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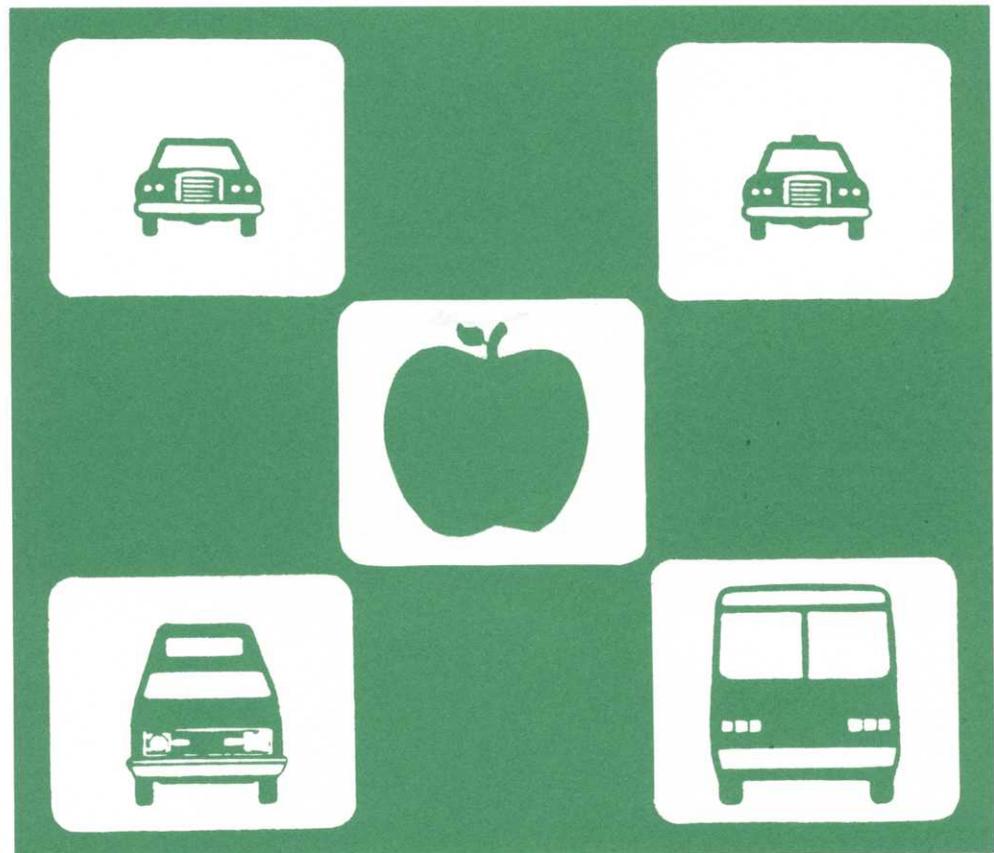
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Urban Mass
Transportation
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The Potentials and Problems of Private Sector Transportation Services

Activities in the New York Region

January 1987



UMTA University Research and Training Program

THE POTENTIALS AND PROBLEMS OF PRIVATE SECTOR
TRANSPORTATION SERVICES

(ACTIVITIES IN THE NEW YORK REGION)

January 1987

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16. Abstract <p>This project explored the problems and potentials of new forms of private urban transportation that have evolved in the Metropolitan New York region in the last 20 years, as well as the problems and potentials of private urban bus service that has existed on a continuous basis parallel to the publicly owned modes. The specific new transport modes investigated were jitney feeders, express and commuter vans, and neighborhood car service operations, which serve as alternatives to standard taxis and other communal modes.</p> <p>One of the most important findings of this study is the extent and pervasive nature of these new travel modes in the New York area. They serve all classes, from affluent white collar workers seeking a more comfortable trip to work to some of the regions lowest paid workers who merely want to get to work on time. Another important finding is that the new locally-generated modes hold the promise of providing a superior service at lower cost than does the public operation in specific corridors, mostly in the least dense portions of the region where the costs of regular bus service are high. Existing private bus lines were found to be only slightly more cost efficient as compared to the public operations.</p> <p>It is suggested that significant amounts of money would be saved by the public sector and a better level of service achieved if the operations were authorized along some of the low density routes.</p>					
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EXECUTIVE SUMMARY

This study was prompted by the call of the Executive Branch of the national government for greater efforts toward privatization of urban services, particularly transit and transportation. Our starting hypothesis was that the metropolitan New York region, having the largest concentration of urban transportation services in the country, and frequently acting as an incubator of innovative programs, should provide a wealth of experience from which conclusions could be drawn and constructive procedures developed. These expectations were more than fulfilled as systematic inquiries uncovered a rich, varied, and extensive range of private sector operations. These activities fill gaps and exploit opportunities in providing desired mobility services to the riding public. These operations flourish, regardless of whether they operate within existing rules or not.

We analyzed existing private bus companies which operate in conventional local and express modes. While they achieve a slightly better efficiency than the comparable public bus services, they are subject to the same operational and financial constraints. We conclude that the marginal efficiencies which they achieve will not lead to the kinds of productivity increases that advocates of privatization hope to reach, if such activities were to be expanded.

More significantly, the demand for fast and comfortable means of commuting to and from work places has spawned an entire range of new private operations that usually parallel, if not duplicate, the established routes of conventional public and private mass transit. Express buses, which are not a specific component of this study and are themselves relatively new, frequently receive direct competition from commuter vans. These vans operate with questionable legality and charge premium fares -- yet they have no lack of patronage. They continue to grow in numbers.

Jitney services have once again been re-invented by hundreds of small scale operators/owners of private cars. They feed many major subway stations in low income areas in an unending stream during peak hours. They operate completely beyond existing regulations, they frequently create chaotic street conditions at local centers, and they tend to supplant regular bus operations. Some jitney services are well organized; others consist of an array of gypsies and "poachers."

The medallion taxis of New York City -- again not a specific component of this study -- constitute the basic and traditional for-hire service mode of the urban community, but they have retreated by choice to the Manhattan CBD and the airports. The rest of the City and much of the region rely on car services that provide rides upon prior arrangement. These operate out of bases with radio dispatching systems, and they have been in existence as an identifiable type of operation for a long time.

The recent change is that they are expanding through the creation of new enterprises. A network of bases now blanket the urban area. In most cases car services have a definite neighborhood orientation, as well as an ethnic/racial one. They do overlap in service areas, but so far "there is enough business for everyone." Some drivers (or many, depending on location) also engage in street hail business as a part of their day-to-day operations, which is an illegal but popular practice.

Car services have become a basic component of neighborhood life, and they fulfill a role that is not covered by any other transportation service. In many respects and in many instances this is a self-generated cottage industry which provides a livelihood to many individuals on the starting rungs of the economic ladder. Most of the operators of car services act within existing regulations, but there are situations around the fringes that tend to go beyond those limits.

Some effort was devoted by this study to estimate the total number of vehicles now participating in private sector transport services in New York City. The mystery has been of long standing and is not unequivocally solved here either, but there are strong indications that the current fleet composition is the following:

Livery and Neighborhood Car Services	22,000
Free-Lance Street Hail Vehicles	8,000
Black Cabs	3,000
Limousines	2,500
Total	<hr/> 35,500

The investigations and analyses of private sector transport in and around New York City have led to a series of conclusions and recommendations. A series of suggestions advanced here attempt to recognize the strong features of private operations and to harness the existing energies. They also try to cope with the several negative features that have been identified. A key concept of the recommendations is a step-wise implementation process and controlled search for the best practical approaches, maintaining an ability to correct possible missteps.

The central proposal is the encouragement of neighborhood oriented car bases so that they can achieve an enhanced role as local transportation suppliers. In most respects, this is simply a recognition of what already is taking place, but a purposeful official policy in this direction would help to expedite the creation of transport systems capable of meeting broad-ranging local needs.

Another suggestion is the establishment of a bidding process under which qualified transport enterprises can apply for the rights to operate services along defined corridors and thereby

reduce and perhaps even eliminate the need for highly subsidized public operations. The primary aim is to "shave the peaks" of transit loads by relying on the capabilities of private operators to provide responsive service. The public agency would still be expected to offer the base level service in most instances.

The savings to the public would accrue through the lessening of the demands placed on transport activities that draw heavily upon public treasuries -- by possibly reducing the fleet, assigning vehicles to higher density (i.e., more profitable) routes, and minimizing the need for overtime payments. It is tentatively estimated that such programs could result in sizable savings of public funds within the City of New York. If as little as 10 percent of the existing bus fleet could be redeployed from areas of marginal density, which we believe is a feasible scenario, savings with an order of magnitude of approximately \$33 million annually could be realized.

In sum, our investigations reveal that there is a broad, extensive, and vigorous private transportation sector in the metropolitan New York region. If nurtured by wise public policy, it could do much to relieve the worsening regional mobility problems and help to keep the economy strong. On the other hand, it could easily be regulated and policed out of existence, to the detriment of all.

PART I
BACKGROUND

Urban transportation occupies an anomolous position in our market oriented economy. Even though most mobility needs are satisfied by private means (the automobile), it achieves this distinction because of the high degree of public sector involvement in its overall production and distribution. The reasons for this are complex, and historic. As with most complex and historic truths, it is useful to take a fresh look at the situation every now and then. The central issue is not whether or not there should be public sector responsibilities in the traditional urban transit operations, the question is rather one of degree and specific roles. Situations change, and hence needs change. Public policy, however, can only respond slowly to these realities. In this report we will attempt to re-examine the situation again as it exists in the mid-1980s.

We propose to do this by reviewing the ways in which urban transportation services are produced and distributed in metropolitan New York City. This conurbation is our study area for three reasons. First, the region enjoys one of the largest and most extensive transportation systems in the entire world. Changes that take place here, for better or worse, both influence and anticipate similar modifications in other places within North America.

Secondly, this is the home and principal sphere of professional activity for the members of the research team. We are thus adequately familiar with the context within which various transportation activities take place, and we have established relationships with most of the key actors in this field.

Thirdly, New York City is presently the location of some of the most exciting and innovative private sector urban transportation initiatives taking place in the entire nation. Both the variety and extent of these actions are not well known even within the region, let alone the rest of the country. These initiatives do not fit easily in the standard predetermined categories within which much of the debate over privatization presently occurs. The principal need does not appear to be for a comparative study of the relative efficiency and demand responsiveness of public and private systems. Instead, it is a matter of investigating

new modes which have evolved within the interstices of the existing system. They both compliment and substitute for elements of the existing system.

Not only do these new forms change the way in which we must think about the public/private debate, but they also render meaningless the neat distinctions which transportation experts make between transit and paratransit. New York is undergoing a revolution in the ways people travel between home and work, as well as how they move around their neighborhoods. The change is led by a large and still growing band of minibus, van, and car service operators. They provide an extensive range of services going all the way from modes that offer comfort and convenience of the high income market segment down to fast and efficient basic transportation for some of the lowest paid workers in the region.

In other words, the private bus operations -- which also exist in the New York region and are perceived by casual observers to be the prime examples of private transportation activity here -- are operating actually in a rather conventional and traditional way, and they are not participants in the revolutionary events taking place. Paratransit services, which in most communities have a readily identifiable purpose and consist of distinct vehicles, are performed by-and-large in New York City by car, livery, and jitney operations whose principal role is becoming increasingly more that of plain urban transit. None of it is planned, most of it is improvised, and much of it is still chaotic and frequently illegal. The self-generating feature of these private operations is of great interest. The challenge is to make the best of a dynamic situation and to integrate these efforts in the total mobility system in a positive way (or at least to exploit their constructive aspects).

Before we get to the New York cases and a review of their implications, there are a number of background items that have to be outlined in this early part of the report.

A. TRENDS IN PRIVATE TRANSPORTATION SERVICES IN THE U.S.A.

Transportation services in the United States during this century have historically revolved around the private automobile and conventional transit. Before the Second World War, services were frequently provided by private firms, but by 1960 the public sector had gradually taken over the provision of almost all transit services as private providers went bankrupt one after another. The current situation appears to be that the transportation infrastructure is deteriorating faster than it can be replaced, public transit systems require more subsidies while not providing adequate levels of service, and government is no longer willing to rescue transit operations from financial insolvency. As a result, the private sector is once again being looked to with the hope of providing transportation services at a reasonable cost to the riding public across the country. The new forms of private sector involvement in transportation -- short of outright responsibility for ownership, management, and operation -- are competitive contracting for a whole range of services, innovative financing techniques, private sector sponsorship and management of selected transit services, and transportation management associations. Market deregulation has also played a large role in encouraging more competition from the private market.

The following is a brief examination of these forms of private sector involvement in transportation services in the United States. (Most of these efforts can also be found in the New York region. Our research, however, has uncovered other examples that can and will be added later to the standard list.)

1. Contracting

Contracting is simply a procedure under which a government agency (usually municipal) signs a contract with a private company to provide a public service.

The contracting of private services has been a popular and easy way of involving the private sector in the provision of a variety of transit and transit-related services, ranging from bus and paratransit operations to advertising and bookkeeping. If the private sector is better able to provide services, or do it more effectively and at a lower cost than the public sector, then contracting out at least a portion of the of transit services is likely to reduce a transit agency's deficit. This can be done, for example, by reducing conventional services at peak periods (i.e., by cutting back the additional service needs required by commuter demand), thereby eliminating excessive agency equipment and personnel needs; and by replacing large, agency-operated buses on low ridership suburban routes with lower-cost small vehicles operated by private firms (Poole, 1984, p. 34).

In some areas, the entire operation of local bus systems is contracted to private firms. Examples of this in California are Yolo County, Antelope Valley, and Santa Clarita Valley. Westchester County in New York State is another instance of extensive contracting for transit operations. The county controls the overall management and policy functions (such as the setting of fares, routes, and schedules), while private companies are responsible for the operational side of transit services, including paratransit, local, and express bus services (TRB Special Report 199, 1982, p. 76).

In the San Francisco Bay Area, the Golden Gate Bridge and Highway Transportation District contracts with four private bus companies to operate its popular "club bus" service from Marin County to downtown San Francisco. Also, San Diego contracts with a private bus operator who carries 44,000 passengers per month in 14 buses, and Houston contracts out one third of all its public bus service to private companies (TRB Special Report 199, 1982, p. 76). The most extensive use of contracting will be found in Dallas, where the new Dallas Area Rapid Transit Authority (DART) has reached agreements with private firms to perform every aspect of its operation -- from designing a new rail system to operating the bus and future rail systems (Orski, 1985A, p. 266).

There have also been an increasing number of private sector contracts to provide dial-a-ride, shared taxi, and fixed route feeder services. The City of Phoenix, for example, was able to save \$600,000 per year by contracting with private taxicab companies to provide dial-a-ride transit service on Sundays (Orski, 1985A, p. 266). San Diego, Norfolk, Columbus, and Birmingham are other cities that have contracted with taxi companies to service low density neighborhoods and low demand time periods, such as nights and weekends (Orski, 1985B, p. 326). These contracts are seen as a way of reducing operating costs, while providing a more demand responsive service. Some of these shared-ride contracts involve user side subsidies as well.

Paratransit services for the elderly and handicapped are also frequently contracted out to private companies by local governments and by social service agencies. Many federally funded social service programs include provision for client transportation, since physical access is indispensable to service delivery (Johnson and Pikarski, 1985, p. 69). A 1979 survey found that 350 of such alternative transportation programs exist in the country. Nearly all of these services reach the homes of the clients, linking them to social service centers, medical facilities, grocery stores, and the like (Johnson and Pikarski, 1985, p. 70).

In Chicago, the Cook-DuPage Transportation Company is engaged by social service agencies to provide similar transportation to

their clients. Cook-DuPage vehicles are licensed as "medicars," which do not fall under any city or county regulations, and thus the company is also able to provide free lance services to large groups of the elderly who live in senior citizen housing complexes. Cook-DuPage takes these groups to shopping centers for a flat, per person fee. Another example is the Central New York Regional Transportation Authority (CNYRTA), in Onondago County, which was forced to contract with taxi operators for elderly and handicapped service when mechanical problems with wheelchair lifts on its 17 transit vehicles became too onerous. So far, the contracted service has compared favorably in cost with CNYRTA's own service (Thompson and Cullinan, 1984, pp. 3-4).

Local governments are also hiring transit management firms to operate their municipal bus systems. Cincinnati-based ATE Management and Service Company is the largest firm of its kind. It contracts with 51 municipal transit agencies in the country, including Charlotte, Cincinnati, Sacramento, and Wilmington. American Transit Corporation is a smaller rival firm based in St. Louis. It manages 16 systems under contract (Poole, 1984, p. 36). (It should be noted that in all of the above instances the municipal government maintains all policy responsibilities, and the private companies act only as the operating departments.)

Performance evaluation by the Transit Division of New York State Department of Transportation indicates that private operators under contract tend to perform more cost-efficiently, but less effectively in terms of the level of service provided, than public sector operators in similar circumstances (Thompson and Cullinan, 1984, p. 1). As local governments become more experienced with contracting out services, they should become more adept at writing contracts ensuring that the private operator's profit orientation does not slight the requirements of public service.

2. Deregulation

Another recent development has been to facilitate private firm entry or expansion in the transit market by easing existing regulations. In the long distance transportation field, airline and trucking industries have been significantly deregulated in the past few years to make more service available at a lower price. In 1982, UMTA gave its support to efforts to remove legal and institutional barriers against private transit in order to promote private sector involvement in the provision of urban transit services. Competitive bidding for contracts, for example, is a part of these efforts. Currently, the entry or expansion of private service is still significantly restricted in most cities by state and/or local regulations (Poole, 1984, p. 38).

Anti-jitney regulations are still on the books from the 1920s in almost all communities. Taxi operations are also severely limited in what they are allowed to do. Shared ride services are frequently prohibited, and sometimes the number of taxi licenses has been frozen, and/or exclusive franchises have been given to individual companies. Fares are also regulated, not allowing would-be operators to charge prices high enough to provide adequate revenues. In some states new operators must prove to the state public utilities commission that there is a need for additional service. This is often interpreted to require the applicant to document that the existing operators are inadequate and have acted irresponsibly, which is a difficult and unproductive task.

Over the last five years, a number of cities (e.g., Indianapolis, Portland, San Diego, Seattle, Atlanta, and Honolulu) have begun deregulating their taxi systems in an attempt to improve the availability of taxi services; decrease fares; and expand the various demand responsive modes of public transportation, including shared-ride modes such as jitneys. In Washington, D.C. and Atlanta, where taxis have traditionally been less regulated, there are many more cabs per capita than are found in other American cities.

It is much too early to assess the results of deregulation in these cities, and so far very few of the expected benefits have occurred. In most of the localities, the number of taxis did increase, but an International Taxicab Association sponsored survey concluded that it was impossible to predict the impact of open entry on the size of the industry, because of the number of other variables (Rosenbloom, 1985, pp. 190-191). These cities experienced problems with unregulated fares at airports, travelers complained of not getting the lowest priced cab, and tourists feel at a disadvantage because they are unfamiliar with the system.

Sandra Rosenbloom argues that it is unlikely that extensive deregulation will occur, given the institutional reality of changing existing regulations only incrementally. She believes that "we would do better to assess new roles for the taxi within existing regulatory structures" (Rosenbloom, 1985, p. 193). An alternative to deregulation could be the expanded use of contracting, as discussed above, particularly for shared-ride type services.

Despite regulations, many illegal operations exist in a number of cities. Some of these operations are of the jitney type, using regular automobiles, limousines, or vans. (The New York situation is not outlined in this chapter because it constitutes the bulk of this report.) Approximately 85 jitneys operate in Chattanooga, hundreds serve the minority areas of Pittsburgh, and between 50 and 100 unlicensed limousines operate as jitneys in San Francisco (Poole, 1984, p. 41). It is quite clear that these city governments maintain a live and let live attitude in

terms of enforcing the existing regulations. There is obviously a need that is being served by these illegal operators, but the problems (e.g., traffic congestion, lack of insurance, unsafe vehicles, and irresponsible drivers, etc.) of these services remain outstanding issues everywhere.

3. Financing

Another form of private sector involvement in transportation has been in the financing of capital facilities through various forms of cost-sharing and benefit-sharing arrangements. Cost-sharing has frequently been used in American cities to finance the building of streets and highways, and it is now being used in other sectors of transportation as well. For example, an assessment district in downtown Miami was formed to underwrite a \$27 million business contribution toward the cost of Miami's downtown people mover. In San Francisco, developers contributed \$12 million towards the rehabilitation of San Francisco's cable car system. In many cities (e.g., Toronto, New York City, Washington, D.C., Denver, Atlanta, Baltimore, San Francisco, and Miami) transit agencies have leased air rights over transit stations or land adjacent to stations to private developers, who then pay the transit agency rent and, in some cases, a percentage of retail sale income (TRB Special Report 199, 1985, p. 75).

Transit authorities, as they gain more experience in the real estate market, have become more creative in their cost-sharing arrangements. New York City's zoning ordinance, particularly for midtown Manhattan, provides floor area ratio (FAR) bonuses to developers who undertake major transit improvements, such as connecting subways, creating easements through buildings, and relocating sidewalk subway entrances. The Metropolitan Transit Authority (MTA) expects these bonuses to generate millions of dollars in private funding for station improvements, but this can happen of course only in those locations where adjacent building development is taking place (TRB Special Report 199, 1982, p. 75).

The concept of benefit-sharing may be tried in Washington, D.C. Negotiations are going on between local developers and the WAMTA to create arrangements under which the developers would pay "connection fees" for direct underground links to subway stations. These fees could mean \$30 to 40 million in extra income for the transit system over the next 20 years, according to one estimate (Orski, 1985B, p. 313).

As was stated earlier, the use of private funds for highway improvements is not new. Private contributions often are a condition of subdivision approval or change in zoning, allowing large scale developments to proceed. Recently, a wide variety of ad hoc transportation agreements have been negotiated in various places stipulating specific off-site transportation improvements to be financed or provided in-kind by the developer

to accommodate or mitigate increased traffic levels generated by the proposed development. An extreme example of this is in Alameda County, where a group of developers led by the Prudential Company has pledged to invest \$80 million in local transportation improvements around the new Hacienda Business Park in Pleasanton. The money will be used to construct two new freeway interchanges, widen two freeways, install a computer-controlled traffic signal system, and provide sound barriers and landscaping (Orski, 1985B, p. 318).

The money coming from the private sector for these transportation improvements is not generated by philanthropic motives; instead, it is based on the developers' realization that, in an era of tight government fiscal constraints, it is in their own best short and long range interests to help finance the local transportation infrastructure.

4. Sponsoring and Managing

Besides helping to finance transportation facilities, some private firms participate in the provision of daily transportation services. Employer-sponsored ridesharing programs, offered by large corporate employers, have been in existence since the 1960s. Today, private residential communities, retirement villages, resorts, amusement parks, suburban office parks, medical centers, and universities often operate their own transportation systems. These systems serve relatively limited markets; however, collectively, they are beginning to play a significant role in the life of many communities.

The Peninsula Transit District Commission (PenTran) in Virginia focuses directly on employer-based ridesharing. By surveying employment sites and compiling detailed information on the commuting needs of workers, it is able to use computer matching to find individuals with similar characteristics. Employees at these sites are then given a list of people who live near them and have the same work hours. PenTran also examines the possibilities of using car-, bus-, and vanpools, rescheduling conventional bus lines, flextime, park-n-ride lots, priority parking, and ridesharing incentive programs. Ridesharing has grown from 25 percent to 33 percent of the work trips in two years; PenTran's own peak/base ratio has fallen, thus increasing the efficiency of its conventional bus service; and overall transportation accessibility has improved substantially (Lave, 1985, p. 14).

A similar type of overall service management has occurred in the private sector. Transportation Management Associations (TMAs) are voluntary nonprofit organizations, formed by local property owners, developers, builders, major employers, and retailers, to cooperatively serve the transportation interests and needs of their members. TMAs typically generate revenues by collecting membership fees or through voluntary assessments, and use their

funds to support needed improvements. TMA activities may include ridesharing programs, administration of shared parking facilities, operation and maintenance of motor vehicle pools, maintenance of pedestrian amenities, and traffic flow improvements. Their philosophy is to "pool private resources in the interest of improving public mobility" (TRB Special Report 199, 1982, p. 76). TMAs are now found in El Segundo (El Segundo Employers Association), near Houston (City Post Oak Association), in Santa Clara County, California (Santa Clara County Manufacturing Group), and in several other cities (TRB Special Report 199, 1982, p. 76).

5. Car Renting

A traditional and well established form of private involvement in transportation has been the rental car business. In San Francisco, a new creative approach to renting cars has been introduced in an attempt to offer an alternative to owning a first or a second car, to encourage the use of public transportation and ridesharing, and to lower overall transportation costs. STAR (short term auto rental) services a large residential complex, Parkmerced. Prequalified members rent cars for a few minutes to a few days at low prices, and are billed at the end of each month for trips taken. So far, the users of this service have benefited from STAR's convenience and low cost. The community benefits are less clear, but some users have shifted from car ownership to using a combination of public transit and short term auto renting. However, other users have substituted STAR for public transportation, which contradicts the project's purpose. It appears that a more important possible application of the STAR concept is at large employment centers, where such an option could provide midday mobility to employees who rideshare or take public transportation (Crain and Associates, 1985).

6. Conclusion

Private involvement in urban transportation cannot be expected to solve most of the basic problems inherent in any contemporary mobility system, but it is clear that transportation services need not be limited to heavily subsidized, monopolistic conventional transit operations. The transit needs of urban residents are diverse, and the services available to them should be equally diverse -- and flexible. Although, in many circumstances the public sector will remain the dominant service provider, the evidence shows that many private firms are able to aid in the financing and/or provision of needed transit services efficiently, and should be given more of a chance to do so. How this has developed in the New York area, in the absence of any official encouragement and despite, at times, active discouragement, is the core subject for investigation of this study.

B. CURRENT FEDERAL POLICIES

Federal transportation policies up until the 1980s aimed primarily at the encouragement of publicly operated transportation. It was believed that cities needed to maintain, rebuild, and expand their transit systems, and that this should be done through direct public involvement. This approach can be traced back to the 1940s and 1950s when housing and highway programs were created that started the massive post-war suburbanization movement. Only limited funds were funneled at first into urban transportation, but gradually these needs became more apparent. In the 1960s, the federal government became increasingly involved, initiating programs that directly assisted the construction of mass transportation systems through expanding allocations of money. These policies existed throughout the 1970s, and during this decade additional UMTA moneys became available to balance the annual operating budgets of transit agencies.

When the Reagan Administration took office, it brought with it a new philosophy to many sectors, including transit, and the concept of reestablishing the private sector in public transportation was introduced. The Executive Branch proposed a reduction in the expansive transit programs that had grown since the Second World War: to cut capital transit funding substantially and to phase out entirely operating subsidies to local systems. Accompanying these policies of reducing federal responsibility for transit budgets, stress was placed on private sector participation and relying on local governments to make decisions about systems operating in each community. Soon the concept of competition, as a constructive device to achieve efficiencies, also emerged in the national forum.

Since the current Administration's policies have been initiated, with varying degrees of success, they have stimulated many debates. These debates focus in particular on the wisdom of subsidizing transit and the effectiveness of private enterprise in the provision of urban mobility services.

The purpose of this study is to investigate and learn from specific cases of private operations in the New York area, however, this situation needs to be placed in a larger context. Therefore, this section will highlight briefly the changing federal measures aimed at aiding public transportation since the Second World War and will review current policies.

1. Background on Federal Policies

Public transportation became a major public concern in the United States after the Second World War. Transit systems, largely owned and operated before that time by private companies were in debt, extremely deteriorated, and believed to be unsalvageable with local resources alone. Continual ridership

declines, increasing labor demands, high equipment costs, and frozen fare levels further barred any means toward recovery that were then available through normal channels. Accompanying the decline of transit was the decline of established urban centers, caused by suburbanization and at least a relative disinvestment in the built environment of older cities. The prevailing attitude was that these problems are no longer manageable at local and state levels and require involvement by the federal government.

In the 1940s and the 1950s, federal programs were initiated that were to address urban problems, but they did not aim directly at the improvement of public transportation. Housing and highway legislation was passed, but almost none of the funds from these programs were funneled into public transportation. Perhaps the greatest spatial impact on cities was caused by the Highway Act of 1956, under which the Highway Trust Fund was established and the Interstate System was built.

In the 1960s, under President Kennedy, national concern for mass transportation in urban areas was first acknowledged officially. This emerged in no small measure from a joint report by the Secretary of Commerce and the Administrator of the Housing and Home Finance Agency, which studied the problem of urban transportation in detail. After looking at forty metropolitan areas and other communities, a commission concluded that there was a compelling need for change in the urban transportation program covered by the Housing Act, as well as revisions in federal highway legislation. The ideas of innovative ways to fund transit and comprehensive planning were stressed, and they became the focus of subsequent policies.

The Housing and Urban Development Act of 1961 committed the federal government to its first real entry into the mass transit field. Two transit assistance programs were created: localities were provided low interest loans for land acquisition, facilities, and equipment for mass transit; and \$25 million was allocated for mass transportation demonstration projects through which communities could research new transit options and collect data for the sole purpose of developing innovative solutions to transit problems. It was thought that improvements were needed in nearly every aspect of public transportation: transit vehicles, power systems, traffic signalling, and methods of construction. The latter component of the 1961 Housing Act was part of a joint program with the 1962 Federal-Aid Highway Act, under which 1 1/2 percent of any highway construction budget became available for research and planning.

The most significant effort by the federal government in the field of urban transportation and the broadest program ever to aid mass transportation systems in American cities came under the Urban Mass Transportation Act of 1964 (UMT Act of 1964). Signed into law by President Johnson, this program marked a turning point in mass transit by creating a new and favorable

climate for government planning and implementation of public transit for the next twenty years. This policy is often viewed as the first time the federal government played a crucial role in the way public transportation would operate, and the beginning of a new approach towards the provision of mass transit. It has also been observed by some subsequently, that this was the start of making any improvements to local systems contingent upon funding by higher levels of government and removing initiatives toward maximum cost effectiveness at the local level.

With initial annual appropriations totalling \$375 million, urban transit -- it was expected -- could finally be improved on a significant scale. While a resurgence of transit activity did occur, it is still an open question as to whether the results approached the promise. Several important provisions were included in the Act: discretionary funds for specific projects, demonstration projects, planning funds, and matching grants (2:1) for capital improvements. Whereas the 1961 and 1962 Acts confined the federal government's role to addressing various specific and limited issues, the UMT Act of 1964 was intended to establish a "permanent" basis for the rebuilding of mass transportation systems throughout American cities. Very significant accomplishments can be cited, but the transportation habits of city residents did not change significantly -- by far most of them still preferred the automobile, and the percentage of commuters carried by mass transit remained low. New York -- because of its traditional orientation toward and dependence on mass transit -- was always an exception vis-a-vis national averages and "normal" patterns.

Several new policies accompanied the allocation of funds under the 1964 Act. Each urban region was required to organize Metropolitan Planning Organizations (MPO) that would coordinate local actions in the planning of all transit. A yearly program of projects was required for each region (Transportation Improvement Program or TIP), and comprehensive and coordinated plans were expected in order to qualify for capital grants. These new policies were intended to urge municipal and state governments to take responsibility for local transit problems and to coordinate efforts across political jurisdictions to achieve integrated systems serving entire conurbations. The philosophy of the day was definitely governmental responsibility for basic services.

Amendments to the 1964 Act were passed in the following years and further encouraged improvements in urban transportation. The 1966 UMT Act Amendment was particularly significant because it established a policy of coordinating all federal transportation initiatives. The United States Department of Transportation (USDOT) was created under this Act, and it became responsible soon after for the Urban Mass Transportation Administration (UMTA). Under UMTA, tighter or looser controls were imposed on local transportation agencies, depending on the

attitude of the Administration in the White House. The same amendment also expanded budgets for capital purchases and allowed funding for research, planning, and training. The 1968 UMT Act Amendment added planning and programming of highway building and new transportation modes in urban areas; and the 1970 UMT Act strengthened the federal commitment to transit by authorizing millions of more dollars over the next ten years and establishing a loan program specifically for the purchase of property or transit equipment.

In the 1970s, the long standing problems of transit deficits continued, systems were still not viable and sufficiently attractive to most potential patrons, and local demands for federal assistance escalated. The Federal-Aid Highway Act of 1973 increased the federally funded portion of transit capital projects from two thirds to 80 percent and authorized expenditure of Federal-Aid Urban Systems highway funds and Interstate Highway Transfers for qualifying transit projects. Then, when it became clearly established and politically recognized that publicly operated mass transit and the few private systems still existing could not operate without subsidies, for the first time the federal government was forced to provide funds specifically for operating expenses. The National Mass Transportation Assistance Act of 1974 was passed, and it authorized funds for operating and capital expenditures to privately owned transit firms and added operating subsidies to the publicly operated systems that had previously only received capital subsidies. A formula grant program was devised to allocate funding directly to urbanized areas.

Four years later the federal government was looking again for further ways to improve urban transportation. Opportunities -- it was believed -- had to be expanded for new modes and new construction, and innovation was needed for new ways of funding established programs. The 1978 Surface Transportation Assistance Act attempted to do this and to respond to the prevailing mood in the country. Under the Act, the formula grant program was expanded and divided into categorical programs. Cities were given additional funds to study new bus projects, commuter rails, intercity bus services, and joint development programs. New approaches to fund transit were created, such as allocating money from the Highway Trust Fund for operating subsidies and setting up development block grants. These policies initiated in the 1970s remain fundamental supports for current transit systems -- they provide capital grants when requests are approved, offer direct operating subsidies, and allow funds for special transit programs. These are essentially the programs that are regarded as vitally needed by most transit agencies today to continue current levels of service; they are the programs that are questioned severely by others as to their effectiveness and efficiency.

2. Current Federal Policies Under the Reagan Administration

Transportation concepts in the United States began a new course in the 1980s when the federal government -- under the leadership of the current Administration -- brought a new philosophy of urban transportation operations to Washington. The overall intent is to reduce dependence on the federal government, and UMTA began in particular to encourage cities to widen opportunities for the private sector in the provision of urban transportation. The concept of relying on the private sector for this urban service was based on the belief that, unlike the public sector, private operators would be cost-efficient and thus reduce the need for subsidies. Competition was to be fostered, and it was assumed that private enterprise could apply innovative management techniques which would result in better service to the public.

The Surface Transportation Assistance Act of 1982 outlined these policies, and municipalities were expected thereafter to utilize the private sector on new or reconstructed transit projects to the greatest extent feasible. It was the responsibility of localities to encourage private firms by reducing regulations, placing greater reliance on market forces, and considering the most cost-effective alternative in all transportation decisions. Other significant provisions in the 1982 Act were that one cent of a five cent increase in the Highway Trust Fund users' fee on motor fuels be placed into a Mass Transit Account for capital projects, and that block grants be developed, allowing more funds for major capital improvements. The Administration has accepted in principle the need for the federal government to assist capital improvements; the threat toward elimination of operating subsidies has been vigorously -- and so far quite successfully -- resisted by the transit industry and Congress.

Once again and with greater force, UMTA announced a modified policy regarding private participation in 1984. Localities should promote a competitive environment in order to increase opportunities for the private sector. Still keeping with the policy of community responsibility, the federal government left the choice of actions to local decisions. This policy remains the primary focus for UMTA today.

The recent proposals to reduce urban transportation subsidies are a part of the larger perceived need by the White House for cutting many service programs (which could be managed locally) in order to reduce the national debt. In 1986 the Administration again proposed to eliminate operating assistance entirely and reduce transit subsidies by 75 percent. The package of all the proposed reductions also meant that the Reagan Administration would cancel almost all forms of assistance to cities created in the last twenty years. However, in September 1986 the Senate passed a bill to continue the mass transit program, including a \$13 billion, four-year extension of the federal program. Approval was gained on a voice vote of 99-

0. This was a victory for the mass transit industry, particularly after years of proposals by the Executive Branch to cut funding.

However, even with the budget for the next four years in place, the transit industry is concerned about political trends during recent years -- regardless of which party may be in power -- and many debate the implications for the future. Because policies in the past were predicated on expanding services and larger assistance funds for transit, some localities have been able to enlarge their systems to include more operators and different modes. Infrastructure networks have been created that are difficult to change. Most transit systems that are in place now are completely dependent on federal dollars, or at least they believe that this is the case. If private participation is advantageous, how much of the load can private entrepreneurs assume, what specific operations can they take over, and what schedule in transferring responsibilities should be followed? Is privatization a partial or a full answer; is it a solution at all?

3. Current Debates

Perhaps the most fundamental issue regarding federal transportation policies pertains to subsidies. The current Administration has as its stated primary objectives the elimination of budgetary deficits and the reduction of the national debt -- one way toward this would be to reduce transit subsidies substantially.

One of the leading proponents of budget cuts was David A. Stockman, the budget director from 1981 to 1984. He suggested slashing the urban transportation component, and he indicated that any form of transit was, in fact, not a federal responsibility, and should be turned back to local governments. In addition, and in conjunction with this policy, subsidies have been viewed as inappropriate in the overall operations of transit because they encourage poor management. It is thought that local agencies agree to overly generous labor contract settlements to avoid strikes, knowing that they have federal subsidies to carry the bulk of the burden. Subsidies presumably also allow local systems to keep their fares artificially low, worker productivity to decline, and absenteeism to soar.

Transit advocates argue otherwise. They have fought to preserve the federal transit program, which is tantamount to saying that subsidies must continue. Two U.S. Congressional Committees were responsible for the reauthorization of the federal transit aid program this last (1986) September: the Senate Committee on Banking, Housing and Urban Affairs and the House Committee on Public Works and Transportation. Senator Alfonse M. D'Amato (R-N.Y.) of the Senate Committee said that cuts in transit aid would be unfair to Americans who deserve the continued benefit of an adequate transit system and a cohesive federal program.

Another advocate, U.S. Representative James Howard (D-N.J.) who is the Chairman of the Committee on Public Works and Transportation, has continually opposed any cuts in federal mass transit funding, either for capital expenditures or for operating assistance. He says that "it is proper for the federal government to help local governments build mass transit systems through capital grants; it is equally proper for the federal government to help local governments keep the systems running through operating assistance." Other transit advocates, such as the Regional Plan Association (RPA), see the proposed cuts in transit funding as having serious consequences for the future of mass transit. They assert that substantial reductions in transit support would leave future generations with a transport network that does not work.

One of the leading opponents of transit cuts, not surprisingly, is the American Public Transit Association (APTA), the Washington based industry organization that represents U.S. transit manufacturers, suppliers, and local operating authorities. APTA monitors and responds to all governmental transit policy initiatives, and its latest mission has been to defeat Congressional actions aimed at reducing the budget for transit. This group argues that continued federal support in mass transit is necessary for the nation's continued economic growth and viability. Local transit systems, whether public or private, do not have the available resources for this task, and they must depend on federal subsidies for capital and operating needs. Being cognizant of the necessity of reducing the deficit, APTA maintains that mass transit should have fair and equitable treatment compared to all other federal programs.

This study will not provide any answers regarding the implications of federal subsidies, nor speculate whether transit systems would be able to operate without them. The only purpose here has been to sketch in the background against which the specific cases of private transit operations in New York can be reviewed.

4. Private Sector Participation

The other major point of contention concerns the appropriateness of encouraging private enterprise in urban transit. Questions have been raised over competition and profits, and the practicality of allowing the private sector to assume responsibility for a service that has been assumed over the last several decades to fall almost entirely in the governmental sphere.

The attitude among proponents is that transit systems can benefit substantially from competition and that there is room for increased reliance on the private sector. Benefits presumably include cost-efficiency and better service, motivated by innovative management and the ability (the need) to make a profit. The private sector can also expand transit networks

geographically and increase options to users by providing supplemental transit during peak hours or during low demand periods in the evenings or weekends. UMTA has repeatedly stated that competition should be a key component of service provision. Ralph Stanley, UMTA's Administrator, has said that healthy competition between the public and private sectors can reduce costs. A newly emerging perspective -- competition vs. monopoly as opposed to the public vs. private concept first presented -- is stressed by Kenneth Butler, UMTA's Associate Administrator for Budget and Policy. His objective is "the best service at the lowest subsidy."

The opposition to this attitude maintains that transit is an essential service that should not be sacrificed for cost-efficiency, and not be motivated especially by incentives to make a profit. These spokesmen argue that the federal government should accept the fact that urban transportation is a public service, and that it must be recognized for the benefits it provides: basic mobility to population groups that do not have access to automobiles, and stimulation of the economy of any city. They believe that private operations are not appropriate on major corridors or in high use situations, such as the central business district; although they will concede that -- at best -- private operators would be well suited for low-intensity services, such as local circulation, dial-a-ride, or commuter express. While it is recognized that a private transit operator may be able to provide more cost-effective service, other aspects may suffer. For example, if operators are too concerned with costs, they will provide less adequate service in order to make greater profits. Among the most common arguments is that private transit operators skim the top off the market, i.e., intrude in the high density/demand situations which are otherwise vital for the general viability of existing public services. Likewise, it is in the interest of private operators to ignore routes which might not be profitable, but nonetheless serve a public good.

Defending UMTA's policy, Ralph Stanley has said recently that the intention is not for the private sector to replace all public transit, and that federal funding for any community is not contingent on private sector participation. Nowhere does UMTA insist that allocation of federal transit funds depend on a certain percentage of services being contracted out to private companies. Stanley asks only that transit agencies search constructively for places where private contracts could work well and improve commuter service -- provide better mobility generally and seek lower costs.

The arguments recorded on the previous few pages are, then, the points which will be explored and documented in this report, looking specifically at the rich inventory of already existing private transit operations in New York.

C. OVERVIEW OF TRANSPORTATION SERVICES IN THE NEW YORK REGION

New York is the prime mass transit community of North America. It has the largest metropolitan rail network, the biggest fleet of buses, and the greatest variety of public modes. But, more importantly, it also shows the highest relative usage of such services on a per capita basis anywhere in the country. (The average resident in New York travels 1,150 miles on transit each year, whereas the corresponding number in such significant mass transportation cities as Chicago and San Francisco is only 600 miles.) While New York has its automobile overload problems -- some districts are more congested than any other place in American cities -- it is clear that economic and social life would come to a halt if public services were to cease. People use subways and buses not because most of them do not have a car or are unable to drive, which would be the excuse anywhere else in the country, but they do it because that is the normal practice and the logical choice given the overall concentrated environment. Many destinations and trip purposes can only be accomplished conveniently by some form of communal transport.

Thus, if a public service loses its attractiveness for any reason to its patrons, the usual reaction in North America is to switch to the private automobile. This is not always the case in New York. Here, it is likely that substitute communal modes will be explored, because the use of the car is a nuisance in many situations -- hence private, for-profit services filling gaps in the total inventory have emerged with perhaps greater frequency than in other communities.

The transportation system in the New York region has been examined in many instances by many authors for various purposes. It is very complex in its operations and its administration. Instead of going through the effort of describing each sector separately, an organizational approach would be useful to make any sense at all of the various elements. This could be done

- on a geographic basis (what services are available to the numerous activity centers and the several boroughs);
- by function (what modes operate as long-distance commuter services, which provide local distribution);
- according to the type of hardware employed (rail, subway, bus, taxi, van, ferry, etc); or
- by administrative responsibility (reviewing the operations of each agency).

The last approach will be utilized here primarily because it provides a useful starting point, allowing in particular to highlight any possible reasons why private services have emerged in various areas (or pointing to opportunities for such activities).

Tables 2 and 3 on the following pages are intended to show the various responsibilities, linking agencies to modes. Much effort has gone into defining these relationships, but it is almost certain that any New York specialist in the field will find items to add or to modify because of the existing overlaps and cross-connections. These pages should be looked at as illustrative road maps, not legal documents.

The principal transportation agency in the region is unquestionably the Metropolitan Transportation Authority (MTA), that was established in 1968 to organize as much as possible most of the public transit services in the region. Its original mandate -- still in force -- is to establish a fully coordinated network of operations, providing accessibility to all residents and visitors at an affordable cost. The extent to which these goals are being accomplished remains a subject for debate. MTA has in recent years embarked on a major upgrading program of vehicles and facilities, having spent over \$8 billion up to now and programming expenditures of at least that much in the next five years. Results are becoming noticeable; the issues are whether improvements are coming fast enough and whether they will be substantial enough to reverse the negative image from which the system has suffered for some time. The follow-up question is whether other avenues can be identified that might provide relief and effectively share the burden -- namely, private sector participation.

MTA, under considerable pressure from Washington, has started to reconsider its attitude toward privatization and the utilization of competitive approaches toward various sectors of its operations. A white paper has been written (summer 1986) which points to various activities already going on, such as partnerships in financing (particularly station reconstruction), and contracting out maintenance and overhaul. Various issues are being discussed, especially if direct provision of service on a competitive basis were to be considered.

It is no criticism of the agency to point out that, as the premier operator of public services in the region, it takes its role seriously and regards most transport services as a public responsibility.

The MTA has close to 70,000 employees, multiple separate units, and a board of directors, who also govern the several subsidiary authorities. The largest one of these operating groups is the Transit Authority (TA). The principal responsibility of the TA is the subway system. It consists of

Table 1

ABBREVIATIONS USED

Pr	Private
MTA	Metropolitan Transportation Authority
TA(NYCTA)	NYC Transit Authority
MaBSTOA	Manhattan and Bronx Surface Transit Operations Authority
SIRTOA	Staten Island Rapid Transit Operating Authority
LIRR	Long Island Rail Road
M-N	Metro-North Commuter Railroad
MSBA	Metropolitan Suburban Bus Authority
TBTA	Triborough Bridge and Tunnel Authority
PA	Port Authority of New York and New Jersey
PATH	Port Authority Trans Hudson
PABT	Port Authority Bus Terminal
NJT	New Jersey Transit
NYSDOT	New York State Department of Transportation
DofMV	New York State Department of Motor Vehicles
NYC	New York City
TLC	Taxi and Limousine Commission
PD	NYC Police Department
NYCDOT	New York City Department of Transportation
Boff	Bureau of Franchises
CPC	NYC City Planning Commission
USDOT	United States Department of Transportation
UMTA	Urban Mass Transportation Administration
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
Amtrak	National Railroad Passenger Corporation
ICC	Interstate Commerce Commission
RIOC	Roosevelt Island Operating Corporation

Table 2

RESPONSIBILITIES FOR TRANSPORTATION MODES
 THAT ENTER OR OPERATE IN NEW YORK CITY (EXCLUDING AIR)

	RAIL				BUS				MOTOR VEHICLE				OTHER		
	LONG DISTANCE	COMMUTER RAIL	SUBWAY	PATH	LONG DISTANCE	REGIONAL COMMUTER	EXPRESS	LOCAL	MEDALLION TAXIS	BLACK CABS/ LIMOUSINE	GYPSIES			FERRY	AERIAL TRAMWAY
OWNER OR CHANNELS			NYC	PA			NYC	NYC	NYC	NYC	NYC	NYC			
OWNER OF ROLLING STOCK	AM-TRAK	MTA	MTA	PA	Pr.	NJT Pr.	TA Pr.	TA Pr.		Pr.	Pr.	Pr.	Pr.	NYC	
OPERATOR/ MAINTAINER	AM-TRAK	LIRR M-N	TA SIRTOA	PA	Pr.	NJT Pr.	TA Pr.	TA Pr.	MaBSTO	Pr.	Pr.	Pr.	Pr.	NYC DOT	RIOC
REGULATORS		FRA			ICC	ICC	NYC	NYC		TLC	TLC	NYS			
						State DOTS									

827 track miles (230 route miles), and 458 stations; it has a fleet of over 6,000 cars. This organization is rivalled in size only by the systems in London, Paris, and Moscow; its ridership, however, has dropped to about 1 billion passengers per year, which is less than half of what it once carried.

There is no doubt that the TA subways represent the backbone

of New York's mobility network. Even though no substantial additions have been made to the system since the 1930s, the trains still provide good accessibility to points throughout the city, at reasonable fares. The problems are features of safety, reliability, comfort, and status. To a significant extent, these are perceptions by the riding public, but they are based on fact and a long history of negative publicity. Perhaps more than anything else, the inadequacy of the subways has spawned substitute operations, which include express buses and commuter vans, as direct consequences.

There are a few other rapid rail operations found in the region. One of these is managed by the Staten Island Rapid Transit Operating Authority (SIRTOA), which is also a subsidiary of MTA. About 6 million passengers are carried annually on its 14 route miles. The problem is that this line does not respond adequately to new needs in the borough and it does not interconnect very well with other services. Thus, Staten Island has experienced a significant search for other opportunities to allow its residents to move around internally and to and from other centers.

The Transit Authority is also responsible for the second largest public transit component -- the local and express buses -- that carry MTA's livery and are operated directly through the TA's surface line division or the Manhattan and Bronx Surface Transit Operating Authority (MaBSTOA). The total fleet of buses in local service is about 4,000, which operate over 1,000 route miles and carry approximately 600 million passengers each year.

The bus service in the City of New York is about as satisfactory and well managed as anywhere else in the United States. This also means, however, that the large vehicles (70-passenger capacity officially), running with long headways and on routes quite far apart outside Manhattan, are not able to provide a very responsive service at the neighborhood level. Impatience and sometimes frustration sets in among the waiting patrons, and here another opening is discovered by substitute services. It is believed by local residents that these service shortages are particularly severe in minority and poverty districts, and therefore other means have to be sought.

Express buses -- which are operated both by TA and private companies -- were the first instances of concrete reactions to the inadequacies of public service (particularly subways). They emerged in the late 1960s, and are

touched upon later in this report. While the original hope was that they would minimize the use of private cars for commuting from the periphery of the city, they frequently duplicate mass transit services, and their riders are quite willing to pay a premium fare for a service that they consider comfortable and reliable.

The TA express service, which is concentrated largely on Staten Island, consists of about two dozen lines that carry over 8 million passengers per year. (The private sector component operating throughout the City is about equal in size.)

MTA also encompasses the two principal commuter rail operations in the region. These services have been reorganized repeatedly, but they now consist of Metro-North, which focuses on Grand Central Terminal and operates along the Harlem, Hudson, and New Haven lines; and the Long Island Rail Road (LIRR), whose principal nodes are Penn Station, Atlantic Terminal (Brooklyn), and Jamaica (Queens). The mileage of track is 650 and 540, respectively, accommodating about 50 million and 75 million passengers annually.

A significant feature of the rail operations is the fact that they cross municipal and county lines and thus have regional implications by definition. The services are largely adequate, and they are being upgraded, but they have been criticized quite vociferously -- most likely because their patrons expect better-than-average service. They too are subject to competition from several other sources, including private commuter vans.

A commuter rail network also exists on the New Jersey side. In relative terms, it was once a very powerful system, bringing its patrons to Manhattan centers by ferries. Its significance has faded today with the switch toward rubber tire modes.

The Port Authority of New York and New Jersey (PA) is the quintessential public authority in the country. Its mandate centers on the commerce of the port (marine facilities and airports), but it is also most significant in regional passenger transportation activities. This includes the Port Authority Trans Hudson (PATH) service which is a rapid rail line between two states. The 14 miles of route carry about 55 million passengers each year and is the major public transit connection from the Manhattan CBD to the west. It is the most modern rail operation in the region, but it cannot assume greater burdens because of existing physical limitations. (It brings most of the New Jersey rail patrons into Manhattan.)

The Port Authority is also responsible for all the Hudson River crossings (Lincoln and Holland Tunnels and the George Washington Bridge, specifically), which are reaching their limits as well. Various programs have been implemented to at least expedite the communal services (i.e., commuter buses)

along these facilities, but the congestion and delays keep growing. Here too private vans have emerged recently, which, even though they are caught in the same traffic jams, can at least through their own agility provide some improvement in travel times and offer greater comfort than regular buses.

The two major bus terminals (at 42nd Street and the George Washington Bridge) are operated by the Port Authority as well, but they are enmeshed in the traffic problems that surround them. The Midtown Port Authority Bus Terminal handles each day about 7,200 regular service buses, mostly connecting to New Jersey. A larger portion of these vehicles belong to New Jersey Transit, an agency that has lately assumed most of the responsibility for public transit in that state.

While bus operations in the region are under review, it should be observed that two large geographic and political units directly outside the City of New York have adopted differing policies toward this type of service.

In Nassau and Suffolk Counties, east of the City, a public agency -- the Metropolitan Suburban Bus Authority (MSBA), a subsidiary of the MTA -- has taken over a few years ago the various local lines, several of which penetrate into the City. In Westchester County to the north, on the other hand, private operations are still holding on, although it could be argued that they are private in name only. The county sets policy, distributes subsidies, and the many separate operators have tended to become amalgamated into a large single group. In most of the cases where commuter buses are involved, duplicate services by private operators have made inroads. While the quality and purpose (and potential future role) of these activities are significant issues, the principal problems today revolve around their legal status. They cross county and sometimes state lines and thus allegedly do not fall under the franchising authority of any single municipality. Licenses from the respective State Departments of Transportation or the Interstate Commerce Commission are, however, easy to obtain.

The government of the City of New York has a very limited role in the direct provision of transit services, albeit it carries, of course, the ultimate responsibility for the quality of life (and mobility) in the community. Indeed, the only service that it operates is the State Island Ferry under the Bureau of Ferry and General Aviation Operations of the New York City Department of Transportation (NYCDOT). It is interesting to note that, while lately much has been said about the possible advantages of instituting a number of new waterborne operations, they are likely to be done by other agencies -- private operators or the Port Authority.

The NYCDOT is, however, responsible for the physical infrastructure on which transportation takes place. This includes principally the maintenance of streets and

highways under the Bureau of Highway Operations, and the control of traffic flow under the Bureau of Traffic Operations. While the regular Police Department is still the most powerful force in the traffic control and safety field, much of the direct on-street enforcement of regulations has been transferred to specially uniformed traffic enforcement agents (TEAs) under NYCDOT. This city department also encompasses the Parking Violations Bureau that has been much in the news lately.

There are at least two more city agencies that have a very important role in the total transportation field; however, they need not be discussed in detail here because the investigations and analyses within the rest of this report will frequently revolve around them. They are the Bureau of Franchises (BoFF) under the Board of Estimate and the Taxi and Limousine Commission (TLC). The Bureau of Franchises has the authority to control the use of public space owned by the City (public rights-of-way, to be specific) for any purpose, particularly if it is profit-making. As such, it regulates the private bus lines and may have duties regarding other transportation operations in the City.

The Taxi and Limousine Commission was established to regulate the yellow medallion taxi industry, but it has lately attempted to extend its authority over other for-hire services. Great controversies and significant conflicts over jurisdiction have been engendered, and any resolution will take some time. Currently, confrontations and demonstrations are the order of the day. It is fair to say, however, that to a great extent the existing complexities have been brought about by the fact that the number of 11,787 taxi medallions have been frozen since the 1940s, while the needs of the urban community have changed drastically. Even the presence of gypsy cabs can be traced to this situation, not to mention local car services, black taxis, and other local neighborhood or business responses to a shortage of adequate service.

The best summary of the current trends in the transportation field in New York may be provided by the following two tables. The first shows a very significant decrease in the relative role of the subway for trips to work in the decade between 1970 and 1980. There is an almost corresponding increase in the use of automobiles and taxis. The private sector operations, including vans and public livery vehicles, would fall under the later category, but it should be noted that they only started their expansion in that decade. By this time (1986), that component may be significantly larger, as is discussed subsequently.

NEW YORK CITY TRANSIT MODES USED FOR TRAVEL TO WORK 1970 AND 1980

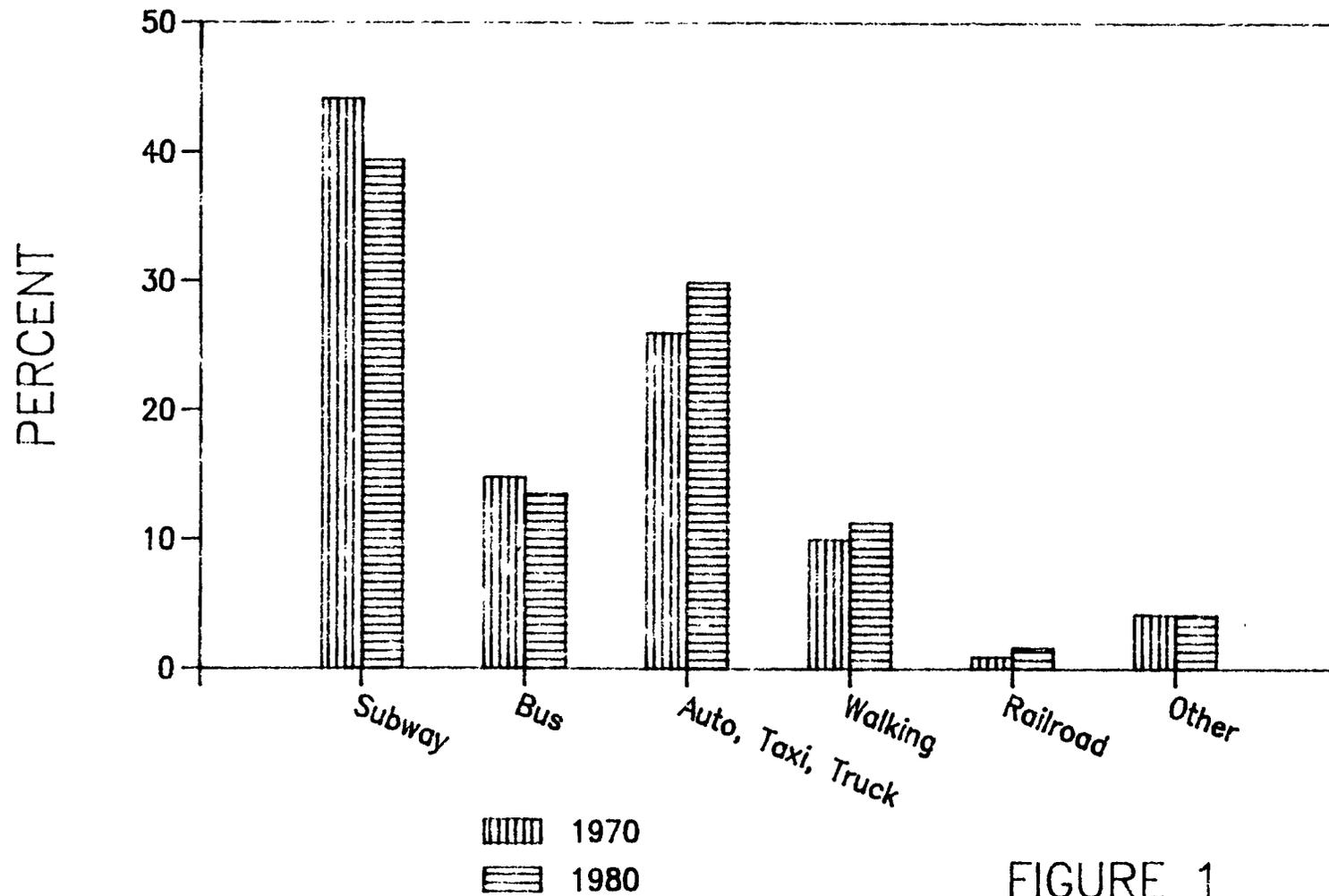


FIGURE 1

Table 4
Transportation Modes Used By New York City Residents
To Travel To Work

	1970 (%)	1980 (%)
Subway	44.1	39.4
Bus	14.8	13.5
Auto, Taxi, Truck	26.0	29.9
Walking	10.0	11.3
Railroad	0.9	1.6
Other	4.2	4.2
Total	100.0	100.0

Source: New York Metropolitan Transportation Council,
Hub-Bound Travel.

The other table, which records the modal breakdown for entries into the Manhattan CBD for approximately the same period, shows very similar developments. Less than half of the total travelers enter by subway today, whereas about two thirds of them did so in the late 1940s. Forty years ago, only 18 percent came in by motor vehicle, whereas recently the figure has risen to one third.

Table 5
Daily CBD Entrances By Mode

	1971 (%)	1981 (%)
TA Subway	54.3	49.7
TA Bus	4.0	3.7
Other NY Bus	0.6	1.3
Railroad	5.4	7.1
PATH Trains	2.2	2.8
Auto, Taxi, Truck	28.9	31.6
Ferry/Tram	1.1	0.9
Total	100.0	100.0

D. POTENTIALS AND PROBLEMS

What are the potential benefits and problems for public policy of relying on private sector provision of public transportation? The preceding sections have indicated some of the debated and experiments that are taking place nationally; in this section we will present a summary of the principal claims that have been made. We will consider the rationales underlying each claim, but will not attempt to evaluate their validity. Rather, this discussion will summarize hypotheses that will be considered in the case studies and conclusion of the present study.

In considering the claimed effects of privately provided public transportation -- both positive and negative -- it is important to distinguish among several types of effects and their impacts on different segments of society. Thus in this section we will consider the possible effects on the cost and quality of service, the structure of the transportation system, and the generation of employment. And we will consider the way these effects may be distributed among different parties, including the riding public, private providers, transportation workers, public sector transportation agencies, and public financing and regulatory bodies.

We will begin by summarizing the more specific assertions that have been made, focusing on the issues of cost and quality of specific service, structure of the regional service as a whole, effect on labor, effect on city facilities, and other impacts, and will later turn to some of the broader issues.

1. Cost

It is commonly claimed that privately provided transportation has a strong potential to significantly reduce costs. This includes assertions that the service will be produced at lower cost, and that this benefit will eventually be shared by all parties: consumers (who will pay lower fares), the public sector (which will pay less in subsidies), and society as a whole (as real costs are reduced and inefficient producers are driven out of the market). The argument goes on to say that the costs of public sector services will also be kept down through cost control measures aimed at remaining competitive with the private sector, and through reorganization which may shed either excess general capacity or specific services better provided by the private sector. This may mean that an overall reduction of public services, which are inherently unprofitable, will lead to budgetary improvements, or that the elimination of the most subsidized parts of the operations will result in even better results.

There are two key elements underlying this argument. The first is that labor costs -- the single largest component of transportation costs, accounting for 70 percent or more of operational expenses -- are lower in private sector firms, due largely to presumed differences in extent of unionization and severity of work rules. The second is that management is more efficient in the private sector, where it must respond to the discipline of the market, and is generally composed of individuals with extensive experience with the operational level of their services, who know their business well. Individuals would keep their jobs only if they maintain high performance day-after-day. Thus private management is presumed to be more efficient not only regarding payment of labor, but also in choosing the lowest overhead, the most appropriate vehicles and equipment, the lowest cost organization, and the best mix of services. Also, it is expected to exercise the most direct and effective supervision of all aspects of the operations.

The main problems asserted regarding costs essentially assume that the present costs do correspond to "real costs," thus any reduction in apparent costs is really only a shifting of the burden to others. This may appear in a number of ways, including:

- lower pay and worsened working conditions for employees;
- lower quality of service, seen in reduction in service for some, especially those least able to acquire a substitute; cost cutting and increased riskiness (lower security -- including deferred maintenance and lack of insurance);
- increased indirect costs, experienced by the community at large or specific agencies, such as increased administrative/regulatory costs, greater congestion and pollution, and lost taxes.

2. Service

The potentials include greater concern by the private operators for the quality and diversity of service provided, as a way of maintaining ones' market. This would be expected to appear in such ways as reduced waiting time and an increased attention to provide special services for specific submarkets. Two of the services that would be expected to develop through market segmentation are premium services for those willing to pay extra, and door-to-door service. Reliability and comfort/convenience would be regarded as most significant features to maintain the necessary high level of customer satisfaction.

The service problems often mentioned are mostly derivative of a combination of the ideas that, if present services are being run at their true costs, private providers will gravitate toward the most profitable activities, and that the profit motive will give

privates an incentive to "cut corners" regarding aspects of service quality, regulations, and laws (particularly those relating to safety). Historically, a social decision was made to provide access for all citizens, and thus unprofitable activities are maintained to provide transportation at times and to places that could not otherwise support it. Given that the system is based on cross-subsidization between more and less profitable activities, if the privates concentrate in the profitable ones, the public sector will be left without the resource base to internally subsidize the less profitable ones. The latter will then have to be cut. If this is the case, serious questions arise as to the extent of present services that private operators would be willing to take over, given existing fare levels.

Additionally, it is sometimes argued that the profitable public activities (such as some very high density bus lines with good ridership throughout the day) would become unprofitable if they lost the monopoly of service, and that this effect is even more likely if the privates were to engage in likely "unfair" practices (e.g., running a few minutes ahead of scheduled buses to target the ready market of waiting bus passengers). Finally, some point out, first, that the differences that might arise here are related not so much to private versus public provision, but rather to the kinds of technology used -- i.e., buses versus smaller units -- and, second, that a large number of smaller producers are more difficult to regulate to guarantee minimum standards than a single public agency.

3. Service Structure -- Overall Use of Resources

The potential of private transport service provision has two basic components: one static and one dynamic. The first is that if an overall existing system were adjusted to include private providers, then these providers could serve a portion of peak period commuters, thereby lessening excess off-hour capacity caused by the present need for the public sector to be capable of serving the extremes of peak demand. A socially more efficient structure would result. Second, it is argued that as service demand changes in both the short and long term, private firms are able to respond more quickly, because they have a strong incentive to remain attentive to such changes, they are typically smaller operations and thus find it easier to reorient themselves, and their management knows better the peculiarities of their service.

The main problem argued here is that the private firms will respond only to effective demand and not to need, i.e., only when it is profitable to do so.

4. Facilities

There are few specific potentials argued here, except perhaps that smaller private firms can often be integrated into their

neighborhoods, not requiring the large scale capital expenditures of the public sector (for example, if they use standard vehicles, they can be maintained through existing regular service garages).

However, there are many problems here, which have often been the focus of comments from public sector transportation planners. When private firms get beyond a small size, they do require their own storage and maintenance facilities, but, since they are undercapitalized, such enterprises often use (and interfere with) city streets for this function. In addition, while commuter services may be dispersed at the point of origin, their vehicles converge on a limited number of areas and cause considerable congestion for loading, unloading, and layover. It is often argued that the private vehicles are the source of much more pollution than public buses, both because of the greater number of lower capacity vehicles involved and of poor maintenance and inappropriate technology.

5. Job Creation

The main potential impact cited here is the opening of new economic opportunities, particularly for employment and entrepreneurial initiatives. Private transportation firms are generally more labor intensive than conventional transit agencies and have greater ease of entry for prospective employees. These firms may provide more employment in a flexible way, especially on a part-time basis, and opportunities to develop new community businesses and local leadership.

The main problem cited here is that the new jobs created are likely to be paid at a level much lower than those in the established sector. This may threaten existing jobs, particularly those with extensive fringe benefits, while not providing "good" work opportunities, and perhaps returning an overall economic share to labor that is lower than had been received.

6. Summary

In summary, the above discussion is intended to provide a framework for the case studies we have carried out. If we are to define the best mix of public and private services for the many transportation needs of the regional community, we must first determine which of the many benefits and problems claimed by partisans or analysts of one service or another have actually appeared and proven significant. We know that the main empirical issues that must be resolved revolve around the real direct and indirect costs of providing service, and the extent of service in underserved areas and for unsatisfied patrons. We must give particular attention to the cost of labor, the financial feasibility of a reasonable return on investment for private capital, the functional impact on city streets and facilities, the responsiveness of management structure to

variations in demand, and features of the particular technologies and services provided. We provide a preliminary response with the case studies below of the New York metropolitan region in 1986, in which we indicate other potentials and problems specific to each of the cases considered.

Following that analysis we can then return to the broader issues that are basic to this study:

1. What role should these private services have in the total regional transportation system? What role should they have in commuting operations? What role should they have in neighborhood service?
2. How can equitable service be provided with complete geographic and temporal coverage and at the same time costs to the public be lowered?
3. How can reliability and safety to riders be best assured?
4. How can decent income and working conditions for drivers be secured? How can reasonable return on investment for owners be achieved?
5. How much regulation, and of what kind, is necessary to reach most, if not all, of the above?
6. How should existing public services be modified or adjusted (if at all)?

E. SCOPE AND FORMAT OF RESEARCH PROJECT

The area of inquiry for the research project was the experience in the New York City region regarding private sector transportation services. The concentration had to be placed on "the rubber tire" components, and, since many such private services already exist in the New York metropolitan area, the principal means of investigation was the case study approach. The case studies are grouped according to the operating subcomponents of the industry, and the basic material is mostly descriptive.

Throughout the study -- as an organizing element -- the discussion has been focused, in so much as practicable, on the three components of transit services: operations and facilities, labor and institutions, and finance and economics. Due to the unique nature of each submode, however, different aspects are emphasized:

- For liveries and car services: the economic conditions under which they operate, the extent of the industry, and the type of regulatory structure prevailing or desired.
- For commuter vans: the economic conditions under which they operate, the service role that they fulfill, conflicts with other modes and objectives, and the feasibility of expanding operations.
- For private bus companies: whether they are more efficient than the services offered by the public sector, what differences exist, and what are the implications for improving local bus service in New York.

Research for the case studies was conducted primarily through interviews with the owners and operators of the private services, review of available documents, and consultation with City officials in policy making positions. A large range of field observations and surveys were also performed. Each such subcomponent required a variety of research methods, of which the principal ones are outlined below:

1. Liveries and car services:
 - a. Interviews with managers or owners of twenty bases throughout the City, covering all of the five boroughs and a range of neighborhoods.
 - b. telephone survey of car service bases in order to estimate the total number of service vehicles operating in New York and the average number of cars per base.
 - c. Interviews with a number of the leaders of the industry.

- d. A car service users' survey that was distributed to 300 residents in a building located at Riverside Drive and 125th Street.
2. Commuter vans:
 - a. A survey on all bridge and tunnel entries to count primarily entering commuter vans and to measure the growth in the activity since 1984.
 - b. Field observations and counts at several major subway stations regarding feeder jitney operations in the outer boroughs.
 - c. Interviews with four of the top commuter van operators in the City.
 - d. A questionnaire that was distributed to the drivers of one of the larger van operations.
 - e. Observation of a number of the principal loading and unloading points for passengers.
 3. Private bus companies:
 - a. Interviews with the managers in each of the companies, high-level personnel in municipal government agencies that regulate them, and officials of the unions representing company workers.
 - b. A four-page survey form that was used to interview 200 private bus users throughout Queens.
 - c. Review of City, State, and federal documents that record the operating and financial conditions of the companies over the last few years.

The team members held regularly scheduled review and program meetings every week-(with very few exceptions) throughout the year. Principal responsibility for sections of the work were assigned to individual researchers, and every draft was reviewed by everybody else and progressively revised. Special tasks or follow-up studies were assigned to various team members, as appropriate, who assembled information, supervised surveys, and prepared analyses. Short term surveyors and researchers were engaged when necessary.

Critical items were submitted to the Advisory Board and the official agency representatives for review and comments. An extended dinner meeting was held toward the end of the project to solicit reactions and suggestions.

PART II
CASE STUDIES

It is possible to travel by public transit (bus, subway, rail) between almost any two points in New York City and the nearby parts of the region. There is a dense network in place, and very few districts are not within easy access. The problem is, however, that the service on this network is frequently inferior and unreliable -- even though the aggregate public service in New York is still much more extensive than in any other American city. Much of this service deficiency can be documented, but, more importantly, a large portion of the riding public perceives public transit as inferior and unreliable, as well as unsafe and unresponsive. In New York City, transit service is expected to work, and, if it does not operate well enough, other solutions are sought quickly.

The pervasiveness and depth of dissatisfaction with City (MTA) buses and subways has never been fully gauged, and this could probably never be done precisely because of the size and complexity of the situation and its continuously fluid state. The extent to which these negative attitudes have been generated through actual experience by each member of the riding public or stem from bad publicity that local transit services have received has not been determined accurately either. There are many middle class people in the City of New York who brag about the years they have accumulated without entering the subway. It is widely believed by residents of low income areas that the providers of public services have little regard for their needs.

The purpose of this research effort is neither to support nor disprove the above contentions -- they are merely the ambient atmosphere within which many things happen. Our principal aim is to bring to everybody's attention the multitude of privately initiated and operated transport services all across New York City and to learn from this experience.

These are not isolated instances -- they spread over neighborhoods and communities, and there is hardly a district that is not able to show some examples of such locally-generated efforts. Yet, by-and-large, City officials (and even the media) have only lately become formally aware of these private activities. They tend not to pay much heed to these operations,

nor really attempt to enforce existing regulations. These services appear to achieve visibility and generate concern only when they start to dislocate established patterns in the Manhattan CBD.

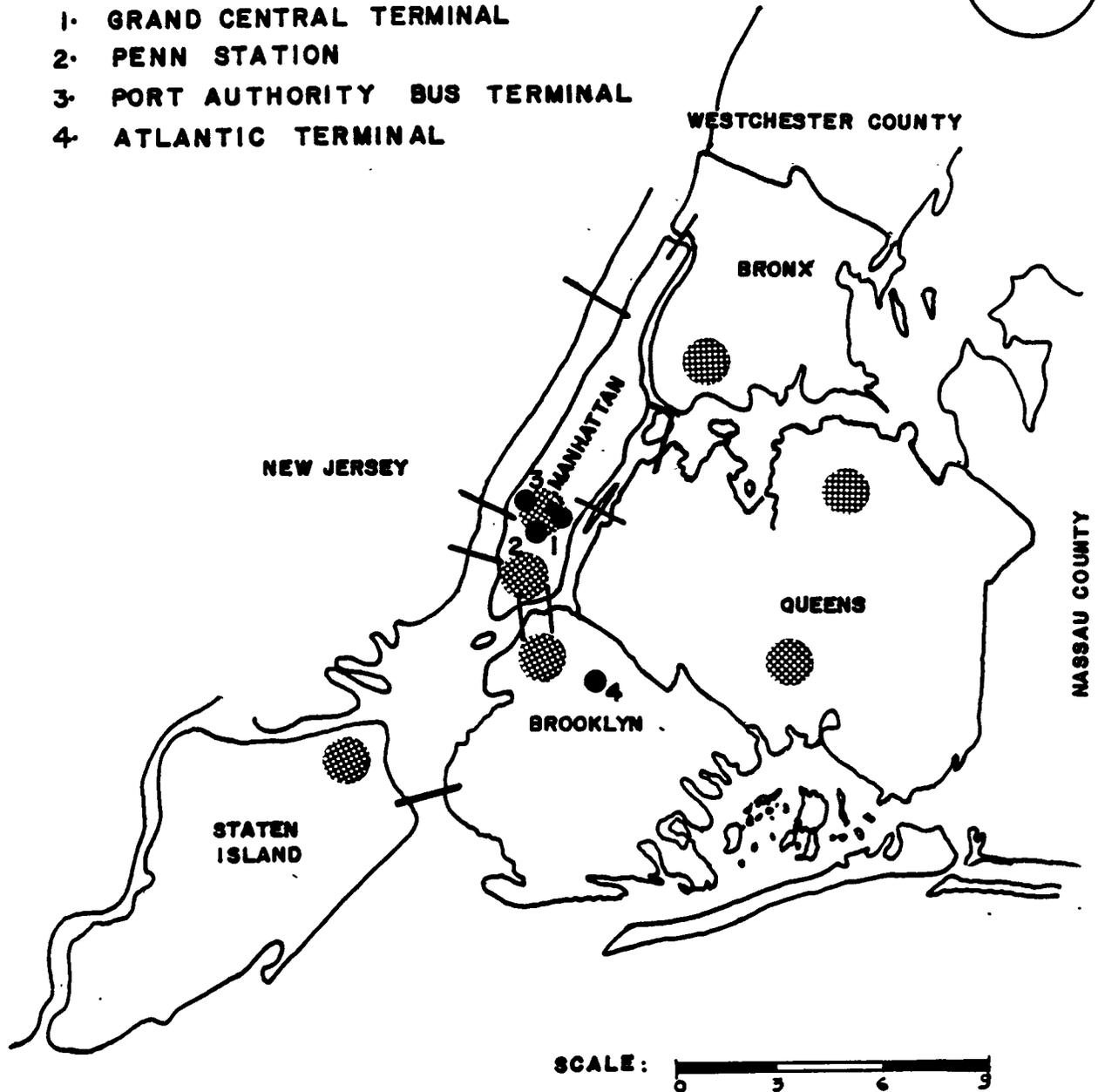
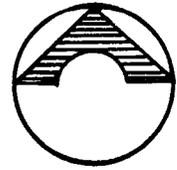
To undertake a systematic review of the existing private transportation activities, an organizational scheme is required, i.e., a classification framework that would allow a comprehensible investigation of each submode and highlight their unique characteristics as well as similarities. This is not a simple task, and our team has spent much time discussing appropriate groupings and debating family resemblances among the individual operations. This effort was probably similar to the problem faced by a group of botanists encountering an array of new plants on a previously unexplored island, trying to assign each to a proper genus and species.

Ultimately, it was found to be appropriate and workable to utilize a simple scheme:

- a. All those modes that primarily service individual trips, with dispersed origin and destination points (but not including medallion taxis).
- b. All those operations that respond to the regular needs of commuters, with high volume movements during peak periods (but not including express buses).
- c. The several private bus companies that have remained in operation for many years but provide a "normal" urban transit service.

LEGEND

- PRINCIPAL BUSINESS CENTER
- PRINCIPAL CROSSINGS
- PRINCIPAL TRANSPORTATION CENTERS
- 1. GRAND CENTRAL TERMINAL
- 2. PENN STATION
- 3. PORT AUTHORITY BUS TERMINAL
- 4. ATLANTIC TERMINAL



ACTIVITY NODES

PRIVATE TRANSPORTATION SERVICES IN THE NEW YORK REGION

FIGURE

2

A. NONMEDALLION CAR SERVICES

Background

In 1937, the number of franchises to operate taxi cabs on the streets of New York City was frozen by the Haas Act at 13,500. Because of oversupply then, approximately 2,000 franchises were returned to the City, or disappeared; leaving 11,787, the number of cabs that presently operate. The moratorium on new entries in the for-hire industry was precipitated by the Depression decade observation that there were too many cabs for a viable industry. Open competition had degenerated into "taxi wars;" fares were not covering costs; drivers fought with one another for customers; and both industry and the riding public were suffering. Whatever the wisdom of that decision a half century ago, our investigations convince us that its continued relevance to the contemporary city must be reevaluated, as has been suggested by others.

The franchise to operate a taxi cab in New York City takes the physical form of a medallion affixed to the hood of a yellow passenger vehicle. It is this token and car color which give the industry its local name. The franchised taxi industry is referred to as either the medallion cab industry or the yellow cab industry. The two names will be used interchangeably in this paper.

There are two valuable benefits which a taxi medallion confers; the statutory right to cruise all the streets of New York City and pick up passengers who hail them; and the right to operate protected from price competition, charging fares set by public regulation.

The value of this privilege can be measured by the market value of medallions. At the time of the Haas Act, a medallion sold for \$100. Ten years later, in 1947, medallions were valued at \$2,500. They sell at present for about \$105,000. The City permits medallions to be transferred between owners on the basis of a private business arrangement. Thus, if a present franchisee wishes to leave the business, s/he can sell their medallion to another individual without any participation by any public agency. The medallion market is a quasi-market because it exists at the exclusive sufferance of New York City policy makers. Any change in policy with regard to the number of medallions, the scope of taxi operations, fare structure, or presence of competitors will have significant impact on the value of the license granted by medallion ownership. As a consequence, policy decisions and rules by the Taxi and Limousine Commission (TLC), the City agency charged with taxi industry regulation, always emerge from a highly charged political process.

One of the strongest pieces of evidence for the need to reexamine the half-century old policy of freezing the number of medallions is provided by the prodigious growth of an even larger agglomeration of nonmedallion for-hire vehicles that provide services frequently imitating closely those of yellow cabs. The best single example of this has been the growth of livery car service. From a base of almost nothing in the middle 1960s, we estimate livery car service to be an industry containing well over 30,000 vehicles. (See the next section for estimation details.) Liveries operate in all five boroughs of New York City, frequently accept street hails, use sophisticated radio networks, and not infrequently provide cars of superior quality to those used by the medallion cab industry at comparable fares. At its best, the livery is a service for which its operators can take much pride. At its worst, it subjects both the riding public and others to unnecessary risk and hardship.

A Typology of Nonmedallion Taxi Vehicles

New York City is comprised of approximately 300 square miles of the most widely varying urban conditions in the world. Physically New York land use patterns range from an extremely dense central business district comprised of very tall buildings, to apartment blocks at the upper end of anybody's rent scale, to areas of single family homes rivaling the lowest density levels found in outer ring suburbs anywhere in the U.S., to desolate burned out districts with a few remaining semi-occupied tenements.

Socially New York is equally diverse. Extremes of wealth and poverty co-exist within walking distance of one another. Manhattan may be the only place, outside of 3rd world cities, where it is possible to find a city block containing both a grooming salon for poodles and malnourished families in subsistence housing. Thus not only does New York possess the forms of neighborhood social diversity typical of any large city, but it is also characterized by diversity in very small dense spaces. The result is that the transportation needs of people living within a few yards of one another can be vastly different.

To service this complex physical and social context is beyond both the desires and resources of the medallion taxi industry as it is presently structured. It has chosen to maximize its revenues by creating a de facto service area comprised of Manhattan below 96th Street and shuttling between that area and the two New York City airports: LaGuardia Airport and John F. Kennedy International Airport. Functionally, that means that a great deal of short trip service is provided in the densest portion of the region, with a few long rides to two nodes. Socially, it has meant that the highest income and mostly white portion of the public are riders. (There are exceptions.)

Two forces were significant in shaping this decision by the yellow taxi industry. Fear of crime helped to push yellow cabs out of minority areas, and the lure of more affluent customers helped to pull them into the white (or business) areas in which they are presently found.

Within the vacuum created by yellow cab service patterns, a multifaceted collection of nonmedallion taxi services has evolved. Given the variegated social and physical landscape of New York City, it is not surprising that more than one type of alternative taxi service exists. Depending upon how one wishes to look at services, many patterns can be discerned. We have found it useful to devise a subclassification system with five groups for the taxi type services.

Our classification scheme is based on three principal variables; ethnicity, class, and geography. We call these service types neighborhood taxi service, livery car service, free lance street hail service, black cab taxi service, and limousine service. Figure 3 illustrates the ways in which these other services have substituted for yellow cabs. (See Appendix C for car counts in New York City, from which this graph was derived.)

1. Neighborhood Taxi Service

Neighborhood taxi service is as old as both automobiles and telephones. It is safe to assume that every American community has this type of service. Usually, these services have bases near a major common carrier mode, such as a train or bus terminal. Passengers walk in upon disembarking the long haul leg of their trip and use this service for the final segment of the journey. Business is also generated by phone calls to bring people to the common carrier or other destinations around the community. This service tends to be patronized by those without cars in areas where cars are the prime means of local travel.

There are four features which distinguish this traditional service from the livery car service of a more recent vintage. The "regular" firms found in American cities tend to be older, they usually own the cars and hire the drivers, they flourish in low density peripheral communities (many with substantial white populations), and they have a clearly local focus to the definition of their service area. In Staten Island and the less dense portions of the Bronx, Brooklyn, and Queens, such neighborhood taxi service is quite common.

The age of any particular taxi service of this type usually approximates the age of the neighborhood in question. They tend to be owned by one individual or a small number of partners. The cars are usually late model vehicles bought new and turned over within two years to avoid the time and money costs of extensive maintenance and repair work. It is also felt that

VEHICLE COUNTS IN NEW YORK CITY
8:00 TO 10:00 AM AND 11:00 TO 12:00 PM

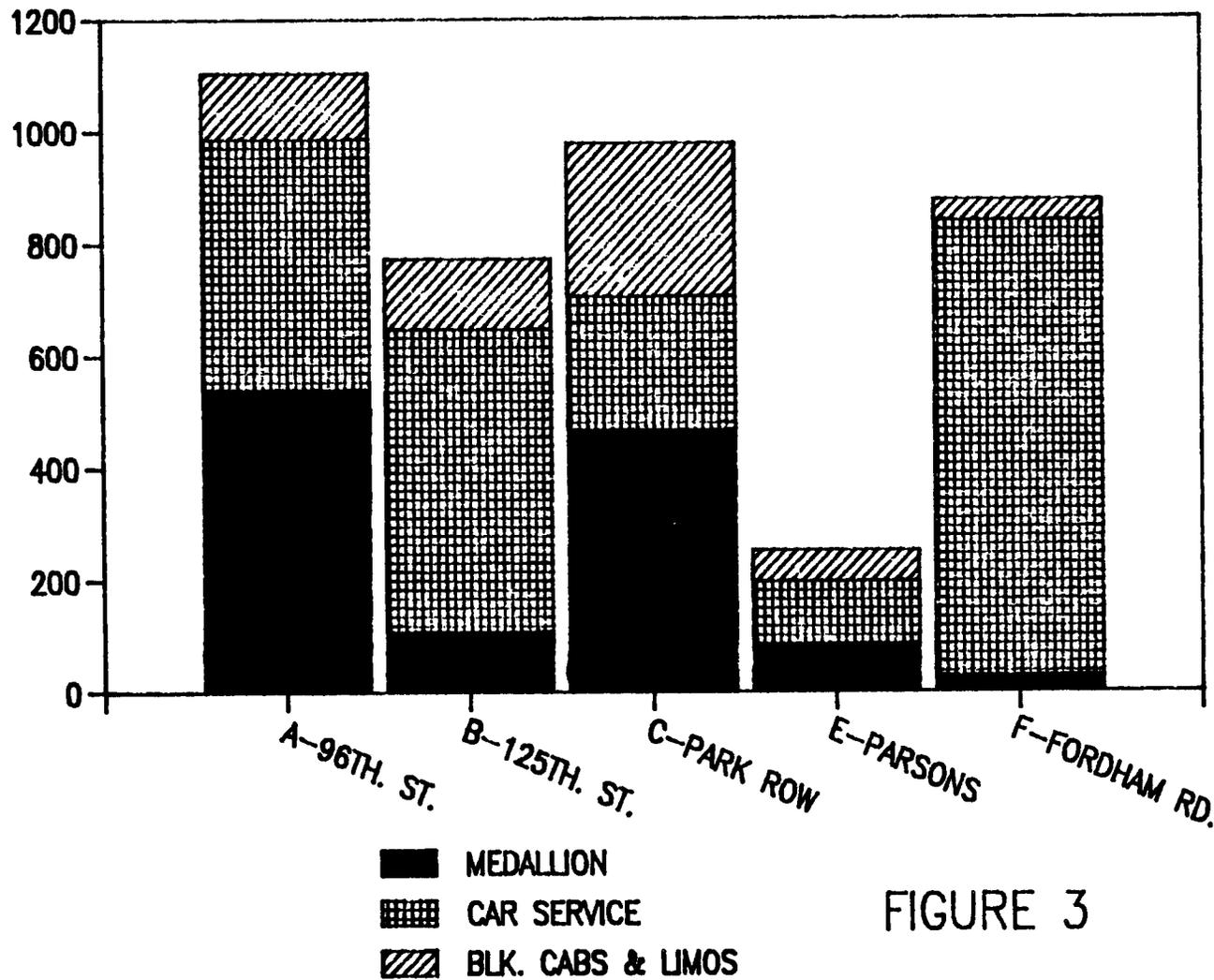
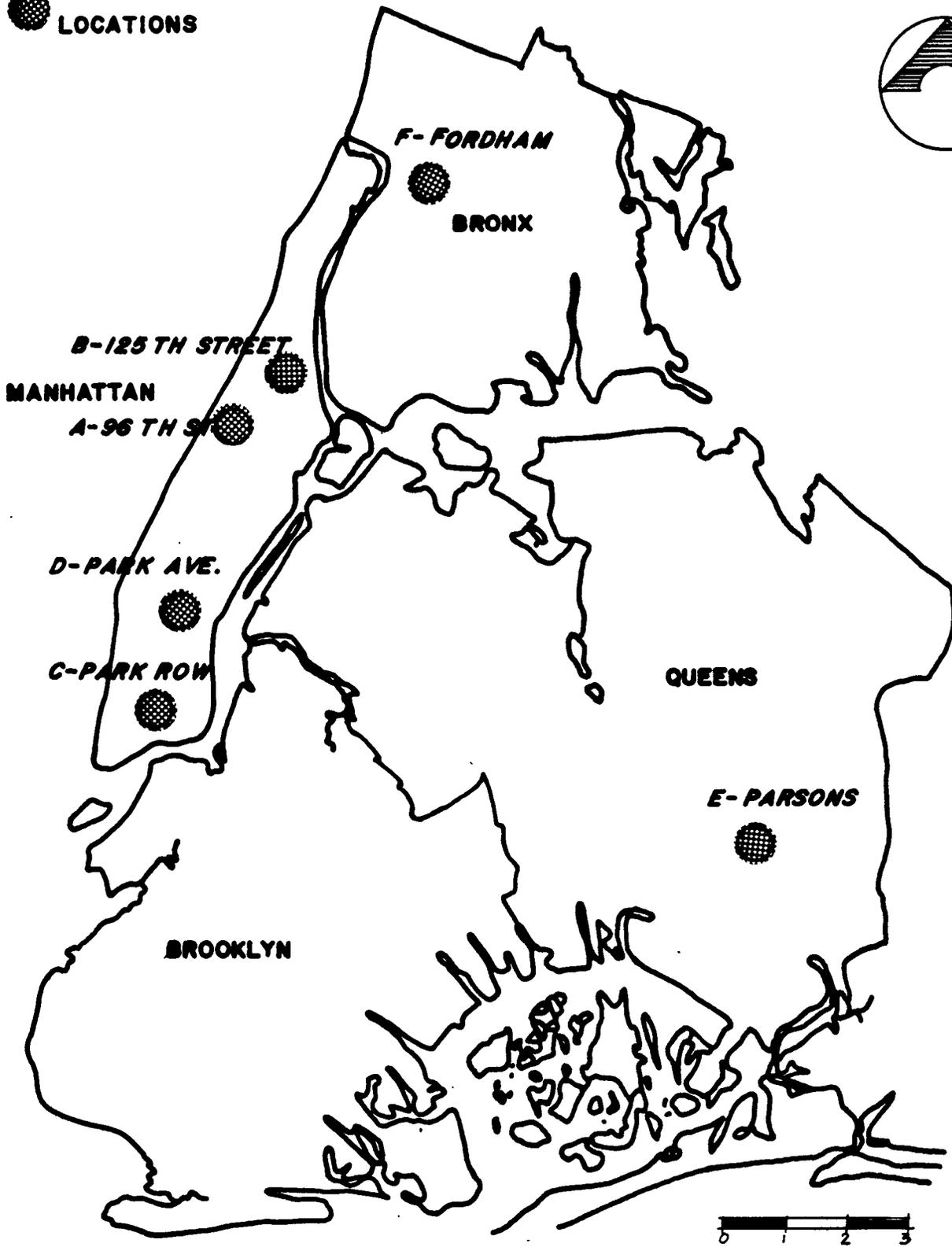
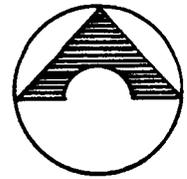


FIGURE 3

 LOCATIONS



LOCATIONS OF CAR COUNTS

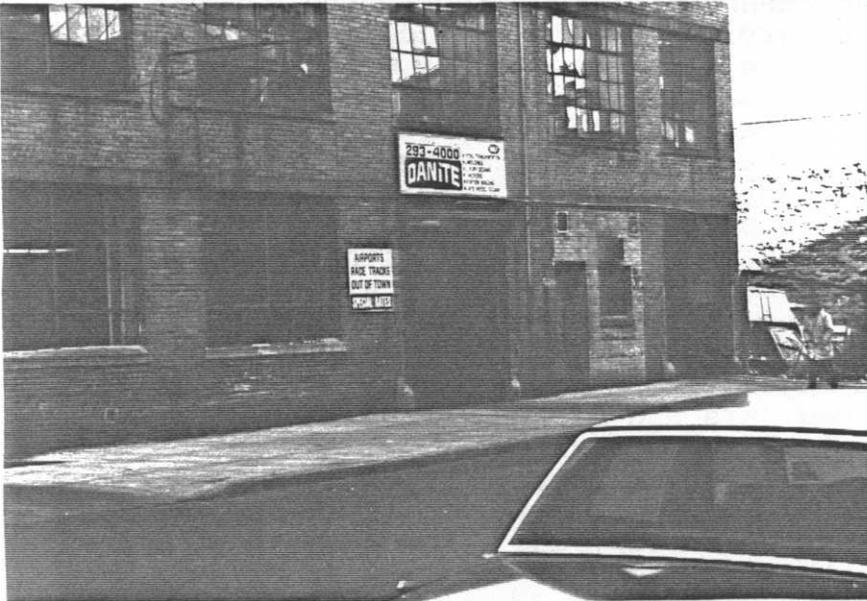
PRIVATE TRANSPORTATION SERVICES IN THE NEW YORK REGION

FIGURE

4



A neighborhood car service base in the Bronx.



One of the largest car bases in the City; entrance to garage.



Typical car service base in Manhattan.

FIGURE 5

reliable and attractive cars are a critical element in the service provided to the clientele.

Typical of these operations is Thruway Taxi. It is located in the northeast section of the Bronx, close to Co-op City, east of the Gun Hill Road subway station on the Dyre Avenue line of the number 5 train. The firm is owned by two partners. It was established approximately 30 years ago as the area around it began to thrive with post-World War II construction. The neighborhood was originally a white, working class area. Much of the work of this firm is typical of a "classical" neighborhood taxi service. It includes shuttling people between their homes and the line haul services provided by City buses and subways. In addition, it provides weekend recreation service by taking people to movies and other amusements located in the West Bronx along Fordham Road and the Grand Concourse.

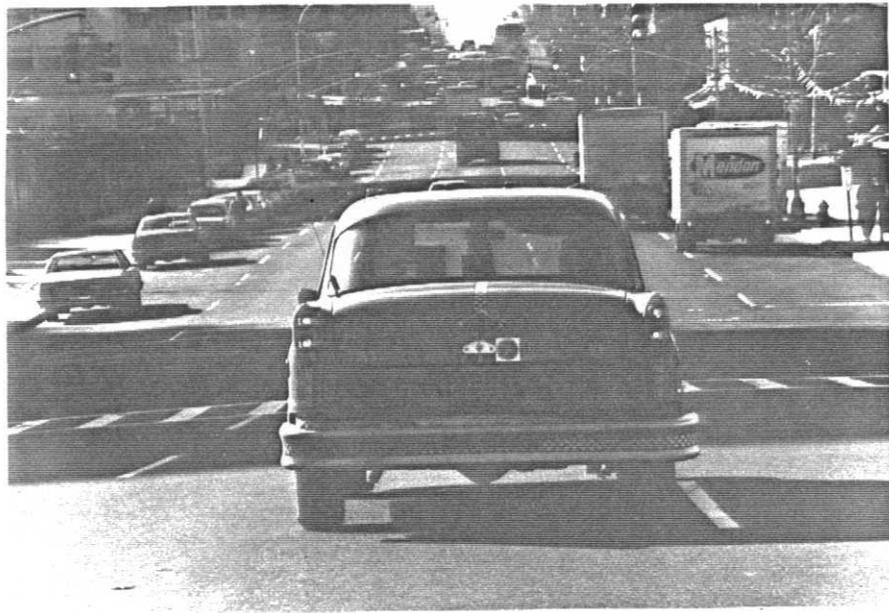
The ethnic, racial, and age change in the neighborhood has had little effect on the basic service that is provided by this firm. The clientele has become older and poorer, but a fair proportion are still middle class and working class, though less white. The major change is that much of the weekend recreation business has fallen off. It has been replaced by trips to hospitals and other medical care facilities, social service agencies, and social security offices. As in the past, the company takes business only by prearrangement. Either customers walk into the waiting room, intentionally located around the corner from a bus stop, or they make a phone call.

The firm has 50 cars, the majority of which it owns. Until last year they purchased only new cars and turned them over every two years. Changes to this policy were required when they lost a major account which they had for over 20 years with Montifiore Hospital. (They were underbid by a competitor.) The hospital provided them with a phone in the lobby and a car stand outside. The service was used by both patients and hospital staff, and Medicaid paid for much of the patient load. As a result of that loss they now buy late model used cars and attempt to keep them longer in operation.

Metered revenues are split between the company and drivers on a 65/35 basis for the first \$100 per shift and a 60/40 basis for the remaining monies. (Drivers earn the smaller proportion.) Drivers usually also receive tips of between 10 percent and 15 percent of the prearranged fare. Shifts tend to run about 12 hours, and drivers net between \$40 and \$65 per shift (before taxes, and it is not known how much taxes the drivers actually pay). The modal net, including tips, appears to be about \$50. Street hails are actively opposed by the owners and are difficult to obtain given the low density development of the areas in which this service operates. The operator reported that approximately 50 percent of gross revenues went to cover costs and 35 percent to the drivers, leaving a pre-tax operating



A livery -- or gypsy -- vehicle turns on 96th street.



A livery vehicle converted from a yellow taxi.



Livery activity near a base.

FIGURE 6

profit margin of about 15 percent. He felt that it was too low for a service industry such as his.

The owner made two points in terms of industry problems. First, he believes that the gypsies should be driven off the streets by firmer law enforcement. He views them as a serious drain on his business and not serving a useful public purpose. Second, he insists that stricter insurance law enforcement is necessary. He has suffered several losses due to accidents with uninsured drivers, especially drivers of gypsy vehicles. (The term "gypsy" as used in this context appeared to refer to any nonmedallion car service vehicle which engaged in street hail business.)

2. Livery Car Service

During the 1960s, a new form of transportation emerged in New York City. At the time of its inception it was derogatorily called "gypsy cab service." (That form is still in popular usage, it has negative connotations, and it may be applied to any activity that is not fully controlled. We will attempt in this report to be careful in the use of this term.) The new mode has evolved into two distinct types of services: livery car service (discussed in this section) and free lance street hail service (to be discussed in the next section). Livery car service differs from neighborhood taxi service in four important respects. It has distinct characteristics in terms of origin and hence clientele, in its willingness to engage in street hail work, in the structure of ownership, and in terms of its self-defined service area.

Livery car service is a principal form of travel for the larger portion of the New York City population -- the City's ethnic and minority communities. During the 1960s, the scarcity of yellow cabs began to become acute in the central business district of New York City, generally thought of as Manhattan below 96th Street. At the same time, the combination of racial tension, which erupted into civic riots and a growing fear of ghetto crime, made medallion drivers reluctant to service those neighborhoods. The fiscal crisis of the mid-1970s exacerbated the problems of poor service reliability which have been plaguing the City-wide subway and bus system.

As a result of these forces, many areas of the City were left with no street hail cab service and poor public transport. To fill this gap in the market, individual community members (particularly those who had tried to join the established taxi industry) spontaneously began to ply the streets in private cars and solicit business directly in poorer neighborhoods. At first these cars were met with great hostility by City officials and the yellow cab industry. However, over time a modus vivendi was established. Yesterday's "gypsy cabs" have spawned today's sophisticated livery car service industry. Virtually every ethnic and racial neighborhood has some form of this service run



Black cab with a "Z"
plate.



Typical livery vehicle
with a livery plate.



Neighborhood car service
vehicle with logo and
telephone number.

FIGURE 7

by members of that community. Hence there are not only black and Puerto Rican livery companies, there are also companies comprised of Haitians, Dominicans, Koreans, Hassidic Jews, etc.

The growth of this service is illustrated in simple terms by Table 6. The table lists the number of car services advertising in the classified pages of the telephone books for all of New York City except Staten Island in 1970 and 1985/86.

Table 6
Comparison of Number of Car Service Advertisements
Between 1970 and 1985/86

Borough	1970	1985/86
Bronx	1	113
Brooklyn	9	304
Manhattan	5	49
Queens	10	230
Total	25	696

Bases range from as few as 8 or 10 cars to as many as 250. Using telephone surveys, we estimate the livery car service fleet at approximately 22,000 vehicles. (See the last part of this section for a detailed discussion of estimates.)

The typical form of the organized industry is a group of independent owner/drivers affiliated with a base, which is the center and the home of each unit. The base provides two-way radio communications linking all the drivers. The base owner is usually a former driver with some organizational and business skills. S/he is the prime mover behind the entire operation. The base markets the service, advertises locally, and puts incoming calls out over its radio network to its members. Generally jobs are dispatched on a first come, first serve basis among the drivers. Depending upon the activity of the radio, the individual inclinations of the drivers, and the policy of the base, drivers may also respond to street hails when the radio is slow or inactive. (The latter practice, however, is not legal, and is the confusing element in any attempt to classify services accurately.)

Unlike the neighborhood taxi service, the livery base operators and drivers we interviewed maintain that they service the entire City. Indeed, the industry's popular motto is "we're not yellow, we go anywhere." They do, of course, tend to concentrate most of their activities in the areas in which their bases are physically located. It should be noted though that even on that level the size of their service catchment area appears larger than that of the neighborhood taxi companies. It

seems to depend on how well each company is known within an ethnic community.

Owner/drivers are predominantly American blacks, Hispanics, and West Indians (Haitians and Jamaicans). The owner/drivers pay the base operator a weekly fee which ranges between \$10 and \$65 per week. The modal fee appears to be about \$30. The amount of the fee varies with the level of radio activity. Even if a driver plans to do a great deal of business through street hails, membership in a radio base is still attractive because it affords a degree of protection in what is, often, dangerous work. It should be remembered that the fear of crime which helped to push the yellow cabs from minority neighborhoods has a basis in experience and affects nonmedallion drivers as well.

The larger, more active bases establish standards for car quality, rates, and toleration of street hail work. Smaller and less active bases tend to require little or nothing in the way of defined performance in the above areas.

The largest operation which we surveyed (indeed, it is reported to be the largest radio base in the City), was Danite located in the Highbridge section of the Bronx. The base is owned by two partners and has approximately 250 affiliated independent owner/drivers. It charges the highest weekly affiliation rate (\$65) and has the most active radio network in the City with calls going out every two to three seconds during peak periods. Given the size of this particular operation, it is clear that their market area extends well beyond the neighborhood in which it is located. In general, their business derives from the entire Bronx and Northern Manhattan. The garage where the base is physically housed looks similar to those used by yellow taxi operations. The base requires that affiliated drivers have late model vehicles. It prefers its drivers to be men over 30 years of age.

The two base owners both started as independent drivers in the 1960s, picking up street hails in minority neighborhoods. They are acutely aware of the ethnic and racial nature of the business in which they are engaged. They believe that they provide a service which is sensitive to the special needs of minority neighborhoods. Unlike the owner of Thruway, they do not have any stated policy opposed to their affiliated drivers picking up street hails. They believe that the City should set up an agency independent of the TLC to oversee operations such as theirs. They would like some legal franchise to pick up street-hails and do radio business within the minority communities which they presently serve. While smaller base operators whom we surveyed saw unlimited market potential, one of the Danite managers had a broader and more realistic view. He could foresee a time of destructive competition. He therefore was quite willing to consider some form of industry regulation which would begin to put limits on new entrants into the business and which would enforce uniform standards of

vehicle and driver safety and performance. (A typical attitude of an established operator.) The operator also expressed concern that, whatever form the regulatory body took, it properly reflected the concerns of the minority community of New York City.

A Touch of Class is located in Northern Manhattan. They provide not only car service similar to that of Danite, but a range of services which approximate those of black cabs and limousines. They are approximately 20 years old. As with Danite, they made their start in the mid 1960s. They too permit their drivers to engage in street hail work. When they began, they stimulated business by providing free car service to and from church on Sundays. They presently provide about 95 percent of the car service at Harlem Hospital. In addition, they offer service by exotic vehicles or limousines to Harlem-based customers desirous of a more upscale service and for special events.

Indeed, the principal concern expressed to us was that the growth of the black car cab service downtown was impacting upon business that they had developed. They are angry and quite prepared to fight to defend their turf. Unlike Danite, they reflected a view more typical in the industry when we asked about public policy. They preferred to be left alone, and they wanted no specific franchise from the City. They also opposed vocally the special treatment they perceived as afforded to the white dominated black car cab and limousine business which operated in the southern portions of Manhattan.

While individually or partner-owned bases are the rule, we did find one base -- Delta -- in Washington Heights which was started as a worker cooperative. A group of 20 Dominican drivers from one base left and went into business for themselves. The ability to organize and run a worker owned coop usually takes far more organizational and business know-how than is the rule among most owner/drivers. It will be interesting to follow the progress of this particular base over time.

Most bases are free standing operations. However, in some instances (e.g., Reyno) we found bases which were established by insurance brokers who viewed the sale of auto insurance and other services as important as the car service operation. One operator also ran an auto repair and body and fender shop, as well as occasionally leasing vehicles to drivers (Uptown Transit Corp). The possible sphere of activity thus for these local businesses is rather wide and depends entirely on the initiative and skill of the owners.

In all we interviewed 20 radio car bases. (See Appendix A for a complete list.) From that investigation, it is possible to estimate the economic situation of this industry. On the demand side of the market, the price structure is a modification of yellow cab rates and black car cab rates. There are no standard prices. It is competition among many sellers for knowledgeable

buyers which establishes price. In general, it appears that prices for trips even in areas not served by yellow cabs are below those charged by the medallion vehicles. For example, we asked for prices from three livery companies for a trip from West 150th Street and Broadway in Manhattan to East 116th Street and the FDR Drive, also in Manhattan. Two quoted a price of \$3 and one gave a price of \$7. A yellow cab fare for that distance would average about \$5. On the other hand, a fare into an area where yellow cabs predominate tends to be higher than a yellow cab fare, reflecting the lack of return business for them in those areas. (Returning passengers tend not to call for such rides, and pick up would be difficult. Street hails are few and would be risky.)

Three companies all quoted us fares of \$12 to go from Broadway and 116th Street in Manhattan to Wall Street in Manhattan. The yellow cab fare for that trip would clock about \$9. For trips from West 116th to La Guardia Airport, all three livery companies quoted a fare of \$15. The comparable yellow cab fare is about \$10.

The demand for this service shows signs of considerable strength. In our interviews, we continually asked about competition. While the largest operator expressed the view that the industry was getting crowded, an often stated comment in our interviews was "there is enough business for everybody."

On the supply side, capital costs are not unreasonable. Drivers tend to buy second-hand late model sedans or used police cars (because of their structural strength). The cost of these vehicles averages around \$3,000. While the variance in durability appears to be large, these vehicles can average about two years of service life on New York City streets. Radio sets cost between \$200 and \$1,500, with an average of about \$500. A taxi meter costs about \$400, if one is used. (A meter is not mandatory, but a number of fleets have them. There does not appear to be any trend in this area.) Insurance costs approximate \$2,000 per year. If we assume that the radio and meter have a useful life of 5 years, the annualized fixed costs of this business are about \$3,680 for an owner/driver.

To estimate the variable costs, let us assume that the driver in question is affiliated with a base which charges \$30 per week and that he works 6 days a week. If gas costs \$15 per day, the cost of daily operation is about \$20. If we assume miscellaneous expenses including vehicle repairs and maintenance at about \$500 per year, then based on a 50 week, six-day-a-week year, the total daily cost of operation is \$27.80. The reported gross revenues per shift have ranged from \$60 to \$160. Hence the net revenues for a 12 hour shift, on a full cost basis, are between \$32.20 and \$132.20, or between \$2.68 and \$11 per hour on a pre-tax basis. The modal return is likely to be between \$5 and \$7 per hour. Given the alternatives, that remuneration is far better than most other job options open to unskilled black,

Hispanic, and West Indian men (many of whom are undocumented aliens) in the New York economy today. It helps to explain why the number of car service vehicles is likely to continue to grow in the coming years.

3. Free Lance Street Service

Free lance street-hail service -- illegal under present regulations -- is undertaken by drivers attached to livery bases between radio calls and by owner/drivers who do not belong to any base and engage exclusively in such business. This latter group is the focus of this section, and the term "gypsies" can be most appropriately applied to them. Unaffiliated drivers can be subdivided between those who have cars registered as livery vehicles and those with ordinary passenger plates who engage in the business on an occasional or casual basis. The latter are gypsies of an extreme kind, and are sometimes called "poachers." Because of the sizable number of vehicles not registered as liveries, it is impossible to ascertain the exact number of cars engaged in this activity. The conventional wisdom among knowledgeable observers is that this unregistered fleet numbers between 10,000 and 15,000 vehicles.

Regardless of registration status, the market for street hail service is found in the densely settled low income and minority areas of the City. It is a major and integral part of the day to day transportation service of those communities. Its strength is in many respects a reflection of the weakness of both the medallion and public transport systems, which were supposed to service these areas.

An illustration of the way in which public transport deficiency leads to expansion of street hail service can be found in the case of jitney service overlapping feeder bus routes in Brooklyn and Queens. Typical of this type of operation are the services which we witnessed at Eastern Parkway and Utica Avenue and at Nostrand Avenue and Church Avenue, both in Brooklyn (described separately in this report). Both of these intersections are subway stops serving West Side and East Side IRT lines. Both are also intersection points of the subway system with cross-Brooklyn local bus routes. During the morning rush hour, street hail vehicles ply these routes taking waiting bus passengers to the subway stations. They charge the same \$1 fare as the bus. Between 7:00 and 8:45 in the morning, along the three blocks of Utica Avenue approaching Eastern Parkway, all one sees is a virtually solid line of these cars discharging between 3 and 5 passengers each, then circling around for another run. The scene at Nostrand Avenue is similar. We estimate that drivers can get between 5 and 10 runs in during the morning rush hour.

In the evening they carry traffic in the reverse direction. However, the congestion problem at the subway stations is worse in the evening since the vehicles have to wait at a congested location to assemble a load. The drivers on these runs are

mostly Haitians. Very few cars had markings identifying them as belonging to any radio base. The small number of base affiliated vehicles suggests that more lucrative rush hour business is found on the radio networks. Although most vehicles in this jitney service had livery plates, a significant number were not so registered.

The jitney service is illustrative of the demand side dynamic which keeps street hail service expanding. Residents of minority neighborhoods (usually in two fare zones) need to get to work in a timely manner. Bus service to the subways is slow and crowded; the street hail vehicles fill the gap. As their popularity grows, the increasing numbers of them on the bus route further exacerbate the service problems of the bus. This in turn leads more people to use jitneys.

On the supply side of the market, the appeal of this business segment is its low entry costs. While the capital costs of entry into the radio base business are comparatively low by normal measures, they are still formidable if one has no money and no access to credit. However, vehicles in marginal states of repair are obtainable for very little money, and, if there are no other direct expenses, a small business is borne easily. Given the wide gaps in motor vehicle regulation enforcement in New York, it is even possible to put vehicles on the road with no insurance and at times no license plates, let alone an operator's license for the driver. Although we have not been able to obtain interviews with drivers in this marginal segment of the business for obvious reasons, we know from personal observation that it exists in the Boroughs of Manhattan, Bronx, Brooklyn, and Queens, unquestionably.

From discussions with drivers in the radio base segment of the industry, with whom these drivers compete for street business, we surmise that these marginal drivers hope to accumulate enough capital to move into the livery segment of the industry. However, if they do so, it must be entirely self-financed as there are no avenues of commercial credit open to such operations. Nonetheless, the large number of such vehicles on the street convinces us that there is indeed sufficient business for them at this time.

4. Black Cab Car Service

Black cab car service is a transport service by prearrangement for an "upscale" market segment. It is used by downtown corporations and upper income individuals who desire the comfort of limousine service and the convenience of a yellow cab. Its origins are found in the effort of the TLC to get two-way radios out of yellow cabs. During the 1960s and 1970s, yellow cab operators began to form two-way radio groups and develop lucrative and regular business among corporate, financial, and legal firms. These firms were willing to pay premiums for charge accounts, package delivery, and long haul business, such

as, for example, taking an executive home to Princeton, NJ late at night. Consumer business off the two-way radio was more lucrative and far safer than street hails. The result was to make a scarce resource -- cruising yellow cabs -- even scarcer on the streets of New York. In order to facilitate a return to the status quo ante, the TLC chose to use a carrot rather than a stick. Operators were permitted to keep their two-way radio business, but they were required to move the radios from the yellow cabs into other vehicles, usually black, full sized sedans -- hence the industry segment name. Originally, the policy was that for each radio removed from a yellow cab, one black cab could be put in service under TLC auspices. Initially there were approximately 2,000 vehicles created under this program. The TLC presently estimates the number of black cabs at about 3,000.

The cost of a trip within Manhattan by black cab is about triple that of a yellow cab. For example, a trip from Central Park West and 72nd Street to the Port Authority Bus Terminal would run between \$2.50 and \$3.20 by yellow cab, excluding tip. In a black cab that same fare would run between \$8 and \$10 before tip. On longer trips, such as those to airports, the differential shrinks to about double. The yellow cab fare between 116th Street and La Guardia Airport is about \$10, excluding tip and toll. The five black cab companies we surveyed quoted us rates of between \$13 and \$19, excluding tip and toll. Of the five, two quoted us a price of \$19, one gave a price of \$18, one of \$16, and one of \$13. It should be noted that the black cab is not as likely to have a legal return fare from any particular destination as a regular taxi. Consequently, the higher one way rate must reflect this reality. At an airport, a yellow cab can get into the taxi queue and pick up a return fare to Manhattan. A black cab, or indeed any of the other services, cannot legally pick up any airport customer with whom they do not have a prearrangement.

As was the case with the livery car service of minority areas, black cab car service requires base membership. Reflecting the higher income market which it serves, the cost of such membership is far higher. The current affiliation fee is between \$10,000 and \$60,000, depending upon the level of business expected at any base. Black cabs are also leased. Presently the lease price is \$350 per week. In addition to an affiliation fee, drivers are expected to have new vehicles and requisite State and TLC licenses and permits; their record and legal status are thus fully scrutinized. The base also takes 15 percent of the weekly gross receipts. Black cabs rarely take street hails, but the practice is not unknown on the streets of the Manhattan CBD, particularly in off-hours. Black cabs are, in effect, the custom end of the car service industry.

5. Limousines

As with neighborhood taxi service, limousine service is a

commonplace and longstanding, if expensive, type of car service. There are approximately 2,500 vehicles in this industry segment divided amongst 12 large firms of 100 to 150 drivers, smaller fleets, and individual owners.

The demand for limousine service is found among the highest income groups in the City. They are used to transport people to important social and political events; they carry corporate executives, public officials, diplomats, and other wealthy individuals. For the Burmuda Company, for example, approximately 80 percent of their fares are obtained from corporate executives. The busiest part of the week for the limousine industry is weekdays between 3:00 and 8:00 PM. On holidays and weekends, supplementary business is generated from weddings, banquets, funerals, and hotel services.

It is not uncommon for limousine companies to specialize in certain segments of the business (like funerals and weddings or hotel or corporate service). Given the uneven schedule of the various service demands, it is often the case that companies specializing in one segment are able to provide back-up to those in another segment when peak demand exceeds capacity. In those instances, one company "subcontracts" with another. (The term "subcontracts" is placed in quotes here because these arrangements are done informally to avoid any contractual liability given the high income and social prominence of the limousine clientele.)

Although limousines are not legally permitted to pick up street hails, and rarely do, they often have arrangements with hotels which allow them to somewhat circumvent that prohibition. Limousines are not legally permitted to loiter outside hotels, but the companies establish a contract with the hotel to service it on an agreed upon, though not standardly prearranged, basis. The limousine then locates in front of the hotel, at the hotel's request, for the convenience of hotel patrons. The patron pays the limousine company directly, and not the hotel.

The agreement is mutually beneficial. The hotel can offer fast and convenient limousine service to its patrons, and drivers have a constant back-up source of fares. The service sits in the nether-world between street hails and prearrangement.

Also, similarly to neighborhood car service, limousine drivers do not own their vehicles. They are employees of the limousine company. A major proportion of their income comes from the tips paid by customers. In addition, some companies also pay bonuses for good customer service. The Burmuda Company rewards its drivers with a \$300 bonus every 3 months if all customers have been picked up on schedule and taken to the correct destinations. Drivers need a New York State driver's license and a Class #4 license. Bases are regulated by the TLC, and drivers and cars must be insured.

The rates for limousines are set on an hourly basis and average about \$40, with a minimum service duration of 2 hours. There are four types of vehicles and prices vary by type: the "stretch," the regular limousine, the sedan, and the station wagon. Airport service is priced separately from the hourly service. Money does not exchange hands between client and driver. Rather, customers are billed and pay for service plus tip at that time. In order to minimize liability for accidents, companies prefer not to have written contracts with customers, even though they are willing to bill them for service.

6. Estimating the Size of the For-Hire Car Fleet

How large is the for-hire fleet outside the medallion taxi industry? Estimates in recent years have ranged from as low as 15,000 to as high as 50,000. Most such estimates of the car service fleet have been put at about 35,000. When the black cab and limousine fleet is added, the number usually ranges around 40,000. These estimates are frequently used by media and local officials. Our investigation indicates that this figure may be high by about 20 percent. Using data prepared by the TLC and the New York City Planning Department and relying on our own surveys, we have attempted to refine the estimate range. In December 1985, the City Planning Department determined, on the basis of Department of Motor Vehicle registration figures, that there were 23,000 motor vehicles with livery, TLC, or "Z" plates with New York City addresses. These vehicles are engaged in all the forms of for-hire service discussed in this study. In order to begin sorting them out, we took the latest "Yellow Pages" for all five boroughs and counted all the car services listed. We attempted to distinguish those companies which were actually limousine and black cab companies from those which fit our descriptions of radio based car service and neighborhood car service. We then sampled at random one third of the listed car service bases to ascertain their size in number of vehicles. The table below presents the survey results. (See Appendix D)

Table 7
Telephone Survey of Car Service Bases

Borough	No. of Bases	% of NYC	Smpl. Size	Mode	Median	Mean
Manhattan	84	13	28	25	37.5	70
Bronx	96	18	32	50	50.0	52.6
Brooklyn	244	38	81	4	12.0	34.7
Queens	185	29	62	20/3	18.0	33.5
Staten Is.	33	5	11	10	12.0	18.4
Total	642	100	214	13.6*	22.7*	40.8*

*These figures are weighted by borough size and the low modal number is used for Queens.

In four of the five boroughs, the mean is significantly above the median because of the presence of a few large bases. Approximately 25 percent of all the numbers called were either disconnected or not answered. Based on our weighted measures of central tendency, we obtain the following range of estimates:

	Mode	Median	Mean	Adjusted Mean
NYC Total	8,731	14,604	26,201	21,828

If we assume that those car services which have disconnects or no answer have left the business, while approximately the same number of new car services have been started since the phone listing were published or do not bother to list, and that these 25 percent represent the marginal fringe of the industry, it is possible to create an adjusted mean estimate. Using the low modal number as the estimate of the size of the 25 percent of the firms which are marginal, and the mean for the other 75 percent, we arrive at the total number of vehicles in car service bases at just under 22,000.

The next table combines our survey estimate with existing TLC estimates of the black cab and limousine fleet to arrive at a total number for the organized portion of the for-hire industry. The free lance or "gypsy" portion is not counted here.

Table 8
Estimate of Total For-Hire Industry

Total Number Of Livery and Neigh. Service Vehicles estimated from Classified Ads.	22,000
Total Black Cab Fleet (TLC)	3,000
Total Limousine Fleet (TLC)	2,500
<hr/>	
Total Organized For-Hire Fleet	27,500

Our estimate is 4,500 higher than the City Planning estimate of 23,000 done in December 1985. There are two explanations for this difference. The first is that the fleet may have grown by almost 20 percent in one year. The second is that many bases are lax about screening their cars for proper registration. Most likely the answer is that some of each is at work.

The free lance street hail fleet, which is still uncounted, has been estimated at about 10,000 vehicles. No doubt some of this fleet overlaps with the improperly registered portion of the car service fleet. Based on that, it is not unreasonable to estimate the entire for-hire fleet (excluding yellow cabs) at approximately 35,500 vehicles, of which about one third is improperly registered. The car service and free lance street hail fleet combined is about 30,000. This estimate is about 20 percent lower than the figure commonly used by the media and officials. The table below summarizes our estimate.

Table 9
The Distribution of the For-Hire Fleet

Livery and Neighborhood Service	22,000
Free-lance Street Hail	8,000
Black Cabs	3,000
Limousines	2,500
<hr/>	
Total	35,500

B. PRIVATE COMMUTER SERVICES

The most prevalent trip purpose or urban mobility need in New York, as anywhere else, is to go to work and come home again. Millions of such trips take place every working day, and high volumes of activity are generated along many corridors. This concentration of demand, not experienced in any other American community, made the implementation of the heaviest urban transportation modes feasible in the past. It also allows for much experimentation and even duplication of services. There are opportunities for variations -- to pick up a slack, to provide for greater comfort and convenience, or to fill a gap. Of course, public agencies have to do careful planning and programming before they can respond with such flexibility -- and this does not happen frequently.

The private sector, on the other hand, has stepped in and created various options. While such private commuter services take a multitude of forms in New York today, there are basically only two families:

1. In middle class and upper middle class neighborhoods (which are largely white), a large number of commuters are willing to pay a premium fare (\$2.50 to \$3.50) to reach their places of employment in Midtown and Lower Manhattan. They utilize express buses or commuter vans, sometimes shared taxis.
2. In lower income areas (which are mostly black or Hispanic) many people forego the regular City bus service to utilize overlapping services provided by local entrepreneurs at the same fare (\$1.00). The vehicles, operating in a shuttle/jitney mode, can be vans, station wagons, or regular sedans. These tend to be feeder services (as compared to the first group which are line-haul, express services).

These commuter services operate vigorously and intensively; they often -- particularly those serving the minority districts -- ignore existing rules and regulations, which does not bother them nor are they much bothered by official enforcement. Their patrons almost unanimously support them. In many instances the commuter vans not only parallel regular bus lines, they also use their stops and pick up passengers waiting there.

The following types of private commuter service (besides individual use of taxis and the formation of car pools) can be listed, each having sufficiently distinguishing features to set it apart as an identifiable submode:

1. Express buses (which also include those operated by MTA).
2. Commuter vans from various locations in the boroughs.
3. Commuter vans from New Jersey.

4. Shuttle (feeder) services to major subway stations in the boroughs (by vans, wagons, or sedans).
5. Shared taxi service.

1. Express Buses

Express buses were introduced in the City's transport inventory around 1968 by private entrepreneurs who discovered that a large number of commuters from the outlying districts of New York City were quite willing to pay a premium fare for a seat on a comfortable and fast bus, as compared to their other travel choices. It had been hoped that automobile drivers would switch to this communal mode; however, surveys have shown that the riders are predominantly former subway patrons.

This mode has received considerable research and policy attention, and, therefore, there is no need to repeat the detailed findings here -- except to record its significant role today as a component of the overall commuter services and its high visibility as an example of active private sector transportation services. (Private bus companies -- discussed in more detail in another section of this report -- also provide express bus service, thus illustrating further the complexities and overlaps encountered when any attempt is made to systematically classify the various private services actually in operation in New York today.)

During the years since express buses have been in operation, their overall situation and impacts have not changed much. They are still regarded by most of their patrons as vital means of mobility ("I would not go into the City if the express bus was not available"). They still upset residents of neighborhoods that are crossed by substantial numbers of these vehicles without serving those areas, and during the day they clutter the streets and curb spaces in Midtown and Lower Manhattan.

There is one more rather obvious but important observation to be made. Express buses as a regular commuting mode are only within the means of middle class workers (and shoppers). People employed in low paying jobs find the daily tariff of \$6.00 or \$7.00 a major burden, and they will stay with the subway as their primary line-haul device, even if they live in a double-fare zone -- thus incurring an unavoidable daily cost of \$4.00 in any case. The patrons of express buses, on the other hand appear to be much more concerned about their comfort and safety than the fare.

An interesting follow-up of this attitude is the recent resurgence of commuter vans (Brooke, 1986). These vehicles are starting to carve out a niche for themselves -- as is discussed next -- but they have also benefitted in a number of instances

from the dissatisfaction of express bus riders with that service (who were previously displeased with subways). It is an operational fact that a large vehicle (some 50 seats) has to spend considerable time assembling a full passenger load in the neighborhood and then distributing it at the other end of the trip. Since each rider is only interested in his door-to-door travel time, smaller (13 seats) and more agile vehicles at more frequent intervals (given the same total demand) will be more responsive. Hence, we now see commuter vans as the next generation of a service type competing for the regular in-and-out passengers along a number of corridors.

2. Commuter Vans in the Boroughs

Of the various private sector transport modes and variations discussed in this research report, commuter vans are the youngest. They too have been spontaneously generated, and they are attempting to become established in the total inventory of New York's transit services. They are regarded by many (primarily those providing already established services) as unwelcome intrusions. They certainly are making the local transportation situation more complicated, and in a number of instances they do not even pretend to respect existing regulations.

Because of their recent appearance, it is still rather difficult to draw a coherent picture of their role or to generalize about systematic patterns. The best that can be done at this time is to look at cases.

a. Riverdale Cases

A place with a history in van operations is Riverdale in western Bronx -- a distinct neighborhood, populated by families at the upper end of the income scale, that has never had a direct subway connection and probably will never ask for one. Yet, its residents need access to employment centers, and not everybody is carried by a limousine or taxi. A bus line -- Bx7 -- provides a link to subway stations across the Harlem River (Broadway) Bridge, but this service has always been perceived as slow and infrequent.

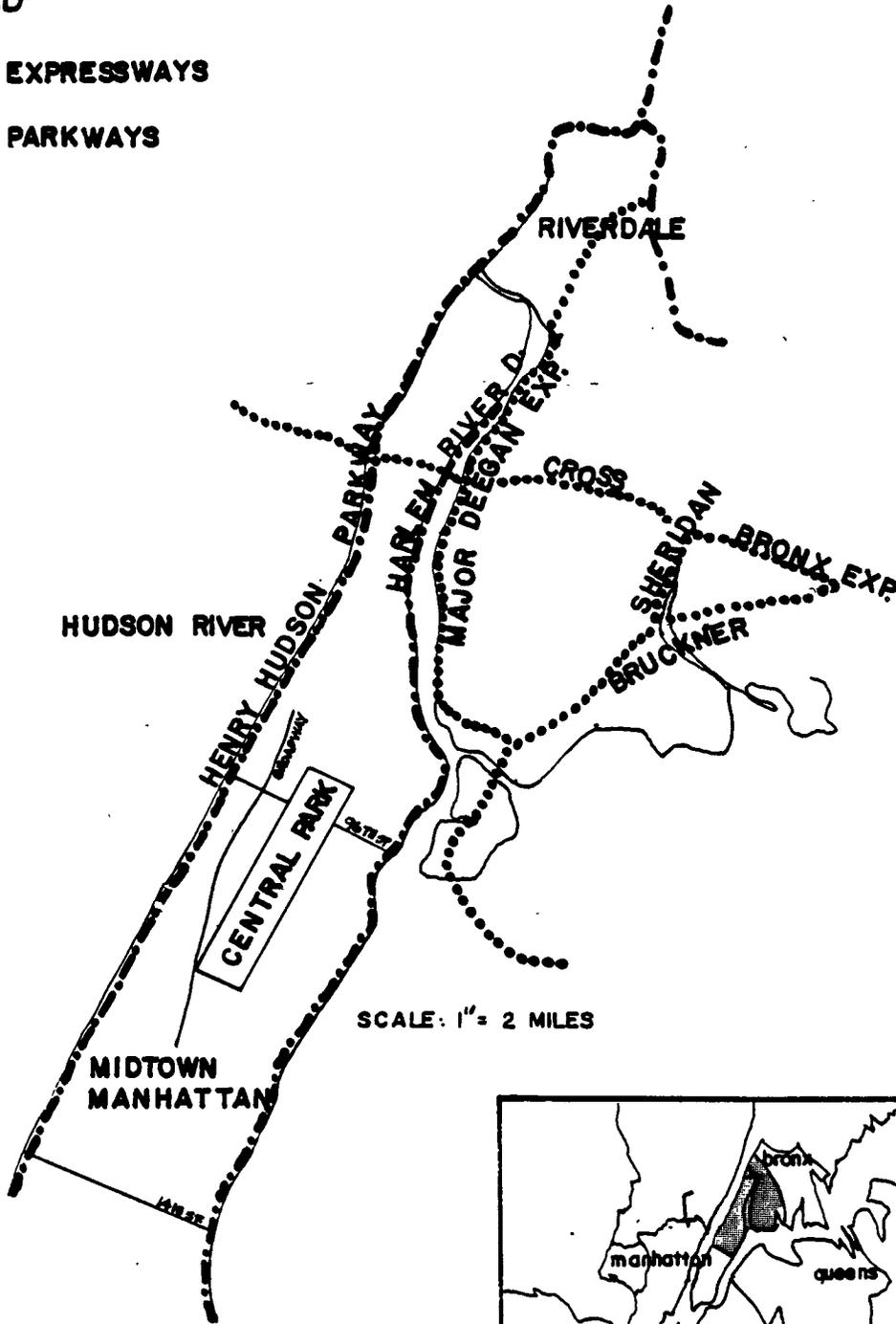
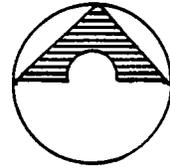
This situation has existed for years, and it generated one of the first recorded instances of a local car service attempting to fill the perceived gap (The New York Times, 1975). More than ten years ago, a jitney type operation was instituted, but it generated a vigorous counter-attack by MTA, protecting its bus line, insisting that full enforcement by the police of existing rules take place.

Presently, several fullfledged van operations are providing regular service. One of these companies is Exec-You-Van, Inc. that operates between Riverdale and Midtown Manhattan. Its principal earmark is that it scrupulously observes all existing

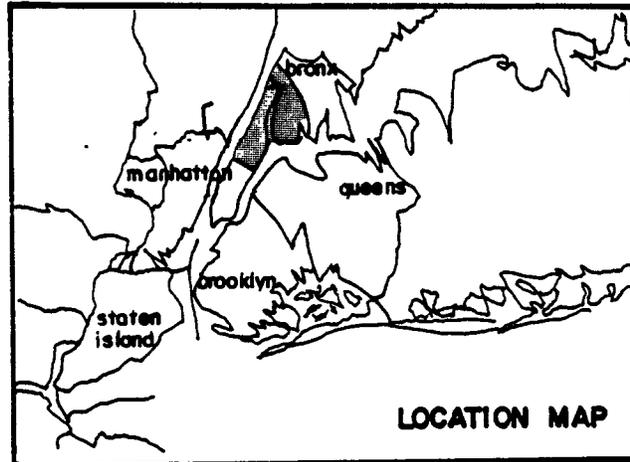
LEGEND

..... EXPRESSWAYS

..... PARKWAYS



SCALE: 1" = 2 MILES



LOCATION MAP

RIVERDALE-NORTHERN MANHATTAN

FIGURE

8

PRIVATE TRANSPORTATION SERVICES IN THE NEW YORK REGION

rules and regulations and goes to great lengths to provide quality service. It serves one of the most affluent neighborhoods in the City.

All rides are by prearrangement over the telephone (601-EXEC). About half of the business consists of regular daily passengers who usually call in on Sunday for the week. Most of them also book return trips in the afternoon. They may prepay for the entire week and use vouchers for each trip. Those who call in on any given morning may not be able to get a seat during rush hours (6:15 to 8:45 AM), but this is no problem in the off-hours. It is recommended that arrangements be made the day before. The fare is \$3.00. The clients are picked up at their door, and the drivers have full information on their origins and destinations, even the name of each rider.

The vans operate on a tight schedule (the driver will not wait more than two minutes). They use the Henry Hudson Parkway and exit at 96th Street on the West Side of Manhattan. There are specific stops which start at 96th/Broadway, and the routes reach as far south as 14th Street (between Lexington Avenue and the Hudson River).

The office of the van company is located on 242nd Street and Broadway, sharing space with an automobile insurance firm. (The dispatching room with the communications equipment is actually placed in a closet.) Another dispatcher is stationed on 15th Street.

This particular firm started in 1983 as an association of owners/drivers. The base owner provided dispatching services and collected commissions. This form of operation, however, did not succeed, and the principal entrepreneur was left alone with a van. In the meantime Liberty Bus Company and the MTA took the owner to court claiming that he picked up passengers at bus stops. The case was dismissed, however, and the operation was formalized under a State DOT license. Within the last year, more vans were acquired, another partner joined the firm, and it was incorporated. There are now four vans in the fleet, second-hand but well maintained (14 seats each), and they are owned directly by the firm. The vehicles carry livery plates; the owners have no association with or even specific awareness of the Taxi and Limousine Commission.

Each van is equipped with a mobile telephone (not radio) which is not completely essential because the vehicles are mostly on scheduled runs, but are most useful in emergency situations or when instantaneous adjustments have to be made. The telephones are used sparingly, however, because of the high charges. (Drivers have been observed to stop at pay phones on the streets instead.)

Drivers (currently five in number) are hired by the owners, with preference given to young people with enthusiasm for this kind

of service work. The quality and stability of this staff had been a problem in the past, but today considerable care is taken in driver selection. (The business depends on personal relationships and a reputation for reliability, courtesy, and safety.) Applicants are interviewed, their driving record is checked, and they are tested for knowledge of Riverdale and Manhattan. Each takes two practice runs in a passenger seat to observe the operations and to be observed (without pay). Then a candidate may be given a run behind a wheel (for pay) and eventually hired. They are instructed to be most polite toward patrons and to observe all traffic regulations.

The drivers collect fares, and they are checked out each evening in the office. Complete records are kept of every trip, and daily sheets are prepared. The drivers are paid for each round trip \$12.50 (about two hours), and they average four tours per day. They work usually from 7 to 10 AM and again after 4 PM. Thus, their daily income is \$50 for 8 hours, but on a split shift. Needless to say, they do not belong to a labor union. Sometimes a van may be driven by one of the owners or even the (woman) dispatcher.

The current (summer 1986) schedule lists 17 trips each work day to Manhattan and an equal number of returns, plus one late evening round trip. On Saturdays, there are ten round trips. on weekends, other trips can be arranged, and there is scheduled service in the summer to Jones Beach (\$13 per passenger round trip, including admission to the beach).

The owners have been quite willing to disclose financial information as well.

The capital expenditures are the following per van:

Purchase price (1984 used vehicle)	\$10,000-11,000
Telephone in the van	\$ 1,500
Insurance (liability, fire, theft per year)	\$ 4,000
Registration and inspection (NYS DOT)	\$ 150
Sign on van	\$ 100

Operating expenses per van are the following:

Gas each day	\$	20
Toll (each crossing of the Henry Hudson Bridge)	\$	0.70
Phone usage per minute	\$	0.55

Added to all this are:

Drivers' wages	about \$ 50 for each per day
Dispatchers' wages	
Telephone bills	
Rental of space	
Office expenses	
Other legal and insurance fees	

Exec-You-Van does not have a monopoly within its community. Besides regular public buses, there are taxis, limousine services, and express bus service, but this is not regarded by the owners as serious competition because of the difference in service type. Indeed, Exec-You-Van regards Liberty riders as a pool of potential patrons. But there is also at least one more very similar van operation -- Mosholu (discussed below) -- that has been in business for 16 years and owns more than 20 vans.

Advertising of the service includes ads in the community's newspapers, flyers left in lobbies, posters at key intersections, contacts with doormen of large buildings, and -- above all -- word of mouth.

The owners take great pride in the "high caliber" of their service; they believe that they provide a more extensive and responsive service than their competitors. They are continuously on guard against any possible violations of rules and regulations and unacceptable behavior by their drivers. The owners insist that this is a "family" business, with regular riders knowing the drivers and the patrons having full confidence in the operations.

The owners work long hours, and they believe that their business can be expanded considerably. This would include not only deeper market penetration in Riverdale itself, but also more services, such as to the theater district and expansion into Westchester County. Capital investment does not appear to be a problem (vans can be leased); growth would be a function of vigorous promotion and continuance of the good reputation of the service.

Mosholu Limousine Service, Inc. is very similar in its operational aspects to Exec-You-Van, except that it is older and larger. It started in 1951 as a neighborhood taxi service utilizing Cadillacs and charging 50 cents a ride. It is said that the company had some sort of understanding with City officials at that time that allowed it to operate without too much interference.

In 1968, express bus services started in this area, and Liberty Lines came into being. These new operations, organized expressly to provide commuter service to the Manhattan core, forced a number of local enterprises out of business as the demand for car service shrank. Mosholu survived, but in 1974 it changed its mode of operation and switched to vans. The growing fuel costs required greater efficiency, i.e., the carrying of more passengers in a single vehicle.

About two years ago, Mosholu underwent reorganization again, becoming a partnership of six owners and embarking on a vigorous promotional campaign. This was based on service improvements, such as upgrading the vehicles, hiring more

competent and courteous dispatchers and drivers, and expanding the schedule of runs to Manhattan. Advertising in the community's papers and handing out of flyers accompanied the other actions. The result was that the daily passenger load grew from about 200 to 700-800. Clearly a dormant market was being tapped.

At the present time, the Mosholu enterprise consists of 29 vans, all but four or five of which belong to individual owner/drivers. It is likely that the company will expand its van ownership of the fleet because it is becoming increasingly difficult to engage reliable owner/drivers who are willing to work under the discipline of the company and pay its fees. (They can easily operate on their own -- as gypsies if necessary.)

The owner/drivers pay 17 percent of the fares collected to Mosholu for the benefits -of belonging to the company. All of the vehicles carry "Z" plates. Most of the vans are 1 1/2 to 2 years old, but have no radios or telephones. A radio system is planned to be installed soon so that customer responsiveness can be upgraded, alerts about service delay can be transmitted from the operations center, and schedule and route changes can be made en route as appropriate. The management expects a 20 to 30 percent increase in business due to this change. At the present time, drivers use pay telephones to check in before starting their runs to Manhattan and when problems are encountered.

Mosholu provides 30 round trips (\$3.00 for each leg) from Riverdale each day of the work week. On Saturdays there are 14 round trips; nine on Sundays, plus two to South Street Seaport (\$10 for the round trip). Passengers are picked up at their door in Riverdale and are brought as far as 23rd Street in Manhattan along routes following Fifth or Seventh Avenues during the morning rush periods. After 9 AM, passengers will be let off almost anywhere in the Midtown service area. All passengers prearrange their trips and pay for each ride separately. Schedules are observed rigorously.

The Henry Hudson Parkway is used for the line-haul portion of this trip with exit at 96th Street. This creates a traffic regulation problem because police consider their 14-passenger vehicles to be buses, which are not officially allowed on the parkway. The company regards this as unfair treatment, particularly because the same vehicles are not allowed to use exclusive City bus lanes either.

The service carries a New York State Department of Transportation license (#24050), and that agency also inspects the vehicles.

b. Other Operations in New York City

Other services of a similar kind exist as well. They emanate

from various areas of the City, and they are becoming noticeable, particularly in certain sections of the Manhattan CBD where the vehicles congregate during rush hours to discharge or pick up their passengers. They may blend into a heavy traffic stream on major arteries and be practically indistinguishable from other similar vans, but they are most visible when many of them stop for extended periods of time at certain locations and aggressively solicit fares. To attract business, the operators have to make the service known.

Thus, commuter vans have started to come to the attention of those groups and agencies that are concerned about congestion of local street space or are mandated to protect franchise arrangements. Some government-sponsored studies have commenced, and, in order not to duplicate efforts in a field that has not yet been charted out at all, on the next few pages some summary findings are included from one such recent study.

The 1984 Commuter Van Service Policy Study (Draft Final Report dated February 1, 1986) was sponsored by the New York City Department of City Planning and done by the Polytechnic Institute of New York (in association with Urbitran Associates and Herbert S. Levinson).

It reported that approximately 1,000 van trips take place during each working rush period (7 to 9 AM) in the City. Of these, nearly three quarters were express trips into Manhattan, serving about 8,000 riders. This number of trips (697 -- see following table) was determined through field surveys or from Triborough Bridge and Tunnel Authority and Port Authority records. Thus these statistics can be regarded as reasonably accurate for late 1984. It was, therefore, interesting and productive to repeat the counts two years later, which was done by our team in October of 1986 at the same locations.

The results shown in the same table indicate a very significant increase -- not exactly a doubling in two years, but getting close to it. Recognizing that we encountered some practical survey difficulties at a few locations and that the procedures of the two surveys were not exactly the same, the findings are instructive nevertheless. Obviously, the growth in this activity continues at a fast pace, particularly from Brooklyn and Staten Island. These types of operations were not particularly well known to the general public two years ago; they are a subject of public debate and media attention today.

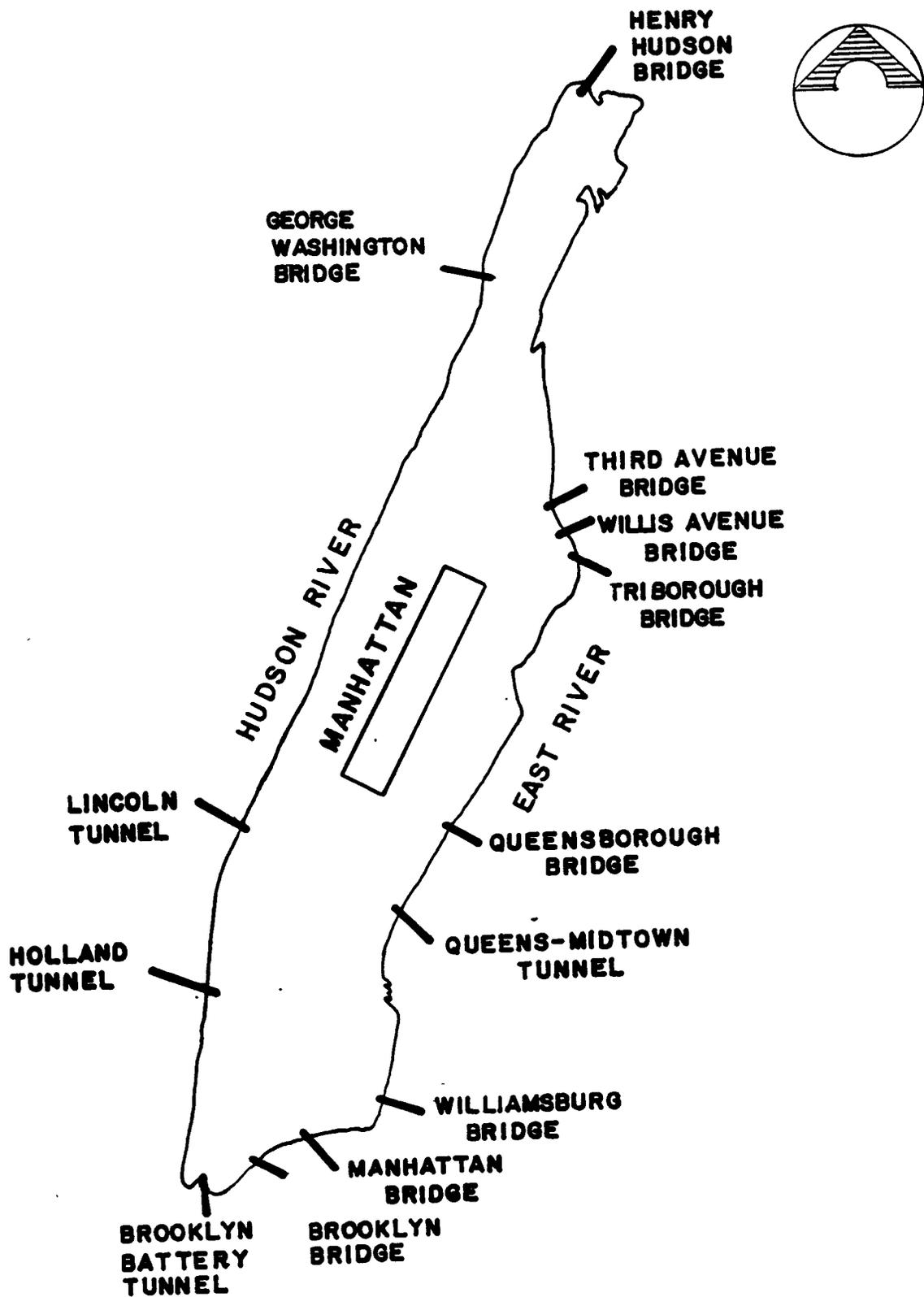
Table 10
Daily Commuter Van Activity
7 to 9 AM Entries into Manhattan

August to November 1984 (Polytechnic Institute Institute of NY Survey)	October 1986 (Columbia University Survey)	
<u>From the Bronx</u>		
Henry Hudson Bridge	24	43
Third Avenue Bridge	62	5*
Triborough Bridge	28	(see below)
<u>From Queens</u>		
Triborough Bridge	36	26*
Queensborough Bridge	72	<u>50*</u>
<u>Midtown Tunnel</u>	40	<u>35</u>
<u>From Brooklyn/Staten Island</u>		
<u>Brooklyn Bridge</u>	98	<u>226</u>
<u>Brooklyn-Battery Tunnel</u>	154	<u>250</u>
<u>From New Jersey</u>		
	<u>32</u>	
<u>Holland Tunnel</u>	<u>153</u>	<u>37</u>
<u>Lincoln Tunnel</u>	<u>36</u>	<u>248</u>
<u>George Washington Bridge</u>	<u>697</u>	<u>169</u>
<u>TOTAL</u>		<u>1,089</u>

Note: *) Count may be low due to construction or diversions on the day of the survey, or inability of surveyors to cover all lanes.

The Polytechnic study observed -- as have we -- that the Manhattan-bound commuter vans compete frequently with, and operate similarly to, express buses. They charge the same fares, often follow the same routes, and even solicit riders from bus stops. It was also determined that up to 95 percent of commuter van riders are former transit passengers. In particular, they had switched from express buses because the vans always provided a seat and, being less delayed by many passengers getting in and out, could reach destinations faster.

A full range of problems have been identified beyond the legal and administrative issues, which principally include preemption of street space, aggressive driving, disregard of parking and



<h1 style="text-align: center;">ENTRY POINTS TO MANHATTAN</h1>	FIGURE 9
PRIVATE TRANSPORTATION SERVICES IN THE NEW YORK REGION	

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standing regulations, and letting passengers off into the traffic stream.

The Polytechnic study also looked at local feeder operations to subway stations and major transportation hubs. It was estimated that 300 such van trips take place each morning accommodating approximately 3,000 riders. We have to recognize, however, that the nature of the operations makes any quantitative estimates most uncertain. There are numerous operators at dozens of locations driving different kinds of vehicles in a minimally organized and largely uncontrolled network (as discussed in another section of this report).

If there actually were 300 feeder trips throughout the City in late 1984 each morning -- and we have no specific reason to question the accuracy of this number -- then this industry has grown tremendously in just two years. As is described in a subsequent section of this report, our study counted over 170 such trips at a single station alone in the South Jamaica complex in the summer of 1986.

The Polytechnic researchers suggest that the establishment and growth of the van operations have been triggered by deficiencies in the regular transit service and riders' concerns about personal safety and demand for better accessibility. The transit strike of 1980 gave a significant boost to the private operations, which did not fade much after the strike was settled. There is always the feature of unemployed individuals seeking to earn an income, which has not been precluded by significant enforcement of regulations during this period. For those who wish to operate in a "legitimate" mode, the New York State Department of Transportation and Interstate Commerce Commission liberal certification processes provide such means.

Besides endeavoring to understand and document the extent of the van operations, the 1984 study's objectives were to determine how much jurisdiction should and can be assumed by New York City over intraurban services and to develop a comprehensive policy for regulations. Also, there was a clear effort to see whether conventional, i.e. "official," transit modes can recapture this market.

The conclusions of the Study were that the City can indeed expand its authority, particularly by reestablishing and extending the powers of the Taxi and Limousine Commission over the intracity operators, assisted by the Bureau of Franchises, certifying specific routes as well as licensing drivers. Origins of service should not be closer than one third mile from a local bus line and central layover areas would have to be identified. Specific street regulations are recommended, including prohibition of passenger pickup and discharge near bridges and tunnels, not allowing such vans to travel in bus lanes or to utilize bus stops. None of this has been enacted or even seriously discussed in the appropriate legislative bodies during the last two years.

The Polytechnic report was based on four specific cases which looked in considerable detail at two commuter van operations (Bath Beach in South Brooklyn and southern Staten Island) and two feeder services (River Park Towers in the Bronx and Laurelton/Jamaica in Queens).

The commuter van operations had the following Manhattan concentrations for drop-offs and pick-ups of passengers:

- 42nd Street adjacent to the Port Authority Bus Terminal;
- Fifth Avenue between 42nd and 43rd Streets, between 37th and 38th Streets, and near 59th Street;
- Columbus Circle;
- Sixth Avenue between 42nd and 54th Streets;
- Lexington and Third Avenues between 45th and 54th Streets.

Lower Manhattan:

- City Hall Park along both Broadway and Park Row;
- Battery Place and in the vicinity;
- Lower Broadway below Vesey Street;
- Liberty Plaza and surrounding streets;
- Water Street between Whitehall and Wall Streets;
- Beekman Street and Park Row;
- Vesey Street and Park Plaza;
- Trinity Place and Morris Street.

The neighborhoods that generated this commuter van traffic in 1984 were identified as the following:

- The Bronx (7 percent of all van trips):
Co-op City in the northeast;
Riverdale in the northwest.
- Brooklyn (14 percent):
Bath Beach;
Bay Ridge;
Coney Island;
Mill Basin;
Sheepshead Bay;
Garritsen Beach.
- Queens (19 percent):
Queens Village/Hollis;
Central Flushing;
Astoria;
Howard Beach;
Jewel Avenue Corridor.
- Staten Island (25 percent):
particularly southern part,
but including also the Staten Island Mall,
the Clove/Targee corridor, and
along Forest and Castleton Avenues.

- Plus:
New Jersey (30 percent)
Westchester, Nassau/Suffolk & Connecticut (5 percent).

Feeder services (primarily to major subway stations) were the following in 1984:

- The Bronx:
River Park Towers in West Bronx;
Pelham Bay Park in East Bronx;
To stations of #6 line (Hunt's Point Ave. to Parkchester);
To stations of #5 line.
- Brooklyn:
Crown Heights along Utical Ave.;
Flatlands (Brooklyn College);
Coney Island (Stillwell and Brighton Beach);
Sheepshead Bay;
Bay Ridge.
- Queens:
Southeast Queens (Sutphin and Parsons Blvds.,
169th and 179th Streets).
- Staten Island:
To Ferry Terminal at St. George.

3. Commuter Vans from New Jersey

At any time during the day, but particularly during rush hours, the entire curbside along 42nd Street north of the Port Authority Bus Terminal (PABT) toward Eighth Avenue is filled with vans that move in and out in rapid succession. Many patrons board without hesitation since they are obviously regular riders; others are solicited by drivers. Waiting passengers utilize the shelter provided by the terminal building when the weather is not pleasant, but Port Authority management and police pay no particular attention because the real activity takes place across the curb of a public street. There is even a dispatcher on the sidewalk managing the operations. Local community groups have complained about the added congestion occasionally, but not too vociferously, because the major streets tend to be badly overloaded in any case. After a load is assembled, each van moves quickly toward the Lincoln Tunnel, disappears through its portal, but usually emerges again less than an hour later for the next round trip.

Who is responsible for this service that takes advantage of a series of public facilities and is obviously in vigorous use directly parallel to one of the major commuter operations in the region? Who controls it? It -- as well as some other similar activities at a few other places -- is a complete expression of



Commuter vans queue up alongside the Port Authority Bus Terminal.



Parking lot used by commuter vans across from Bus Terminal.



Commuter vans with ICC and NJDOT licenses on side doors.

FIGURE 10

private initiative, operating in a shadowy, or at least disputed, area of legality. (The service has another important feature --it crosses a state line.)

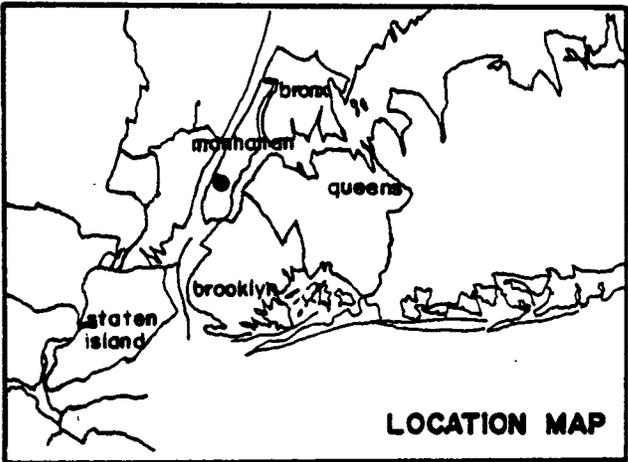
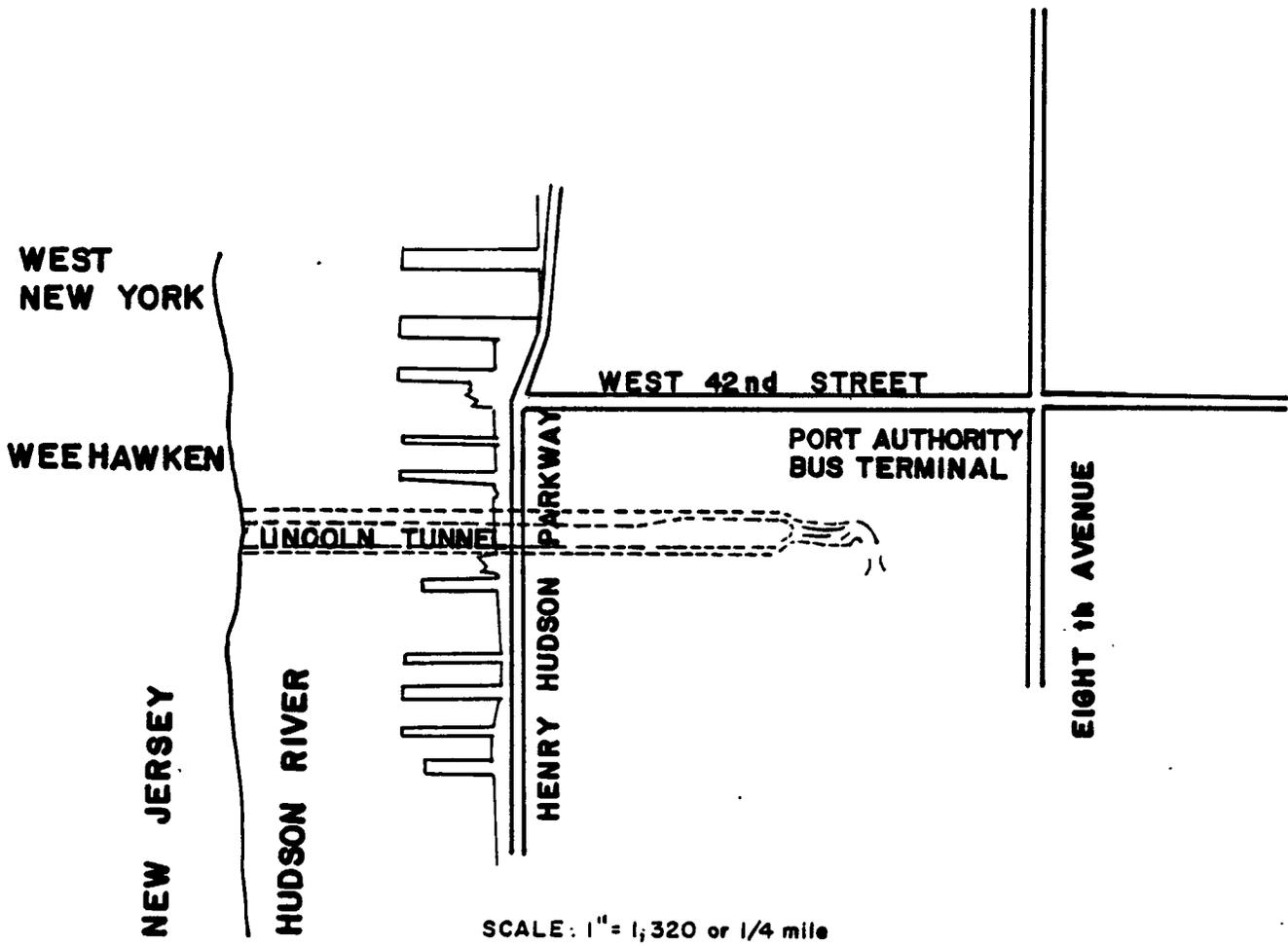
The van operations at the Port Authority Bus Terminal, as is the case at most other places receiving such service, consist entirely of many small business units -- one owner/operator for each van. However, this is not apparent on the street because they are grouped together in associations carrying a name that is usually displayed on the sides of the vehicle. Currently (spring and summer of 1986) the companies operating alongside the PA terminal -- a major logical point of convergence for New Jersey services to Midtown -- include Executive Service, Inter Van Corporation, New Jersey Van Corporation (NJV), and B. Parado Limousine Service.

All of them travel along established New Jersey Transit (N.J. Transit) routes (specifically Boulevard East into Weehawken and West New York); all their drivers utilize 12 to 15 seat vans. The fare is \$1.25, exactly the same as for the parallel but much slower public transit service.

Since the operational characteristics of the various companies are very similar, this research effort concentrated on one of them -- Executive Service -- and not only observed its operations in the field, but interviewed also its management with follow-up visits, distributed questionnaires to its drivers, and contacted New Jersey Department of Transportation officials and N.J. Transit managers as to their reactions to the competitive situation that has become established.

The association (or company or cooperative) is the key element in this form of activity (similar to the base of livery car services). It has no particular charter, but represents the private initiative of an individual or partners -- usually former drivers themselves who possess business skills and an ambition to make money. The association has many of the characteristics of a medieval trade guild or a loose brotherhood. (There are some women owner/drivers too.) It provides a central organizing element, protection and stability of operations, an entry point for individuals, a sense of belonging and legitimacy for the drivers, a stronger voice to the outside, and certain business conveniences. Among the latter are the matters of licensing and insurance.

Since this van service operates across the New York/New Jersey line, it is subject -- at least so far -- to federal Interstate Commerce Commission (ICC) rules and licensing requirements. Since this agency's current mandate is "to reduce regulation of and to increase competition in the motor bus industry," perhaps eventually leading to complete deregulation, the obtaining of a license is not a difficult matter. ICC issues three types of licenses for passenger carriers: regular route service, charter service, and special operations. The vans are eligible for



LINCOLN TUNNEL CORRIDOR	FIGURE II
PRIVATE TRANSPORTATION SERVICES IN THE NEW YORK REGION	

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either regular route service or special operations. The manager of the association applies for one license, and the number is painted on all the vans belonging to the group.

New York City and State and the corresponding local political units on the other side of the river have no real jurisdiction, albeit the City has complained bitterly about this situation -- it believes that a major burden is being imposed on City streets and quality of life, with no redress or control through local government agencies charged with such duties at the municipal level. Needless to say, there is thus no overall planning or management of the extent and quality of the service under the ICC purview. Everybody operates in an open market.

ICC's criteria for granting licenses concentrate on willingness, ability, and fitness to provide the proposed service. The latter element is considered to include the meeting of basic safety standards and the availability of insurance coverage of \$5,000,000 for vehicles of 16 passengers or more and \$1,500,000 for vehicles of 15 passengers or less. The association or cooperative is in a good position to arrange for favorable rates (and there are no vehicles with more than 15 seats).

The owners of the vehicles register their cars individually and obtain regular license plates.

While most vans are operated personally by their owners, occasionally they are also leased. The driver thus does everything: from collecting the fares to operating a small business to repairing the vehicle. Basically, they are accountable only to themselves, and there is no labor union involvement at all.

The Executive Service Company is the principal operator within the corridor (western-shore of Hudson River to PABT). The origin of this enterprise is most instructive, and it is characteristic of many of the grass-roots private operations in the New York region and presumably elsewhere. About five years ago a few individuals on the New Jersey side of the river found themselves without jobs but still owning automobiles. A snag developed in the regular public commuting services, and these drivers went on the streets to help out and to earn a few dollars. When the shortage period in public service was over, there was no real reason to stop operations since a basic clientele had been captured.

Soon thereafter a cooperative was formed -- Inter Van -- which a few individuals left later to establish Executive Service. The company is run by a small staff consisting of the president, vice president, and secretary, and its office is located on Park Avenue in Guttenberg, New Jersey. While the company operates as an umbrella agency with which van owners are affiliated, it also owns a small fleet of vehicles and provides special services to airports and other areas. Express service to Wall Street is

available for patrons on a prearranged basis. In order to distinguish between the service that the company provides itself and that of the van service operators, the latter are grouped under the name of Express Transit. Express Transit is in effect a secondary subsidiary company under the directorship of Executive Service.

As it is presently organized, the company's responsibility to its approximately 30 affiliates does not go much beyond assistance in obtaining supplemental insurance coverage, the availability of the ICC license, and representation if necessary when their rights are being infringed upon. Van owners associated with the company operate under a contract and are required to pay an annual fee for the privileges derived from association with the company.

The company controls their van affiliates only in terms of ensuring that they operate on the route they are assigned to, that they maintain their vehicles properly, and that good driving habits and road codes and traffic signals are observed. In trying to maintain these standards and exercising some vigilance, the company occasionally performs spot checks on the vans on their routes.

The company has a schedule in mind, at least in terms of how many drivers should be on the road at any given time. In practice, however, this control is difficult to maintain since drivers are independent and need not follow company scheduling. In addition, traffic along this particular route is very heavy and demand for service is great. Thus, up to now, there has been enough business for everybody in the association who wants to work.

The vans are new vehicles, well maintained, and air conditioned. There are 14 comfortable seats, although a full load represents a rather tight fit. The vehicles will stop anywhere along the route to pick up or discharge passengers, but regular bus stops appear to be favored for this purpose. During peak periods the frequency of van service is high -- a vehicle is almost always in sight along the route; in off-hours there may be a five minute wait. This is still much superior to the service interval that N.J. Transit is able to provide.

The company has no authority to set work hours; it does not provide work benefits or contribute to drivers' income. The financial survival and profitability ultimately rest with the van owners themselves. Maintenance of the vehicles, insurance costs, tolls, and gas are also the responsibility of the operators. Even in the instances where vans are leased, the drivers are on their own and are only required to pay leasing fees or a percentage of their profits, depending on the arrangement between owner and lessee.

The company requires that affiliates hand over their daily intake to be recorded in the company's books. The entire revenue is returned to the individuals by company check. The stated reason behind this procedure is that it is done for taxation purposes and general accountability. (The degree of control associated with these steps is not known to our research team.)

Undoubtedly, the scope of operations and quality of service of the New Jersey-based commuter van activity is primarily a reflection of the efforts by the owner/drivers, since basically a personal service is being provided in an overall loose framework. To document these characteristics, questionnaires (see Appendix K) were distributed in two languages to the operators. Of the 30 members, only 10 responded, despite repeated assurances of complete anonymity. Given the nature of the operations and the attitudes and status of the individuals, this percentage of answers is not surprising, however. The view of the service from the drivers' perspective is of considerable interest to identify problem areas and potential improvements.

All but one of the 30 affiliates are of Hispanic or West Indian origin, coming mainly from South America and the Caribbean. Among the respondents, the driving experience ranges from 4 to 25 years, while their ages range from 26 to 47. Most joined the company because of suggestions by their friends and other operators. The majority of the respondents (8) owned their vehicles, as opposed to only two who leased. Nearly all considered the service their full time job. The length of time that drivers indicated as their tenure in this business supports the idea that the van service is a relatively new phenomenon. The periods range from 3 weeks to 2 1/2 years.

One of the important advantages that drivers cite for this type of business is the independence that it allows them. It presents an opportunity for recent immigrants to earn a living, while adapting to the new surroundings without too much trauma. Individuals are able to carve out their own working environment and establish their own work practices. The entry fee -- the capital investment -- for this business is relatively manageable: the cost of a vehicle only, which is in high contrast to the price today of a medallion for a New York City yellow taxi. Once integrated into the American economic system, some drivers might become confident enough to find other jobs if this business were to fail.

The majority of the respondents follow a 5 to 6-day work week, working an average of 8 to 10 hours per day. Drivers estimate that they pick up an average of 50 to 60 passengers per day, a very conservative figure. What is the total number of passengers that the van service as a whole transports? Such a figure is difficult to estimate at this point in time, and nobody is ready to venture a guess in this very complex

situation -- still a small component of a very large commuting system across the river.

It is also difficult to determine the average amount spent on gas, tolls, maintenance, and other operational needs. Much certainly depends on the individual habits and abilities of the drivers. All indicated that their intake was sufficient to pay for tolls, but only 70 to 90 percent felt that the income was enough to cover maintenance, insurance, and gas adequately. Yet, at the same time, it was noted that at least 60 percent of the respondents are able to save some money from their labor. The majority said that they wanted to stay in the business. Some, but not all, see this as a life time occupation.

The attractiveness of this type of money-making activity has increased to such an extent that competition on the same route among operators and companies is becoming fierce. This is reflected in the responses by operators who cite competition as the prime negative feature associated with the business. Police involvement, which is perceived as harassment, follows closely as a significant concern. Since there are no entry controls, at least 100 vans (of several companies and perhaps some "free lancers") operate on the Boulevard East route at this time, which makes waiting time for patrons a very convenient 5 to 10 minutes, but is beginning to cut into the net revenues of the operators.

Once the vehicles arrive in New York, vans generally terminate their trips at the Port Authority Bus Terminal. Some vans go further into Manhattan, while most try to make as quick a turnaround as they can. Police attention is frequent at this point, and the lack of any parking facilities or legal stopping areas results in frequent tickets. Several companies, including Executive Service, have tried to secure an off-street place for parking and layovers. However, the cost of acquiring a site in this district is prohibitive, particularly for a small, shoe-string operation. The hope is now to arrange for the use of a parking lot in or around 42nd Street as a pick up and drop off point. Recently, vans have started to stand in the parking lot directly across the street on the north side, as well as use that curb.

While the vans get overwhelmingly favorable reviews from their users, official agencies are not pleased with the service. Chief among these are New York City regulators. The primary concern of the City has been the additional traffic it creates in Manhattan and the competition it presents to established public modes. Studies done for the City have concentrated on assessing the impacts on Manhattan traffic and trying to find ways to best control the service. Local community groups are concerned about the seemingly untidy and improvisational nature of the operations in their district.

New Jersey's regulators are more interested at this time in

ensuring that the service maintains adequate passenger safety. They are, therefore, concerned that vans comply with all safety regulations, licensing procedures, and insurance provisions.

New Jersey Transit -- not surprisingly -- is one of the strongest opponents of the service. The concern is that the vans are in direct competition, siphoning off profits by drawing away patrons. However, no official action has been taken by the agency against the vans, except trying to improve its own service on the route.

The strongest reaction against the vans is exercised by NYC regulatory agencies. Close vigilance by traffic inspectors leads to regular ticketing. Yet, most operators regard this as a part of their business expense and are not deterred from providing the service.

The example of the New Jersey commuter vans shows that if the possibility exists for private individuals to be involved in an effective production of transportation services they will not hesitate to do so. Small entrepreneurs identified a service gap, and they have tried to fill it. The problem to be faced again is that once the enterprise is recognized as viable, the number entering the field increases. The resulting intensive competition makes survival difficult, and can result in a chaotic situation, particularly regarding the conflict with the established public operation.

The sequence of events, however, experienced so far by the New Jersey commuter vans is classic; the same process has been seen in many instances in earlier days when the initial transportation services were being organized through trial and error in American cities. Have we come full circle?

4. Shuttle Services to Subway Stations

As has been mentioned before, the private sector response in low income (i.e., minority) districts has been the institution of shuttle services that are tied to a specific major subway station and fan out along local arteries into the neighborhoods. There are many such operations in New York City, and frequently they duplicate directly public bus routes. This is, however, not always the case, and the services -- through continuous, unplanned adjustments -- probe the market and try to achieve a continuous, fluid balance between supply and demand. In these service modifications, as in almost everything else, operators are not answerable to anybody, and can thus respond instantaneously -- not only to follow shifts in residential distribution, but also, for example, to set up a shuttle for a local event. To prepare a City-wide map with all such operations shown would be a massive task, most likely outdated before the map is printed. It would also be a sobering experience to see the multitude of services and the extent of the aggregate network. (A comprehensive coverage will not be

attempted here; the purpose of this research task is to identify various (representative) types of operations and review their characteristics.)

It also has to be assumed, albeit there is no documentable proof supporting such a statement (only a general attitude emerging from many discussions), that there is a socio-political reason why these shuttle services exist in low income/minority neighborhoods and not in middle class districts (as they do in Latin American cities, for example). There are many underemployed and unemployed individuals here with some resources (namely a car), and their natural reaction is to make use of it. They will do this first among their own people, who readily accept this service because it is not done by an outsider or through a formal mechanism. It is recognized by the local residents that this is a "home-grown" industry, "our thing," the first step up the entrepreneurial ladder -- therefore, it is worthy of support. There is also a very satisfying element, by rider and driver alike, to thumb one's nose at the authorities.

The shuttle services described in this section of the report -- picking up passengers on a public street along a regular route and bringing them to a single point -- violates a number of extant regulations, principally those addressing franchise requirements. This is not a concern out in the neighborhoods, and has not hampered the development of this industry. Again, we have the classic case of a service gap (perceived or real) being filled by individual initiative and a certain type of responsive operations being invented once more. None of the drivers have studied a manual on how to organize a jitney service, there have been no market studies, and nobody has done a comprehensive plan of how all this should fit together. Each participant is hardly aware that similar, if not identical, operations exist elsewhere in the City, not to mention cities in Latin America, Africa, and Asia where jitneys are the dominant type of transportation service. (Do poverty areas in New York have more affinity to urban districts in developing countries than to middle class neighborhoods here?)

It is also possible that the general idea of a jitney service has been brought to North American cities by recent immigrants from countries where such operations are the norm -- Latin America, the West Indies, etc. Indeed, many of the drivers have such origins, but, whether the jitney concept is transplanted or continuously re-invented, its principal characteristic is flexibility. Our research has uncovered many instances where a car base or a group of drivers have switched from the pre-arranged trip mode to jitney operations, have adjusted routes or changed them entirely from one corridor to another. Needless to say, the driving force is the need to make a living, not to satisfy some abstract mobility objectives for residents of New York City or to structure an integrated transportation system.

Let us now turn to some specific examples.

a. South Jamaica, Queens Case

Jamaica Center is one of the important secondary business cores of New York City, and it has been identified for years as a node with much potential for commercial expansion. While this may indeed happen, so far the events have not been overwhelmingly positive, and there has actually been a contraction of business activity. Large residential areas south of Jamaica Center have had an influx of black residents, and several of the areas' neighborhoods have well-maintained single-family residences.

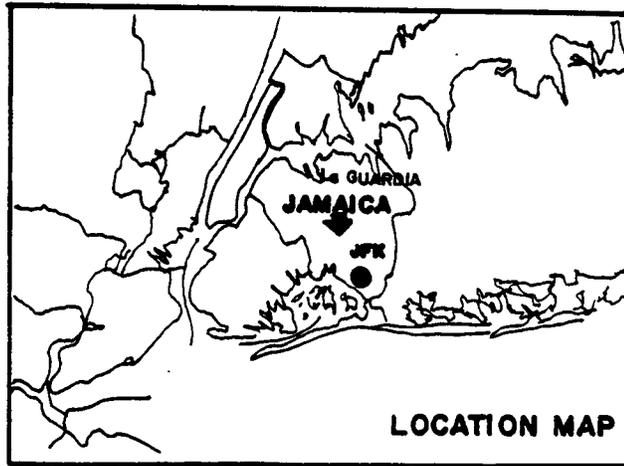
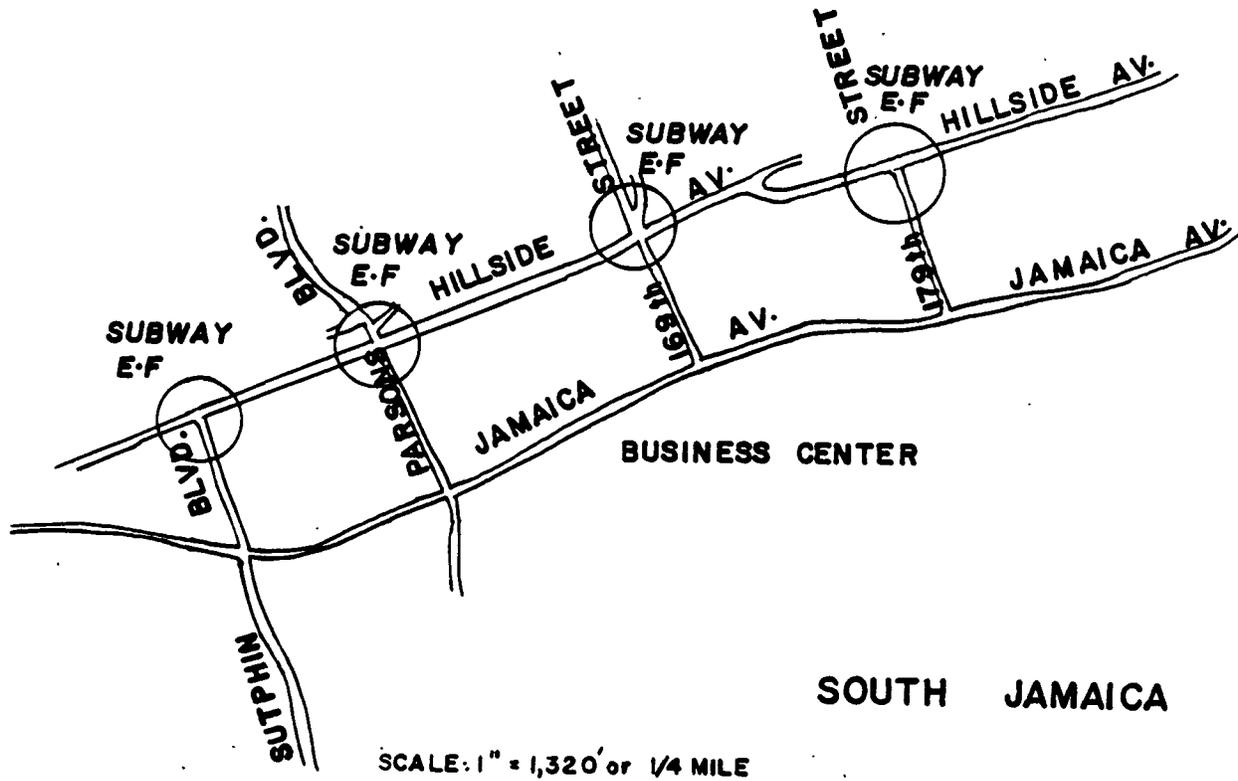
Besides a major station of the Long Island Rail Road, which is of little interest to the local residents, subway lines extend from the Manhattan and Brooklyn CBDs and more or less terminate here. Local bus service exists in as dense a coverage as could be expected, but -- because of the low scale of the community's development -- there are great difficulties in providing good and frequent service.

It is most interesting to note a fundamental difference in the approach toward service planning between the Transit Authority and the private entrepreneurs. The public agency has to look at 24 hours of operation involving large vehicles with fixed routes. Therefore, they have to conclude that this is a low-demand area where any reasonable level of service will fall far short of supporting itself. The commuter van drivers, on the other hand, tend to concentrate on a few peak hours, have small and highly maneuverable vehicles, and are not tied to a specific route rigidly. For them, there is much business here, and the returns are most adequate (at least so far). They also have very limited overhead and other fixed costs.

It is possible for owner/drivers to vary their work schedules or to establish hours that suit their needs. For example, some drivers only work the AM peak and then go on to a regular job; others drive during both peaks and have a part-time job in the middle of the day; a few have the van as their entire source of income and they may put in long hours, extending into the night. There are also instances of joint ownership of a vehicle, which is then kept in operation during several shifts each day.

Four stations at the end of the very busy and very important E and F line are the focal points of the Jamaica commuter van activity. These are 179th Street, 169th Street, Parsons Boulevard, and Sutphin Boulevard, each with a slightly different form of operation, particularly regarding the choice of vehicles.

At two of the stations the feeder vans are organized very similarly to a car service: there is a base, drivers are formally affiliated, rules are observed, and members with outstanding or repeated violations will be asked to leave. The



JAMAICA CENTER

PRIVATE TRANSPORTATION SERVICES IN THE NEW YORK REGION

FIGURE

12

associations keep records, supervise drivers, have back up insurance, can protect some of the rights of its drivers, and generally provide a framework of "legitimacy." Many of these features are important to a good number of drivers. But not to all. Many are unwilling or unable to join organizations that exercise controls over their behavior and require the possession of proper documents.

Thus, the other two stations in the South Jamaica complex are serviced by feeder/jitney operations that have no apparent internal organization, as are activities at many other transportation nodes, particularly at major subway stations in lower income neighborhoods (discussed subsequently). It is reasonable to speculate that the unorganized situation may be an initial stage that establishes a market, organizes operational patterns by trial and error, and builds a fleet of vehicles and drivers. This total activity can then be given a fixed form through a formalized cooperative arrangement or by an individual or partnership structure providing the managerial and administrative leadership. Or it can be left alone to operate day-by-day through a natural balance of supply and demand factors. The regulatory agencies of the City of New York continue to play no part in the developments discussed above.

One-Hundred and Sixty-Ninth Street Node

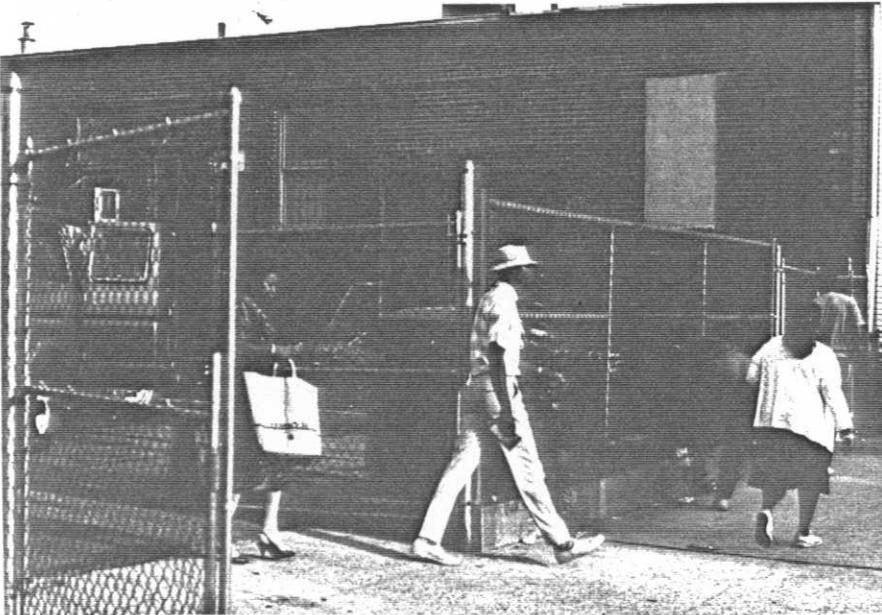
The 169th Street operation appears to be the most intensive and well developed one among the Jamaica Center commuter activities. The service vehicles are owned or leased by the drivers (utilizing 14-passenger vans exclusively), but they all are affiliated with a single company -- Queens Van Plan. It is said to be one of the largest and best managed of such operations in Queens. The vehicles are well maintained and clean, and they all carry the company name and the same New York State Department of Transportation license number (30453). They have also a small decal number, fixing their position in the fleet. A total of 40 vans belong to this group. Most have livery plates, the remainder have "Z" plates.

The company (or cooperative) again is the central organizing element of the operations, and it manages the service internally, as well as represents it to the outside. The latter efforts appear to focus on contacts with the DOT and the fighting of traffic tickets. The company's slogan "The Choice of the People, Serving Queens Community" is most visible.

The 169th Street operations are most unusual because an off-street lot (about 100 x 100 feet) around the corner from the subway station is available. Every vehicle run pulls in here, passengers get off, and the van turns around and leaves. There is only one gate, and the internal maneuvering is somewhat constrained, particularly when up to five vehicles try to turn around at the same time, but the streets are certainly kept free. (New York TA buses and Nassau County MSBA buses have



Van turning around in Queens Van Plan parking lot.



Passengers walking to subway station.



Peak activity with several vans discharging passengers.

FIGURE 13



Queens Van Plan
vehicle with a full
load of passengers
enters off-street lot.



Vans, liveries, and
buses crowd the
streets in Queens.



Passengers entering
and leaving vehicles
in the middle of the
street.

FIGURE 14

stops there.) The lot is closed off with a cyclone fence, and it is also used for parking of vans at night (with 23 spaces).

Most vans carry radios, which are not particularly essential for a regular shuttle service, but are useful to receive warnings about problems and to dispatch service during off-hours.

The principal service route starts at the Nassau County line (no vans go beyond the City boundary), follows Merrick Boulevard and 133rd Street or 135th Street, and terminates in the lot at 168th Street and 88th Avenue. During peak periods, vans arrive at an average spacing of about a minute, but, because no schedules are in effect, there is much unavoidable clustering.

There are also a number of branch routes, depending on demand. Passengers are picked up and dropped off along the street, such as 133rd and Merrick Boulevard -- but only on Merrick Boulevard during off peak hours. Previously the City's bus stops on Merrick Boulevard were used as pickup locations which caused a reaction from the official agencies and police involvement. Today, in the morning hours, at the upstream end of the route, the vans go through the residential neighborhoods on parallel streets, about a block away from Merrick. Everybody knows where to stand, even though there are no signs or other informational markings.

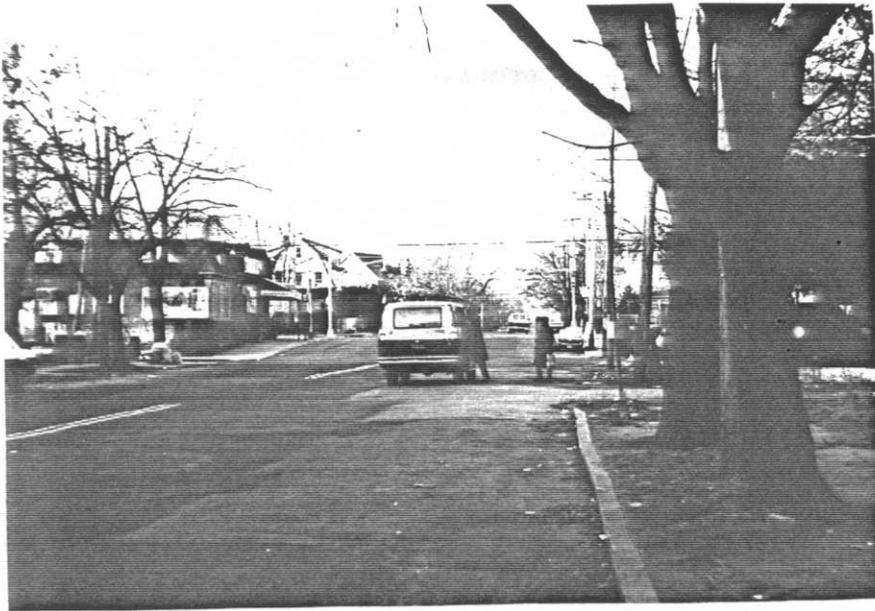
The owner/drivers are black; the patrons are almost all black. The latter are predominantly office workers in Manhattan who stream back and forth from the subway and pay a double fare. (The van tariff is \$1.00.) In the AM peak period, all the arriving vans are full, but of course empty for the return trip. A driver can make up to 10 revenue producing trips each day.

Hillside Avenue and Sutphin Boulevard Node

At this station -- in contrast to the 169th Street node -- the feeder operations are not organized under a single enterprise (or cooperative). They are extremely heavy nonetheless, and the unaffiliated owner/drivers operate independently.

The quality and condition of the vans vary greatly as well -- ranging from new and clean vehicles to ones that are dented a little or a lot. They come in all kinds of colors, and some have a name painted on the side ("Pastor and Founder," "Vance Young Enterprises," "Christ Temple Deliverance Church, Inc.," "Operator M," etc.). These labels are meaningless, however (except perhaps that there is some comfort and security in having God on one's side), since the vehicles are mostly leased on a short-term basis or, if purchased, there has been no reason to remove the previous name.

The operations at the subway station are extremely chaotic. Besides the vans, the vehicular services focusing on this node



A van picks up passengers on a side street near Merrick Boulevard, Queens.



Jitneys and vans unload passengers on a narrow street.



A livery makes an illegal turn on a crowded street.

FIGURE 15

consists of delivery trucks, regular buses (MTA and Green Bus Lines, private automobiles, and gypsy/livery cars. In addition, there are a number of station wagons, carrying 2 to 5 passengers, which operate similarly to the vans and appear to compete directly with them. (Since the vans do not carry a full load usually, it could very well be that in this uncontrolled environment the station wagons may be in a stronger position, i.e., are more efficient to serve a limited market.)

It is quite clear that a distinctive oversupply of service exists at this location among the competing modes. The City buses are not full, not even during rush hours; the vans usually carry from 2 to 10 passengers (mostly 3 to 6) and rarely are all seats occupied.

The disorganization extends also to street operations and driver behavior. In the morning, many vans and station wagons make a U-turn on Sutphin before reaching Hillside Avenue in the middle of the block regardless of traffic conditions on a narrow street with parking on both sides. Passengers are dropped almost anywhere near the subway station, and they often have to wind their way among other vehicles in the middle of the street. Other van drivers turn around on Hillside Avenue wherever they can and then re-enter Sutphin to head south for another load.

There is no control over licensing either -- as should be apparent from the above discussion. On a recent day (summer 1986), of the total number of vans observed in operation, 17 percent carried "Z" plates, 11 percent "L" plates, and a large 72 percent had ordinary passenger car plates. Most drivers and passengers are black -- residents of the minority districts to the south. (One Indian driver was observed carrying Indian passengers only -- most likely a special ethnic subset of the total commuter operations.)

The volume of operations was the following on a typical (August 1986) morning:

Table 11
Survey of Van and Station Wagon Operations in Queens

<u>Time</u>	<u>Vans</u>	<u>Station Wagons</u>
7:30 to 7:45 AM	20	
7:45 to 8:00	27	
8:00 to 8:15	14	
8:15 to 8:30	21	10
8:30 to 8:45	20	8
8:45 to 9:00	21	
<hr/>		
Total 7:30 to 9:00	123 +	18 = 141

In 1985, a total of 15 vans were observed at the same location between 7 and 9 AM. (Commuter Van Service Policy Study, 1986). This dramatic increase in van operations has affected the van drivers, who are beginning to experience at this location the constraints of growing competition. It is reported that, not so long ago, they were able to collect \$75 during a shift; now they are lucky to reach \$50. Drivers who drive vans as their primary occupation average 4 to 5 trips during each morning rush period.

The contrast between the two nearby van nodes in Jamaica --169th Street and Sutphin -- is most marked, although the basic purpose of operations and format are the same. The second location exhibits most vividly the problems that can emerge when an otherwise successful activity in the service sector becomes overwhelmed by excessive and unorganized supply of service providers having little regard for even rudimentary street regulations. As the internal pressures become greater in the effort to secure a decent income, the overall conditions at this location can only become worse (or a significant number of operators will have to drop out of the picture).

Consequences of Commuter Operations

The transportation options and level of service for the residents of South Jamaica have undoubtedly been upgraded by the local van operations, whether they are organized or completely free-wheeling. The riders have concerns about the safety of the service, but they use it in great numbers. The other side of this coin is the impact on the previously established, regular transportation services in the area. TA buses are hard-hit by the vans since there is certainly an almost complete duplication of service. The City buses are not empty, but even during the peak period they have very few standees. Everything else being equal, the vans are much quicker, and therefore more attractive to riders. Because of their frequency, as compared to that of buses, there are many more opportunities for any waiting rider to take a van than to hold out for a bus.

The other industry affected is local car services. The vans have siphoned off most of the peak hour business, i.e., commuters carried by livery cabs on a pre-arranged basis.

The vans also materially affect the several private bus companies active in the area. For example, supervisors of Jamaica Buses, Inc. are particularly disturbed by the competition and the uncontrolled form of van operations. They maintain that too many of the vans are simply leased for a day by a driver (\$89), even carrying out-of-state license plates, sometimes without insurance. Some drivers are said not to have even a proper driver's license, who would thus leave a scene of an accident and the van itself since they have no serious commitment to the service or a stake in the vehicle.

One of these supervisors estimated that there are about 500 vans in operation around Jamaica Center, and stated that conflicts between drivers of buses and drivers of vans are now becoming quite frequent.

As a part of this overall private sector research effort, bus riders were interviewed in the Jamaica area, probing principally their attitudes toward private bus operations. However, because of the geographic and functional overlap of the bus and van services, information was also obtained on the perceptions of the patrons regarding vans and other service vehicles.

It appears that most bus riders prefer specifically to take the bus, but are quite ready to utilize a van when waiting becomes inconvenient. There are some who will never enter a van on principle; others believe that van drivers are drug users or are inadequately trained; some women will only enter a van if another woman is present.

But, there are also many other patrons who regard the van service as excellent and more dependable than buses. They get to know the drivers and, if they are aware of any safety problems, they consider the risks minimal.

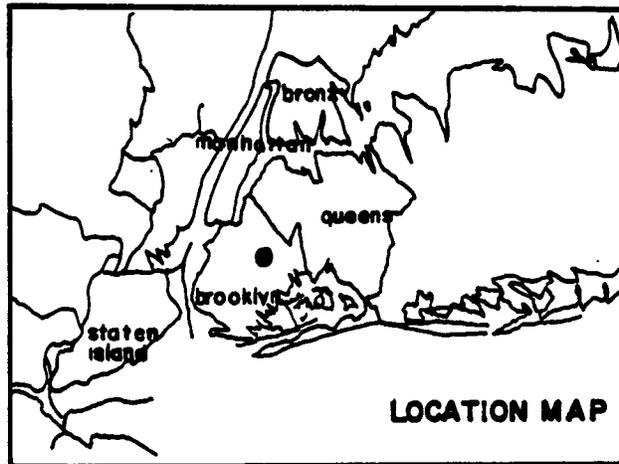
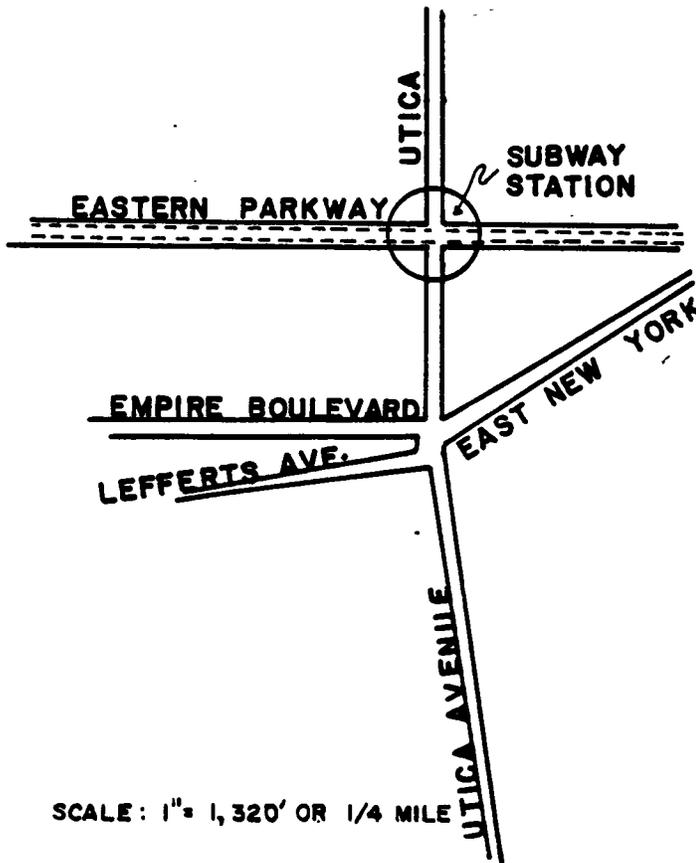
b. Eastern Parkway, Brooklyn Case

Besides the commuter operations in Jamaica Center, similar activities are found at other locations in New York City as well (i.e., outside Manhattan and other intensively developed districts where subway stations are always within walking distance).

One such place is the Utica Avenue station (#2, 4, and 5 lines) on Eastern Parkway in Brooklyn. Here numerous jitney-type routes converge on the terminal point of express subway service.

The Utica station is under Eastern Parkway, a boulevard with 6 fast lanes in the center and service roads on both sides separated by landscaped promenades. Residential neighborhoods, primarily black, adjoin the principal artery. Bedford Stuyvesant is to the north; Crown Heights to the south. The principal bus line is the B46 along Utica Avenue, which serves as the main public service feeder to the station. During the peak AM period, buses arrive at an approximate 5 minute interval from both directions. Many subway patrons walk to the station, but even more arrive by cars operating in the jitney mode. The flow of people into the station is very high -- a continuous stream through the turnstiles. (MTA records indicate the total entering volume at this end of the station between 7 and 8 AM as about 4,250 fare-paying passengers.)

The car service is operating at a most vigorous level. In the morning peak period, up to 5 vehicles arrive on Utica Avenue



EASTERN PARKWAY — UTICA AVENUE
 NODE, BROOKLYN

PRIVATE TRANSPORTATION SERVICES IN THE NEW YORK REGION

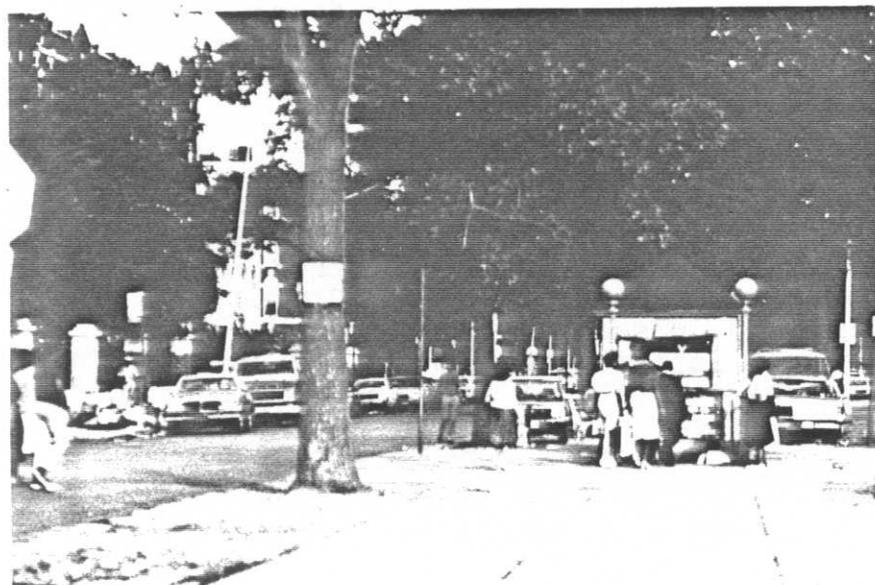
FIGURE
 16



Jitneys and liveries jockey for position on Utica Avenue near Eastern Parkway.



Jitney passengers at Utica Avenue disembark in the middle of the street.



Steady stream of passengers enter Utica Avenue subway station.

FIGURE 17

northbound and 2 or 3 from the other direction at every signal cycle (as Utica Avenue crosses Eastern Parkway from both sides with a traffic signal at the entry points).

The operations are most intensive to and from Crown Heights (to the south) since the housing stock in this neighborhood is in relatively good condition, at high densities, populated by many office workers who have to reach Manhattan every day. In the morning peak period, the arriving jitneys constitute a practically solid line, and the passengers disembark whenever they feel that they can get to the subway station quicker on foot than staying in the vehicle. Thus, the entire block below Eastern Parkway (and frequently the block further to the south as well) becomes the discharge area from both sides of the cabs. The situation is not only chaotic, but also dangerous during the peak periods. The traffic queue due to congestion extends several blocks southward.

A survey of arriving vehicles from the south along Utica Avenue during a morning in October 1986 indicated the following break down:

Table 12
Survey of Vehicles at Utica Avenue

	Vehicles with Livery Plates	Vehicles with Passenger Plates (Gypsies)	Vans	Buses	Yellow Cabs
7:15-7:30 AM	19	10	2	5	2
7:30-7:45	13	14	3	3	2

The vehicles are not always completely full (five passengers), but, since the average load is certainly at least three riders per vehicle, over 1,500 patrons are brought each hour to the station from the southern district. Twenty six additional buses would be needed to do the same job -- which would undoubtedly improve street traffic conditions (assuming that unloading operations would be properly accommodated), but rider satisfaction would certainly decrease.

After discharging passengers, the cars make a right turn on to the respective service roads of Eastern Parkway for a return run. Since they do not necessarily go back to the other end of Utica Avenue, some have been observed to return in 10 minutes. When streets are not too crowded, passengers may also be discharged after the right turn is made, which helps to reduce congestion appreciably. On the other hand, when the jams become really bad, some drivers will make a U-turn in the middle of Utica Avenue to get back to the upstream end of waiting patrons.

In the evening, the operations are not quite as intensive, but the problem is that vehicles have to be at the location longer to wait for and pick up passengers. This is largely accomplished on the service roads parallel to the subway station. The operations are so massive in scale and so thoroughly established that the physical presence of a police car on the block will not even slow down the drivers.

The vehicles in use are almost without exception second-hand passenger sedans. Some carry livery plates; most have regular automobile plates (a few have been seen with no plates whatsoever). They do not display any markings of company identification -- they are unaffiliated owner/drivers, definitely toward the "gypsy" end of the scale. A few members of the Black Pearl association are also visible ("Particular People Ride Black Pearl -- The Best Keeps Getting Better -- Brooklyn -- 773-0020"), as well as of the White Top base. It has been said that a large proportion of the drivers are undocumented aliens, who have few other means of employment.

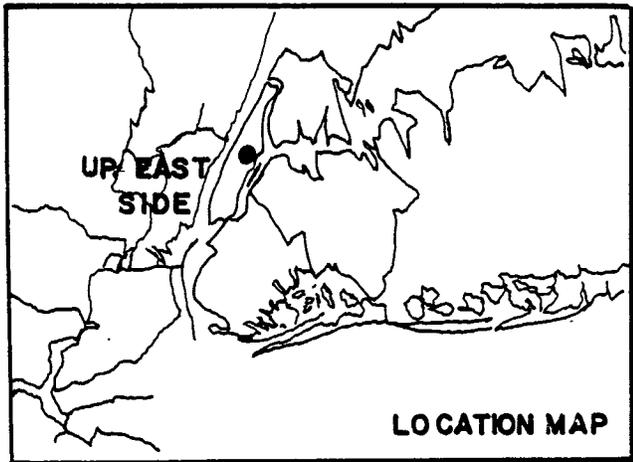
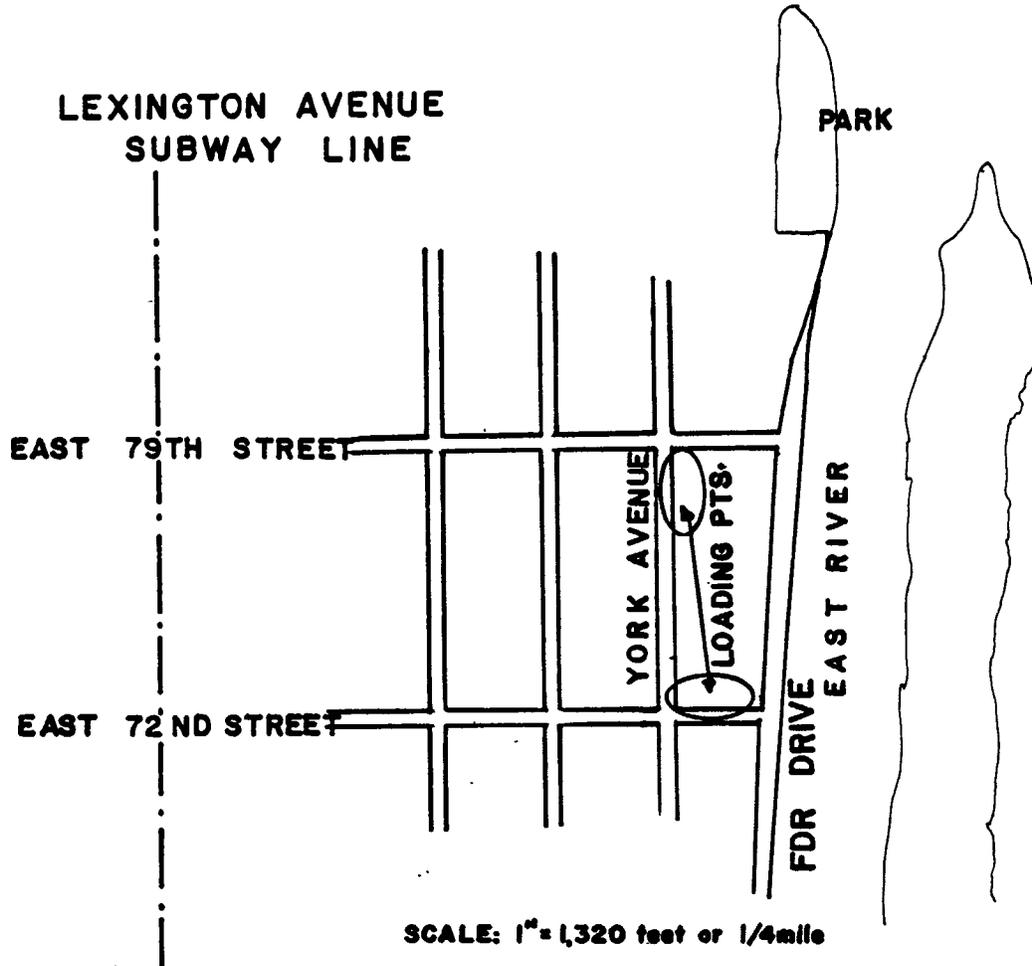
Since the loading operations take place off the central carriageway of Eastern Parkway, and the cars move quickly around the corner and away (almost none cross the boulevard), there is not much of a traffic problem on the principal artery (Eastern Parkway). Utica Avenue to the north is also not overloaded because the activity here is much less intensive due to the devastated character of that neighborhood. To the south, however, the traffic situation has deteriorated to an intolerable level.

The Eastern Parkway/Utica Avenue private jitney feeder operations are the largest such known instance at this time, but it is by no means unique. Similar activities take place in Brooklyn at Church and Nostrand Avenues, along the New Lots line and Pitkin Avenue, in Canarsie, and elsewhere. Similarly, there are examples in the Bronx, particularly from Soundview. The activities, however, are fluid; they are continuously in a state of flux with some fading and others growing all the time. It is not possible to keep a full account of them; nobody has tried to do that.

The Church/Nostrand case, for example, shows a lower volume of vehicles, but generates a worse traffic condition because the street space is most constrained (there is no wide central boulevard). The private cabs preempt all curb space, and most buses have to stop fully or partially in the second lane, thus blocking traffic completely. In the afternoon there is no reservoir space for waiting vehicles, and the street is clogged up again.

5. Shared Taxi Service

To add even more variety to the inventory of privately operated transportation services in New York City and to present the



YORK AVENUE AND 70'S STREETS		FIGURE 18
REGION	PRIVATE TRANSPORTATION SERVICES IN THE NEW YORK	

complete spectrum, one more type of service has to be discussed: shared taxis. A service has been operating at least four years now from the East Side of Manhattan to Wall Street and Broad Street. These are not vans nor livery vehicles but yellow medallion cabs, who operate again in conflict with existing regulations and have received some media attention (The New York Times, December 22, 1985). This form of operation is illegal in New York City, although it is allowed under various constraints in other cities in the United States and elsewhere.

Every morning, between about 6:30 and 9 AM, certain taxi drivers converge at the 79th and 72nd Street intersections with York Avenue, fill their vehicles with four passengers who have waited in a line, and take them to the financial district downtown. (There is no counterpart PM service.)

The fare is \$3.00 per head today (it went up from \$2.50 in January of 1986 when the subway fares increased). The trip -- if traffic conditions are favorable on the East River Drive -- takes about 15 minutes. This is an unbeatable combination for any passenger, compared to the subway (the crowded Lexington a few blocks away), express bus on local streets (\$3 or \$3.50), individual taxi (fare of about \$8.00 on the meter), or private car (\$12 parking charge).

The operational patterns are quite simple. At the 72nd Street location, empty cabs line up along the north side of 72nd Street facing westward. They stand in the second lane, but this is no particular problem because the street here is a dead end stub. Each vehicle accepts four passengers, and, when it is full, it leaves the queue, turns northward on York Avenue, turns again eastward at the next intersection, and enters the East River Drive for a quick journey to Lower Manhattan.

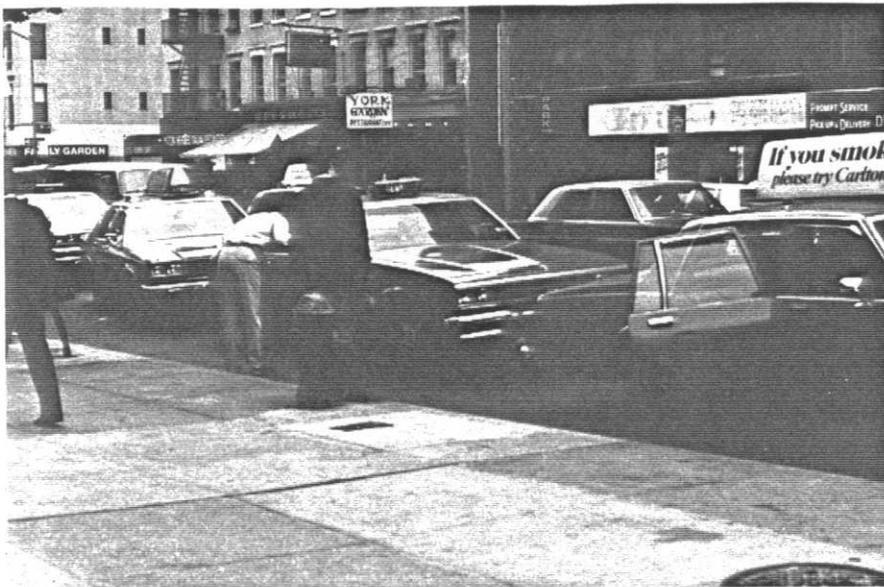
If there are cabs available in the queue along the street, most riders will go directly to the head vehicle. Some, however, have preferences regarding a specific seat or riding companions and will enter the second or third vehicle. This practice is tolerated, but no cab will jump the departure sequence. If cabs are in short supply, the patrons will form a queue themselves, and proceed in an orderly manner by mutual agreement.

The number of cabs waiting at the peak time at 72nd Street are four to six; two to four leave the area during every green cycle of the traffic light. The total number of patrons carried by this service at this location probably amounts to over 600 passengers during the 7 to 9 AM period.

At the 79th Street location, the operations are approximately the same -- except that there the cabs line up along York Avenue facing northward with the head of the queue at 79th Street. All of the participants are medallion taxis. A full cab turns eastward on 79th Street to reach the entry ramps of the East River Drive. The queue may be 13 or more vehicles long,



Line-up of shared-ride taxis on York Avenue, near 79th Street.



Passengers entering vehicles.



Queue of taxis on 72nd street.

FIGURE 19

which means that it extends below 78th Street and fills up one entire traffic lane. General traffic, however, in this direction in the morning is light, and therefore no real congestion problem exists. Usually, there is a surplus of cabs -- thus a long street queue -- around 7 AM, and a shortage exists after 8 AM, generating waiting passengers.

The through-put at the 79th Street location is about two or three vehicles at the peak during each signal cycle. Thus, a total volume of 500 passengers can be estimated. An actual count during a morning period in late July 1986 recorded 121 yellow taxi departures. Since they were fully loaded, 484 passengers were carried. During the same period, 10 non-medallion vehicles also managed to insert themselves in this stream.

The taxi drivers participating in these operations appear to do it every morning, and they are known to each other. In many respects it is a club whose entry procedures rely on personal friendships. When business is slow, the waiting drivers will get out of their cabs and chat with each other. When necessary, they will discourage interlopers -- particularly non-medallion cabs and vans -- from joining the queue. Physical actions have been taken to protect the established "rights" of this group, which is informally self-governing.

A driver who starts at 6:30 AM is able to complete usually four full runs (gross revenue of \$48 in 2 1/2 hours); most others will do three runs in the morning. Each trip in the shared mode thus nets the driver at least \$4 more than carrying passengers on the meter.

Police have not been concerned with these cabs, no matter how obvious the operations are. However, the situation is delicate -- if a police car happens to park nearby, the taxi queue tends to evaporate quite quickly (to reassemble again when the coast is clear).

The whole operation is, of course, completely illegal, not only in terms of the shared group ride feature, but also because a second lane is occupied and the taxi drivers involved will refuse to go to any other destinations except Downtown. Since this happens in broad daylight, in one of the affluent and highly visible neighborhoods of the City, benign neglect by regulatory agencies may not be a viable policy over an extended period. The Taxi and Limousine Commission, whose jurisdiction is most directly involved, has unofficially regarded these operations as positive efforts toward improving mobility in the City, but there is much unease about the whole situation.

Local shopkeepers tried to fight these operations for a few years when they were first established because they preempt parking spaces and interfere with deliveries. However, since the

law enforcement agencies took no action, the merchants have given up these efforts in resignation.

Regardless of the illegality of the taxi operations at the two nodes, they do represent a significant convenience to the patrons, as well as an effective high-occupancy use of service vehicles which would otherwise be carrying a person-and-a-fraction during peak demand hours. The total volume carried is the equivalent of about one subway train (which is not available this far east anyway) or about 25 express buses (which would create a measurable impact on the East Side avenues since they cannot use the East River Drive). It would be quite easy to stop these operation by a couple of policemen -- on the other hand, there appears to be no compelling reason for taking such action. (Besides, the patrons, many of whom occupy prominent positions in the City's business establishments, would not accept a crack-down quietly.)

C. PRIVATE BUS COMPANIES

Six private bus companies provide local service in New York City, primarily in the Borough of Queens, with some local and express service in Brooklyn and the Bronx, and express service to various areas in Manhattan. Private local bus services in New York City provide a particularly good test situation for comparing public and private provision of transportation services, since there is not much difference in the physical and demographic conditions within which public and private services operate in the outer boroughs. Furthermore, unlike vans and nonmedallion livery services, bus service provides an opportunity to compare similar public and private services with long-established and thoroughly monitored operations.

Advocates and providers of private local bus services are generally convinced that they already provide better and more efficient service than do the public authorities. This study, after reviewing statistics which confirm their lower cost provision of service, seeks to determine whether it is a result of their private ownership or of other characteristics. Several alternative explanations may account for the differences encountered. First, the quality of service provided to users may vary, i.e., the public Transit Authority service may be better and therefore correspondingly more costly to provide. Second, variations may result from differences in for-profit vs. public organizations. Third, they may be the result of differences in route characteristics, i.e., if in earlier periods of municipalization of previously private services the public sector ended up with the worst routes. Fourth, the public sector may have a service monopoly in its area, thus shielding it from the competitive pressures felt by the privates. Fifth, differences may be largely the result of differences in scale of operations. Sixth, differences may be the result of particular personal and managerial qualities of their respective decision makers, not necessarily out of reach of the public sector, but also not easily reproduced in either the public or private sectors. Seventh, there may be differences in the factor costs paid, especially regarding labor. Finally, differences may result from significant hidden subsidies, such as taxes from which the public sector is exempt or the cost to the government of regulating the private companies, which, whether deliberately or de facto, benefit the accounts of one type of operation over the other.

In order to compare private and public provision of local bus service in New York City and complete a qualitative evaluation of the principal explanations offered toward any differences encountered, we collected information from a wide range of sources. We have interviewed managers in each of the companies, high level personnel in the local government agencies which regulate them, officials of the unions representing company workers; we surveyed members of the riding public who use their



An older model
Steinway Transit bus.



A variety of vehicles
operated by private
bus companies.



One of the best
facilities -- Triboro
Coach Company yard.

FIGURE 20

services, observed the service and conditions of various routes, examined relevant Urban Mass Transportation Administration and City and State of New York Department of Transportation documents, and reviewed the history of the industry.

1. Characteristics of Private Bus Service in New York City

Local bus service in New York City is presently provided by a total of eight enterprises -- six private and two public -- operated by three entities. The private firms, operating primarily in Queens and Brooklyn, are:

Green Group

- Green Bus Lines, Inc.
- Jamaica Buses, Inc.
- Triboro Coach Corporation
- Command Bus Company, Inc.

Queens-Steinway Group

- Queens Transit Corp.
- Steinway Transit Corp.

The public enterprises, belonging to the New York City Transit Authority, are:

- Manhattan and Bronx Surface Transit Operating Authority
- TA Surface Lines (Brooklyn and Staten Island)

In 1983, the private companies owned 18 percent of the bus vehicles in the City, and provided 14 percent of the passenger miles, with the Green Group providing eight percent and Queens-Steinway six percent. For three of the companies -- Command, Steinway, and Queens -- express routes were a significant component of their total activity, representing roughly 80, 25, and 12 percent of their respective riderships (roughly 90, 45, and 25 percent of revenue, respectively), while they represent less than 5 percent of ridership each for Green, Jamaica, and Triboro.

These eight enterprises are the survivors of the more than four dozen companies holding franchises that provided local bus service in New York City in the 1920s and 1930s. The history of private bus systems has always been strongly influenced by local politics, particularly by the politics of monopolies (and franchises) and the politics of fares (and subsidies). Temporary franchises were first opened up in the 1920s as a part of Mayor Hylan's attempt to break the power of the traction companies, and by 1925 there were thirty six lines operating. While other companies soon joined them and many did well for some years, by 1939 the number of companies had fallen to just over twenty, and by the late 1940s they were all suffering from rising costs and a loss of revenue due to falling ridership and a frozen fare. The City took over a number of companies, adding

their routes to the ones it had received in 1940 as a part of the takeover of the BMT and IRT systems, encouraged some of the privates to take over others that were in trouble, and raised the fare. In the early 1950s, the City discussed turning its routes over to private companies, but was unable to reach agreement on a formula to fund the existing pension plan. A decade later, in 1962, the City took over the largest remaining private lines (Fifth Avenue Coach, New York Omnibus, and Surface Transportation companies) and formed MaBSTOA to run them. Since then the City has encouraged the remaining privates to consolidate when in difficulty, and since 1974 it has provided capital and operating subsidies to assist them.

This general history is reflected in each of the present private companies. The history of the four companies in the Green Group dates back to the 1920s. Previous to the development of these companies, drivers each owned one bus and operated independently of one another, much like independent jitneys. Routes and permits were assigned and regulated by the New York City Department of Plants and Structures. In the early 1930s, approximately 200 of these drivers organized into one company, with the encouragement of Mayor LaGuardia. In 1933, when the City finally began granting permanent franchises, a franchise to operate in Queens was issued to this association, in the name of Green Bus Lines. The operators formed a type of cooperative, and instituted a policy that no shares be sold to outside investors, to guarantee that only the original operators and their families would own the company. One of the original members, William Cooper, retired from his position as President of Green Bus Lines in 1986, sixty years after he began driving buses in New York City.

Prior to the Second World War, Green Bus Lines was a small suburban operation in the eastern portion of Queens, transporting residents to shopping areas, work places, and recreational facilities. Other private companies began operating in New York City as demand increased in other areas. In the years after World War II, population shifts and increased automobile usage caused a sharp decline in ridership, while at the same time equipment and labor costs increased, and the fare was frozen at pre-War levels. As a result, several of the private bus companies were faced with large deficits and could no longer maintain service. Many of the private transit operations in New York began to be taken over by the City, although in Queens County the municipal government took over only the operations serving the northern portion of the borough.

In 1947, Triboro Coach Corporation notified the City that it was about to go out of business. The Mayor asked the owners of Green Bus Lines to take over the Triboro company and franchise, which they did. Jamaica Buses was faced with similar financial problems in 1949. Owners of Green Bus Lines took over this franchise as well, at the request of the Mayor. Pioneer Bus Company abandoned their local bus operations in Brooklyn in

1979. Once again the Mayor turned to Green Bus Lines to take over the operation. The company was acquired, and the name was changed to Command Bus Company. Since then, while all the companies belong to Green Bus Lines, they have each maintained their own management and operational structures.

Table 13
Evolution of Private and Public Ownership of Franchised Bus Companies

Borough and Company	1939	1986	Year Taken Over		
			City	Green	Q-S*
<u>Manhattan</u>					
New York City Omnibus	xx	TA	62		
- Eighth Avenue Coach	xx		62		
- Madison Avenue Coach	xx	TA	62		
Fifth Avenue Coach	xx	TA	62		
Comprehensive Omnibus	xx	TA	48		
Avenue B and East Broadway	xx	TA	??		
Triangular	xx	TA	??		
East Side	xx	TA	48		
Third Avenue	xx	TA	62		
<u>Brooklyn</u>					
BMT	xx	TA	40		
<u>Bronx</u>					
Suburban	xx	??			
Surface	xx	TA	62		
<u>Richmond</u>					
Staten Island Coach	xx	TA	47		
<u>Queens</u>					
Bee Line	xx	??			
Green Bus	xx	GR		33	
Jamaica Bus	xx	GR		49	
Manhattan and Queens	xx	??			
Nassau Shore	xx	??			
North Shore	xx	TA	47		
Queens-Nassau	xx	QS			42
Steinway	xx	QS			42
Triboro	xx	GR		47	
Pioneer		GR		79	

* Queens and Steinway together.

NOTE: The table indicates all local bus companies operating in 1939. It does not include twenty two companies that provided some local service during the mid-30s but had been absorbed by another company or otherwise ceased operating by 1938.

Queens and Steinway Transit Companies were both formed by H.E. Salzberg Company in 1933. At that time the companies were trolley fleets; they were motorized during the 1930s and 1940s. The companies have always operated under the same management structure, but maintain separate financial accounting. (Some data cited in this report are consolidated information for the two companies.)

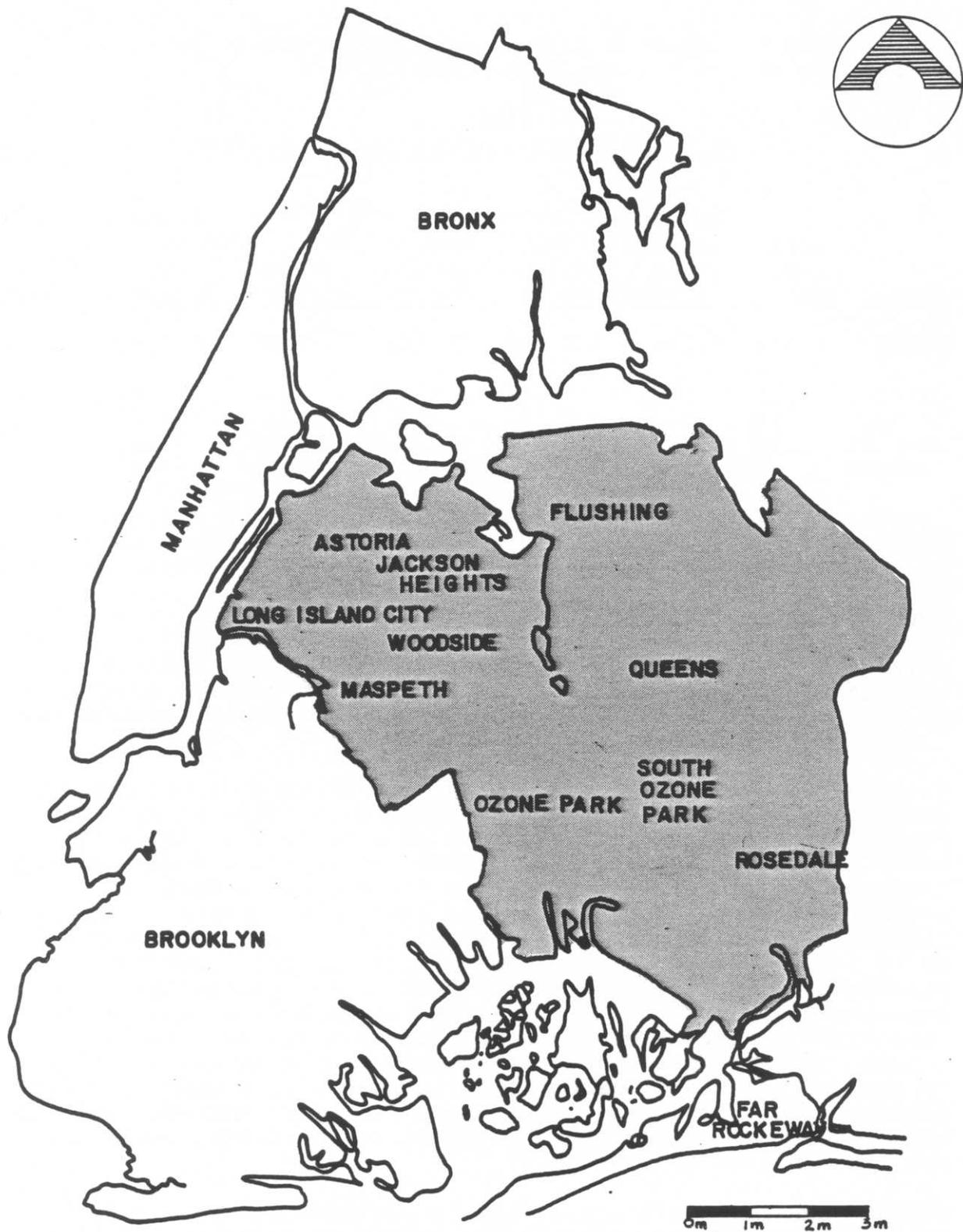
Today the private bus companies provide local service to several areas. Green Bus Lines has the greatest number of local routes, with fifteen local routes providing service to Brooklyn and Queens and between Queens and Manhattan. Triboro Coach Corporation and Jamaica Buses, with thirteen and four local routes respectively, have service only in Queens. Steinway Transit's five routes are in Queens and between Queens and Manhattan. Queens Transit, with seven local routes, is the only company serving the Bronx, and has routes between the Bronx and Queens. Command, the smallest of the six companies, has only one local route in Brooklyn. (See Map.) There are a total of 45 local routes among the six companies, 27 of which serve minority areas. Between them, they generated 722 local bus trips during each peak period (in July 1983), with a total number of 59,398 peak period passengers, of which 37,282 were able to have seats, leaving about one third to stand. Ridership has declined in the last three years, and there were fewer standees in 1986.

Ridership figures vary almost inexplicably, depending on the source consulted, with large and inconsistent differences between the figures provided by company annual reports, Bureau of Franchise data, and UMTA reports, even though they all originate in some form with the companies. (While recognizing these differences -- and that some conclusions may depend upon which figures are used -- we have used the UMTA Section 15 Annual Reports.)

Green Bus Lines, the nucleus of the Green Group, carries more passengers than any other private company, with a total of 19,630,000 passengers in 1983, although Queens Transit has more buses. On a given day, Green Bus carries one third of the local passengers and three percent of the express passengers traveling on the private lines. In a survey conducted as part of this study, users generally ranked Green worst in terms of waiting time, cleanliness, temperature, and general service quality.

Triboro, member of the Green Group, carried nearly as many passengers as Green, and was rated highest by users on almost all service measures. It carried 19,073,000 passengers in 1983, with almost one third of local passenger and one tenth of the express total.

Steinway and Queens Transit were ranked after Triboro in terms of service. They carried a total of 6,888,000 and 14,442,000



AREAS IN QUEENS SERVED BY THE PRIVATE BUS COMPANIES

PRIVATE TRANSPORTATION SERVICES IN THE NEW YORK REGION

FIGURE

21

passengers in 1983, respectively. Together they carried almost one half of the express riders and thirty percent of local passengers on the private buses.

Table 14
Selected Transit Operating Statistics

System	Total Rev. Veh.	Veh. Oper. in Max. Sched. Service	Veh. Miles 000/yr	Veh. Rev. Mi. 000/yr	Veh. Rev. Hrs. 000/yr	Unlinked Pass. Trip 000/yr	Mi. 000/yr
NYCTA	4,573	3,116	105,056	96,132	12,241	1,062,142	2,027,245
Green	191	162	5,667	5,475	604	19,630	88,334
Triboro	180	107	3,153	3,027	391	19,073	30,361
Jamacia	152	96	2,109	2,109	296	7,712	30,845
Command	95	69	3,443	1,958	173	3,354	45,501
Queens	247	197	4,554	4,300	534	14,442	95,066
Steinway	130	106	2,539	2,463	275	6,888	45,690

Source: UMTA (1985) 1983 Section 15 Annual Report.

Jamaica Buses, member of the Green Group and intermediate in size between Queens and Steinway, was ranked next in quality. It carried 7,712,000 passengers in 1983, of whom 95 percent were local and five percent express customers.

Finally, Command is the smallest of the private bus companies, carrying a total of 3,354,000 passengers in 1983, of whom 80 percent were express riders and 20 percent on its one local route. Between 1983 and 1984, operating expenses and operating revenues for all six bus companies increased, in spite of several years of generally falling ridership. Private local bus ridership steadily decreased from 83,819,305 passengers in 1980 to 70,194,270 passengers in 1984, while express ridership fluctuated. The increase in revenues is due primarily to the fare increase in early 1984. Net earnings varied between the companies: Queens-Steinway's net earnings nearly tripled between 1983 and 1984 (but the company nearly declared bankruptcy in 1985), Triboro's net earnings increased slightly, and the other companies net earnings decreased between 1983 and 1984. Command Bus Company had the lowest earnings, suffering a net loss in 1984 of \$24,459.

Without subsidies all six of the companies would be unable to operate. Since 1974, private bus companies have been eligible for both capital and operating subsidies. Currently, the six private bus companies receive subsidies from City, State, and federal governments. The 1984 total operating subsidy of \$41,346,117 was down about 6 percent from 1983. About one sixth was provided by the federal government, and five sixths by City

and State governments. In recent years, the federal government has provided less money to transportation services, and New York City and State have increased their assistance to partially cover these cutbacks. The federal formula for distributing subsidies is largely based on a region's population. State operating subsidies for the last five years have been based on mileage and number of passengers. Private bus companies receive 47 cents a mile and 18 cents per passenger to cover operating expenses. Since 1980, the City has added to these subsidies based on financial need, and according to agreements reached during company-union contract negotiations in 1979 and 1984. The City's formula for distributing government assistance was revised in 1984 to provide greater incentives for company efficiency. The maximum level of City operating assistance allowed is the sum of three elements: 1) operating expenses, minus operating revenues, 2) allowable interest expenses, and 3) reasonable return limit.

With subsidies, the return companies are allowed to realize is 6.38 percent of operating revenues, but this profit rate is not guaranteed. If the companies exceed a 7 percent increase in operating expenses per revenue vehicle mile (exclusive of depreciation, of City franchise fee, and of City utility tax) over the last year or a 14 percent increase over the last two years combined, that amount, which exceeds these limits, is subtracted from their net return (although the City waived this limitation as part of the 1984 labor negotiations). Thus there is very little, if any, profit incentive for improving the operations of private sector firms.

Virtually all the people interviewed agreed that local bus operations must be subsidized. Most argued that the two principal reasons are the political decisions to pay private company personnel public sector rates and to guarantee a basic level of service to the entire population; i.e., given the cost implications of these two decisions, bus operations have to be unprofitable. All administrators agreed that subsidies could be reduced if changes could be made that would decrease costs and increase revenues, with particular attention focused on improving the condition of equipment and facilities, and reducing competition from vans.

The conditions of storage and maintenance facilities vary from company to company. Command, Queens, and Steinway facilities are in the poorest condition, and entirely new facilities are needed to relieve these "disasters." Facilities of the other companies need only minor renovations, such as new lifts or washers. The Queens bus storage facility was built in 1936 to hold 150 buses, and it is currently holding 268. Similarly, Steinway's was built in 1956 for 79 buses but now stores 150. The Command facility was intended for 28 foot long school buses when it was built in 1968. Today both Command and Varsity Transit, Inc. (a school bus company with the same shareholders as Green, Triboro, Jamaica, and Command) store their buses in

OPERATING ASSISTANCE TO PRIVATE BUS OPERATORS 1980-1984

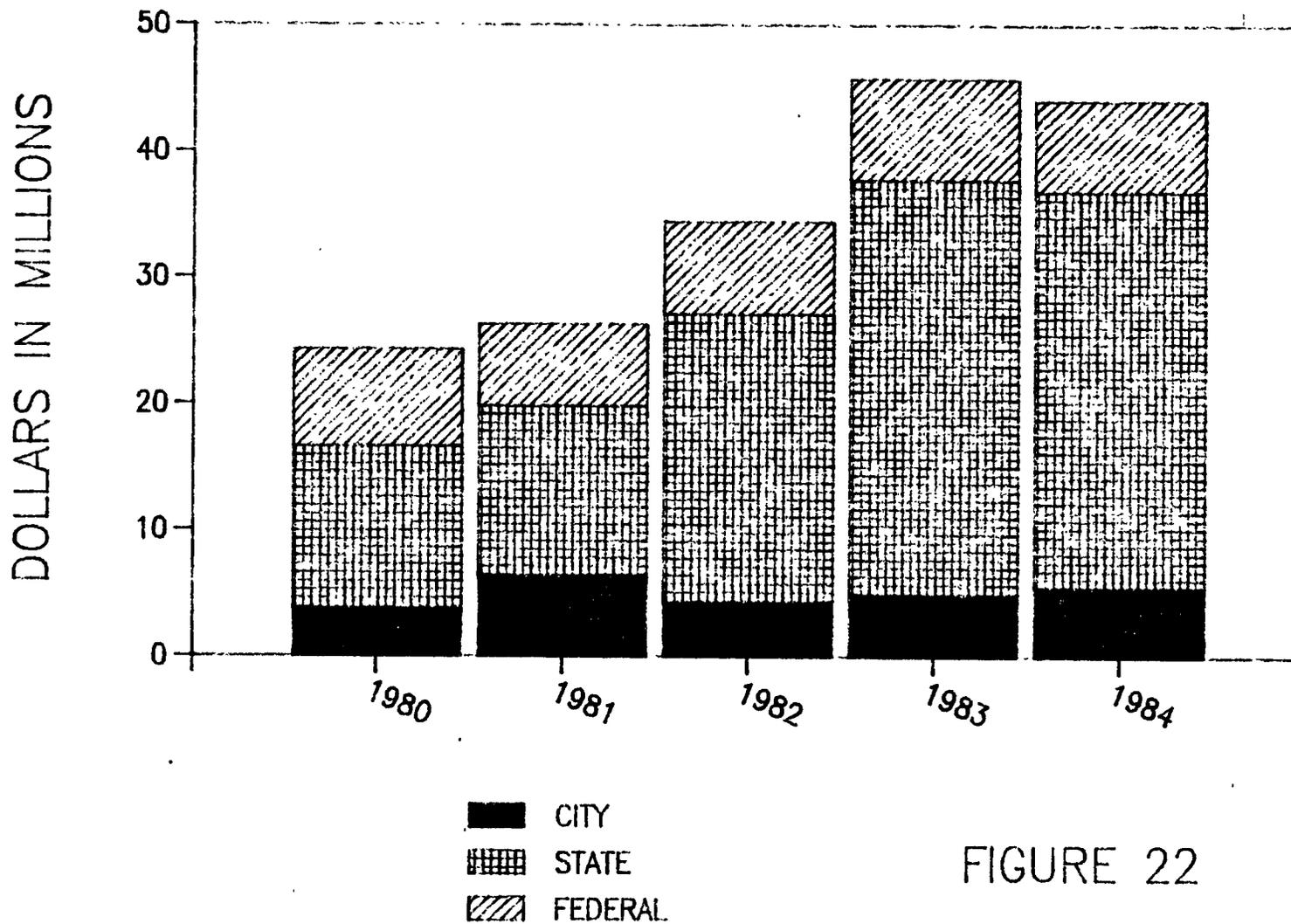


FIGURE 22

this one facility. This is a major problem for Command since their buses are 40 feet long and each weigh at least four times as much as a school bus. Queens and Steinway have been requesting funds from New York City DOT to build new joint facilities since the 1970s. Equipment (such as lifts and cleaners) is also in short supply and in need of replacement.

Each company owns a variety of bus types, with the majority being General Motors Corporation (GMC) models. A large percentage of these are outmoded, and in poor condition due to age and previous years of deferred maintenance. Of the 916 buses in service in 1986, 149 are over 12 years old. An aggressive effort at improving equipment has been taken by New York City DOT, which, in line with UMTA recommendations, has set itself the goal of replacing every bus that is over 12 years old. The distribution of funds received from UMTA is based on need, and the companies with the largest number of older buses are given priority. In 1985, 200 new buses were bought by DOT and distributed among the companies in exchange for a nominal fee of \$1 per bus each year, and, in January 1986, the purchase of 72 additional buses was approved.

The private bus companies have essentially the same problems of "unfair competition" with the unregulated local van and livery services as does the TA, possibly aggravated by even less organization among the services in the Borough of Queens area than elsewhere in the City. For example, on one occasion when members of the research team were waiting for a local bus to take them to interview the head of one of the private companies, six vans pulled into their stop and announced the route they were following. Some managers of the privates argue that the vans do not really provide a public service, because they cannot be relied upon in bad weather and at night. In fact, "they are a disservice to the community, because they use bus stops, cut in front of buses and take revenues away from the bus companies who provide complete reliable service. They pay no taxes and increase the need for subsidies." Jamaica estimates that seven to ten percent of its revenue is lost to vans, and several people estimated a loss of one million dollars per year to the privates as a group. one person insisted, "There is no need for vans. They serve no purpose. They provide no service." However, the shorter waiting time our researchers could have enjoyed, together with the obvious extensive use of this service as discussed elsewhere in this report, demonstrate that there is a real service being provided. It is in the interest of both the privates and the TA to respond to the challenge in a coordinated manner.

How well have the private bus companies performed in comparison with the New York City Transit Authority? Table 15 presents representative statistics from the two systems. The private companies as a group are consistently more efficient and more cost-effective than the NYCTA. In 1984, operating cost per vehicle mile for the privates was 76 percent of the TA level,

while the privates obtained 74 percent more vehicle miles per employee hour. Similarly, the privates covered 12 percent more cost with operating revenue, only spent 89 percent as much as the TA per passenger, and recovered 25 percent more revenue from each passenger. While the cost-effectiveness of the privates was consistently higher, the differential has been falling, as a comparison of the 1982 to 1984 numbers indicates.

Table 15
NYC Local Service - Peer Performance Comparison

	NYC	Private	Operators	NYCTA		
	1982	1984	% change	1982	1984	% change
COST EFFICIENCY						
Cost/Veh. Mile	5.22	6.16	9.0	7.05	8.07	7.2
Cost/Veh. Hour	46.44	53.17	7.3	54.44	62.57	7.5
Veh. Mile/Emp. Hour	NA	3.98	NA	2.28	2.29	0.4
Veh. Hour/Emp. Hour	NA	0.46	NA	0.29	0.30	0.2
SERVICE EFFECTIVENESS						
Pass./Veh. Mile	4.90	4.66	-2.4	5.63	5.41	-2.0
Pass./Veh. Hour	43.58	40.24	-3.8	43.53	41.97	-1.8
COST EFFECTIVENESS						
Oper. Rev./Cost	0.70	0.67	-2.1	0.60	0.60	0.0
Cost/Pass.	1.07	1.32	12.0	1.25	1.49	9.6
Pass. Rev./Pass.	0.73	0.85	8.4	0.51	0.60	9.6

Source: New York State Department of Transportation, "1985 Report on Transit Operating Performance in New York State," p. III-52.

Could the difference reflect higher quality service provided by the TA buses? The survey of 200 users of private local buses conducted for this study, while far from conclusive in this regard, strongly suggests that riders perceive TA service as superior. (See questionnaire and user comments in Appendices H and E.) However, a significant portion of the comments could be explained by the newer buses in the TA fleet, since efficiency and service quality are strongly related to the conditions of facilities and buses.

There is a significantly greater efficiency of private compared to NYCTA local bus service, but the table shows it is not a dramatic one. What produces this difference? Reviews of private sector transportation provisions suggest a number of explanations, focusing on: private vs. public management, private routes being the "cream" and public routes the "lemons,"

monopoly provision of service, scale of operations, management characteristics, different costs (particularly regarding labor), hidden or implicit subsidies, the TA as a location for political patronage, and others.

A basic question which we must ask first is -- are the private lines private? In the simplest sense they are, for they are companies owned by private individuals, and the public sector cannot direct but can only seek to influence their decisions. Furthermore, the heads of the companies strongly subscribe to an ethos of their being private operations. Yet, one person commented that he does not like owning a private company yet having the City auditors "living with him. It's like working for the City." The public sector has extremely strong tools of influence, to the point that private managerial initiative may be stifled. "The City and the companies are partners; the companies are not private," said one person, continuing, "you don't truly have a private sector when the government is involved; their hearts are no longer in it." As a result of current trends, "ultimately the City will own the system because they now pay for buses, equipment, and repairs to facilities. The private companies are only managers." Furthermore, as several people commented to us, it is unlikely that any private company would today choose to enter this market, and the ones that are there are so because of a combination of historical inertia and family commitment to a business and way of life built in earlier times.

The degree of regulation and dependence on subsidies under which the privates operate shrinks (although it does not eliminate) the distinction between private and public. The principal capital source for the industry and each firm is now the public sector. Financial regulations put a low ceiling on possible return, while not officially guaranteeing any floor (although there appears to be a de facto guarantee). Operational regulation greatly restricts normal managerial decision making. Private companies have always been regulated, in their routes, frequency of service, and fares, but today they face much more detailed requirements, such as monthly audits and tight procurement restrictions, in exchange for subsidization and the formulae through which it takes place. Thus it does not appear that the principal difference is related to the companies being privately or publicly owned.

Are the routes along which the private local lines run the best of their boroughs? The private companies do not feel they are skimming the cream off the system, because the "MTA has most of the local lines and they have actually turned down some express bus lines." The private local routes do not seem inherently better or worse than the comparable public ones for two reasons. First, in their respective areas, each provides a full range of service, and there is no evidence that the private lines are any less complete than the public ones. Thus, we would expect that both have relatively more and less profitable routes. Second,

the historical process that produced the present distribution of routes between the public and private sectors was shaped more by politics and personality than by profit. That division was the product of negotiations affecting entire companies not individual routes. All bus lines were once profitable, and nearly all of the present private lines went through a period of unprofitability in past decades, attributable in large part to the political decision to maintain a low fare without subsidies to operators. Unless it can be shown, for example, that the Fifth Avenue Coach Line and BMT were especially decapitalized by their private owners, one must assume that those companies were not inherently any less profitable (or more unprofitable) than those brought into the present private companies.

Has their behavior been shaped by becoming a local monopoly? Both the privates and TA are effectively monopoly local bus service providers in their franchise areas. Some would argue that this reduces competitive pressures, although the restricting of competition by granting franchises has long been a means of guaranteeing the minimum necessary profitability to enable private operations. It is the case, however, that the private companies have essentially become a duopoly for service provision, unlikely to compete against each other for the same routes, and unlikely to be significantly more efficient than the TA due to this factor. Still, they do provide an alternative against which to judge public performance, as we have seen above. However, neither the TA nor privates are monopoly providers of transportation service in their areas. Furthermore, there are other alternatives, such as subways and taxis, and particularly the presently unregulated local van and livery services, discussed in other chapters of this report.

Does the smaller size of the privates compared to the TA make them more efficient? Here the evidence is quite incomplete, although both the management and union representatives of the privates are convinced that this causes a difference, and that greater size is a recognized correlate of higher costs nationwide. One union official insisted that, "the TA is a system that was made not to work." And a director of one of the private companies argued that "private management is better because we work closely with our personnel and there is always someone to talk to. The TA has 6,000 to 8,000 employees and cannot be close to them. Management has a lot to do with size, even though they have the same problems. This is true of any small company." One form of this argument insists that the TA is top heavy with supervisory personnel. If we consider only the operations divisions, the privates appear much leaner, with only 0.7 to 2 percent of the number of operators in professional or supervisory positions. However, considering total employment in each of the three groups (Green, Queens Steinway, NYCTA), the percentage of technical, supervisory, and administrative personnel is virtually identical, at just under 15 percent. While the organizational pyramids are equivalent -- although the specific organizational structures may vary -- the TA is

considerably larger (disproportionately larger) with 20 to 60 percent more employees per vehicle than the privates.

Another important implication of size and organization is the ability of the system to respond to localized requests for change, for example, as voiced by the community boards. At least some of the community boards feel the privates are more responsive, in part because these firms can be directly approached and their service area corresponds to the boundaries of a few boards, whereas the TA management is highly centralized in a single office in Brooklyn, with a few people responsible for service covering one to three boroughs instead of only a few community boards. The head of one community board transportation committee commented, "the privates are more subject to community board pressure; the TA is harder to shake." Many of the private companies print newsletters honoring employees and informing residents, provide space for local residents and community board members to express their concerns, attend community board meetings, and consult with the community boards regarding complaints. The TA's unapproachability, or difficulty in responding, is not necessarily a result of size per se, but rather of the type of management structure and specifically of the degree of centralization of decision making. A TA structure providing significant autonomy for decisions affecting local operations to managers at the borough level could be as responsive as the privates are presently able to be when they wish.

Private company management is credited by employees, the union, and themselves with knowing their respective systems very well, and they are involved in both policy and operational decisions. Management structure is similar throughout all of the private companies. This is due to several factors: two families control the six operations and have thus implemented similar management procedures; UMTA regulations require that various uniform standards be met in order to obtain subsidies; and all companies are locked into union contracts. The latter is perhaps the largest unifying factor. Although the contracts vary slightly from company to company, wages, benefits, and basic work rules are the same. All of the companies reported good working relations with their unions, whereas relations between the TA and TWU are far more tense. A significant portion of current TA management came up through the ranks in the Fifth Avenue Coach Company and other privates. However, this generation is now nearing retirement, many new managers have entered with "book learning," but far less practical experience, and the responsibilities and division of labor in a very large organization do not permit the daily contact with operational activities that at least a part of the privates' management maintains.

Are there differences in production costs? Since equipment and consumables come from the same market, the real question here regards labor costs. All of the private companies are unionized

and have been for many years. All drivers and maintenance employees are unionized, while clerical, supervisors, and administrative positions are nonunion. Four of the companies (Triboro Coach Corporation, Jamaica Buses, Queens Transit, and Steinway Transit) have the same union as the New York City Transit Authority (TA) -- Transit Workers Union (TWU) Local 100. The other two companies (Green Bus Lines and Command Bus Company) are under Amalgamated Local 1179 and 1181, respectively. The wage rate in private company contracts was recently raised from 95 to 100 percent of that paid by the NYCTA. The benefit packages are roughly comparable, with a better pension plan for the workers in the NYCTA system, and better health benefits for those in the private lines. The principal difference enters with the use of swing-shifts, which are much more common in the privates, where two and one half hours of unpaid swing is the norm. This implicit subsidy from the labor force represents a savings of some 30 percent in operator labor costs, compared to a situation of maintaining the same number of employees but paying them straight time. Nonetheless, the percentage of expenses absorbed by nonoperator wages and salaries is higher for the TA than for the privates (with 3.34 employees per revenue vehicle at the TA, compared to 2.81 for the Green Group and 2.02 for Queens-Steinway), and fringe benefits are much higher at the TA. (Interestingly, union officials do not see lower pay by privates as a sign of anti-union attitudes or activities. They insist that the issue is not who runs the system but how it is run, and they feel the public sector is at present far more anti-union and unresponsive to the public than are the privates.)

Are there significant implicit subsidies to one system or the other? The privates are quick to point out that their expenses are increased by a variety of taxes from which the TA is exempted, including franchise fees, gasoline and other user charges, sales tax, and City, State, and federal corporate income and local property taxes.

Both receive capital grants for the purchase of new fleet. The TA was favored by receiving new vehicles first, but since a number of deliveries were made this year and last to the privates, the percentage of private vehicles over twelve years of age has fallen below 15 percent. Nonetheless the TA does still have a newer fleet, which should imply lower maintenance costs and more vehicle miles between breakdowns, and higher quality of service from the users' perspective. On the other hand, the administrative cost to the City of overseeing the privates (including processing grants, procurement, planning, and marketing) must be added to the direct cost of private operations to determine their real cost under the present system. Whether or not such regulation could be reduced without loss of service quality is an important issue that deserves detailed examination. While there are no reliable figures available on the exact amount of these implicit subsidies in each direction, it is likely that their net effect is to understate the efficiency of the privates.

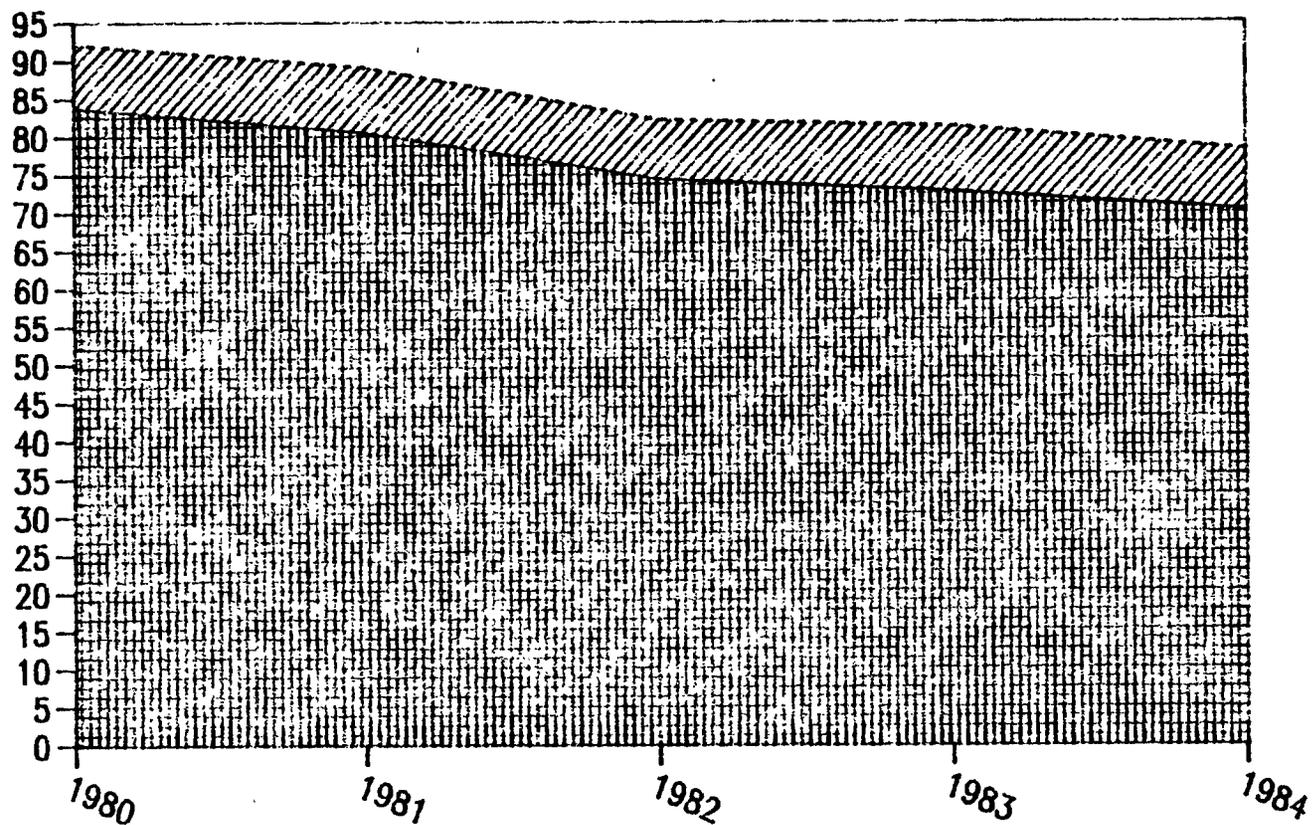
Finally, the privates believe themselves to be subject to much more severe regulatory controls than those experienced by the TA, which, one complained, "just asks for money and gets it," and is its own final judge for many aspects of operation (for example, inspection of equipment). The present study did not determine whether or not this is the case. To the extent this corresponds to greater built-in responsibility on the part of the TA, the greater regulation of privates may be a necessary cost of private service provision. To the extent the TA is more lax with itself, there is reason to have an outside office of inspection, or a justifiable complaint against discriminatory treatment.

In summary, there is a difference between the cost effectiveness of the private companies in New York City as a whole and that of the public Transit Authority. What are the roots of that difference, and what implications do they have for policy related to bus service provision by the public and private sectors?

The difference is not the result of the difference between private and public enterprise, as that is normally understood. Nor is it the result of inherent comparative (dis)advantages in the routes traveled. The differences are associated with (but not necessarily caused by) differences in scale of the organizations involved. Whatever the source, it is strong enough to overcome an existing implicit subsidy system that favors the public sector. Of all the factors discussed in this chapter, the two which seem most significant are the privates lower labor costs and greater decentralization of decision making. The TA's higher labor costs are shaped both by higher operator wages (with repercussions throughout the payroll) and by a disproportionately larger organization. The privates' advantage in decentralization of decision making is the product of small private unit size together with a high degree of centralization within the TA. The labor cost difference has been reduced in recent years, and is the subject of public policy and political action that surpasses the realm of transportation policy proper; in New York City, the choice of private versus public local bus service provision is not likely to have a significant impact on labor costs. The centralization of decision making in the Transit Authority has increased in recent years, as a part of deliberate management policy, while increased public regulation has lessened the benefit of smaller scale decision making units in the private sector. More effective organizational and monitoring structures should be found for both the public and private firms.

LOCAL AND EXPRESS BUS RIDERSHIP 1980-1984

NO. OF PATRONS IN MILLIONS



LOCAL
EXPRESS

FIGURE 23

BUS RIDERSHIP SHARES, 1984

NO. OF PATRONS IN MILLIONS

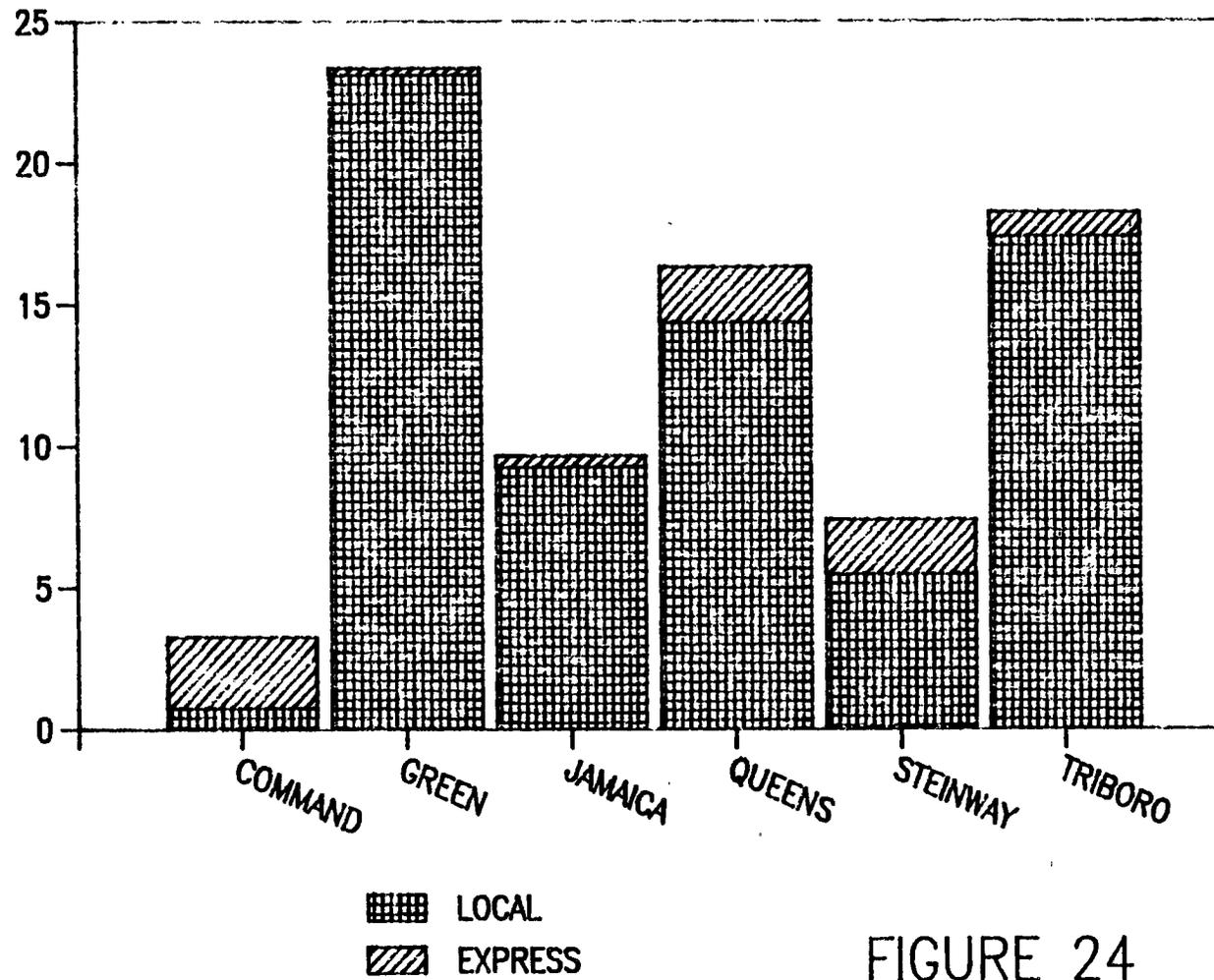


FIGURE 24

PART III
EVALUATION

Having reviewed the private sector transportation operations in the preceding part of this report through the case study approach, findings and conclusions need to be defined, assembled, and presented in a comprehensible manner. There are significant differences among the various submodes, but, since all of them cope with the same environment and provide a basically similar service, there are even greater similarities. This later factor allows a joint discussion in a comparative format. The strengths and weaknesses of the private sector services in the New York area are described and emphasized in this the evaluative part of the report.

The structure for this discussion is the following:

- a. How is the service provided and how does it operate on the streets? (primarily from the perspective of the patrons)
- b. What are the working conditions and government controls? (primarily from the perspective of the drivers)
- c. Is the return adequate? (primarily from the perspective of the owner/operators)

A. OPERATIONAL AND FACILITY IMPLICATIONS

The operational aspects of private sector transportation can be looked at from at least two points of view:

- what kind of service is provided to the patrons of these activities, and
- what impacts are thereby generated that affect the rest of the urban community.

All this relates to how well and how conveniently people can get to jobs and other destination points. Also, how safely and how affordably they can accomplish their trips. These concerns involve the physical operation on streets where concentrations of vehicles may create excessive congestion and pollution. As the earlier case studies suggested, in some instances the private modes represent an insignificant component of the traffic stream, in others the conditions can approach anarchy. Above all, there is the question of the quality of service -- is it responsive and affordable, is it appropriate to the needs and suitable to the various environments?

Beyond what can be observed regarding the dynamics on the streets, there are also issues related to fixed facilities -- garages, repair places, stops, and terminals -- and whether they can provide an adequate level of services or are available at all. Clearly, if repair and maintenance -- even regular cleaning -- cannot be accomplished well and reliably enough, the service on the streets will be affected, and the patrons will be most aware of such difficulties. It is also well to keep in mind, since the total fleet is so diverse, that the smaller vehicles (sedans and vans) can be maintained through any number of ordinary garages that keep automobiles in operation, while the larger vehicles (buses) tend to use specialized facilities and mechanics. The physical size of units is also a storage consideration -- buses simply cannot be parked on the streets all the time. Furthermore, a diesel bus cannot be left outside during a cold winter night with its engine shut off, since it will be almost impossible to start it again in the morning.

Private operations, being, by-and-large, an element superimposed on existing streets, usually represent a new traffic load on channels. Addition to the physical infrastructure to support these activities (such as creating additional street space or building passenger shelters) can rarely be achieved easily, and are almost always unknown. The private sector does not have the authority and resources to do that, even if it were physically possible.

These conditions have generated reactions and opinions for some time in New York. On some occasions the expressions of concern have been most vocal. Clashes have taken place, and, while they have been mostly verbal, some physical actions against or among private operators have also been recorded. In most cases the sides are drawn quite clearly:

- There are the service users who find these operations convenient and are willing to extend themselves to preserve their established travel services.
- There are the new service providers whose livelihood is affected and who -- if it is otherwise safe for them to do so -- will protect the operations. In many instances, they are not particularly concerned about full legal propriety and all extant regulations.
- There are the rest of the indirectly involved population who may live in neighborhoods that are heavily traversed by added traffic or who may drive cars on streets that become more congested. (All the private modes discussed here are of the rubber tire type, thus impacting streets directly.)
- There are the existing providers of regular, established public service who see an intrusion into their territory and some (or significant) loss of business.
- There are the regulators and responsible government agencies who are frequently not able to enforce the regulations that are supposed to apply (or with some unease choose not to enforce them fully).

1. Service Levels

Since the private services have to operate in a competitive environment -- different operators often compete among themselves within a given service type and all of them compete against other modes, particularly public ones -- the levels of service, in terms of service availability, are generally quite high. Service intervals for commuter vans, express buses, shared taxis, and feeder jitneys are usually short. In many cases, during peak periods, a vehicle is always in sight: if a patron misses one, the next one will be approaching. However, this feature is a direct consequence of demand, i.e., vehicles are usually in sufficient supply to pick up the fares and their dollars when these opportunities appear on the street. It also means that during off hours and in lower density areas the headways can be considerably longer. Generalizations cannot be made reliably because -- not surprisingly -- such feeder and commuting services have only appeared so far in corridors and districts where the volume of demand is quite high to begin with.

The conditions are quite similar regarding public livery vehicles. They too exist in sufficient numbers across New York City so that there is no shortage of service. Street hails are readily possible on almost all larger streets in minority districts, and this condition has lately been extended to most major arteries throughout New York. Responses to telephone requests are made quickly almost anywhere in the City. In the open environment that exists -- legal or sublegal -- an overall situation has been reached where the existing demand (coupled with an ability to pay) has generated a most satisfactory level of service capability.

(The private bus companies in Queens, however, do not fall in the same category. As has been discussed elsewhere, they are not much different from regular TA and MaBSTOA service and thus provide a service level that is adequate overall, but does not quite achieve satisfactory standards in many specific instances.)

Beyond the basic quantitative service availability from private modes, there are issues regarding quality of service. Here the situation is not as good across the entire spectrum. Many factors ranging from appearance and maintenance of the vehicles to driver courtesy are involved.

In many cases the situation is "normal" for New York City: complaints come in, but the conditions are generally adequate. This applies to express buses, shared taxis, and private bus companies. Public livery vehicles and commuter vans, however, show a great range in their quality. Almost invariably this feature is a reflection of what the riders will accept (and how much choice they have in the matter). Thus, the vehicles servicing upper income districts are frequently in the luxury class, while the poorer neighborhoods often have to make do with automobiles that are close to the end of their service life. Much of this is determined by the policies established by individual bases and companies in various areas. There is usually a direct correlation between the organizational level of an enterprise and the quality of its vehicle. Those who operate in a completely legal mode and wish to maintain repeat clientele will have the better vehicles. The true gypsies and those operating the most decrepit vehicles fill in the gaps (off hours) or in remote areas or they insert themselves in high demand situations where riders are willing to use any means to get to their destinations. The point is that there is no overall standard or control mechanism. The quality of service is simply governed by how desperate the patrons are or how choosy they can afford to be. The case studies pointed out many instances where specific operators are going to considerable lengths to provide a quality service that will be appreciated by their patrons and thus become a permanent feature of those neighborhoods.

The quality of drivers correlates with the quality of vehicles and the areas that are being served. Some companies in upper class and middle class districts even have a dress code, and drivers who are targets of passenger complaints are terminated. On the other hand, there are many locations where patrons fear for their personal safety because some drivers have been known to engage in criminal acts. (Usually, of course, the security problem plays out the other way.)

The question of personal safety always looms large in the minds of New Yorkers and all other urban residents. In most of the instances that have been reviewed here, the sheer volume of people provides a comfort factor because nobody is ever alone in an isolated place. Also, during the commuting rush people are preoccupied with the task of moving rapidly, thus not being too worried about safety.

Beyond that, however, there are serious concerns. This is of course a particularly important problem at night, on low density corridors, or being the single occupant of a vehicle. The industry is most cognizant of these issues, and we frequently encountered a fervent expression of hope by livery owners and drivers that no major criminal act will be committed in their vehicles that would generate wide media coverage and thus damage the reputation of all these operations. This has not happened, and it can be concluded that the activity is as safe as anything else in New York. This is another way of saying, that the industry -- in spite of the sometimes improvisational nature of enterprises and frequently questionable characteristics of drivers -- has been able to police itself and maintain adequate personal safety standards.

2. Conditions on Streets

There is no question that the growing popularity of private transportation modes in the City of New York is resulting in increasingly heavy traffic congestion and in accompanying pollution, noise, and safety problems. All of these vehicles operate on public streets or highways, and invariably they have replaced a higher density (i.e. less attractive) mode or created an activity where one did not exist before. (Again, the private bus companies in Queens are the exceptions to these general observations.)

The riders of express buses are mostly former subway patrons, and the riders of commuter vans come largely from buses and subways. The customers of livery and neighborhood car services used City buses before, they walked, or had limited mobility in general. The users of jitney feeders and shared taxis were patrons of buses or subways.

Thus it is fair to say that in almost all instances private operations in New York have not filled an absolute service gap, but they have expanded the level of mobility and access for

residents, workers, and visitors. (There are some isolated instances of areas without any reasonable public service which are now substantially in the private sphere.) The convenience of being able to reach destinations much easier and faster has been the driving force behind the growth of these activities. The private industry has been able to respond to a demand, which the public sector could not fill. This ranges from the desire of an office worker to get to his job with the least amount of delay and uncertainty to an elderly person reaching a service center by a single and direct route. The livability in this City should thereby be improved, at least for residents of certain neighborhoods.

The physical consequences of these trends, however, are quite apparent in many places. The streets have simply not been designed for the vehicular loads that converge on some nodes. This includes heavy express bus traffic on major Manhattan avenues, and it extends to masses of vehicles feeding major subway stations in the boroughs. There is no capacity left over for other traffic, whether it is local or long-distance, at these locations during peak hours.

The conditions are exacerbated greatly by the aggressive driving behavior of the operators. This occurs in particular with the less organized and controlled components of the industry, i.e., those under the strongest competitive stress: feeder jitneys, commuter vans, and gypsies in general. Frequently, traffic rules are violated with impunity, and, if the companies themselves do not police the behavior of their drivers, the regular traffic controllers do not appear to be able to achieve enforcement at the more remote locations.

Mid-block U-turns, picking up and discharging passengers from the wrong side in the middle of the street, standing and waiting in the second and even third lane, and jumping traffic signals are the most common transgressions. All of them generate safety problems and cut down considerably the through-put capacity of any street. Commuter vans, competing for fares with overlapping bus routes, add to this list the practice of cutting off buses and passing in front of them with close clearances to sweep up passengers.

The progressive intrusion into services established previously by others is one of the concerns that is voiced strongly by many operators. Clearly, those who are more established are also more concerned. It is not only MTA that is endeavoring to protect its patronage; even semilegal operators with a going business are complaining loudly about poachers and gypsies in many instances. The private bus companies and several of the better organized van units are among those most concerned because their operations are fragile and at the financial margin anyway. At the same time they feel rather powerless because street controls are not provided adequately by police or traffic enforcement agents, and they themselves are not about to engage

in vigilante strong-arm tactics to protect their turf.

There can be little question that, as much as flexibility is desirable, the anarchy and chaos that exist at some locations have to be eliminated. Operators do need reasonably stable conditions to survive and do their job.

3. Fixed Facilities

One of the characteristics of private sector operations is that they tend not to develop off-street facilities and generally rely on the available infrastructure represented by public rights-of-way. Funds for such amenities are simply not available. Nor do the private operators possess the necessary authority to assemble and acquire space, and to clear and develop it for transportation purposes at any sizable scale. Neither do they appear to try, and this factor may represent a sizable, not-intended subsidy to private sector activities.

Even express bus companies, which have the strongest financial base, have not provided a single off-street vehicle storage space or passenger shelter in all the years that they have been in operation. But at least express bus stops are designated and proper signage for loading areas is in place.

Jitneys, car services, commuter vans, and public livery vehicles operate on the street without the benefit of any special spaces or signs. These are simply locations where they tend to congregate to await passengers. There certainly are specific routes along which they operate at any given time, but their patrons have to discover through word of mouth such alignments - which is not too difficult to do for members of any given neighborhood.

Car services, of course, have a base from which they operate. At the minimum this is a small room where the dispatcher mans a telephone and a radio set. Another larger room may be attached that serves as a waiting room for both drivers and passengers. Frequently, there is no off-street parking space for the vehicles, which simply assemble, double parked if necessary, near the door of the office. On the other hand, there are also operations with full garage facilities that may include respectable maintenance and repair capability. This is usually the case when many or most of the cars are owned by the company, not individual owner/drivers who are simply associated with a base but take their vehicles home with them.

The private bus companies in Queens suffer in particular from inadequate garage and maintenance facilities. Large size buses require space and care, but the companies have never had the resources to make the needed capital investments. Thus, generally speaking, their facilities are not only outdated but substandard to a significant degree. This affects the total quality of service they can provide. Since various subsidy

programs by the government are now in full effect, the companies have repeatedly requested financial assistance in this area. The problem becomes more intrusive each year, and the companies tend to take the view that the inadequacies in this sector are now a public responsibility.

The expansion of car service bases with the accompanying accumulation of moving and standing vehicles in many neighborhoods has generated a functional impact on residential and commercial areas. The zoning ordinance has not fully anticipated these developments, but the concern is real, and land use regulations should address the issues. The questions are whether bases and garages are compatible with residential uses, whether off-street facilities (storage and maintenance) should be required, and whether local traffic load controls should be implemented in the vicinity of such facilities.

Field investigations over an entire year and covering most of New York City have uncovered only the following rare instances where off-street operational facilities exist for private sector transport activities (excluding individual garages):

- A public livery waiting area (so designated) at Lincoln Hospital in the South Bronx.
- An off-street fenced in lot near the 169th Street Station in Jamaica where feeder vans discharge and pick up passengers.
- Partial use of the parking lot across 42nd Street from the Port Authority Bus Terminal to store and queue up New Jersey vans.

B. LABOR AND INSTITUTIONAL IMPLICATIONS

Earlier chapters have suggested that there are significant differences in the organization and provision of the various private transportation services, particularly in terms of the way labor is organized and motivated and of who has authority over which operational decisions. These differences have important implications for both the cost of service provision and the responsiveness of service to local conditions, for, on the one hand, labor typically accounts for three fourths of operational costs, and, on the other hand, some motivational and organizational structures are more able than others to respond quickly to changing local circumstances.

This section reviews the labor and institutional characteristics of the service modes discussed in Part II of this report and considers several basic questions regarding the significance of the differences encountered. How do differences in the organization of labor and institutional authority account for differences in quality of service or efficiency? Can these differences be extended and maintained on a large scale, and what would be the costs and problems of so doing? What kind of regulation do these factors suggest is appropriate, and how is it facilitated or complicated by differences in labor and institutional conditions?

Table 16 presents the cases organized according to a progression of the labor and management structure characteristics. The columns indicate, first, the extent to which labor is organized and how it is paid, and second, the level at which management decisions are made regarding relations with individual clients, community boards, service to be provided, and daily labor relations. As one progresses down the table, the respective services are offered by smaller firms that are less comprehensive but more responsive to their clientele.

The services fall into three broad categories in terms of their labor and institutional organization: traditional bus systems; prearranged demand responsive services; and street-hail demand responsive services. The first two, NYCTA and private buses, are the City's conventional mass transit services, the next three are forms of prearranged transportation, and the final two are informal street arrangements. The first two are the largest organizations and the easiest to regulate, the last is the most difficult, and those in between are all at a similar intermediate position. The possibilities and practice of regulation correspond to these structural differences. Only the first two rely on union labor, which puts their labor costs -- and average driver income -- considerably above the other services; drivers in all other modes have significantly lower expected incomes and longer work days.

Table 16
Services, Labor, and Management Authority

Type/Case	Labor		Management Decisions Regarding			
	Form of Organization	Source of Pay	Client	Community Board	Service	Labor
"Traditional Bus Services"						
NYCTA	union	wages	none	City	City	City
Private Buses	union	wages	none	direct	City	local
"PreArranged Demand Responsive"						
Commuter						
- prearranged	non-union	trip or wages	direct	direct	base	base
Car service - neighborhood taxi		fare or wages	direct	direct	base	base
Car service - livery	indepnt	fare	direct	direct	base	base
"Street-Hail Demand Responsive"						
Commuter - jitney					none or base	base
	indepnt	fare	direct	none	base	base
Car service - free lance	indepnt	fare	direct	none	none	none

Both City and private bus services are relatively complex bureaucratic organizations, unionized, with an extensive division of labor regarding the production of the service as well as the making of policy decisions. There is little interaction between drivers and users, and any variations in quality of service are outside the control of the drivers. Service conditions are largely the outcome of City-wide policy, involving participation by the Bureau of Franchises, City Department of Transportation, and the companies. The private bus companies differ from the TA in two important respects: the geographic coverage of their services and the distance from operations at which decisions are made. First, while management of both entities responds to labor relations issues at the level of the firm, top management of the privates is much closer to

and knows better their employees and immediate working conditions. Second, the smaller service areas of the privates more nearly approximate the boundaries of a few community boards, and thus Community Board representatives are more able to meet with private company managers as equals to discuss service issues. Both of these factors contribute to a sense of greater flexibility and responsiveness of the private companies as compared to the TA.

It should be clear that the private firms are not necessarily more decentralized internally than is the NYCTA (that question remains open), rather the size of the private operations is sufficiently smaller to allow much more contact with conditions at the service delivery level. As a result, the privates are more responsive to their communities, as embodied in community boards, although there is not necessarily any difference regarding responsiveness to individual patrons. If any attempt were made to reproduce this structure of decision making within the NYCTA (e.g., giving significant autonomy to borough level managers), an appropriate set of incentives would have to be designed to guide TA managers' decision making to effectively respond to local needs. Lastly, as indicated in Part II, the private bus companies do not appear to show a large cost savings over the TA. Thus we do not see them as an alternative to replace the TA. Rather, their existence is important as a possible point of comparison and as an example of the potential to increase responsiveness inherent in smaller decision units.

This advantage of systems with greater authority nearer the street is even stronger in the other private services. The pre-arranged demand responsive services are all very similar in terms of most institutional and management decision aspects, although there is variation in terms of organization of labor. They are all organized around a base which structures the service and intercedes with public sector regulatory agencies, organizing requests for service and giving them the right to operate legitimately. As the name suggests, they all involve direct interaction between the client and both the base and driver. While there may not at present be much interaction with the local community boards, service tends to concentrate within a few board areas, and direct negotiation would be quite feasible. Finally, labor relations are also carried out at the base level, whether overseeing employees or negotiating with affiliated owner/operators. Both forms of hiring exist in all of these service modes. However, since payment is always proportional to fares/trips, the incentive to work quickly and respond to demand is always strong. The only difference that may exist would be a weaker incentive for maintenance among employees. (It is also worth noting that services with a fixed route requiring less initiative (e.g., line haul commuter services), tend to attract or hire younger drivers than do other local services.) The greater local responsiveness of this service category makes it a viable alternative for demand situations where one or both termination points of trips are

dispersed, or where other factors make clients willing to pay for the point to point convenience they can provide. It also makes this service the one most able to negotiate with and respond to changing conditions and priorities of local groups or community boards.

We have found the organization (or lack there of) of street-hail demand responsive services to provide the most responsive service to the riding public. They are independent operators, and it is in the interest of the independent owner/driver to seek out customers and be in places where demand is great. They are also illegal in New York City. This type of service is provided not only by firms that limit themselves to this activity, but also during slow periods of the day by those that provide prearranged service. These services require high population density to generate sufficient fares, and operate best when at least one point of the trip is fixed, e.g, peak-hour feeder service. They tend to be unorganized -- i.e., without a base -- although some jitney type services have developed strong organizations. The organized jitney services are able to exert some control over service quality and labor relations, but neither mode has contact with local community boards. There is no simple means of exerting any precise control over the quality of service of the vast majority of free lance vehicles and drivers, except strict police enforcement to rules that would probably shut down operations.

Street-hail service, with the longest hours and lowest expected income, is a way of avoiding the costs and lack of autonomy associated with belonging to a base or driving a yellow cab. On the other hand, street-hail service is an entry level position, from which one may seek to accumulate a little capital and gain the greater security of being attached to a base, or the greater potential income of establishing one's own firm. Thus, that service which is most responsive to the consumer is the least likely to survive over time, unless entry controls are high and/or it is made a legal form of activity, much like the present yellow cabs. In times of high unemployment and/or lax regulation, drivers leaving this activity are continually replaced by others. Whether or not that is likely and desirable in other periods is considered elsewhere in this chapter in terms of the economics of the various segments of the industry and the impacts on the community and City facilities.

The way the services are organized, the way they structure management decisions and provide incentives to drivers are important elements for distinguishing among the services. These institutional aspects shape their responsiveness to local conditions, and for creating both the specific need and channels for regulation. The comparison between the prearranged and street-hail services shows that the key point for self-regulation of safety and other features of service is the base. This should also be the point of contact for public regulation.

C. ECONOMIC AND FINANCIAL IMPLICATIONS

1. The Market Economics of Transportation

It is argued that urban public transportation service must, by-and-large, either be publicly provided or publicly subsidized. The argument rests on two propositions. The first is that total cost of service provision tends to exceed total revenue available from users. The second is that economic and social benefits, broader than those accruing to the individual user, exist. Unless direct or indirect public subsidy is provided, the market will fail as a result of the first proposition and the larger benefits promise by the second would be lost.

The first proposition rests on two observations. The first is that transportation service relies heavily upon the existence of expensive elements of public infrastructure, such as roads, highways, bridges, railbeds, and rolling stock like trains and buses. Consequently the fixed cost of transportation is quite high. Secondly, urban public transportation's most valued function is carrying the workforce between home and workplace twice-a-day. This is referred to as the peak load problem. If the system is to fulfill this role, there must be sufficient plant and equipment to carry this peak load. Hence for 75 percent or more of any 24 hour period, transportation facilities tend to be underutilized. Either peak period users have to be willing to pay enough to cover the costs they generate or there must be sufficient off-peak use to make up the short-fall. Absent one or both of these conditions, either the enterprise must fail as a market undertaking or subsidy must be provided. While there have been exceptions, by-and-large it has been the case that commuters have not been willing to pay the full costs of the system created to serve their needs, and there is not enough off-peak use to cover the shortfall.

With reference to the second proposition, there are two ways in which the shortfall is covered. Either public subsidy is provided to private operators or the systems are publicly operated. The justification for such intervention in the market rests upon the observation that the urban economy could not function without some land use separations between home and workplace. The living densities would be too great for an acceptable quality of life. The urban economy in turn is viewed as a central driving force for a larger modern economy. Since the social benefits of land use separations exceed those private benefits which individual users receive, it is only through collective support that we can insure that the necessary service is provided. As a result, just as none of us individually and directly benefit from the total cost of a modern urban police department (except most rarely), we consider it a necessary service because of its indirect benefits, and we publicly support it. So too with public transportation. It is deemed a

vital public service worthy of public funding because of its larger "external" benefits.

While no one seriously doubts the basic validity of the above two propositions, much debate does exist about the degree of necessary subsidy and its form. Unlike police protection, transportation service is an item that individual users can and will pay for, at least partially, at the time of use. Furthermore, the extensive ownership of private automobiles clearly indicates that individuals are willing and able to make significant investments in transportation service.

From a public policy point of view there are two legitimate questions to be asked: How much public subsidy is necessary? How should it be provided? The two questions though different are not unrelated. A poorly designed subsidy system will generate capital and operating inefficiencies which create pressure for more subsidy than might otherwise be necessary.

In order to help answer these questions, this section will look at the economics lessons to be learned from the private sector modes which we investigated. The central question which we will try to answer is why do these operators appear to make a sufficient return while public sector operations are losing both riders and money? There are two key elements to the answer: demand responsiveness and low overhead. Let us look at each in turn.

2. Demand Responsiveness

One fact which comes through overwhelmingly from our research is that all of the new jitney, van, mini-bus, and for hire vehicle operations developed in response to needs which were not being met adequately by the existing regulated transportation system. The established system of buses and franchised taxi service was not capable of seeking out new markets in response to changes in demand. It took the entry of new operators into the market to demonstrate that the demand existed.

The method through which subway, commuter rail, and bus service is subsidized creates no incentive to behave in a demand responsive manner. The amount of subsidy provided by government is based upon the size of the operating deficit. This is also true of the publicly subsidized local bus operations in Queens. The only pressure which the MTA and private operators get from public agencies is to cut costs. The incentive pattern implicit in such a subsidy scheme leads to two types of agency behavior. The first is to cut costs as much as possible. The second is to be astute at the politics of obtaining public funding.

In theory cost cutting is supposed to eliminate waste without compromising service. In fact, when it is applied, it more often than not cuts service and leaves waste. The reason lies

in the bureaucratic nature of public agencies. They are governed by strict rules in order to attain two potentially contradictory goals: to insure that public funds are not misappropriated and to meet the political priorities of constituent interest groups. One damaging side effect of such rigidity in the field of transportation is that it is difficult, if not impossible, to redeploy resources in response to market shifts. Similarly, attempts at cost cutting must pass through a complex political filter reflecting the concerns of workers, riders, elected officials, and newspaper editorial writers. In practice, this has meant that attempts to cut costs either have gone nowhere or have been translated into deterioration in either the quantity or quality of service.

It should be noted at this point that the above general comments are not meant to be critical of the efforts being made by the present MTA leadership to improve service and eliminate waste and inefficiency. Indeed, commendable progress has occurred. Nonetheless it is a difficult, if not impossible, task to sustain, and -- given the political nature of the problem -- progress is painfully slow.

The long term cumulative effect of concern with cost cutting in public and publicly subsidized systems has been to push their level of functioning near the margin which separates acceptable service levels from those which are unacceptable.

Given the low qualitative operating margin at which these services function, agencies develop skills at working the political process to insure that their subsidy level maintains that service margin. It is not difficult to make a prima facia case that any subsidy cut below the existing level will push the system over the line from acceptable to unacceptable with all its dire broader consequences.

Taken together, the subsidy system does not encourage demand responsive innovation. The problem is that to innovate is to spend money and take a risk -- thus court failure. Even if the gamble is successful, the increased ridership in relation to the systemwide total may be quite small. Therefore, from the agency point of view, the risk/reward ratio is usually too low for such ventures. Given the political risks any innovation entails, it is not possible to get the kind of service innovations from the public operators which we have witnessed among the private ones. Despite the fact that the cumulative payoffs of such innovation may be great, any one innovation may just be too small for an agency the size of the MTA to gamble its political and economic capital upon. On the other hand, a policy decision to force the MTA and large private operators to compete with the new small entrepreneurs may eventually create a climate in which it will be possible for the agency to innovate in a demand responsive manner.

Similar poor demand responsiveness is also found in the franchised yellow cab industry. The monopoly granted to yellow cab operators by the City yields an economic rent with a market value of approximately \$105,000 (the present price tag for a taxi medallion). It is the desire of medallion owners to maintain the value of their property, rather than the urge to be innovative or demand responsive, which drives the industry. The result is that the vast majority of the City has been left without legal taxi coverage for decades now.

The taxi industry has opted to pursue a policy which could be described as "leave well enough alone." That has meant that the owners and drivers have been content to allow its market coverage to shrink from the entire City to the high density core and airport service from that core. As long as the industry could achieve fare increases at reasonable intervals to keep revenues high enough to maintain medallion value, it has been content. Proposals to expand service or innovate in ways which might lead to an increase in the number of vehicles in service have been fiercely opposed (with complete success so far).

As a result of the rigidities of such operations and attitudes which accumulated over the years, a new market burst forth in all patronage segments and geographic areas of the City (low, middle, and high income). Upper and middle income commuters sought the comfort, convenience, and exclusivity of express service from the outlying areas in which they lived. Lower income commuters looked for more responsive, comfortable, and reliable service to subways in the two fare zones in which they reside than that provided by MTA buses. They also sought better local intracommunity service than that which was offered to them by the MTA and the franchised cab industry. The demand gap was filled by private entrepreneurs using small vehicles in a flexible way ranging from passenger cars to mini-buses.

Given the demand driven nature of these new firms, it is reasonable to expect that, if they do not eventually become entrenched groups with markets to protect, they will be forced to continue to innovate in response to demand or go out of business. A major concern which must be addressed in setting policy for these new firms is the degree to which it will be possible to maintain that type of flexibility.

3. Low Overhead

One of the strongest a priori arguments in favor of private operators is that they run their enterprises in a cost-efficient manner, since they benefit directly from any savings. Public operators, on the other hand, achieve no special and immediate rewards from cost saving. In fact, they risk getting smaller future subsidies from state legislatures and city councils as a result of such action. The argument of advocates of increased private service is that, if competition is maintained, then the profit seeking efficiency of private operation will ultimately

translate into the lowest possible fares. It is the promise of efficiency and low fares, along with demand responsiveness, which makes the idea of private operation so attractive. Our investigations into this matter reveal a more complex issue.

The cost structures of large private bus operators appear to be not much different from that of the MTA. Part of the reason may be that the subsidy rules under which they operate do not give them much incentive to be more cost-efficient. However, much of the similarity with public operations appears to stem from the fact that the cost of inputs is almost identical. The price of a bus is the same whether it is purchased by a private or public operator. Similarly, labor costs are virtually identical. Both organizations are served by members of the same union. While it is possible to envision situations in which the costs could diverge in a manner favorable to the private operators, our investigations lead us to believe that it is unlikely that this would be the case. We conclude that, if the size of operations and the level of service is controlled, the issue of public vs. private responsibility has little bearing on cost.

We are convinced that it is the ability of the "non-bus" operations to maintain a small size that permits them to attain low overhead, which gives them a cost advantage. The feature which seems common across all the various van, jitney, and for hire vehicle operations was the prevalence of owner/drivers as the basic form of the business. Such operations have little overhead, and only those costs which have a direct bearing on business are incurred. As a result, these operations find it very congenial to carve out niches for themselves in an environment where the fare structure is defined by the higher cost established operators like the MTA, New Jersey Transit, and the yellow cab industry. They are able to charge the public fares which approximate those of the established operators and gain a satisfactory income from that effort.

The threat to the continued viability of these low cost operations will come from attempts either by themselves or through public action to become fully institutionalized parts of the transportation network. Everything from legal fees and accounting costs to debt finance would become a part of the cost of doing business. Furthermore, as they become established and entrenched, they too will fight to preserve a new status quo, i.e., to protect the turf that they would have obtained.

The final issue with regard to overhead concerns the costs not paid. As matters now stand, these operators have only one major capital cost -- the purchase of a vehicle. However, if a decision was made to bring these operators into the established transportation fold, many other indirect costs would have to be either paid by them or ascribed to them and subsidized. For example, if they were given assigned routes, they would have to cover them for an extended period and most hours of the day. At present, many operators are able to concentrate only on the peak

load in certain areas. They are not responsible for an 18 or 24 hour service. If they were part of the system, they might be taxed for the construction and maintenance of public ways and facilities upon which their business depends. Higher safety and insurance regulation costs would also probably have to be imposed on these operators. Finally, there is the issue of air quality and street congestion. The operators would have to comply with regulations in this area to a much higher degree. As with other forms of regulation, this one too has a price tag.

When looked at as a whole, it is clear that much of the flexibility and cost advantage of these operations comes from the marginal nature of the way the entrepreneurs have entered the industry. If they were to become regular participants, much of the cost advantage would dissolve. The question then would become one of the degree to which they still could prove to be cost-efficient, as compared to the established public services.

Part IV
RECOMMENDATIONS

For an entire year, our team systematically observed private sector transportation activities in and around New York. We went to places rarely visited by officials, and established close contacts with people whose only involvement with City Hall are demonstrations. (See Appendix N containing recent newspaper clippings.) The existence of these operations was not a surprise, but the extent was. Private entrepreneurs provide a service through an improvised system that works, albeit with many frictions, obstacles, pitfalls, and dislocations. The activities in which these people engage are neither planned, nor recognized by official bodies in many instances, and they are, frequently, unwelcome intrusions into the established service networks. Yet, they are vitally important to their patrons.

In light of these findings, it would appear that a logical policy would be to enhance those features that are good and useful, and expunge the negative elements. In other words, we are arguing that public policy should legitimize and encourage these operations in ways which would enhance their positive features and help to overcome their drawbacks. We are thus -- by extension -- opposed to any sudden efforts to enforce existing regulations strictly or to formulate policies with the usual official attitude. If a cure is needed, it should not be a tourniquet or massive surgery; the appropriate type would appear to be the traditional, ethnic New York remedy -- chicken soup.

The recommendations, which follow, are our attempt to outline public policy principles that can achieve positive service aims. They are outgrowths of our observations in and around New York City. We have looked at the problems and the weaknesses, and we believe that many of them can be remedied. And we have certainly studied the strengths and potentials, and believe that much more can be made of them -- particularly if a symbiotic relationship is established with public services. The basic construct would be an integrated urban transportation system that relies on public networks, but which are relieved and augmented by private operations.

Everything we recommend in the following pages has been drawn from some existing source, statement, or situation. We think, however -- even if the individual pieces are not original -- that the selective choice and the assembly into a program do represent a step forward in thinking about the provision of needed services in American cities.

The principal recommendation that emerges from our research work is that private sector transportation be given a reasonable chance to operate and establish a niche for itself. These operations can contribute to, and not detract from, the total public effort to provide urban mobility services.

All our subsequent recommendations are predicated on three concepts:

1. step wise experimentation;
2. field search for the best operational and administrative features(particularly those that are cheapest for the public);
3. avoidance of any irretrievable commitments.

We suggest that it is possible and constructive (with the modes under discussion here) to explore potentials incrementally and to build workable patterns gradually. The new or expanded operations, as proposed below, need not be started all over the metropolitan area at once, but can be tried in separate neighborhoods or in individual corridors. If they work, more can be added. If they do not work, presumably only a few more vehicles will be added to the used car lots.

This entire scenario, however, is based on a very fundamental requirement: a receptive climate has to be fostered among public policy makers as to the potential contributions that private sector activities can make to the total regionwide transport system. They should not be grudgingly accepted, but seen as welcome elements. We hope to show that such an approach would be justified under the programs outlined here. It does imply, however, that a change of attitudes held by most local officials and agencies has to take place.

In specific terms, a set of objectives can be defined that underlie our recommended program:

1. Exploit dormant or under utilized private sector resources and initiatives. The total transportation sector is not poor -- much money is spent every day for the purpose of moving around in American cities -- it is the public sector that is strapped for funds.
2. Expand the available mobility choices for all. Undoubtedly, the most serious constraints are experienced in low income neighborhoods, which should be

remedied, but there is also no reason not to expand the options for premium service to those who desire it and are willing to pay for it (besides private cars and limousines).

3. Provide responsive and flexible transport services. Whether private operators are more efficient than public agencies is debatable, but there is no doubt that they are -- and have to be -- quicker in their reactions to market demands.
4. Lighten the burdens on public transport services. The sharing of peak loads and the reduction of operations in low density corridors should be a major boon to the balance sheets of established services.
5. Build upon experience. Much experience with private sector operations has already accumulated in New York, in other American cities, and around the world; more can be systematically and purposefully generated through controlled experimentation.

A. PROPOSALS AT THE NEW YORK REGIONAL/CITY LEVEL

1. Transportation Bases in Low and Medium Density Neighborhoods

The evidence is incontrovertible that car services operated by private companies in many residential neighborhoods have become essential components of their communities. They have existed for a long time in most places, there are certain traditions and established patterns associated with them, and they can support themselves comfortably in most instances. They take care of the mobility needs of those who do not have cars, and they augment the choices for those who have them. They provide for special or emergency services, and they accommodate commuters, wedding guests, beach parties, etc.

We recommend nothing more than official encouragement for these types of enterprises, because we see them as the nests from which many other opportunities can grow. They can be looked at as the equivalent of neighborhood grocery stores, and they need about as much control and regulation. There can be several of them in the same neighborhood, and services can easily be made available across neighborhood boundaries. Entry should be completely unconstrained which would build the necessary competitive situation assuring quality of service and reasonableness in charges. All this already exists in most places.

The established and desirable types of service that car bases provide upon a telephone call or other prearrangement are the following:

- short-distance, taxi type services within the community;
- longer-distance, taxi type service, to remote destination points (for example, to the airport);
- delivery and pick up of school children;
- group rides to events or special places by clubs, families, or casual arrays of people,
- social service trips for the elderly, handicapped, and other transportation-disadvantaged individuals.

With respect to the latter item, there is a specific opportunity here to encourage the expansion of neighborhood-based car services through public efforts, while responding to a significant social need. That would be the opportunity to regard private local transport units as the principal means to offer mobility for those who do not have it otherwise, and to support these activities financially. Contracts can be (and are) signed between social service agencies and public livery companies for defined tasks and specified client groups. This approach is quite acceptable because it provides a stable underpinning for the neighborhood transport enterprises, but under present rules a somewhat rigid structure is imposed.

The same purpose can be achieved with a greater degree of fluidity by issuing travel vouchers or coupons to qualified patrons -- i.e., adopt a user-side subsidy approach. These coupons could be used for any type of transportation (public or private), as decided by each individual. A metropolitan-level scale for this program would appear to be appropriate, but a smaller geographic scope would also work. The positive encouragement of local transport companies would be found in their official authorization to collect and redeem these coupons.

Elements of regulation regarding these enterprises should be basic and minimal. They certainly should include adequate insurance and safety inspection extending to vehicles, drivers, and the company. Entry and fare limits are not necessary and would quite likely be counterproductive; the self-regulating mechanisms are strong enough to assure proper behavior almost universally. Any repeat rider knows what the fare levels should be, internal crime is rare, and bad drivers are weeded out.

All of the above may sound like a major effort in deregulation. Actually, that is not the case because this sector is not much regulated to begin with. There are efforts underway in New York City to improve strict controls under the jurisdiction of the Taxi and Limousine Commission. This has been and will be resisted vigorously by the industry. There is a need to protect and inform the public, but operational and financial constraints beyond that should be approached with caution. For example, the riders should know what the fares are over extended periods, but an open competitive situation should be maintained as far as possible otherwise.

The companies can also be expected and required to keep tabs on their drivers, particularly regarding such basics as their qualifications, behavior, and traffic record. The organizational format of the transport enterprise is of little concern as well. It can be a corporation, partnership, cooperative, or any other legally recognized unit.

Lastly, since we are describing a community-based mobility center or shop, it could be a "single-stop" market place for transportation services. For example, car rental could be offered, repairs and automotive supplies provided, travel information made available, etc. The aim would be, again, to foster the car base's ability to become the focus of the neighborhood's transportation operations. Thus, among other things, it can become a physical and operational organizing unit for the community.

In an overall sense, the advantage of the proposed system is that it would go far in assuring that mobility is available to any given community or district, even to those people whose financial ability to purchase rides is low. Thus, the burdens and responsibilities otherwise resting on public agencies would

be eased, at least on a conceptual and policy level.

There is no significant reason why the same approach cannot also be taken with respect to high density neighborhoods -- except that they are more likely to have dense public transit service and plentiful regular taxis available. Thus, there would be less need for car base services. On the other hand, these residents may own fewer automobiles and therefore still need to hire trips or vehicles.

2. Local Community Services

Recommendations can also be made with respect to specific transport tasks where private sector participation can be used to advantage, in our opinion. This refers specifically to regular, peak hour needs which, because of the great demand fluctuations hour-by-hour, place unproductive labor and rolling stock burdens on public transit agencies. Again, we learn from jitney type services that exist in several places in New York and at hundreds of locations throughout the world.

The service they offer is effective; the conditions under which it takes place are almost always chaotic. The reason is that the new service providers are intruders, and their presence is bitterly (but mostly helplessly) resented by the established services. The newcomers could be stopped with significant police assistance, but this is not being done currently in New York. (Let us assume that this is not neglect, but a wise public policy.) Vehicles -- vans or regular sedans -- converge mostly on major subway stations, expediting work related trips and augmenting the choices available.

The usual charge that these are "poachers" who "skim the cream" from the corridors should be replaced by the concept that they can "shave the peak." We propose the following set of program elements:

- a. Advance and establish the principle that public transit agencies (or the private bus companies providing regular service in Queens for that matter) should be responsible for base level transportation, but preferably only for base level transportation. That is -- regular service should be maintained in all districts, more or less around the clock, but not necessarily expanded with very short headways during peak hours to accommodate great volumes of commuters. Commuters are in a position to pay; whereas the rest of the transport service (the base level) can be regarded as a social necessity in cities or a public utility. It will obviously have to be subsidized, as it is already.

The aim is to preclude or minimize the need for a large public fleet that remains idle most of the day and many drivers who have to be paid overtime or who have to work

split shifts. (In the last item on this list of steps we will return to this issue.)

- b. Starting now with a concrete action program, an appropriate governmental agency should invite proposals from private or public groups to provide peak hour feeder/distribution service associated with selected nodes and/or defined corridors. A franchise would be awarded to the unit offering the most advantageous terms to the government. (Note: the terms "proposal" and "bid" are frequently and inaccurately used interchangeably. We will not always make a strict distinction either because our recommended program would solicit "proposals" from transport groups, which would contain "bids" as to the quantity and quality of service that they would provide and the amount of relief made possible for public operations -- but not "bids" in the strict monetary sense.)

- c. A governmental agency would be assigned the responsibility of selecting the operator, and also given follow-up duties in monitoring performance. The choice of this agency is the first issue. We believe that in New York City, theoretically and ideally, this should be a Community Board. After all, they were established through a charter revision to assume much responsibility for local development and operation of urban services; they are the units that were expected to know precisely what local needs are and to respond accordingly. Considerable powers have been granted to them. Thus, local transportation should also fall under their auspices.

(We have been advised, however, by a number of people that community boards should not be given this task -- because of their uneven performance, commitment, and ability. The question, therefore, of which exact local unit should be responsible requires further review.)

- d. The unit of government that has the ultimate authority to award franchises in New York City is, pending legal challenges, the Board of Estimate which works mostly through its Bureau of Franchises in this sector. Thus, the latter agency would manage the entire process, or -- if possible -- act upon the detailed recommendations made by a local community unit.

It is also important that the New York City Departments of Transportation and City Planning and the Metropolitan Transportation Authority be participants in the process to review submissions and to evaluate their impacts. This would happen anyway through the normal franchising and Uniform Land Use Review Process (ULURP) that would presumably be triggered, but the point should be made nevertheless that responsibilities for approval and review of consequences should be shared.

Depending on the local circumstances, the "bid" may be the set of relative service benefits (as discussed above) that the candidate unit would offer, and/or the fare level that they would have to charge in order to maintain an unsubsidized service, or even the minimum amount of subsidy that the public would have to provide to keep operations going. The final awarding of a franchise would clearly not depend solely on the plus or minus dollar "bid," but should consider every aspect of service and community need.

- e. The franchise itself for commuter service on any given corridor should be granted for a reasonable short period so that proper reviews, enforcement, and modifications can be made as necessary at frequent intervals. On the other hand, a sufficient period is necessary for any operator to assemble vehicles and staff, to break in the service, to establish a clientele, and to recover the investment.

Three years appear to be an appropriate time span, but further thought can be given to this subject as well.

- f. The private enterprises allowed to respond to such requests for proposal should encompass the widest possible range. They could be any qualified group that presents sufficient evidence that they can provide the service; in other words, a prequalification step might be needed. (Groups from public agencies could also be participants in the process, as is the case in Great Britain.)

Such candidate units would certainly include the neighborhood car bases discussed previously, which usually would be in the strongest position to respond. While this would be a most appropriate solution (giving these enterprises a steady revenue source, strengthening their local role, and providing flexibility in managing their fleet), they should not have a monopoly and thus be trapped by the mistakes of the past. Enterprises from anywhere in the metropolitan area should be able to bid, cooperatives may be formed, new companies could use such franchises to establish themselves, and quite likely other forms of response would be created by small private businessmen.

The question can be raised whether a proposal should be accompanied by a performance bond thus giving some guarantee of service continuation and providing a means of making adjustments in case an operation collapses. The idea is generally acceptable, as long as it does not create too much of an obstacle to free entry by otherwise able operators. Certain risks are to be assumed by all parties, including the possibility that a corridor may occasionally be left temporarily without a service.

The proposal as prepared by each company would have to be

accompanied by a fee to take care of processing costs and to weed out casual submissions. A thousand dollars might be appropriate.

It should be noted that, beyond the application fee, the proposal and the subsequent operation by the selected entrepreneur would not involve actual exchanges of money between the private operator and the government. The proposals are to be evaluated on their merits from the public service, the users', and the transit agency's perspectives. (See item i below.)

- g. It almost goes without saying that, if the operators have to go through the process of obtaining a franchise, their rights have to be protected. It can be assumed that a successful enterprise will do much self-policing in its territory, but it also has to receive every assistance from the public in this direction to secure an adequate income. Gypsies and poachers have to be kept at bay to preclude the situations that frequently exist today on major streets and result in damage to most operators who stay within legally prescribed limits.

Again, the periodic review of performance and rebidding of the proposal should provide sufficient checks and balances against undesirable rigidity. Enforcement of operational rules, however, is critical to the entire program envisioned herein.

- h. We come now to the contents of the proposal that transport companies would put forth, i.e., the scope of service and its features. Our recommendation is that the following items be included:
- The number and type of vehicles that would be placed in operation.
 - The exact routes that would be followed in the corridor, including patterns of pickup and delivery at either end.
 - The hours of operation; the frequency of service each hour.
 - The fares to be charged for service or any part thereof.
 - The availability of garage facilities for maintenance and overnight parking.
 - The availability of any terminal space (preferably off-street), or proposed patterns of operation at critical or congested locations.
 - The qualifications and type of drivers; the extent of record keeping regarding drivers.

- The information systems that will be in place (posters, telephone answering service, flyers, etc.) to serve potential riders.
 - Recommendations as to what service reductions would be appropriate on the public systems. (This is perhaps the key element of the entire program and is outlined in greater detail in the following paragraphs.)
- i. The possibility of reducing public transit operations, without impairing service availability to the riders, is seen by us as the principal benefit associated with this proposed program. The intent, as has been mentioned before, is to shed those runs, and possibly entire routes, that can be replaced by private service. This is the true "bid" that a private operator would make to the City and MTA, representing a direct benefit to the public. The greatest savings of course would occur through the elimination of those elements that are only productive during peak periods and remain idle during the rest of the day, while consuming resources.

The potential threat to reduce jobs in the unionized public sector will undoubtedly be met with much organized opposition, and political problems will emerge. Similar issues are faced in many other situations where changes in established service operations are contemplated. Much sensitivity and constructive negotiations will be required, and most likely the key will be gradual attrition of unneeded components, rather than sudden dislocation.

Traditionally, transit agencies have argued that peak periods on high density corridors give very high load factors and thus must be profitable, at least with respect to the rest of the operations. That is true if a fixed number of vehicles and drivers have to stay in operation in any case. We are suggesting that the approach in evaluating system performance and responsibilities be modified. The proposal is to establish, to the extent possible, a steady rate of performance for the transit agency, with a leaner fleet and staff, and have private operators pick up the peaks -- which they are able to do better because of their inherent flexibility. It is worth noting that we are not calling for the abandonment of routes by the MTA or private bus companies -- certainly not without a reasonable substitute. Rather, we are proposing that they run at a steady base (off-peak) rate. By turning the peaks over to the smaller operators, the public sector could be freed in many locations from one of the most onerous economic burdens of transport operation: peak period service in low density areas.

For a service proposal to be particularly attractive to the reviewers, it should also include the assuming by the

private operator of responsibility for entire routes and operations that are not obviously profitable, but can be managed by being a part of the total service package (internal cross-subsidy). Again, the benefit to the public would be measured by the degree to which such a component reduces strain on the transit agency's budget.

Lastly, a critical element in the evaluation of various proposals must be MTA's participation. Indeed, it is hoped that the authority may take the lead in identifying situations, with possible service packages, where the shedding of certain parts of its current responsibilities would represent a tangible benefit. In any case, MTA and its subsidiary agencies would have to be satisfied that the best proposal truly represents a savings to the public and still provides a satisfactory service locally. To reach such a finding unequivocally, it may be necessary to adjust present accounting systems, i.e., allow the preparation of balance sheets and income statements for a specific route or clusters of them.

All of the above certainly does not preclude the public agency from preparing its own "bid" for the service package. It would have to show that its operations, perhaps augmented to match the responsiveness of the private service, is more cost effective than the alternatives. This is entirely possible in a number of instances, but not likely to be the case all the time. We believe that -- upon rethinking the options -- the public agency would approach this concept of sharing the transportation burdens with some enthusiasm.

Our final question: what assurance is there that the above program will work properly, that the rules will be observed, and that proper behavior will take place when things are so chaotic on the streets today and no effective enforcement is visible? The answer is that the current state of affairs has been allowed to happen through benign or some other type of neglect and that police enforcement simply does not occur within this industry. It has to be assumed that if the entire set of operations are placed on a regular and "legitimate" basis, when both riders and service providers find it in their interests to cooperate toward maintaining a reliable and effective service, that appropriate means of control and proper enforcement will be instituted. There can be no illusions, however, that this will be easy or noncontroversial. Even with a flexible and responsive service, at least initially, significant police assistance may be required.

3. Long-Distance Commuting Services

The previous scenario addressed programs geared toward neighborhood level feeder services, i.e., those directed to major transport nodes (subway stations) and commercial/institutional centers in the community. The next possibility for

private sector participation exists in a similar way at a larger geographic scale: commuting to principal, metropolitan level centers (meaning primarily the Manhattan CBD).

We suggest that the same basic procedure be used here as described above, but with certain obvious adjustments. One of these is the general purpose of such service additions or replacements. In this case the principal driving force is likely to be a desire by the riding public to obtain a higher quality service than is currently available, and they will have to pay for that privilege. This is exactly what is happening around the region already.

The subway and rail services would remain in their current form and with their current levels of operations. The private entrepreneurs who desire to provide a service would also submit proposals, but they would have to go to a central agency directly -- in the case of New York City, to the Bureau of Franchises (Board of Estimate).

Our proposal recommends the use of the franchise mechanism in this sector too, as opposed to the absolute free-market approach. While the latter is almost the rule today de facto, there are legal and supervisory problems. A franchise for commuter service -- provided that it is granted with a positive attitude without too many constraints -- would give a managerial framework for the government that can be used to allocate street space, control activities at the terminals, and preclude unnecessary turbulence and confusion. It should not, however, contain competition appreciably.

Under this scenario the service offerors (as candidates) would again be prequalified companies, consisting of express bus companies, van enterprises, cooperatives of taxi drivers, or other types of business groups. The franchise, because of the larger investment involved and greater commitment made, would have to be for a longer time period than the neighborhood services -- say five years.

No specific limits on fares need be imposed, as long as they are stated and remain steady. It can be assumed that they will be invariably higher than comparable public services, reflecting the premium nature of operations and the absence of public subsidies.

The proposal would include the same items as outlined before, but would stress in particular the following:

- The patterns of operation at both the origin and destination ends.
- The street conditions along the line haul portion of the service (prevailing traffic volumes, bottlenecks, impacts, etc.).

- The availability of terminal facilities at the downtown end of the route (with particular emphasis being placed on keeping congestion loads manageable).
- Statements and explorations of the extent to which public service loads can be relieved. (This is probably not going to be a very significant impact in statistical terms. It is hoped that this element would emerge from constructive prior discussions with the relevant public agencies and that it would not entail the need for elaborate planning studies by the transport entrepreneurs.)

B. PROPOSALS AT THE NATIONAL LEVEL

Our research has concentrated on the New York City region almost exclusively; certainly our field work is limited to cases found here. The recommendations are thus also responsive to the conditions in New York. It would be very tempting to state that conditions in other American cities are not substantially different from those in New York and the same recommendations should be workable elsewhere. However, in the absence of further study, we cannot say for sure. It is worth noting that all over the urbanized world, numerous spontaneously generated, privately operated jitney and bus services are found. They respond to the same basic needs. Therefore, we believe that the implications and findings of our study will have applications in many other American cities.

The one caution that we would introduce is the observation that the scale and the intensity of development and transportation needs are higher in New York than elsewhere in North America. This applies to both the overall environment as well as local districts. A number of the concepts that we have advanced can only work (probably) in high density situations.

C. IMPLICATIONS OF RECOMMENDATIONS

It is assumed that the recommendations advanced in this report will serve to improve the level of mobility services and their availability to the regional population. In addition, the program that we have proposed stresses the potential for the shedding of unprofitable elements of the existing public service industry -- reduced need for stand-by vehicles to carry peak loads, minimization of overtime and split-shift labor expenses, elimination of some routes entirely (i.e., replacement in all cases by equal or better private services).

How much public money could be saved by such a program? To know precisely, two factors would have to be fully understood: the exact form in which our recommendations were to be implemented and hence the exact number of public vehicles to be reallocated; and the actual costs of service on the routes affected. Neither of these crucial items are presently known with any certainty. The specific plan can not be defined because it is yet to be devised, and its execution would depend on steps taken by public agencies. Also, the detailed cost data may not even exist within the MTA at the present.

However, using aggregate data available in public reports for the year 1984, it is possible to estimate the order of magnitude of the potential savings to be realized.

Bus service has borne the major brunt of the ridership decline suffered by the NYCTA. Between 1970 and 1984, bus ridership declined by 37 percent, while total bus miles of service only declined 5 percent. Hence, despite any savings achieved from improved efficiency of operations, the cost of bus service has been increasing. Between 1980 and 1984, the cost per vehicle mile for bus service rose by 21 percent from \$6.49 per mile to \$7.87 per mile. On a vehicle hour basis, the rise was 31 percent from \$48.58 to \$63.61.

A major reason for the severe ridership decline of buses at a time when rapid transit occasionally showed an increase along an otherwise declining curve is that bus travel is far more easily replaced by alternative services than rail travel. This is demonstrated by the demand elasticities of the two modes in response to the 20 percent fare increase instituted in January 1984. Rapid transit ridership declined by less than 1 percent while bus ridership fell by more than 6 percent.

Indeed, a major finding of our research project has been the increasing ease with which riders can now give up City buses because of all the available substitutes which are perceived as a superior product. It is likely that any new fare increase will accelerate this long term trend.

If the TA is to offset these trends of rising costs and falling ridership, it can take one of two approaches. It can invest capital to make its product much superior and hope that increased ridership will ensue along with sufficient additional revenue to justify the risk. Or it can attempt to decrease its costs along the lines suggested here. The table below outlines the potential cost savings.

Table 17
1984 Unit Cost Estimates For NYCTA Surface Transportation

1. Total Operating Costs (TA & MaBSTOA) (\$000,000)	\$756.9	
2. Total Number of Vehicles		3,835
3. Total Operating Cost per Vehicle	\$197,366	
4. Cost per Vehicle per Weekday	\$759.10	
5. Average Number of Weekday Revenue Passengers		1,623,163
6. Average Number of Passengers per Bus per Weekday (This is the same as weekday revenue per bus @ \$1.00 per rider)		423.25
7. Annual Revenue per Veh. for 260 Work Days	\$110,045	
8. Net Revenue Loss per Vehicle (Line 3. - Line 6.)	\$ 87,321	
9. Average Number of Weekday Trips		58,582

If the NYCTA could remove just 10 percent of its vehicles from operations on its low cost outlying routes, it could achieve annual gross savings of almost \$76 million and a net savings of over \$33 million. Admittedly, this is a very general approximation, and the real question is how it can be accomplished in actual practice. Let us, therefore, consider a hypothetical but not unreasonable situation.

Assume a 5-mile route along which service is provided with 5-minute headways during the 6 rush hours (6 AM to 9 AM and 4 PM to 7 PM) and with 15-minute headways during the other 18 hours of the day. Assuming an average speed of 10 miles per hour, 4 buses per hour are needed for 18 hours per day and 12 buses are needed for 6 hours per day to service this route. (Reserve vehicles and layover time are not included in this scenario.) Two thirds of the fleet are thus idle most of the day. If the 8 additional buses were eliminated due to the use of private jitney service, then \$6,072.80 (Line 4. x 8) per day in costs would be saved.

On the revenue side, the elimination of 36 peak period runs would lead to a loss of some income. Let us assume that each of these runs was 50 percent full. The average weekday run carries 27.7 passengers (Line 5./Line 9.). If loading during the peak periods were double the average, then vehicles would contain 55.4 passengers. Our observations indicate that the buses on peak runs to subway stations where jitneys operate are approximately half full. Thus we take this assumption to be reasonable. This would result in a daily loss of \$1,994.40 revenue income for the eliminated peak period runs for this route.

The net saving per weekday under this scenario would be \$4,078.40 or \$1,060,384 per year.

If the NYCTA could remove peak period service on just 15 percent of its 222 bus routes (or 33.3 routes), it could save about \$35,000,000 per year. We believe that these estimates are conservative. It must be remembered that we are working with aggregate figures and averages. However, the outlying routes around which our recommendations are shaped tend to be the higher cost operations because of the lower density districts where they run. As a result, the effort to provide peak period service along these routes tends to generate high cost. Consequently, shaving these peaks or even turning over whole routes to unsubsidized operators could prove to be a very cost saving move without causing a decline in total service to riders in these outlying districts. At a minimum, these estimates should compel a closer look at these operations and possible scenarios.

TECHNICAL APPENDIX

APPENDIX A

LIST OF INTERVIEWS

I. PRIVATE BUS COMPANIES IN QUEENS

1. Command Bus Company, Stan Brettschneider, Vice President and Catherine Garson, General Manager on March 25, 1986.
2. Green Bus Lines, Martin Gottlieb, Manager on April 3, 1986. Follow up interviews with William Cooper, President and Doris Drantch, Comptroller on April 17, 1986 and July 30, 1986.
3. Jamaica Bus, Raymond Martini, Superintendent of Transportation on April 10, 1986.
4. Queens Transit and Steinway Transit Corporation, William Sanders, Director of Transportation and Thomas Albertini, Traffic Manager on March 27, 1986.
5. Triboro Coach, Robert Planz, Superintendent of Transportation on March 6, 1986. Follow up interview with Tom Agar, Comptroller on March 14, 1986.

II. FOR-HIRE BASES

1. Touch of Class (June 16, 1986)
2. Audobon (June 16, 1986)
3. Bronx Express Car Service (June 30, 1986)
4. Danite (June 23, 1986)
5. Delta (June 16, 1986)
6. Family (June 16, 1986)
7. Fordham
8. Galil (July 17, 1986)
9. LGM Car Service (June 16, 1986)
10. Knight Riders (June 16, 1986)
11. Midland Cars (October 17, 1986)
12. Reyno (June 16, 1986)

13. Staten Island Car Service (October 17, 1986)
14. Superior (June 16, 1986)
15. Tel Aviv (June 17, 1986)
16. Thruway Taxi (June 23, 1986)
17. Transportation Car and Travel Service (September 30, 1986)
18. Uptown Transit Corporation (June 30, 1986)
19. White Top Car Service (September 30, 1986)
20. 179th Street Car service

III. COMMUTER SERVICE OPERATORS

1. Executive Service Transportation, Inc. Jamie Ramierez, President on March 27, 1986.
2. Exec-You-Van, Inc., Ray Murphy on July 10, 1986.
3. Mosholu Limousine Service, Inc., Barry Cohen, Owner on July 24, 1986.
4. Queens Van Plan, Inc., Lloyd Case on July 22, 1986.
5. VIP/Wynn Van Service, Mr. Wynn on September 9, 1986.

IV. NEW YORK CITY AGENCIES

1. Mayor's office of Transportation, Jack Lusk, Special Advisor to the Mayor on Transportation on October 3, 1986.
2. Metropolitan Transit Authority, several meetings with Sheldon Fialkoff, Deputy Director of Planning, and Greg Johnson.
3. Metropolitan Transit Authority, Robert A. Olmstead, Special Assistant, Planning Department on September 26, 1986.
4. New York City Bureau of Franchise, David Adams and Henry Dachinger on March 4, 1986.
5. New York City Bureau of Franchise, Morris Tarshis, Director on September 12, 1986.
6. New York City Department of City Planning, Transportation Division, Kathleen Stein-Hudson and Arnold Bloch.

7. New York City Department of Transportation, Bureau of Transportation Planning and Research, Andrew Hollander, R.S. Salvensen, Joel Shaw, Sam Shariyf, and Bill Armstrong on February 21, 1986. Follow up interviews on March 20, 1986 and March 28, 1986.
8. Taxi and Limousine Commission, Gorman Gilbert, Commissioner.

V. COMMUNITY GROUPS AND ORGANIZATIONS

1. Affiliated Livery Drivers & Owners Association of New York, Inc., Several meetings with Kenny Arthur, President.
2. Amalgamated Transport Union #792, Lawrence Hanley, Secretary-Treasurer on March 31, 1986.
3. Fifth Avenue Association, Michael Grosso, Executive Vice President on February 24, 1986 (telephone).
4. Metropolitan Livery Association, Frank Maralla, President.
5. Transport Committee, Community Board #9, Queens, Robert Mangieri, Chairman on July 23, 1986.
6. Transport Workers Union #100, James Hood, Vice President for the private lines on July 24, 1986.

VI. MISCELLANEOUS

1. Livery drivers at Lincoln Hospital Taxi Stand (June 30, 1986)
2. Unger, Ari, owner of a used car dealership which converts cars for either yellow cab or livery use.
3. Westchester County Department of Transportation, interviews with Raymond Jurkowski, Deputy Commissioner, John Murray, Director of Fiscal Affairs, Joseph Petrocelli, Director of Planning, Perry Rogers, Director of Operations, Thomas Calanti, Assistant Program Administrator, Mary Helmsworth, Program Administrator, and Richard Stiller, Director of Maintenance.

APPENDIX B

LIST OF DOCUMENTS

I. MAJOR DOCUMENTS

1. MTA Strategic Plan
2. New York City Bureau of Franchise, financial statements of Command, Green, Jamaica, Queens, Steinway, and Triboro for fiscal year 1984.
3. New York State Department of Transportation, "1985 Report on Transit Operating Performance in New York State," p. 111-152.
4. New York City Department of Transportation. (September, 1977) "Express Bus Policy: A Technical Study for Better Integration of Transportation Modes Project."
5. Smith, Richard B., Committee Chairman (March 1981-1982) Survey of the Taxi Riding Public to the Mayor's Committee on Taxi Regulatory Issues.
6. Transportation Training and Research Center, Polytechnic Institute of New York, in association with Urbitran Associates. (February 1, 1986) Commuter Vans Service Policy Study. (Draft Final Report) Prepared for the New York City Department of City Planning.
7. Urban Mass Transportation Administration, 1983 Section 15 Annual Report.
8. URS Company, Inc., in association with Polytechnic Institute of New York. (February, 1986) Express Bus Route Policy Study. Prepared for the Department of City Planning.
9. URS Company, Inc., (1986) Express Buses, Final Draft.

II. MISCELLANEOUS DOCUMENTS

1. New York City Department of Transportation, "Ridership figures for 1975 through 1984."
2. New York City Department of Transportation, "Load factors for peak hour, peak direction, by company," July 20, 1983.
3. New York City Department of Transportation, "Alternative Distribution Plan for New York City Private Bus Companies," 1984, 1985.
4. New York City Department of Transportation, "Bus Fleets of the Private Operators Compilation by Age," 1960-1985.

5. New York City Department of Transportation, "Local Private Operators' Fleets - Buses Eligible for Replacement as of April 1985." (Revised)
6. New York City Department of Transportation, "Private Local Bus Operators Fleet Size," 1986.
7. New York City Department of Transportation, "Basic Mission of the City's Private Bus Program," 1986.

APPENDIX C

CAR COUNTS IN NEW YORK CITY
SUMMER 1986LIVERIES

	96th St./ Amsterdam	125th St./ A.C. Powell	Fordham/ Grand Con.
8-9AM	195	163	261
10-11AM	169	208	329
11-12PM	82	169	222
	Park Row/ City Hall	Parsons/ Hillside	53rd St./ Park Ave.
8-9AM	84	39	211
10-11AM	68	28	159
11-12PM	86	45	123

BLACK CABS

	96th St./ Amsterdam	125th St./ A.C. Powell	Fordham/ Grand Con.
8-9AM	44	35	9
10-11AM	22	33	11
11-12PM	18	27	10
	Park Row/ City Hall	Parsons/ Hillside	53rd St./ Park Ave.
8-9AM	73	11	148
10-11AM	57	15	109
11-12PM	81	17	117

GYPSIES

	96th St./ Amsterdam	125th St./ A.C. Powell	Fordham/ Grand Con.
8-9AM	12	239	235
10-11AM	63	212	238
11-12PM	30	285	221
	Park Row/ City Hall	Parsons/ Hillside	53rd St./ Park Ave.
8-9AM	18	24	2
10-11AM	6	29	9
11-12PM	5	11	4

LIMOUSINES (STRETCHES AND OTHERS)

	96th St./ Amsterdam	125th St./ A.C. Powell	Fordham/ Grand Con.
8-9AM	12	7	3
10-11AM	11	12	1
11-12PM	11	11	3
	Park Row/ City Hall	Parsons/ Hillside	53rd St./ Park Ave.
8-9AM	19	4	109
10-11AM	21	6	96
11-12PM	22	2	90

LIVERIES, BLACK CABS, GYPSIES, AND LIMOUSINES

	96th St./ Amsterdam	125th St./ A.C. Powell	Fordham/ Grand Con.
8-9AM	289	482	521
10-11AM	482	504	585
11-12PM	362	522	464
	Park Row/ City Hall	Parsons/ Hillside	53rd St./ Park Ave.
8-9AM	194	78	470
10-11AM	152	78	373
11-12PM	194	75	334

YELLOW CABS

	96th St./ Amsterdam	125th St./ A.C. Powell	Fordham/ Grand Con.
8-9AM	102	38	13
10-11AM	217	39	6
11-12PM	221	30	8
	Park Row/ City Hall	Parsons/ Hillside	53rd St./ Park Ave.
8-9AM	130	42	1,903
10-11AM	152	23	1,894
11-12PM	185	20	1,571

BUSES

	96th St./ Amsterdam	125th St./ A.C. Powell	Fordham/ Grand Con.
8-9AM	46	77	64
10-11AM	39	76	63
11-12PM	31	80	69
	Park Row/ City Hall	Parsons/ Hillside	53rd St./ Park Ave.
8-9AM	113	130	--
10-11AM	102	90	--
11-12PM	70	74	--

VANS

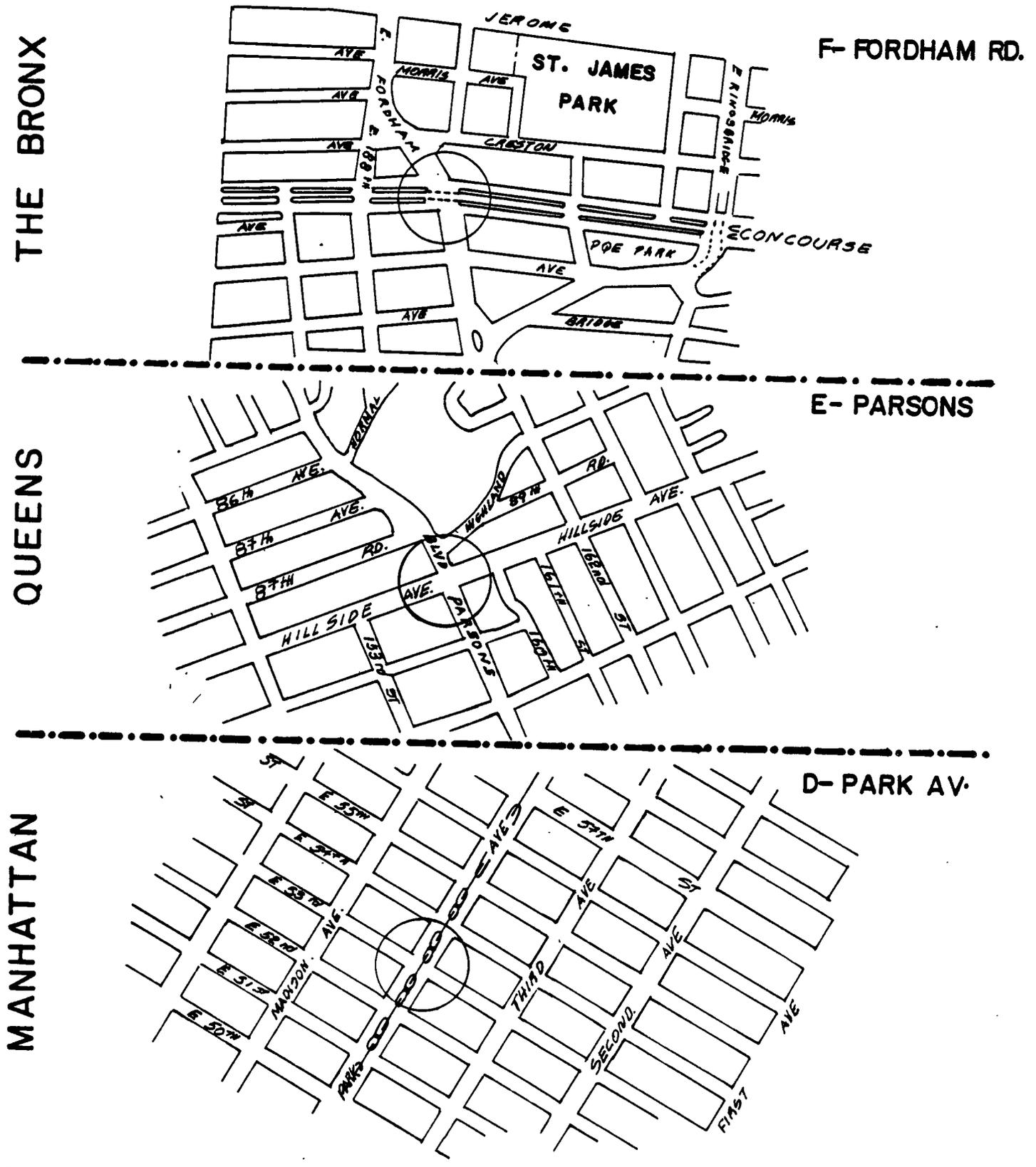
	96th St./ Amsterdam	125th St./ A.C. Powell	Fordham/ Grand Con.
8-9AM	5	7	13
10-11AM	4	8	11
11-12PM	4	10	14
	Park Row/ City Hall	Parsons/ Hillside	53rd St./ Park Ave.
8-9AM	43	72	26
10-11AM	21	6	27
11-12PM	14	39	16

THE PERCENT OF LIVERIES TO YELLOW CABS

	96th St./ Amsterdam	125th St./ A.C. Powell	Fordham/ Grand Con.
8-9AM	191	429	2,008
10-11AM	78	533	5,483
11-12PM	37	563	2,775
	Park Row/ City Hall	Parsons/ Hillside	53rd St./ Park Ave.
8-9AM	65	93	11
10-11AM	45	122	8
11-12PM	46	225	8

53RD ST. AND PARK AVENUE

	TOTAL NO. OF VEHICLES	% TRANSIT VEHICLES	% YELLOW TAXIS
8-9AM	3,954	61	48
10- 11AM	3,319	69	57
11- 12PM	3,488	55	45

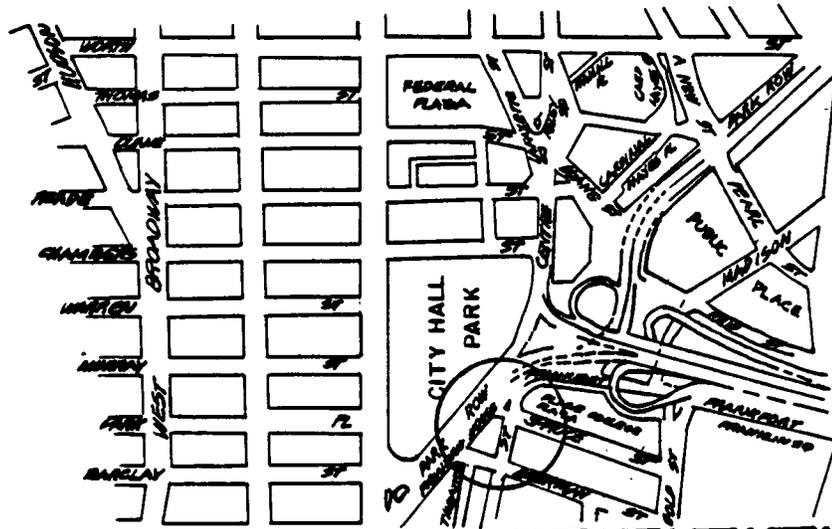


LOCATIONS OF CAR COUNTS

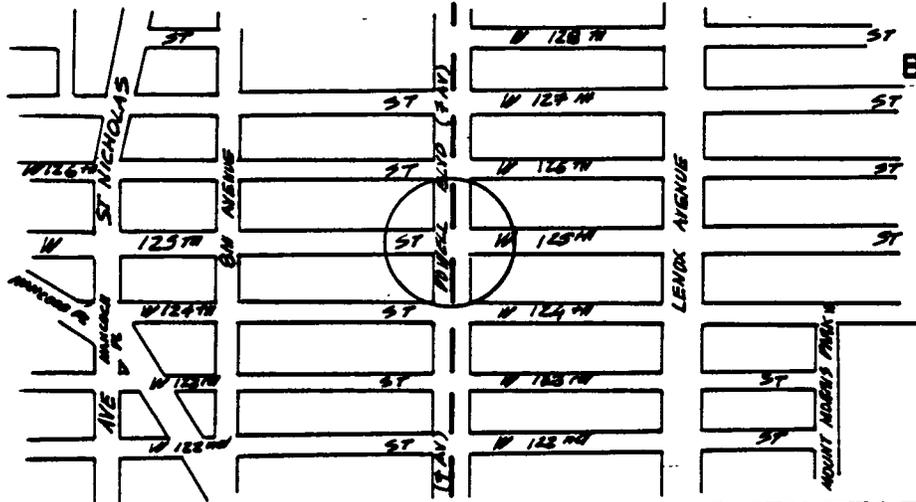
PRIVATE TRANSPORTATION SERVICES IN THE NEW YORK REGION

FIGURE
25

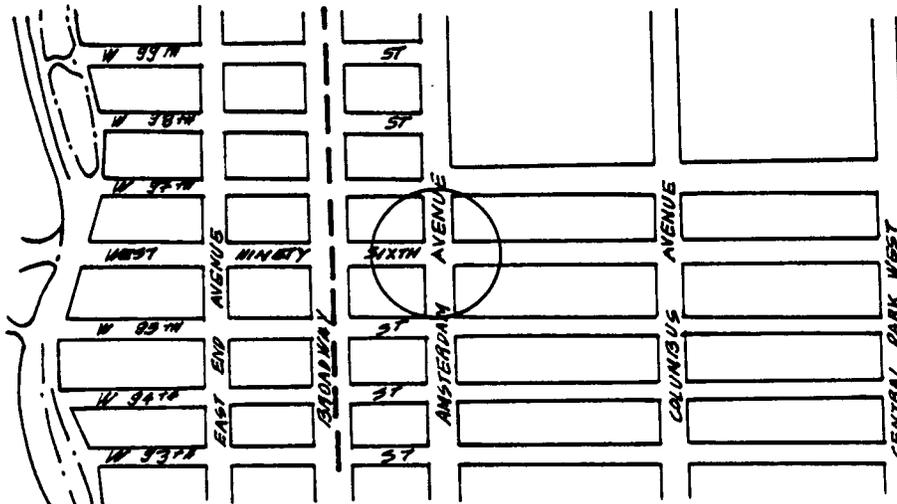
MANHATTAN



C- PARK ROW



B- 125TH. ST.



A- 96TH. ST.

LOCATIONS OF CAR COUNTS

PRIVATE TRANSPORTATION SERVICES IN THE NEW YORK REGION

FIGURE

26

APPENDIX D

TELEPHONE SURVEY OF CAR SERVICE BASES

	NO OF BASES LISTED	% OF N.Y.C.	NO. CALLED (1/3-ALL)	-- (CARS PER BASE) --		
				MODE	MEDIAN +	MEAN+
MANHATTAN	84	13	28	25	37.5	70
BRONX	96	18	32	50	50	52.6
BROOKLYN	244	38	81	4	12	34.7
QUEENS	185	29	62	20&3	18	33.5
STATEN ISLAND	33	5	11	10	12	18.4
N.Y.C. TOTAL	642	100	214	13.6**	22.7*	40.8*

+ The mean is frequently much larger than the median, because there are a few very large bases with hundreds of cars.

* These numbers are weighted by borough size.

** This number is weighted by borough size and the low modal number was used for Queens.

TOTAL NUMBER OF CARS PER BASE

	MODE	MEDIAN	MEAN	ADJUSTED MEAN*
N.Y.C TOTAL	8,731.2	14,604	26,201.1	21,828

* Approximately 25% of all the numbers called were either disconnected or no one answered. If we assume that those car services have gone out of business, while approximately the same number of new car services have been started since the phone listing or are not listed, and that the new car services tend to have fewer cars; we can use the low modal number of 13.6, multiply it by 25%, and add this number to 75% of the total number of cars in bases (19,645 -- calculated using the weighted mean of 40.8) to reach a total of 21,828 cars.

Using the weighted mean only, the total number of cars is 26,201.1, which is significantly lower than the frequently stated 35,000 number but relatively close to the number given to us by City Planning, whose number is based on license plate information from the Department of Motor Vehicles.

OTHER INFORMATION FROM THE TELEPHONE SURVEY

In order to obtain the number of cars in a base, it was necessary to call 95% of the bases listed. Many of the bases were reluctant -- to put it mildly -- to divulge this information, particularly when the industry is fighting to maintain some independence from the TLC.

APPENDIX E

RESULTS OF BUS USER SURVEY

TOTAL GENERAL COMMENTS: 75

A. POSITIVE COMMENTS: 6

Very accessible.
Likes buses in Queens.
Pleased, especially because mass transit is not like this in Michigan.
Better than train.
Express routes are good.
Drivers are nice.

B. NEGATIVE COMMENTS: 69

WAITING TIME/SCHEDULING PROBLEMS: (29)
The waiting time is too long for the Far Rockaway bus. (2)
The waiting time in winter is bad.
Has waited over an hour and 10 minutes for a bus.
45 minute headways.
Not dependable.
Buses should run more frequently - wait time is bad. (20)
Never on-time.
The buses double-up And the headways are unreliable.
Triboro and Green are very slow on return trips.

SEATS: (1)
Would like to know why small children take the whole seat when they could sit on someones lap.

DRIVERS BEHAVIOR AND ENFORCEMENT OF RULES: (14)
The drivers race and the passengers urinate in the back of the bus.
Should enforce no radio playing.
Should have cops on buses - kids smoke pot on the bus.
Passengers smoke on the bus. (2)
Loud music on the bus.
Drivers smoke.
Drivers take too long of breaks.
Rude drivers don't wait for you, and then they don't say anything when passengers drink and smoke in the back of the bus.
Some drivers are nasty.
Radios are played on the Queens line.
Bus Drivers are not informative.
Triboro drivers are bad.
Buses stop in the middle of the street.

CLEANLINESS OF BUSES: (5)
Private lines could clean buses more often, get new buses.
Buses are dirty. (3)
Graffiti and gum.

TEMPERATURE ON BUSES: (3)

Too hot.

Sometimes air conditioning is too cold. (2)

INADEQUATE SERVICE: (11)

On weekends:

On weekends waiting time is very bad.

Seems to be a reduction in the number of buses, especially on weekends.

Church days have full buses.

Holidays and weekends are terrible.

Weekend service is terrible, the usual wait is 45 minutes.

Sundays and nights are bad.

Nights:

Service is good in the morning but not at night.

Bad service at night.

In Bad Weather:

In bad weather service is much worse.

To the Beach:

There should be more buses to the beach on weekends.

To La Guardia:

Bus service to La Guardia is bad.

TRANSFERS: (2)

Should have transfer between subway and buses.

Would prefer transfers that are good in any direction for 2 hours.

FARE: (3)

Everytime the fare goes up the service gets worse.

Fares should be 75 cents.

The higher the fare, the worse the service.

OTHER: (1)

Need more new buses.

C. DO THE COMPANIES DIFFER?

FROM THE MTA - POSITIVE COMMENTS: (30)

MTA has newer buses.

MTA buses are cleaner, drivers are more polite.

MTA has newer buses, cleaner and runs better.

MTA has more air conditioning and is cleaner.

MTA has air conditioning. (3)

MTA has shorter headways. (4)

MTA is more on schedule than Queens.

MTA is better. (9)

MTA buses come more frequently, but they could be cleaner and they don't always close their windows when it rains.

MTA is cleaner, a little more reliable and drivers are more friendly.

MTA runs on time and is safer.

MTA is cleaner than Green.

MTA is cleaner and drivers are more polite.

MTA is cleaner and the drivers are in uniform.

MTA is cleaner, cooler and their buses look better.

MTA had air conditioning.

MTA is cleaner.

FROM THE MTA - NEGATIVE COMMENTS: (4)

MTA has fewer seats.

MTA is dirty.

MTA is slower.

MTA is more crowded than Triboro.

D. TRIBORO - POSITIVE COMMENTS:(8)

More seats on Triboro - routes are shorter.

Triboro is not as crowded and had air conditioning.

Triboro is cleaner and more dependable than the MTA buses that go between Queens and Manhattan.

Triboro buses come more frequently.

Triboro dependable.

Triboro has shorter wait than Steinway

Triboro is better than Jamaica.

Triboro is better than Steinway (new buses).

E. QUEENS - POSITIVE COMMENTS:

Queens is more comfortable and has better routes (more direct).

Queens is better than Green.

Queens bus is better - shorter wait and nicer buses.

Queens Transit better than Steinway.

Queens is better than MTA-cleaner- standards are higher.

Queens is better than Steinway.

F. JAMAICA - POSITIVE COMMENTS:

Jamaica cleaner than Green.

Jamaica is better than Queens Transit.

JAMAICA - NEGATIVE COMMENTS:

Jamaica is the worst.

Jamaica passengers are out of hand.

Jamaica is always off schedule.

G. GREEN - POSITIVE COMMENTS:

Green drivers are more polite.

Green's drivers are more personal than MTA drivers.

Express Green Bus is excellent.

Green has better seats.

Green and express buses have padded seats.

Prefer Green Bus.

GREEN - NEGATIVE COMMENTS:

Green has longer headways.
 Green bus drivers smoke and allow passengers to smoke --
 not so on MTA.
 Green is the worst, Queens is in the middle, and MTA is the
 best--there is always a seat, windows open, and they are
 more comfortable.
 Buses, besides Green, come regularly.
 Green bus is the dirtiest.

H. PRIVATES - MTA

Local buses in Queens better than ones to Manhattan (MTA).
 Private buses are unreliable.
 Can't find the bus stops of the private companies.

I. HAS THE BUS SERVICE CHANGED?

IMPROVED:(35)

Better at meeting schedules.
 Drivers better.
 Cleaner.(2)
 Safer.
 Queens Transit has improved.
 MTA is better.
 New buses. (13)
 More air conditioning.(4)
 Cleaner and drivers behave better.
 Can now get bus to Manhattan from 108th St.
 MTA is more reliable.

Wait time:(8)

MTA comes more frequently, has better buses and most have
 air conditioning.
 Headways are shorter.(3)
 More on-time.
 Since this year buses are more on-time and drivers are
 better.
 Buses are faster with fewer breakdowns.
 A little better with keeping to a schedule.

WORSENERD:(18)

No change in service, but fares have increased.
 Fares have gone up and service hasn't changed.
 More people--different people?
 Green has gotten worse.
 They used to allow you to load early on cold days.
 Slight deterioration over past years.
 Drivers are worse.
 Some bus drivers let you off in the middle of the street or
 on the curb.
 Fewer buses & in worse condition - they breakdown & are
 dirty.
 Buses are dirtier, and you can't a seat on express buses.

Wait time:(8)

There is no longer a schedule, in the past 2 weeks taking the bus takes forever.

In the last 2 years service is slower and never on-time.

Two years ago service was more regular.

Headways are longer. (2)

Waiting time has gotten worse in the last 6 months.

Buses double-up.

Buses used to come more often.

J. ARE THERE DIFFERENCES BETWEEN THE ROUTES YOU TAKE? (3)

The Q44 is the worst.

The Queens 44 line is awfull and it smells.

The Queens 33 line is very good.

K. DO YOU TAKE DIFFERENT MODES OF TRANSPORTATION ON THE WEEKENDS? (74)

Yes, because lack of bus service:

Use private auto -- buses come too infrequently. (2)

Yes, no bus. (3)

Walk because bus takes 40 minutes to come.

Train, because buses are so bad on the weekends.

No transit on weekends.

Wish there was a city bus into Manhattan on the weekends.

Buses really bad on weekends, so take cab.

APPENDIX F

RESULTS OF CAR SERVICE USER SURVEY

A car service user's survey was conducted in a Columbia University owned building located between Riverside Drive and Broadway on 125th Street. This building was chosen for this survey because the area is served by both medallion and non-medallion taxi's and is well served by public transportation. Residents have a variety of choices in which to travel. 300 surveys were distributed underneath the doors of residents and residents were instructed to return them to the doorman. 41 surveys were completed and returned. The following is a summary of the results:

- I. Most people (35) said that the area is heavily served by public transportation.
- II. Most people (36) see medallion cabs often.
- III. 32 persons use car service, 9 persons never use car service.
- IV. 6 persons have a regular car service they call, 26 do not.
- V. 2 persons said they ask for a particular driver, 29 do not.
- VI. 12 persons said the fare is too high, 12 persons said the fare is average, and 3 persons said it is low.
- VII. 16 persons hail cabs, 17 do not.
- VIII. The majority of people surveyed take car service during the peak hours.
- IX. Negative comments:
 - It is difficult to communicate to drivers because many do not speak English.
 - Drivers can rip-off passengers if they do not have a meter.
 - Drivers tend to overcharge after an agreement is made with the dispatcher.
 - Some cars are in very bad condition.
 - People use car service because they have no other choice.
 - The fare is too high.
 - Cleanliness is poor.

APPENDIX G

RESULTS OF QUESTIONNAIRE SENT TO COMMUNITY BOARD MANAGERS

A questionnaire of private sector transport services was sent to each Community Board managers in New York City (a total of 59). Only nine were returned. Five managers from Queens responded, two from Manhattan responded, and one each from Brooklyn and Staten Island. Several of the questionnaires completed were conducted over the phone. The following is a summary of the nine surveys completed:

- I. Bus service is perceived well by three managers and is perceived poorly by two managers.
- II. Three managers said express bus service should be expanded and three said that express buses cause problems because of traffic congestion and layovers.
- III. Five manager do not see commuter vans operating in their areas and 2 managers do see vans.
- IV. One manager said residents like the vans; one manager said some do; and one manager said very few do.
- V. Three managers have problems with the vans. They said that vans are unreliable and keep no schedules, they have no layover location, and drivers ignore traffic and parking violations.
- VI. Seven managers see organized livery services in their area, one manager does not see any, and one manager sees some.
- VII. Five managers said that they have livery problems. They said that liveries create congestion, park in private areas or double park, operate illegally from private residences, block driveways, and pull into bus stops and creat congestion. Two managers said that they do not have and problems with liveries.
- VIII. Five managers said that livery drivers have radios in their cars and one manager said that some do.
- IX. Three managers said that livery drivers are local residents, one said they are not, and two did not know.
- X. Seven managers see spontaneous, unlicensed (gypsy) operations in their neighborhood, and one does not see any. Those managers that see them said that the operation is widespread.

- XI. Four managers said that gypsy liveries are a negative feature, because they compete with public transportation, create traffic problems, and taxi drivers complain that unlicensed taxi's use their designated space by subway stations.
- XII. Other comments made include: livery drivers have bad sanitation habits, interfere with television and radio reception in homes, double park, block private driveways, do not use meters, use parking spaces in front of fire hydrants, pick up passengers in an unruly manner, have anti-social behavior, and harass community residents.

APPENDIX H

BUS SURVEY

Date _____		
Area _____		
Name of bus companies serving area (code companies as below) _____		
Which bus companies do you use? (4)		How many times per week per company?
COMMAND	1	1
GREEN	2	2
JAMAICA	3	3
QUEENS	4	4
STEINWAY	5	5
TRIBORO	6	6
MTA	7	7

Rate bus operations good, average or poor in the following areas?

	Good	Average	Poor
WAITING TIME	1	2	3
RELIABILITY/DEPENDABILITY	1	2	3
DISTANCE TO BUS STOP	1	2	3
CLEANLINESS	1	2	3
SAFETY	1	2	3
DRIVER BEHAVIOR	1	2	3
ABILITY TO GET A SEAT	1	2	3
TEMPERATURE	1	2	3

Has the bus service improved, 1
 stayed the 2
 same
 gotten worse? 3

Since when, how, and for which companies? _____

Have you noticed differences between the bus companies, including
 MTA? Yes: _____ If yes, what are they (specify which
 companies)? _____

Are there differences between the different routes that you take?
 Yes: 1 No: 2 If yes, what are they and for which routes?

Other complaints or comments about bus service?
 Yes: 1 No: 2 Example: _____

Does the amount of the fare influence how often you take the bus?
 Yes: 1 No: 2 Sometimes: 3

If the fare increased, would you switch to another mode of
 Transportation?
 Yes: 1 No: 2 No choice: 3 Comment: _____

<u>Age:</u>		<u>Race:</u>		<u>Sex</u>	
0>18	1	White	1	Male	1
18-24	2	Black	2	Female	2
25-39	3	Hispanic	3		
40-64	4	Asian	4		
65 +	5	Other	5		

Automobile ownership:

Owns Auto	1
Does not own auto	2
Household member has auto	3

Income:

Below \$10.000
\$10.000-\$14.000
\$15.000-\$24.000
\$25.000-\$49.000
\$50.000 and over

Occupation:

Homemaker:	1	Tech., Sales, Admin,	6
Student:	2	Service	7
Prof., Mgmt.	3	Craft	8
Unemployed	4	Indust. Laborer	9
Artist	5	other	10

Household size:_____Borough:

Bronx
Brooklyn
Manhattan above 96th St.
Manhattan above 96th St.
Queens
Staten Island
Other

Of Residence:

1
2
3
4
5
6
7

Of Work:

1
2
3
4
5
6
7

General Transportation Characteristics:

Does the time of day influence the mode of transportation you take?

Yes: 1 No: 2 Comment: _____

Do you take different modes of transportation on the weekends?

Yes: 1 No: 2 Comment: _____

Usual transportation mode to the following destinations:

	Work	Shopping	Leisure	Med- ical	Train Conn.	School	Airport
Walk	1	2	3	4	5	6	7
Auto	1	2	3	4	5	6	7
Local Bus	1	2	3	4	5	6	7
Subway	1	2	3	4	5	6	7
Ex. Bus	1	2	3	4	5	6	7
Local Van	1	2	3	4	5	6	7
Com. Van	1	2	3	4	5	6	7
Com. Rail	1	2	3	4	5	6	7
Taxi (med.)	1	2	3	4	5	6	7
Taxi (non.)	1	2	3	4	5	6	7
Bicycle	1	2	3	4	5	6	7

APPENDIX I

QUESTIONNAIRE TO COMMUNITY BOARD MANAGERS

PRIVATE SECTOR TRANSPORT SERVICES
LOCAL QUESTIONNAIRE

Community Board # _____, Borough _____

Name of Manager _____

Address _____

Telephone Number _____

A. Do franchised express buses serve your district? _____

What lines? _____

How is this service perceived locally? _____

Are there any identified problems? _____

B. Are there any commuter vans operating out of your district
(locally-generated, probably not franchised by NYC, service to
Manhattang CBD's)? _____

If they are present, do local residents like to have this
service? Are the problems? _____

C. Do you have organized and established local service (public
livery) operations? _____

How many companies? _____

Names _____

Where are their offices? _____

Do they provide service:

Yes	No	
_____	_____	On call only?
_____	_____	As feeders to subway stations?
_____	_____	To local shopping areas?
_____	_____	To institutions and medical centers?
_____	_____	To parks and beaches?
_____	_____	To airports
_____	_____	Other _____

Do they create any problems? _____

Do they appear to be expanding their operations? _____

Which company (ies) would be a good candidate for interviews?

How many vehicles does an average company have? _____

Are they equipped with radios? _____

Are drivers local residents? _____

D. Are there spontaneous, unlicensed (gypsy) operations in your district? _____

To what extent? _____

Is this a positive or negative feature? _____

E. Any other comments you might wish to make _____

APPENDIX J

Car Service User Survey

**Do not mark
this section**

			<u>VARIABLE</u>
Date			1
Area			2
<u>How well is your area served by public transportation?</u>			
	Heavily	Moderately	Poorly
	1	2	3
			3
<u>Do you have "Yellow Cabs" service in your area?</u>			
	Yes	Sometimes	Not at all
	1	2	3
			4
<u>Do you like using Car Service?</u>			
	Yes	No	No Choice
	1	2	3
			5
<u>Have you noticed differences between the Car Service companies?</u>			
	Yes	No	
	1	2	
			6
<u>If yes, what are they?</u>			
<u>Do you have a particular Car Service that you use regularly?</u>			
	Yes	No	
	1	2	
			7
<u>Do you have an account with a Car Service?</u>			
	Yes	No	
	1	2	
			8
<u>Do you ask for a particular driver?</u>			
	Yes	No	
	1	2	
			9

Do not mark
this section

Do you find that the Car Service industry -

Has Improved	Stayed The Same	Gotten Worse
1	2	3

10

Since when?

When you call for a Car Service, do you ask the dispatcher for
the amount of your fare ?

Yes	No
1	2

11

Do you find Car Service fares -

High	Average	Low
1	2	3

12

Are Car Service fares higher, the same or lower than Yellow Cab
fares?

Higher	Same	Lower
1	2	3

13

Do you hail Car Service Cabs on the street (Non Yellow Cabs)?

Yes	No
1	2

14

If yes, do they have a taxi radio?

Yes	No	Don't know
1	2	3

15

When do you normally take a Car Service? (mark all times that are
applicable)

16

7:00 a.m.-9:59 a.m.	1
10:00 a.m.-4:29 p.m.	2
4:30 p.m.-6:29 p.m.	3
6:30 p.m.-10:59 p.m.	4
11:00 p.m.-6:59 a.m.	5

Do not mark
this section

Rate Car Service operations good, average, or poor for the following:

	Good	Average	Poor	
Waiting Time	1	2	3	17
Dependability	1	2	3	18
Cleanliness	1	2	3	19
Safety	1	2	3	20
Driver Behavior	1	2	3	21
Ability To Get A Car	1	2	3	22
Vehicle Temperature	1	2	3	23
Knowledge Of Your Area	1	2	3	24

Other comments about Car Services:

General Transportation Characteristics

Usual transportation mode to the following destinations:
 (circle all that are appropriate)

	Work	Shopping	Leisure	Medical	Train	School	Airport	
Walk	1	2	3	4	5	6	7	25
Auto(own)	1	2	3	4	5	6	7	26
Local Bus	1	2	3	4	5	6	7	27
Subway	1	2	3	4	5	6	7	28
Ex. Bus	1	2	3	4	5	6	7	29
Local Van	1	2	3	4	5	6	7	30
Com. Van	1	2	3	4	5	6	7	31
Com. Rail	1	2	3	4	5	6	7	32
Yellow Cab	1	2	3	4	5	6	7	33
Car Service	1	2	3	4	5	6	7	34
Bicycle	1	2	3	4	5	6	7	35
Other	1	2	3	4	5	6	7	36

Personal Characteristics:Do not mark
this section

<u>Age (years):</u> (37)		<u>Race:</u> (38)		<u>Sex:</u> (39)		
18-24	1	White	1	Male	1	37
25-39	2	Black	2	Female	2	38
40-64	3	Hispanic	3	<u>Nationality:</u> (40)		39
65+	4	Asian	4	U.S	1	40
		Other	5	Non U.S	2	

<u>Annual Household Income:</u>(41)		<u>Automobile Ownership</u> (42)		
Below \$10.000	1	Owns Auto	1	41
\$10.000-\$14.000	2	Does not own auto	2	42
\$15.000-\$24.000	3	Household member owns auto	3	
\$25.000-\$49.000	4			
\$50.000 and over	5			

<u>Borough:</u>	<u>Of Residence:</u>(43)		<u>Of Work:</u>(44)		
Bronx		1		1	43
Brooklyn		2		2	44
Manhattan above 96th St.		3		3	
Manhattan below 96th St.		4		4	
Queens		5		5	
Staten Island		6		6	
Other		7		7	

<u>Occupation:</u>				
Homemaker	1	Tech. Sales, Admin.	6	45
Student	2	Service	7	
Prof., Mgmt.	3	Craft, Laborer	8	
Unemployed	4	Retired	9	
Artist	5	Other		

(10) Could you fill in the average number of hours you work each day?

MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY SUNDAY

(11) What is the average number of passengers you pick up per day? _____

(12) What is the average amount you spend on gas for the week?

(13) What is the average amount you spend on tolls for the week?

(14) How much do you spend on the average on maintenance of the vehicle per year?

(15) Do you think you make a decent or good living in the van business?

(16) From the intake from the business are you able to :

- Save for personal needs? _____
- Get enough for maintenance of the vehicle? _____
- Get enough to pay tolls and gas? _____
- Get enough to pay insurance for the vehicle and Company fees? _____

Do you intend to stay in the business? _____

- If yes, How long? _____

- If no, Why not? _____

(18) What are the best things about the _____ business?

(19) What are the worst things about the _____ business?

(20) Is the police or other regulators a problem in your operations?

(21) What are the main complaints that you get from your riders?

(22) What could be done to improve the _____ operations?

(23) How old are you? _____

(24) What nationality are you? _____

(25) What kind of drivers license to you have? _____

(26) How long have you been driving? _____

(27) Have you had any significant accidents?

(28) How many traffic tickets did you get last year? (list by
type and number)

(29) What was your previous employment?

APPENDIX L

COMMUTER VAN SURVEY

Facility:
 Location:
 Movement surveyed:
 Number of lanes:

Date:
 Weather:
 Name:

	Vans Carrying Commuters	Express or Commuter Buses	City (TA) Buses	Medallion (Yellow) Cabs	Public Livery Vehicles	Level of Service	Remarks
7:00-7:10 7:10-7:20 7:20-7:30							
7:30-7:40 7:40-7:50 7:50-8:00							
8:00-8:10 8:10-8:20 8:20-8:30							
8:30-8:40 8:40-8:50 8:50-9:00							
Total							

Not repair or service vans. Not minibuses in personal use.

Not long distance buses.

Incl. Private company buses

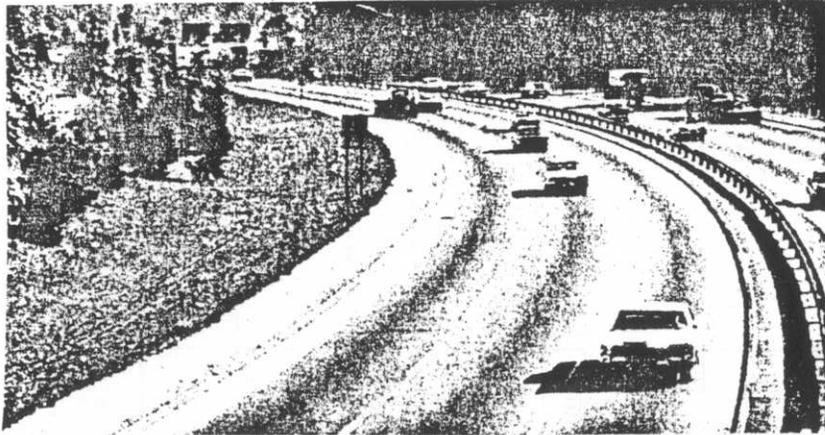
AM SURVEY OF COMMUTER VANS

ENTERING MANHATTEN

Facility	Location	Problems	Surveyors
1. H. Hudson Br.	Along west service road, south of Kappock street exit	Far from nearest subway	1
2. Third Avenue Br.	Sidewalk on west side of bridge	Desolate area	1
3. Triboro Br.	Sidewalk on south side of bridge (enter at 2nd Ave. and 124th St.	Desolate area	1
4. Queensboro Br.	Upper ramps - 62nd St., between 1st and 2nd Avenues Lower ramps - southeast corner of 60th St. and 2nd Avenue		2
5. Midtown Tunnel	South of 37th St., between 1st and 2nd Avenues <u>or</u> south of 37th toward 3rd Avenue		1
6. Brooklyn Br.	On central pedestrian walkway, near cables (enter from Park Row subway passage)		1
7. Brooklyn-Battery Tunnel	On Pedestrian bridge at Morris Street <u>or</u> alongside east wall of plaza		1
8. Holland Tunnel	Southwest corner of Canal and Varick Streets		1
9. Lincoln Tunnel	Within Block between 38th and 39th Streets and 9th and 10th Avenues, down in the center of the plaza (enter from 40th Street) <u>or</u> look over side of bridge of 38th Street	Dangerous	2
10. G. Washington Bridge	Upper level - on south sidewalk at cables, enter near Cabrini and 178th Street Lower level - eastbound - north of 178th, end of Cabrini, - southbound - across from Cabrini, south of 178th Street		3

LEVELS OF SERVICE

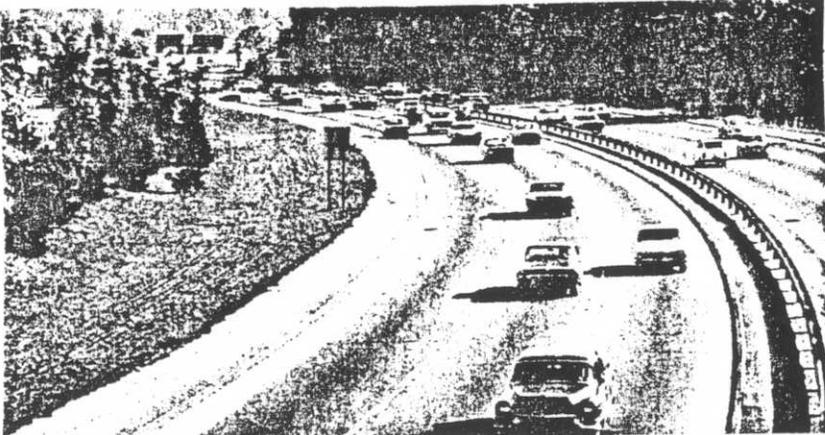
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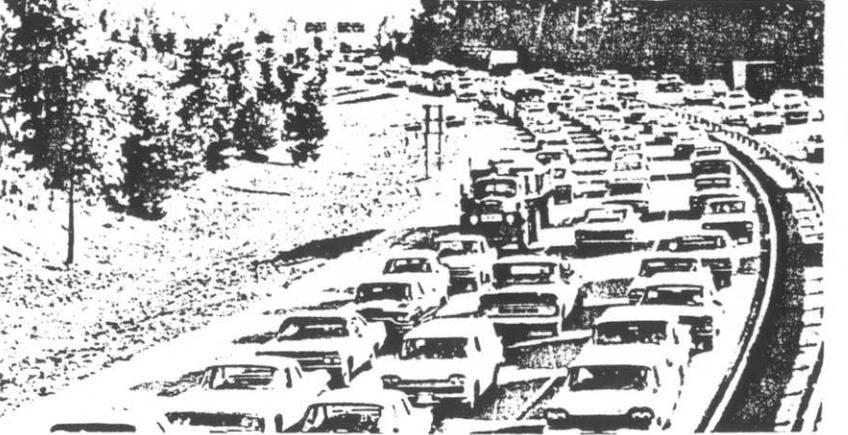
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F



APPENDIX M

TABLES FOR CASE STUDY OF PRIVATE BUS COMPANIES

Table 1
TRANSIT OPERATING STATISTICS, SELECTED

System	Total Rev. Vehs.	Veh. Oper. in Max Sched. Serv.	Veh. Miles 000/yr	Veh. RevMi 000/yr	Veh. RevHrs 000/yr	Unlinked Pass Trip 000/yr	Pass. Miles 000/yr
NYCTA	4,573	3,116	105,056	96,132	12,241	1,062,142	2,027,245
Green	191	162		5,475	604	19,630	88,334
Triboro	180	107	3,153	3,027	391	19,073	30,361
Jamaica	152	96	2,109	2,109	296	7,712	30,845
Command	95	69	3,443	1,958	173	3,354	45,501
Queens	247	197	4,554	4,300	534	14,442	95,066
Steinway	130	106	2,539	2,463	275	6,888	45,690

Source: UMTA (1985), 1983 Section 15 Annual Report.

Table 2
COMBINED PERFORMANCE DATA
QUEENS-STEINWAY AND GREEN GROUP

	CY 1978	CY 1982	CY 1983	CY 1984
Total Revenue Passengers (m)	90.68	82.13	81.25	78.54
Revenue Vehicle Miles (m)	20.08	20.51	20.68	20.96
Revenue Vehicle Hours (m)	2.107	2.273	2.299	2.37
Employees	1864	2175	2231	240
Employee Hours	4.006	NA	5.245	5.229
Vehicles - Total	1013	984	982	963
Peak	722	N A	773	798
Passenger Revenue (m)	53.3	73.7	75.3	83.8
Operating Revenue (m)	54.9	75.0	77.0	86.6
Total Operating Cost (m)	63.9	105.8	117.6	124.0
Operating Cost (m)	65.3	107.0	118.1	123.9
Profit (m)	1.4	2.3	3.2	4.0
Loss: Depreciation (m)	-2.9	-3.6	-3.7	-3.9
Operating Deficit	9.0	30.9	40.6	37.4

Source: New York State Department of Transportation, "1985 Report on Transit Operating Performance in New York State," p. III-49.

Table 3
CHARTER REVENUES

	1984		1983	
	Dollars	% Of Total	Dollars	% Of Total
COMMAND	97,795	0.99	87,022	1.00
GREEN	6,360	0.02	6,954	0.02
JAMAICA	761,539	4.60	346,346	2.20
QUEENS	5,300	0.02	1,700	0.006
STEINWAY	13,600	0.08	11,100	0.07
TRIBORO	0	0.0	0	0.0
TOTAL	884,594	0.95	453,122	0.55

Source : Financial statements submitted to the Bureau of Franchise, 1984.

Table 4
RIDERSHIP SHARES, 1984

	Total	% Local	% Express
COMMAND	3,258,150	22.5	77.5
GREEN	23,340,566	98.8	1.2
JAMAICA	9,648,647	96.1	3.9
QUEENS	16,318,302	88.1	11.9
STEINWAY	7,388,958	73.5	26.5
TRIBORO	18,229,634	95.0	5.0
TOTAL	78,184,257	89.8	10.2

Source: New York City Bureau of Franchise, 1986.

Table 5
LINE AND FLEET SIZE

	Express Lines 1986	Local Lines 1986	Peak Fleet Size 1985	Total Fleet Size 11/1985	No. Of Other Vehicles	Local Lines Serving Minority Areas
COMMAND	5	1	98	131	3	0
GREEN	5	15	168	186	14	10
JAMAICA	1	4	96	145	11	3
QUEENS	4	7	186	229	Q & S 13	4
STEINWAY	3	5	108	147		3
TRIBORO	3	13	175	228	10	7
TOTAL	21	45	831	1066	51	27

Source : New York City DOT and interviews with bus company administrators, 1986.

Table 6
NUMBER OF PEAK TRIPS AND PASSENGERS (JULY 1983)

	Total Peak No. Of Trips Local	Total peak No. Of Trips Express	Total Peak No. Of Passengers Local	Total Peak No. Of Passengers Express
COMMAND	29	89	1,070	4,990
GREEN	236	25	21,831	1,140
JAMAICA	68	8	7,124	556
QUEENS	104	44	6,911	2,183
STEINWAY	55	32	2,672	2,021
TRIBORO	230	34	19,760	2,111
TOTAL	722	232	59,368	13,001

Source : New York City Department of Transportation, 1984.

Table 7
NUMBER OF PEAK SEATS AND LOAD FACTOR

	Total Peak No. Of Seats Local	Total Peak No. Of Seats Express	Average Load Factor
	<hr/>	<hr/>	<hr/>
COMMAND	1,537	4,717	.97
GREEN	12,036	1,275	1.73
JAMAICA	3,536	416	1.94
QUEENS	5,408	2,288	1.18
STEINWAY	2,805	1,632	1.06
TRIBORO	11,960	1,768	1.59
	<hr/>	<hr/>	<hr/>
TOTAL	37,282	12,096	1.41

Source :
New York City Department of
Transportation, 1984.

Table 8
OPERATING EXPENSES AND REVENUES

	Operating 1984	Expenses 1983	Operating 1984	Revenues 1983
	<hr/>	<hr/>	<hr/>	<hr/>
COMMAND	9,163,450	8,089,878	9,805,598	8,678,419
GREEN	28,450,266	27,117,719	30,971,948	29,484,807
JAMAICA	15,259,248	14,977,455	16,610,030	16,020,257
QUEENS	29,628,500	28,671,600	30,570,900	29,466,500
STEINWAY	16,033,400	15,375,800	16,667,300	15,944,500
TRIBORO	19,706,136	18,318,700	21,835,478	20,068,904
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	118,241,393	112,551,152	126,461,254	119,672,387

Source : Financial statements submitted to the
Bureau of Franchise, 1984.

Table 9
NET EARNINGS (LOSS)

	1984	1983
COMMAND	(24,459)	76,330
GREEN	744,619	930,040
JAMAICA	301,899	389,489
QUEENS	943,800	365,700
STEINWAY	636,000	204,300
TRIBORO	630,487	626,919

Source : Financial statements submitted to
the Bureau of Franchise, 1984.

Table 10
LOCAL RIDERSHIP
1980-1984

	Local Ridership 1984	Local Ridership 1983	Local Ridership 1982	Local Ridership 1981	Local Ridership 1980
COMMAND	735,370	832,478	793,537	944,759	1,021,983
GREEN	23,057,584	24,598,290	24,758,127	26,702,364	27,967,252
JAMAICA	9,271,377	9,621,227	9,793,469	10,355,137	10,986,014
QUEENS	14,383,035	14,451,387	15,334,488	16,574,333	18,316,066
STEINWAY	5,429,540	5,290,600	5,573,417	6,629,301	6,399,655
TRIBORO	17,317,364	17,891,878	18,073,333	19,304,124	19,128,335
TOTAL	70,194,270	72,685,861	74,326,371	80,490,018	83,819,305

Source : New York City Department of Transportation, 1985.

Table 11
EXPRESS RIDERSHIP

	Express Ridership 1984	Express Ridership 1983	Express Ridership 1982	Express Ridership 1981	Express Ridership 1980
COMMAND	2,522,780	2,688,888	2,391,947	2,526,730	2,164,614
GREEN	282,982	279,406	269,234	324,290	299,413
JAMAICA	377,270	411,956	386,408	441,072	2,245,231
QUEENS	1,935,267	2,232,832	1,930,323	2,278,099	2,245,231
STEINWAY	1,959,418	2,041,454	1,841,644	2,069,314	2,203,425
TRIBORO	912,270	893,350	988,065	907,585	998,560
TOTAL	7,989,943	8,547,886	7,803,671	8,547,090	8,309,330

Source : New York City Department of Transportation, 1985.

Table 12
OPERATING ASSISTANCE

	City and State		Federal		Total	
	1984	1983	1984	1983	1984	1983
COMMAND	795,275	648,100	798,600	636,300	1,593,875	1,284,400
GREEN	9,245,442		851,100	623,300	10,096,542	10,745,000
JAMAICA	5,327,400	6,380,100	1,071,300	748,800	6,398,700	7,128,900
QUEENS	11,877,400		1,031,000	2,157,200	12,908,400	13,638,800
STEINWAY	5,142,900	5,797,700	1,156,300	1,214,300	6,299,200	7,012,000
TRIBORO	1,795,100	2,481,590	2,254,300	1,989,500	4,049,400	4,471,090
TOTAL	34,183,517	36,910,790	7,162,600	7,369,400	41,346,117	44,280,190

Source : Financial Statements submitted to the Bureau of Franchise, 1984.

Table 13
CONDITION OF BUS FLEET

	Authorized Fleet	Buses Less Than 12 yr	Eligible for Replacement	Replaced Jan 86	Balance E.F.R.
COMMAND	108	81	27	--	27
GREEN	185	139	46	23	23
JAMAICA	106	71	35	18	17
QUEENS	205	166	39	--	39
STEINWAY	119	100	19	--	19
TRIBORO	193	138	55	31	24
TOTAL	916	695	221	72	149

Source: NYC Department of Transportation, 1986.

Table 14
LABOR FORCE ORGANIZATION

	No. Of Non-Union Clerical	Non-Union Supervisor s & Admin.	No. Of Union Drivers	Union
COMMAND	5	20-25	123	AMALG. LOC. 1181
GREEN	*	50*	345	AMALG. LOC. 1179
JAMAICA	14	6	163	TWU LOC. 100
QUEENS Q & S	50	50	300	TWU LOC. 100
STEINWAY			150	
TRIBORO	8	20	293	TWU LOC. 100

* The number of non-union clerical is included in the number of non-union supervisors and administrators.

Source : Interviews with bus company administrators, 1986.

Table 15
LABOR FORCE ORGANIZATION

	Total No. of Employees	Total No. Of Union Employees	Total No. of Non-Union	No. of Union Supervisors	No. of Union Non-Drivers (Maintenance, Cleaners, etc.)
COMMAND	202-207	177	25-30	--	54
GREEN	540	490	50	--	145
JAMAICA	265	245	20	18	64
QUEENS					90
Q & S	700	600	100	--	
STEINWAY					60
TRIBORO	450	422	28	--	129

Source : Interviews with private bus company administrators, 1986.

TABLE 16
TRANSIT PERFORMANCE INDICATORS

System	Annual Pass Miles		Annual Unlinked Pass Trips			Employees
	per Directnl Mile (000)	per Veh. RevHr	per Veh. RevMile	per Empl. (000)	per Veh. RevHr	per Rev. Veh
NYCTA	1108	166	11.0	69.3	86.8	
Green	380	146	3.6	33.8	32.5	3.0
Triboro	283	78	6.3	45.4	48.7	2.3
Jamaica	671	104	3.7	28.7	26.0	1.8
Command	76	263	1.7	18.0	19.4	2.0
Queens	932	178	3.4	28.1	27.1	2.1
Steinway	513	166	2.8	27.9	25.1	1.9

Source: UMTA (1985), 1983 Section 15 Annual Report.

Table 17
TRANSIT PERFORMANCE INDICATORS, (CON'T)

System	Annual Veh. Rev. Mi.			Annual Veh. Rev. Hrs.		
	per Veh. Max.Schd.	per Oper.	per Veh. Rev.Hr.	per Direc. Miles	per Veh. in Max.Schd.Srv.	per Operator
NYCTA	30,851	10,667	7.9	52,523	3,929	1,358
Green	33,794	15,868	9.1	23,536	3,726	1,750
Triboro	28,286	11,508	7.7	28,233	3,658	1,488
Jamaica	21,970	13,019	7.1	45,849	3,088	1,830
Command	28,373	18,127	11.3	3,269	2,506	1,601
Queens	21,829	16,106	8.1	41,751	2,709	1,998
Steinway	23,233	17,102	9.0	27,671	2,590	1,907

Source: UMTA (1985), 1983 Section 15 Annual Report.

Table 18
NYC LOCAL SERVICE - PEER PERFORMANCE COMPARISON

	NYC Private Operators			1982	NYCTA-Surface	
	1982	1984	% change		1984	%chg.
COST EFFICIENCY						
Cost/Veh. Mile	5.22	6.16	9.0	7.05	8.07	7.2
Cost/Veh. Hr.	46.44	53.17	7.3	54.44	62.57	7.5
Veh. Mile/Emp. Hr	NA	3.98	NA	2.28	2.29	0.4
Veh. Hour/Emp. Hr.	NA	0.46	NA	0.29	0.30	0.2
SERVICE EFFECTIVENESS						
Passengers/Veh. Mile	4.90	4.66	-2.4	5.63	5.41	-2.0
Passengers/Veh. Hour	43.58	40.24	-3.8	43.53	41.97	-1.8
COST EFFECTIVENESS						
Operating Rev./Cost	0.70	0.67	-2.1	0.60	0.60	0.0
Cost/Passenger	1.07	1.32	12.0	1.25	1.49	9.6
Pass. Rev./Passenger	0.73	0.85	8.4	0.51	0.60	9.6

Source: New York State Department of Transportation, "1985 Report on Transit Operating Performance in New York State," p. III-52.

Table 19
TRANSIT OPERATING EXPENSES: LABOR

System	Total Revenue Vehicles	Total Operating Expenses \$(000)	Labor Salaries and Wages		Fringe Benefits	Total
			Oper	Others		
NYCTA	4573	655,203	29.1	22.6	33.0	84.7
Green	191	27,982	30.0	20.3	25.2	75.5
Triboro	180	19,163	35.1	19.5	24.1	78.7
Jamaica	152	15,556	26.3	17.5	21.2	65.0
Command	95	8,145	33.3	22.6	15.0	70.9
Queens	247	27,368	26.3	20.2	21.3	67.8
Steinway	130	14,464	27.8	23.7	21.9	73.4

Source: UMTA (1985), 1983 Section 15 Annual Report.

Table 20
SHARE OF PERSONNEL IN SUPERVISORY AND ADMINISTRATIVE POSITIONS

System	Exec., Prof., Supr. Rev./Veh./Oper.		Exec., Prof., Supr. Support, GAdmin./Total	
	NYCTA	1256/9012	13.9%	2274/15,263
Green Group				
Triboro	3.5/263	1.3	53.5/420	12.7
Green	3/345	0.9	89/581	15.3
Jamaica	3/162	1.9	41/269	15.2
Command	2/108	2.0	26/186	14.0
(Total)	(11.5/876)	(1.3)	(210/1456)	(14.4)
Queens-Steinway				
Queens	2/267	0.7	93/514	18.1
Steinway	1/144	0.7	18/247	7.3
(Total)	(3/411)	(0.7)	(111/761)	(14.6)

Source: UMTA (1985), 1983 Section 15 Annual Report.

The New York Times 30/86

Commuter Vans Creating Traffic Woes, Study Says

By JAMES BROOKE

Private commuter vans, many of them illegal, are proliferating in New York City, aggravating midtown Manhattan traffic congestion and costing the Transit Authority \$12 million to \$20 million a year in lost bus and subway fares, according to a study released yesterday.

From "a negligible handful" a decade ago, commuters are now served by more than 1,000 van trips each morning, according to the report, the Commuter Van Service Policy Study, which was prepared by the Department of City Planning.

Of passengers surveyed, 95 percent said they had abandoned Transit Authority service for the vans, the report said. When asked why, passengers said vans offered door-to-door service, faster rides, assured seats, greater personal safety and drivers who make change for fares.

'A Legitimate Service'

Vans, which carry about 11,000 people every weekday in the city, first became a popular during the 1980 transit strike, the 300-page report said.

About two-thirds of the vans in the city carry commuters on "express routes" to Manhattan, largely from Brooklyn, Queens, Staten Island and New Jersey, the survey said. The remainder carry riders on "feeder routes," generally from remote

neighborhoods in Queens, Brooklyn and Bronx to subway express stations.

In both cases, the survey found, vans generally charge the same fares as local or express buses run by the Transit Authority.

The study recommended that the city give the Taxi and Limousine Commission the power to regulate van service to guarantee passenger safety, to reduce traffic congestion and to minimize duplication of existing Transit Authority service.

"The vans do provide a valuable, legitimate service to the consumers, but we do not want vans that duplicate mass transit service that the public subsidizes," Kathleen E. Stein-Hudson, director of the Planning Department's transportation division, said yesterday.

Ms. Stein-Hudson directed the study, which was prepared by consultants from Polytechnic University of New York City in association with Urbitrans Associates.

The survey found that most express van companies are certified, either by the State Department of Transportation if they operate within New York, or by the Interstate Commerce Commission if they operate between New York and New Jersey or Connecticut.

However, the report said, "Virtually all

Continued on Page 30, Column 1

Study Cites Growing Role of Commuter Vans

Continued From Page 27

of the feeder-service vans are operating illegally, that is without N.Y. State or I.C.C. authorization."

Many of the feeder vans cruise local bus routes, picking up passengers from bus stops, the report said.

Illegal van services are able to escape notice by avoiding confrontations with the police, according to William Murphy, a Transit Police spokesman. Under a 1984 law, transit and city police officers are authorized to issue summonses against people who provide transportation for compensation

without a certificate.

"Our overwhelmingly top priority is the subway system," Mr. Murphy said. "A department of our size is not equipped to cover the hundreds of route miles that the vans cover."

The report said city certification would improve safety for riders by requiring background checks for drivers, adequate liability insurance, regular inspections of vehicles and dropoff of passengers at curbs rather than in traffic lanes of streets.

Yesterday, Sharon L. Landers, counsel to the Mayor's Office of Transportation, said, "The city feels that regulation of van service is required, but what

agency will do it is very much in the open."

One van operator, Edward C. Lowe, of Exec-You-Van Inc. which runs vans between the Riverdale section of the Bronx and midtown Manhattan, said the State Transportation Department already does an adequate job of inspection and enforcement of van operations.

Mr. Lowe, who operates a state-certified service, said that police should crack down on "the illegitimate operators out there hitting the bus stops."

THE NEW YORK TIMES, MONDAY, SEPTEMBER 22, 1986

Transit Authority Needs More Competition

To the Editor:

The Department of City Planning study of commuter vans in New York City (news story, Aug. 30) notes that passengers are switching from Transit Authority buses to private vans because the service is better, although the fare is the same. The study inadvertently concedes that the private operators make a profit at that fare, while the T.A. requires a tax subsidy to provide inferior service.

The study properly recommends greater regulation to assure safety, but its prescription to prevent vans from competing with the T.A. is entirely wrong. The rational policy in the public interest is to encourage more transportation entrepreneurs, not shield the T.A. from competition.

The biggest losses for the T.A. occur because it has to have enough buses and drivers to handle the peak demand during rush hours. Therefore the best approach for the city is to

allow private operators to handle even more of the rush-hour commuters. Moreover, the T.A. should contract with private operators both to handle peak loads and also to serve low-density routes during off hours, as private operators can use more appropriate vehicles and part-time drivers for this work.

The study's recommendation would tend to strengthen the T.A.'s near monopoly, insulate it from the beneficial pressure of competition and victimize riders by depriving them of the freedom of choice they are currently exercising. Surely, the public interest should be uppermost, not the preservation of an inferior public agency.

E. S. SAVAS

New York, Sept. 2, 1986

The writer, chairman and professor of management at Baruch College, is author of "Privatization: The Key to Better Government," scheduled to be published this fall.

The New York Times, 10/13/86

RISE OF THE REFINED RIDE



The New York Times/Chester Higgins Jr.

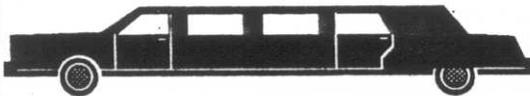
Stretch limousines and their drivers at Dav-El Livery at Pier 62 on the Hudson River.

Limos Become a Common Luxury

Fancy and Fancier



The \$30-an-Hour Sedan, With Phone



The \$45-to-\$50-an-Hour Stretch, With Liquor, Velvet Seats and Quadrophonic Sound

By ELEANOR BLAU

LIMOUSINES, once the preserve of the ultra-rich, are everywhere these days, it seems, double-parked on crowded streets or inching forward in traffic. And they are carrying a varied breed.

Behind their discreet dark windows sit men with attaché cases, young people in jeans and high school seniors in formal attire, en route to airports, discotheques and proms.

"It's very convenient, and it's a heck of a lot of fun," said a public relations man, Thomas Hartocollis, who uses them for a night on the town in New York and elsewhere, and who reports from Boston that limos are growing more popular there.

Indeed, extra-long limousines have been appearing in cities like Kansas

City and St. Louis, where few were seen in the past. But New York remains the largest limousine town.

Whether it is because of convenience, a lack of taxis, rising affluence or just plain chic, about 2,500 "stretch" limos are in use these days in the city and perhaps four times that number in the metropolitan area, according to industry estimates.

It is the stretch limousines that are mostly in evidence — that is, sedans extended by coach builders, who slice the cars in two to insert midsections. They charge about \$50,000 for the more luxurious results.

These can include everything from a bar and television to a bed. And they have been known in extreme cases to span 60 feet — the height of a six-

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The New York Times, 10/13/86

Ubiquitous Limos Make Luxury Commonplace

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story tenement — although 22 feet or so is a more usual length. A sedan limousine is usually about 18 feet.

Stretches account for about 75 percent of the trade around the country, compared with 25 percent five years ago, according to the publisher of *Limousine & Chauffeur Magazine*, Maurice Sutton. And, he said, the number of livery vehicles — including a small percentage of vans — provided by limousine services doubled in the same period, from about 20,000 to 40,000.

There are a lot more coach builders around to do the job — 55 in the nation compared with only 8 in 1978, he said. The oldest company is Hess & Eisenhardt, based in Cincinnati. The 110-year-old coach builders made their first stretches back in the 1920's for the Carey company, which is still in business in New York.

Mr. Sutton offers one more statistic: 40 percent of the 5,000 livery services in the country have been in business two years or less.

Why the explosion?

Michael Hemlock, president of Manhattan Limousine, one of the largest companies, attributes the limo surge to greater affluence, the "sorry" state of public transportation and the scarcity of taxis.

Small Entrepreneurs in Suburbs

Another reason, said Mr. Sutton, is traffic congestion. With someone else at the wheel, executives can get work done — using a telephone or portable computer, and meeting with clients on the way to airports and other engagements. Executive clients have "always been the core of the business," he says.

The executive vice president of Hess & Eisenhardt, Bob McMahan, adds: "Mom and pop operations with one or two cars — small entrepreneurs located in suburbs — got into the business and created new markets. They're the ones doing weddings and bar mitzvahs and high school proms."

Planning in advance for a luxurious ride is not always necessary. When cabs cannot be found, it is not too hard to hop into a limo instead, after negotiating a fee. Only the city's 11,787 yellow medallion taxis are supposed to pick up street hails. But with time to kill between depositing and retrieving their clients, some chauffeurs cannot resist.

For legal hire, the typical fares range from about \$30 an hour for a sedan with a telephone to about \$45 or \$50 an hour for a stretch limousine with such amenities as liquor, video cassettes, quadraphonic sound, leg room and rear seating for six — three each on facing benches of plush velvet or leather.

Price and Image

As David A. Klein of Dav-Ei Livery in Manhattan sees it, three couples sharing a limo for a night might spend \$85 each. "Why not?" he asked. "You spend that much for dinner. Working couples are making in excess of \$100,000 a year. I'm not saying they can hire one every night but they can afford it two or three times a year."

Customers offer still other reasons. Flat rates for airports are not much more than car service rates. A general crackdown on drunken driving can land a celebrating motorist in jail these days. And a limousine may impress nightclub doormen who choose their customers carefully.

Most accounts of limousine life are fond. But it is the unexpected that lingers in memory.

In Los Angeles, one driver opened the door for a customer — who did not anticipate the courtesy at that moment and tumbled to the sidewalk, where he was greeted with formality by a frock-coated hotel doorman.

And in Hastings-on-Hudson, N.Y., where limousines were part of the prom ritual last June at Hastings High School, Dan Baur and his date rode with two other couples in "a 1986 Lincoln that had everything," including a bar that rose and, unfortunately, a tape that stuck. It relentlessly repeated the same "horrible easy-listening" songs. The chauffeur was unpleasant, he said, and smoke issued from the air conditioner vents.

Reflecting a trend among the larger companies, most of Dav-Ei's drivers lease their cars through the company. Most of the vehicles are navy blue; corporate travel managers in a survey found the color discreet yet not funereal.

Which just may indicate a new trend in the making. Mr. Hemlock of Manhattan Limousine says business executives in the last year or two have started shifting to sedans, in which they can work inconspicuously. The demand for stretches just may shrink.

Taxi Agency Said to Back Group Riding

York Avenue to Wall St. Is Route Now Planned

By ROBERT O. BOORSTIN

The city's Taxi and Limousine Commission is expected to approve on Wednesday a six-month experiment in group-riding from Manhattan's Upper East Side to the financial district in lower Manhattan, according to commission members and industry sources.

The experiment would formalize what has been a practice for years among residents of the area who work on Wall Street. Under the proposal, group riding stations would be established at York Avenue and 72d Street, and at York Avenue and 79th Street.

Details of the program, including prices and hours, are still under discussion, but it is expected to be similar to programs started last spring at the Jacob K. Javits Convention Center and at La Guardia Airport in 1979. In those programs, passengers heading for nearby locations are dropped off at individual destinations.

Expansion of Programs Favored

Under those programs, taxi dispatchers put together riders who wish to share cabs. On trips from La Guardia to Manhattan passengers pay \$6 or \$7, depending on destination. From the Javits Center, at 10th Avenue and 35th Street, fares to locations between Third and Eighth Avenues and 30th and 59th Streets are \$2 or \$3.

A trip from La Guardia to Manhattan costs between \$10 and \$14 on the taxi meter. Depending on traffic conditions, fares from the Javits Center to midtown can run from \$1.50 to more than \$6.

Those who currently gather informally on York Avenue reportedly each pay \$2.50 — normally as part of a group of four — for a trip that might cost each \$8 on the meter. The city's downtown express bus costs \$3.

The chairman of the taxi commission, Gorman Gilbert, has said he favors expanding group riding to increase rush-hour service and help stabilize the number of vehicles in Manhattan. Pollutants from vehicles must be reduced if the city is to meet Federal clean-air regulations by the end of 1987.

Mr. Gilbert declined to comment on the specifics of the program yesterday, but commission members and representatives of all sectors of the industry responded favorably.

One member of the nine-person commission, Marvin Greenberg, said he expected the measure to pass once assurances are given that prices will be fair and that taxicabs will still be available in the area for individual passengers.

Previous group-riding plans have been opposed by the large fleets that now control

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Taxi Commission Set to Approve Group-Ride Trial

Continued From Page B1

about 1,700 of the city's 11,787 medallions. The fleets feared the drivers, who worked on commission, would misrepresent how much they earned.

But the number of drivers who work on commission has dropped to 1,500 from about 10,000 a decade ago. The fleet organization, the Metropolitan Taxicab Board of Trade, now supports the proposal. The president of the group, Ronald Stoppelman, said yesterday his organization was for "some

formal control at the dispatch point."

Most fleet drivers and those who work for so-called minifleets — companies that operate two or three cabs — now pay flat fees to lease cars for a day or week.

If the York Avenue program proves successful, officials say that other locations, including train and bus terminals, might be considered. Public officials and transit groups have long advocated group riding as a means of easing the difficulty of finding cabs during rush hours and bad weather.

At its meeting, the commission is also expected to consider a resolution that would permit up to 200 taxicab operators to have cellular telephones in their vehicles.

The measure is expected to be contested by commission members who fear that the number of cabs available for street hailing will drop because drivers will use telephones to prearrange pickups. Such fears led the commission to order removal of two-way radios from yellow cabs in February 1985. The order mandates their removal by February 1987.

The New York Times, 11/13/86

New York City Bus Passengers Know Why Ridership Is Down

To the Editor:

It is surprising that New York City's Transit Authority is at a loss to explain the great decline in the number of riders using buses (news story, Nov. 3). The problem will not be solved by changing bus routes.

All that the president of the T.A. would have to do is poll riders.

The replies would invariably include one or more of the following complaints: rear doors so heavy that even weight lifters cannot open them; windows so dark that even in daylight street signs cannot be made out; drivers at route starting points who refuse to allow passengers on until they are scheduled to leave, even if it is raining, snowing or freezing cold; long waits at stops until herds of four and five buses arrive with only the lead unit filled with a few passengers; excessive delays caused by traffic jams and, finally, streets so poorly paved that riding a bus is physically painful.

Add a dollar fare, and many people like myself now regularly walk intermediate distances or prefer the subway for speed. NANCY NICHOLS
New York, Nov. 4, 1986

To the Editor:

Research at Columbia University under Urban Mass Transportation Administration sponsorship leaves little doubt that another very powerful force is at play in bus-rider decline: the local feeder and distribu-

tion services provided by jitney operations, gypsy cabs, car services and commuter vans. At certain places, the operations are overwhelming in scope, but since they are largely illegal, they appear not to be officially visible. This home-grown industry, with agile vehicles and aggressive drivers charging the same fares, can beat any bus, and no waiting is required.

Has no bus driver or local traffic policeman told higher authorities what is happening on the streets out there? Has nobody from Manhattan gone out to Jamaica, central Brooklyn or the South Bronx to see conditions near major subway stations today?

SIGURD GRAVA
Professor of Urban Planning
Columbia University
New York, Nov. 9, 1986

To the Editor:

Your article ignored unreliable schedules. I would much prefer the "shoe leather express" in Manhattan than waiting for the buses. The term buses is the core of the scheduling problem; it is now the rule for buses to travel their routes in packs, with long

delays between the herds' appearances. The drivers seem to band together on purpose, disregarding passenger needs, revenues and, ironically, their own job security in the event of cutbacks. JAMES K. ROWBOTHAM
New York, Nov. 4, 1986

To the Editor:

Often when I opt for bus travel, instead of waiting at a stop, I walk in the direction of my destination, waiting for a bus to catch up with me. And almost as often, I walk 10, 20, even 30 blocks before an M-whatever lumbers into sight. Especially down Second Avenue, a crucial ride to East Siders, buses are so infrequent or log-jammed that it would be faster to hitchhike. DAVID HANDELMAN
New York, Nov. 3, 1986

To the Editor:

Very few people have exactly \$1 in change or extra tokens. Officials need to provide more outlets for tokens and fare boxes on buses that accept currency (such fare boxes are already installed in many other cities). HOWARD BURKAT
Scarsdale, N.Y., Nov. 5, 1986

The Times welcomes letters from readers. Letters for publication must include the writer's name, address and telephone number. Because of the large volume of mail received, we regret that we are unable to acknowledge or to return unpublished letters.

Taxi Protest Creates Traffic Mess

By ROBERT O. BOORSTIN

More than 1,000 drivers of nonmedallion taxicabs converged on lower Manhattan yesterday morning in slow-moving convoys, turning vital highways and streets into parking lots and tying up traffic for more than five hours, the City Transportation Department said.

The cabdrivers, primarily from car services that operate in low-income areas and the boroughs outside Manhattan, were protesting Mayor Koch's plan to place them under the control of the city's Taxi and Limousine Commission.

Organizers said they would demonstrate again next Tuesday, when the City Council is expected to approve a bill empowering the Taxi Commission to license and inspect the vehicles. The bill would require payment of more than \$400 in annual fees for driver and vehicle licenses and vehicle inspections.

"I doubt if we'll turn the vote around," said the president of the Metropolitan Livery Association, Frank Manzella. "But we felt we might get a postponement, which would

Nonmedallion cabs clog key highways.

give us time to work." The Association represents about 70 community car services.

The protest forced the city to divert more than 300 police officers from regular duty to keep traffic moving, particularly on highways where the cabs lined up three and four abreast. The police issued 55 summonses to drivers who blocked roads, blew their horns or refused to cooperate and three other summonses for disorderly conduct.

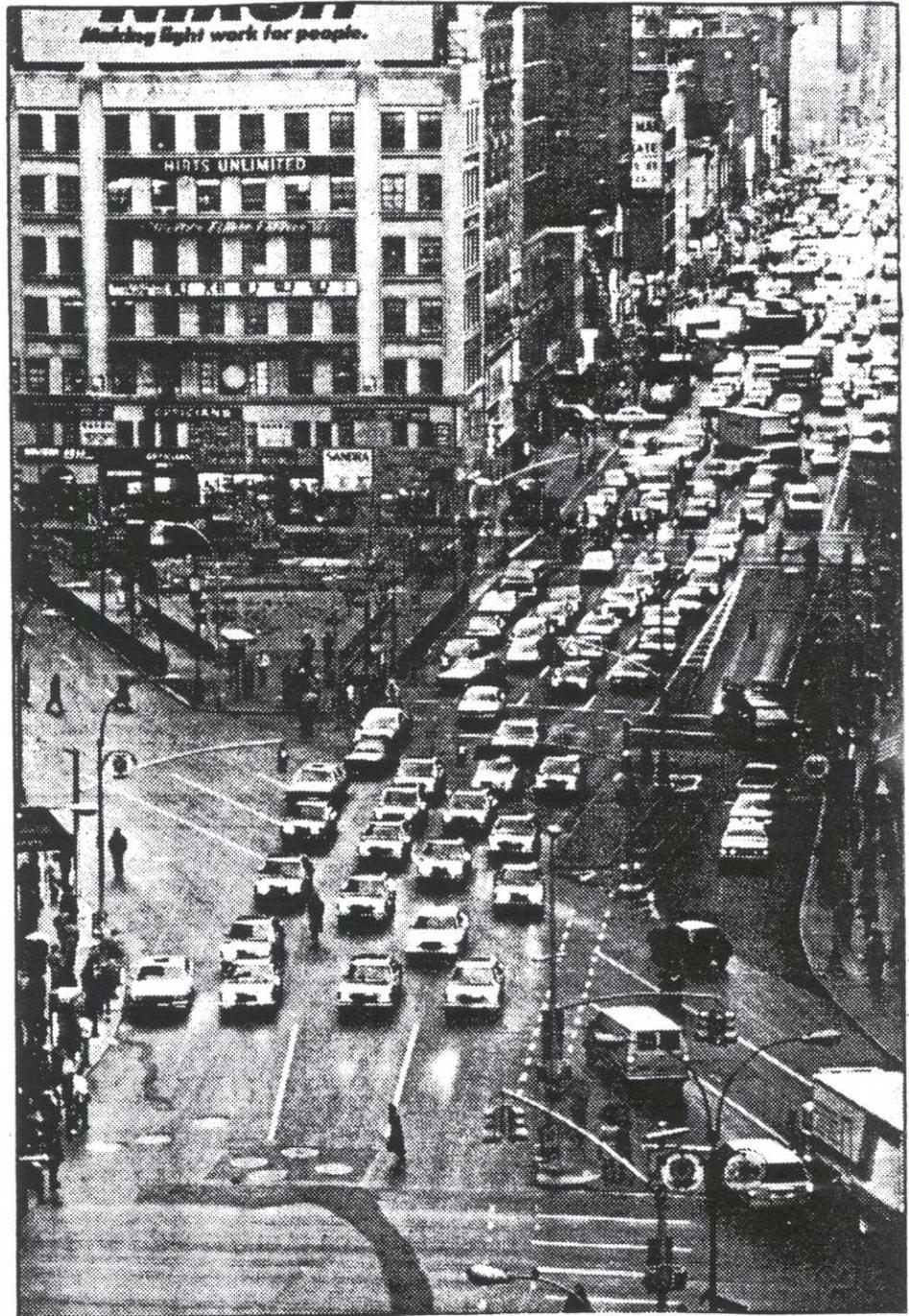
City transportation officials said the protest, which involved at least six separate convoys and about 1,000 cars, obstructed traffic more seriously than a similar demonstration last month by more than 700 yellow medallion taxicabs. The protesters were seeking a fare increase.

According to the chief of the city's traffic-situation room, Fred Feldman, particularly hard-hit areas included the area around City Hall, the Queensboro Bridge, the Franklin D. Roosevelt Drive, and the Gowanus and Brooklyn-Queens Expressways.

Mr. Feldman said that getting from La Guardia Airport to the Manhattan side of the Triborough Bridge took more than 40 minutes, instead of the usual 15. At one point, traffic on the westbound, upper level of the Queensboro Bridge was completely stopped, and it took 15 minutes to go 10 blocks on the Franklin D. Roosevelt Drive.

Around City Hall, several hundred of the vehicles parked in the streets while their drivers staged a horn-honking protest. Traffic on Chambers Street and other key cross-streets was immobile for more than an hour.

The cars participating in the protest represented only a tiny fraction of the city's



The New York Times/Neal Boenzi

Nonmedallion taxicabs, with traffic backed up behind them, moving slowly north on Avenue of the Americas through Herald Square yesterday.

estimated 35,000 for-hire vehicles, which are used extensively by residents of areas where yellow cabs do not operate. About 20,000 of those vehicles belong to more than 600 community car services, which dispatch cars via two-way radios after receiving telephone requests from customers.

Inside City Hall, Mayor Koch defended the bill, saying it would insure safety for passengers in for-hire vehicles throughout the city.

Mr. Koch dismissed as "baloney" the charges by car-service owners that the bill was intended to raise revenues for the city. More than \$10 million could be raised annu-

ally from the \$250 vehicle licensing fee and the \$50 driver-registration fee.

Under the bill, drivers of nonmedallion cabs would also have to pay \$35 for each of three annual vehicle inspections and provide proof of adequate insurance to the Taxi Commission. The commission would not set fares, as it does for the city's 11,787 medallion taxis.

Drivers are now required to hold commercial licenses and to have vehicles inspected by the state.

Industry representatives and car service

Continued on Page B7

The New York Times, 12/3/86

Nonmedallion Cabs Stage Protest

Continued From Page B1

owners said the new fees would force them to increase prices and would make it more difficult to find drivers. Some warned that minimum fares, now \$2 or \$2.50 depending on the service, might double.

If passed, the bill would triple the scope of the Taxi Commission's operations and restore to it powers it lost earlier this year after an extended court battle. From 1984 to June 1986 the commission had the power to regulate nonmedallion vehicles, although its enforcement efforts were haphazard and unsuccessful.

Industry officials and some City Council members have said that the Taxi Commission lacks the resources to regulate the additional 35,000 vehicles. The bill was passed by the Council's transportation committee earlier this month, but only after it was amended to require the commission to submit detailed plans describing how it would handle its expanded workload.

At a news conference on the steps of City Hall yesterday, three City Council members who represent predominantly minority areas said they would fight the bill.

Councilman Hilton B. Clark, Democrat of Harlem, said the bill would sanction an "apartheid system," under which minorities are forced to use community car services because yellow cabs refuse to pick them up. At his news conference, Mr. Koch said he had asked and taxi commissioners had agreed last week to step up efforts to insure that medallion taxis serve low-income areas.

Car service owners and drivers also questioned the commission's ability to regulate them. "The T.L.C. has proven by past history that it cannot regulate medallion taxis," said the owner of the Bronx-based Thruway Private Tax service, Steven Dalessandro. "If it can't do that effectively, is this the time to take on 30,000 more cars?"

The chairman of the taxi commission, Gorman Gilbert, has said his agency would increase its staff to 456 from 316 to handle the increased workload.

As with previous protests, the police escorted the convoys of taxis, which moved at speeds between 5 and 15

miles per hour. The mood was generally peaceful, although words were exchanged with the police when officers forced vehicles to keep moving change routes.

The Nonmedallion Cabs: Who Provides the Service

Most drivers who participated in yesterday's demonstrations work for community car services, which account for about 20,000 of the estimated 47,000 for-hire vehicles that provide car service to residents of New York City.

In addition to 11,787 yellow, medallion taxicabs — the only vehicles legally allowed to pick up people who hail them from the street — there are an estimated 35,000 nonmedallion vehicles that primarily service the city's low-income areas and the boroughs outside Manhattan. This number does not include limousines and a variety of commuter vans.

These types of vehicles make up the 35,000:

Community car service vehicles. About 20,000. Often called livery cars, they are divided among more than 600 companies, with fleets ranging from 15 to more than 150. The companies receive requests for car service by telephone, and then dispatch their drivers using two-way radios.

Unlike medallion taxicabs, which charge passengers by using meters that register \$1.10 to start and then add 10 cents for

every 1/9th mile, community car services set their own fixed rates. The fares, which vary according to company and borough, range from a minimum charge of \$2 or \$2.50 to more than \$9 for interborough trips.

About half the owners of community car services own their fleets and lease vehicles to drivers at rates ranging from \$30 to \$50 a day plus gas. Other services sell their radio-dispatch services to drivers who own their cars.

Gypsy cabs. About 10,000. Illegal, they cruise heavily trafficked locations such as bus stops and hospitals. They are neither radio-equipped nor affiliated with base operations. Some carry signs in their windows advertising car service.

"Black cars." About 5,000. They serve primarily Fortune 500 companies and the city's large financial and legal firms. Created in 1985 when the Taxi and Limousine Commission ordered all medallion cabs to remove two-way radios, they charge about double the fares of community car services.

The New York Times, 12/10/86

Agency to Make Rules For Nonmedallion Cabs

By ROBERT O. BOORSTIN

The New York City Council yesterday empowered the city's Taxi and Limousine Commission to regulate an estimated 35,000 vehicles that provide taxi service in lower-income areas and the boroughs outside Manhattan.

The Council passed the bill, 21 to 13, after nearly two hours of emotional debate. One Council member was absent.

The commission regulates the activities of the city's 11,787 medallion taxis, the only vehicles legally permitted to pick up people who hail them from the street.

The bill approved yesterday, which covers so-called nonmedallion cabs, restores to the Taxi Commission powers it lost earlier this year after an extended court battle. If the commission strictly regulates the nonmedallion taxi industry, there could be wholesale changes in car service outside central Manhattan, where the yellow medallion cabs generally do not operate.

Lawsuit Is Planned

Spokesmen for the nonmedallion taxi industry, which had strongly opposed the bill, said after the Council vote that they would have to increase their fares by at least 50 percent to compensate for additional costs imposed by regulation. They also announced plans to file a lawsuit charging the city with operating a taxi system that discriminates against members of minority groups.

Although the bill does not list specific regulations, the Taxi Commission plans to require each operator to pay \$405 in annual fees for driver and vehicle licenses and three yearly vehicle inspections. Drivers are now required only to hold commercial driver licenses and have vehicles inspected annually by the state.

The commission would neither set fares nor establish precise rules for service and cleanliness for nonmedallion cabs, as it does for yellow cabs.

The bill quadruples — to 47,000 from 12,000 — the number of vehicles regulated by the commission to include about 20,000 community car-service vehicles that provide prearranged service, 10,000 so-called gypsy cabs that cruise and illegally pick up passengers, and 5,000 so-called black cars, which primarily serve Manhattan-based corporations.

After the debate, the Taxi Commission chairman, Gorman Gilbert, said the commission would regulate the nonmedallion industry by focusing on base operations that lease vehicles and provide radio-dispatch service to all but gypsy cabs. "We want the management to be responsible for their cars," he said. "We don't want to take over the management of this industry."

During the debate, Council members who represent minority areas heatedly criticized the bill, saying it would perpetuate a segregated system of taxi service. "Yellow cabs will not pick up

black people and go into black areas," said Councilman Hilton B. Clark, who is from Harlem. "We are sanctioning a separate but unequal cab system."

Council members, including many who voted for the bill, also expressed doubts about the ability of the Taxi Commission to take on additional responsibilities, saying that it was having troubles regulating medallion cabs.

The bill was sent to the full Council by the Transportation Committee only after it was amended to require the commission to provide detailed plans about any new regulations and how it would handle the expanded tasks. Mr. Gilbert has pledged to raise the number of employees to 456 from 316 to deal with the increased workload.

From 1984 to June 1986, when the Taxi Commission had the power to regulate nonmedallion cabs, its enforcement efforts were haphazard and generally unsuccessful.

In the end yesterday, a majority of Council members sided with those who argued that the bill — by requiring drivers to be licensed and properly insured and vehicles to be more frequently inspected — would improve safety for the riding public.

"It would be wrong for us not to act because the morons of the past at the T.L.C. did not run the agency well," said Councilman Walter L. McCaffrey of Queens.

A small but vocal contingent of car-service owners, drivers and industry representatives attended the session, applauding those Council members who said they would oppose the bill and heckling supporters with cries of "shame."

Warning on Fares

The industry had lobbied heavily against the bill, which was initiated by Mayor Koch, and staged a slowdown protest last week. After the vote, industry spokesmen warned that fares would rise not only because of the new fees but also because new regulations would make it more difficult to attract drivers and would thus idle vehicles.

A lawyer for community car-service groups, C. Vernon Mason, said a lawsuit would be filed in Federal court in Brooklyn charging that the city was permitting civil-rights violations by not enforcing regulations requiring medallion taxis to pick up all passengers.

"There's no question there is unequal access and this bill perpetuates that," Mr. Mason said.

Passage of the bill moves the Taxi Commission one step closer to considering a fare increase for yellow cabs. The Mayor asked the commission to delay considering a fare increase until after the Council took action on the bill and another bill that would add 1,800 medallions to the current total.

A Council committee plans to begin hearings on the second bill Friday.

The New York Times, 12/25/86

Transport Plan Delayed As City Studies Disabled

By ROBERT O. BOORSTIN

Eight months after the Koch administration was required to give Governor Cuomo a plan for a ground transportation system to serve disabled residents, the city's consultant has not finished the plan, city officials say.

Disputes with the consultant and additional work will delay the plan until February, and the system will not serve customers until next fall at the earliest, the officials added.

In the meantime, the 125,000 New York City residents classified as "transportation disabled" will continue to use the informal network of private van and bus services available to them. Advocates have said repeatedly that these services cannot meet the needs of the disabled.

Some of the private carriers, who respond to telephone requests from disabled residents and drive them to their destinations, are subsidized by the city and the state.

Cuomo Cites Problems

In a statement, Mr. Cuomo said yesterday that despite what he called the "extraordinary problems" the city has faced in completing the report he would "insist this report be submitted at the earliest possible date."

"This is of great personal interest to me," he added.

The head of the city's committee on transportation for the disabled, Jack Lusk, said that state legislators, who last year amended legislation to give the city an extra nine months to complete the study, were also aware of the difficulties the city had faced in getting a contractor and completing the study.

"We recognize the fact that we are somewhat behind the legislative schedule," Mr. Lusk said. "We believe that we will end up with a better product."

The current troubles reach back to 1984, when the State Legislature passed a law authorizing money to make about 50 subway stations accessible to the disabled and to add wheelchair lifts to city buses.

In addition, the Legislature ordered the city to plan and operate a ground transportation system designed for the disabled. Legislators did not specify what kind of vehicles would be used.

That law was enacted over the objections of Mr. Koch, who said it was "wasting money" to modify the subway stations. The Mayor's decision was opposed by the Governor, the Metropolitan Transportation Authority and advocates for the disabled.

Mr. Lusk acknowledged that his committee had experienced delays and had disputes over the type of study the consultant — Ketron Inc. of Philadelphia — was awarded \$895,000 to produce.

But Mr. Lusk, who is also the Mayor's special adviser on transportation, said the delays had been "unavoidable." He cited difficulties in identifying those who would use the system, where they live and what kind of method would best serve them.

The state law required the city to form an 11-member committee with state and city officials and advocates for the disabled. The committee is charged with planning both the ground transportation system and overseeing the modifications to subways and buses that the city agreed to.

Referring to the law, Mr. Lusk said, "It was a compromise that we didn't necessarily approve of totally but we have worked very hard to implement it."

Some committee members and city officials familiar with the committee's work disagreed, saying that Mr. Lusk had not pushed the consultants from Ketron to complete their work.

Ketron's associate manager for transportation planning, H. Norman Ketola, said in a telephone interview from Boston yesterday that the project was "extremely complicated" but declined to provide details about why the study had been delayed. Mr. Ketola referred queries to Ketron officials in Philadelphia. Those officials referred calls to Mr. Lusk.

The dispute came to light last week when the office of the Manhattan Borough President, David N. Dinkins, blocked a request by the Mayor to increase by \$78,732 the \$895,000 originally awarded to Ketron.

The conflict included a heated exchange of words between Mr. Lusk and representatives of Mr. Dinkins outside the chamber of the Board of Estimate, which must approve the additional funds. Mr. Dinkins, a board member, asked that approval of the additional money be delayed until next month.

Members of Mr. Dinkins's staff, who asked not to be identified, said the dispute centered on assurances by Mr. Lusk last summer that the Ketron study would be completed by year's end.

The staff members said that because of Mr. Lusk's assurances, they had dropped a plan to spend borough funds to expand the service offered by private companies.

Role of Board

Mr. Lusk said the disagreement was routine, with Mr. Dinkins's staff telling him "they needed an opportunity to get questions answered" before letting the board vote on the additional contract.

The board is charged with approving discretionary contracts like the one between Ketron and the city, which was awarded after several consulting companies responded to a call for proposals.

Ketron has done studies of transportation for the disabled for states and such cities as Boston and Philadelphia. The company also does consulting work for the Federal Departments of Defense and Agriculture.

The New York study has bogged down in a dispute over whether the contract requires Ketron to produce a model for providing service or a full-scale plan describing how such service should be put into effect.

BIBLIOGRAPHY

- Brooke, James. (August 30, 1986) "An Increase in Commuter Vans Prompts a Call for Regulation," New York Times.
- Crain and Associates. (January, 1985) Project Star, Report of First Year.
- Derrick, Peter. (Fall, 1983) "Public Transportation: Toward a Realistic Approach of Benefits and Costs," The Regional Economic Digest, Vol. 2, No. 1.
- Fisher, Ronald J. (January, 1984) "Megatrends in Urban Transport," Transportation Quarterly, Vol. 38, No. 1, pp. 87-102.
- Grava, Sigurd. (Spring, 1979) "The Express Bus Saga," New York Affairs, Vol. 5, No. 3.
- Henke, Cliff. (March, 1986) "U.S. Funding," Mass Transit, Vol. XIII, pp. 14-18.
- Lave, Charles A. (1985) "The Private Challenge to Public Transportation - An Overview," Urban Transit: The Private Challenge to Public Transportation, edited by Charles A. Lave. Pacific Institute for Public Policy Research, San Francisco: California, pp. 1-29.
- New York City Department of Transportation. (September, 1977) "Express Bus Policy: A Technical Study for Better Integration of Transportation Modes Projects."
- New York City Department of Transportation. (September, 1978) Economic and Environmental Impacts of Express Buses, Technical Report.
- New York Times. (November 24, 1975) "Illegal Jitney Vans Popular in Riverdale."
- Orski, C. Kenneth. (1984) "Redesigning Local Transportation Service," pp. 255-276.
- Passenger Transport. (February 10, 1986) "Transit Advocates in House to be Featured at Conference," Vol. 44, No. 6, p. 1.
- Passenger Transport. (March 3, 1986) "Anderson, D'Amato Affirm Their Support," Vol. 44, No. 9, p. 5.
- Passenger Transport. (March 24, 1986) "Transit Professionals Learn 'How To' at Privatization Workshop," Vol. 44, No. 1, p. 3.

- Passenger Transport (August 4, 1986) "Transportation Zones - Serving Local Needs," Vol. 44, No. 31, p. 1.
- Polytechnic Institute of Brooklyn. (1973) Express Bus Operations in New York City. (L.J. Pignataro, Principal Investigator).
- Poole, Jr., Robert W. (1984) "Transit Systems," This Way Up: The Local Official's Handbook for Privatization and Contracting Out, edited by R.Q. Armington and William D. Ellis. Regenery Gateway: Chicago, pp. 20-47.
- Queens Rider. (Fall Issue, 1984) A public service newsletter form Queens Transit and Steinway Transit.
- Rosenbloom, Sandra. (1985) "The Taxi in the Urban Transport System," in Charles A. Lave, op.cit. 181-214.
- Savas, E.S. (1982) Privatizing the Public Sector: How to Shrink Governmen, Chatham House Publishers, Inc., Chatham: New Jersey.
- Thompson, Theodore A. and Thomas J. Cullinan. (December, 1984) Contracting for Public Transportation Services: Some New York Findings, Transit Program and Evaluation Bureau, Transit Division, New York State Department of Transportation.
- Transportation Training and Research Center, Polytechnic Institute of New York, in association with Urbitran Associates. (February 1, 1986) Commuter Van Service Policy Study. (Draft Final Report). Prepared for the New York City Department of City Planning.
- URS Company, Inc., in association with Polytechnic of New York. (February, 1986) Express Bus Route Policy Study. Prepared for the New York City Department of City Planning.
- URS Company, Inc. (1986) Express Buses, Final Draft.
- Weiner, Edward. (1984) "Devolution of the Federal Role in Urban Transportation," Journal of Advanced Transportation, pp. 113-124.
- Wiese, Arthur E. (March, 1984) "Next President Could Shape U.S. Transit of the 80's" Mass Transit, pp. 8-11, 18-19, 33.

BIBLIOGRAPHY OF LITERATURE REVIEWED

The primary source of information on public transportation and the private sector is the "Special Bibliography: Public Transportation and the Private Sector." The bibliography covers the related literature published between 1974 and 1984. It is distributed by the Urban Mass Transportation Research Information Service. The following pages are additional literature we found useful.

Adiv, Aaron. (January, 1986) "Public-Private Cooperation in the Provision of Specialized Transportation service - A Case Study for the Univeristy of Michigan," Prepared for the 65th Annual Meeting of the Transportation Research Board, Washington, D.C.

Advisory Commission on Intergovernmental Relations. (1974) "Toward More Balanced Transportation: New Intergovernmental Proposals," pp. 180-188.

Airport Ground Transportation Association, in consortium with The American Bus Association and The International Taxicab Association. (May, 1983) "Overcoming Barriers to Private Sector Transportation Contracting With Public Agencies."

Allison, William S., Herbert S. Allison, and Arnold Bloch. (January, 1986) "New York City's For Hire Van Services: Blessing or Curse," Prepared for the 65th Annual Meeting of the Transportation Research Board, Washington, D.C.

Armington, R.Q. and William D. Ellis. (1984) This Way Up: The Local Official's Handbook for Privatization and Contracting Out Regency Gateway, Chicago.

Barone, Charles S. and Jain, Rajendra. (January, 1986) "Interest Free Vanpool Program: The State of Connecticut Experience." Prepared for the 65th Annual Meeting of the Transportation Research Board, Washington, D.C.

Bernstein, Corrine S. (September, 1985) "Private Funds, Public Projects" Civil Engineering/ASCE, pp. 49-54.

Cervero, Robert. (January, 1986) "Safeguarding Mobility in Suburban office Settings." Prepared for the 65th Annual Meeting of the Transportation Research Board, Washington, D.C.

Cherwony, Walter (Abrams-Cherwony and Associates). (October, 1983) "A Route Financial Analysis Procedure." Prepared on Behalf of the Policy and Planning Committee American Public Transit Association.

- Cox, Wendell. (July, 1983) "Contracting for Public Transit Service." Prepared on Behalf of the Policy and Planning Committee, American Public Transit Association.
- Crain, John (Crain and Associates). (January 15, 1985) "Star Project"
- D'Adamo, Raleigh R. (October 9, 1985) "Westchester's Public/Private Partnership in Transit: A Decade of Experience"
- Dagerman, Lo. (October, 1983) "Private Bus Operators in Commuter Transportation - A Brokerage Implementation in Bridgeport, Connecticut." Prepared on Behalf of the Policy and Planning Committee, American Public Transit Association.
- Daily News Magazine (Special Report). (March 23, 1986) "Getting There: Mass Transit Faces the Future," New York.
- Deakin, Elizabeth A. (November, 1984) "Private Sector Roles in Urban Transportation," ITS Review, Vol. 8, No. 1.
- Derrick, Peter. (August, 1983) "Public Transportation: Toward a Realistic Appraisal of Benefits and Costs," Regional Economic Digest, Vol. 2, No. 1.
- Dodd, John Milton. (September/October, 1985) "Public, Private Efforts Improve Dallas Transit," Metro, Vol. 81, No. 5.
- Fasteau, Marc and Woodworth, Jay N. and Downey, Mortimer L. and Poole, Robert W. Jr. "Private Sector Financing of Transportation" Transportation Quarterly.
- Fisher, Ronald J. (January, 1984) "Megatrends in Urban Transport" Transportation Quarterly, Vol. 38, No. 1. Eno Foundation for Transportation, Inc., Westport: Connecticut.
- Fondriest, Cynthia. (January, 1986) "Senior Citizen Area Transit: The Implementation of a Volunteer Owned and Operated Senior Transit Service." Prepared for the 65th Annual Meeting of the Transportation Research Board, Washington, D.C.
- Glazer, Jesse and Koval, Ann and Gerard, Carol. (September, 1984) "Demonstration of a New Ride Sharing Marketing Concept -Part-Time Carpooling." Prepared for California Air Resources Board, Sacramento, California.
- Greater Hartford Ridesharing Corporation. (October, 1984) "Public/Private Transportation Management Organization." Prepared for the Urban Mass Transportation Administration.

- Guilliam, K.M. and Nash, C.A. and Mackie, P.J. (October, 1984) "Deregulating the Bus Industry," Institute for Transportation Studies, The University of Leeds.
- Hargreaves, Donna. (February, 1986) "Michigan Operator Voices Concern About Privatization," Rural Transportation Reporter, Vol. 4, No. 2.
- Harnett, Joel. (June-July, 1979) "Public Unions vs Private Entrepreneurs," Empire.
- Harnett, Joel and Altschuler Jonathan B. (February 21, 1979) Press Release for City Club of New York Hearing on Issue of Private/Public Service.
- Hatry, Harry P. (1983) A Review of Private Approaches for the Delivery of Public Services, The Urban Institute Press Washington D.C.
- Henderson, Harold. (November, 1985) "Can Business Do it Better," Planning, pp. 19-21.
- Institute for Defense Analysis. (February, 1972) Economic Characteristics of the Urban Public Transportation Industry. Prepared for the U.S. Department of Transportation.
- Keough, Michael (Booz, Allen, and Hamilton, Inc.). (October, 1983) "An Approach to operationally Defining A Transit System's Goals and Objectives." Prepared on Behalf of the Policy and Planning Committee, American Public Transit Association.
- Kirby, Ronald F. and Ulrich, F.W. Ernst. (April, 1981) "Involving Private Providers in Public Transportation Programs: Administrative Options," Urban Institute.
- Kuzmyak, Richard J. (April, 1984) "Transportation Brokerage Demonstration-Bridgeport, Connecticut."
- Leon, Nancy. (October, 1983) "New and Emerging Financing Techniques." Prepared for the American Public Transit Association Planning and Policy Committee.
- Liebowitz, Peter A. (May, 1984) "Municipal Costs of Transit Capital Investment in New York City." A Columbia University Master Thesis.
- McKnight, Claire E. and Christopher, Ed J. and Zavatiero, David A (January, 1986) "Involving Private Transportation Operators in the Transportation Planning Process: The Case of the Chicago Region." Prepared for the 65th Annual Meeting of the Transportation Research Board, Washington, D.C.

- Morris, Anne G. and Miele-Cleveland, Margaret. (January, 1986) "Taxi Schools: A First Step in Professionalizing Taxi Driving." Prepared for the 65th Annual Meeting of the Transportation Research Board, Washington, D.C.
- Meislin, Richard J. (December 31, 1985) "The M.T.A. Says it May Consider Private Bids on Some Bus Routes," The New York Times.
- National Research Council. (January, 1986) Transportation Research Board Publications Catalog.
- New York City Department of Transportation. (July, 1983) "City Streets." A Report on Policies and Programs.
- New York State Department of Transportation, Transit Program and Evaluation Bureau. (September, 1985) "1985 Report on Transit Operating Performance in New York State."
- New York State Department of Transportation, Bureau of Transportation Planning and Research. (April, 1985) "Proposed Service Standards for Franchised Private Local Bus Operators."
- North Carolina Agricultural and Technical State University. (May, 1985) "Development and Impacts of Dedicated Funding Sources for Public Transit Systems." Prepared for the Urban Mass Transportation Administration.
- Pagano, Anthony M. (July, 1984) "Private Sector Alternatives for Public Transportation," Transportation Quarterly, Vol. 38, No. 3, pp. 433-447.
- Palffy, John. (No date) "Charting a New Course for Transportation Policy," Background, The Heritage Foundation.
- Patrick, Edward F. (September, 1984) "Money Wars for U.S. Transit," Mass Transit, pp. 26-27.
- Pikarsky, Milton and Johnson, Christine. (1983) "Trends and Options for Increasing the Role of the Private Sector in Urban Transportation," Journal of Advanced Transportation, 17:2, pp. 89-100.
- Polytechnic Institute of Brooklyn. (May, 1985) "Feasibility and Impacts of Returning Transit to Private Ownership." Prepared for the Urban Mass Transportation Administration.
- Ramsey, James B. (November, 1981) "Selling the Subways in New York: Wild-eyed Radicalism or the Only Feasible Solution?"

- Regional Plan Association and New York City Citizens for
Balanced Transportation. (March, 1985) "Transit on Track."
- Reinshuttle, Robert J. (The Council of State Governments).
(December, 1984) "State Options for Transit Financing."
- Rice University. (October, 1984) "Public vs. Private Ownership
of Transit Systems." Prepared for the Urban Mass
Transportation Administration.
- Robert Harmon and Associates, Inc. (February, 1984) Miami's
Downtown Component: Public-Private Coventure Financing Using
a Special Assessment District. Prepared for the office of
Planning Assistance.
- Roche, Patrick and Wilson, Richard. (January, 1986) "Ridesharing
Requirements in Downtown Los Angeles: Achieving Private
Sector Commitments." Prepared for the 65th Annual Meeting of
the Transportation Research Board, Washington, D.C.
- Rooney, Steven and Teal, Roger F. (January, 1986) "Developing a
Cost Model for Privately Contracted Commuter Bus Service."
Prepared for the 65th Annual Meeting of the Transportation
Research Board, Washington, D.C.
- Roth, John H. and Marx, L Eric and Kraus, Janet E. (January,
1986) "The Chicago Transit Authority's Hybrid User-Side
Subsidy Program for the Disabled." Prepared for the 65th
Annual Meeting of the Transportation Research Board,
Washington, D.C.
- Rutgers University. (1982) "Redesigning Federal Transit
Subsidies to Control Costs and to Increase the Effectiveness
of the Transit Program." Prepared for the Urban Mass
Transportation Administration.
- Selsam, Robert E. (October, 1983) "Generating Private
Contributions for Station Improvement Through Public
Development Incentives and Controls." Prepared on Behalf of
the Policy and Planning Committee, American Public Transit
Association.
- Simpson, Anthony H. (October, 1983) "Implications of Public
Transit Efficiency Incentives on Use of Private Sector
Contracting."
- Smith, Richard B. (March 29, 1982) "Mayor's Committee on Taxi
Regulatory Issues, New York City."
- Stanton, Christine C. (July, 1971) "Mayor's Committee on Taxi
Regulatory Issues, New York City." Leasing Survey.

- Stanton, Christine C. (July, 1971) "Mayor's Committee on Taxi Regulatory Issues, New York City." Report on availability of taxicabs on week days.
- Talvitie, Antti and Heinila, Ari. (January, 1986) "A Comparison of Privately-Owned and Publicly-Owned Bus Companies and a Public Transit Agency." Prepared for the 65th Annual Meeting of the Transportation Research Board, Washington, D.C.
- Teal, Roger F. et. al. (March, 1984) "Private Sector Options for Commuter Transportation", Institute of Transportation Studies University of California, Irvine.
- Teal, Roger F. (April, 1985) "Private Enterprise in Public Transportation: The Case of the Taxi Industry," Transportation Quarterly, Vol. 39, No. 2.
- Tomlinson, Douglas. (October, 1984) "Taking Stock of Japan's Railroad Companies" Mass Transit, Vol. XI, No. 10.
- Transportation Research Board. (1983) "The Evolution of Transportation Planning," Washington, D.C.
- Transportation Research Board, National Research Council. (September 26-29, 1982) Future Directions of Urban Public Transportation, Special Report 199. Proceedings of a conference on the future directions of urban public transportation, Washington, D.C.
- Transportation Research Board. (1983) "Transportation Innovation: Ridesharing Techniques and Public-Private Cooperation."
- Transportation Research Board. (1984) "Techniques for Making Key Transportation Decisions."
- Trevas, Harriet. (November, 1985) "Survey Spotlights Tax Reform Plan," American City and County.
- United States Department of Transportation. (January, 1984) "Administrative Impacts of Private Financing Techniques for Urban Transportation."
- United States Department of Transportation. (No date) "Public Private Cooperation for Better Transportation." (UMTA Technical Assistance Program).
- Urban Mass Transportation Research Information Service (Summer, 1985) Urban Transportation Abstracts, Vol. 4, No. 1.
- URS Company, Inc. (1984) "Infrastructure: Crisis or Opportunity."

Wells, John D. et al. (February, 1972) Economic Characteristics of the Urban Public Transportation Industry, Institute for Defense Analysis Prepared for the U.S. Department of Transportation.

Williams, Jon. (January, 1986) "A Survey and Analysis of Vanpooling in Metropolitan Washington, D.C." Summary of Findings Prepared for the 65th Annual Meeting of the Transportation Research Board, Washington, D.C.

Author unknown. (December 21, 1985) "Privatization: Everybody's Doing it Differently," The Economist.

Author unknown. (September, 1978) "Public versus Private Ownership of Transportation" Current Transportation Issues in the United States, Vol. 11.

