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THE TAXICAB IN MODERN URBAN TRANSPORTATION
IN THE UNITED STATES

A THESIS
Presented to
the Faculty of the Graduate Division
by
Robert Wilson Bivens

In Partial Fulfillment
of the Requirements for the Degree
Master of City Planning

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March, 1960
THE TAXICAB IN MODERN URBAN TRANSPORTATION
IN THE UNITED STATES

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Others have contributed directly and indirectly to the completion of this thesis. To all of these contributors I express my sincere appreciation.

To my wonderful, patient wife, June, and my wonderful, but less patient, son, David, I gratefully dedicate this thesis. Their sacrifices have made this great educational venture possible. Their encouragement has been boundless.
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<th>Page</th>
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INTRODUCTION

Riding on a wave crest of unparalleled technological advancement, the United States is rapidly becoming a country of cities. The growing concentration of people in metropolitan areas and the simultaneous mushrooming of vehicular traffic on antiquated street networks combine to focus the spotlight of governmental action on methods of moving people smoothly, effectively, and inexpensively. The future of any major city may well be measured by the yardstick of its ability to develop a satisfactory solution to its transportation problems.

So complex are the patterns of movement within a city, and so varied are the vehicles for effecting these movements that no single transportation device has yet earned a place of uncontested superiority. Thus it appears that no cure-all has yet been found; nor is such a discovery imminent. Just as the proper key aligns all pins of a tumbler lock into proper relationships with each other, so should a successful urban transportation program properly align each element of public and private transportation into its role of maximum usefulness. The following quotation from a publication of The International City Managers' Association vividly emphasizes
the need for such a comprehensive approach: ¹

A first step in planning a unified transit system is to analyze the characteristics of each of the different kinds of transit facilities — their weak points and their field of greatest usefulness — so that they may be woven together into a unified and smoothly operating system, each performing the functions for which it is best adapted and all properly related to the other elements of the community.

Conspicuously missing from most urban transportation planning studies are taxicabs. Is this omission justifiable, or arbitrary? Do taxicabs serve a useful purpose; if so, what?

It is the purpose of this investigation to study and evaluate the role of the taxicab in modern cities and to develop recommendations for the more effective use of this tool for the movement of people. In this analysis of the taxicab industry, the following questions will be investigated:

1. How did the industry start, and what is its present status?
2. How is the taxi business organized and operated?
3. What services are offered by the taxicab, and what segments of the public does it serve?
4. How is the industry regulated and controlled?
5. How can the usefulness of the taxicab be further developed?

¹ Local Planning Administration, The International City Managers' Association, 1948, p. 135.
CHAPTER I

HISTORICAL BACKGROUND OF THE TAXICAB INDUSTRY

To develop an intimate understanding of the taxicab industry -- its size, how it operates, whom it serves, how it is regulated, its problems, and how it can be used more effectively -- it is necessary to know the history of the industry and the steps of its evolution into its present place in modern urban transportation. Around the common taxicab is built an unusual industry, one which has been in a constant state of transition since its inception. This chapter covers the historical background of the taxicab industry, with particular emphasis on those elements which may contribute to further development of the taxi as an important tooth in the gear of public transportation. (In this study, the term, "public transportation," refers to that transportation which is available for use by the general public; thus, usage is denoted rather than ownership.)

Origin and Early Development

How did the taxicab industry get started? Where did it begin, and what were the patterns of early development? This section traces the origin and early development of the taxicab business in the United States.
A Spectacular Beginning

The forerunner of the modern taxicab was the nineteenth century horsedrawn hack, or hansom cab. Most of these early vehicles-for-hire were found in the older metropolitan areas such as New York, Boston, Chicago, and Philadelphia.

Birth of the industry.—Taxicabs made a flashy and formal debut on the American scene as a fleet — a fleet of sixty-five shiny red taxicabs, complete with taximeters and smartly dressed, uniformed drivers. Even the word "taxicab" was coined for this new type of vehicle making its appearance on the streets of New York City. The founder of this first company, the New York Taxicab Company, was Harry N. Allen; the date was October 1, 1907. Capital for financing this new transportation service came from confident investors in France, England, and the United States. The initial investment of $3 million was divided equally between these three countries.

Early growth.—In spite of violent resistance presented by operators of horsedrawn hansoms, the taxicab industry grew at a phenomenal rate into a fleet of 700 cabs. 2 Public responsiveness to this new public transportation device is reflected in its explosion into a $100 million business by

1929, only 22 years after the birth of the industry. By this time, there were 28,000 cabs on the streets of New York alone. The social prestige associated with automobile use undoubtedly contributed to the early success of the taxi.  

Rapid Growth During Depression Years

Perhaps the most unusual upsurge of industry development occurred during the economic depression of the late 1920's and the early 1930's. With most other industries declining, with millions jobless, and with the nation's economy seriously crippled, taxicab business grew at an unprecedented rate. As financial pressures forced people to seek new employment, cab driving was a natural refuge. At that time, few restrictions guided the industry; demand for transportation service was good; and finally, the capital investment required to enter this business was low, in many cases involving only the minor cost of converting the family automobile into a taxi. Inadequate regulatory controls allowed an outbreak of piracy of mass-transit routes by unscrupulous cab drivers who cruised along the main transit routes and picked up waiting patrons -- frequently at reduced rates.

It is estimated that, by 1931, "there were 84,000 cabs operated by responsible fleet-operators, while another

56,000 were operated by owner-operators. The organized, responsible cabs were then carrying an estimated one million passengers per day. "4

**Competition with transit companies.**—The pinch of competition offered by taxicabs was soon felt by the transit companies. Immunity to regulation gave to the cab companies an unfair advantage over the transit systems which were strictly regulated and guided by public utility commissions. The transit systems were defenseless in the outbreak of fare wars which were waged by cab operators. Offered a less expensive means of transportation, the public turned away from the bus, subway, trolley, and railroad in favor of the taxicab. Mass-transit began to suffer serious loss of revenue.

**A campaign for regulation.**—In the face of this battle for survival, the transit industry initiated a campaign for the regulation of taxicabs in a manner consistent with that of the transit industry. "5 Many taxi owners and operators, sensing the build-up of an over-supply of cabs in many locations, joined forces with transit interests in advocating regulatory controls. Transportation journals of the late 1920's and


the early 1930's contain many articles pointing out the need for taxicab control and regulation. This intensive campaign brought results, and many of the states passed laws setting forth taxicab licensing requirements -- a rudimentary first-stage control measure. Some states went so far as to place the industry under the control of public utility commissions, thus for the first time recognizing the taxicab as an element of public convenience and necessity. In 1937, New York made the drastic move of ordering a reduction in the number of taxicabs from an estimated 20,000 to 11,796 -- a ceiling which still exists without regard for any population changes which have occurred since that time.6

Value of the Cab During World War II

Although the late 1930's reflected a general leveling out of industry growth, World War II marked the beginning of another favorable upward trend for the cab business. With the wartime rationing of tires, gasoline, and repair parts for private automobiles, people sought every available means of public transportation. At first, however, the cab industry itself was crippled by the same limitations which so adversely affected private automobile owners. Soon the true value of the taxi in moving people became obvious to governmental

officials and to the public; consequently, rationing controls were relaxed to permit the industry to fulfill its war-time role more effectively. Recognition of the importance of the taxicab to the war effort is shown in the following quotation from an article appearing in a trade journal during World War II;  

The Office of Defense Transportation recognizes that taxicabs fill a transportation need many times that of private automobiles, and, in the main, it has now been too severe in its limitations on travel. In the same breath, ODT has been extremely interested in maintenance of a sufficient fleet on the streets as an alternative to further crowding of transit vehicles in some instances or overuse of private cars in others.

Circumstances encouraging the use of taxicabs during World War II carried over into the post-war years. Habits formed by non-owners of automobiles were not quickly changed after the war. The cab had proved valuable, not only in its normal commuter role, but also as an emergency transportation device -- a characteristic which is highly significant in user patterns today.

Changes After World War II

Return of the nation to normal conditions after cessation of hostilities saw some strange developments occurring within the taxicab industry. Cab operating companies had heretofore been closed enterprises in most major American

7Stanley H. Brams, "Assembly Line," The Iron Age, February 8, 1945, p. 66.
cities. Now, however, came an effort to break down the existing franchises and penetrate the closed groups serving our cities. This movement was led by veterans returning from the war. Just as in the depression years, the cab business was easily entered and required very little capital outlay. In many cases, veterans invested war-time savings and mustering-out pay in automobiles — thus qualifying for work in veterans' cab companies.

The returning veterans' entry into the taxicab business met with strong resistance from the older, established companies. Violence and court action followed; however, the drive of the veterans was strong, the effort was united, and public sentiment favored the returning hero. Consequently, in many cities veterans' cabs penetrated the defenses of the old companies. Competition became very keen, bringing about many innovations in the industry. Changes in ownership increased, undoubtedly contributing significantly to the scarcity of information about the industry.8

The Taxicab Industry Today

Just how big is this taxicab industry? How many passengers does it transport, and how does this compare with other forms of transit? How many people are employed in the

industry? What are the trends of this business? This section will explore these questions for determining the significance or insignificance of this means of public transportation.

The Number of Taxicabs

Statistical information concerning taxicabs is sketchy and incomplete; not even a reasonably accurate estimate of the total number is available. This lack of information is due to many factors, among which are:

1. the absence of special licensing requirements in many states,
2. the lack of a closely-knit industry-wide organization,
3. the high turn-over rate of company ownerships, particularly in smaller cities,
4. the lower degree of regulation of the industry as compared with other industries serving similar public needs,
5. the prevalence of driver-owners and the large number of small, independent companies, and
6. the similarity between taxicabs and private automobiles, considering both behavior in traffic and general appearance. (In many traffic counts, no distinction is made between the two.)

Notwithstanding the acute lack of information about the mag-
nitude and importance of taxicab operation in the United States, sufficient information is nevertheless available for the development of reasonable conclusions.

Not all of the states require special registration of taxicabs. In 1957, only 23 states, plus the District of Columbia, maintained a record system in which taxicabs were separated from other vehicles. Table 1 shows the number of taxicabs, buses, and total vehicles in the states having a requirement of special taxi licensing.9

---

Table 1. Registration of Taxicabs, Buses, and Total Vehicles in States Maintaining Separate Taxicab Registration Records, 1957

<table>
<thead>
<tr>
<th>States</th>
<th>Total Registered Vehicles</th>
<th>Registered Buses</th>
<th>Registered Taxicabs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>1,066,652</td>
<td>1,218</td>
<td>2,208</td>
</tr>
<tr>
<td>Arizona</td>
<td>479,872</td>
<td>803</td>
<td>180</td>
</tr>
<tr>
<td>Arkansas</td>
<td>617,372</td>
<td>766</td>
<td>563</td>
</tr>
<tr>
<td>Connecticut</td>
<td>1,002,085</td>
<td>3,147</td>
<td>746</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>193,640</td>
<td>1,890</td>
<td>9,579</td>
</tr>
<tr>
<td>Florida</td>
<td>1,946,347</td>
<td>6,578</td>
<td>32,316</td>
</tr>
<tr>
<td>Illinois</td>
<td>3,513,334</td>
<td>1,674</td>
<td>8,721</td>
</tr>
<tr>
<td>Kentucky</td>
<td>1,092,938</td>
<td>1,419</td>
<td>1,892</td>
</tr>
<tr>
<td>Louisiana</td>
<td>1,063,405</td>
<td>4,457</td>
<td>2,614</td>
</tr>
<tr>
<td>Maine</td>
<td>345,621</td>
<td>210</td>
<td>850</td>
</tr>
<tr>
<td>Maryland</td>
<td>1,033,316</td>
<td>5,875</td>
<td>2,721</td>
</tr>
<tr>
<td>Mississippi</td>
<td>633,967</td>
<td>1,500</td>
<td>898</td>
</tr>
<tr>
<td>Nebraska</td>
<td>654,233</td>
<td>1,218</td>
<td>469</td>
</tr>
<tr>
<td>New Mexico</td>
<td>369,215</td>
<td>1,573</td>
<td>281</td>
</tr>
<tr>
<td>New York</td>
<td>4,771,100</td>
<td>19,400</td>
<td>26,700</td>
</tr>
<tr>
<td>North Carolina</td>
<td>1,561,133</td>
<td>13,966</td>
<td>3,616</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>1,055,713</td>
<td>1,070</td>
<td>1,490</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>3,887,626</td>
<td>13,366</td>
<td>4,198</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>310,738</td>
<td>574</td>
<td>313</td>
</tr>
<tr>
<td>South Carolina</td>
<td>804,206</td>
<td>1,986</td>
<td>1,849</td>
</tr>
<tr>
<td>Tennessee</td>
<td>1,193,650</td>
<td>2,000</td>
<td>2,650</td>
</tr>
<tr>
<td>Virginia</td>
<td>1,332,867</td>
<td>2,379</td>
<td>4,072</td>
</tr>
<tr>
<td>Washington</td>
<td>1,217,917</td>
<td>2,254</td>
<td>992</td>
</tr>
<tr>
<td>West Virginia</td>
<td>611,640</td>
<td>815</td>
<td>825</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30,758,587</td>
<td>90,138</td>
<td>110,743</td>
</tr>
</tbody>
</table>

States Not Maintaining Separate Taxicab Registration Records:

California, Colorado, Delaware, Georgia, Idaho, Indiana, Iowa, Kansas, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New Hampshire, New Jersey, North Dakota, Ohio, Oregon, South Dakota, Texas, Utah, Vermont, Wisconsin, and Wyoming.

Total registered vehicles in these states: 35,912,482.

States with accurate records of cab registration form the basis for estimating the total number of taxicabs in the United States. For purposes of making this estimate, a ratio of total-registered-taxicabs to total-registered-vehicles was computed from the available data; then this ratio was applied to the total registered vehicles in the other states in order to estimate the total registered taxicabs. Since separate registration requirements appear to follow no distinct pattern related to geographical location, population concentration, or other such factors, it may be assumed that the application of the derived ratio will yield reasonably accurate results. This ratio is 3.6 taxicabs-per-1,000-total-vehicles; application to the total vehicles in the United States indicates an estimated total of 240,000 taxicabs in 1957. Fragmentary estimates of several authorities by such breakdowns as total cabs in major cities, total fleet cabs, and taxicab passenger-miles lend support to the estimated magnitude of taxicab operation in this country.

Number of People Transported

Just as the exact number of taxicabs is unavailable, so is a tabulation of passenger-rides and passenger-miles unavailable. Therefore, existing bits of information will be gathered, fitted together, and projected for determining
estimates of the importance of the role of the taxicab in these transportation variables.

A back-door approach involves the comparison of passenger-rides for fleet taxicabs with those of other forms of transit; basic figures for this comparison are reflected in Table 2. By using the method of assumed constant ratios of taxicabs-to-total-vehicles described above, and by assuming that fleet and non-fleet cabs transport the same number of passengers, the known information may be applied to the entire industry for obtaining a perspective view of this sector of our public transportation picture. By this method, it is concluded that in 1948 the cab industry provided 10.5 per cent of the total passenger-rides in the entire transit industry. It is estimated that, by 1955, taxicabs transported 27.0 per cent of total persons moved by public transportation in urban areas.

Comparable data are not available for passenger-miles of taxicab and transit systems; nevertheless, some indications may be derived from existing data. From Table 2, it may be seen that revenue-vehicle-miles for transit vehicles decreased from 3.106 to 2.447 billion miles between 1948 and 1955, a decrease of 22 per cent. During this period, however, passenger-miles for taxicabs increased from 9.6 to 12.3 billion, an increase of 28 per cent. Although units of measurement are not the same for the two systems, it may be
Table 2. Comparison of Passenger-rides and Passenger-miles — Taxicabs Versus All Other Urban Transit Vehicles 1935 to 1958

<table>
<thead>
<tr>
<th>Year</th>
<th>Fleet Taxicabs</th>
<th>Estimated Total Taxicabs</th>
<th>Transit Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Passenger-Rides (In Billions)</td>
<td>Passenger-Miles (In Billions)</td>
</tr>
<tr>
<td>1935</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1940</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1945</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1948</td>
<td>81,700</td>
<td>2.0</td>
<td>150,000</td>
</tr>
<tr>
<td>1950</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1951</td>
<td></td>
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<td></td>
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<tr>
<td>1954</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1955</td>
<td>76,600</td>
<td>1.3</td>
<td>200,000</td>
</tr>
<tr>
<td>1956</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1957</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1958</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Transit industry information from Transit Fact Book, 1959, pages 8 and 10.

METHODOLOGY:

Passenger-rides for all cabs were calculated by multiplying the ratio of total-to-fleet-cabs by the number of passenger-rides for fleet cabs. In a similar manner, passenger-miles were calculated by multiplying the ratio of total-to-fleet-cabs by the number of passenger-miles for fleet cabs. In order to compare taxicabs and transit vehicles, during the years for which information on taxicabs is available, transit revenue-passengers for 1948 were interpolated, assuming a straight-line function between 1945 and 1950. The dash (-) indicates that data are unavailable for these years.
inferred that between 1948 and 1955 the use of taxicabs increased significantly relative to the use of transit vehicles.

Significant in behavioral trends within the industry is the relative change in fleet-passenger-rides as compared with fleet-passenger-miles between 1948 and 1955. Both decreased, but the rides decreased by 35 per cent while the miles decreased by only 9.5 per cent, indicating a trend toward longer trips.

Although the number of fleet taxicabs decreased between 1948 and 1955, the total number of taxicabs increased as a result of the previously described post-war movement toward driver ownership and decentralized operation. Consequently, passenger-rides for all cabs during this reference period decreased an estimated 7.5 per cent, but passenger-miles increased by about 28 per cent. Again, fewer but longer rides by taxi users are indicated.

Number of Taxicabs in Different Cities

Not all cities have accepted taxicab operation with equal enthusiasm. As a result, wide differentials exist in the number of taxis found in various cities. Size appears to bear a rather complex relationship to the number of cabs in operation. While still undoubtedly affected by war-time
transportation habits, in 1948 there were 1.17 taxicabs per 1,000 persons in cities of more than 10,000 population in the United States. As shown in Table 3, cities of 250,000 to 500,000 population had the lowest per-capita ratio with 0.87 per 1,000, while cities of 10,000 to 25,000 population had the highest, with 1.43 per 1,000 persons. By 1958 the picture had changed in several ways. Although cities in the 250,000 to 500,000 population group retained the lowest per-capita ratio, cities of more than 500,000 persons climbed into the position of the highest ratio. Meanwhile, the ratio in cities of 10,000 to 25,000 population dropped by about 30 per cent.

Technological advancements contributed to changes in taxicab operation and use during the period from 1948 to 1958. One of the most significant technical innovations was the two-way frequency-modulated radio system of internal control. This system greatly increased operating efficiencies, at the same time improving service to customers. Obviously this new facility was a factor in the reduction of taxicabs-per-capita in most population groups shown in Table 3. An interesting sidelight is the fact that the larger cities are not as readily adaptable to radio control systems; this hypothesis is supported by the increase in taxicabs per capita for cities of more than 500,000 population.
Table 3. Comparison of the Number of Taxicabs per Capita by City Size for the Years 1948 and 1958

<table>
<thead>
<tr>
<th>Population Group</th>
<th>Number of Cities Included</th>
<th>Number of Taxicabs</th>
<th>Taxicabs per 1,000 Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 500,000</td>
<td>13</td>
<td>25,773</td>
<td>38,150</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>1.20</td>
<td>1.42</td>
</tr>
<tr>
<td>250,000 - 500,000</td>
<td>19</td>
<td>5,670</td>
<td>7,247</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>0.87</td>
<td>0.85</td>
</tr>
<tr>
<td>100,000 - 250,000</td>
<td>48</td>
<td>7,472</td>
<td>8,443</td>
</tr>
<tr>
<td></td>
<td>67</td>
<td>1.03</td>
<td>0.86</td>
</tr>
<tr>
<td>50,000 - 100,000</td>
<td>91</td>
<td>7,445</td>
<td>8,303</td>
</tr>
<tr>
<td></td>
<td>126</td>
<td>1.16</td>
<td>0.94</td>
</tr>
<tr>
<td>25,000 - 50,000</td>
<td>180</td>
<td>7,982</td>
<td>8,426</td>
</tr>
<tr>
<td></td>
<td>246</td>
<td>1.25</td>
<td>0.98</td>
</tr>
<tr>
<td>10,000 - 25,000</td>
<td>483</td>
<td>10,643</td>
<td>2,616</td>
</tr>
<tr>
<td></td>
<td>164</td>
<td>1.43</td>
<td>1.01</td>
</tr>
<tr>
<td>Less than 10,000</td>
<td>-</td>
<td>-</td>
<td>1,120</td>
</tr>
<tr>
<td></td>
<td>144</td>
<td>-</td>
<td>1.34</td>
</tr>
</tbody>
</table>


The number of taxicabs in a city defies the application of any general rule of thumb. Whether there are many or few cabs depend on many variables representing political, social, physical, and economic factors. Generalizations are therefore impossible, because any one of these factors may be so dominant as to overwhelm the other elements. For example, regulatory measures can be so severe as to stifle the effects of any strong demand for taxi service, or heavy traffic congestion can cripple the taxicab industry in the same manner that it can cripple surface mass-transit systems. Table 4 on the next page lists the number of cabs per capita in cities of more than 240,000 persons. Variability is great, ranging from a high of 11.2 taxicabs per 1,000 persons in Washington, D. C., to a low of 0.28 cabs per 1,000 persons in Jersey City, New Jersey. Further study is needed for the determination of optimum ratios and for the isolation of factors which distort these balances between numbers of cabs and numbers of people.

Employment in the Taxicab Industry

How important is the industry from the standpoint of the employment of people? To answer this question requires again the building upon a foundation of existing information and developing conclusions. The Automobile Manufacturers

Table 4. Taxicabs Per Capita in Cities of More Than 240,000 Population

<table>
<thead>
<tr>
<th>Rank</th>
<th>Name of City</th>
<th>Persons/License</th>
<th>Cabs/1000 Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Washington, D. C.</td>
<td>89</td>
<td>11.20</td>
</tr>
<tr>
<td>2</td>
<td>New Orleans, La.</td>
<td>372</td>
<td>2.68</td>
</tr>
<tr>
<td>3</td>
<td>Boston, Mass.</td>
<td>526</td>
<td>1.90</td>
</tr>
<tr>
<td>4</td>
<td>Miami, Florida</td>
<td>580</td>
<td>1.72</td>
</tr>
<tr>
<td>5</td>
<td>New York, N. Y.</td>
<td>669</td>
<td>1.50</td>
</tr>
<tr>
<td>6</td>
<td>St. Louis, Mo.</td>
<td>675</td>
<td>1.48</td>
</tr>
<tr>
<td>7</td>
<td>Louisville, Ky.</td>
<td>714</td>
<td>1.40</td>
</tr>
<tr>
<td>8</td>
<td>Newark, N. J.</td>
<td>731</td>
<td>1.37</td>
</tr>
<tr>
<td>9</td>
<td>Baltimore, Md.</td>
<td>825</td>
<td>1.21</td>
</tr>
<tr>
<td>10</td>
<td>Dallas, Texas</td>
<td>829</td>
<td>1.20</td>
</tr>
<tr>
<td>11</td>
<td>Philadelphia, Pa.</td>
<td>892</td>
<td>1.12</td>
</tr>
<tr>
<td>12</td>
<td>Indianapolis, Ind.</td>
<td>899</td>
<td>1.11</td>
</tr>
<tr>
<td>13</td>
<td>San Antonio, Texas</td>
<td>908</td>
<td>1.10</td>
</tr>
<tr>
<td>14</td>
<td>Kansas City, Mo.</td>
<td>932</td>
<td>1.07</td>
</tr>
<tr>
<td>15</td>
<td>Omaha, Nebr.</td>
<td>955</td>
<td>1.05</td>
</tr>
<tr>
<td>16</td>
<td>Fort Worth, Texas</td>
<td>961</td>
<td>1.04</td>
</tr>
<tr>
<td>17</td>
<td>Chicago, Ill.</td>
<td>968</td>
<td>1.03</td>
</tr>
<tr>
<td>18</td>
<td>Memphis, Tenn.</td>
<td>990</td>
<td>1.01</td>
</tr>
<tr>
<td>19</td>
<td>San Francisco, Cal.</td>
<td>1049</td>
<td>0.96</td>
</tr>
<tr>
<td>20</td>
<td>Dayton, Ohio</td>
<td>1056</td>
<td>0.95</td>
</tr>
<tr>
<td>21</td>
<td>Pittsburgh, Pa.</td>
<td>1073</td>
<td>0.93</td>
</tr>
<tr>
<td>22</td>
<td>San Diego, Cal.</td>
<td>1100</td>
<td>0.91</td>
</tr>
<tr>
<td>23</td>
<td>Oklahoma City, Okla.</td>
<td>1309</td>
<td>0.76</td>
</tr>
<tr>
<td>24</td>
<td>Denver, Colo.</td>
<td>1312</td>
<td>0.76</td>
</tr>
<tr>
<td>25</td>
<td>Rochester, N. Y.</td>
<td>1325</td>
<td>0.75</td>
</tr>
<tr>
<td>26</td>
<td>Atlanta, Ga.</td>
<td>1325</td>
<td>0.75</td>
</tr>
<tr>
<td>27</td>
<td>Toledo, Ohio</td>
<td>1349</td>
<td>0.74</td>
</tr>
<tr>
<td>28</td>
<td>Detroit, Mich.</td>
<td>1414</td>
<td>0.71</td>
</tr>
<tr>
<td>29</td>
<td>Seattle, Wash.</td>
<td>1417</td>
<td>0.71</td>
</tr>
<tr>
<td>30</td>
<td>Providence, R. I.</td>
<td>1421</td>
<td>0.70</td>
</tr>
<tr>
<td>31</td>
<td>Cleveland, Ohio</td>
<td>1531</td>
<td>0.65</td>
</tr>
<tr>
<td>32</td>
<td>Milwaukee, Wisc.</td>
<td>1535</td>
<td>0.65</td>
</tr>
<tr>
<td>33</td>
<td>Buffalo, N. Y.</td>
<td>1547</td>
<td>0.64</td>
</tr>
<tr>
<td>34</td>
<td>Cincinnati, Ohio</td>
<td>1595</td>
<td>0.63</td>
</tr>
<tr>
<td>35</td>
<td>Portland, Ore.</td>
<td>1658</td>
<td>0.60</td>
</tr>
<tr>
<td>36</td>
<td>Columbus, Ohio</td>
<td>1671</td>
<td>0.60</td>
</tr>
<tr>
<td>37</td>
<td>Birmingham, Ala.</td>
<td>1929</td>
<td>0.52</td>
</tr>
<tr>
<td>38</td>
<td>Long Beach, Cal.</td>
<td>1959</td>
<td>0.51</td>
</tr>
<tr>
<td>39</td>
<td>Houston, Texas</td>
<td>1987</td>
<td>0.50</td>
</tr>
<tr>
<td>40</td>
<td>Oakland, Cal.</td>
<td>2003</td>
<td>0.50</td>
</tr>
<tr>
<td>41</td>
<td>Minneapolis, Minn.</td>
<td>2108</td>
<td>0.47</td>
</tr>
<tr>
<td>42</td>
<td>Los Angeles, Cal.</td>
<td>2189</td>
<td>0.48</td>
</tr>
<tr>
<td>43</td>
<td>Akron, Ohio</td>
<td>2309</td>
<td>0.43</td>
</tr>
<tr>
<td>44</td>
<td>St, Paul, Minn.</td>
<td>2491</td>
<td>0.40</td>
</tr>
<tr>
<td>45</td>
<td>Jersey City, N. J.</td>
<td>3590</td>
<td>0.28</td>
</tr>
</tbody>
</table>

Association, in 1956, estimated employment within the motor bus and taxicub industries at 303,303 persons. For the same period, the American Transit Association estimates that 104,000 persons were engaged in the motor bus transportation field. Using these figures, it may be deduced that taxicab operation employed an estimated 200,000. On the other hand, however, our previously developed estimates for the number of cabs in operation would tend to indicate a number of employees approaching, or even surpassing, the quarter-million mark.

The cab industry is responsible for secondary or indirect employment also. If it is assumed that the average life of a taxicab is 3 years, then about 80,000 new cabs are placed in service each year, representing a substantial purchase from automobile manufacturers. One automobile maker, the Checker Motor Company, specializes in the manufacture of a vehicle designed and built exclusively for use as a taxi. In 1956, this company produced 3970 of these automobiles; other manufacturers of the more economical, small, and maneuverable automobiles supplied the remainder of the demand for taxicabs. In addition to purchased vehicles, the industry requires other equipment and supplies such as taximeters, dome lights, two-way radios, tires, and petroleum products.

\(^{11}\text{Automobile Facts and Figures, Automobile Manufacturers Association, 37th edition, 1958, p. 44.}\)

\(^{12}\text{Transit Fact Book, op.cit., p. 3.}\)
Taxicabs serve as business stimulants by providing a primary means of transportation to stores, nightclubs, theaters, opera houses, and other establishments. Cabs further contribute to business activity by maintaining in active circulation many persons -- the aged, the physically-handicapped, the non-drivers, the visitors in town, and others -- who otherwise would be inactivated because of the lack of convenient, suitable transportation.

Summary

Taxicab operation is big business. From its flashy beginning on New York City streets on October 1, 1907, the industry has mushroomed into an industrial giant with operations in virtually every city or town in the United States.

Although precise information about the magnitude of the business is unavailable, indications are that this industry consists of about a quarter-million vehicles. Direct and indirect employment attributable to the taxicab industry is highly significant. Furthermore, about one-fourth of all rides supplied in the urban public transportation field are in taxicabs. While dependence upon taxi service may vary from city to city, most cities nevertheless use this device to some extent in serving public needs.
Operation of the taxicab industry will be analyzed and evaluated in the following chapter.
CHAPTER II

OPERATION OF THE INDUSTRY

Planning an integrated transportation system making maximum use of capabilities of various available components must be based on a knowledge of these components and the operational characteristics of each. It is the purpose of this chapter to extract from obscurity a basic understanding of the taxicab industry so that planners, traffic engineers, and city officials may use it more effectively. Advantages and disadvantages peculiar to the cab business will be analyzed.

Operational Characteristics of Cab Systems

Descriptions of the inner workings of cab companies are spotty indeed. Little is known about these public transportation systems -- about ownership, internal controls, system load characteristics, and fare structures. This section explores the internal functioning of the taxicab industry.

Ownership

Generally, taxicabs are fleet-or-company-operated or individually-operated. In 1931, it was estimated that 84,000
fleet taxicabs were in operation, as compared with 56,000 individually-owned and operated cabs. The ratio of fleet-to-individual taxis then was 60 per cent to 40 per cent, but, by 1948, this ratio had equalized somewhat to 54 per cent to 46 per cent -- a change perhaps reflecting the entry of returning veterans into this transportation field as described in Chapter I. The percentage of fleet taxicabs had decreased even further -- to 38 per cent -- by 1955; the absolute quantity likewise had decreased. (Refer to Table 2.)

A hybrid of these two systems of ownership is that of the individually owned cab which is used under company sponsorship. Many variations of this arrangement are in effect. In some cases, the driver pays the company a commission in return for the privilege of use of the company name and for the administrative control offered through a system dispatcher, as well as for such services as use of company stands. In other cases, the driver may be obligated to buy gasoline and supplies from the company in return for the privilege of working under a company name. Numerous adaptations of these principles are in effect, but little information is available on the specific details.

Some cities establish a balance between individual and fleet ownerships by specifying a ratio which must be maintained. Such a scheme seems to have a two-fold purpose:
(1) to eliminate some of the problems involving the awarding of franchises, and (2) to maintain a self-regulatory system based upon an enforced competition. New York City, for example, uses the ratio of fleet-to-individual cabs which existed in 1937. The administration of this system involves the issue of metal medallions by the Police Department. These medallions may not be transferred between fleet and individual owners. So pronounced is the unbalance of taxi-cab supply and demand in New York that these medallions are reported to have sold on the market for $13,500 in 1957, with one sale being made for a record $18,000.  

While the number of taxicabs has been increasing during recent years, the number of taxicab companies has been decreasing, perhaps indicating trends toward consolidated operations and toward individual driver-owner operations. In 1946, 24,000 companies were reported in this country; however, this number had diminished sharply to an estimated 10,000 by 1957. Sizes of cab companies range from 2 cabs in numerous small towns to about 2,000 in operation by Philadelphia Yellow Cab Company. Many authorities feel that the large cab concerns

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14 Automobile Facts and Figures, op.cit., p. 42.
become too unwieldy for efficient operation. New York taximen are reported to agree that fleets of more than 1,000 cabs are too large -- the problems of off-peak work are compounded in excessively large operations.\textsuperscript{15}

Some of the larger companies are publicly-owned, stock being offered for sale through various stock exchanges. In his excellent appraisal of some of the financial aspects of cab operations, J. Richard Elliott, Jr., cites the following large companies with listings in stock exchanges: Checker Cab Company, Chicago Yellow Cab Company, Parmelee Transportation Company, Yellow Cab Company of California, and Yellow Cab Company of Philadelphia. Parmelee is the largest fleet owner in the United States.\textsuperscript{16}

Taxicab operation is no clear-cut financial panacea in the field of public transportation. However, Mr. Elliott describes how several companies are reaping profits during the present period of generally poor business in the transit field. The Philadelphia Cab Company, in 1955, used 1900 taxis for accumulating revenues of $18.2 million. Even after deduction of the driver's 45 per cent share, this represented an average meter take of $9,600, or a gross return of $350 per cab, exclusive of the driver's pay. The final net of

\textsuperscript{15}J. Richard Elliott, Jr., op. cit., p. 23.

\textsuperscript{16}Ibid., p. 3.
$416,500 represented 2.3 per cent of total revenue, or 8 per cent of invested capital. In contrast, the California Yellow Cab Company in the same year earned an average of $600 profit with each of its 1,765 units. Mr. Elliott reports that not all systems were so fortunate; for 1956, the Parmelee Transportation Company appeared to operate in the red, and the Chicago Yellow Cab Company showed a nine-month, pre-tax loss of $99,700 on revenues of $10, million. Checker Cab Company, in its complicated manufacturing and operating arrangement, lost $968,000 in 1955 and $925,000 in the first three quarters of 1956. 17

Obviously, then, taxicab operation can be profitable or unprofitable. If cab operation is to be free from the threat of extinction, then further study is needed for determining the internal and external variables which contribute to the financial success or failure of the operation. Need for this type of study is not limited to the taxicab industry, but applies to each element of urban transportation.

Internal Operational Controls

By its very nature, taxicab operation defies effective internal control. Vehicles are scattered over entire cities; there is no foolproof way of directing the driver and following-up to assure compliance with instructions; yet the development

of good public relations is highly dependent upon responsiveness to requests for service, particularly in fleet operations. Many cab companies have installed two-way radios for the dual purpose of improving control and of improving system efficiency. Mr. L.L. Bennett, President of Atlanta Veterans Cab Company, cites a system of control which his company is using. He requires all drivers to report in to the system dispatcher periodically. He further requires close adherence to instructions from the dispatcher. Enforcement is effected through severe disciplinary action for non-compliance with instructions, for false reports, or for failure to answer a call from a customer.18

Development of the two-way radio made possible numerous improvements in system operation. Efficiency was greatly increased through the reduction of non-productive travel while empty. Calls may be answered by the closest available cab, thus improving public relations by providing more prompt service. A significant by-product of radio dispatching is its adaptability to route control. For example, drivers can appraise the dispatcher of traffic conditions, particularly bottlenecks; the dispatcher, in turn, can direct other drivers along alternate routes, thus expediting service, pleasing customers, increasing system effectiveness, and not further

18 Based on an interview with Mr. L. L. Bennett, President of the Atlanta Veterans Cab Company, in his office, October 28, 1958.
aggravating traffic congestion. Radio control, however, is not without disadvantages, and limitations. In the first place, radio installations involve large capital expenditures and high maintenance costs. Allocation of channels is a problem, and communication is limited to line-of-sight. Obviously, the number of taxicabs which may be controlled through one dispatcher or over one assigned frequency is limited. A single person can direct only a limited number of cabs, and a channel can handle only a limited number of calls before becoming saturated with messages.

Another scheme of functional control is based upon the use of telephones. With this arrangement drivers usually report-in to a central location by telephone and stand-by a telephone, usually at a special stand or central location, when not on call. Control effectiveness with this system is inferior to that involving the use of radios. However, some offsetting advantages are found in certain cases. For example, in many of the smaller cities the short travel distances involved, the nature of service demands, and the general lack of serious traffic congestion combine to obviate the need for a complex, highly refined system of control. Capital investment is far less for telephone stands than for radios. Finally, in a society geared to telephone communication, the phone directory is a convenient media for advertising service and for informing the public as to how to
locate a taxicab. On the other hand, however, this system is not conducive to effective and responsible supervision by the companies; nor is it as flexible and responsive to the pulse-beat of public needs.

The third type of control is of the "laissez faire" type. In this system the driver operates almost completely independent of any central direction. One fleet operator described the freedom of driver action thusly: 19

When they leave here (the fleet garage) there's only one restriction -- they gotta turn left when they get out the door, because it's a one-way street. We don't know where they've been till we see their trip cards at the end of the day.

In the absence of any positive supervision, many companies rely on police departments for reporting any flagrant violations of regulations and of ethics. In some of the larger cities special plain-clothesmen are employed to monitor cab operations.

The uncontrolled system of operation is well-suited to individually owned cabs. Skillful operators have developed remarkable abilities to predict public need for transportation and to adjust schedules to coincide with these needs. One driver-owner described the demand in New York City as following the schedule below: 20

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19"From the Driver's Seat: It's No Easy Life," *op.cit.*, p. 73.

20"Manhattan Hackie," *op.cit.*, p. 160
8:00 – 9:30 A.M. -- railroad stations, hotels, residential streets
9:30 – 12:00 Noon -- office buildings and department stores
12:00 – 2:00 P.M. -- lunch trade
2:00 – 3:00 P.M. -- women shoppers and matinee goers
3:30 – 6:00 P.M. -- downtown financial section
5:00 – 7:00 P.M. -- people going home, business all over town
7:00 – 9:00 P.M. -- hotels and restaurants active, theater goers
9:00 – 11:00 P.M. -- trade slow
11:00 – 12:00 Mid. -- after theater break, big hotels, office buildings
12:00 – 4:00 A.M. -- mid-town nightclubs, the drunk who lives far away

Thus, in spite of its dependence upon chance to bring about a meeting of taxicab and customer, the system appears to serve New York City well, the highly refined responsiveness to public needs indeed becoming one of the strong advantages of this type of uncontrolled operation. This system may be compared to a jazz band, each driver being a competent musician playing by ear in response to the audience -- the city -- and adjusting his melody to produce harmony when blended with other members -- mass-transit, customers, and other taxi drivers. The results are highly effective in such major cities as New York, Chicago, and Washington.

Peculiarities of Peak Characteristics

Analysis of load characteristics of the taxicab industry indicates certain basic differences from other forms of public transportation -- differences which may well provide clues toward improved solutions to the more complex problems of load
distribution facing the transit systems of this country. Diversified load characteristics lend further support to the argument for integrated transportation systems, making best use of all available components.

The basic problem which plagues all transportation networks is that of high peak demands for service, followed by periods of very low demand. Facilities must either be designed to handle the periods of heavy loading, or must be designed to suffer serious overloading during these periods. Both alternatives are costly to communities — to differentiate between these two evils is merely to place in the balances the cost of expensive equipment and construction on the one side and the value of non-productive time and human inconvenience on the other. In an economic analysis of mass-transit operations, Dr. Stephen Paranka clearly explains the severe financial burden placed on transit companies because of the peak-hour phenomena:

These two peak periods (morning and afternoon) determine the capacity requirements for transit equipment in a transit system. During the off-peak period, fixed expenses of a transit system continue at the same rate as during peak periods.

Transit service offered during non-peak hours on a regular schedule involves the same variable expenses as during peak hours. Wages of vehicle operators are the same during rush hours as during the lull between them. Equipment and material costs are also the same during

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both periods . . . Once a route has been completed, the unused service, in the form of empty seats, is beyond recovery.

Operating peaks thus establish a maximum capacity of operations, which remains as overcapacity in the off-peak periods.

Taxicab operation parallels the phenomena of peaks and off-peaks described by Dr. Paranka; however, several highly significant differences are readily discernible. These differences deserve further consideration. First, demands for taxicabs generally do not experience the same violent fluctuations between peaks and off-peaks found in other forms of public transportation. Several influences contribute to the building of a relatively good taxicab system load factor.\textsuperscript{22} Taxicabs are commonly used to transport businessmen to and from points within the central business district; these vehicles are used by visiting businessmen who have no other means of local travel; taxicabs are used by shoppers; and taxicabs are used to fill in the voids created by reduced frequencies of transit vehicles as necessitated by reduced customer demands. Each of these uses is highly adaptable to off-peak periods; experience confirms this adjustment of travel activity.

Secondly, taxicab companies are able to sway with the breeze of changing demands for service. There are no complex

\textsuperscript{22}"Load factor" is a term borrowed from power system operations. It is defined as the ratio of average-load-to-peak-load, the optimum load factor being unity, indicating that the system is being used at its maximum capability.
schedules to alter. Routes are undefined; therefore, there is no battle with a public service commission before making such changes, nor is there the problem of informing and educating the public of these changes. Mass-transit is not so flexible.

Taxicab operation is highly fluid. Not only can adjustments be made for such unusual situations as sports events, inclement weather, and emergency conditions, but minor adjustments may be made upon a few minutes' notice throughout the day. Through the system dispatcher, additional drivers may be summoned, vehicles may be shifted to different parts of the city, and routes may be changed so as to avoid traffic bottlenecks. Such adaptability is the product of the extreme flexibility of routes, work hours, and areas of coverage.

Not only are daily peaks leveled out as described above, but weekend lulls are also minimized. Increased social activity of weekends contributes to improve load factors. This phenomenon is particularly detectable within the lower economic levels, among non-owners of automobiles. Here the taxicab is reported to be considered a mark of distinction; such feeling does not exist toward other forms of public transportation.

Taxicab operation is normally characterized by several secondary peaks such as those caused by theater-goers, conventioneers, the party crowds, domestic help, and automobile-less shoppers. Violent upheavals may be caused by inclement
weather; for example, it was estimated that a hard rain in the morning or early afternoon in New York City, in 1939, meant as much as $35,000 to the taxicab business. 23

The cab business is highly responsive to longer-range fluctuations as well as to hourly, daily, and weekly changes in demand. The low capital investment represented by cab companies, in direct contrast with that of mass-transit companies, permits taxi systems to make frequent adjustments of equipment to reflect changing transportation needs.

Unfortunately, the taxicab is not immune to one major problem shared by all forms of surface transportation using road networks -- the dilemma of traffic congestion. At the very times when demands for service are greatest, and at the very time when the maximum rate of travel is most desirable, overloaded street networks become clogged with vehicles, to the extent that traffic moves slowly, if at all. Thus, poor traffic circulation adversely affects profits by reducing the number of trips that cabs can make. It is then no wonder that taxicab operators are keenly interested in schemes for expediting traffic flow.

Fares -- Systems and Amounts

If the planner and traffic engineer are to develop an integrated system of public transportation, then a knowledge

23"Manhattan Hackie," op.cit., p. 60.
of fare structures of each component is essential. From an intimate understanding of the various cab-fare systems in operation, one may select the desirable elements for composing a rate structure which will serve the public effectively. Basically, there are three types of taxicab fares: metered, zoned, and flat fees.

**Taximeters.**—Since its initial appearance in the original fleet of cabs on the streets of New York in 1907, the taximeter has become a recognized symbol of the taxicab. The taximeter is a mechanical device by which charges are automatically calculated as functions of time and distance. A clock mechanism within the meter automatically adjusts the fare to reflect waiting time at a predetermined rate. Other features may be incorporated into the meter; for example, the flag may activate a switch to operate a dome light indicating that the cab is empty. Such an arrangement is mandatory in New York City to assist policemen in the enforcement of cruising regulations. In many cities, illumination of the taximeter is required so that customers may be appraised of accumulating charges.

Many cities permit the "flag drop" as a method of adadministering a minimum rate. Under this rate arrangement, a customer is charged a minimum fee as soon as the flag drops at the beginning of the trip. In most cases, this minimum is automatically applied to the total fare.
Popularity of the taximeter is reflected by its wide acceptance throughout the country. Despite the additional capital outlay required, 430 of 827 reporting cities indicated the use of taximeters, in a special survey conducted by the American Taxicab Association. Even more significant, however, is the fact that 57, or 13 per cent, of the cities in which taxicabs use meters, had no ordinances directing the use of these meters.24

Many advantages are found in the use of taximeters for determining and regulating fares. Governmental agencies responsible for administration of cab controls find the taximeter readily adaptable to testing and inspection; meters may be sealed to prevent tampering. Meters are ideally suited to ordinance requirements for records of mileages and gross receipts. Not all of the advantages of this form of fare administration are confined to control bodies. Quite to the contrary, customers also benefit greatly by the use of this system. In the first place, the taximeter is understandable and the customer keeps a running account of the cost of his trip. Besides its basic simplicity, the taximeter is fair — it charges on the basis of actual time and distance as contrasted with the flat fee system which makes no allowance for these transportation variables and as contrasted with the zone

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system which makes no differentiation within a zone. Drivers also find taximeters most helpful in calculating rates. No mental arithmetic is required; no zones must be memorized; and customers are not left in a cloud of suspicion, wondering if and just how much they have been overcharged.

Primary among disadvantages is the element of cost. The meters are expensive and represent sizable capital investment; also, the meters require maintenance and inspection. Nevertheless, the advantages far outweigh any disadvantages, and it must be concluded that the taximeter provides an effective, businesslike method of administering and controlling cab fares.

Zoned fares.—In the system of zoned fares, charges are normally computed on the basis of two components: (1) a flat minimum charge, and (2) additional charges as the taxicab passes from one zone into another. Other common modifications include extra charges for waiting time and/or additional passengers.

The system of zoned fares provides some advantages, but also has many drawbacks. On the favorable side, less capital investment is required than for metered installations. Also, there is no complex moving equipment to service and inspect. However, on the unfavorable side of the ledger are many disadvantages, among which are: (1) unfairness is
inherent in the zone system, a charge being set for a zone or
band with no allowance for differences between maximum and
minimum distances within a zone, (2) the system is complicated
and difficult to understand and to administer, thus sowing
seeds of distrust in the minds of users, (3) enforcement of
fare regulations is difficult, if not impossible under this
system, and (4) the zoned fare does not lend itself well to
rate changes — "once riders become familiar with the zone
rates, they will not welcome changes." Maximum equity of
fares is found in systems having the most zones with the least
difference between maximum and minimum boundaries; in such
systems, however, the rate structure is most complex and
difficult to administer and to understand. Nevertheless,
many cities, particularly those of less than 50,000 population,
have found the zone fare system most desirable for local
needs.

Flat fee system.—This type of fare system, in which a single
flat fee applies to an entire city or major sector thereof,
is only a crude derivative of the zone system. One adaptation
involves a flat rate for increments of time. An example of
this type of fare is found in Concord, N. H., where a flat

rate of $4 per hour is set. Greenville, Pa., uses still another scheme — $0.40 for one passenger within the city, $0.10 for each additional passenger, and $0.35 for each mile of trips outside the city.27

In evaluating the flat fee system of fares, a quotation is borrowed from Dr. Paranka in his study of mass transit operations:28

This structure has the advantages of ease of collection and simple theory of application. A basic problem in the structure involves the amount of yield from the fare; if the fare level is low, the yield may be insufficient to cover costs, whereas a higher level will cause some people not to use transit service and thus, likewise, result in a low yield.

A serious disadvantage of a flat fare is inequity of charges among riders. This fare has no relationship to service rendered to different riders; a rider traveling a short distance is charged as much as one who rides along the entire route.

The same observations apply to this form of fare structure in the taxicab industry. However, it should be understood that the flat fee for an increment of time is more closely related to fare systems geared to service rendered, and is thus an exception to this observation. Because of its inherent weaknesses and unfairnesses, the flat fee fare shows little promise in the development of an integrated transportation system.

Amounts of fares.—Wide diversity characterizes the range of


28 Stephen Paranka, op.cit., p. 56.
fares charged by taxicabs. Among the five largest cities, New York has the lowest rates with a charge of 45¢ for one mile, 95¢ for three miles, and $1.45 for five miles. Highest rates are found in Los Angeles where rates for corresponding distances are 70¢, $1.30, and $1.90. Of interest is the manner in which the percentage difference between New York and Los Angeles decreases as distance increases, perhaps indicating that the latter structure is geared to greater distances per trip. In the midrange among the five largest cities are Chicago and Philadelphia, with rates of 55¢, $1.05, and $1.55 for comparable distances. Table 5 reflects rates from cities that are representative of all population groups, the five largest cities being intentionally picked and all others selected at random. 29

Of vital importance in the development of any comprehensive urban transportation plan based upon optimum utilization of all components, is a comparison of the rates of taxicabs and other forms of public transportation under the various combinations of distance, time, and passengers. If the best possible working combination of public transportation devices is to be developed, and if the best system for moving people is to be devised, rate structures must be carefully

29 Compiled from data on individual cities as reported in A-T-A Data Book, 1958-1959, pages 16-66.
Table 5. Taxicab Fares and Charges in Selected Cities

<table>
<thead>
<tr>
<th>City</th>
<th>Taxicab Fare Rates:</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>City</td>
<td>Base</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Five Largest Cities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York, N. Y.</td>
<td></td>
<td>25¢</td>
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<tr>
<td>Chicago, Ill.</td>
<td></td>
<td>35¢</td>
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<tr>
<td>Philadelphia, Pa.</td>
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<td>35¢</td>
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<tr>
<td>Los Angeles, Cal.</td>
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<td>50¢</td>
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<tr>
<td>Detroit, Mich.</td>
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<td>40¢</td>
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<td></td>
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<tr>
<td>San Antonio, Tex.</td>
<td></td>
<td>35¢</td>
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<tr>
<td>Columbus, Ohio</td>
<td></td>
<td>50¢</td>
</tr>
<tr>
<td>Louisville, Ky.</td>
<td></td>
<td>35¢</td>
</tr>
<tr>
<td>San Diego, Cal.</td>
<td></td>
<td>60¢</td>
</tr>
<tr>
<td>Omaha, Nebr.</td>
<td></td>
<td>45¢</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Richmond, Va.</td>
<td></td>
<td>45¢</td>
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<tr>
<td>Jacksonville, Fla.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(metered)</td>
<td></td>
<td>55¢</td>
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<tr>
<td>(unmetered)</td>
<td></td>
<td>50¢</td>
</tr>
<tr>
<td>Bridgeport, Conn.</td>
<td></td>
<td>40¢</td>
</tr>
<tr>
<td>Des Moines, Iowa</td>
<td></td>
<td>40¢</td>
</tr>
<tr>
<td>Sacramento, Cal.</td>
<td></td>
<td>45¢</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albuquerque, N.M.</td>
<td></td>
<td>35¢</td>
</tr>
<tr>
<td>Asheville, N. C. Zone:</td>
<td></td>
<td></td>
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<tr>
<td>Augusta, Ga. Zone:</td>
<td></td>
<td></td>
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<tr>
<td>Kalamazoo, Mich.</td>
<td></td>
<td>30¢</td>
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<tr>
<td>Lowell, Mass.</td>
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</tbody>
</table>

(Continued on next page)
Table 5. Taxicab Fares and Charges in Selected Cities (Continued)

<table>
<thead>
<tr>
<th>City</th>
<th>Taxicab Fare Rates:</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base for charge</td>
<td>plus a charge of: first: of: additional:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remarks</td>
</tr>
</tbody>
</table>

25,000 - 50,000 Population:

<table>
<thead>
<tr>
<th>Alliance, Ohio</th>
<th>Flat fee: 50¢; 75¢ crosstown; $3.00/hr. WT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashland, Ky.</td>
<td>Zone: 50¢, 1-2 passengers, 75¢, 1-3; $1.00, 1-4; $4.00/hr. WT</td>
</tr>
<tr>
<td>Bremerton, Wash.</td>
<td>Metered: 50¢ flag, 40¢/mi.; 25¢ each extra passenger; $4.00/hr. WT</td>
</tr>
<tr>
<td></td>
<td>Zoned: 1, 50¢; 2, 75¢; 3, $1.00; 4, $1.25; 5, $1.50; 6, $2.00</td>
</tr>
<tr>
<td>Ft. Lauderdale, Fla.</td>
<td>35¢ 1/4 mi. 10¢ 1/4 mi. $3.00/hr. WT, $3.50/hr. cruising time</td>
</tr>
<tr>
<td>Tyler, Texas</td>
<td>40¢ 2/3 mi. 10¢ 1/3 mi. 10¢ each extra passenger, 10¢ for each extra stop</td>
</tr>
</tbody>
</table>

10,000 - 25,000 Population:

<table>
<thead>
<tr>
<th>Anderson, S.C.</th>
<th>Flat fee: 50¢, 1-5 passengers; $3.00/hr. WT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annapolis, Md.</td>
<td>Zone: 40¢, 60¢, 75¢, $1.00, $1.25; 30¢/mile where not zoned; $3.00/hr. WT</td>
</tr>
<tr>
<td>Defiance, Ohio</td>
<td>Zone: 40¢, 55¢, 70¢, $3.00/hr. or 5¢/min. WT</td>
</tr>
<tr>
<td>Dover, N. H.</td>
<td>50¢ 1/3 mi. 10¢ 1/3 mi. $3.00/hr. WT</td>
</tr>
<tr>
<td>Marshall, Tex.</td>
<td>35¢ flag; 10¢ each additional mile; $3.00/hr. WT</td>
</tr>
</tbody>
</table>

5,000 - 10,000 Population:

<table>
<thead>
<tr>
<th>Baraboo, Wisc. (metered)</th>
<th>30¢ flag; 10¢ each additional 1/3 mile, $3.00/hr. WT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baraboo, Wisc. (zoned)</td>
<td>35¢, 40¢, 55¢, 75¢; 20¢ for each over 2 passengers</td>
</tr>
<tr>
<td>Eastlake, Ohio</td>
<td>50¢ 1 mi. 5¢ 1/6 mi. or 30¢/mile; $3.00/hr. or 5¢/min. WT</td>
</tr>
<tr>
<td>El Monte, Cal.</td>
<td>Zone: 50¢, 65¢, 75¢, and $1.00; next step is 40¢/mi; $4.00/hr. WT</td>
</tr>
<tr>
<td>Lamar, Colo.</td>
<td>Zone: 35¢, 40¢, 50¢, 30¢/country mile</td>
</tr>
<tr>
<td>Washington, N.C.</td>
<td>Flat fee: 50¢ in city, 5¢ each additional passenger; $3.00/hr. WT</td>
</tr>
</tbody>
</table>

(Continued on next page)
Table 5. Taxicab Fares and Charges in Selected Cities (Concluded)

<table>
<thead>
<tr>
<th>City</th>
<th>Taxicab Fare Rates:</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base for charge the charge each additional:</td>
<td></td>
</tr>
<tr>
<td>Less than 5,000 Population:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arcata, Cal. Zone: 40¢ plus 10¢ for each extra stop; 10¢ for each extra passenger; $4.00/hr. WT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bardstown, Ky. 25¢ flag 50¢ 1 mi. 20¢ 1 mi. $3.00/hr. WT; flat fee 30¢/mi.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarksville, Tex. Flat fee: 35¢; 10¢ each for extra passengers; 25¢/mi.; $2.00/hr. WT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hackettstown, N.J. Zone: 50¢ within town, $3.00/hr. WT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hogansville, Ga. Flat fee: 25¢ in city; 25¢/mi. outside; $2.00/hr. WT 50¢ extra for groceries</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*WT means waiting time -- including time when taxi is not in motion but is considered to be under the direction of the passenger.

studied and an inter-relationship established so as to create the balance most suitable to public needs. Such a program warrants further study.

Personnel, Practices, Policies, and Problems

Numerous peculiarities are observed which appear to apply to the taxicab industry in such a manner as to affect any planned integration of cabs into comprehensive transportation systems. These unusual characteristics should be recognized lest the planner, traffic engineer, or others confront unexpected variables which may strongly influence behavior of the cab industry under different circumstances.

Hours of Work

Undoubtedly one of the reasons for the large number of taxicabs and their ability to maintain a favorable competitive position in the public transportation field is the flexibility of hours worked by drivers. Placed under a more rigid schedule of work hours, many cab companies and individual drivers would be hard-pressed to earn a profit — unless other compensations were made to offset the probable losses which would follow a conversion to firm schedules and standard work weeks.

Generally speaking, the work hours of cab drivers are long; the pay is low. One article, written in 1952 and
describing some of the undesirable aspects of taxi driving, cited the fact that a 60-hour work week was necessary in order for the driver to earn a living wage. Thus, any driver who wished to maintain a reasonable living standard was forced to work long hours or to seek supplemental employment.

In order to get a first-hand report of driver hours on the local scene, a random sample of 15 Atlanta taxi-cab drivers was made by the author in December, 1959. None reported working an average of only 40 hours per week. The following table shows the extremely long hours worked:

<table>
<thead>
<tr>
<th>Hours Worked Per Week (Average)</th>
<th>Number of Taxicab Drivers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-50</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>50-60</td>
<td>7</td>
<td>47%</td>
</tr>
<tr>
<td>60-70</td>
<td>3</td>
<td>20%</td>
</tr>
<tr>
<td>70-80</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>More than 80</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100%</td>
</tr>
</tbody>
</table>

"From the Driver's Seat; It's No Easy Life," op.cit., p. 66.
One of the Atlanta drivers reported, "I have several friends who operate their cabs more than one hundred hours per week on an average." Several of the drivers reported that they work odd and split shifts in order to earn more money; usually they tailor their schedules to coincide with peak demands.

Because of these abnormally long work weeks, any plans for coordination with other forms of public transportation should include reduction of driver work-hours to correspond with those of the operators of other transportation devices. Otherwise, the unbalance of wage scales may create disturbances of sufficient magnitude as to disrupt any plans for an integrated system. Thus, such a comprehensive plan must consider the adjustment of wages and hours to a common denominator within the integrated system.

Driver Pay

A clue that cab driving employs a unique system of payment is suggested by the low degree of labor organization found within the industry. In general, driver pay is directly related to the hours worked rather than to any salary; furthermore, by most standards, wages are low.

As though long hours and low wages were not insulting enough to cab drivers, the antiquated, unstable and frustrating system of "tipping" is frequently practiced within the
taxi industry. In many cases the original theory of tipping for special service or as a token of appreciation by the customer has given way to tipping as a recognized part of the driver's pay. One social scientist, Fred Davis, recognized that taxicab driving is a peculiar occupation having many strange facets, and he drove a cab on the streets of Chicago for six months in order to observe the industry first-hand. In his study he reported that tips account for about 40 per cent of the average earnings. He further emphasizes the importance of tips in his statement, "For the family man who drives, tips usually represent the difference between a subsistence and a living wage." 31

Other authorities recognize the value of tipping in many places, but usually estimate a lower value. The Collector of Internal Revenue considers 15 per cent as a reasonable amount for tax purposes, while the New York State Unemployment Commission estimates tips at 12½ per cent of total fares. 32 Personal interviews with 15 Atlanta cab drivers selected at random indicated that tips account for considerably lower percentages of earnings in Atlanta.

31 Fred Davis, "The Cabdriver and His Fare: Facets of a Fleeting Relationship," The American Journal of Sociology, September 1959, pp. 158-165.

32 "From the Driver's Seat, It's No Easy Life," op.cit., p. 68.
Not only does tipping vary widely from place to place, but it also is related to prevailing rate structures. For example, if the average fare is 80 cents, the tip will probably be 20 cents. On the other hand, if the fare is 90 cents, the tip will probably be only 10 cents. The wide latitude in tips reported in Chicago and Atlanta would seem to indicate that local custom also determines whether tips will be large or small, and even whether or not they will be given to the driver.

Tipping as a method of payment has other serious implications to the industry. Psychological as well as financial problems are by-products of this method of payment, and are of such magnitude as to affect seriously the ability of the industry to assume a role of maturity in modern urban transportation. In his study, Mr. Davis stresses that tipping causes drivers to develop customer preferences and to use shrewd selectivity in picking those customers who appear most apt to tip generously. Such preferential treatment, while illegal in most cities, defies corrective action. Yet this behavior creates poor public relations and indeed serves the public needs less than adequately. A hypothetical case of customer selection on a rainy day will serve to illustrate the point. Suppose that a driver is hailed by two customers simultaneously -- one is an arthritic
little lady, the other an obviously successful businessman. The dominant role of the tip in his total income leaves the driver with but little choice — he probably sacrifices valor for the money needed to support his family. Can a system of payment which not only permits, but encourages, such discrimination, be tolerated in a public utility?

Another intangible, but nonetheless important, psychological aspect of the tip as a method of payment is the potentially adverse effect which such a system may exert on driver behavior. William F. Whyte, in a special study of human relations in the restaurant industry, points out some peculiarities of tipping which apply equally well to the taxicab industry. He pictures the recipient as thinking of the tip as a measure of customer satisfaction as stimulated by the quality of the service provided; however, such is not necessarily always the case, for the customer may be unaccustomed to the practice of tipping, or he may omit the tip or undertip for some other reason. According to Mr. Whyte, such experiences of unsatisfactory tipping, particularly when the server is under extreme financial pressures, create frustrations which affect the quality of subsequently rendered services.33 In the face of frustrations which are set up by the practice of tipping, the public may suffer in two ways.

First, according to most safety experts, an emotionally disturbed person is accident-prone -- such a practice as tipping encourages such frustrations on public streets. Secondly, such a practice forces drivers to try to select the most generous tipper, not necessarily the person who needs transportation most. Thus a customer is placed in the position of bidding for taxicab service.

Another pay practice found in the taxicab industry is that of paying the drivers at the end of each shift. Such a practice, coupled with the general absence of fringe benefits commonly found in other industries, undoubtedly fosters a feeling of job instability in contrast with other transportation businesses where more conventional practices prevail.

Information is not available for determining the average pay of cab drivers. Wide variations in such determining factors as rates, methods of driver payment, unionization, hours of work, tipping customs, ownership, competition, and regulation defy any generalizations about the amount of pay which drivers receive. Nevertheless, several examples will serve to illustrate amounts of driver pay under certain defined conditions. One source reports that in the late forties, a hard-working driver might earn a total of $75 for
60 hours of work.\textsuperscript{34} An account of cab driving in New York in the thirties pictured a typical driver, Harry Faber, as serving 12 to 15 persons per day at an average of 60 cents per trip. Harry estimated that he earned $4.49 for the company and $3.31 for himself, not including $1.25 per day in tips. About his work, Harry said he "doesn't think there's any future in hacking."\textsuperscript{35} Although taxi driving is low-paying by most standards, some advances are reported. California drivers in 1957 were reported to get 50 per cent of the meter, or an average of $13.50 per 8-hour day, with a guaranteed minimum of $11 per day. Such a firm wage arrangement, and such set hours of work are reported to create major problems for operators in meeting wage demands and supplying the needed service.\textsuperscript{36}

Driver ownership appears to be the dynamic element in pay practices. One source describes pay for the driver-owner as netting an estimated $25 to $30 per week more than that of a fleet driver.\textsuperscript{37} Such ownership appears capable of solving

\textsuperscript{34}"From the Driver's Seat: It's No Easy Life," \textit{op.cit.}, p. 66.

\textsuperscript{35}"Manhattan Hackie," \textit{op.cit.}, p. 160.

\textsuperscript{36}J. Richard Elliott, Jr., \textit{op.cit.}, p. 3.

\textsuperscript{37}"From the Driver's Seat: It's No Easy Life," \textit{op.cit.}, p. 73.
some of the problems of irregular hours and low pay which seem to prevail in fleet systems.

In summary, the prevailing pay practices associated with cab operation are outdated and need modernization in order to compare favorably and be in harmony with those of other public transportation systems. Not only do these antiquated practices adversely affect the individual drivers, but they also impair the ability of the taxicab industry to serve the public with maximum effectiveness. Thus, plans to integrate taxicabs more completely into urban transportation systems must include a program for developing and maintaining satisfactory driver pay policies.

Labor Organization Within the Industry

Only a small percentage of the taxicab industry is unionized. In its special survey in 1958, the American Taxicab Association listed only 62 of 422 reporting cities with taxicab systems having any form of union organization or union contract. Of this 15 per cent which are reported to be organized, most are represented by the Teamsters' Union.38

Resistance of the industry to organizing efforts may be attributed to many peculiarities, among which are:

(1) the looseness of the taxi business -- the fact that it is difficult to get the drivers together, or to learn anything about the drivers collectively or individually, (2) the high turn-over rate among cab drivers, (3) the peculiar hours worked by most cab drivers who seem to recognize the advantages of working long hours and split shifts, (4) lack of rigid controls of maximum hours worked, thus deflating one of the points of emphasis of unions -- the 40-hour work week, (5) the driver-owner type of operation is generally not conducive to unionization, and (6) the unfavorable bargaining position of fleet drivers when competing with driver-owners who may be willing to work longer hours, split shifts, and otherwise make sacrifices for the sake of more pay. One article describes the independence which cab drivers feel, even when working unusually long hours:39

They (driver-owners) are complete individuals and want to remain that way. But even fleet drivers are a bunch of pretty independent people. Unions have tried to organize them for two decades but only two have even gained a small foothold, and most of the failures have been chalked up to the lonewolf character of the drivers.

Preclusion of the taxicab industry as a prime target for organization activity is attributable to other factors. The general instability of the industry -- its marginal operation -- means simply that demands for higher wages, and

39"From the Driver's Seat: It's No Easy Life," op.cit., p. 73.
fringe benefits might well throw the industry into a fatal tailspin. Mr. Elliott, in his outstanding article on the financial aspects of taxicab operation, cites California as having the "toughest labor problem in the industry." Whereas most cab drivers in other parts of the country work on a straight commission basis, the drivers of California, under three tightly organized teamster locals, get a flat 50 per cent commission with a guaranteed minimum wage of $11 daily, plus tips. President W. L. Rothschild of Yellow Cab Company of California describes such contracts as threatening to the industry in saying, "Our labor agreements are so restrictive that management has lost all flexibility . . . it is all but impossible to cope with unexpected peak periods."  

One need only to try to learn about the operation of the taxicab industry at any level, in any part of the country, to recognize the heterogeneity of the industry and the magnitude of the effort necessary for knitting it into an effective labor organization. Certainly the relatively low wages, long hours, absence of fringe benefits, instability, pay policies, and other apparent disparities would appear to be conducive to organization; yet history reflects a strong resistance to such efforts. While this phenomenon is worthy of further study by students of labor relations, planners

40J. Richard Elliott, Jr., op.cit., p. 17.
and others intent on assembling a comprehensive public transportation system should also recognize the pattern and should be cognizant of the possible consequences of integrating this industry with more highly organized forms of transportation.

Experiments in Combined Operations

Almost from its inception, taxicab companies and other transportation systems have experimented with integration schemes designed not only to serve the public more effectively, but also to stimulate business among all participants. Some recent developments include attempts by various groups outside the transportation field to promote trade through selling a combination merchandise and transportation package. These types of experiments will be reviewed for the purpose of gleaning any bits of information which may prove helpful in developing combined functions in urban transportation systems.

Experiments in Combined Transportation Operations

As early as 1932, the potential value of coordinating taxicabs with other systems was a recognized possibility. The Transit Journal published an article in which divergent views were expressed by experts in the field of public transportation. Walter A. Draper, president of the American
Transit Association, expressed the view that, "Operation of taxicabs should be coordinated with the operation of mass transportation agencies under unified management." Agreement was expressed by Mr. Thomas N. McCarter, president of Public Service Co-ordinated Transport, who said, "We believe in principle that the operation of taxicabs should be coordinated with the operation of other public transportation agencies under one management." On the other hand, some authorities were not so optimistic about the feasibility of developing an integrated transit system. Mr. W. W. Cloud, president of the National Association of Taxicab Owners, said, "Friendship is good, but marriage is doubtful." This attitude was expressed even more strongly by Mr. T. Julian McGill, president of Twin City Rapid Transit Company, who said, "There is nothing to coordinate that is worthwhile."41

In the thirties, the Philadelphia Rapid Transit Company attempted to operate taxicabs as part of an integrated system. However, after 7 years of apparently unsuccessful operation, the company admitted failure, the president saying, "... it just didn't work out. A corporation with overhead and ethics just can't compete with the nighthawks who take tips for delivering customers to nightclubs."42 Evaluation of this attempted coordination is impossible


with the available information; however, many changes in public transportation needs, policies, and problems have taken place in the past two or three decades. Therefore, the idea of coordination should not be dismissed solely on the basis of _prima facie_ evidence of 1930 vintage.

An attempt to provide an attractive public transportation package is found in a scheme of 1940, in which 16 railroads in 25 cities developed an arrangement with taxicab companies to provide special service for train users. The railroad company provided the customer with an identification card which entitled him to a flat rate of $5 per hour for the use of a taxicab within the metropolitan area between the hours of 9:00 A.M., and 3:00 P.M. The railroads received no payment from the cab companies, but considered the more attractive transportation package as an incentive worthy of the effort necessary for administration. Such a system had the advantage of providing better transportation service and of improving taxicab load factors. Baltimore, Boston, Pittsburgh, and Philadelphia were among the cities which tried this form of combination.\(^\text{43}\) Such a system may well be applied to air travel, and may even be modified so as to permit successful combination with mass-transit facilities. For example, purchase of tokens for mass-transit rides could

\(^{43}\)"Train-Taxi Service," _Business Week_, June 8, 1940, pp. 24-25.
include a second token for use with taxicabs whenever such a service is desirable.

Another combination attempt was an arrangement used in Chicago where Parmelee Cab Company handled all transfers from incoming trains to points downtown and to other trains. Under this plan, each train passenger was given a coupon with his train ticket, thus entitling him to this cab service. Parmelee then redeemed the coupons with the railroad company for $1.22 each. However, several difficulties were encountered, and the plan was discontinued in 1955. Some of the major drawbacks in this plan were: (1) many passengers failed to take advantage of the plan, (2) coupons were nevertheless redeemed, (3) some riders paid fares anyway, thus effectively paying the fare twice, and (4) Parmelee equipment was considered old and run-down, and had little sales appeal to train users.44

Transportation-Sales Experiments

Riding the current popularity wave of savings stamps and coupons, the Yellow Cab Company of Philadelphia and a manufacturer of soaps and cleansing products have entered into an arrangement through which coupons are given with the purchase of soap products -- these coupons to be applied to taxicab fares. Although a joint venture such as this may be

44J. Richard Elliott, Jr., op.cit., p. 17.
more promotional than practical, fleet president Edmund F. Higgens expressed the hope that such a scheme will encourage residents of the area to use existing transportation devices rather than place additional automobiles on already overloaded streets. Optimism about this idea runs high, with increases of about 35 per cent predicted. From traffic and business standpoints, the really significant point is not what the increase will be, but when it will occur. Female shoppers are expected to account for most of the increase. These shoppers will probably travel during off-peak periods, thus improving the load factors of taxicab systems.\textsuperscript{45}

Summary

Taxicab operation differs in many ways from that of any other form of public transportation. Many of these differences loom as formidable obstacles in the path of further integration of the taxicab industry into public transportation organizations; on the other hand, many of these differences enable taxicabs to minimize problems which cause grave concern in other transportation schemes. A public transit system making optimum use of some of the advantages of taxicabs can become a more efficient and effective public servant within its community. However, the

\textsuperscript{45}"Philadelphia Yellow Cab Offers 'Soap-Coupons-for-Fares' Plan," Taxicab Industry/Auto Rental News, October, 1958, p. 11.
idiosyncrasies of the industry must be understood and considered in any plans for further development of the industry within the urban transportation complex.
CHAPTER III

TAXICAB-SERVED SEGMENTS OF PUBLIC TRANSPORTATION

In analyzing the weak points and field of greatest usefulness of taxicabs as part of a unified transit system, a fundamental step is the determination of public services provided by existing cab systems and the segment of the public dependent upon these services. Many factors influence the role which taxicabs play in a community's transportation complex -- such factors as habit, regulation, street networks, and other available means of transportation. Therefore, each city is different, and the variables in its transportation formula must be analyzed separately; nevertheless, some dominant traits appear to stand out so conspicuously as to justify generalization. This chapter will analyze the public services provided by taxicabs and the segment of the public predominantly using these services.

Providing for Public Needs Otherwise Unserved

A wide variety of community services, both transportation and non-transportation, have been and are being offered by taxicabs throughout the United States. An analysis of these services serves two purposes: (1) providing an insight into some frequently overlooked special community
services which may be modified and adapted into useful new municipal functions.

Door-to-Door Service

One of the most desirable features of taxicab service is the door-to-door pick-up and delivery feature. This is the only public transportation device which provides this outstanding characteristic to any significant extent.

Completeness of orientation to customer desires is reflected in the definition of "taxicab" given in the New Orleans Taxicab Ordinance: "The term 'taxicab' or 'taxi' means any motor vehicle used for the transportation of passenger for hire over a route and/or to a destination that is controlled by the passenger or passengers." 46

Demands for door-to-door service take many forms. During inclement weather, calls for taxicabs far exceed system capabilities in most cases. Whereas many users of mass-transit facilities do not object to the waiting and walking associated with mass-transit riding during favorable weather conditions, the situation is entirely different during adverse conditions, and demands for door-to-door service are high.

Shoppers laden with big bags of groceries or heavy packages also prefer taxicab service to other less convenient

46 Taxicab Ordinance, Number 1004, City of New Orleans, Louisiana, April 11, 1957, Article V, Section 12-47.
forms of public transportation. Henry Faber confirmed the
demand of shoppers for taxicab service even in New York City
where a highly effective mass-transit system operates. Atlanta cab company operators also recognize the business
boost of shoppers, and point out that this boost normally
occurs at off-peaks when equipment would otherwise be idle.

The movement to suburbia, increased dependence upon
private automobiles, rising transit operational costs, and
decreasing transit revenues are some factors which combine
to force transit companies to establish transit routes
following patterns of high population densities. These
routes are like a wagon wheel, in which distances between
spokes become greater as the distance from the hub increases.
Thus, areas unserved by mass-transit become greater as dis­
tance from the business district increases and as residential
densities become lower. Not only are walking distances thus
lengthened, but the lower densities make high-frequency
transit runs uneconomical. Underdeveloped community ser­
VICES, such as street lighting and police protection, compound
problems of using mass-transit facilities and make door-to-
door service highly desirable in such suburban areas. A
small fleet of taxicabs can serve suburban areas far more
economically than scheduled mass-transit vehicles during off-

peak hours, because: (1) the cabs operate only on an "as needed" basis rather than on a fixed schedule, and (2) operating and fixed costs are much lower for taxicabs than for the larger high-capacity vehicles.

Movements Along Flexible Routes

Whereas most transit system routes are established radially for reasons of economy, taxicab routes are flexible, and cabs are free to travel the shortest distance from point-to-point. No transfers or extra travel distances are involved. Not only may the customer follow the most expeditious route, but he may have the driver stop at selected points along the way, or alter the course if desired. This type of personalized service may result in significant time-savings. No other form of public transportation can match this flexibility of taxicabs.

Directory and Guide Service

A great advantage of using taxicabs is that no knowledge of the city is required, since an intimate knowledge of the city is prerequisite to cab driving. The client need know only the address of his destination. Thus, the customer is buying the service package, which includes the driver's knowledge of the city.

Cab drivers also serve as guides, if customers desire such service. In his interesting study of some
sociological aspects of taxi operation, Fred Davis describes the driver as a person who must respond with sensitivity to the whims of the rider. The cab operator must answer questions asked by his client, he must converse intelligently with him, or he must remain silent -- depending entirely upon the desires of his fare. The driver thus becomes a pseudo-traveling companion and guide, or a non-person, depending on wishes of the customer. Vehicles operating along fixed routes and serving numerous other patrons cannot match this type of individualized service.

Emergency Services

Missions of mercy have often been credited to taxicabs. Expectant, but surprised, mothers have often found taxicabs very helpful in a mad dash to the hospital -- some drivers have even served in the emergency role of midwife when the call was late. The taxicab is also available to mothers who confront emergencies when the family automobile is away from home or inoperative. Measurement of the value of this type of service is impossible; but such value is real, and planners should be cognizant of such community needs as they plan for unified transit systems.

48 Fred Davis, op.cit., p. 160.
New Services Introduced Through Promotional Schemes

In their attempts to promote taxicab business, some operators have introduced novel ideas which appear worthy of consideration as newcomers to the list of public services offered within urban areas. Perhaps these innovations can be developed and refined into more useful community tools, thus serving practical as well as promotional purposes.

In one of these innovations, information about traffic conditions, particularly congestion, is gathered by drivers in the Atlanta Veterans Cab Company system and relayed to the system dispatcher by radio. The dispatcher then uses this information for the dual purposes of directing taxicab flow and of passing it along to a local radio station for thus informing commuters of conditions during peak hours. The resulting dispersal of vehicles over city streets is helpful to cab companies; but it is also helpful to traffic engineers, private motorists, transit companies, and the general public -- each of which is adversely affected by traffic snarls.

Just as any comprehensive transportation system should make maximum use of all vehicles within the limits of practical capabilities, so should a comprehensive transportation plan make maximum use of the physical street network. A coordination arrangement similar to that used by
the Atlanta Veterans Cab Company may well improve the load factor of street networks by dispersion of traffic over parallel arteries, and thus make better use of arteries by routing traffic around points of congestion. Railroad companies use electrical control networks for increasing capacity of existing tracks by improving control of trains, thus reducing wasted time. This idea of feeding traffic information into a control center appears worthy of further study. Perhaps taxicab fleets can be used as a first stage in the development of such an integrated street control system. However, this proposal has limitations which should be recognized and considered in any attempted dispersal of traffic. The elimination of one bottleneck should not create a more serious one; nor should any plan of dispersal unduly sacrifice the safety and privacy of residential areas, schools, or other such uses. Nevertheless, the idea of maximum utilization of major arteries appears to be a sound one; strategically placed radio units seem to offer promise as a stethoscope for keeping a continuous check on the heartbeat of city traffic.

In other promotional efforts, taxicab companies have come forth with additional ideas which are noteworthy. One Atlanta cab company has equipped its cabs with emergency oxygen supplies, and trained its drivers in the emergency
administration of this life-saving element. Mr. L. L. Bennett of the Atlanta Veterans Cab Company also reports that he has advertised a special holiday service: "After the holiday party, call Veterans Cab Company -- we will furnish a driver to deliver you and your car home safely." His company has also used the promotional aid of offering to get help at any time for stranded motorists in the event of automobile failure. Other companies have tried such promotional schemes as reduced rates for transportation to church, and some have used a similar idea by furnishing transportation to the polls on election day. While these innovations are intended primarily for boosting business, transportation system planners should carefully screen such stunts to determine if some of the ideas may be adapted to other roles of public service.

Cities Not Served by Other Transit Facilities

In many of the smaller cities in the United States, taxicabs provide the only means of public transportation. Thus a role as the exclusive provider of public transportation in these small cities is in sharp contrast to that in larger cities where taxicabs complement mass-transit systems. Apparently population is a major determinant of the cut-off

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49 Based on a personal interview with Mr. L. L. Bennett, President of Atlanta Veterans Cab Company, in his office, on October 28, 1958.
point below which various forms of mass-transit cannot survive. The general level of this cut-off point is not known, but may be expected to vary with other characteristics of the city, such as nature of industrial activity, proximity to large cities, and composition of the population. Nevertheless, there are indications that dependence on taxicabs changes significantly at populations of more than 10,000, where a sharp decrease in the average number of taxicabs-per-capita occurs. Perhaps this change indicates significant differences, possibly better service added by other forms of public transportation. (See Table 9, Chapter IV.)

The interaction of several elements precludes the use of mass-transit public transportation in small cities and towns. In the first place, prevailing low densities in residential areas prevent the establishment of extensive transit route coverage. In such situations, not only must routes be widely separated, but vehicle trips must necessarily be infrequent, if not sporadic. Consequently, residents can be provided with only a rather rudimentary form of public transportation, at best; nor can such a system expect to increase significantly its patronage through the promotional programs recommended by Dr. Paranka, in his economic analysis of mass transportation -- modernization and innovation, improved public relations and merchandising, and improved
fare structures. The potential is simply non-existent. The comparative lack of traffic congestion in small towns, together with the relatively short travel distances normally involved, tend to minimize the need for mass-transit facilities.

In spite of having no need for a sophisticated form of public transportation, these small cities and towns nevertheless need some type of public transit. These cities need to provide a means for transporting such persons as the aged, the non-owners of automobiles, and others who need and require public transportation. The answer to the problem of how to provide such an urban transportation system may well lie within the framework of taxicab operations. However, municipal assistance may be needed to assure the level of service which the community needs. Programs of implementation and assistance will be discussed in Chapter V.

Types of People Served

Just whom does the taxicab serve? Although most urban dwellers use taxicab service at one time or another, there are indications that regular users may be grouped into four rather broad categories: (1) non-owners of automobiles, (2) businessmen, (3) persons having emergency transportation needs, and (4) persons requiring specially-equipped vehicles

or specially-trained drivers.

Non-Owners of Automobiles

In many major cities -- particularly those which flourished and became densely populated before the advent of the automobile -- crowded conditions, high operating costs for automobiles, inadequacy of parking space, and other related problems contribute to make private automobile ownership highly unsatisfactory. In some of the older cities such as New York, mass-transit has become a way of life; likewise has the taxicab become an indispensable and recognized public transportation device. Its intrinsic value may well be measured in dollars by the market value of the police-issued medallions which are prerequisite to the licensing of cabs. So pronounced is the unbalance between supply and demand that these medallions are reported to be worth approximately ten times the actual value of the vehicle.\(^1\)

Even in the cities which have grown up with the automobile industry and have thus built streets and transportation systems to fit the pattern set by the automobile age, there is also a heavy demand for door-to-door service for non-owners of automobiles.

One element of this demand which may be expected to increase with advanced medical technology is that of the aged group. Many states, under the pressures caused by

\(^1\)J. Richard Elliott, Jr., op.cit., p. 23.
increasing vehicle accident rates, are even now imposing more rigid standards of reflex action and general physical condition as prerequisites for driver licenses. North Carolina is a good example; other states may be expected to follow. With increasing life expectancies, and the resulting increase in numbers of elderly persons, there will undoubtedly be many more non-owners of automobiles who will need door-to-store, or door-to-door transportation service. This predicted change in age composition may also necessitate revised concepts of acceptable walking distances from mass-transit terminals or pick-up stations. In many small villages such as the currently popular "retirement villages," mass-transit, or even rudimentary bus systems, may not be economically feasible; in such cases, taxicabs can serve public transportation needs quite effectively.

One unusual aspect of the role of the taxicab in the life of a non-owner of an automobile is represented in a phenomenon described by the operator of a cab company in Atlanta. This company serves Negro patrons only, segregation being required by local law. The owner, Mr. T. A. Travis, Jr., of Tiger Flower Cab Company, described the taxicab as a prestige transportation device for the non-owner of an automobile. He supported this observation by pointing out the peaks in demands for his cabs during weekends. Weekend
peaks reflected normal party hours, both beginning and ending.\textsuperscript{52} Thus it appears that the taxicab has ridden the swells of social status commonly associated with automobile ownership. Perhaps in the lower economic levels the non-owner of an automobile views the cab as a device over which he exercises dominance and authority — a power not associated with any other form of public transportation.

It should not be inferred that the prestige factor associated with the use of taxicabs is limited to lower income levels, for such is definitely not the case. Cab activity in the fashionable sectors of New York City, around the opera and theater districts, and in the vicinity of fashionable hotels and nightclubs reflects the general acceptance of taxicabs as legitimate transportation means for persons of high income, as well as those of low.

Businessmen -- Out-of-Town and Local

In his detailed study of taxi customers, Fred Davis described businessmen as the real backbone of the industry: "These (businessmen) are the staple of the cab trade, particularly for drivers who work by day. Not only are they the most frequently encountered; their habits and preferences are more uniform than those of any other type."\textsuperscript{53}

\textsuperscript{52}Based on a personal interview with Mr. T. A. Travis, Jr., President of Tiger Flower Cab Company, in his office on October 28, 1958.

\textsuperscript{53}Fred Davis, \textit{op.cit.}, p. 162.
savings, convenience, social prestige, and the automobile habit are factors which cause local businessmen to choose taxicabs for cross-town trips. In his dissertation, Dr. Paranka recognizes the impact of habit and social prestige on customer selection of public transportation means:\footnote{54}

Another segment of the community is wholly independent of mass transit service. This group includes those individuals who do not ordinarily consider use of mass-transit, but have access to an automobile or use taxicabs for their local movements. Social prestige is a factor which plays an important role in the thinking of this group.

Air and rail travel present the out-of-town businessman with a transportation problem at his destination where he must seek another means of transit. Taxicabs are frequently called upon to serve this need. Further evidence of this demand for cabs is reflected in the heavy demands for cabs in the vicinity of air, rail, and boat terminals. The following quotation from McQuillin's \textit{Municipal Corporations} implies the importance of this service:\footnote{55} "There naturally is considerable competition among rival taxicab concerns for exclusive or favored places and stands for soliciting customers at railroad and bus passenger stations, boat and ferry terminals and the like." Many modern ordinances verify the existence of such choice sites by including

\footnote{54}{Stephen Paranka, \emph{op.cit.}, p. 43.}

\footnote{55}{Eugene McQuillin, \textit{The Law of Municipal Corporations}, vol. 7, 1949, p. 719.}
special sections devoted to the regulation of cabs at these terminal facilities. Some cities rely upon license fees and law enforcement officers for controlling stand arrangements at choice locations; for example, the City of Atlanta provides an open stand at the airport, entry to which is permitted upon insertion of a quarter into a coin-operated gate.

An interesting hybrid of the visiting businessman is the visiting conventioneer, to whom business may be somewhat lighter and more casual than to persons on purely business trips. In Atlantic City, there are 4.1 taxicabs per 1,000 persons as contrasted with an overall average of only 0.94 for all cities in the 50,000 to 100,000 population range. (See Table 9.) Many advantages are offered to the visiting conventioneer by taxicabs. Among these advantages are: the directory and guide service provided; freedom from restraint, thus permitting drinking and hilarity without fear of becoming involved in traffic violations; and freedom from parking worries. Streets of the host city are made safer by this patronage of taxicabs.

Persons Having Emergency Transportation Needs

In major cities, there is always a demand for auxiliary service under such conditions as: when mass-transit vehicles are missed, when tight schedules preclude using regular transit routes, or when other unusual circumstances
suddenly create an immediate need for door-to-door service. One Atlanta cab owner described the service of his company as that primarily built upon serving emergency needs. He further described travel patterns of his cabs as predominantly between residential areas and the downtown area; he also pointed out that these demands are relatively constant, but that the persons thus served vary from day to day.

In addition to the more common mild catastrophes, other emergencies arise which place the taxicab in the role of hero. Inclement weather and severe cold invariably create heavy demands for cab service. Injuries, accidents, and sudden illnesses send stranded mothers scurrying to the telephone to summon a taxicab. Although defying exact measurement, such emergency transportation service is a valuable asset to the community.

Requirements for Specially-Trained Drivers and Specially-Equipped Vehicles

In systems of public transportation, special needs may be easily overlooked in favor of the masses. However, taxicab service extends into many of the more obscure corners of public transit needs. The newly recognized transportation demands of invalids, elderly people, and other special groups are increasingly being met by taxicab companies in new facets of public transit.
Philadelphia has been the proving ground for a unique service offered by "cabulances." This system combines the special features of taxicabs and ambulances into a fleet of 15 cars which are on call 24 hours per day. Careful driver selection and training have contributed greatly to the success of this unusual service which has operated in Philadelphia for 21 years. The cabulances are used primarily for non-emergency service such as transporting the sick, aged, and convalescent to the hospital or doctor's office for examination or treatment. Morale effects of this service are reported to be very good, with enthusiastic endorsement coming from shut-ins who are now able to ride around, go to the polls on election day, go to church, and otherwise regain a degree of their heretofore lost independence.\(^{56}\)

A somewhat similar service is offered in Milwaukee, where a transport service known as "Chair Car Cabs, Incorporated," was recently placed in operation. This company's cabs are specially built and equipped to accommodate wheelchairs, which may be furnished by the customer or the company. Fares are reported to be slightly higher than average, but half-fares are applied to church transportation on Sunday and to other special outings. The uniformed drivers are

specially trained in working with handicapped persons.
Herein is a special fulfillment, not only of a physical need for transportation service, but also of a social need of an otherwise immobilized person. 57

Summary

Taxicabs provide transportation services which cannot be provided by any other known form of public transit. There is a very real need for door-to-door service in most communities; voids between transit lines are often filled by taxicabs; and other special community transportation services are also offered. Areas of public service are even more discernible in small towns where taxicabs are the only public transportation devices. Attempted coordination with other systems in the past, and recent innovations in the industry suggest ways of further improving community service.

CHAPTER IV

REGULATION OF THE TAXICAB INDUSTRY

Taxicab regulation is represented by a complex set of schemes, ranging in degree of control from the simple "laissez faire"-type to the more rigid public-utility-type. In this chapter, the regulation of taxicabs will be analyzed in an effort to determine the elements of control which are most important in the development of workable relationships between taxicabs and parent communities. The following phases will be developed: (1) the basic need for regulation, (2) the legal basis for control measures, and (3) existing frameworks for regulation.

The Basic Need for Regulation

Keeping pace with the high growth rate of the industry after its birth in 1907 -- and even exceeding it in many cities -- were the problems brought about by a general inadequacy of the control machinery necessary to guide this new municipal service. Many peculiarities contribute to the need for effective regulation of the taxicab industry.

Nature of the Industry

Soon after the inception of cab business on city streets, it became apparent to municipal governments that
this new industry bears a peculiar relationship to the public interest. Under private ownership and operation, it serves a public need, but uses publicly-owned streets for serving this public need. This situation became more complex as increasing numbers of taxicabs began to contribute more significantly to congestion of city streets. Traffic flow was impaired in two ways: (1) by the additional vehicles on the streets, and (2) by the passenger loading-unloading process along public streets.

Particularly in the embryonic days of the industry and even detectable to some extent today are inherent characteristics of the industry which precipitated the need for controls. The high driver-turn-over rate caused by low pay, long hours, and poor personnel practices tended to lower the caliber of cab drivers. A natural resistance of the industry to close supervision robs management of the controls commonly associated with most other industries. Because driver pay bears a direct relationship to the passenger-rides or passenger-miles, drivers are encouraged to take shortcuts, thus being tempted to violate various city ordinances in order to increase earnings. Finally, fleet ownership is reported to bring out the most irresponsible and reckless traits of drivers — such traits being reflected not only in abuse to the vehicles, but also in jeopardizing passengers and pedestrians.
Thus, by its nature, the taxicab industry exerts heavy demands on the public and on public facilities. Internal behavioral patterns create a favorable climate for adequate public regulations, self regulation being ineffective.

Protecting the Public Safety and Welfare

There are many facets of the public interest which need the protection which may be afforded through proper control of the taxicab industry. Some of the unusual characteristics of taxicab operation produce situations which, if uncontrolled, may easily become prejudicial to the public interest. Some of these peculiarities are listed below:

1. Whereas other public transportation vehicles usually have more than one passenger with the driver, the taxicab frequently carries only one passenger. Thus is eliminated that protection normally afforded merely by proximity to other persons; therefore, the need for careful driver selection and training is vital to the public safety.

2. The prevailing low wages of cab drivers preclude his ability to pay personally for damages sustained in accidents, a factor which emphasizes the need for regulations requiring the guarantee of financial responsibility.
3. Taxicabs frequently travel from 20,000 to 60,000 miles per year, most of which is in the heavy traffic of busy streets. The resulting exposures of other vehicles and pedestrians to this traffic make necessary the establishment and enforcement of regulations designed to promote safe-driving practices.

4. Looseness of operation of the business, the economic level of the drivers, and internal operational characteristics combine to make the industry peculiarly susceptible to public demands for service associated with nightclubs, prostitional establishments, liquor, and narcotics. Although the moral aspects of cab driving are beyond the scope of this study, regulation must nevertheless recognize the potential immorality within the operation and take necessary steps to protect the public morals.

5. Monitoring and auditing of cab operation are not simple; therefore, methods of controlling fares and protecting the public against unfair rate structures are vital to the general welfare. Control of minimum rates is essential to prevent the undermining of mass-transit systems by unscrupulous cab operators.

Protecting the Rights of Mass-Transit

Problems which were created by unscrupulous cab drivers who pirated mass-transit routes during the depression days
of the 1920's and 1930's serve to illustrate the difficulties which can arise under inadequate control and limitation of taxicabs. Taxicabs and other forms of public transportation have certain common characteristics; they provide public transit service, their general service areas are usually overlapping, and rates are somewhat comparable, particularly if cabs operate on a multi-passenger basis. Similarities are greatest between taxicabs and surface-type transit vehicles.

As supplementary and complementary components within a city's composite transportation system, cabs and other public transportation devices must be so regulated as to obtain a proper balance between the facilities and to extract from each component the maximum public benefit. Discriminatory regulations can impair the usefulness and effectiveness of either of these components, and by so doing can deny the public a useful service.

Protection of the Taxicab Industry

Effective regulation of taxicabs is essential not only for protection of the public welfare and the mass-transit industry, but also for the protection of the taxicab industry itself. As early as 1934, the adverse effects of inadequate controls were discernible within the industry. Paul H. Geyser, President of the Terminal Cab Company of New
York, cited this urgent need in the following quotation:

... so far as electric railway and bus operation are concerned, the existing machinery of regulation appears to be reasonably adequate and satisfactory, but in the field of taxicab operation the machinery of regulation is inadequate. As a consequence, the economic stability of the business has been practically destroyed.

Modern authorities confirm this need for regulations designed to protect the industry from enemies within and without. Stability, reasonable standards of service and safety, equal treatment, and protection against unfair competition are cited as some of the prerequisites for good ordinances oriented toward protection of the cab industry.

In summary, certain inherent characteristics of taxicab operation serve to emphasize the need for comprehensive regulatory measures designed not only to protect the vital public interest but also to protect the rights of the various components comprising the urban transportation system.

The Legal Basis for Regulation

Sympathetically responding to the growing needs for regulation of the taxicab industry, municipal and state officials began to develop legal tools for taxicab control.

58 "Taxi Regulation an Urgent Need," _op. cit._, p. 165.

This section analyzes the legal foundation upon which taxicab industry regulation has been built.

Establishment of Jurisdiction

Inherent to state governments and, by delegation, to municipal authorities, is the power to regulate taxicab operation. Such authority is normally granted to cities either by specific charter provisions or by constitutional home rule provisions. The municipality's right to regulate taxicabs has a dual basis — under the general police power, and under the power to regulate cabs as a public utility.\(^{61}\)

The courts have long supported the position that no one has the inherent right to use public streets for the conduct of private business — that such use is a privilege which may be granted or withheld at the discretion of the governing authority, subject to the usual tests of fairness and reasonableness. The prevailing dependence of the taxicab industry upon use of public streets naturally subjects this business to regulatory controls far more stringent than those of normal enterprises. Taxicab ordinances may even be penal in character, providing for fine or imprisonment in the case of violation. Courts have further recognized that

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\(^{60}\)Stanley v. Public Utilities Commission, 295 U. S. 76, 79 L. Ed. 1311, 55 S. Ct. 628, aff'g 113 Me. 91, 174 Atl. 93.

\(^{61}\)Clem v. LaGrange, 169 Ga. 51, 149 S. E. 638.
regulations may be designed to cover taxicabs as a class—
that such grouping is not discriminatory or arbitrary,
provided the class controls are reasonable and germane to
legitimate police purposes.  

Elements Subject to Regulation

In the evolution of controls for prevention of the
misuse of city streets and for proper protection of the
public interest, municipalities have developed a compre­
hensive background of legal precedents which include even
the most minute details. The following elements of industry
regulation have been generally accepted, and may suggest to
planners and other responsible governmental agents some
refinements and innovations designed to improve the overall
effectiveness of taxicabs in the community.

Regulation of the number of taxicabs.—Saturation of city
streets by unlimited hordes of taxicabs during the economic
depression of the 1930's precipitated development of local
ordinances setting forth more effective controls of numbers.
Not only do these ordinances protect the public, but they
also provide a framework for assuring drivers and cab owners
of fair treatment, protection against unfair competition, and
assurance of reasonable business stability.

62"The Regulation of Taxicabs by Wisconsin Cities and
The courts have generally recognized the power of municipalities to determine the number of taxicabs which may operate within the city.\textsuperscript{63} Therefore, on the basis of public convenience, welfare, and necessity, the city may issue or refuse to issue permits for the operation of taxicabs.\textsuperscript{64} The city may determine whether and to what extent taxicabs are needed; therefore, a city may adopt an ordinance limiting the number of cabs permitted. The number of cabs permitted is normally regulated through licensing controls.\textsuperscript{65} Approximately half of the states impose a rather rudimentary and relatively non-restrictive type of regulation through requiring a special state license for taxicabs. In spite of this licensing requirement, however, primary authority for control is usually delegated to the municipalities.

Rights and privileges.—Unless the state reserves the right to control the use of city streets for the conduct of private business, the municipality has the authority to issue licenses, award franchises, and otherwise control this type

\textsuperscript{63}Yellow Cab Company v. City of Chicago, 396 Ill. 388, 71 N. E. (2d) 652.

\textsuperscript{64}Rudack v. Valentine, 274 N. Y. 615, 10 N. E. (2d) 577.

\textsuperscript{65}Eugene McQuillin, op.cit., p. 716.
of business activity. In the case of the awarding of a franchise, however, the city cannot delegate its authority to control taxicab operation — thus ultimate control still rests with the city, regardless of any franchise terms. Also, the city may not exceed the constitutionally established time limits for the granting of exclusive rights. 66

One precaution should be observed in order to avoid possible conflicts with state laws; municipal regulation cannot invade any rights or privileges granted a licensee through a state license. Thus, when a taxi is licensed by the state, certain rights are granted and these rights may be abridged by the municipality only in a manner authorized by the law of the state. 67 Nevertheless, payment of the state license fee permits the licensee to operate his vehicle on the streets of a municipality subject to reasonable and lawful regulation by the city.

The test of reasonableness.—In spite of the liberal interpretation of the courts in respecting the public nature of street ownership, the courts have made no compromise as to the test of reasonableness; nor have accepted standards been lowered. The municipality may not unreasonably discriminate;

66 McQuillin, op. cit., p. 711.

in fact, it may not provide the framework for possible discrimination through an administrative mechanism which is obviously likely to promote discrimination. 68

Of particular interest to municipal officials is the court precedent establishing that unreasonableness does not exist because of pecuniary injury suffered by taxicab operators as the direct result of enforcement of an ordinance. 69 Ordinances may select taxicabs as a class to be restricted from parking in certain designated areas, or even from traveling on certain streets. Thus, taxicabs are recognized by the courts as being subject to far more exacting rules than private passenger automobiles, provided the rules are reasonable. Whenever the reasonableness of a taxicab ordinance has been questioned, the burden of proof has generally been upon the party raising the question. 70

Financial protection of the public.—Given the necessary authority by the state, the municipality has the power to require that proof of the ability to pay damages be presented by taxicab companies either in the form of acceptable insurance policies or posted bond. 71 Since some states

68 McQuillin, op. cit., p. 712.
69 Suddreth v. City of Charlotte, 223 N. C. 630, 27 S. E. (2d) 650.
70 McQuillin, op. cit., p. 713.
71 Huston v. Des Moines, 176 Iowa 455, 156 N. W. 883; also Large v. City of Elizabethton, Tenn. 203 S. W. (2d) 907.
specify insurance coverage or other method of assuring financial responsibility, any municipal ordinance should be developed in harmony with existing state laws.

Driver selection and licensing.—Screening and licensing requirements for cab driving, as established by cities, may far exceed those required by the state for private automobile operation. Although most states are lax in imposing and enforcing restrictions based on moral character, the courts have generally upheld the authority of municipalities to set high moral standards as prerequisites for obtaining licenses to operate taxicabs. Addiction to the use of liquor or narcotics has been held by the courts to be sufficient reason for withholding the license privilege. In addition to the requisite good moral character, the driver may be subject to more rigid age restrictions than those normally required by the state for private non-commercial vehicle operation.

Taxicabs may be controlled by the city in which they operate, regardless of the city in which based. Many cities have developed reciprocal agreements for simplifying the inter-city operation of cabs; however, the city in which the taxi is actually operating retains final jurisdiction, even to the extent of being permitted to ban such vehicles from

72 Scott v. Hart, 128 Miss. 353, 91 So. 17.
its streets, subject to the usual tests of reasonableness and public benefit.\textsuperscript{74}

Not only are driver screening and licensing proper functions of a city, but also, driver behavior is properly within the police power; therefore, failure to behave according to established rules and standards is considered to be just cause for revocation of the operator's permit. Drivers may be prohibited from soliciting customers at certain places, or perhaps at certain places at specified times.\textsuperscript{75} They may legally be required to maintain a presentable appearance, or to wear distinguishing clothing such as a cap or jacket, as specified by ordinance.\textsuperscript{76} The courts have also ruled that, subject to reasonable limitations, service must be supplied to anyone who seeks this service — drivers frequently being prohibited from even asking about the destination until the customer is in the automobile.\textsuperscript{77} Drivers may also be prohibited from picking up additional passengers without the approval of the original passenger.\textsuperscript{78}

\textsuperscript{74}Commonwealth v. Kelley, 229 Ky. 722, 17 S. W. (2d) 1017.
\textsuperscript{75}Lindsay v. Anniston, 104 Ala. 257, 16 So. 545 (1894).
\textsuperscript{76}Atlantic City v. Freretti, 70 N. J. L. 489, 57 Atl. 259 (1904).
\textsuperscript{77}Atlantic City v. Brown, 72 N. J. L. 207, 62 Atl. 428 (1905).
\textsuperscript{78}Jackie Cab Company v. Chicago Park District, 366 Ill. 474, 9 N. E. (2d) 213 (1937).
Municipalities have received strong legal backing whenever licenses have been revoked for violation or other non-compliance with these provisions for the operation of taxicabs.

Rates.—Unless specifically reserved for state control, a municipality may normally be empowered to control rates in any reasonable manner. Such rate control may involve the use of minimum fares, establishment of zones, requirement of taximeters, or any combination of these features. Although most courts have ruled in favor of the city's right to fix rates79 -- both maximum and minimum -- some dissenting decisions have been rendered;80 therefore, it is recommended that local law and local precedents be studied prior to the establishment of an ordinance fixing these rates. Any developed rate structure must be non-discriminatory, non-confiscatory, and reasonable.

As an integral part of its program to regulate rates, the municipality may require the installation, inspection, and certification of taximeters; it may further prescribe the rates upon which this operation is based.81 Courts have also

79State ex rel Stephenson v. Dillon, 82 Fla. 276, 89 So. 558 (1921).
80Worley v. French, 184 Okla. 116, 85 Pac. (2d) 296 (1938).
generally upheld as reasonable and justly within the police power the requirement that rates be conspicuously posted on the exterior of taxicabs.

License fees.—It has usually been held that a municipality with the authority to regulate taxicabs may also impose a reasonable license fee as an element incident to the exercise of the police power. In other cases, cities have been granted the power to impose license fees for the purpose of gaining revenue. However, it is important to recognize that the power to tax and the power to license as a police measure are not interchangeable. 82 In most cases, the courts have ruled that fees obviously in excess of administrative costs are revenue-producing rather than regulatory, and thus are not permitted under the police power. 83

Control of stands and methods of solicitation of passengers.—The control of stands and regulation of the method of soliciting passengers have been tested in the courts many times, thus providing an adequate background of legal precedents upon which to develop a sound policy of control of these phases of cab operation. Courts have generally ruled that the establishment of cab stands and the requiring of cabs to


use these stands are properly within the limits of police
power authority.84 One troublesome aspect of the assignment
of cab stands, however, is the method of assigning these
stands. Nevertheless, the courts have accepted this assign­
ment as a legislative function and have permitted cities to
use virtually any scheme which is reasonable for the local
situation. In one of the most important cases, it was ruled
that some degree of preference may be unavoidable in the
chore of assigning stands among several companies; consequent­
ly, it was ruled that "... not absolute equality is
required, but only reasonable equality under the circum­
stances."85 Other equally liberal rulings have been made
favoring the city's authority over its streets; for example,
it is generally accepted that a city with the right to
establish stands may also prohibit, suspend, limit, or
completely abolish stands in the streets.86

Terminal points for other forms of transportation
have often precipitated court cases from which important
precedents may be extracted. A city may require cabs to use
whatever portion of a depot, wharf, airport, or other
terminal the responsible operating agent may designate for

84Eugene McQuillin, op.cit., p. 717.
85District of Columbia v. Hazel, 16 App. D. C. 283
(1900).
86Charles S. Rhyne, op.cit., p. 11.
the loading and unloading of passengers.\textsuperscript{87} Just as in the ruling about inequality of stand assignment, the courts have upheld inequality of assignment, so long as such inequality is reasonable when measured by the yardstick of public rights and welfare.\textsuperscript{88} Recognition of private rights has been upheld in rulings that a private transportation company may establish stands on its own property according to its own discretion.\textsuperscript{89}

In some states it has been ruled that the city must obtain the permission of abutting property owners before establishing a cab stand; on the other hand, however, it has been ruled that a cab company may not circumvent municipal authority by establishing a stand simply on the basis of the abutting property owner's permission.\textsuperscript{90} Other states provide that establishment of stands need not be dependent on the consent of abutting property owners; however, rights of ingress and egress must be respected.\textsuperscript{91}

\textsuperscript{87}Veneman v. Jones, 118 Ind. 41, 20 N. E. 644.
\textsuperscript{88}City Cab, Carriage, and Transfer Company v. Hayden, 73 Wash. 24, 131 Pac. 472 (1914).
\textsuperscript{91}Yellow Taxicab Company v. Gaynor, 82 Misc. 94, 143 N. Y. S. 279 (1913), aff'd 159 App. Div. 893, 144 N. Y. S. 299.
element which has received acceptance by some states,92 but rejected by others,93 is that of prohibiting taxicabs from stopping on public streets for the specific purpose of loading and unloading passengers.

The final issue in the regulation of stands and control of solicitation of customers is that of allowing or prohibiting solicitation of passengers in or along city streets. Of particular interest to officials who would remove any impediments to smooth traffic flow is the court support of municipal regulations against cruising or otherwise seeking passengers along city streets.94

**Inspection requirements.**—Numerous ordinances requiring periodic inspections of taxicabs or taximeters have been challenged on the grounds that such provisions violate the due process clause of the Federal Constitution. However, courts have generally upheld the legality of any reasonable inspections showing due relationship to the public welfare, such required inspections being considered proper derivatives of the police power.95

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92 Sanders v. Atlanta, 147 Ga. 819, 95 S. E. 695 (1918).
Other elements subject to regulation.—In addition to previously mentioned regulations, some cities are permitted to go so far as to specify the type of markings which will be used on the taxicabs—such features as the following being subject to control: color schemes, information to be included, company names, and dome lights. New York City requires prominent display of the police department issued metal medallions.

Some cities have found it desirable, in keeping with local custom, to maintain separation of races in taxicab service. The taxicab ordinance of the City of Atlanta received legal sanction in its requirement that all taxicabs and vehicles for hire be conspicuously marked to indicate whether authorized to transport white or colored patrons—no cabs being authorized to transport both races.96

Summary

Courts generally have adopted a liberal outlook toward the authority of municipalities to regulate and control the taxicab industry through exercise of the police power. Nevertheless, any ordinance for such control should be based on a thorough analysis of local enabling legislation so that conflicts with state law may be avoided. Most court tests

96Bunn v. City of Atlanta, 67 Ga. App. 147, 19 S. E. (2d) 553 (1942) cert. den. 317 U. S. 666, 63 S. Ct. 73, 87 L. ed. 535.
of the validity of taxicab ordinances have been centered around the following elements: (1) reasonableness, (2) protection of the public interest, and (3) absence of arbitrary and discriminatory measures.

Existing Frameworks of Regulation

The basic needs for taxicab regulation have been discussed; the legal precedents associated with cab controls have been analyzed; attention will now be focused on the actual regulatory controls which are in use in cities of the United States. Thus may planners, traffic engineers, and other concerned parties determine those elements which appear most progressive, which are most popular, and which may best be adapted to local roles of usefulness.

Determination of the Number of Taxicabs

Most cities of more than 10,000 persons limit the number of taxicabs which may operate on city streets; however, smaller cities are not so specific in establishing a maximum number within the city. In 1948, the American Municipal Association conducted a study of taxicab regulations, in which it collected information about the determination of taxicab numbers. The table on the following page reflects answers received from 339 reporting cities.97

97"Regulation of Taxicabs," op. cit., p. 416.
Table 7. Limitation of the Number of Taxicabs Allowed to Operate in Cities of More Than 10,000 Population, 1948

<table>
<thead>
<tr>
<th>Agency Determining Number</th>
<th>Number of Cities</th>
<th>Per Cent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Council or Committee of the Council</td>
<td>248</td>
<td>73.5 %</td>
</tr>
<tr>
<td>City Manager</td>
<td>6</td>
<td>1.8</td>
</tr>
<tr>
<td>Mayor</td>
<td>4</td>
<td>1.2</td>
</tr>
<tr>
<td>Police Department</td>
<td>4</td>
<td>1.2</td>
</tr>
<tr>
<td>Various Boards or Combinations of Officials</td>
<td>23</td>
<td>6.8</td>
</tr>
<tr>
<td>State Agency, Usually the State Utility Board</td>
<td>54</td>
<td>15.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>339</strong></td>
<td><strong>100.0 %</strong></td>
</tr>
</tbody>
</table>


Almost three-fourths of all reporting cities indicated that the city council or a committee appointed by the council control the number within the city. Only 10 cities out of the 339 reported that a single person, either the mayor or the manager, sets a maximum limit. Recognition of the industry as a public utility is reflected in the 15.5 per cent of the cities in which cab limits are set by a state agency, normally the state utility board.
In 1958, the American Taxicab Association prepared a data book containing information on taxicab operation in various cities in this country. Tabulation and classification of these data reveal some interesting relationships between the size of the city and control of the number of taxicabs allowed to operate on city streets. The following table shows this relationship:

Table 8. Limitation of the Number of Taxicabs in Cities of Various Sizes (City size based on 1950 Census)

<table>
<thead>
<tr>
<th>Size of City</th>
<th>Total Number Reporting</th>
<th>Cities Limiting Number of Cabs</th>
<th>Cities Not Limiting Number of Cabs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Per Cent</td>
</tr>
<tr>
<td>Over 500,000</td>
<td>18</td>
<td>13</td>
<td>72 %</td>
</tr>
<tr>
<td>250,000-500,000</td>
<td>24</td>
<td>22</td>
<td>92</td>
</tr>
<tr>
<td>100,000-250,000</td>
<td>51</td>
<td>39</td>
<td>77</td>
</tr>
<tr>
<td>50,000-100,000</td>
<td>81</td>
<td>49</td>
<td>61</td>
</tr>
<tr>
<td>25,000-50,000</td>
<td>158</td>
<td>84</td>
<td>53</td>
</tr>
<tr>
<td>10,000-25,000</td>
<td>174</td>
<td>88</td>
<td>51</td>
</tr>
<tr>
<td>5,000-10,000</td>
<td>103</td>
<td>42</td>
<td>41</td>
</tr>
<tr>
<td>Less than 5,000</td>
<td>39</td>
<td>18</td>
<td>46</td>
</tr>
</tbody>
</table>

There is a discernible tendency toward imposing ceilings as cities become larger — up to the 500,000 level, at which point an unexplained drop may be detected. Available data indicate that most cities set limits on taxicab numbers; thus history appears not to favor the "laissez faire" method of controlling cab numbers.

Having reviewed existing practices regarding the setting of ceilings on numbers of taxicabs, it is important that the methods of establishing these numbers be analyzed. First, an empirical yardstick will be developed, based on the actual numbers of taxicabs licensed to operate on the streets of different sized cities. Secondly, several schemes in use by various cities will be cited.

Taxicabs per capita.—Cities groping for a guide to use in developing a taxi number ceiling may get some ideas from a study of national averages. Again, the American Taxicab Association Data Book provides a basis for the development of this valuable information. Of 845 reporting cities, the average number of taxicabs per 1,000 persons is 1.13, or one taxicab per 1,180 persons. The largest number of cabs per capita is found in the towns of 5,000 persons or less — this ratio being 2.45. On the other hand, the next highest ratio is in cities at the other extreme of the population

range -- in cities of more than 500,000 where a ratio of 1.42 cabs per 1,000 persons is found.

Among the major cities in this country, Washington, D. C., stands head and shoulders above all others with 11.20 taxicabs per 1,000 residents -- or one cab per 89 persons. At the other extreme among cities of more than 500,000 population is Los Angeles, with 0.46 cabs per 1,000 persons. Table 9 shows the number of licensed taxicabs per capita in selected cities in the United States, including all cities of more than 500,000 population.

Other methods of determining numbers. -- Many cities set ceilings of taxicab numbers directly related to population by establishing a per-capita limit. Milwaukee permits one cab per 1,175 residents, almost precisely the national average developed in the preceding section. Seattle, on the other hand, allows one cab per 2,500 residents, about one-half of the national average. Other cities base their limits on the actual number licensed to operate on a given date, as in Cleveland (9/15/39), Kansas City (1/1/46), and Minneapolis (1/1/49). An added refinement is found in some cities where maintenance of a constant ratio between fleet and individual cabs is required, in addition to the limitation of the total number. New York City uses such an arrangement, using the 1937 ratio, while Buffalo uses the ratio existing on February 19, 1946. In Denver and Boston, taxi administrative
Table 9. Licensed Taxicabs per Capita for Various Sized Cities in the United States — Selected Samples

<table>
<thead>
<tr>
<th>Population Range</th>
<th>Selected Examples</th>
<th>Taxicabs per Capita:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Selected Example</td>
</tr>
</tbody>
</table>

*Less than 5,000*

- Glenside, Pa. 12.00
- East Weymouth, Mass. 11.40
- Hartselle, Ala. 2.60
- Norwalk, Cal. 2.40
- Port Washington, Wisc. 0.42
- Seaside, Ore. 0.25

*5,000 - 10,000*

- Gaffney, S. C. 6.30
- Mt. Airy, N. C. 5.00
- London, Ohio 1.30
- Rochester, Pa. 1.20
- Seguin, Tex. 0.10

*10,000 - 25,000*

- Annapolis, Md. 7.30
- Las Vegas, Nev. 6.30
- Corning, N. Y. 0.97
- Scottsbluff, Nebr. 0.94
- Harlingen, Tex. 0.13
- Laramie, Wyo. 0.13

*25,000 - 50,000*

- Hempstead, N. Y. 8.50
- Fayetteville, N. C. 4.40
- Anchorage, Alaska 0.97
- Montclair, N. J. 1.10
- Aliquippa, Pa. 0.19
- Monroe, La. 0.13

*50,000-100,000*

- Atlantic City, N. J. 4.10
- Evanston, Ill. 2.37
- Galveston, Tex. 0.95
- Winston Salem, N. C. 0.96
- Clifton, N. J. 0.08
- Cranston, R. I. 0.04

(Continued on next page)
Table 9. Licensed Taxicabs per Capita for Various Sized Cities in the United States -- Selected Samples (Concluded)

<table>
<thead>
<tr>
<th>Population Range</th>
<th>Selected Examples</th>
<th>Taxicabs per Capita</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Selected Example</td>
<td>National Average</td>
</tr>
<tr>
<td>100,000-250,000</td>
<td>Albany, N. Y.</td>
<td>2.20</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>Cambridge, Mass.</td>
<td>2.10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Austin, Tex.</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nashville, Tenn.</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Waterbury, Conn.</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Youngstown, Ohio</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>250,000-500,000</td>
<td>Baltimore County, Md.</td>
<td>1.80</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td>Newark, N. J.</td>
<td>1.36</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Atlanta, Ga.</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>San Diego, Cal.</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jersey City, N. J.</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>St. Paul, Minn.</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>Over 500,000</td>
<td>New York, N. Y.</td>
<td>1.50</td>
<td>1.42</td>
</tr>
<tr>
<td>(all cities)</td>
<td>Chicago, Ill.</td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philadelphia, Pa.</td>
<td>1.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Los Angeles, Cal.</td>
<td>0.46</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Detroit, Mich.</td>
<td>0.71</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Baltimore, Md.</td>
<td>1.21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cleveland, Ohio</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>St. Louis, Mo.</td>
<td>1.48</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Washington, D. C.</td>
<td>11.20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boston, Mass.</td>
<td>1.90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>San Francisco, Cal.</td>
<td>0.96</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pittsburgh, Pa.</td>
<td>0.93</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Milwaukee, Wis.</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Houston, Tex.</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buffalo, N. Y.</td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New Orleans, La.</td>
<td>2.68</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minneapolis, Minn.</td>
<td>0.47</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cincinnati, Ohio</td>
<td>0.63</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Per-capita values computed from information contained in A-T-A Data Book, op. cit., pp. 16-66.
officials are given certain maximum-minimum limits within which to operate. In Dallas, Texas, taxicab operation is treated more nearly like a public utility, even to the extent that the city through its public utility supervisor may require additional cabs whenever the service is considered to be inadequate.

The Use of Public Streets

Establishing a reasonable balance between serving the public needs on the one hand and protecting the public interest on the other has caused numerous schemes to be developed for controlling the use of streets, for both parking and travel. Among the main elements which are considered in composing ordinances for regulating the use of streets by taxicabs are: (1) minimizing congestion caused by taxicab traffic, (2) controlling solicitation of passengers along mass-transit routes, (3) minimizing the impairment of traffic flow caused by parked cabs, (4) protection of pedestrians, and (5) providing for public convenience.

Cruising along public streets. — "Cruising" is defined as repeatedly and persistently driving a taxicab to and fro in a short space before, or otherwise interfering with the proper


and orderly access to or egress from, any theater, hall, hotel, transportation terminal, or other place of public gathering, while seeking passengers. The American Municipal Association reports that about three-fourths of the cities in the 100,000 to 400,000 population range have ordinances prohibiting cruising, while the cities of more than 400,000 persons are more evenly divided. Some cities have hybrid arrangements, in which cruising is permitted in specified areas at certain times. Cruising policies are summarized in the following table. 102

Table 10. Policies Regarding Cruising of Taxicabs in Cities of More Than 100,000 Population

<table>
<thead>
<tr>
<th>Population Group</th>
<th>Cruising Policy</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Permitted</td>
<td>Prohibited</td>
<td>Permitted at Night</td>
<td></td>
</tr>
<tr>
<td>Over 1,000,000</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>500,000 - 1,000,000</td>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200,000 - 500,000</td>
<td>5</td>
<td>16</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>100,000 - 200,000</td>
<td>11</td>
<td>29</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Over 100,000</td>
<td>24</td>
<td>53</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: John R. Kerstetter, Municipal Regulation of Taxicabs, op. cit., p. 2.

102 John R. Kerstetter, op. cit., p. 2.
Cruising is permitted in Chicago, Los Angeles, St. Louis, San Francisco, Buffalo, New Orleans, Minneapolis, and Cincinnati; however, cruising is prohibited in New York, Detroit, Baltimore, Cleveland, Washington, Boston, Milwaukee, Houston, Seattle, Kansas City, Newark, and Denver. The difficulty of enforcing ordinances against cruising is obvious -- violations being relatively undetectable unless so flagrant as to attract the attention of police agencies. However, some cities require the installation of mechanical and electrical devices designed to make cruising more readily detectable. For example, New York City requires empty cabs to display a lighted dome sign to signify that the cab has no passengers. This light is connected to the flag on the taximeter in such a way that the light is operative when the meter is inoperative.

Cab stands.---A "cab stand" is defined as a place where taxicabs are permitted to park as well as to pick up and discharge passengers. These stands may be open to all taxicabs or reserved for exclusive use by one or more specifically designated companies. Most large cities have open stands for use by all companies on a first-come-first-served basis. In Cleveland, however, the stands are assigned for the exclusive use of certain companies. In Los Angeles, each franchised company is assigned to serve a designated geographical area, and passenger pick-ups are limited to this area. San Francisco and Newark have some open and some exclusively-assigned stands.
The city contemplating the assignment of closed stands should take the necessary steps to assure that such assignment will withstand the judicial test of being reasonably non-discriminatory. Choice stand sites are most likely to precipitate the challenge of discrimination, and many cities have experienced difficulty in developing formulas for reasonably equitable distribution of stand space. The elimination of this problem is one point in favor of open stand arrangements; however, open stand schemes are not readily adaptable to assignment of responsibility for order and maintenance under the threat of revoking the stand privilege.

Stand assignment policy in cities of more than 100,000 population is reflected in the following table:103

Table 11. Cab Stand Assignment Policies in Cities of More than 100,000 Population

<table>
<thead>
<tr>
<th>Population Group</th>
<th>Cab Stand Assignment Policy</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Open</td>
<td>Exclusive</td>
<td>Both</td>
<td></td>
</tr>
<tr>
<td>Over 1,000,000</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>500,000 - 1,000,000</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>200,000 - 500,000</td>
<td>12</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>100,000 - 200,000</td>
<td>15</td>
<td>18</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Total over 100,000</td>
<td>40</td>
<td>26</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>


Some cities require off-street parking of taxicabs, and some prohibit street stands altogether. Off-street cab parking is required by one city in the 50,000 - 100,000 population range; eight in the 25,000 - 50,000 range; and thirty-one in the 10,000 - 25,000 group. No street stands are permitted in two cities in the 100,000 - 250,000 population group; in three cities of 50,000 - 100,000 persons; and in six cities in each of the 25,000 - 50,000 and 10,000 - 25,000 population groups.104

License Fees

License fees associated with cab operation fall into two broad categories — those which are imposed by the municipality and those which are imposed by the state. Because primary authority for the control of taxicabs has been delegated to the cities, licensing usually occurs at the municipal level. The segments of taxicab operation most commonly subject to licensing requirements are: taxicab vehicles, stands, and operators. In addition, cab inspection fees may be levied to pay for any required inspections. State license requirements, where used, resemble those of other commercial vehicles in contrast to provisions for private vehicles.

Taxicabs.—Licensing of taxicabs follows two general patterns,

the first based on a flat fee per vehicle, and the second based on gross receipts. The special survey conducted by the American Taxicab Association in 1958 lists 845 cities and describes the fees prescribed by each city. This list provides the basis for establishing categories of licensing schemes which serve as a practical yardstick by which to measure local requirements. Of the 629 reporting cities, 560 had some form of flat fee system of licensing while the remainder used some type of license system based on gross receipts. The table following shows the number of cities using various flat fee schedules:

Table 12. License Fees Charged per Cab in Cities in the United States, Using Flat Fees

<table>
<thead>
<tr>
<th>Annual Charges per Taxi-cab</th>
<th>$0-10</th>
<th>$11-20</th>
<th>$21-30</th>
<th>$31-40</th>
<th>$41-50</th>
<th>$51-80</th>
<th>$81-100</th>
<th>Over $100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Cities</td>
<td>177</td>
<td>124</td>
<td>135</td>
<td>30</td>
<td>47</td>
<td>27</td>
<td>8</td>
<td>12</td>
</tr>
</tbody>
</table>


Of the 629 reporting cities, 78 per cent charge fees of $30 or less per cab per year, an indication of only nominal charges for the use of city streets. The operating

license fee is, in most cities, the only special charge for the use of streets. Nevertheless, several cities, including Baltimore, Washington, and Houston, have no cab license fee as such, but impose upon each cab an annual fee for the use of streets. Chicago, on the other hand, uses a combination of both revenue-producing schemes -- veterans' cabs must pay annually $20 while other owners must pay $55 for the use of streets, plus a license fee of $5.50 per year.

Many cities use a graduated fee system, in which the fee for the first cab of a company is set at a level substantially higher than that for subsequent cabs. Some cities use a similar arrangement by requiring a set fee for the company and a separate fee for each taxicab placed in service. For example, Akron, Ohio, charges $625 per year for up to 50 cabs and $10 each for all cabs above 50. Of 69 cities using the graduated fee system, fifty per cent charge $25 or less for the first taxicab for each company. Twenty-one of the 69 cities have a fee of $30-100, and the remaining fourteen charge more than $100 for the first cab. Fees for cabs beyond the initial one range from $1 to $50; the most widely used value being $10.

Several other cities have unusual adaptations of the graduated fee system. Delavan, Wisconsin, has a fee of $50 for the first cab, $25 for the second, $15 for the third, and
$5 for all others. Jacksonville, Florida, sets a flat fee of $250 per company annually, but limits each company to 250 cabs. Oak Park, Illinois, has a fee of $750 for up to 31 cabs, and $1,125 for more than 31. Ogden, Utah, charges $50 total for the first 3, $10 total for the next 7, and $7.50 for all others. Tucson uses a scheme which is the inverse of most other graduated arrangements; it charges less for the first taxi and more for additional units — $7.50 per quarter for 1-9 cabs, $50 per quarter for 10-20 cabs, and $75 per quarter for more than 20 vehicles.

A clever attempt to encourage the use of good vehicles through licensing provisions is found in some fee structures. Fort Lauderdale, Florida, for example, bases fees on age of the vehicle. In 1958, this city reported a fee of $75 for 1955 models, $50 for 1956 models, and no charge for 1957-1958 models.

In the survey by the American Taxicab Association in 1958, it was found that a gross receipts tax or some derivative thereof provides the basis for licensing charges in 69 cities, or 11 per cent of the 629 reporting cities. About one-third of the 69 cities collect 2 per cent of gross receipts. Generally, the tax rate ranges from 1 mill to 4 per cent. One small town, Buckhannan, West Virginia, reports the unusually high rate of 10 per cent of these receipts. Even with this exorbitant rate, however, the city has 2.0 cab
licenses per 1,000 population -- substantially more than the average for that population group. Some cities impose a gross receipts tax in lieu of a franchise tax. The rate of 3 per cent is the most prevalent value in this franchise tax substitute.\textsuperscript{106}

One city, Atlanta, Georgia, uses a unique fee system based on mileage traveled. The rate is 3 mills for each of the first 30,000 miles; 2 mills for each of the next 60,000 miles; and 1 mill for all additional miles. Mileages are computed separately for each company.\textsuperscript{107}

A significant disadvantage of the gross receipts tax or any of its derivatives is the complexity of administration from the standpoints of both the taxicab companies and the municipal agency responsible for administration of the ordinance provisions. Usually, enforcement of this scheme involves maintaining complicated and complete records by the taxicab operators.

Required records are not, however, limited to systems operating under systems based on gross receipts. Many cities under the flat-fee system of licensing require that the cab company maintain complete records which are subject to review by the governing authority. One outstanding advantage of this record requirement is that such information


\textsuperscript{107}Based on an interview with Captain E. O. Mullen of the Atlanta Police Department, in his office on October 28, 1958.
is of great value to governments which are striving to
develop a comprehensive transportation system. Typical of
the required-records provision is the following excerpt from
the New Orleans Taxicab Ordinance: 108

Every company . . . shall keep daily records, including
a record of telephone calls accepted and refused, in
such form as to insure the accuracy thereof. Such daily
records shall be preserved and be available for in­
spection by the Director of Utilities for a period of
ninety days. The driver of each taxicab, whether
owner or employee, shall keep a trip report upon which
he shall enter for each engagement immediately upon
completion thereof, the points of origin and destina­
tion, the times of beginning and completion, the fare
collected, and the number of passengers. All entries
shall be made legibly and the trip report shall be
signed by the driver and turned over to the owner of
the cab, who shall preserve them for a period of not
less than ninety days.

Stands.—Not nearly so many cities charge fees for stands
as for cab operation. Of the 629 cities reporting some
form of license fee, only 95 cities, or 15 per cent, have
fixed fees for the use of stands. One-third of this group
charge $20 or less for a cab space annually. Sixteen cities
have annual fees set at more than $100 per space. Wilkes
Barre, Pennsylvania, has the highest fee for stands, $50 per
month. The following table shows the range of stand fees
in this country: 109

---
108 "Taxicab Ordinance, Number 1004, City of New
Orleans, Louisiana," Section 12-135.
Table 13. Stand Fees Per Cab in Cities in the United States

<table>
<thead>
<tr>
<th>Annual Charge per Cab Space</th>
<th>Over $100</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0-10</td>
<td>16</td>
</tr>
<tr>
<td>$11-20</td>
<td>17</td>
</tr>
<tr>
<td>$21-30</td>
<td>8</td>
</tr>
<tr>
<td>$31-40</td>
<td>3</td>
</tr>
<tr>
<td>$51-80</td>
<td>9</td>
</tr>
<tr>
<td>$81-100</td>
<td>10</td>
</tr>
<tr>
<td>$100</td>
<td>10</td>
</tr>
<tr>
<td>$100</td>
<td>16</td>
</tr>
</tbody>
</table>

Number of Cities

<table>
<thead>
<tr>
<th>Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
<tr>
<td>17</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>16</td>
</tr>
</tbody>
</table>


Some cities have devised special variations of ordinance provisions for controlling and licensing stands. Lubbock, Texas, for example, charges $2 per linear foot per year, while Omaha, Nebraska, and Bellingham, Washington, charge $5 per foot. Eight reporting cities base stand fees on the prevailing parking meter rates.

Operator license fees.—Most cities have established nominal charges for operators' licenses — obviously designed to bear the cost of administration only. In a survey conducted in 1948, of the 836 reporting cities, 416 require the driver to pay an individual license fee, 352 require no licenses, and 68 did not report on this item. Of the 416 requiring licenses, 36 per cent reported a $1 fee; 4 per cent, a $1.50 fee; 24 per cent, a $2 fee; 9 per cent, a $3 fee; 13 per cent, a $5 fee; and the remaining 14 per cent, fees ranging from 25 cents to $25. The $1 fee was found to be most
popular; the $2 fee, second most popular in all city size
groups except in cities from 100,000-500,000 population,
where the $5 fee was in second place.\textsuperscript{110} Washington and
Buffalo are among the cities using a $5 fee. Chicago and
Minneapolis have a $5.50 initial fee, with renewal fees of
$3.30 and $2.00 respectively.\textsuperscript{111}

\underline{Cab inspection fees}.—Only one other type of taxicab fee is
found in significant numbers within cities; this is a fee
for taxicab or taximeter inspection. Fees thus collected
are generally used to finance the inspections. Typical of
such fees are those of Cleveland and Buffalo, where operators
must pay $2 per year for the required inspection of their
vehicles. Taximeter inspections in Chicago, Detroit,
Boston, Cincinnati, and Denver cost operators from $1 to
$5 per year. Other cities inspect meters periodically or
upon complaint, but do not assess charges for this service.\textsuperscript{112}

\underline{State licenses}.—Approximately half of the states retain
some form of control over taxicabs in addition to that
delegated to municipalities. Among the 48 states for which

\begin{flushright}
\textsuperscript{110}The Municipal Yearbook, 1948, op.cit., p. 418.
\textsuperscript{111}John R. Kerstetter, op.cit., p. 4.
\textsuperscript{112}Loc. cit.
\end{flushright}
information is available, 24 maintain records in which taxis are separated from other vehicles. Trends are in the direction of maintaining these records separately. Taxi-cab license fees in 25 of the states are the same as for comparable private automobiles. These states include: Alabama, Arizona, Colorado, Delaware, Georgia, Idaho, Iowa, Kentucky, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, New Hampshire, New Jersey, New York, North Dakota, Ohio, South Dakota, Texas, Utah, Vermont, Wisconsin, and Wyoming.

Besides these states which require no additional licenses, several other states have very low fees. Among the states requiring $30 or less per cab per year are: California, $14 above regular passenger car fee; Connecticut, $23 fee; Florida, $25; Illinois, $10.50; Indiana, $11.50; Kansas, $11.75; Louisiana, $25; Nebraska, $15; Nevada, $25 (Public Service Commission tag); Oklahoma, $25.50; Rhode Island, $28; South Carolina, $19; and Tennessee, $25. Five states have flat fees of more than $30: Arkansas, $75; Maryland, $45; New Mexico, $70; North Carolina, $60; and Washington, $35. Maine uses a fee which is twice that of equivalent private automobiles. Oregon charges $0.45 per

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100 pounds of vehicle weight plus a Public Utility Commission fee of $35 per cab per year; on the other hand, Virginia uses a flat rate of $1 per 100 pounds. Pennsylvania imposes a gross receipts tax of 8 mills plus a license fee of $25. West Virginia prescribes a Public Service Commission fee of $37.50 plus a gross receipts tax of 1.5 per cent.\textsuperscript{114}

Issue of Operating Licenses

Many cities recognize the need for careful screening of drivers, and consequently provide ordinance sections covering the requirements which drivers must meet, and setting forth the conditions under which licenses may be revoked. In one survey conducted in 1948, of 818 reporting cities, 555 indicated that police approval is necessary for the issue of an operating license, while the remaining 263 have no such ordinance provision. Driver's fingerprints are required by most cities; and drivers' records are reviewed by most cities. The following table reflects licensing standards required by cities of different sizes, according to this 1948 survey:

Table 14. Extent of Examination of Taxicab Drivers for Licenses

<table>
<thead>
<tr>
<th>Population Group</th>
<th>Number of Cities</th>
<th>% of 818 Reporting Cities Requiring</th>
<th>Police Approval</th>
<th>Fingerprints</th>
<th>Photographs</th>
<th>Record Checked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 500,000</td>
<td>13</td>
<td>69.2 %</td>
<td>69.2 %</td>
<td>92.3 %</td>
<td>100.0 %</td>
<td></td>
</tr>
<tr>
<td>250,000-500,000</td>
<td>19</td>
<td>84.2 %</td>
<td>84.2 %</td>
<td>94.7 %</td>
<td>94.7 %</td>
<td></td>
</tr>
<tr>
<td>100,000-250,000</td>
<td>48</td>
<td>87.2 %</td>
<td>80.0 %</td>
<td>80.4 %</td>
<td>89.5 %</td>
<td></td>
</tr>
<tr>
<td>50,000-100,000</td>
<td>91</td>
<td>78.6 %</td>
<td>72.6 %</td>
<td>74.7 %</td>
<td>86.4 %</td>
<td></td>
</tr>
<tr>
<td>25,000-50,000</td>
<td>180</td>
<td>71.4 %</td>
<td>52.9 %</td>
<td>55.1 %</td>
<td>75.3 %</td>
<td></td>
</tr>
<tr>
<td>10,000-25,000</td>
<td>483</td>
<td>61.7 %</td>
<td>31.0 %</td>
<td>36.3 %</td>
<td>61.8 %</td>
<td></td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
<td>67.8 %</td>
<td>44.8 %</td>
<td>49.4 %</td>
<td>70.3 %</td>
<td></td>
</tr>
</tbody>
</table>


In contrast to the driver-screening requirements in the cities tabulated above, 200 of the reporting municipalities require none of the listed prerequisites for issue of operator permits. The cities of 10,000-25,000 population range account for 149 of the 200; those of 25,000-100,000 account for 47; and cities of 100,000-500,000 account for the remaining four.

New Orleans has one of the most comprehensive taxicab ordinances in the United States. Its standards for driver licenses are most exacting. A driver must be 21 years of age
or older, must be able to read and write the English language, must be a citizen of the United States, and must have lived in the Parish of New Orleans for the preceding two years, and currently live there. Permanent disqualification is ruled where the applicant has been convicted of offenses involving moral turpitude. Listed among these offenses are rape, homicide, kidnaping, burglary, robbery, pandering, prostitution, specified forms of vagrancy, or illegal traffic in, or use of, narcotics. An exception to the disqualification ruling is allowable in the case of a veteran with an honorable discharge after serving for more than one year of military service, provided the service occurred after the conviction. The applicant shall not have been convicted of offenses other than those causing permanent disqualification, or have served any part of a sentence therefor within the preceding 8-year period. He shall not be addicted to the use of intoxicants or narcotics.

In addition to satisfying these numerous personal prerequisites, other procedural requirements are specified in the New Orleans ordinance. The applicant must furnish photographs of himself, and be fingerprinted. A valid chauffeur's license and proof of immediate employment must be presented with application for a license; then, with all of these requirements met, the Supervisor of the Taxicab Bureau
recommends issue of the license by the Director of Utilities. Provision is made for public hearings for those persons whose applications are denied; waiver of certain normal requirements may be permitted upon approval of the City Council. The Taxicab Bureau insists that company owners maintain accurate records of drivers' names and addresses; drivers must notify the Bureau of any changes of address within 48 hours.

**Rules of operation.**—In addition to the requirements necessary to obtain operator's permits, most cities have established rules of conduct — violation of which subjects the driver to possible revocation of his license. The New Orleans Ordinance provides a good example of rigid standards of behavior expected of taxicab drivers. The driver must operate his vehicle "... with due regard for the safety, comfort, and convenience of passengers and for the safe and careful transportation of property and for the safety of the general public." He is prohibited from operating his vehicle while under the influence of drugs or intoxicants. Standards of attire are explicit, as shown in the following quotation from Section 12-122:

115 New Orleans Taxicab Ordinance, op. cit., Section 12-119.
Every driver shall be neatly dressed and shall wear, while on duty, some distinguishing article of uniform, such as a cap, or shall be dressed in complete uniform; provided that when the driver is seated in the driver's position or when the taxicab or other for-hire vehicle is in operation, the driver may place his cap on the front seat of the vehicle; provided further, that when the driver is out of his vehicle he shall either wear his cap or he shall hold said cap in his hand.

Drivers are required by the ordinance to conduct themselves in a courteous manner and to refrain from the use of violent or insulting language. Furthermore, it is unlawful under the New Orleans Ordinance for the licensee to solicit for prostitution, or to permit the use of his vehicle for the solicitation for prostitution or for any other purpose which is unlawful according to city or state statutes.

In New Orleans, taxicab drivers are not permitted to infringe upon the recognized rights of any other public utility engaged in the transportation of passengers under a franchise or franchises. Drivers may not solicit patronage at public transit terminals or at intermediate points along the routes. However, this latter provision does not prohibit cab operators from responding to specific calls anywhere in the city.

Consideration and respect for passengers are included purposes of other portions of the ordinance. For example, the driver may not force a passenger to wait, nor may he pick up additional passengers along the route without the original
passenger's consent. A driver may not refuse to transport passengers anywhere within nine miles of the city. He must not smoke while operating the vehicle; he must keep his vehicle clean; and he must search it at the end of each trip for articles which may have been left by a passenger.

Under the provisions of Section 12-211, the Director of Utilities is given the authority to suspend a driver's permit for a period of not more than ninety days for non-compliance with any of the specified driver requirements; however, a hearing may be afforded any driver who desires such an opportunity to appeal. Under Section 12-213, the Director of Utilities may suspend a permit, after providing a chance for a public hearing, pending disposition of alleged felonies or specified misdemeanors.

The following specific causes are considered sufficient to justify revocation or suspension of licenses within the City of New Orleans:

1. Repeated acts of drunkenness.
2. Conviction in any court of any offense involving moral turpitude.
3. Conviction in any court for drunken driving.
4. Three or more violations of the traffic provisions of this code within a twelve-month period.
5. Three convictions in any court for violating any of the provisions of this article within a period of twelve months.
6. Three findings by the Director of Utilities, after administrative hearings, that the holder of a permit or certificate of public convenience and necessity has failed to comply with the provisions of this article.

7. A combination of convictions and/or suspensions totaling three.

8. Falsification of information regarding licensing requirements.

9. Operation of a taxicab when operator's permit is under suspension.

Mandatory revocation of licenses follows certain court convictions for serious offenses such as: misdemeanors involving moral turpitude, any felony, pandering, soliciting for prostitution, certain acts of vagrancy, and any illegal sale or use of drugs. The minimum revocation period is one year. 117

Regulation of Cab Fares

No precise pattern of taxicab fare regulation exists in this country. Nevertheless, available information provides a basis upon which some broad generalization may be derived. At best, planned, equitable coordination of cab rates with those of other forms of public transit is in its

117 New Orleans Taxicab Ordinance, op. cit., Section 12-214.
infancy. A knowledge of the prevailing rate practices is essential to the formulation of a coordinated rate structure.

Most cities prescribe maximum rates which may be charged, but surprisingly few set minimum rates -- in spite of the problems of rate wars during depression years. Apparently most cities rely on the pressures of business competition to maintain a balance between rates within the systems composing urban transportation complexes.

In a sample survey conducted by Charles Rhyne in 1949, of 190 cities questioned, 160 or 84 per cent reported some form of regulation of maximum rates which cabs are permitted to charge. However, of these 160 having maximum rates, only 20 cities set a minimum rate of any type. Fifteen of the cities reported that they exercised no control over maximum rates; the remaining eight did not reply to the question regarding rates.¹¹⁸

Established rates of fare are customarily fixed by ordinance adopted by the governing body of the city. Some cities, such as San Francisco, prescribe a range within which the Board of Public Utilities and Transportation is delegated the authority for specifying exact rates. In Boston, on the other hand, the Police Commissioner sets rates within the city. Washington's rates are established by Public Utility

¹¹⁸Charles S. Rhyne, op. cit., pp. 36-49.
Commission order, while Baltimore's are set by the City, subject to approval by the Public Service Commission.  

Taximeter requirements.—Since its inception on the first American taxicabs on the streets of New York in 1907, the taximeter has become widely accepted by taxi operators, the public, and municipal governing bodies. The taximeter has the advantages of simplicity, adaptability to auditing schemes, and ease of understanding by the cab-using public. It has the further capability of computing fares on the basis of time and distance, at any predetermined rate. It is not surprising, then, that of the 827 cities reporting on their rate structure in the American Taxicab Association survey, 373 cities, or 45 per cent, require the use of taximeters and a corresponding graduated fare scheme. On the other hand, 397 cities, or 48 per cent, do not require taximeters. Highly indicative of the acceptance of taximeters is the fact that 57 cities, or 7 per cent, use these meters, although not required to do so by local ordinance. The following table indicates the use of taximeters within cities of various sizes:  

119 Charles S. Rhyne, op. cit., pp. 36-49.  
Table 15. Taximeter Use in 827 Cities in the United States in 1958

<table>
<thead>
<tr>
<th>Population Group</th>
<th>Cities Using Taximeters</th>
<th>Cities Not Using Taximeters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Used Where</td>
<td>Unrequired</td>
</tr>
<tr>
<td>Over 500,000</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>250,000-500,000</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>100,000-250,000</td>
<td>43</td>
<td>5</td>
</tr>
<tr>
<td>50,000-100,000</td>
<td>72</td>
<td>12</td>
</tr>
<tr>
<td>25,000-50,000</td>
<td>81</td>
<td>6</td>
</tr>
<tr>
<td>10,000-25,000</td>
<td>66</td>
<td>19</td>
</tr>
<tr>
<td>5,000-10,000</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>Less than 5,000</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>430</td>
<td>57</td>
</tr>
</tbody>
</table>


Great latitude exists in the details of rate structures used in various cities. For example, some cities have a minimum cab fee called a "flag drop;" others use a flat fee anywhere within the city; some cities determine fees on the basis of the number of blocks traveled, or travel within zones; and others base the charge on a time standard. Other details of rate structures are included in Chapter II.

Financial Responsibility and Insurance Requirements

Ordinances specifying insurance and financial responsibility requirements prevail in some form in most cities regardless of size. Six of the larger cities go so far as to
require the filing of financial statements on a periodic basis; such statements are necessary annually in Los Angeles, Baltimore, and Denver; semi-annually in Chicago; quarterly in Cincinnati; and monthly in Houston. Some cities specify the filing of financial reports in conjunction with requests for rate changes. No city prescribes any minimum financial assets as prerequisite to issuance of an operating license; however, financial stability of the company is considered by many licensing bodies in granting licenses.  

Apparently following the lead of states in establishing requirements of public liability insurance, most cities have ordinances setting forth minimum insurance coverages and providing the administrative mechanism for enforcing this provision. The American Municipal Association reports that every city of more than 400,000 population requires this coverage, either by local ordinance or at the state level through such bodies as the Public Utilities Commission. The American Taxicab Association lists compulsory insurance for 607 cities out of a total of 845 cities. The most popular liability insurance requirement is $5000 for a single claim and $10,000 for multiple claims, or $5,000/10,000 insurance coverage; about 34 per cent of the reporting cities use this standard. Second most popular is the $10,000/20,000

\[121\] John R. Kerstetter, op.cit., p. 6.  
combination, with 21 per cent using this arrangement. Only five of the 607 cities allow single liability minimum levels to be less than $5,000.

Property damage insurance coverage is not as prevalent as that of public liability. Only 484 of the cities described in the American Taxicab survey indicated that property damage insurance is required. By far the most common level of protection is $5,000, found in 60 per cent of the reporting cities. The second most common value is $10,000, found in only 19 per cent of the cities. The low minimum of $1,000 is found in 30 cities, primarily the small ones.\textsuperscript{123}

Many cities require that insurance policies be filed with the agency responsible for administering taxicab regulation, and that the insuring company give the city advance notice of impending cancellation for any cause. Such requirements are included in the taxicab ordinance or the administrative framework associated with the ordinance. Ten days' notice is usually required, although some cities such as Washington and Kansas City require 20 days, and Milwaukee requires 30 days. State approval of an insurance company is usually considered to be adequate proof for acceptance by municipalities; however, some cities still require further investigation by the city attorney, finance officer, and/or

\textsuperscript{123}A-T-A Data Book, op. cit., pp. 16-66.
taxicab control agencies. In several cities, taxicabs must display stickers on the windshield, signifying that insurance coverage is in effect. Monthly stickers are required in New York, St. Louis, and Newark, while weekly stickers are required in Washington.

In lieu of insurance coverage, surety bonding is permitted in some cities. Minimum bond amounts are usually decided on a basis of the number of taxicabs in operation. For a single cab, the most common bond prescribed is $11,000. Los Angeles has set the lower limit at $20,500 for a single cab, whereas St. Louis requires but $5,000.

Other hybrid arrangements are in use in several cities to provide financial protection of the public. Some municipalities have the authority to permit taxicab companies to act as self-insurers. In Philadelphia and Pittsburgh, companies may act as self-insurers whenever current liquid assets exceed liabilities by $100,000. In Los Angeles, net assets of $100,000 plus $500 for each cab above 100, entitle the company to waive the insurance requirement, but books must be inspected by the city at least annually. San Francisco uses a similar system, but requires a cash reserve of $25,000, or net assets of $25,000 plus $250 for each cab over 125. Major cities permitting deposits of cash or bonds in

lieu of insurance are Cleveland, Denver, Kansas City, Milwaukee, New Orleans, and Washington.\textsuperscript{125}

Summary

Protection of the public interest, as well as protection of the taxicab industry itself, requires that adequate, effective regulations be developed for the proper control of taxicabs. Legal precedents generally favor the city and its authority to control the use of public streets. While most cities have some type of ordinance regulating taxicab operation, these ordinances appear to have the common weakness of being oriented toward restriction, rather than constructively trying to integrate taxicab operations into more effective roles of community service. Nevertheless, existing regulatory practices are tempered with years of experience, and thus provide valuable stepping stones along the path toward the goal of developing comprehensive urban transportation systems, making best use of all available components.

CHAPTER V

PLANNING FOR THE FUTURE

Taxicabs are currently performing important transportation functions in urban areas. Optimum use of all available components is necessary if comprehensive transportation systems are to be developed for serving cities effectively. A formula for the efficient movement of people in urban areas must be based upon proper interrelationships of all significant transportation system variables. This chapter re-emphasizes the major conclusions derived from this analysis of taxicabs, and presents recommendations for improving their usefulness within communities.

Conclusions

Study of the taxi industry and its role of service in the movement of people in urban areas reveals undeveloped resources in the transportation field. This section reviews highlights from which recommendations will be developed.

Taxicab Operation Is Big Business

Taxicabs comprise a large industry, using an estimated quarter-million vehicles, and employing 300,000 or more persons. Cabs furnish approximately one-fourth of all
public transportation in urban areas. Most cities, both large and small, use this form of transit to some extent; in many small cities it is the only form of local public transportation.

This Industry Has Been Overlooked in Most Transportation Studies

Most urban transportation studies do not separate taxicabs from other vehicles; however, their function is quite different from that of mass-transit vehicles on one hand, and from private automobiles on the other hand. Little is known about taxi service, as is evident from the lack of written information about this form of transportation. In spite of growth of the industry, taxicabs are omitted from most studies about the movement of people in urban areas.

Taxicabs Provide Vital Community Services

Many of the services provided by taxicabs cannot be provided by any other existing form of public transportation. Among such services are:

1. Door-to-door transportation for the aged, for businessmen, for non-owners of automobiles, for persons having emergency transportation needs, and for persons having need for specially-equipped vehicles.

2. Filling in areas unserved by mass-transit facilities, and supplying service between scheduled runs of mass-transit vehicles.
3. Providing the only public transportation for cities too small to support mass-transit facilities.

4. Emergency service under such conditions as: inclement weather, automobile break-downs, injuries in home accidents, and missing of mass-transit vehicles.

5. Special community service, such as: relaying traffic information, transporting persons to church, transporting persons to the polls, and providing emergency assistance.

Taxicabs Serve Needs Otherwise Not Met by Public Transportation

It is neither economical nor practical for mass-transit or any other form of public transportation to provide the individualized type of service furnished by the taxi industry. Furthermore, habits of an automobile-oriented American public influence preferences for public transportation, thus causing automobile owners seeking public transportation to choose that transportation which most closely resembles a private automobile -- the taxicab.

Taxicab Systems Can Be Used More Effectively

Two major steps can be taken to improve effectiveness of taxicab operation. First, cab companies need to take steps to improve customer relations and enlist public support; assumption of more responsible roles as public servants can improve business and develop confidence of riders and public officials.
The second step toward improving effectiveness is outside of the industry itself, and consists of government action. Whereas most regulation of, and indeed concern for, the taxi industry have been restrictive in nature, positive action should be directed toward finding the proper place for taxicabs in well-planned, comprehensive transportation systems, and developing programs of implementation necessary to yield maximum effectiveness.

Subsequent sections are concerned with specific recommendations for improving the usefulness of taxicabs in community service.

Improving the Effectiveness of Taxicabs

If taxicabs are to serve their communities with maximum effectiveness, several changes must be made, both inside and outside the industry. Within different cities, wide variations exist between transportation needs, street networks, travel habits, and other variables related to the movement of people; therefore, no single formula may be universally applied to cities for determining the best composition of transportation systems. Although no single equation can be developed for solving all transportation problems in urban areas, intelligent, cooperative action by system operators and government officials can lead to workable programs for moving people. Through cooperative effort,
taxicab companies and cities can find ways by which cabs can serve the public more effectively, and at the same time add stability to the taxi industry.

Recommended Changes Within the Industry

City governments should help only those enterprises which help themselves. Therefore, it is recommended that the taxicab industry make a concerted effort toward self-improvement -- to pull itself up by its own bootstraps. Widely diversified ownerships, unfavorable past publicity, and unsympathetic municipal governments are among the obstacles standing in the way of further development of the taxicab industry; nevertheless, positive steps can be taken by the industry to eliminate these obstacles.

Practices related to fares.--It appears that the practice of tipping has no place in modern society. Whereas tipping was once considered as a method of expressing appreciation for a job well done, tips now are considered as important, integral parts of drivers' pay. The uncertainties and frustrations associated with tipping -- from drivers' and customers' viewpoints, alike -- render such a system out-of-place in modern transportation systems. It is therefore recommended that taxicab companies, associations, and individual drivers join in a campaign for elimination of this practice. Such
a change will require appropriate adjustments in rate structures, together with an intensive publicity campaign for education of the public. The customer should detect no appreciable difference; he pays the total cost anyway. On the other hand, elimination of the practice of tipping offers numerous advantages: (1) taxicab operation would be on a more business-like basis, (2) the incentive for selection of customers according to tipping habits would be eliminated, (3) customers would be relieved of the problem of trying to conform to local tipping customs, and (4) taxicab operation would be placed on a fare-schedule more nearly matching that of other public transportation, thus making possible the establishment of comparable rate structures.

Because of the wide acceptance of taximeters, and because of the accuracy and fairness of such devices, it is recommended that taxicab operators establish a campaign for the universal use of taximeters for fare-administration. Taximeters are precise instruments which take the guesswork out of customer charges and assure that these charges are fair. Control and inspection by governmental agencies can raise taximeters to the same heights of public confidence as gasoline pumps and electrical power meters. There is no place for lackadaisical rate arrangements in public transportation.
System stability.—Taxicab companies can lend their support to programs designed to develop comprehensive transportation systems, making best use of each available component. Since taxicab systems now lean heavily on emergency needs, the integration of cabs into the urban transit systems may well add stability to the industry by increasing the percentage of non-emergency patronage.

Personnel practices.—To taxicab users, drivers represent the industry -- customers seldom see fleet owners, dispatchers, or other persons behind the scenes. Thus, customers' impressions are based solely upon the appearance of drivers. Since most major cities screen drivers and issue licenses according to rigid standards, moral character of drivers appears to be no major problem within the industry. As an Atlanta alderman is quoted as saying, "It's about as easy to get on the police force as it is to get a permit to operate a taxicab in Atlanta." Although moral character is subject to close scrutiny, driver appearance is not carefully controlled. Most passengers do not see the long list of licensing requirements which must be met -- they see only the driver. If the driver is unshaven and slovenly, can customers be expected to have much respect for taxicab companies, in general? It is

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therefore recommended that the industry take further steps -- that it launch a campaign -- to improve the appearance of drivers. The relationship between taxicab driver and passenger is the most intimate within the public transportation field; therefore, it is vitally important that this be a pleasant relationship.

Special steps should be taken by the industry to improve its employee relations policies, and thus encourage cab-driving as a career. Fringe benefits, such as hospitalization plans and sick leave, can greatly improve cab operation as a career. Perhaps national organizations should develop proposals for industrial relations plans to satisfy some of the peculiar needs within this unusual industry; regardless of where such plans originate, positive action is needed to keep the taxicab industry abreast of national trends in the field of human relations.

Program of public relations.—The taxicab industry needs to sell itself to the public. Few people know much about the operation of cabs and the roles of service which these transportation devices provide within urban areas. Therefore, it is recommended that the taxicab industry launch an advertising campaign designed to acquaint the public with services offered by taxicabs and to improve public attitudes toward this form of transportation.
Recommended Governmental Action

What steps can governments take in order to extract maximum public benefit from the taxicab industry? Taxicabs are capable of solving only part of the problem of moving people efficiently within urban areas; cabs are only a species of trees in the forest of people-movement components in urban areas. Only limited development of the individual trees can be expected unless a comprehensive program for the forest is effected. Therefore, the following section is concerned with recommendations for an over-all program into which taxicabs can be fitted for maximum community service.

The urban transportation department concept.—Piecemeal attempts at developing effective systems for moving people efficiently within urban areas have been generally unsuccessful. Perhaps the dilemma resulting from uncoordinated efforts to solve the people-movement problems can best be illustrated by testing the existing mechanisms for workability. What single governmental agency has the responsibility for planning and coordinating such essential people-movement variables as on-street and off-street parking, traffic flow, major thoroughfare planning and construction, licenses, transit systems, public transportation rates, pedestrian ways, taxicabs, truck traffic, major traffic generators, and other such factors? Are these transportation variables not related to each other?
If a relationship exists, then what agency is responsible for developing a balanced people-movement program, into which all elements are properly integrated for achievement of optimum results? In most cities, responsibility is divided among several agencies -- any coordination is frequently accidental.

A requisite step in solving the problem of people-movement is the establishment of a governmental agency concerned with developing policy for the complete function of moving people rather than for selected fragments of the function. Therefore, it is recommended that cities consider establishing "urban transportation departments" as integral parts of governmental organizations. Such departments should be endowed with the authority necessary for collection of pertinent data and for the implementation of the comprehensive program. Municipal administrative procedures should be designed so as to channel into this department, for review or action, any matters significantly related to people-movement.

The idea of governmental agencies concerned with the over-all problem of people-movement is not new; yet, development is still in the embryonic stage. In December, 1955, the City of Philadelphia Urban Traffic and Transportation Board made the following recommendation:

that a regional transportation organization be created as soon as possible to develop a comprehensive transportation system including streets, highways and bridges, urban and suburban transit, parking facilities, taxicabs, and (if desirable and necessary) passenger and freight terminals.

Under the assumption that fragmentary solutions of the urban transportation problem are not effective and that comprehensive plans must be developed for solving problems of people-movement, attention can now be directed toward recommendations for more effective utilization of taxicabs in urban areas.

Integration of taxicabs into local transportation patterns. — After the establishment of a governmental mechanism capable of gathering and evaluating data about local transportation variables and fitting each component into its proper place, the next step relative to taxicabs is that of determining local needs which can best be served by taxicabs and finding means to fit taxicab service to these needs. Not all cities are alike; therefore, each solution must be based upon existing local conditions. Nevertheless, certain general steps are necessary and may be applied to most situations. Following is a check-list which may serve as a guide in studying taxicabs as part of the local people-movement system:
Analysis of Existing Taxicab Operations

Ownership
Companies
Driver-owner arrangements
Free-lance
Under company sponsorship
How long in business -- turn-over rates

Methods of functional control
Radio
Telephone
Combinations
Uncontrolled

System load characteristics
Peaks
Times peaks occur
Duration of peaks
Variations in demands
Daily
Weekly
Seasonal
Emergencies (rainy days, cold weather)

Fares in local systems
Type of system used
Zoned
Metered
Flat fees
Amount charged
Comparison of cab fares with other forms of transportation
Public
Private

Personnel policies and practices
Hours worked
Total per week
Number of shifts -- length of each
Outside jobs
Comparison with other transit jobs
Driver-payment practices
Method of paying
Basic amount (commission, minimum, company share)
Local tipping practices
Fringe benefits
Labor organization
Organized or unorganized
By whom represented
Evaluation of labor status relative to industry effectiveness
Relationships with other forms of transit
Problems
Conflicts
Possible combined operations

Taxicab Services Currently Provided

Number of riders

Number of passenger-miles

Types of service provided
Normal
  Residence-to-work
  Residence-to-residence
  Work-to-work
  Other: (conventions, theaters, nightclubs)
Emergency
  Inclement weather
  Home accidents, missed transit rides, car failures
Special services
  Invalids
  Incidental community services (traffic information, first aid)

Local Needs for Taxicab Services

Survey of physical factors
  Size of city
  Physical characteristics (rivers, street networks, compactness)
  Denseness of residential development
  Adaptability of the city to mass-transit service
  Locational relationships of residences, businesses, industries, and community facilities

Transit system coverage
  Areas served by nearby transit routes
  Areas unserved by convenient transit routes
  Frequencies of transit runs in various areas
    Adequate
    Inadequate

Survey of the needs of people
  Non-owners of automobiles
    Registered automobiles as compared with persons of driving age (trends)
    Possible changes in licensing requirements relative to age
Number of elderly people (trends)
Is desirability of owning automobiles increasing or decreasing locally

Visiting businessmen
Statistics on incoming train and plane passengers
Conventions

Emergencies
Needs during cold weather or on rainy days
Supply compared with demands on these days
Local needs for specially-equipped vehicles

Fitting Taxicabs into Roles of Optimum Service

Congestion created versus service provided
Stands or cruising desirable locally
Open or closed stands

Possibility of banning all vehicles except cabs from designated areas
Around downtown malls
Residential areas
Concentrated business districts

Development of rates related to other transportation rates
Determination of transportation balance desired
Rate structures necessary to establish this balance
Establishment of minimum rates to prevent undermining of rate structure

Auxiliary services
Supplementing other forms of transit (possibly transporting persons from residences to transit stops or terminals)
As possible civilian defense fleet
For furnishing traffic information by radio or telephone for public or governmental use
Emergency vehicles for getting help to stranded motorists, providing first aid, supplying oxygen, and other such services
Under special arrangements, transporting persons to polls, to church, and on outings

Developing regulations to achieve desired results
Are regulations to be positive, not just restrictive
Do regulations encourage the development of schemes for maximum public benefit
Are regulations part of a comprehensive plan, designed to create and maintain a well-balanced transportation system
Is there a program for periodic review, evaluation, and adjustment of regulations and policies to maintain an up-to-date people-movement plan
Points for special emphasis.—In the development of governmental programs for the maximum utilization of taxicabs within their capabilities, several points are worthy of emphasis:

1. Special registration of taxicabs is required by only about one-half of the states; however, such practice appears needed in all states. In developing effective comprehensive systems for people-movement, basic knowledge about all essential elements is indispensable; therefore, taxicab registrations should be maintained separately at the state level. It is recommended that no significant additional charges be levied for taxicab licenses at the state level, and that primary authority be delegated to municipal governments.

2. Fares should be set so as to achieve the desired balance of taxicabs in relation to other transportation devices. Special care should be exercised to assure that resulting fare requirements do not seriously impair performance of the industry. Fares should be based upon the elimination of tips.

3. Taximeters should be considered for use in the administration of all fares. This system is not only fair and equitable, but also, is readily adaptable to requirements for records, audits, and inspections.
4. In setting the permitted number of taxicabs, minimums as well as maximums are important if taxicabs are to assume responsible roles within the community. The Dallas, Texas, ordinance provision furnishes a pattern for requiring the addition of taxicabs when public needs warrant such additions.

5. Taxicabs, as well as other forms of public transportation, should be carefully supervised so that public interests are properly protected and so that responsible governmental agencies may be properly informed of the need for regulation-enforcement emphasis or of the need for modifications in the people-movement system. Special supervisors should be used for this purpose, particularly in the larger cities.

6. Local administrative agencies should carefully consider the relatively good load factor of taxicab systems as a possible method of improving the financial status of public transportation. Perhaps the combination of taxicab and transit systems may be more workable under the proposed comprehensive transportation system.

7. In the proposed comprehensive system for moving people, the cost of all elements related to people-movement should be carefully evaluated. Some of the hidden variables should be sought out -- for example, the cost of congestion relative to its deleterious effect
on downtown properties, losses incurred by congestion-
triggered de-centralization, the cost of personal
inconvenience and loss of leisure time, and other
similar hidden costs.

Summary

In the twentieth century traffic dilemma facing most
urban areas in the United States, taxicabs are no trans-
portation panacea. Cabs cannot replace buses, trains, planes,
or private automobiles. However, taxicabs do provide valuable
transportation services, many of which cannot be provided
by any other existing form of public transportation.
Usefulness of cabs to the public can be substantially
improved by the positive integration of taxicabs into com-
prehensive urban transportation systems in which each element
is used to best advantage.
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