- _____ # Other (Please specify: _____)
- _____ # Total (Note: Total should equal the total number of vehicles in your organization)

2. How many vehicles of the following types did your organization operate in September 1978?

- _____ # Taxicabs (carries 9 passengers or less)
- _____ # Vans equipped for handicapped
- _____ # Vans not equipped for handicapped

<i>Minicompact or Subcompact</i> (e.g. Honda Civic, Le Car, VW Rabbit, Chevette, Fiesta, Horizon)	<i>Compact or Midsize</i> (e.g. Malibu, Fairmont, Nova, Citation, Le Baron, Volare)	<i>Large</i> (e.g. Electra, Impala, LTD, Checker Cab)
--	--	---

3. How many of these does your organization currently operate as taxicabs?

_____ # _____ # _____ #

4. How many of these did your organization acquire in 1981?

_____ # _____ # _____ #

5. On the average, how often do you replace these types of vehicles?

_____ months _____ months _____ months

6. If you operate vans, on the average how often do you replace them?

_____# of months

7. Of the taxicab vehicles operated by your organization in September 1978 and September 1981, please provide your best estimate of the number of taxicab vehicles that were:

September 1978

September 1981

_____#

_____#

Owned by the organization, driven by employee drivers.

_____#

_____#

Owned by the organization, driven by lease drivers.

_____#

_____#

Owned by drivers, driven by drivers (driver-owners).

_____#

_____#

Owned by drivers, leased to lease drivers.

_____#

_____#

Other (Please specify: _____)

Fare System

In this section, we have some questions about fare systems used in your organization. If you do not know exact figures for some of the questions, make your BEST ESTIMATE and continue to the next question.

1. What is the fare system for in-city, exclusive rides? (Circle one)

1 Meter only



If meters are used, how are fares calculated?
Initial drop: \$_____ per (fraction) _____ mile
Additional distance: \$_____ per (fraction) _____ mile

2 Zone only



If zones are used:
How much is the initial zone?
\$_____ per initial zone
How much is each additional zone?
\$_____ per each additional zone

3 Combination meter and zone or meter and flat rate



If combination meter and zone or meter and flat rate are used, how are fares calculated? _____

4 Odometer mileage



If odometer mileage is used, how are fares calculated?

5 Flat rate



If flat rates are used, how are fares calculated? _____

6 Other (Please explain)

2. Does your organization collect a *night-time charge*?

1 No

2 Yes →

If a night-time charge is collected, when is it collected and how much is it?

Time period: _____

Amount: \$ _____

3. Does your organization collect an *extra passenger charge*?

1 No

2 Yes →

If an extra passenger charge is collected, how much is it?

\$ _____ per passenger

4. Does your city or airport collect an *airport charge*?

1 No

2 Yes →

a. If an airport charge is collected, how much is it?

\$ _____ per passenger

b. Do you pass the fees on to the customer?

1 No

2 Yes

c. Does the company absorb the fees?

1 No

2 Yes

5. Does your organization collect a *waiting time charge*?

1 No

2 Yes →

If a waiting time charge is collected, how much is it?

\$ _____ per hour

6. Does your organization collect a *traffic delay charge*?

1 No

2 Yes →

If a traffic delay charge is collected, how much is it?

\$ _____ per hour

7. Does your organization collect a *baggage charge*?

1 No

2 Yes →

If a baggage charge is collected, how much is it?

\$ _____ per _____

8. Does your organization collect any other types of charges?

1 No

2 Yes →

If your organization collects other types of charges, please specify and indicate amount.

9. Does your organization have a shared-ride service?

1 No

2 Yes 

If yes, how is the fare determined? _____ _____ _____ _____ _____
--

10. Do you give *reduced fares* in *exclusive-ride services* for the following groups? (Circle each that is offered and indicate who absorbs the cost)

1 *Elderly*

2 *Handicapped*

3 *Low income*

4 *None*



Who absorbs the cost? (Circle)

Who absorbs the cost? (Circle)

Who absorbs the cost? (Circle)

- 1 Your organization
- 2 Local government agency
- 3 Nonprofit social service agency
- 4 Transit authority
- 5 Other (Please explain _____)

- 1 Your organization
- 2 Local government agency
- 3 Nonprofit social service agency
- 4 Transit authority
- 5 Other (Please explain _____)

- 1 Your organization
- 2 Local government agency
- 3 Nonprofit social service agency
- 4 Transit authority
- 5 Other (Please explain _____)

11. In the past two years:

a. How often did your organization *apply* for *rate increases or surcharges*?

_____ Number of times applied for rate increases or surcharges

b. How many *rate increases* did your organization *receive*?

_____ Number of rate increases or surcharges received

Services

The next set of questions deals with services your organization offered in 1981. Please answer the questions by circling the number corresponding to the appropriate response, or by filling in the blanks. If you do not know exact figures for some of the questions, make your **BEST ESTIMATE** and continue to the next question.

1. Which of the following types of areas do you serve? (Circle all that apply)

- 1 Downtown
- 2 Remainder of the central city
- 3 Suburb
- 4 Small towns
- 5 Airport

2. What proportion of the taxicabs operating in your service area are operated by your organization? (Circle one)
- 1 Less than 10%
 - 2 10%–24%
 - 3 25%–49%
 - 4 50%–74%
 - 5 75%–99%
 - 6 100%

3. Which of the following *regular* transportation services (excluding contracts) were provided by your organization in 1981? (Circle all services provided excluding contract services)
- 1 Exclusive-ride taxicabs (one or more passengers from same origin to same destination)
 - 2 Shared-ride taxicabs (two or more unrelated passengers with different origins and destinations; also called dial-a-ride)
 - 3 Limousine
 - 4 Package delivery
 - 5 Other demand services (Please specify: _____)

4. What was the *average cost per vehicle mile* for the regular (non-contracted) taxicab services provided by your organization in 1981? (Do not include contract services)
- \$_____ Average cost per vehicle mile

5. If your organization provided regular (non-contracted) taxicab services in 1981, please answer the following questions in terms of those services. (Do not include contract services)
- a. How many taxicab trips were made by your organization in 1981?
_____ Total number of taxicab trips in 1981
 - b. How many passengers were carried in 1981?
_____ Total number of passengers carried in 1981
 - c. How many miles, both paid and dead head, were driven in 1981?
_____ Total number of miles driven in 1981
 - d. How many paid miles were driven in 1981 with regular taxicab services?
_____ Total number of paid miles in 1981
 - e. What was the total revenue from taxicab services that your organization provided in 1981?
\$_____ Total revenue for regular taxicab services

6. Did your organization engage in contract services in 1981?

1 No --- skip to question 1 on page 8

2 Yes →

a. In the first column, circle the number next to *each* of the contract services your organization provided in 1981. (Circle *each* provided)

- 1 Company employees
- 2 School children
- 3 Hospital patients/nonemergency ambulance services
- 4 Government employees
- 5 Blood and hospital supplies
- 6 Senior citizens
- 7 Public aid recipients
- 8 Handicapped
- 9 Community circulation (Dial-a-ride)
- 10 Package delivery
- 11 Other (Please specify: _____)

b. Enter in the box below the number of the contract service (above) that provided the most revenue in 1981.

c. How does your organization charge for special contract services? (Circle all that are used)

- 1 Per hour
- 2 Passenger mileage
- 3 Taxicab rate
- 4 Other (Please specify: _____)

d. How are drivers paid for contract services? (Circle all that are used)

- 1 Lease →

If you have lease drivers who participate in your contract services, do they bid to be able to provide that service?
1 No
2 Yes
- 2 Commission
- 3 Hourly
- 4 Other (Please specify: _____)

e. Circle the number of *each* group for which your organization contracted with in 1981.

- 1 Private companies
 - 2 Private individuals
 - 3 Hospitals
 - 4 School districts
 - 5 Social service agencies
 - 6 Other county or city agencies
 - 7 Transit authority
- (continued on next page)

- 8 Other public agency
- 9 Other (Please specify: _____)

- f. How many passengers were carried in contract services in 1981?
_____ Total number of passengers carried in 1981
- g. How many miles were driven in providing contract services in 1981?
_____ Total number of miles driven in 1981
- h. What was the average cost per mile for all contract services provided by your organization in 1981?
\$ _____ Average cost per mile in 1981
- i. What was the total revenue from all of the contract services that your organization provided in 1981?
\$ _____ Total revenue from all contract services

Fuels

The next set of questions deals with fuels your organization used in 1981. If you do not know exact figures for some of the questions, make your BEST ESTIMATE and continue to the next question.

- 1. Which of the following fuels does your taxi organization use? (Circle all that are used)
 - 1 Gasoline
 - 2 Gasohol
 - 3 Diesel
 - 4 LPG (propane)
 - 5 Other (Please specify: _____)
- 2. Please put the number of the fuel (above) that is used most in the box below.
- 3. What was the average taxi sedan fuel economy for your organization in September 1981?
_____ mpg fleet fuel economy for September 1981
- 4. What was the average taxi sedan fuel economy for your organization in September 1978?
_____ mpg fleet fuel economy for September 1978
- 5. How does your organization adjust to rising fuel prices? (Circle)
 - 1 Fare increases are requested
 - 2 Fuel adjustments are collected

- a. How much are your fuel adjustments per trip?
\$ _____ Amount of fuel adjustment charge
 - b. How are your fuel adjustment charges calculated? _____)

6. Do you buy fuel in bulk? (Circle)

1 No

2 Yes

a. How much did you pay per gallon of fuel in September 1981?

\$_____ Cost per gallon in September 1981

b. What is your fuel storage capacity?

_____ Gallons

7. Do you purchase fuel directly from the *pump*? (Circle)

1 No

2 Yes

a. How much did you pay per gallon of fuel in September 1981?

\$_____ Cost per gallon in September 1981

8. Is there a tax on the fuel your organization uses? (Circle)

1 No

2 Yes

a. Which of the following taxes does your organization pay when purchasing fuel? (Circle all that apply)

1 State tax

2 City tax

3 Federal tax

4 Other (Please specify: _____)

b. Does your *city* give rebates for any tax collected on the fuel your organization purchases?

1 No

2 Yes

c. Does your organization apply for the rebate of the state excise tax on motor fuels?

1 No

2 Yes

3 N/A, no state rebate

d. Does your organization apply for the rebate of the federal excise tax on motor fuels?

1 No

2 Yes

Drivers and Staff

The next set of questions deals with the drivers in your organization. It includes questions about the number of drivers used by your organization, methods of compensation and services provided to drivers. If you do not know exact answers for some of the questions, make your BEST ESTIMATE and continue to the next question.

1. On the average, how many workers do you have in the following categories?

_____ Number of managerial staff, office staff and maintenance staff

_____ Number of commission drivers

_____ Number of hourly-rate drivers

_____ Number of lease drivers

_____ Number of owner-operators

_____ Number of other workers (Please specify type: _____)

2. Did your organization *lease* taxicabs to drivers in September 1981? (Circle)

1 No

2 Yes

▶ a. When did you start leasing?

_____ Date you started leasing

b. How many lease drivers that worked for your organization in September 1981 were of the following types?

_____ # White

_____ # Black

_____ # Spanish, Mexican or Puerto Rican

_____ # Other (Please specify: _____)

_____ Total (Note: total should equal total number of lease drivers in September 1981)

3. Did your organization pay drivers a *commission* in September 1981? (Circle)

1 No

2 Yes

▶ a. What was the beginning commission rate paid to drivers?

_____ % Percent of revenue

b. Did the commission rate you paid increase with driver seniority?

1 No

2 Yes (Please specify: _____)

c. How many commission drivers that worked for your organization in September 1981 were of the following types?

_____ # White

_____ # Black

_____ # Spanish, Mexican or Puerto Rican

_____ # Other (Please specify: _____)

_____ Total (Note: Total should equal total number of commission drivers in September 1981)

4. Did your organization have drivers who were paid on an *hourly basis* in September 1981? (Circle)

1 No

2 Yes

▶ a. What was the starting hourly rate?

\$_____ Starting hourly rate

b. Did your hourly rate increase with seniority?

1 No

2 Yes

c. How many hourly rate drivers that worked for your organization in September 1981 were of the following types?

_____ # White

_____ # Black

_____ # Spanish, Mexican or Puerto Rican

_____ # Other (Please specify: _____)

_____ Total (Note: Total should equal total number of hourly rate drivers in September 1981)

5. What is the average length of time a driver has been with your organization?

_____ Average length of time a driver has been with your organization

6. Do you provide services to independent owner-drivers and/or to other companies? (Circle)

1 No

2 Yes

▶ Please circle the number next to each service provided.

1 Radio dispatching

2 Fuel

3 Maintenance

4 Advertising

5 Storage

6 Cleaning of vehicle

7 Uniforms

8 Other (Please specify: _____)

7. Do you employ a marketing advisor or consultant? (Circle)

1 No

2 Yes

8. Are you self-insured? (Circle)

1 No

2 Yes

▶ If you are, what are the upper limits of your self-insurance?

\$_____ Upper limits of your self-insurance

9. Is your organization unionized? (Circle)

1 No

2 Yes

▶ Is the union national or local? (Circle)

1 National

2 Local

10. Do you use a computer? (Circle)

- 1 No
- 2 Yes, through a service bureau
- 3 Yes, in-house

→ Is the computer:

- 1 Owned
- 2 Leased
- 3 Both owned and leased

11. Which of the following terms best described your organization in September 1981? (Circle one)

- 1 Individual proprietorship/partnership
- 2 Closely-held/family corporation
- 3 Public corporation
- 4 An association or cooperative
- 5 Other (Please specify: _____)

12. When was your organization established?

_____ Date your organization was established

13. Some taxicab organizations provide services to the public under more than one name (e.g., Yellow and Checker). In the box below write in the number of names your organization trades under.

THANK YOU FOR YOUR ASSISTANCE

The information you have provided will be treated in strict confidence and will be presented in a manner that will not reveal the identity of a person or organization. If you would like a copy of the survey results, please write SEND RESULTS with your name and address on the back of the return envelope.