

## SECTION II

### EXISTING PARATRANSIT SERVICES IN NORTHERN VIRGINIA

Presently, Northern Virginia has six major paratransit systems in operation and has experimented with three types of paratransit service over the past few years. The taxi has been the most longstanding service, having begun in the early part of this century. For this reason, this section begins with a thorough analysis of the taxi industry in Northern Virginia. From that point of departure, a jurisdictional analysis of each of the other paratransit systems will be presented.

### THE NORTHERN VIRGINIA TAXI INDUSTRY 1977

The taxicab industry in Northern Virginia is typical of the industry throughout the country and similar to that of the surrounding suburban areas in Maryland; it is however, completely different from the industry in the District of Columbia. In Northern Virginia, each jurisdiction has set a limit on the number of taxicabs it will license; in addition, each taxicab is required to have a fare meter. The District of Columbia, on the other hand, operates under a "free entry" system; that is, there is no legal restriction on the total number of taxis that can be licensed. The City is also unique in that the taxis operate under a fare zone system<sup>1/</sup> versus fare meters. This difference offers transportation planners and officials an excellent opportunity for comparison of the two different systems.

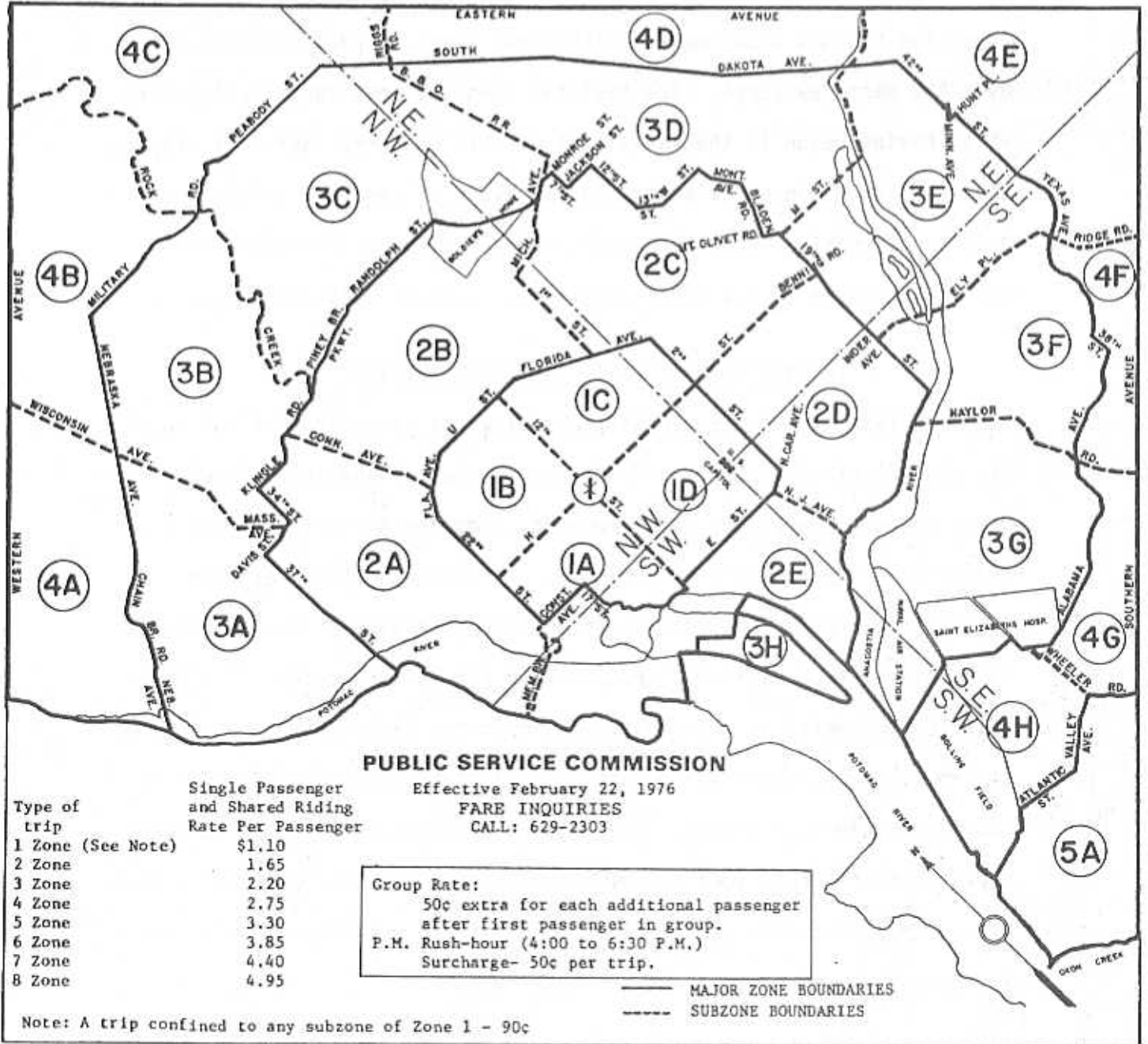
<sup>1/</sup> See Map II for zones and fares in the District of Columbia.

MAP II

DC TAG NO

TAXICAB ZONE MAP

APPENDIX A TO ORDER NO. 5769



**PUBLIC SERVICE COMMISSION**

Effective February 22, 1976

FARE INQUIRIES

CALL: 629-2303

Type of trip	Single Passenger and Shared Riding Rate Per Passenger
1 Zone (See Note)	\$1.10
2 Zone	1.65
3 Zone	2.20
4 Zone	2.75
5 Zone	3.30
6 Zone	3.85
7 Zone	4.40
8 Zone	4.95

**Group Rate:**  
 50c extra for each additional passenger after first passenger in group.  
 P.M. Rush-hour (4:00 to 6:30 P.M.)  
 Surcharge- 50c per trip.

— MAJOR ZONE BOUNDARIES  
 - - - SUBZONE BOUNDARIES

Note: A trip confined to any subzone of Zone 1 - 90c

### Characteristics of Taxi Operations

In Virginia, the State Legislature has given the localities in Northern Virginia the powers necessary to regulate taxi operations in their respective jurisdictions. The only qualification to this is when taxi operations cross jurisdictional boundaries, the State's Motor Carrier Laws dictate that taxi operators must be licensed by the State Corporation Commission. The licensing procedure is basically proforma once a local jurisdiction approves a taxi operation.

With respect to regulation and monitoring operations, each jurisdiction in Northern Virginia has a different approach. As can be seen in Table I, there are 17 different arms of government regulating taxis in Northern Virginia. Table II, Taxi Fares, indicates that Fairfax and Arlington have adopted the same fare structure, while Alexandria has recently increased their fares.

What this has led to in the past is a domino type effect. When one jurisdiction approves a new fare structure, usually a higher one, the taxi operators use this as a precedent to show their localities that there is a need for a rate change.

Although taxi fares are similar in Northern Virginia, what is not comparable is the amount of service available. Table III shows the relationship between population and service availability. Comparing Arlington and Alexandria, which have roughly the same population densities, Alexandria has twice the number of cabs per person compared to Arlington, and three times the number of cabs per intra-jurisdictional employment.

Comparing the above to Fairfax is difficult because the population densities are much lower overall; however, if you look at where the taxicab companies are located, Falls Church and Springfield, and compare their service areas with those of Arlington and Alexandria, it can be seen that all the companies service similar population densities. This is due to the general trend of more taxi patronage in downtown central business district-type areas.

TABLE I

AGENCIES REGULATING TAXI INDUSTRY

Arlington County

County Board  
County Manager's Office  
Police  
Arlington Transportation Commission  
Office of Consumer Affairs

Alexandria

City Council  
Chief of Police  
Traffic and Parking Board  
City Finance Office

Fairfax County

Board of Supervisors  
Chief of Police  
Director of Finance  
Taxicab License Review Board  
Department of Consumer Affairs (Consumer Protection Commission)

Vienna

Town Finance Office  
(Business License Only)

Falls Church

City Council  
(Regulation coordinated with Fairfax County)

Fairfax City

No regulation, city operators conform to regulations of Fairfax County.

Virginia

State Corporation Commission  
(Permit for intrastate operations)

TABLE II  
TAXI FARES IN NORTHERN VIRGINIA

	ARLINGTON	ALEXANDRIA	FAIRFAX <sup>1/</sup>
First drop	60¢ (2/7 mile)	60¢ (2/8 mile)	60¢ (2/7 mile)
Thereafter	10¢ (1/7 mile)	10¢ (1/8 mile)	10¢ (1/7 mile)
Extra Passenger	60¢	6-12 years old 25¢ 13+ yrs. old 50¢	60¢ 1st/25¢ over 2
Waiting Charge	\$7.20 hour	\$8.00 hour	\$7.20 hour
Baggage Charge	20¢ each after 2	20¢ each after 2	20¢ each after 2
Total 1st mile	\$1.10	\$1.20	\$1.10
Additional Miles	70¢	80¢	70¢

<sup>1/</sup> Includes Falls Church and Fairfax City

TABLE III  
JURISDICTIONAL DEMOGRAPHIC DATA

	<u>Arlington</u>	<u>Alexandria</u>	<u>Fairfax</u> <sup>1/</sup>
Population (thousands)	157	117	589
Area (square miles)	26	15	418
Employment (thousands) <sup>2/</sup>	140	49	175
Population Density (thousands/sq.mi.)	6.0	7.8	1.3
Number of taxis	445	441	149
Taxis/thousand population	2.2	3.8	0.3
Taxis/square mile	17.1	29.4	0.4
Taxis/thousand employment	3.1	9.0	0.9

<sup>1/</sup> Includes Falls Church and Fairfax City

<sup>2/</sup> 1975 data, all other is 1976

\* \* \* \* \*

TAXI DRIVER STATISTICS

	<u>Arlington</u>	<u>Alexandria</u>	<u>Fairfax</u> <sup>1/</sup>
License Duration	2 years	1 year	1 year
License fee - original	\$9.00	\$8.00	\$5.00
License fee - renewal	\$9.00	\$3.00	\$3.00
Maximum driving time per- mitted per day	13 hours	13 hours	13 hours
Agency issuing "face"	Police	Police	Police
Written exam required	Yes	Yes	No
Number of drivers	2,183	907	1,250
Number of taxicabs	445	441	149
Drivers Per Cab	4.4	2.0	7.9

<sup>1/</sup> Includes Fairfax City and Falls Church

Table IV is an overview of the industry and regulations imposed.<sup>1/</sup> Of significance here are the number of "hack inspectors"<sup>2/</sup> in each jurisdiction and the insurance requirements. These "hack inspectors" are the sole enforcers of regulations regarding actual operations. This fact helps to explain the difficulties encountered in getting accurate data about cab operations. One or two individuals trying to keep up with reviewing applications for prospective drivers, the same individuals to review required driver manifests and to inspect vehicles. This obviously is an impossible situation.

The second point mentioned in Table IV is the insurance requirements of 100/300/10. This amount of insurance costs between from \$600 to \$2,000 a year per vehicle; the exact cost is dependent on type of operation -- a driver owner, driver renter, etc. Superimposed on top of this insurance requirement is a reluctance on the part of insurance companies to insure taxi operations. To some extent, this is mitigated in Virginia by an assigned risk pool. This requires insurance companies operating in Virginia to accept a specified number of taxi operators.

#### Availability of Taxi Service

The two most frustrating things for the normal patron is the wait time and no-show of taxis. It has been said that in Northern Virginia the latter is not a problem, but try and get a taxi during the peak of rush hour and you become acutely aware of the typical operating characteristics of taxis. Figure III gives the typical number of taxicabs in

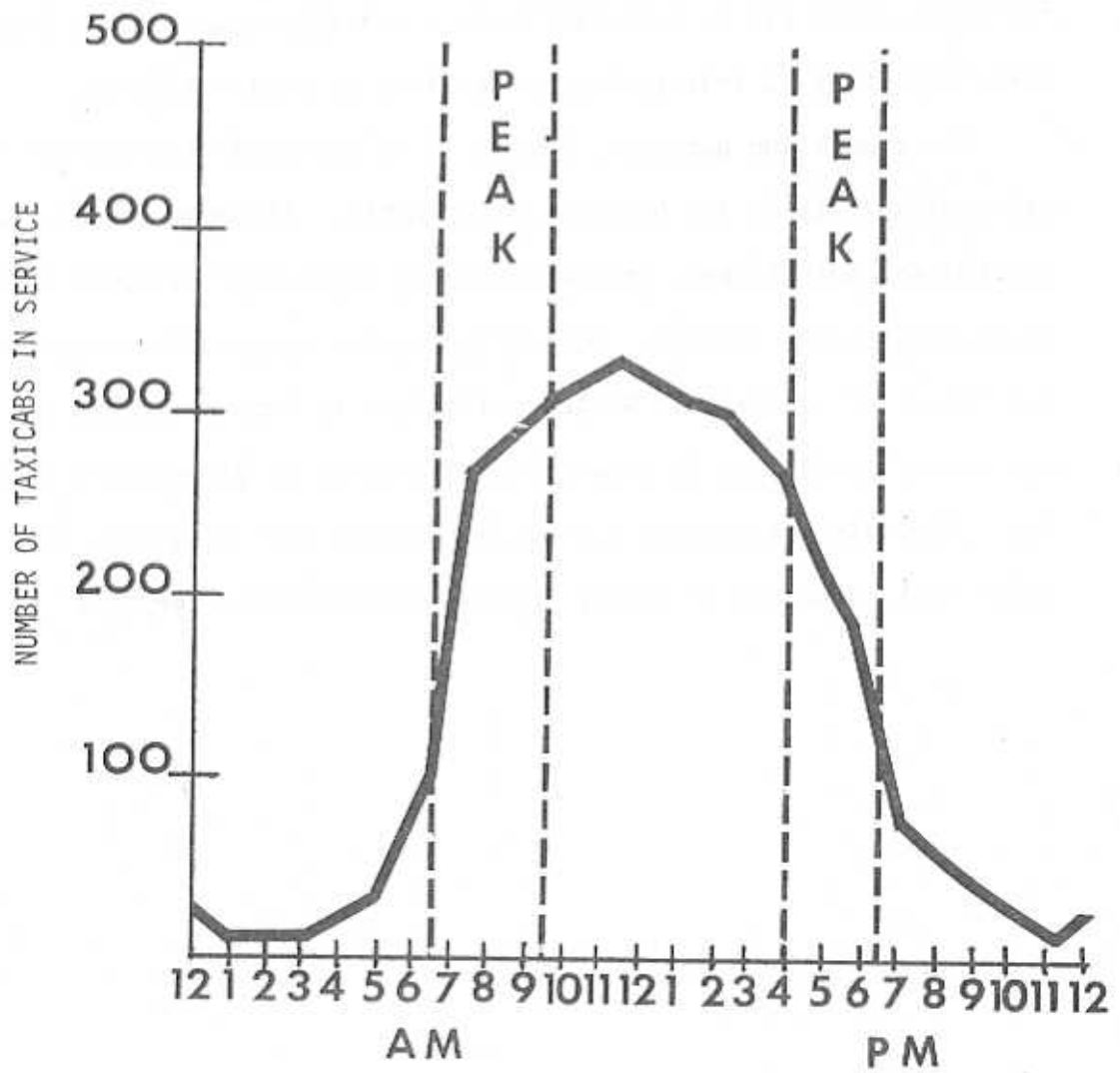
<sup>1/</sup> See Appendix III for National Airport Regulations.

<sup>2/</sup> See Glossary of Terms for explanation of this term, Appendix IV.

FIGURE III

NUMBER OF ARLINGTON COUNTY TAXIS ON THE STREET  
BY TIME OF DAY

1976



Source: Arlington County Public Service Commission May 1976.

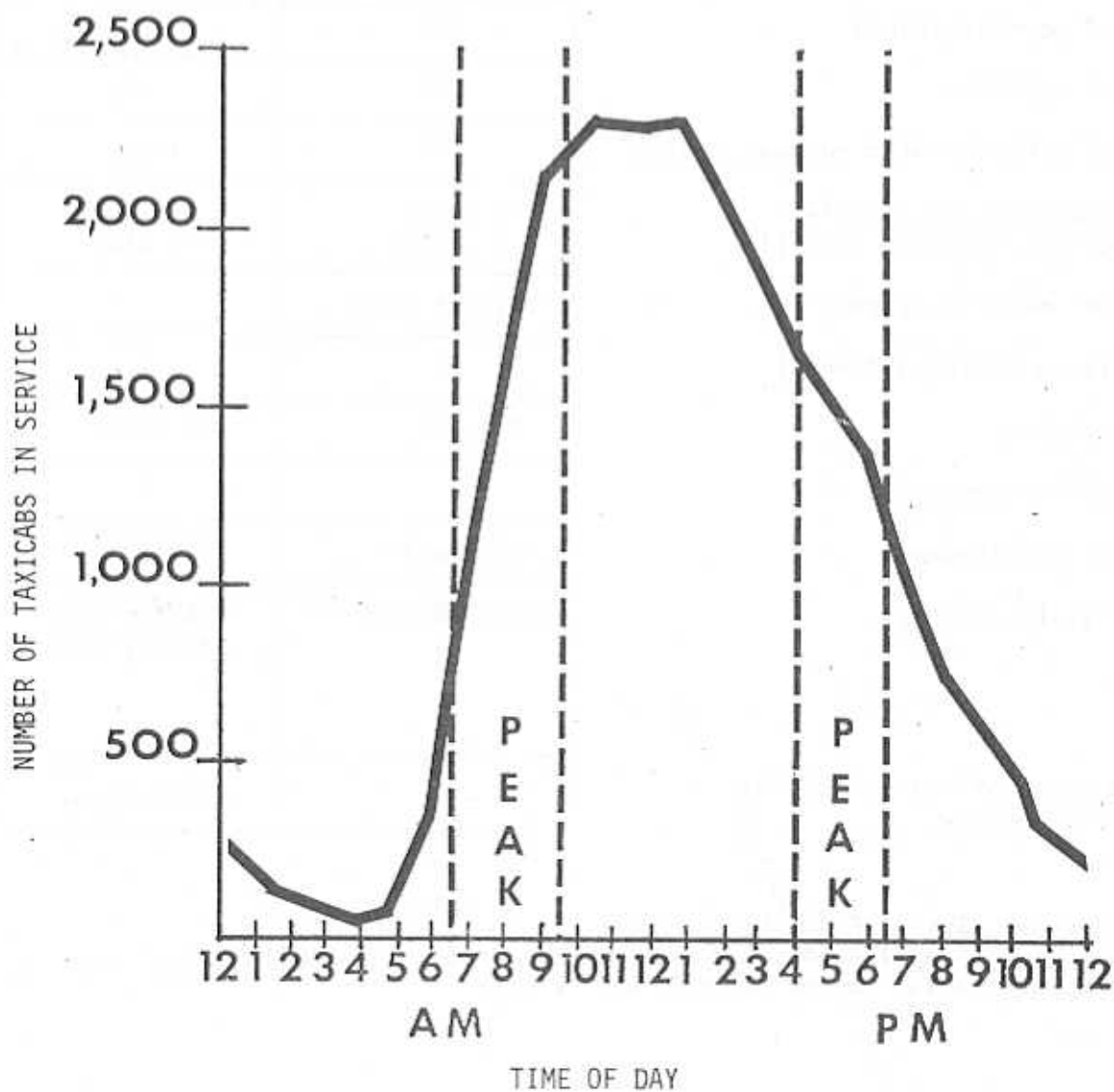
operation on a weekday in Arlington. The peak availability is during midday, indicating the taxi industry's great ability to provide mid-day off-peak service. The graph also shows the industry's lack of interest in operating at other times either because of lack of demand, or low profits because of rush hour traffic.

This peaking of service availability leaves a great surplus of taxicabs, which can be presumed to be a possible resource for better, more comprehensive transportation services to area residents.

For comparison purposes, Figure IV is enclosed illustrating taxicab availability in the District of Columbia. Although the absolute numbers are much higher, the shape of the curve and the hours cabs are available is very similar. During interviews with various operators and owners of taxicabs in Northern Virginia it became obvious that they are more than willing to expand their services if given sufficient backing. They also reaffirmed our own data which indicated that they have sufficient resources to handle increased paratransit services.

FIGURE IV

TAXICAB AVAILABILITY BY TIME OF DAY IN THE  
DISTRICT OF COLUMBIA



Source: Characteristics of Taxicab Service in the District of Columbia, WMCOG July 1970, page 3.

TABLE IV  
PUBLIC VEHICLE PERMITS/VEHICLE DATA

	ARLINGTON	ALEXANDRIA	FAIRFAX COUNTY
Limit on number of permits <sup>3/</sup>	445	441	---
Number of permits issued	445	441	149 <sup>1/</sup>
Number of vehicles	440	441	141
Number of vehicles with two-way radios	347	441	146
Number and types of vehicle inspections required annually	2 state 1 county	2 state 1 city	2 state 2 county
Number of "Hack Inspectors"	2 (part time)	1	2
Age limit on vehicles (years)	5	7	6
Mileage limits	200,000	No limit	300,000
Number of cab companies	8	8	4
Insurance requirements	100/300/10	100/300/10	100/300/10
Agency issuing permits	County Manager <sup>2/</sup>	Traffic and Parking Board	Taxicab License Review Board
Minimum hours of operations for each cab company	---	24 hrs./day	24 hrs./day

<sup>1/</sup> Includes 98 cabs in Falls Church area.

<sup>2/</sup> On the recommendation of the Arlington Transportation Commission.

<sup>3/</sup> See Appendix V for number of cabs per company

## CURRENT PARATRANSIT ACTIVITIES OF TAXI OPERATORS

Although it is the current thinking among taxi operators and decision makers alike that there is a greatly untapped transportation resource in the taxi industry for expanded paratransit services, there exists in Northern Virginia very few such operations. Notably among those employed is one in Alexandria, a subsidized taxi service to senior citizens and another in Arlington, Metro Shuttle Service.

### Alexandria's Subsidized Taxi Service

The Senior Citizen Employment Services of Alexandria, a non-profit social service agency, currently has a user subsidy program underway in Alexandria, Virginia, using one of the major taxi operators in the City.

To use a taxicab for medical or shopping purpose an elderly individual must make a reservation one day in advance. The user pays 50¢ per trip, the program pays the rest of the charge, less a 15% reduction the taxi company gives for the consistent business.

The program is funded until Title III of the "Older Americans Act of 1965 as amended", and is therefore restricted to the elderly.

During the second year of operation this service had a total of 9,053 passenger trips.

Alexandria also has a Senior Trolley service, which employs one Grumman minibus. This service to the elderly carried 7,048 passengers during 144 days of operation in 1977.

### Arlington County, Virginia, Metro Shuttle Service

Arlington County, in cooperation with the local taxicab operators, has recently begun a Metro Subway Feeder Service, using shared-ride

taxis. The establishment of this service results from a year long study by the County on the feasibility of such a service and the cooperation of the local taxi operators in taking the initiative to institute such a service.

The Metro Shuttle provides service in the County to and from the Rosslyn, Pentagon City, and Crystal City Metrorail stations, with limited service on request to Arlington Cemetery and the Pentagon. This service is offered Monday through Friday with the exception of holidays between the hours of 6:30 A.M. to 9:30 A.M. and 3:30 P.M. to 6:30 P.M.

Passengers requesting service to the Metrorail stations are provided with service within one hour of the request, or on a subscription basis. Passengers requesting service from a Metrorail station are provided with service within ten (10) minutes after boarding.

Fares are based on a three zone system and vary from 90¢ to \$1.95; see Map III for the location of the zones and Metro stations.

Although it is still too early to determine how successful this service will be, there does appear a commitment on the part of the County to support this system. Marketing will be an extremely important factor in shaping the public acceptance, and this, too, has been properly recognized by the County's staff and the private operators.



## OTHER PARATRANSIT SYSTEMS IN NORTHERN VIRGINIA

### Fairfax County, Virginia

There are two prominent paratransit systems in Fairfax. The County, through its Area Agency on Aging, has contracted dial-a-ride, "Assist", services for the elderly, and Reston citizens operate a minibus circulation system.

#### "Assist"

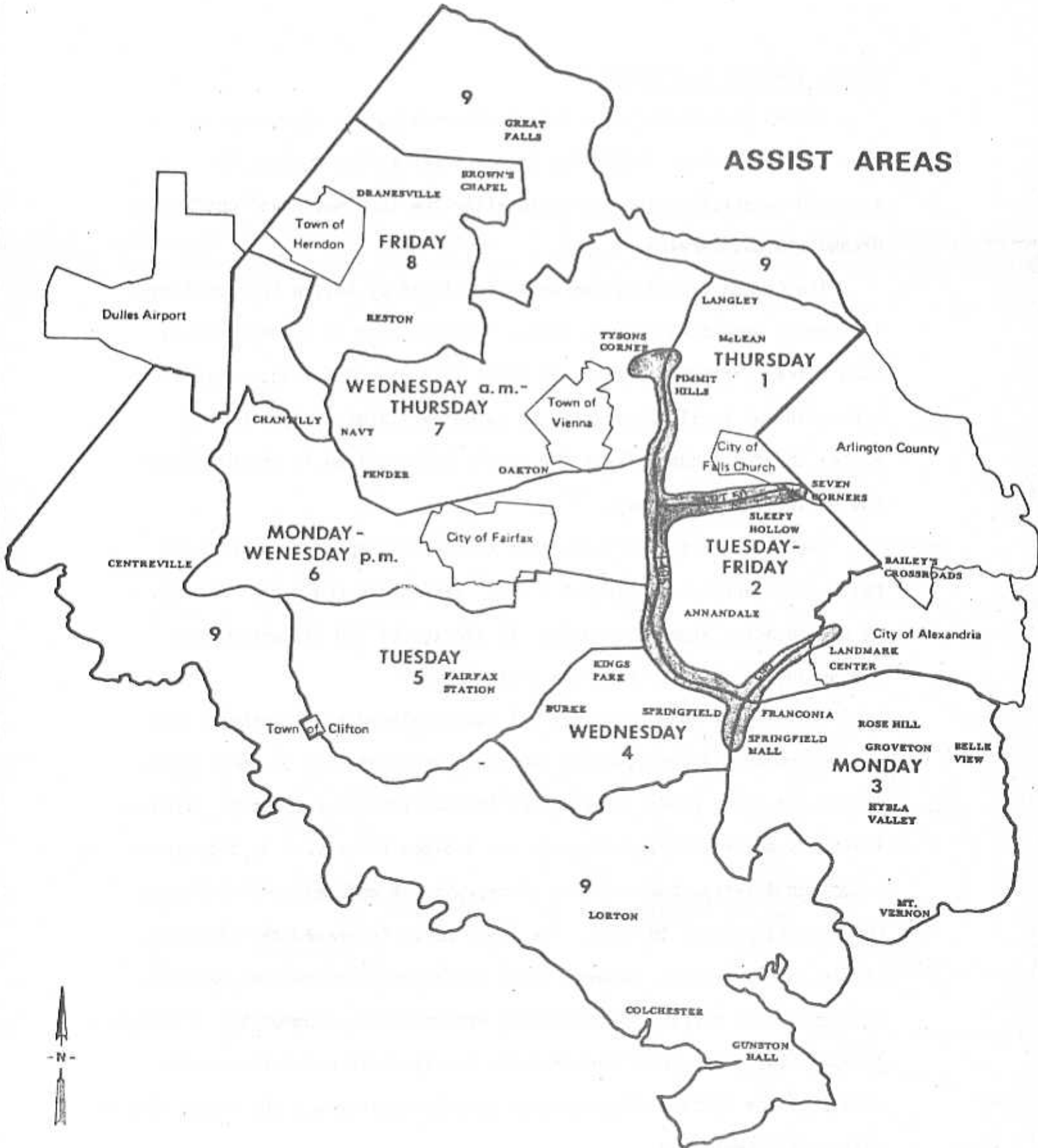
The Assist program is a new low cost shared-ride transportation system which is available Monday through Friday 9:00 A.M. to 5:00 P.M. to the elderly residents of Fairfax County. This program, on a rotating zone basis, supplies the elderly with a DAR or subscription service two to three days a week. In the words of the program outline, "Assist is designed to increase the mobility of senior citizens who need transportation for the following: Shopping, medical and dental care, business and other essential trip purposes".

Assist uses vans, without lifts, but drivers are under instructions to help all patrons in need of help into or out of the vans. The driver also helps with packages.

Map IV indicates the nine zones where service is available. Also on the map is the major transportation corridor. The map also indicates when service is available in each zone. The patron may ride anywhere in his or her zone and into any of the designated travel corridors. The fare is an optional 25¢.

The Assist program has been in existence since October 1977. In this time the ridership has increased from an initial 399 person trips per month to a current high of 810 person trips per month.

MAP IV



### Reston Internal Bus System

Reston is currently the only Northern Virginia community served by a minibus system. RIBS, the Reston Internal Bus System, Inc., is a second-generation system created after the termination of the Common Ground minibus service.

The Common Ground system was established by Reston Episcopalians, The Common Ground Foundation (CGF), in an attempt to answer the new town's transportation needs. In April 1972, the CGF inaugurated service with two small buses drive by volunteers along a double-loop route; the two loops reflect the town's being sliced in the middle by the Dulles Access Highway.

Twelve round trips of 24 miles each were completed on an hourly basis each weekday starting at 7 A.M. Passengers could hail the bus at any location along the route. An average of 120 passengers per day or 30,000 per year rode the minibuses.

The initial no-fare policy was soon replaced by a charge of 25¢ per passenger. Advertising on the buses and donations by local businesses and civic groups provided additional financial support. Although transit's major operating expense was avoided for a year by the use of volunteer drivers, the problems of recruitment and reliability forced CGF to hire drivers in 1973. The labor costs increased the financial strain on the system. Several times cessation of operations was prevented only by desparate fundraising efforts of the community. Finally, in April 1977 even funds from Fairfax County could not postpone the demise of the system. The vehicles became unusable and the Common Ground System was terminated.

RIBS initiated service on September 6, 1977. The \$20,000 cost for each diesel minibus was paid with State grant monies. The buses had been used as demonstrators for Mercedes, and had mileages of 15,000 and 25,000 when RIBS obtained them.

RIBS is managed by a seven member Board of Directors appointed by the Reston Homeowners' Association (RHOA) which is subsidizing the system with a \$17,500 grant for FY 1978. The RHOA grant has been matched by an equal allocation from Fairfax County, for a total first year operating subsidy of \$35,000.

RIBS service operations have been contracted to Reston Mobility Services, Ltd. (RMS). The contract includes financial incentives and disincentives to encourage high performance. The contract standards relate to on-time performance, driver performance, vehicle cleanliness, and the month submission of an operations report.

The RMS in-house incentive program increases the hourly wage by 10% for drivers who receive no complaints from passengers. Despite the relatively low base pay of \$3.00 an hour, the driving jobs are attractive to local residents, especially women, because of the RMS policy of hiring only part time drivers; of the seven drivers, five are women.

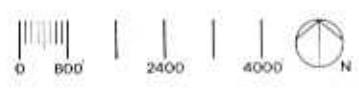
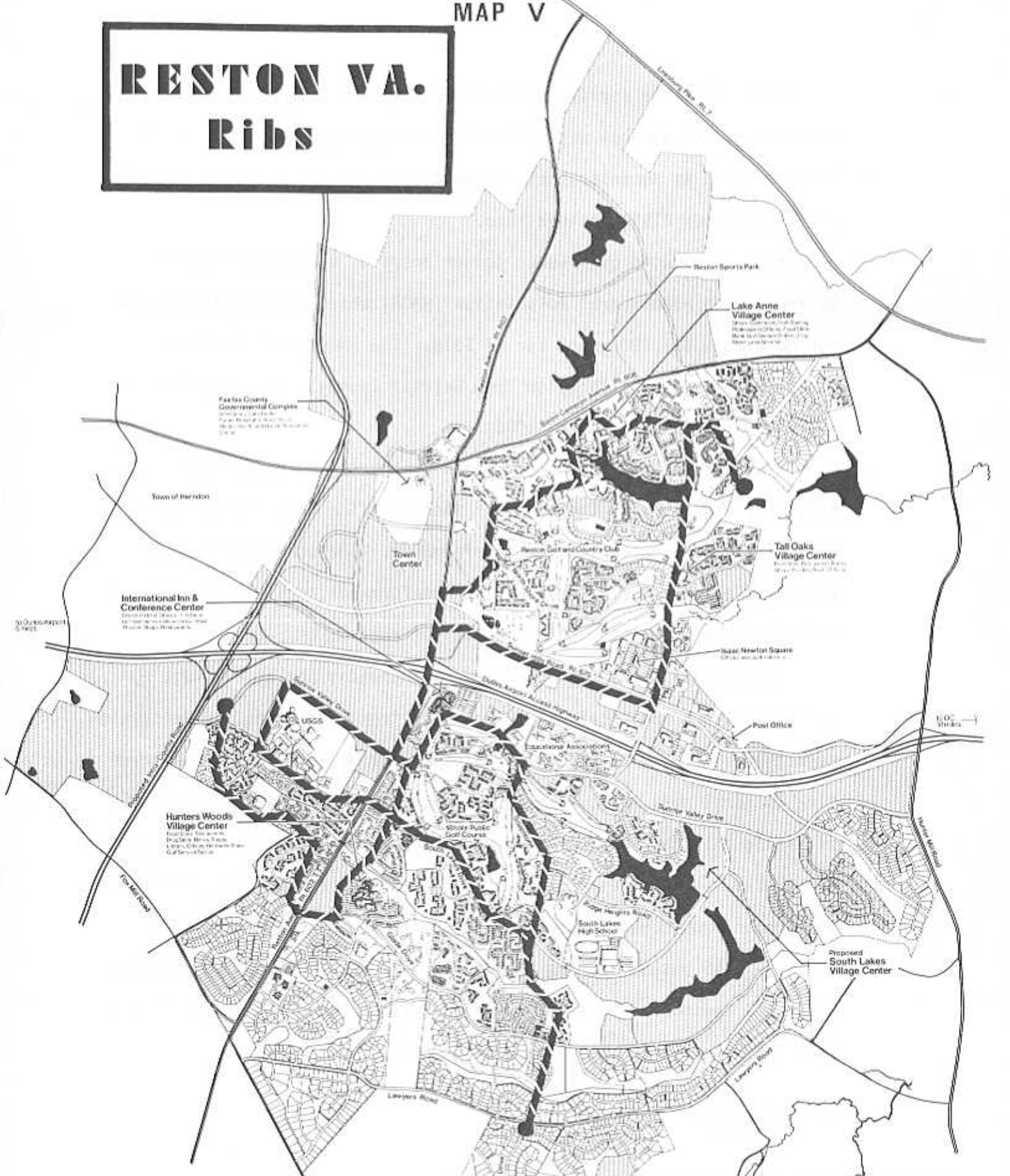
RMS devised routes and schedules which differ significantly from the Common Ground bus system.<sup>1/</sup> Sixteen round trips are completed daily by RIBS buses. During the peak hours each bus makes four trips, while one bus makes all eight off-peak trips. The operating hours are 7:00 A.M. to 7:00 P.M., Monday through Friday.

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<sup>1/</sup> See Map V.

MAP V

# RESTON VA. Ribs



**RIBS ROUTE** 

The Northbound peak trip consists of 18 miles from the Southern residential areas to all of the town's employment centers and back to the Southern sector. The southbound peak trip consists of 19 miles from the northern residential areas to all employment centers and back to the northern section.

Both peak and off-peak trips provide service to the following places:

1. The five subsidized low and moderate income housing projects;
2. Commercial and industrial areas;<sup>1/</sup>
3. Metrobus stops in the northern sector (Metrobus doesn't serve the southern sector).

According to RMS manager, Mike James, RIBS policy is to provide the best service to the residents of the subsidized projects and the apartment complexes because these persons tend to be transit-dependent. Originally, RIBS provided no service to large sections of Reston where single-family homes predominate. Complaints from residents of those neighborhoods prompted the addition of minimal service to that area during off-peak hours. RIBS' impressive average of 20 mph results from this policy, but at the expense of good service for all segments of the community.

At the end of 1977, RIBS was carrying an average of 110 persons daily. Average per mile ridership on the 308 passenger miles traveled per day is .36, as compared to .4 on the CGF system. Ridership has been increasing constantly, having started at seventy-four persons per day.

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<sup>1/</sup> Only peak hour buses stop at the U.S. Geological Survey complex.

Expense per mile for the Common Ground bus system was \$.43, of which \$.26 was actually paid by CGF. The rest came from donated services. RIBS cost per mile is \$.56. While the cost per revenue vehicle hour for CGF was \$9.60, the RIBS cost is \$9.80.

#### Reston Commuter Services

Reston is served by two other public bus systems -- the Reston Commuter Bus (RCB) service and the Washington Metropolitan Area Transit Authority (WMATA). The RCB serves about 1,400 daily passengers between Reston and Washington with approximately 18 runs each way. The RCB is supervised by a volunteer organization, and membership in either the Reston Homeowners Association, the Deepwood Homeowners Association, or the Reston Community Association is required to utilize the commuter bus operation. Service is provided during morning and evening peak hours and operates on a subscription basis with tickets available on a daily or weekly basis.

Metro also provides bus service to Reston. Metro Route 5S/ serves the Lake Anne Section, and Route 3X serves the USGS area via the Dulles Access Highway. However, Metro does not provide service between the Lake Anne and the Hunters Wood Sections or within the Hunters Woods Section of Reston.

#### Vienna Jitney Service

The area's first privately operated non-commuter paratransit service was operational from December 1, 1975 to November 18, 1976 when it terminated. The service was performed by a taxicab company in Vienna which

assigned two minibuses (16 and 19-seat capacities) to the shuttle service within Vienna and between Vienna and the Tysons Corner shopping and business district.

Fixed jitney routes extended along Maple Avenue (Route 123) between Tysons Corner and downtown Vienna and through residential neighborhoods on either side of this arterial. The jitneys ran seven days a week between 7:00 A.M. and 10:00 P.M., picking up passengers who hailed them. The service was considered by some local officials as providing the needed in-town local transportation which the also-discontinued Fairfax City Dial-a-Ride was also designed to furnish. These officials thought that the effect of the service in reducing traffic congestion and air pollution outweighed any adverse impact it might have on Metrobus ridership in the area.

#### Ridership and Cost

The service failed because of excessive costs not covered by revenues, amounting to about a \$50. per day deficit. Fares were collected from an average of 120 passengers each weekday, with triple that number riding on weekends. The fares were 35¢ within Vienna and 50¢ to Tysons Corner.

The private operators anticipated overcoming the deficit conditions by enlarging the service with the addition of more minibuses and the extension of routes all the way from George Mason University in Fairfax City to the CIA headquarters in McLean. The minibuses would proceed through residential areas as far as a mile and one-half on either side of Route 123. The Northern Virginia Transportation Commission was requested to grant the necessary authorizations to extend

the service into the Fairfax City area, and also to issue authorization to operate a charter service in Northern Virginia. These requests had the support of the Vienna Town Council, which expressed the need for a minibus service in and through the Vienna area.<sup>1/</sup>

However, NVTC was not able to grant the authority Vienna Jitney requested because of problems with defining the legal regulatory powers of NVTC inside Transportation Districts versus SCC powers. The question of competition with Metro was also raised.

This problem with defining NVTC's authority, in relation to paratransit operations is one that is discussed in Section III of this report. It is a problem that will have to be resolved before any other private paratransit systems are put into operation. Unfortunately for Vienna Jitney, these problems could not be resolved before the operation closed down because of excessive costs and low ridership.

It is important to point out that the per ride deficit was only 35¢, considerable lower than that generally attributed to Metrobus service and only slightly higher than Reston's Common Ground system run by a non-profit organization. Reston's Common Ground and the Vienna Jitney carried approximately the same number of riders per day.

Fairfax City Dial-a-Ride, 1974-1975

Fairfax City, in cooperation with the Northern Virginia Transportation Commission, operated a dial-a-ride system from June 1974 to April, 1975.

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<sup>1/</sup> WMCOG Para-Transit Report, p. 25

The system initially utilized three seventeen seat buses, and one van as a spare vehicle, later on these were replaced by twenty-three seat buses. The service to a patron was initiated by telephone and then relayed by a dispatcher to the particular bus in the vicinity of the calling patron. In addition to this demand responsive service which operated during the off-peak hours, subscription service was offered during peak periods. Hailing from the street was allowed during all hours of operation.

The service operated from 6:00 A.M. to 7:00 P.M. weekdays and from 10:00 A.M. to 3:00 P.M. on Saturdays. The fare was 25¢, but a book of ten tickets could be purchased for \$2.00.

Rider reaction to the service was generally favorable with regard to comfort, driver responsiveness and the low fare of 25¢ per ride. It was unfavorable with regard to the unreliability of the service due mainly to mechanical failures. The taxpaying citizens of Fairfax City frequently reacted adversely to the service because it was not seen as benefiting the wage earner (who normally drives or uses Metrobus to get to work) as much as the transit dependent person, such as the young, the aged, and the handicapped.

During 1974 about 31,500 riders used the service, yielding an average weekday ridership of 200 passengers. The estimated ridership when planning the service was 300 passengers per weekday. In the first quarter of 1975, weekday ridership climbed slowly to about 260. However, by this time, the cost overrun connected with the service had prompted the City administration to search for alternative service and finally to discontinue the experiment.<sup>1/</sup>

<sup>1/</sup> MWCOG Para-Transit Report 1977, p. 21.

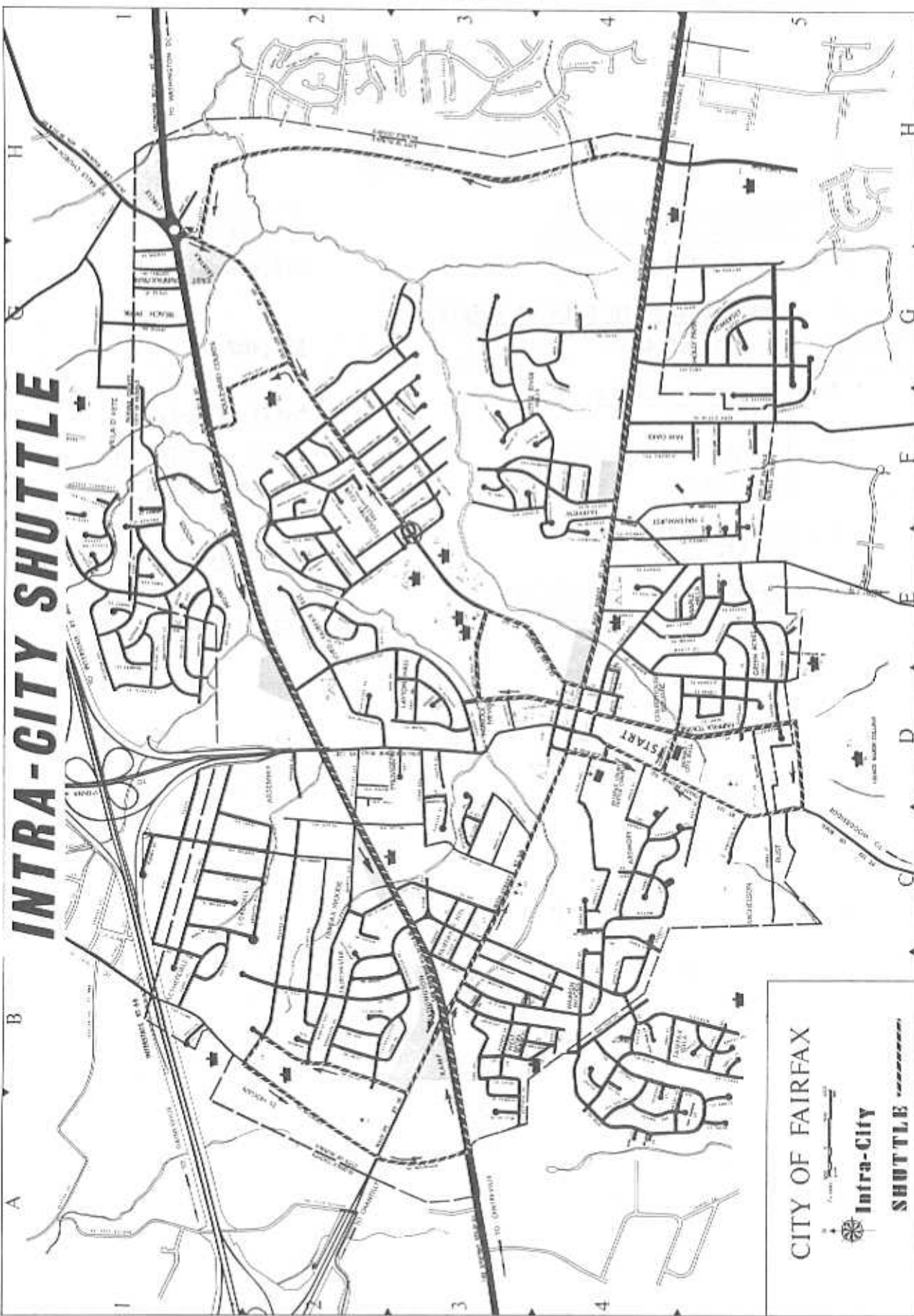
### Fairfax City: Intra-City Shuttle Bus Proposal

In late 1977 Fairfax City withdrew from participation in WMATA. At that time the City staff felt this might prompt the WMATA Board to curtail Metrobus service in the City. As a result of this conclusion the City asked for proposals from private operators to run a minibuss shuttle system in the City of Fairfax.

The proposed shuttle service, which has yet to be implemented, would operate in the City Monday through Friday with service commencing at 8:00 A.M. and ending at 6:00 P.M. along the route described on Map VI. This route was times at fifty (50) minutes not including a planned layover at City Hall, so in essence the service would have one-hour headways on the hour. The passenger fare would be 25¢, except for senior citizens displaying a pass which could be purchased at a reduced fare at City Hall.

The company of Assist, Inc., entered the lowest bid. Their bid was \$17,402 for a five-month demonstration project and included a contribution of \$104.40 per month toward a promotional campaign for the shuttle service. Table V gives a complete breakdown of the costs.

At this time it is uncertain as to whether this system will be implemented since the WMATA Board has yet to curtail Metrobus service in the City.



# INTRA-CITY SHUTTLE

CITY OF FAIRFAX



Intra-City

SHUTTLE

TABLE V  
FAIRFAX SHUTTLE  
CHARGE FOR SERVICES

A - <u>Demonstration Period</u>		(5 months)	
<u>Monthly Cost to Assist</u>		<u>Total</u>	
\$3,480.40		\$17,402.00	
<u>Monthly Charge to City of Fairfax</u>			
\$3,480.40		\$17,402.00	
B - <u>1st Year Extension</u>			
<u>Monthly</u>		<u>Totals Yearly</u>	
<u>1 Vehicle</u>	<u>2 Vehicles</u>	<u>1 Vehicle</u>	<u>2 Vehicles</u>
\$2,319.62	\$6,639.24	\$43,435.44	\$79,670.88
C - <u>2nd Year Extension</u>			
<u>Monthly</u>		<u>Totals Yearly</u>	
<u>1 Vehicle</u>	<u>2 Vehicles</u>	<u>1 Vehicle</u>	<u>2 Vehicles</u>
\$3,764.40	\$7,028.80	\$45,172.80	\$84,345.60