



Thirteenth Annual Report

Transportation Service

Coordination Plan

October, 1997

ABSTRACT

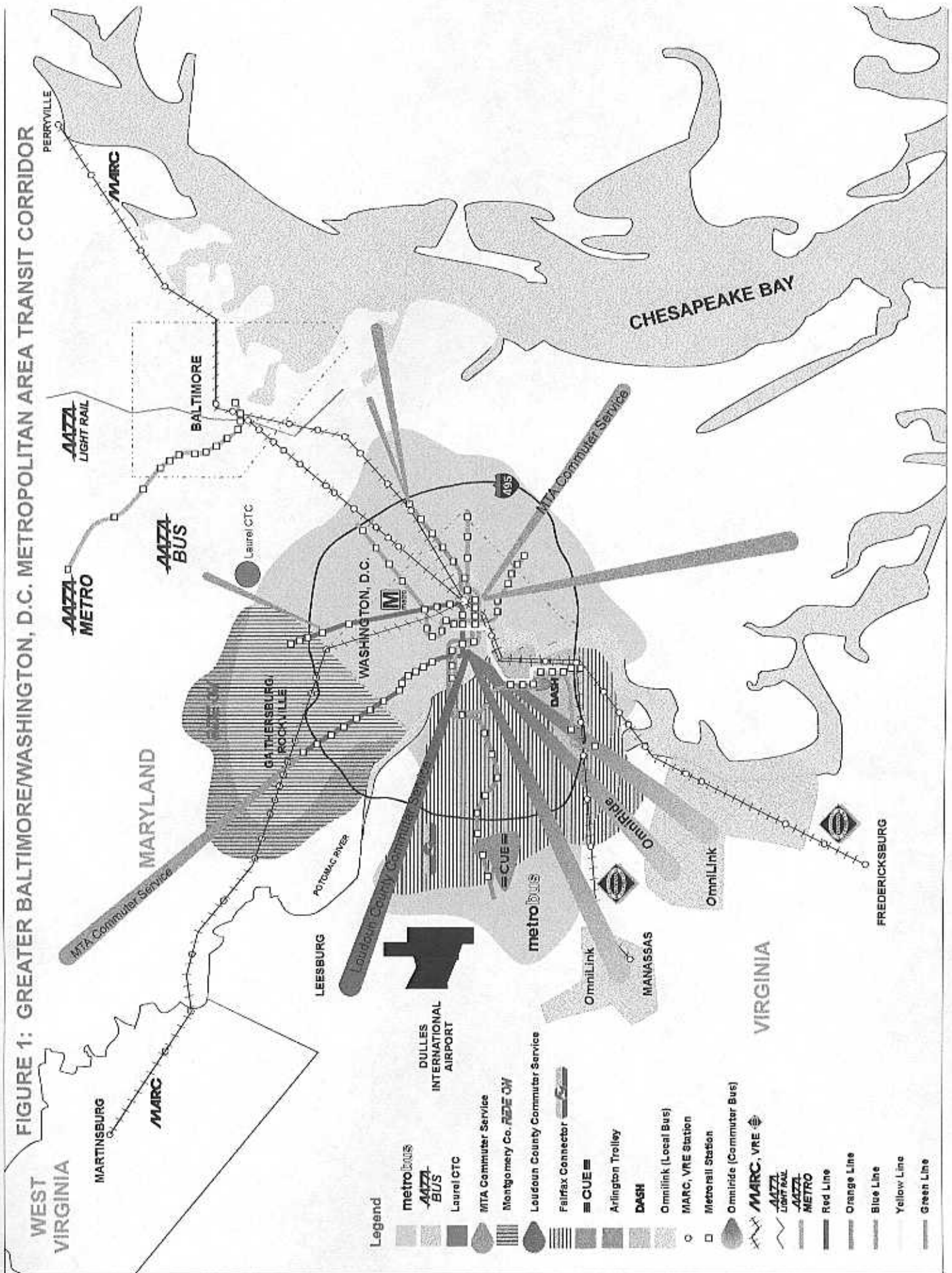
This thirteenth in the series of Transportation Service Coordination Plans (TSCP) of the Northern Virginia Transportation Commission reviews the issues that shape the region as well as the institutional and legislative settings within which transportation policies and programs are planned and implemented. This year the TSCP is organized primarily by mode and function. Within each section is a discussion of the related issues and a list of contacts. Performance data for the region's public transit systems are assembled as part of the Section 4: Bus Services and Section 11: Regional Transportation Network. This year's report also includes three additional original components. These components are a matrix of regional studies and projects, which includes the project's purpose, study area, costs and contact; a list of area park and ride lots cross checked against all state and jurisdictional lists; and a matrix of comparative transit performance measures, such as on-time performance and passenger miles. In addition, ten initiatives have been identified as crucial regional transportation coordination initiatives. These initiatives are listed in Section 1: Introduction and further information on each of these issues can be found in the text.

The current situation in Northern Virginia includes limited transportation funding, growing congestion, and deteriorating transportation facilities. Unfortunately, planned investments for the future are not projected to keep up with the projected increase in traffic. In addition, between 1990 and 2020, the population of the region is expected to increase by 43 percent, while vehicle trips in the region are predicted to increase by 64 percent, and vehicle miles traveled daily by 74 percent. Public transit must play an essential role in meeting these challenges.

Northern Virginia provides transit access through several regional and local systems varying in size from approximately 255 peak-hour Metrobuses in Virginia to the two trolleys that serve the Crystal City area in Arlington. Both public agencies and private firms operate transit services. Public transit agencies operating in the Greater Washington/Baltimore metropolitan area are shown in **Figure 1**. While most encourage transfers between systems, no uniform regional transit pass yet exists that would reduce the cost and increase the convenience of travel by public transit. This issue is currently being pursued through the Washington Metropolitan Area Transit Authority's (WMATA) Regional Mobility Panel, a study considering the region's current and future bus service mobility needs, and the NVTC/WMATA Smart Card project, which is developing options for using an electronic stored value card for transit fares and fees.

The appendix provides detailed information on transportation agencies and organizations throughout the area. The substantial number and variety of such agencies demonstrates the size and complexity of the transportation issues faced by Northern Virginia.

FIGURE 1: GREATER BALTIMORE/WASHINGTON, D.C. METROPOLITAN AREA TRANSIT CORRIDOR



- Legend**
- metrobus
 - AAZZA BUS
 - Laurel CTC
 - MTA Commuter Service
 - Montgomery Co. RIDE
 - Loudoun County Commuter Service
 - Fairfax Connector
 - CUE
 - Arlington Trolley
 - DASH
 - Omniride (Local Bus)
 - MARC, VRE Station
 - Metro Station
 - Omniride (Commuter Bus)
 - MARC, VRE
 - AAZZA LIGHT RAIL
 - AAZZA METRO
 - Red Line
 - Orange Line
 - Blue Line
 - Yellow Line
 - Green Line

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LIST OF ACRONYMS AND ABBREVIATIONS

AAA	American Automobile Association
AASHTO	American Association of State Highway & Transportation Officials
ADA	American with Disabilities Act
ARTS	Automated Routing Transportation System
APTA	American Public Transit Association
AQPAC	Air Quality Public Advisory Committee
AVI	Automated Vehicle Identification
BATA	Ballston/Rosslyn Area Transportation Association
CAAA	Clean Air Act Amendment
CAC	Citizens Advisory Committee
CIP	Capital Improvement Program
CLRP	Constrained Long Range Plan
CMAQ	Congestion Mitigation & Air Quality Improvement Program
CO	Carbon Monoxide
CTB	Commonwealth Transportation Board
CUE	CUE Bus (city of Fairfax)
DASH	Alexandria Transit Company
DATA	Dulles Area Transportation Association
DRM	Division of Risk Management
EPA	Environmental Protection Agency
FAMPO	Fredericksburg Area Metropolitan Planning Organization
FCC	Federal City Council
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GMU	George Mason University
GPS	Global Positioning System
GRH	Guaranteed Ride Home
GRP	Gross Rating Points
GSA	General Services Administration
HJR	House Joint Resolution
HMOF	High Maintenance Operating Fund
HOT Lanes	HOV-Free/Toll Other
HOV	High Occupancy Vehicle
HUD	Department of Housing and Urban Development
IRS	Internal Revenue Service
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITS	Intelligent Transportation Systems
LINK	Reston Transportation Management Association
LOV	Low Occupancy Vehicle

LIST OF ACRONYMS AND ABBREVIATIONS Cont'd

MARC	Maryland Rail Commuter Service
MDOT	Maryland Department of Transportation
MIS	Major Investment Study
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MWAA	Metropolitan Washington Airports Authority
MWAQC	Metropolitan Washington Air Quality Committee
MWCOG	Metropolitan Washington Council of Governments
NEXTEA	National Economic Crossroads Transportation Efficiency Act
NHS	National Highway System
NO _x	Nitrogen oxide
NPS	National Park Service
NTD	National Transit Database (formerly Section 15 data)
NVPDC	Northern Virginia Planning District Commission
NVTA	Northern Virginia Transportation Alliance
NVTC	Northern Virginia Transportation Commission
O ₃	Ozone
PRTC	Potomac and Rappahannock Transportation Commission
RADCO	Rappahannock Area Development Commission
RFP	Request for Proposals
RSTP	Regional Surface Transportation Program
SAG	TCC Study Advisory Group
SCC	State Corporation Commission
SIP	State Implementation Plan
SOV	Single Occupant Vehicle
STARS	Surface Transportation Authority & Regulatory Act
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TCC	Transportation Coordinating Council
TCM	Transportation Control Measure
TEIF	Transportation Efficiency Improvement Program
TERM	Transportation Emissions Reduction Measure
TIP	Transportation Improvement Program
TLC	Transit Link Pass between MARC, Metro and VRE
TMA	Transportation Management Association
TPB	Transportation Planning Board
TRB	Transportation Research Board
TRDI	Transit Ridesharing Development Initiative
TRIP	Train Information Provider
TRIP II	Toll Road Investors

LIST OF ACRONYMS AND ABBREVIATIONS Cont'd

TSCP	Transportation Service Coordination Plan
TTF	Transportation Trust Fund
TYTRAN	Tysons Transportation Association
USDOT	U.S. Department of Transportation
UVAVA	University of Virginia/Virginia Tech.
VACO	Virginia Association of Counties
VDRPT	Virginia Department of Rail and Public Transportation
VDOT	Virginia Department of Transportation
VML	Virginia Municipal League
VOCs	Volatile Organic Compounds
VPSI	Van Pool Services, Inc.
VRE	Virginia Railway Express
VTA	Virginia Transit Association
WABA	Washington Area Bicyclist Association
WMATA	Washington Metropolitan Area Transit Authority
WMTIS	Washington Metropolitan Traveler Information Service
WSTC	Washington Suburban Transit Commission

SECTION 1

INTRODUCTION

SECTION 1: INTRODUCTION

History and Overview of the Report

This is the thirteenth in the series of reports on NVTC's Transportation Service Coordination Plan. The focus of the process quickly expanded beyond buses, the original subject, to include passenger rail and other High Occupancy Vehicle (HOV) strategies as well as related highway improvements.

NVTC's Transportation Service Coordination Plan is not a typical government plan, in which routes are drawn on a map or specific equipment needs identified. Rather, the commission's plan is part of a **process through which the commission seeks to accomplish improvements by changes in the way members of local and state governments and the private sector think about, analyze and solve transportation problems.** Thus, the NVTC plan can never be "complete;" the process must be continually enhanced and revised to accomplish steady progress toward its objectives. The annual reports that describe the process and the progress are, therefore, more on the order of dynamic proposals rather than static blueprints. The reports set forth strategies for coping with congestion and coaxing more productivity from scarce transportation resources, primarily through improved coordination and communication.

The genesis of the commission's planning process was Virginia Senate Resolution #20, passed in 1983, that directed NVTC and the former Virginia Department of Highways and Transportation (now the Virginia Department of Rail and Public Transportation --VDRPT -- and the Virginia Department of Transportation-- VDOTto conduct a thorough study of bus transportation in Northern Virginia. The resulting 1983 study (Report on the Feasibility and Desirability of Locally Sponsored Bus Service in Northern Virginia) concluded that while NVTC should not promote decentralization of bus service within the regional network operated by the Washington Metropolitan Area Transit Authority, it should take an active role by developing a bus service management plan. That plan should examine feasible options for planning, routing, scheduling, establishing fare structures for, operating, marketing, and coordinating a diverse set of public transportation services in Northern Virginia. It is toward those goals (expanded to include other transportation modes) that NVTC's Transportation Service Coordination Plan is focused.

The 1997 TSCP is made up of 18 sections focusing on transportation modes and related issues, with an emphasis on providing data, contact and summary tables wherever possible. The Appendix contains contact information for agencies with responsibilities for regulating, planning, financing, and operating specific parts of the complex transportation system. In addition to a new format, this year's report

also includes three additional original components. These components are a matrix of regional studies and projects, which includes the project's purpose, study area, costs and contact; a list of area park and ride lots cross checked against all state and jurisdictional lists; and a matrix of comparative transit performance measures, such as on-time performance and passenger miles.

Based on the information included in this plan, the ten initiatives listed in **Table 1** have been identified as crucial regional transportation coordination initiatives. More information on each of these issues can be found in the text which follows.

Table 1: Top 10 Regional Transportation Coordination Initiatives

Initiative	Importance	Contact
Regional Mobility Study	Determines regional plans for area's future bus service together with subsidy allocation and funding alternatives. Also supports regional goal of fare simplification.	Rod Burfield, WMATA (202) 962-1004
TPB Vision Plan	Promotes long-range planning of projects between now and 2050.	Ron Kirby, MWCOG (202) 962-3310
ITS/ SmarTraveler	Use of technology to address transportation issues.	Pam Marston, FHWA (410) 962-0077, x3054
TCC MIS Enhancement	Improves the coordination and effectiveness of the regional decision-making process.	Farid Bigdeli, VDOT (703) 383-2000
HJR 572 (Northern Virginia)	Identifies long-term transit needs for Northern Virginia.	Gary Kuykendall, VDRPT (804) 786-1051
HJR 160 (Statewide)	Forecasting statewide transportation needs. Could influence future state appropriations.	Chip Badger, VDRPT (804) 786-8135
WMATA SmarTrip, NVTC Smart Card	Improve convenience of commuting for area transit passengers through joint fare media.	Al Doehring, WMATA (202) 962-1020 Heather Wallenstrom, NVTC (703) 524-3322
NVTC Bus Data Collection	Coordinates, collects and disseminates bus ridership data for Northern Virginia operators not currently filing NTD data reports. Will also earn the region a larger share of federal funds.	Heather Wallenstrom, NVTC (703) 524-3328
Mixing Bowl Congestion Mitigation Plan	Planning alternative commuting options during the 12 year construction of the I-95/395/495 interchange.	Valerie Pardo, VDOT (703) 383-2227
MARC, WMATA and VRE TLC Pass	Promotes fare coordination among regional agencies and improves convenience of commuting.	Laura Maddox, The Commuter Store (703) 413-4287

Role of the Northern Virginia Transportation Commission

NVTC was created by the Virginia General Assembly in 1964, and consists of 19 commissioners representing six Northern Virginia jurisdictions and the Virginia Department of Rail and Public Transportation. **Table 2** shows the current membership.

TABLE 2: NVTC OFFICERS AND COMMISSIONERS

--1997--

Kerry J. Donley, Chairman
Albert C. Eisenberg, Vice-Chairman
Dana Kauffman, Secretary-Treasurer

Arlington County

Ellen M. Bozman¹
Albert C. Eisenberg
Paul Ferguson

Fairfax County

Sharon Bulova³
Robert B. Dix, Jr.
Katherine K. Hanley
Gerald W. Hyland^{1,3}
Dana Kauffman^{2,3}

Loudoun County

David G. McWatters

City of Alexandria

Kerry J. Donley
Lois L. Walker^{2,4}

City of Fairfax

Scott Silverthorne

City of Falls Church

David F. Snyder

Department of Rail and Public Transportation

Leo J. Bevon

Virginia General Assembly

Senator Joseph V. Gartlan, Jr.
Senator Mary Margaret Whipple
Delegate L. Karen Darner
Delegate Toddy Puller
Delegate Marian Van Landingham

¹ Principal member of WMATA Board
² Alternate member of WMATA Board
³ Principal member of VRE Board
⁴ Alternate member of VRE Board

NVTC is charged with allocating as much as \$100 million in state and federal aid each year among its member jurisdictions. The commission also appoints Virginia's two principal and two alternate members of the Board of Directors of the Washington Metropolitan Area Transit Authority (WMATA or Metro). WMATA operates Metrobus and Metrorail service in the District of Columbia, Maryland and Northern Virginia. The commission also appoints three members and one alternate to the Operations Board of the Virginia Railway Express. The commuter rail system, co-owned by NVTC and the Potomac and Rappahannock Transportation Commission (PRTC), began service in mid-1992 and now provides 7,050 daily trips (equivalent of a peak-period freeway lane) in the congested I-66 and I-95 commuting corridors of Northern Virginia.

NVTC has sponsored numerous demonstration projects to improve coordination among transportation services, such as the Falls Church Electric Shuttle Bus, in which state-of-the-art nickel cadmium batteries will power 22-passenger buses linking the East and West Falls Church Metrorail stations together with neighborhood service in the city of Falls Church. This project is being undertaken in close cooperation with Virginia Power, WMATA and Falls Church. NVTC has also hired a consulting firm for a bus data collection project which will compile jurisdictional and route-specific bus data and qualify the region for additional federal transit formula assistance.

These projects are evidence of the active role the commission has assumed in coordinating transportation services in Northern Virginia and working with local governments to maintain stable and reliable funding for these services. NVTC also seeks to improve transit connections and assure that useful information is provided to passengers, while improving the performance of transit operators.

The categories of NVTC goals enumerated in the Fiscal Year 1997 work program are listed below:

1. Transit service coordination
2. WMATA governance
3. Grant, contract, and trust fund management
4. Finance
5. Public information, marketing, and customer service
6. Policy development and legislative advocacy
7. Ownership and operation of public transit services
8. Planning and technical assistance

More information about NVTC, its statutory mandate, history and accomplishments, as well as a detailed listing of its 1997 work program, is available in the commission's 1997 Handbook. This document, as well as a colorful brochure illustrating its history and the earlier reports in the Transportation Service Coordination Plan series, are available upon request to the commission.

SECTION 2

REGIONAL PLAYERS

SECTION 2: REGIONAL PLAYERS

The Washington metropolitan area presents a unique situation in regard to interjurisdictional coordination. In addition, the presence of two states and an independent district, the location of the federal government and its central role in employment must be considered. The federal government directly owns a good deal of land and certain facilities, such as the Woodrow Wilson Bridge. The U.S. Department of Transportation (USDOT), including the Federal Transit Administration (FTA), the Federal Highway Administration (FHWA) and the Federal Railroad Administration (FRA), as well as the Environmental Protection Agency (EPA) may exert great influence over transportation plans and funding.

The organizational players include organizations mandated by government regulations, representatives of certain areas or jurisdictions, and new groups formed in response to a particular issue or problem. They provide insight on transportation planning, financing, construction, regulation, and the advocacy of change. In many cases, coalitions of these organizations form to provide greater leverage to achieve shared objectives. While these players sometimes change, most can be found working together regularly to adopt policies, define programs, and improve the mobility of people and goods in Washington metropolitan area.

Table 3 provides a complete list of transportation-related organizations located in the region, as well as federal/national organizations located within the region. Throughout this report, many of the agencies will be referred to by their acronyms.

Due to this large number of organizations and even larger number of local issues, it is not always evident how these organizations interact. In an effort to clarify some of the relationships, **Table 4** shows the membership status of various agencies on area entities. While the chart is not comprehensive, it identifies many of the key players, about which a further explanation follows.

TABLE 3: TRANSPORTATION AGENCIES/ORGANIZATIONS

FEDERAL/NATIONAL

American Association of State Highway and Transportation Officials (AASHTO)
American Public Transit Association (APTA)
Army Corps of Engineers
Congress
Environmental Protection Agency (EPA)
Executive
General Services Administration (GSA)
National Park Service
Transportation Research Board National Research Council (TRB)
U.S. Department of Transportation (USDOT)
 Federal Highway Administration (FHWA)
 Federal Railroad Administration (FRA)
 Federal Transit Administration (FTA)
 Office of The Secretary (OTS)

STATE

Commonwealth Transportation Board (CTB)
D.C. Department of Public Works
Division of Risk Management (DRM)
George Mason University (GMU)
Governor
Maryland DOT
 Maryland Rail Commuter Service (MARC)
Maryland Mass Transit Administration Secretary of Transportation
State Corporation Commission (SCC)
Virginia Association of Counties (VACO)
Virginia Department of Rail & Public Transportation (VDRPT)
Virginia Department of Transportation (VDOT)
Virginia General Assembly
Virginia Municipal League (VML)
Virginia Transit Association (VTA)

REGIONAL

Baltimore/Washington Regional Association
Federal City Council (FCC)
Fredericksburg Area Metropolitan Planning Organization (FAMPO)
Greater Washington Board of Trade
Northern Virginia Planning District Commission (NVPDC)
Maryland National Parks and Planning Commission
Metropolitan Development Policy Committee
Metropolitan Washington Air Quality Committee (MWAQC)
Metropolitan Washington Council of Governments/Transportation Planning Board (MWCOG/TPB)

Northern Virginia Transportation Commission (NVTC)
Potomac and Rappahannock Transportation Commission (PRTC)
Rappahannock Area Development Commission (RADCO)
Transportation Coordinating Council (TCC)
Virginia Railway Express (VRE)
Washington Metropolitan Area Transit Authority (WMATA)
Washington Suburban Transit Commission (WSTC)

LOCAL

Citizens Transportation Advisory Boards
Offices of Transportation, Finance, Planning and Public Works
Transit Operators
 CONNECTOR (Fairfax County), including RIBS (Reston) and the TYSONS
 SHUTTLE (Fairfax County)
 CUE (City of Fairfax)
 ARLINGTON TROLLEY (Arlington)
 DASH (Alexandria)
Transportation Management Associations
 Ballston/Rosslyn Area Transportation Association (BATA)
 Dulles Area Transportation Association (DATA)
 Jefferson Davis Corridor Transportation Management Association (JDC TMA)
 Reston Area Transportation Association (LINK)
 Tysons Transportation Association (TYTRAN)

PRIVATE

American Automobile Association (AAA)
Northern Virginia Transportation Alliance (NVTA)
Toll Road Corporation of Virginia
Washington Area Bicyclists Association (WABA)

TABLE 4: Membership on Regional Transportation Entities

	Focus	on COG	on TPB	on TCC	on NVTC	on PRTC	on WMATA	on VRE
Towns								
	Herndon			1				
	Leesburg			1				
	Vienna			1				
Cities								
	Alexandria	1	1	2	2			
	Fairfax	1	1	1	1			
	Falls Church	1	1	1	1			
Counties								
	Arlington	1	1	3	3			
	Fairfax	3	2	7	5			
	Loudoun	1	1	2	1			
Regional								
	MWAA		1					
	NVPDC							
	NVTC						2/2 *see note	3
	PRTC							3
	VRE							
	WMATA		1					
State								
	VDOT		1	1				
	VDRPT			1	1	1		1
	No. VA Delegation	1	2	10	5	3		
Federal								
	FHWA		1					
	FTA		1					

* Note: Two alternate and two regular members are appointed to the WMATA Board from Northern Virginia by NVTC.

Source: ICC White Paper on A Combined Transportation Organization for Northern Virginia, September 26, 1996

Organizations With Transportation Responsibilities in the Washington, D.C. Metropolitan Area

1. Virginia Department of Rail and Public Transportation (VDRPT): Formerly a division of the Virginia Department of Highways and Transportation and later the Virginia Department of Transportation (VDOT), VDRPT provides technical and financial assistance to Virginia's public transit, ridesharing, and railroad operators. VDRPT, along with VDOT, also manages several studies that will help shape the future course of transportation in Northern Virginia, including rail feasibility studies in the Dulles and Richmond-Washington, D.C. corridors and a Major Investment Study of the I-66 Corridor outside the Beltway. The director of VDRPT is the current designee of the Secretary of Transportation to serve on NVTC.
2. Commonwealth Transportation Board (CTB): The policy-making body that allocates state funds (and federal funds channeled through the state) for transportation projects. Virginia's Secretary of Transportation chairs the CTB; the board's 16 members are appointed by the Governor. The group adopts a six-year funding program, which is updated each year. Northern Virginia's CTB member chairs TCC.
3. Virginia Department of Transportation (VDOT): State agency responsible for building, maintaining, and operating the state's roads, tunnels, and bridges. While VDOT headquarters is located in Richmond, a Northern Virginia district office is located in Fairfax County. VDOT provides a voting member of TPB from its Richmond headquarters and coordinates Northern Virginia's submittal of transportation projects for TPB's TIP.
4. Metropolitan Washington Area Council of Governments (MWCOG): In 1966 MWCOG was officially recognized by the federal government as the agency responsible for comprehensive regional planning. MWCOG also functions as the Metropolitan Planning Organization (MPO) for purposes other than transportation (e.g., population forecasts).
5. Transportation Planning Board (TPB): Includes separate technical and citizens committees and is designated as the metropolitan planning organization (MPO) for transportation in Northern Virginia, suburban Maryland and the District of Columbia. TPB established the Vision Planning Steering Committee, which is guiding the presentation of alternative visions for the 21st Century to the public and developing a preferred alternative; the ITS Task Force, which coordinates the use of technology in transportation projects; and multiple subcommittees of TPB Technical Committee. These subcommittees include: Aviation Technical, Bicycle Technical, Travel Management, Travel Monitoring, Travel Forecasting and Commuter Connections. TPB is responsible for adopting annual lists of projects to receive federal funding and producing long range transportation plans.

Members of the board consist primarily of elected officials from the local jurisdictions in each state and the District of Columbia.

6. Fredericksburg Area Metropolitan Planning Organization (FAMPO): FAMPO acts as a regional transportation planning agency for the City of Fredericksburg, Spotsylvania County, and Stafford County. The designation of Fredericksburg as an urbanized area through the 1990 Census lead to the 1992 Memorandum of Understanding (MOU) which created FAMPO. The MOU was signed by the Commonwealth of Virginia, the City of Fredericksburg, Spotsylvania County, Stafford County, and PRTC. The Rappahannock Area Development Commission (RADCO) is the designated staff for FAMPO and in this capacity, also oversees transportation planning activities in Caroline and King George Counties. RADCO is a state-mandated agency addressing quality of life issues for the region.
7. Transportation Coordinating Council (TCC): Includes separate policy, technical and citizens groups, with a work plan that features regional consensus-building to establish transportation priorities. TCC is staffed by the Northern Virginia District Office of VDOT. The policy group, consisting primarily of Northern Virginia elected officials from NVTC, PRTC and the Transportation Planning Board and chaired by Northern Virginia's member of the Commonwealth Transportation Board, meets at least six times each year to set forth priorities on regional transportation projects and establish legislative priorities. The technical and citizens' committees meet monthly. TCC has adopted procedures to develop closer ties to the Transportation Planning Board and to provide better representation for town governments in the regional allocation process for transportation funds. The TCC initiates the annual process of allocating flexible federal ISTEA funds available to Northern Virginia, and provides recommendations concerning their allocation to the Transportation Planning Board.
8. Metropolitan Washington Air Quality Committee (MWAQC): This group, which consists of elected officials from localities, states, and the District of Columbia, has been given the authority by the governors of Maryland and Virginia and the Mayor of the District to develop specific recommendations for a regional ozone control strategies in the Washington non-attainment area. Once final, these recommendations are folded into Virginia's State Implementation Plan, which is submitted to the Environmental Protection Agency. The committee works closely with MWCOG and state and local staffs, as well as with the Air Quality Public Advisory Committee (AQPAC), which was created by MWAQC in order to enhance citizen input into the process.
9. Washington Metropolitan Area Transit Authority (WMATA): WMATA is the regional transit authority for the Washington Metropolitan area. It operates the heavy rail system "Metrorail" and the bus service "Metrobus" within a

service territory established by an interstate (District of Columbia, Maryland, and Virginia) compact. In Virginia, the cities of Alexandria, Fairfax, and Falls Church are included in the transit zone defined by the compact, as well as Arlington, Fairfax, and Loudoun Counties. This zone is contiguous with NVTC's district, and NVTC appoints from its commissioners Virginia's members of the WMATA Board of Directors.

10. NVTC: Summary included in introduction.
11. Potomac and Rappahannock Transportation Commission: Created in 1986, PRTC is the transportation commission for Prince William and Stafford counties and the cities of Fredericksburg, Manassas, and Manassas Park. A total of 15 principal commissioners are appointed by the member jurisdictions, the General Assembly, and the Virginia Department of Rail and Public Transportation (VDRPT). PRTC operates the OmniRide bus service, which includes a commuter bus system, a neighborhood and rail station feeder service known as OmniLink, and a ridesharing program. PRTC is also co-owner of the Virginia Railway Express commuter rail service.
12. Virginia Railway Express: The Virginia Railway Express is a joint commuter rail project of the NVTC and PRTC. In 1992, VRE began peak period service from Fredericksburg and Manassas into Washington DC, with stations in Alexandria, Crystal City, L'Enfant Plaza, and Union Station, as well as at suburban locations along the 82 miles of right-of-way. Amtrak is VRE's contract operator, running trains over two lines owned by four private railroads. VRE's Operations Board meets monthly and is comprised of representatives from NVTC and PRTC jurisdictions. The Operations Board votes on issues relating to VRE operations, service, and financing and forwards their recommendations to the two commissions for approval.

Names, addresses, and telephone numbers for many agencies and organizations currently involved in transportation (and related air quality) endeavors in Northern Virginia and the Metropolitan area are included in the Appendix. The Appendix is organized alphabetically, along with a summary of each organization's primary responsibility.

TCC Study

The institutional arrangements surrounding transportation planning are currently being studied by the Transportation Coordinating Council (TCC). This study received its impetus from a bill in the Virginia legislature that suggested the establishment of a subcommittee to study the creation of a Northern Virginia Regional Transportation Authority. Such an authority would have broad powers

over transportation planning and financing. While the bill mandating a study did not pass, the TCC has agreed to look at the issue.¹

The TCC began the study process by identifying a range of ways in which the transportation planning process might be reconfigured. Some of the alternatives considered include:

- establishing a powerful authority
- abolishing the TCC
- retaining the status quo
- merging NVTC, PRTC, VRE, and the TCC
- modifying the Northern Virginia District office of VDOT

There have been differences of opinion from the beginning as to the exact definition of the problem being addressed. Some participants argue that the greatest problem with transportation planning in the region is the multitude of parties involved. Transportation planning involves numerous agencies and organizations and the process can often appear convoluted and cumbersome. For others, the concern is not the transportation planning *process* so much as the lack of adequate funding for regional transportation projects. There is also frustration over the fact that many decisions affecting Northern Virginia localities are made by VDOT staff in Richmond.

Another view is that regional planning requires extensive coordination to ensure that many different points of view are considered before consensus is reached and a final decision is made. It has also been suggested that the Major Investment Study (MIS) process be simplified and made more transparent and easier to understand. These MIS's help the region determine how best to address mobility needs in each corridor. An MIS is required for certain major infrastructure projects using federal funds. The study must define the needs of a transportation corridor and examine multiple modes of travel and their possible interactions before recommending a particular course of action. An effective MIS process should be developed to facilitate public participation. While studying all of these issues, the TCC must also work toward obtaining adequate input from a variety of constituencies and allowing for new types of funding or financing. In addition, many of the institutional changes suggested would also require legislative action – not only in Virginia, but possibly also in Maryland, the District of Columbia, and in Congress, due to the language of the WMATA compact.

¹ A bill did pass that calls for a consideration of these issues, but the timing is such that the TCC study could be used as input into that legislative study.

In an effort to capture all of these concerns, the study was split into four study areas, which include:

- TCC Study Area #1: Possible Consolidation of Agencies
- TCC Study Area #2: Strengthening the VDOT Northern VA District Office
- TCC Study Area #3: Improving the MIS Process
- TCC Study Area #4: Public Participation Enhancements

For assistance in making these decisions, TCC is working with a consultant for **Study Area #1** and has developed a schedule and work elements. A Study Advisory Group (SAG) was also formed and interviews with jurisdictional/agency stakeholders were conducted in the early summer. The consultant will consider creating focus groups, made up of elected officials and members of the business community. One issue that has come up in relation to study area #1 is the extent to which an enhanced TCC or a consolidated agency would be designed to handle objectives of stronger regional planning. While some point out that there is a need for a regional agency with that type of power, others respond that local jurisdictions may be reluctant to cede any decision making powers to a consolidated agency. While additional scenarios may emerge during the study, two organizational scenarios will be developed for written review. One is a consolidation of TCC, NVTC, PRTC and VRE. The other is an "enhanced" TCC. The two scenarios will then be compared based on criteria such as organizational purpose, responsibilities, MIS participation, and public involvement. A draft report is scheduled to be completed in September, 1997.

Discussion concerning **Study Areas #2 and #3** began in June. A matrix showing a comparison of Maryland, D.C., and Virginia's public participation process has been developed as a starting point for **Study Area #4**. The Citizens Advisory Committee (CAC) is working with the TCC and has recommended, as with Study Area #1, that a public communications consultant be hired to work with the TCC to develop a comprehensive plan and approach for public education/participation for transportation issues in the region. Unlike Study Area #1, Study Areas #2, 3, and 4 do not have a set deadline. In addition, as these study areas are dealing with more internal issues, the majority of investigation and analysis will be completed by staff and the TCC. More information on the TCC Study can be found in Section 18 : Regional Studies.

SECTION 3

RAIL SERVICES

SECTION 3: RAIL SERVICES

Metrorail

Since its opening in 1976, the Metrorail system has served as the core of the region's transportation system (see **Figure 2**, system map). **Tables 5 and 6** compare average daily, and annual Metrorail ridership for fiscal years 1996 and 1997. For the Metrorail system, these passengers traveled almost one billion miles, with an average trip length of 7.4 miles. Metrorail carried over 148 million passengers in FY97, up one percent from FY96. Average weekday boardings were 510,000 system-wide, and over 158,000 in Virginia.

Planned System Expansions and Enhancements

The Metrorail system is still being constructed, and the originally planned 103-mile system is now scheduled to be completed in 2001. The Franconia/Springfield station, located on the Blue Line, opened June 29, 1997 completing the Northern Virginia portion of the 103-mile system. Other possible expansions in Northern Virginia include the Orange Line to Dulles Airport and Loudoun County, and in the I-66 corridor as far as Gainesville, and a station at Potomac Yard on the Blue/Yellow Line. Plans for Metrorail system extensions and enhancements are summarized in **Table 7**.

As the region looks forward to completing the originally planned system and funding proposed system expansions, funding must also be identified for maintenance and repairs to the existing system. These projects are identified in the Capital Improvement Program (CIP), where a \$92 million shortfall has been identified in fiscal year 1998 between the cost of the projects proposed and the available funding.

Virginia Railway Express (VRE)

The Virginia Railway Express is a joint commuter rail project of the NVTC and PRTC. In 1992, VRE began peak period service from Fredericksburg and Manassas into Washington DC, with stations in Alexandria, Crystal City, L'Enfant, and Union Station, as well as at suburban locations along the 81 miles of right-of-way (see **Figure 3**). Amtrak is VRE's contract operator, running trains and maintaining over two lines owned by four private railroads.

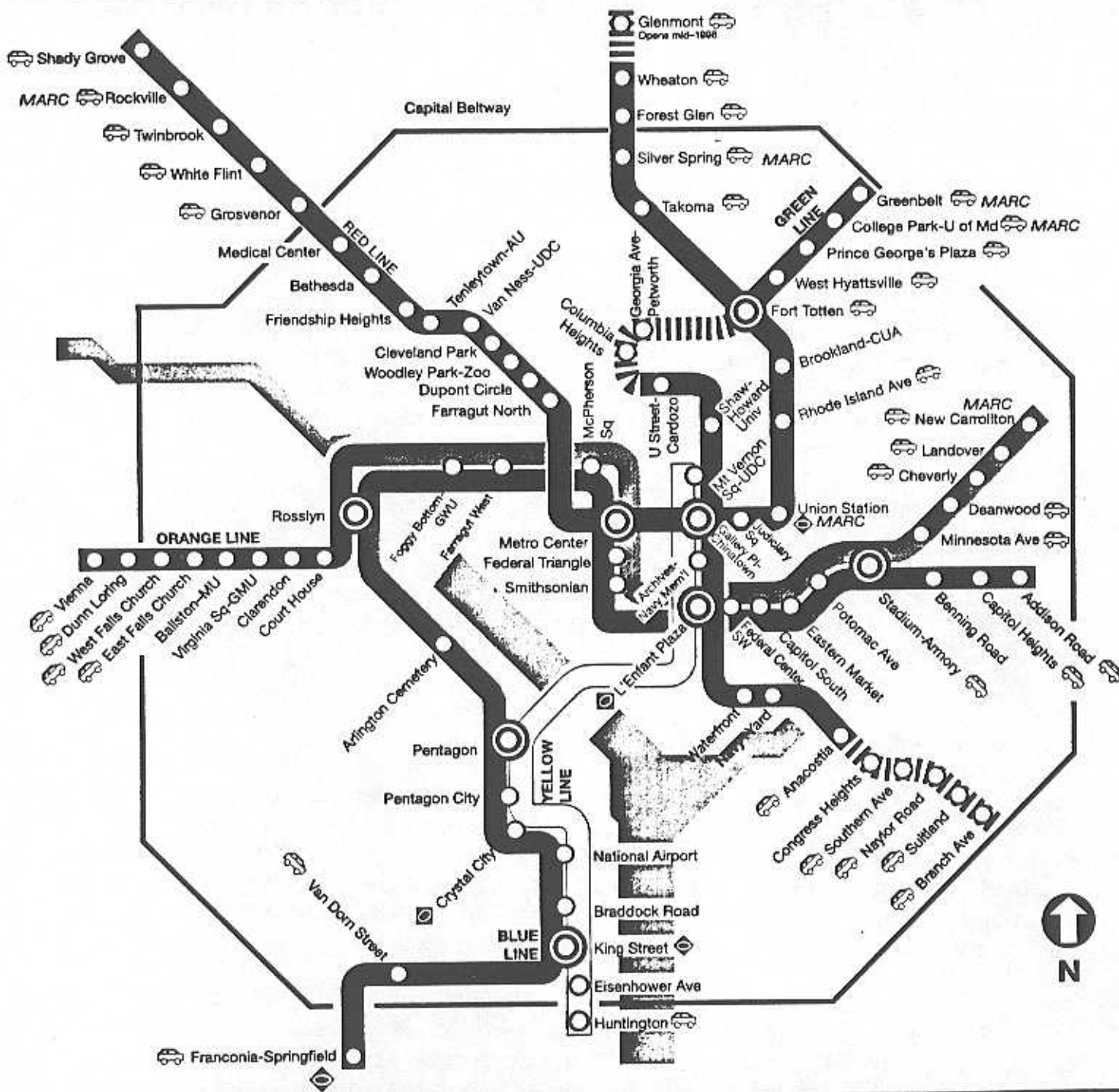
On June 22, 1997, VRE celebrated its fifth year in operation. In Fiscal Year 1997, the service carried 1.9 million passengers, with weekday boardings averaging over 7,050 (see **Figure 4**). The extension of HOV lanes south on I-95 to Route 234 has made the I-95 corridor the only major corridor in the region

Figure 2

M metro SYSTEM MAP

Legend

- Red Line • Glenmont/Shady Grove
- Orange Line • New Carrollton/Vienna
- Blue Line • Addison Road/Franconia-Springfield
- Green Line • Branch Avenue/Greenbelt
- Yellow Line • Huntington/Mt. Vernon Sq-UDC



- No Smoking
- No Food or Drinks
- No Animals (Except Guide Dogs)
- No Audio or Video Devices (Without Earphones)
- No Litter or Spitting
- No Dangerous or Flammable Materials

Table 5: May 1997 Metrorail Ridership Summary
Average for Total Station Entries and Exits

	Weekday	Saturday	Sunday
Stations in Alexandria			
Blue/Yellow Line Stations			
Braddock Road	6,295	2,114	1,457
Eisenhower Avenue	1,971	625	390
King Street	8,419	4,795	3,250
Subtotal Alexandria	16,685	7,534	5,097
Stations in Arlington			
Orange Line Stations			
East Falls Church	6,993	2,909	1,945
Ballston	18,781	7,303	5,005
Virginia Square	4,300	1,289	913
Clarendon	5,263	1,730	1,208
Courthouse	12,099	4,325	3,030
Rosslyn	26,500	9,164	6,846
Subtotal	73,936	26,720	18,947
Blue/Yellow Line Stations			
Arlington Cemetary	3,569	4,976	5,785
Pentagon	31,196	7,081	3,550
Pentagon City	20,905	18,250	12,047
Crystal City	22,955	7,889	6,184
National Airport	7,967	6,397	5,537
Subtotal	86,592	44,593	33,103
Subtotal Arlington	160,528	71,313	52,050
Stations in Fairfax			
Orange Line Stations			
Vienna	19,152	9,361	5,244
Dunn Loring	7,765	3,202	1,887
West Falls Church	11,520	3,993	2,641
Subtotal	38,437	16,556	9,772
Blue/Yellow Line Stations			
Huntington	14,897	5,618	3,360
Van Dorn Street	6,840	4,252	2,779
Subtotal	21,737	9,870	6,139
Subtotal Fairfax	60,174	26,426	15,911
TOTAL Virginia	237,387	105,273	73,058
Total System Ridership	503,794	222,142	146,615

Table 6: Annual Metrorail Ridership Summary

Total Station Entries and Exits

	Weekday		% Chg	Saturday		% Chg	Sunday		% Chg
	1997	1996		1997	1996		1997	1996	
Stations in Alexandria									
Blue/Yellow Line Stations									
Braddock Road	1,542,105	1,578,835	-2%	115,774	123,186	-6%	78,748	77,592	3%
Eisenhower Avenue	507,175	515,146	-2%	35,204	48,317	-27%	23,665	21,187	12%
King Street	1,983,565	1,928,625	3%	258,556	255,362	1%	173,848	162,297	7%
Subtotal Alexandria	4,032,845	4,072,606	0%	409,534	426,855	-4%	277,261	261,046	6%
Stations in Arlington									
Orange Line Stations									
East Falls Church	1,717,762	1,718,899	0%	143,984	148,181	-3%	108,215	100,030	8%
Baltson	4,690,280	4,799,640	-2%	413,490	437,680	-6%	285,692	283,358	1%
Virginia Square	1,096,229	1,133,900	-3%	72,352	75,931	-5%	54,791	54,619	0%
Clarendon	1,310,446	1,287,164	2%	96,118	96,454	2%	66,586	59,563	12%
Courthouse	2,979,236	2,914,787	2%	240,700	246,392	-2%	163,682	161,028	2%
Rosslyn	6,468,188	6,418,993	1%	467,635	452,969	3%	344,200	308,372	12%
Subtotal	18,262,141	18,273,383	0%	1,436,279	1,457,607	-1%	1,023,166	966,970	6%
Blue/Yellow Line Stations									
Arlington Cemetery	633,106	552,575	15%	203,286	187,129	9%	193,203	167,250	16%
Pentagon	7,849,179	7,933,021	-1%	304,927	322,850	-6%	205,755	190,943	8%
Pentagon City	5,098,253	4,843,294	5%	1,046,741	1,000,887	5%	623,964	587,867	6%
Crystal City	5,682,956	5,663,634	0%	414,176	425,070	-3%	288,015	269,533	7%
National Airport	1,820,721	1,859,629	-2%	266,217	288,401	-1%	301,893	312,665	-3%
Subtotal	21,084,215	20,852,153	1%	2,235,347	2,204,337	1%	1,612,830	1,528,278	6%
Subtotal Arlington	39,346,356	39,125,536	1%	3,671,626	3,661,944	0%	2,635,996	2,495,248	6%
Stations in Fairfax									
Orange Line Stations									
Vienna	4,715,548	4,636,296	2%	382,731	383,621	0%	282,532	251,381	12%
Dunn Loring	1,930,302	1,907,881	1%	145,312	149,614	-3%	104,457	96,306	8%
West Falls Church	2,761,075	2,632,061	5%	193,319	195,156	-1%	138,963	126,324	10%
Subtotal	9,406,925	9,176,238	3%	721,362	728,391	-1%	525,952	474,011	11%
Blue/Yellow Line Stations									
Huntington	3,715,038	3,760,234	-1%	272,856	279,487	-2%	182,647	174,638	5%
Van Dorn Street	1,716,079	1,672,210	3%	209,382	205,428	2%	142,846	130,982	9%
Franconia-Springfield	14,343	0	100%	0	0	0%	3,340	0	100%
Subtotal	5,445,460	5,432,444	0%	482,238	484,915	-1%	328,833	305,620	8%
Subtotal Fairfax	14,852,385	14,608,682	2%	1,203,600	1,213,306	-1%	854,785	779,631	10%
TOTAL Virginia	58,231,586	57,756,824	1%	5,284,760	5,302,115	0%	3,768,042	3,326,820	13%
Belthreth Stations									
Bethesda	3,714,666	3,627,921	2%	325,037	334,055	-3%	219,246	208,368	5%
Silver Spring	5,102,858	5,237,617	-3%	552,232	563,327	0%	375,580	363,555	3%
Greenbelt	1,734,512	1,496,854	16%	169,767	148,201	15%	102,367	83,578	22%
New Carrollton	3,715,834	3,605,286	3%	326,953	319,190	2%	233,440	207,268	13%
Addison Road	2,637,608	2,569,100	2%	197,777	201,135	-2%	116,692	111,593	5%
Anacostia	3,684,881	3,901,885	-6%	343,222	339,997	1%	222,017	214,917	3%
L'Enfant Plaza	8,114,343	8,028,879	1%	365,802	334,359	9%	240,879	207,931	16%
Smithsonian	5,944,902	5,818,739	2%	1,497,899	1,320,240	13%	1,065,480	843,515	26%
Farragut West	10,868,851	10,764,420	1%	308,269	359,700	-14%	164,303	150,602	9%
Metro Center	12,244,479	12,728,532	-4%	1,028,895	1,071,366	-4%	641,772	612,287	5%
Gallery Place	3,231,640	3,354,312	-4%	351,726	334,894	5%	260,531	235,680	11%
Union Station	11,641,743	11,700,449	-1%	1,224,152	1,236,930	-1%	916,222	899,862	2%
Subtotal	72,636,337	72,855,994	0%	6,691,731	6,553,394	2%	4,559,529	4,139,176	10%
Total System Ridership	123,983,677	123,332,799	1%	11,299,443	11,221,455	1%	7,872,806	7,300,691	8%

Table 7: Metrorail System Expansion and Enhancements

Extensions		Line		Status		Estimated Cost	Contact Information
Franconia-Springfield (VA)	Blue	Station opened June 29, 1997				\$169.9 million	Leona Agouridis WMATA, (202) 962-1051
Green Line Short-Cut (MD/DC)	Green	Peak period Green line trains began operating through to Farragut North using the Red line track 1/27/97				\$470,000	Larry Levin, WMATA (202) 962-1251
Largo Towne Center (MD)	Blue	Extend Metrorail service from Addison Rd. to Summerfield and Largo Town Center. Preliminary engineering is underway.				\$383 million	Dave Couch, WMATA (202) 962-1402
Dulles (VA)	Orange	MIS completed Summer, 1996; Funding strategies being pursued				\$1.4 billion	Bill LaBaugh, VDRPT (804) 786-1052
I-66 to Gainesville	Orange	MIS completed Summer, 1996; Funding strategies being pursued				N/A	Gary Kuykendall, VDRPT (804) 786-7948
Beltway Circumferential (VA)	Purple	One alternative being evaluated as part of the VDRPT transit study				N/A	Gary Kuykendall, VDRPT (804) 786-7948
Enhancements							
Railcar Purchase	System-wide	WMATA has initiated the procurement process for 80-110 railcars to be delivered in 2000 and 2001.				\$164 million	R.N. Stoetzer, WMATA (202) 962-2354
Train Arrival Indicator Lights	Select Stations	Demonstration project using flashing lights to alert bus drivers when trains are arriving so that they can wait for transferring rail passengers.				\$92,000	Steven Yang, WMATA (202) 962-5279
Rosslyn Livable Communities	Blue/Orange	Enhance the Rosslyn station area by improving the bus facility, adding street trees and furniture, improving lighting, and adding art to the station.				\$100,000	Ronit Shafir, WMATA (202) 962-2008
King St. Pedestrian Access	Blue/Yellow	Alexandria has agreed to pay WMATA for an engineering and design study which will consider the addition of a new entrance and mezzanine at the North end of the station or a pedestrian overpass at Cameron St. and Commonwealth Ave.				\$325,000 (study only)	Ik Hong, WMATA (202) 962-1158 or Betsy Massie, Alexandria (703) 838-3800
Artwork for Franconia-Springfield	Blue	Artwork was commissioned and installed between the station and the parking garage.				\$250,000	Shlomo Shyovitz, WMATA (202) 962-1381
Kiosks/Touch Screen Demonstration	Blue	Demonstrate the use of touch screen kiosks to disseminate information at the Franconia-Springfield Metro station.				\$250,000	Pamela Wilkins, WMATA (202) 962-1448
Transit Infrastructure Investment Fund	System-wide	Allows the Authority to receive proceeds from the sale of real estate and use funds for capital projects				N/A	Al Doehring, WMATA (202) 962-1020
Trail Blazer Signs	System-wide	Provide improved, consistent signage to Metrorail stations.				\$785,000	WMATA, BPAD (202) 962-2477
Suburban Bus Annex	Northern Virginia	Funding available, project in the planning stages				\$900,000	WMATA, BPAD (202) 962-2477
Value Added Parking	Select Stations	Offer monthly parking passes, and guaranteed parking spaces to demonstrate the impact of alternative parking fees at West Falls Church and Franconia-Springfield stations in Virginia.				\$1,118,000	Tom Donahue, WMATA (202) 962-2477

Figure 3

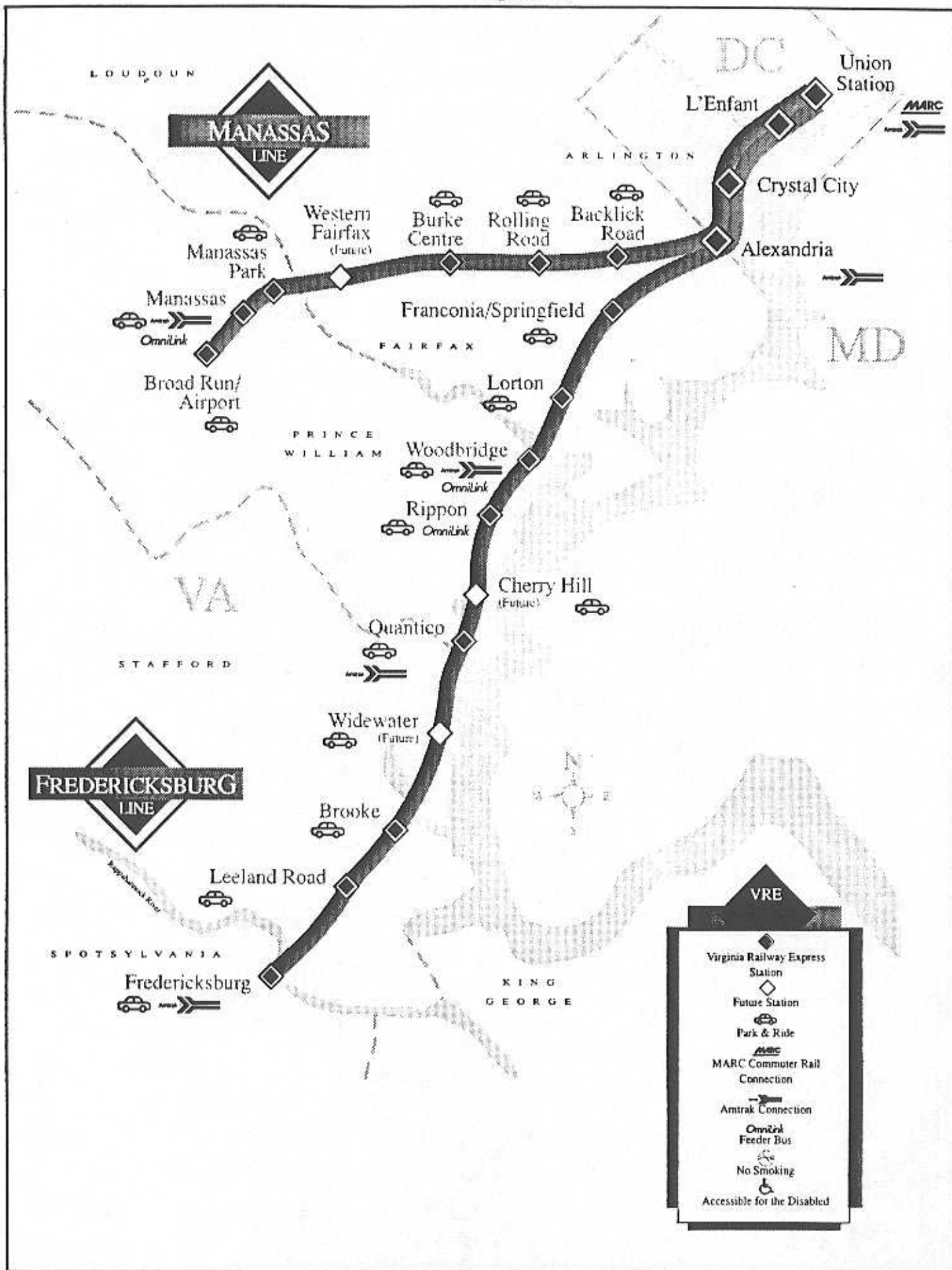
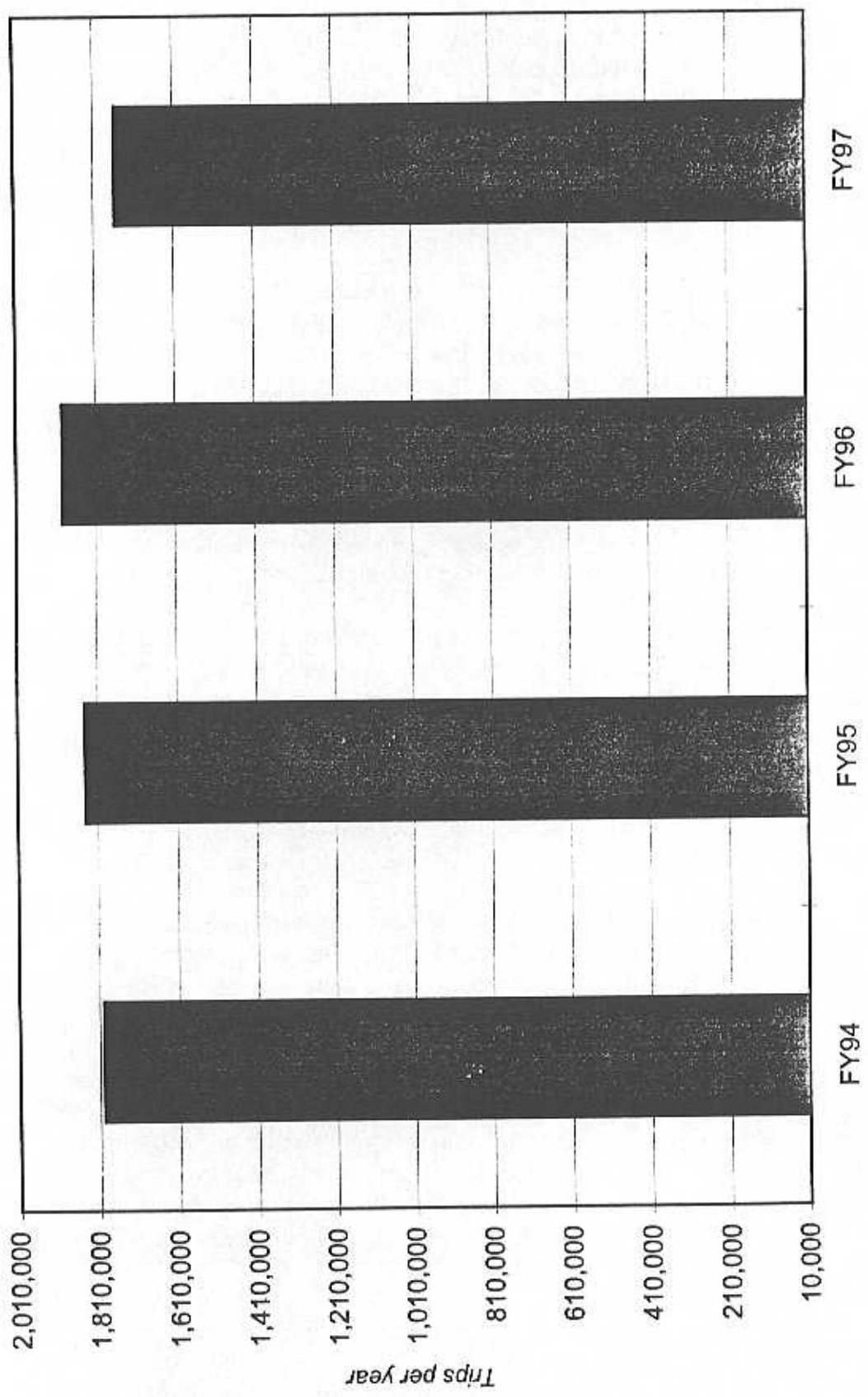


Figure 4: VRE Ridership, Fiscal Years 1994-1997



where traffic conditions improved between 1993 and 1996. The single occupant motorists are taking advantage of HOV lanes prior to the restriction periods, and as a result, VRE has seen a reduction in ridership in that corridor in FY97. The combination of free parking at all VRE stations, additional parking spaces at the Fredericksburg station, and construction scheduled to begin on the "Mixing Bowl" where I-395/495/95 meet is expected to increase ridership significantly through 1999.

Another challenge facing VRE is schedule adherence. VRE track access is leased from CSX, Conrail and Norfolk Southern railroads, which means commuter and freight trains share the same tracks. Freight traffic has increased steadily along the Northeast corridor in recent years causing scheduling conflicts throughout the day. Current rail traffic demands can be met with existing capacity, however, repair and maintenance work increasingly results in lengthily travel delays. For example, the freight train derailment on July 8, 1997 north of Crystal City required significant track repairs. As a result of the derailment, VRE was only able to operate half the scheduled service, and on-time performance dropped from an average of 90 percent to 39 percent with some trains delayed by over an hour.

VRE's fares remain competitive with the average price of parking an automobile in core employment locations. While the costs per trip may appear to be high on VRE, the long distances traveled by commuters (averaging 33 miles) result in costs per passenger-mile (33 cents) that are very competitive with the costs of operating a single-occupant automobile.

Program Enhancements

To encourage ridership, VRE has approached member jurisdictions with a plan to eliminate parking fees. Stafford County has agreed, and parking fees were eliminated at the Leeland Road station as of July 7, 1997. VRE is continuing to pursue this policy with all member jurisdictions to determine which ones will be participating.

VRE passengers can transfer free to and from many Metrobus and local feeder buses at several stations. Passengers need only show their VRE ticket with a validation for that morning or evening to the bus driver upon boarding the bus. Single-ride, ten-trip, and monthly tickets are all accepted. VRE later reimburses the bus systems for these rides. Routes honoring VRE tickets are listed below.

To/From Backlick and Franconia/Springfield:

Fairfax Connector Routes 109, 110, 111, 202, 204, 301, 303, 304, 305, 311 and 401 and Metrobus Routes 18R and 18S

To/From Alexandria:

Fairfax Connector Route 110
Metrobus Routes 28A, 28B, 29K, and 29N
DASH Routes AT2/6, AT5, and AT8
Eisenhower Avenue Shuttle

To/From Crystal City:

Arlington Trolley
Metrobus Route 23A

The one year VRE-TLC (Transit Link Pass) demonstration project between VRE and WMATA was started in January, 1997. The pass is good for unlimited trips on VRE and Metrorail for one calendar month. (See Fare Policy section for more information).

Riders can use their 10-trip or monthly VRE tickets on Amtrak trains, which significantly enhances VRE service throughout the week and on weekends. The joint Amtrak-VRE arrangement was negotiated in 1994 in response to riders' requests for later service from Fredericksburg in the morning and from Washington in the evening. Approximately 300 passengers take advantage of this arrangement each day.

A mutual ticket exchange between VRE and MARC, Maryland's commuter rail service is also in place. VRE customers with a valid VRE pass are allowed to continue onto MARC trains at Union Station, and MARC riders may board VRE trains and continue southbound. Currently, about 30 people take advantage of this arrangement each day. Eventually, VRE and MARC hope to be able to continue service into each other's jurisdiction, saving their riders a transfer. Based on the last origin/destination survey of a MARC passengers in 1994, approximately 245 MARC passengers traveled to Crystal City, and 33 traveled to Alexandria. The 1994 survey also showed 330 Northern Virginia residents traveling on MARC trains to Maryland destinations. These numbers indicate that passengers are indeed traveling through Washington DC to get to Maryland and Virginia destinations. If the need for transferring could be eliminated by running VRE and MARC trains through the city, passengers would likely find the service even more attractive.

Intercity Rail

Amtrak, which serves VRE stations at Alexandria, Woodbridge, Quantico, and Fredericksburg, offers intercity rail links to various points along the Eastern Seaboard and inland. Some intercity service has been lost due to Amtrak's budget difficulties, and as the agency comes under further financial pressure, the Commonwealth may choose to become more involved in the provision of intercity rail service. One example of this possibility is the ongoing Bristol Passenger Rail

Study, which examines the option of state-provided rail service between Richmond, Washington D.C. and Bristol (on the Tennessee-Virginia border).

Amtrak serves as VRE's contract operator, providing crews, mid-day storage and maintenance. Through an additional arrangement with VRE, Amtrak also provides valuable service to commuters with its scheduled intercity trains. VRE ticket holders may board certain Amtrak trains, which then stop at shared stations. Amtrak is reimbursed per passenger by VRE. This arrangement has benefited both lines, as Amtrak is provided with increased revenues and VRE is able to, in effect, add capacity and frequency to its service without incurring the costs of running additional trains.

Amtrak is currently moving ahead with plans to implement high-speed rail service in the Northeast Corridor, generally defined as between Boston, Massachusetts, and Washington, D.C. The Commonwealth of Virginia believes that this service would be of great benefit to the state, and has been discussing with Amtrak the possibility of extending that service past Washington to Richmond. In the meantime, the plans will have an impact on VRE, which stores equipment at Amtrak's Ivy City rail yard in Washington, D.C. during the day. Amtrak wishes to use this space for storage and maintenance of its high-speed equipment, and is now working with both VRE and MARC to identify alternative storage areas. As a result of this change, the cost of mid-day storage will most likely increase considerably. This was one of the factors that VRE considered in making the choice to purchase bi-level passenger cars, which can carry more passengers without increasing the need for storage space.

SECTION 4

BUS SERVICES

SECTION 4: BUS SERVICES

Metrobus

Over the years, as the Metrorail system has expanded, Northern Virginia's Metrobus routes have been restructured. Today, besides offering a number of primarily interjurisdictional cross-county routes, Metrobus serves as an essential and effective feeder service to the rail lines. Metrobus offers 39 lines and 128 routes in the Northern Virginia area, served by a fleet of 258 buses. During FY 97, Metrobus served over 105 million passengers system-wide, over 16 million passengers in Virginia, and provided over 33 million miles of bus service system-wide.

Despite its effective service, Metrobus is viewed as expensive. Many of the region's jurisdictions have responded to this situation by beginning their own services, to either replace Metrobus routes with their own, or to add new service without bids from Metrobus. With the cooperation of local jurisdictions, Metrobus has been responding to this problem through efforts identified during the Strategic Bus Planning process (completed in 1996) and through the Regional Mobility Panel which was established in January, 1997.

Tables 8 and 9 track highest average daily and annual ridership trends between 1996 and 1997 for Northern Virginia Metrobus routes.

Regional Mobility Panel

WMATA's General Manager, has acknowledged that jurisdictions are carefully comparing the costs of WMATA-operated bus routes to the value received, and that unless WMATA enters into an improved partnership with the jurisdictions, fragmentation of the Metrobus system is likely to continue. In response to this situation, WMATA convened a conference on January 10, 1997, to begin to explore the future of Metrobus, and called for creation by the WMATA Board of a Regional Mobility Panel composed of local government officials, business leaders and citizen representatives. The panel has been charged with examining the funding needs of the Metrobus system and developing a predictable and reliable financing mechanism to meet those needs.

To date, the panel has focused on both the comparative cost of Metrobus services as well as the way those costs are allocated. To reduce Metrobus costs, the panel has agreed to re-designate Metrobus routes as either regional or non-regional. Regional routes would be a core regional route network planned and operated by Metrobus. Non-regional routes would be planned by local governments that could choose any operator, including Metrobus.

Table 8: Northern Virginia Average Daily Metrobus Ridership, May, 1997
Highest Daily Average for Registering Farebox Reported Passenger Boardings

	Weekday	Saturday	Sunday
<u>Ballston Terminal Services</u>			
1B,B/,C,D,E,F,F/,Z,Z/	2,880	1,200	500
2A,B,B/,C,G	3,310	1,730	690
10B,B/,C,D	3,410	2,130	940
22A,B,B/,F	2,280	0	0
23A,B,C,C/,T,T/	3,340	2,250	1,360
24M,P	750	130	0
25A,A/,F,F/,G,J,P,P/,R	1,570	200	420
25B	1,090	480	0
38B	1,380	910	490
Subtotal	20,010	9,030	4,400
<u>Rosslyn Terminal Services</u>			
3A,B,C,E,F	3,070	950	470
4A,B,E,H,S	2,050	500	450
Subtotal	5,120	1,450	920
<u>Pentagon Terminal Services</u>			
7A,A/,C,E,F,H,P,W,X	3,980	1,450	800
8S,W,X,Z	1,240	0	0
9A,B,C,C/,E	3,450	2,460	1,830
10A,A/,E	2,180	1,130	570
13A,B,F,G,M	910	330	200
16A,B,B/,C,D,E,F,G,J	7,270	4,190	2,230
16L	0	0	0
16S,U,W,X	1,810	0	0
17 Series	1,880	0	0
18 Series	2,280	0	0
21A,B,C,D,F	750	0	0
28F,G	610	0	0
29C,E,H,X	1,690	0	0
Subtotal	28,050	9,560	5,630
<u>Other Terminal Services</u>			
2W	190	0	0
3W,Z	280	0	0
11P,P/	40	0	0
11Y	160	0	0
12 Series	1,220	0	0
15K,L	540	0	0
20 Series	410	0	0
24T	240	0	0
26G,H,H/	0	0	0
28A,B,B/	4,170	2,310	1,430
29K,N,N/	1,410	680	0
Subtotal	8,660	2,990	1,430
Metrobus Total-Virginia	61,840	23,030	12,380
Metrobus Total-System	394,890	138,860	94,260

Table 9: Northern Virginia Metrobus Ridership Summary, FY 96 - FY 97
Highest Annual Average for Registering Farebox Reported Passenger Boardings

	Weekday			Saturday			Sunday		
	FY 97	FY 96	% Chg	FY 97	FY 96	% Chg	FY 97	FY 96	% Chg
<u>Baileston Terminal Services</u>									
1B,B/C,D,E,F,F,I,Z,Z	728,060	677,390	7%	77,690	80,440	-3%	44,380	51,790	-14%
2A,B,B/C,G	751,280	632,410	19%	74,550	74,470	0%	51,610	41,730	24%
10B,B/C,D	814,790	768,580	6%	108,500	113,290	-4%	56,110	60,070	-7%
22A,B,B/F	574,230	527,470	9%	0	0	0%	0	0	0%
23A,B,C,C,T,T	914,930	788,450	16%	106,880	92,630	15%	72,160	63,440	14%
24M,P	194,860	185,450	5%	11,170	13,600	-18%	0	0	0%
25A,A/F,F/G,J,P,P/R	396,030	374,240	6%	11,220	8,870	26%	25,230	23,090	9%
25B	259,550	204,680	27%	29,790	30,680	-3%	0	0	0%
38B	297,190	270,310	10%	49,040	44,940	9%	28,820	33,050	-13%
Subtotal	4,930,920	4,428,980	11%	468,840	458,920	2%	278,310	273,170	2%
<u>Rosslyn Terminal Services</u>									
3A,B,C,E,F	631,070	610,460	3%	52,740	46,060	15%	34,810	23,680	47%
4A,B,E,H,S	492,770	452,970	9%	32,960	33,410	-1%	27,400	27,600	-1%
Subtotal	1,123,840	1,063,430	6%	85,700	79,470	8%	62,210	51,280	21%
<u>Pentagon Terminal Services</u>									
7A,A/C,E,F,H,P,W,X	1,250,170	1,174,180	6%	76,110	72,260	5%	42,050	45,900	-8%
8S,W,X,Z	359,150	356,090	1%	0	0	0%	0	0	0%
9A,B,C,C/E	946,780	860,870	10%	143,260	131,880	9%	96,010	106,880	-10%
10A,A/E	533,540	539,740	-1%	59,950	67,270	-11%	30,860	37,090	-17%
13A,B,F,G,M	260,380	254,640	2%	16,610	15,750	5%	12,470	9,890	26%
16A,B/B/C,D,E,F,G,J	1,781,320	1,647,960	8%	182,680	161,500	13%	127,050	126,720	0%
16L	22,590	80,790	-72%	0	0	0%	0	0	0%
16S,U,W,X	487,030	423,290	15%	0	0	0%	0	0	0%
17 Series	488,030	436,930	12%	0	0	0%	0	0	0%
18 Series	644,440	592,590	9%	0	0	0%	0	0	0%
21A,B,C,D,F	247,560	268,730	-8%	0	0	0%	0	0	0%
28F,G	156,910	131,240	20%	0	0	0%	0	0	0%
29C,E,H,X	436,890	413,090	6%	0	0	0%	0	0	0%
Subtotal	7,614,790	7,180,140	6%	478,610	448,660	7%	308,440	326,480	-6%
<u>Other Terminal Services</u>									
2W	56,070	55,160	2%	0	0	0%	0	0	0%
3W,Z	75,120	68,900	9%	0	0	0%	0	0	0%
11P,P/	14,400	20,920	-31%	0	0	0%	0	0	0%
11Y	42,400	31,640	34%	0	0	0%	0	0	0%
12 Series	275,710	285,320	-3%	0	0	0%	0	0	0%
15K,L	131,970	102,690	29%	0	0	0%	0	0	0%
20 Series	109,160	202,490	-46%	0	0	0%	0	0	0%
24T	54,850	41,610	32%	0	0	0%	0	0	0%
26G,H,H/	4,530	39,340	-88%	0	0	0%	0	0	0%
28A,B,B/	953,550	880,080	8%	129,410	126,440	2%	73,510	80,900	-9%
29K,N,N/	381,670	351,230	9%	40,190	38,140	5%	0	0	0%
Subtotal	2,099,430	2,079,380	1%	169,600	164,580	3%	73,510	80,900	-9%
Metrobus Total-Virginia	15,768,980	14,751,930	7%	1,202,750	1,151,630	4%	722,470	731,830	-1%
Metrobus Total-System	98,820,530	101,282,670	-2%	7,959,340	7,961,890	0%	5,507,740	5,368,130	3%

Differences remain on the criteria that should be used to define the routes, whether routes now operated by agencies other than WMATA should be classified using the same criteria, and how long the transition period should be.

Regarding cost allocation, the panel is considering allocating subsidies, rather than costs, and is reviewing four proposed allocation formulas for the new regional bus network that are very similar to the rail allocation formula. Factors used in the proposed formulas include population, population density, weekday ridership (number of residents by jurisdiction), and availability of service. The primary differences between the four proposed formulas are the weight each factor will be given, and whether revenue miles and hours or platform miles and hours should be used to measure service availability.

In addition to the regional/non-regional route designations and the proposed changes in the allocation formula, WMATA has proposed a multi-part initiative, including:

- No Metrobus subsidy increase for five years through FY 2002, resulting in a 15 percent inflation adjusted reduction over that period.
- No fare increase through FY 2002.
- Simplified and unified fares.
- Better regional customer service/information.
- New routes for unserved markets.
- Service quality standards.
- WMATA operates regional routes.
- Regional revenue source adopted for bus and rail.

A transition plan has been proposed, which would phase in the designation of non-regional routes as well as the new allocation formula. Labor negotiations for the FY 1999-2001 and FY 2002-2004 periods would be crucial, but the subsidy/fare freeze would not depend on ridership increases (which nonetheless should be anticipated). This proposal has not been well received by labor representatives, who are concerned that the proposed changes would reduce the number of jobs over time, even though management would guarantee no job losses for existing employees.

New revenue sources will not be considered until decisions are made on the route designation and allocation formula issues. A report is due to Congress in September, 1997.

Local Bus Systems

As referenced above, many local jurisdictions also provide bus service. In FY 1997, these services carried over 9.5 million passengers in Northern Virginia. Jurisdictions have found that locally operated service is often less expensive than that offered by WMATA; thus, some jurisdictions have chosen to begin or expand their own systems. Others, such as Arlington and Falls Church, have announced that they are considering moving in this direction.

Electric shuttle bus service in the Falls Church area and express service between Tysons Corner and Bethesda are two major service enhancements being planned for Northern Virginia. NVTC has applied for and received grant funds to demonstrate the latest electric bus technology, and is working with the city of Falls Church, WMATA and Virginia Power to plan and implement the service. WMATA, Fairfax County and Montgomery County are exploring the feasibility of peak period express bus service between Tysons Corner and Bethesda using some discretionary funding provided by the Commonwealth.

Table 10 provides system descriptions, contact names and telephone numbers. Ridership between fiscal 1994 and 1997 are shown in **Figures 5-10**, and system maps are included in **Figures 11 through 19**. For data on transit ridership and system performance, see Table 29 in Section 11, the Regional Transportation Network. Table 29 replaces Tables 6 and 7 in the 1996 TSCP.

Increasing the Regional Share of Federal Money

In the Washington region, WMATA, VRE, Fairfax Connector, PRTC, and Montgomery County's Ride On report National Transit Database (NTD) data (formerly Section 15 data), as required by FTA in order to receive Urbanized Area Formula funds. The data are then used to allocate funding to the Washington region based on the amount of service provided and its cost. Every system that reports data brings additional federal money to the region, and substantial benefits could be gained if all regional operators were to report.

In order to capture a larger share of the federal funds, NVTC has applied for and received grant funding to coordinate collection and dissemination of performance data for Northern Virginia transit operators not currently filing NTD reports. While local transit providers already collect much of the required data, certain costs would be associated with gathering the additional data, such as passenger miles, to fulfill NTD requirements.

It is estimated that the region would have earned an additional \$568,000 in FY 95 if CUE and DASH had filed NTD reports, which would outweigh the costs of data collection. With the exception of PRTC, the local bus systems have

**Table 10: Description and Contact Information for
Northern Virginia Public Bus Systems**

Local Bus Service	Service Description	Contact for Route Planning/ Performance	Phone
Metrobus	Provides bus service in Maryland, DC, and Northern Virginia with connections to Metrorail, VRE, DASH, Arlington Trolley, and Fairfax Connector	Fred Simms <i>(route planning)</i>	(202)962-2059
Fairfax Connector	Service primarily within Fairfax County with connections to Metrorail/Metrobus/VRE/DASH	Tom Black	(703) 324-1197
Arlington Trolley	Operates along a loop in Crystal City serving Metrorail and VRE stations	Chris Hamilton	(703) 358-3725
Alexandria DASH	Provides service throughout Alexandria to five Metrorail stations and the King St. VRE station	Sandy Modell	(703) 370-3274
City of Fairfax CUE	Serves points in the city, George Mason University, and the Vienna Metrorail station	Paul Briggs	(703) 385-7827
Loudoun Transportation Association	Operates both fixed route and door-to-door service covering most of the county	Mark McGregor	(703) 777-2708
PRTC Omnalink	Provides feeder bus service to Rippon, Woodbridge and Manassas VRE stations, and local flex-route service in the Woodbridge/Lakeridge, Dale City, Dumfries, Manassas Park and Manassas areas	Peter Behrman	(703) 490-4811 x122
Commuter Bus Service			
Loudoun County Commuter Service	Eight peak period buses provide service from Loudoun County to the Pentagon and downtown Washington locations	Tara Shelton	(703) 777-0246
PRTC OmniRide	Sponsored by PRTC, Omniride provides peak period service from Prince William County and Manassas to Vienna and Franconia/Springfield Metro stations as well as the Pentagon, Crystal City, and downtown Washington	Peter Behrman	(703) 490-4811 x122

Figure 5: Alexandria DASH Ridership, Fiscal Years 1994-1997

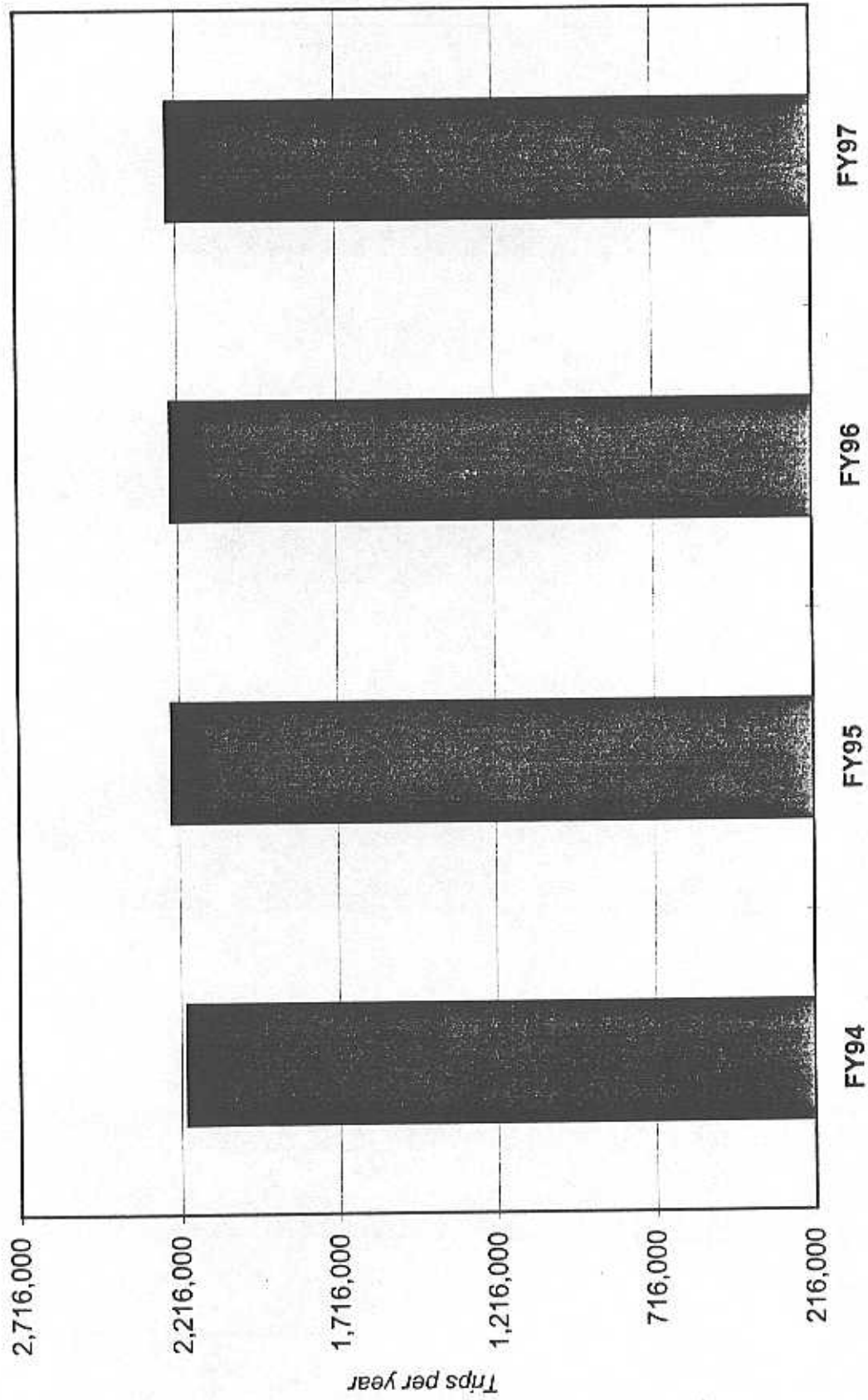


Figure 6: Arlington Trolley Annual Ridership, Fiscal Years 1994-1997

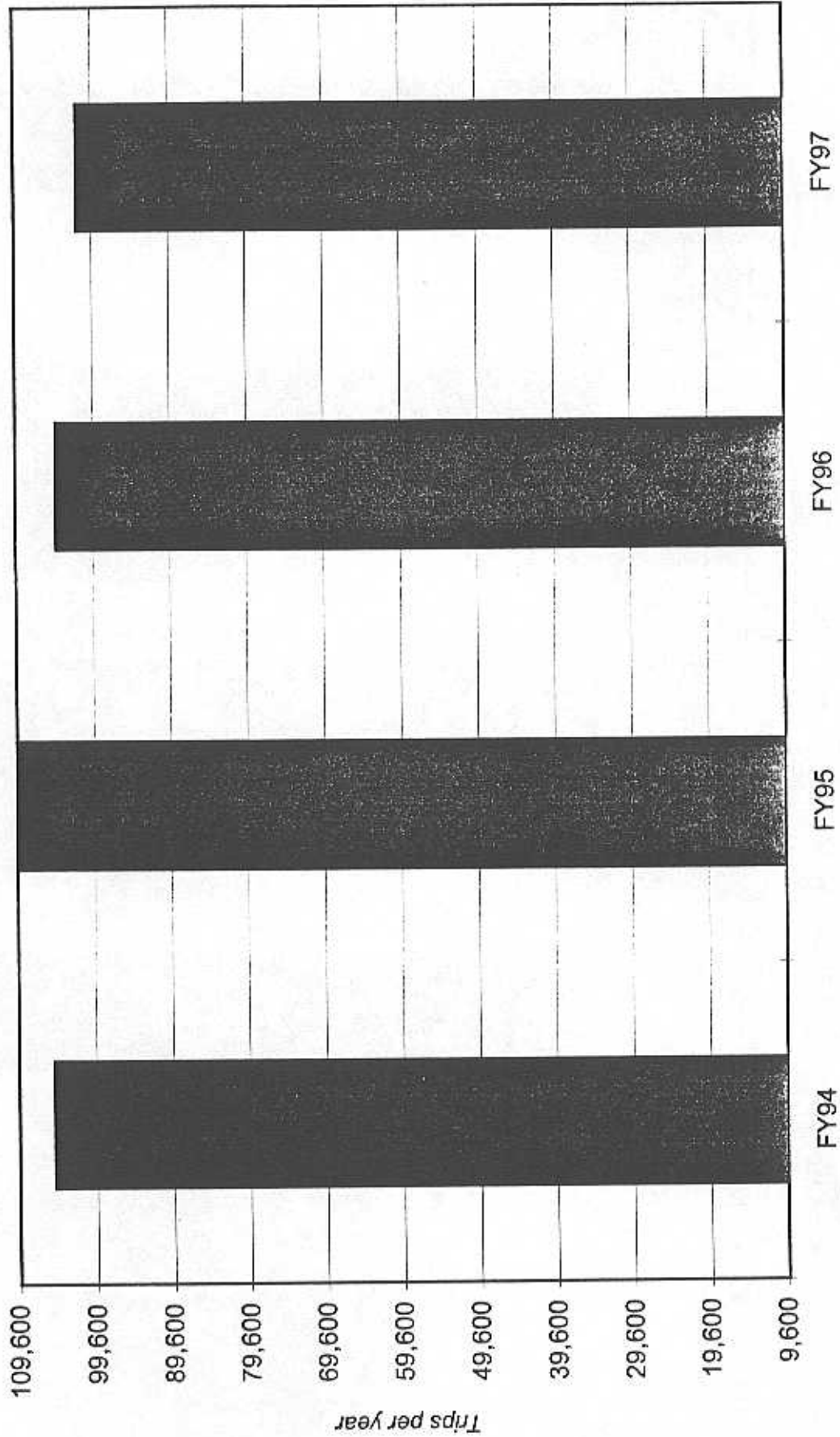
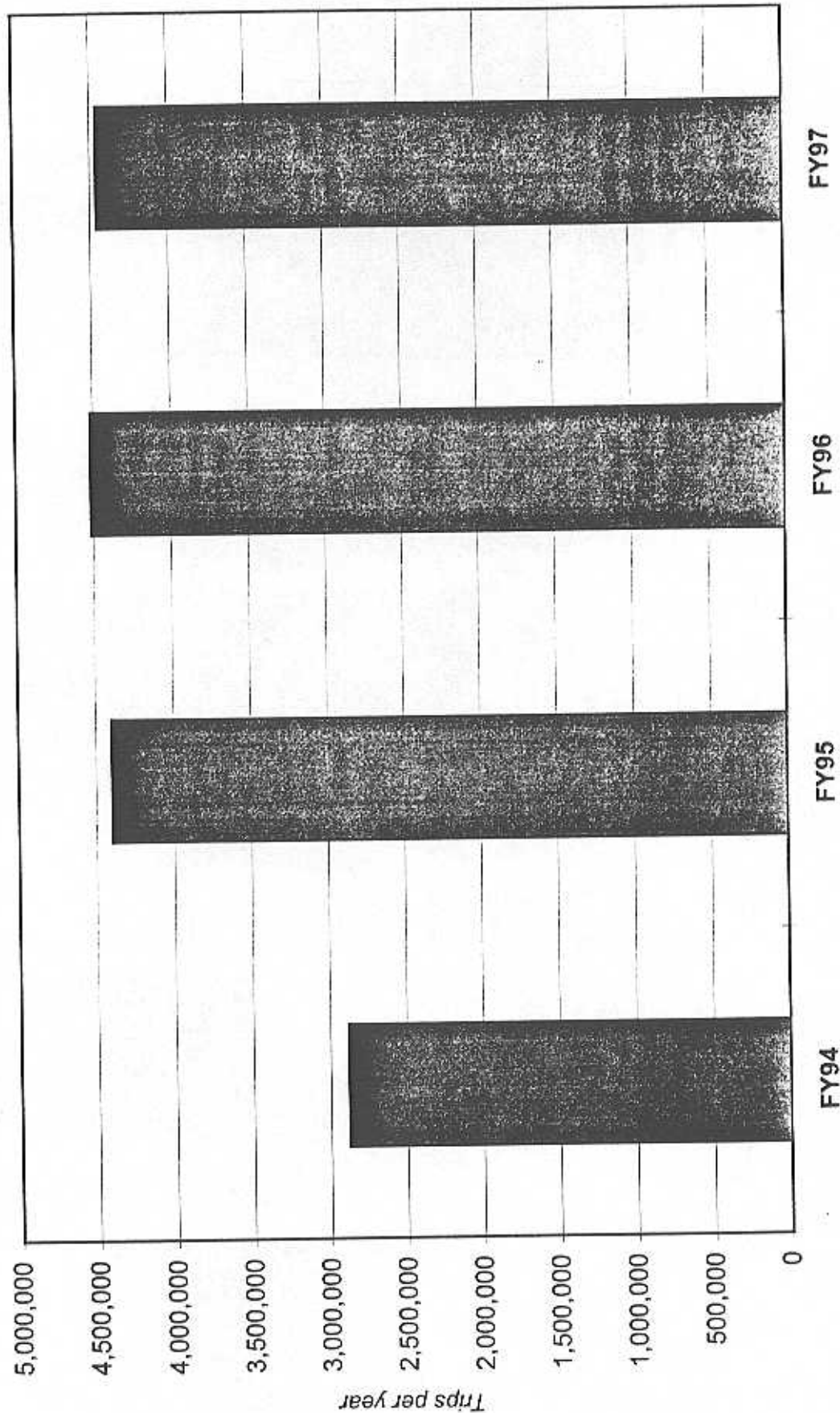
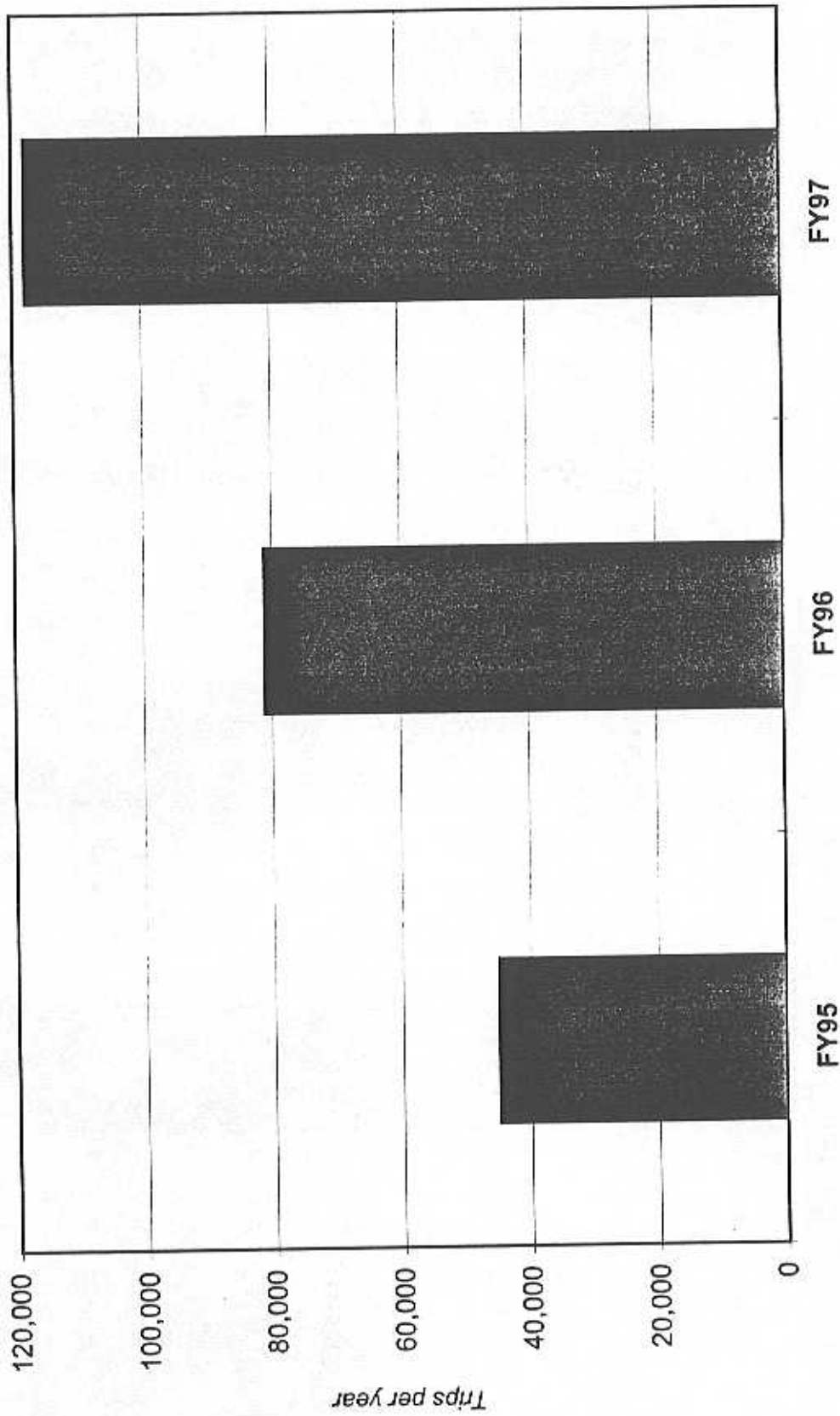


Figure 7: Fairfax Connector Ridership, Fiscal Years 94-97



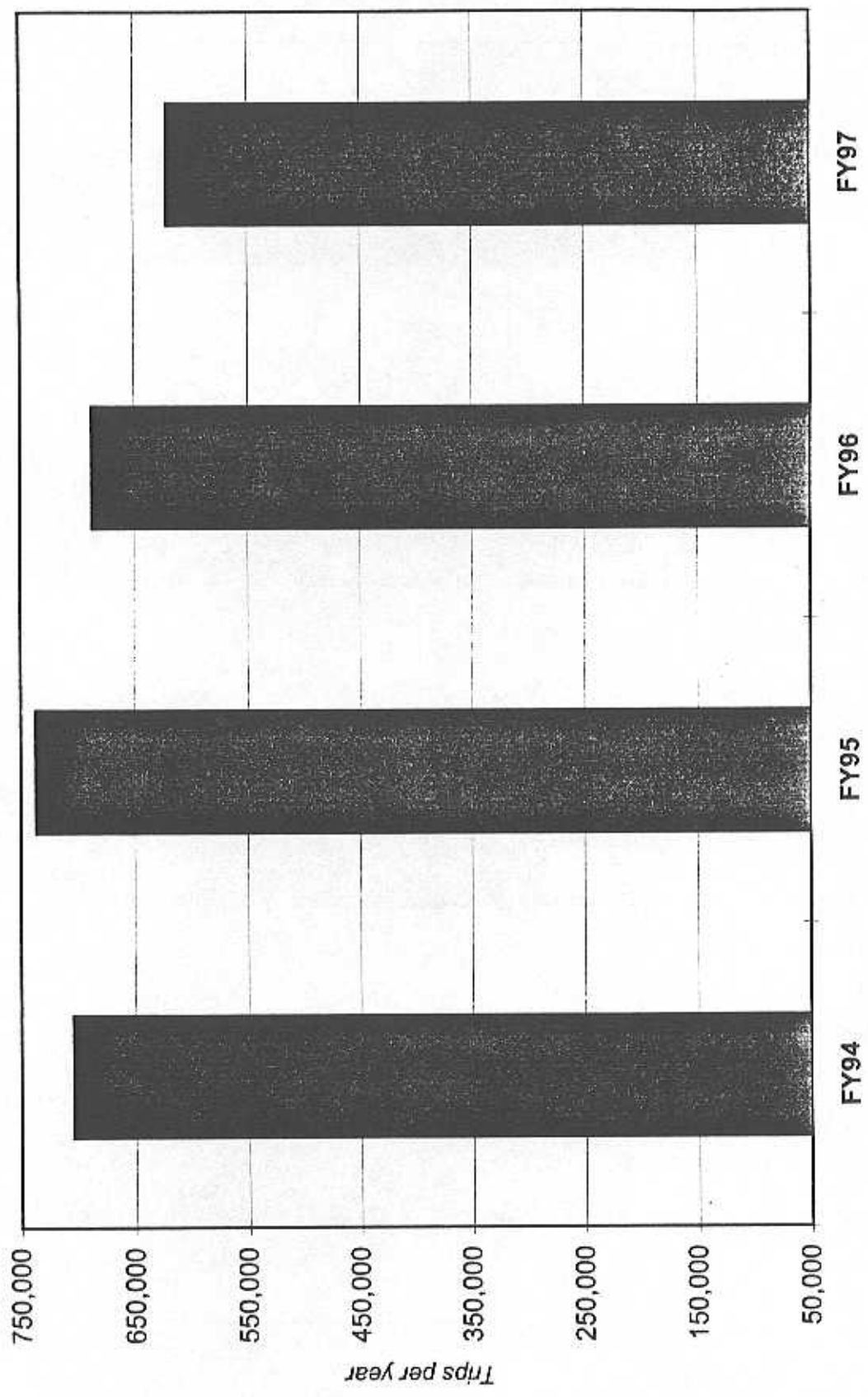
Note: In FY96 the Fairfax Connector began operating some service previously operated by Metrobus, and in FY97, service reductions were implemented in response to budgetary constraints.

Figure 8: Loudoun County Commuter Bus Ridership, Fiscal Years 1995-1997



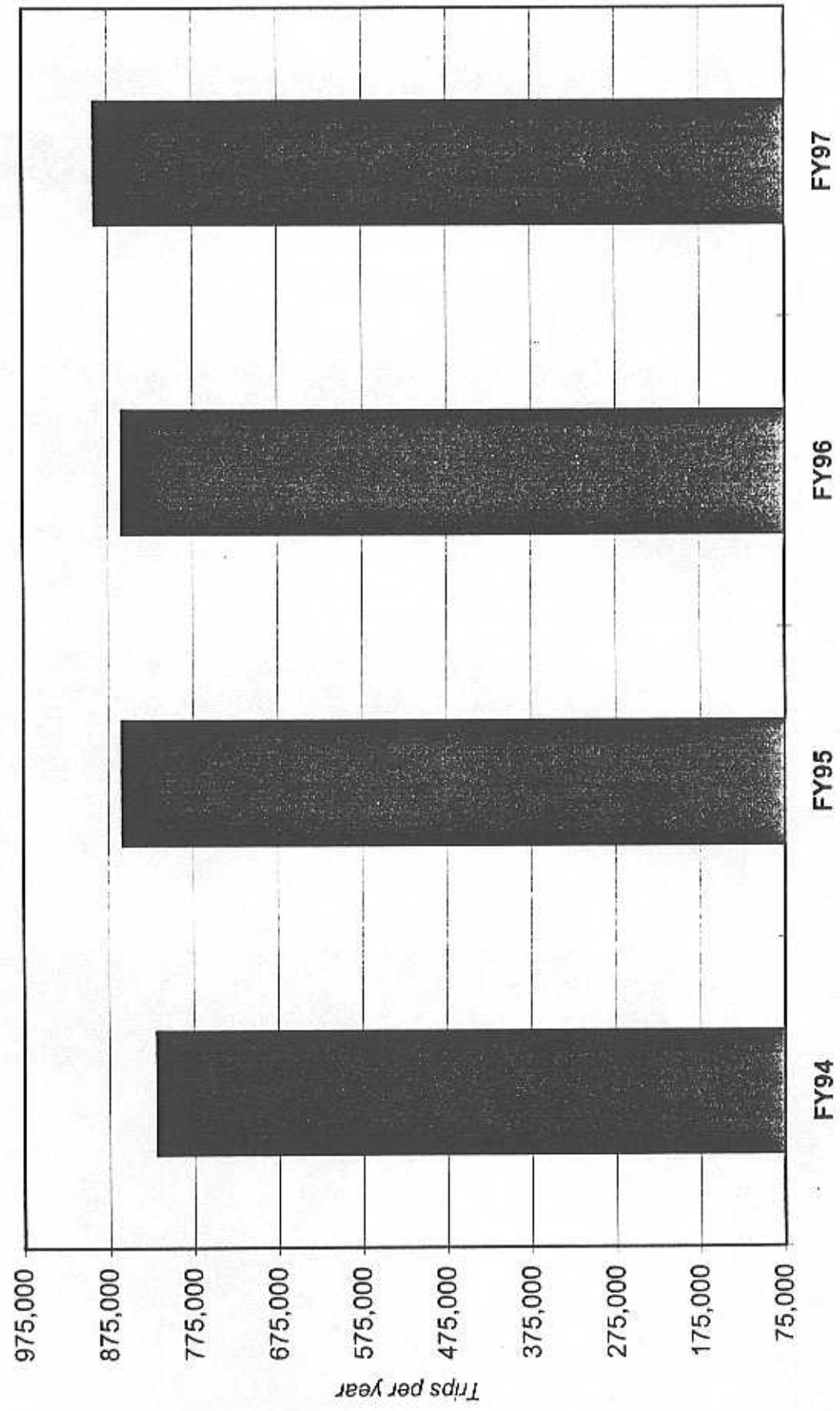
Note: Loudoun County service increased from four to eight peak period buses between fiscal years 1995 and 1997.

Figure 9: OmniRide Ridership, Fiscal Years 1994-1997



Note: Since 1995, HOV lanes on I-95 have been extended south to Route 234 making HOV travel increasingly attractive in the corridor.

Figure 10: CUE Bus Ridership, Fiscal Years 1994-1997



ROUTE LEGEND

A.T. 2	Post Office
A.T. 6	Government Building
A.T. 5	Library
Industry Extension	Park
A.T. 7	Residential Complex
A.T. 3	Shopping Center
Push Hour Extension	College
Industry Extension	School
A.T. 4	Hospital
Push Hour Extension	DASH PASS Sales Site
Industry Extension	Metrorail Station
A.T. 8	One Way Travel Only
★	Terminated Point
—	Metrorail Station
—	Local Line
—	Peak Line

DASH TRANSIT MAP

Figure 11

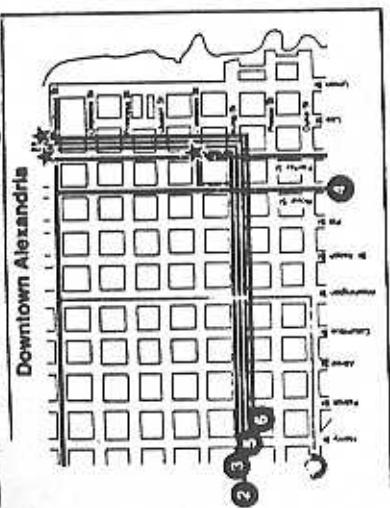
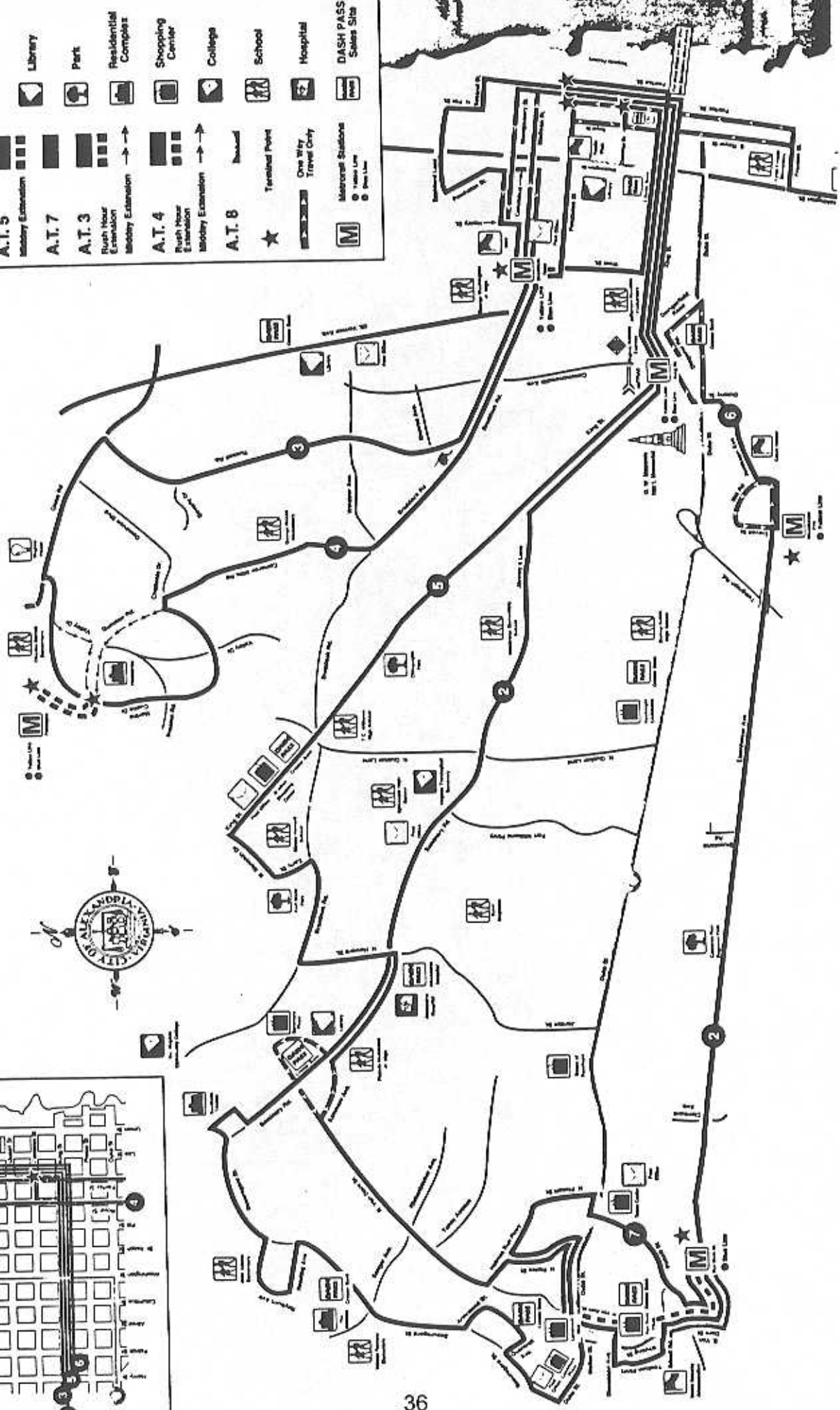


Figure 12

The Arlington Trolley in Crystal City Completes Your Crystal City Connection

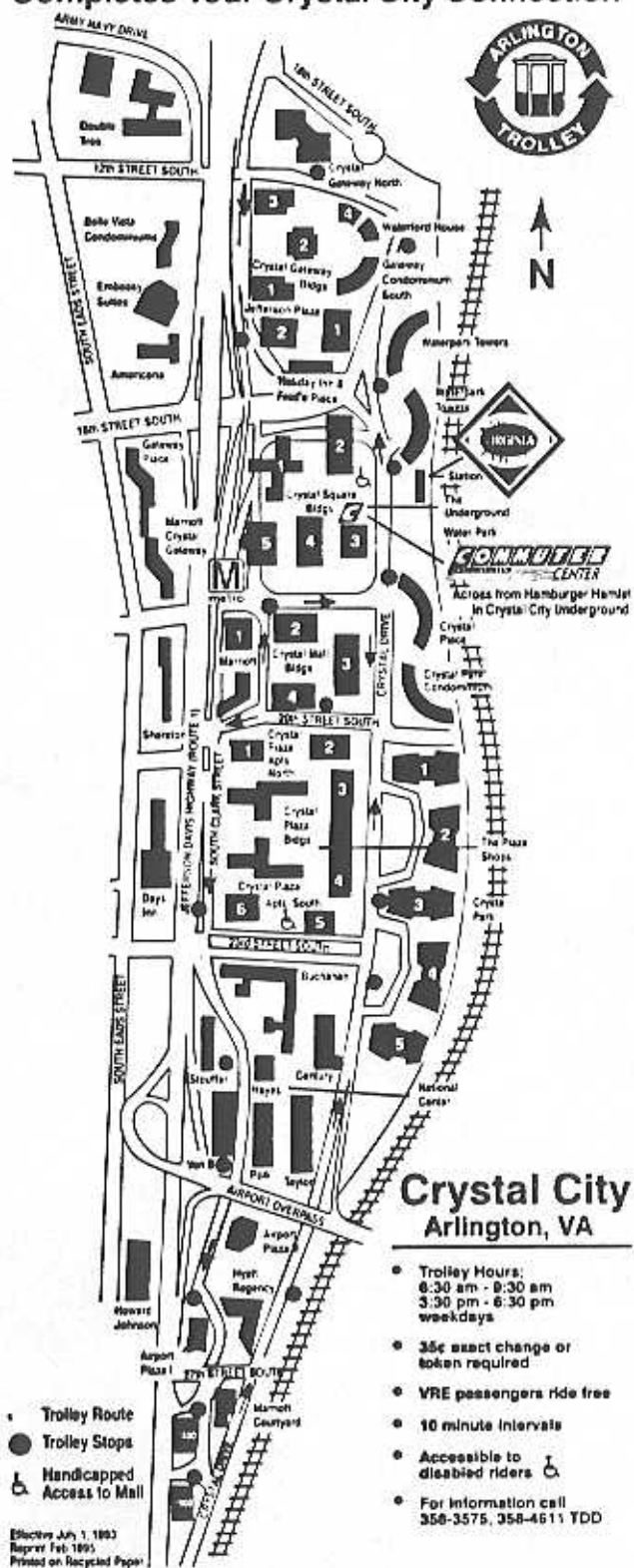


Figure 13

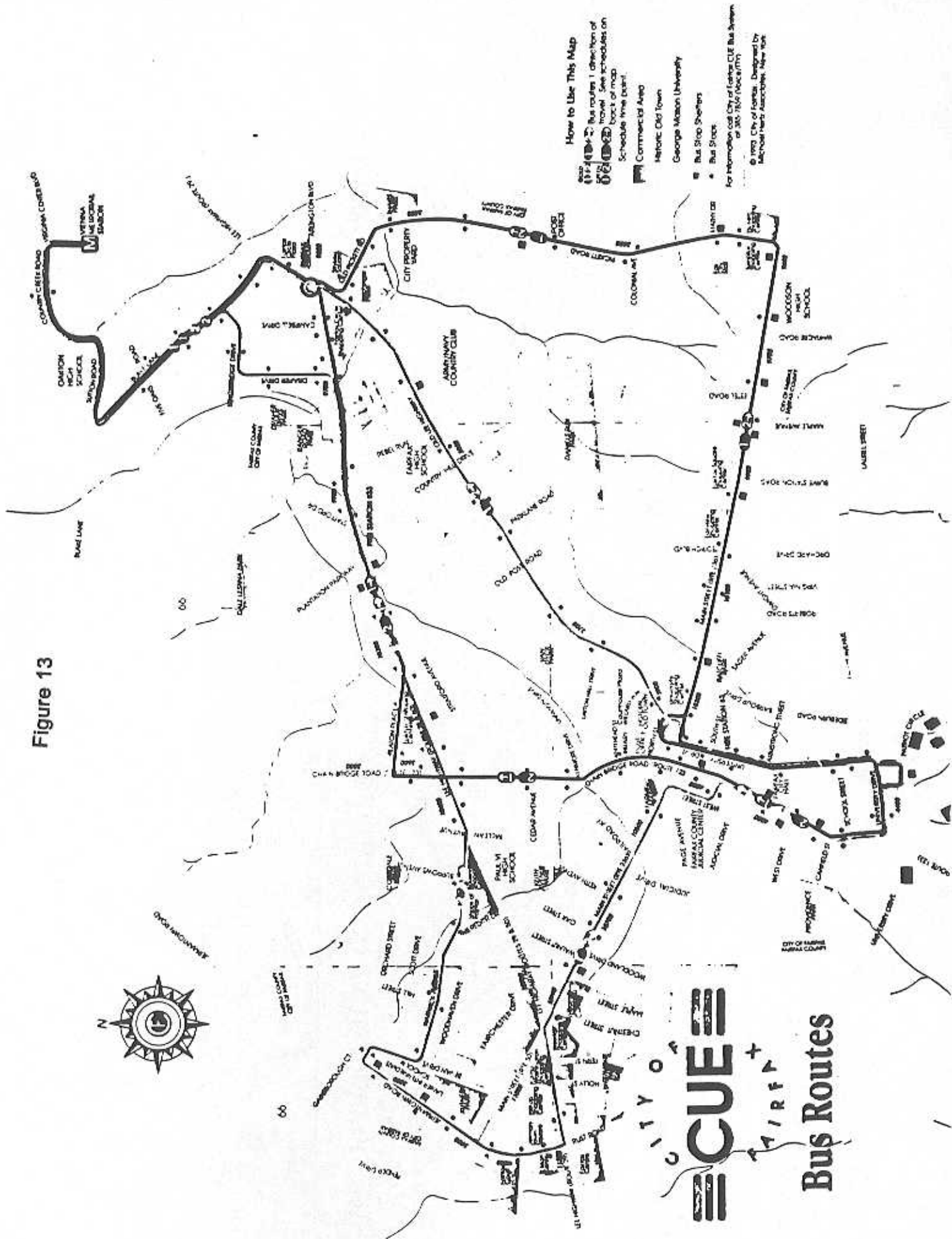


Figure 15

OmniLink Feeder Service to Manassas VRE Station
(Manassas Line)

OmniLink FEEDER MANASSAS SCHEDULE

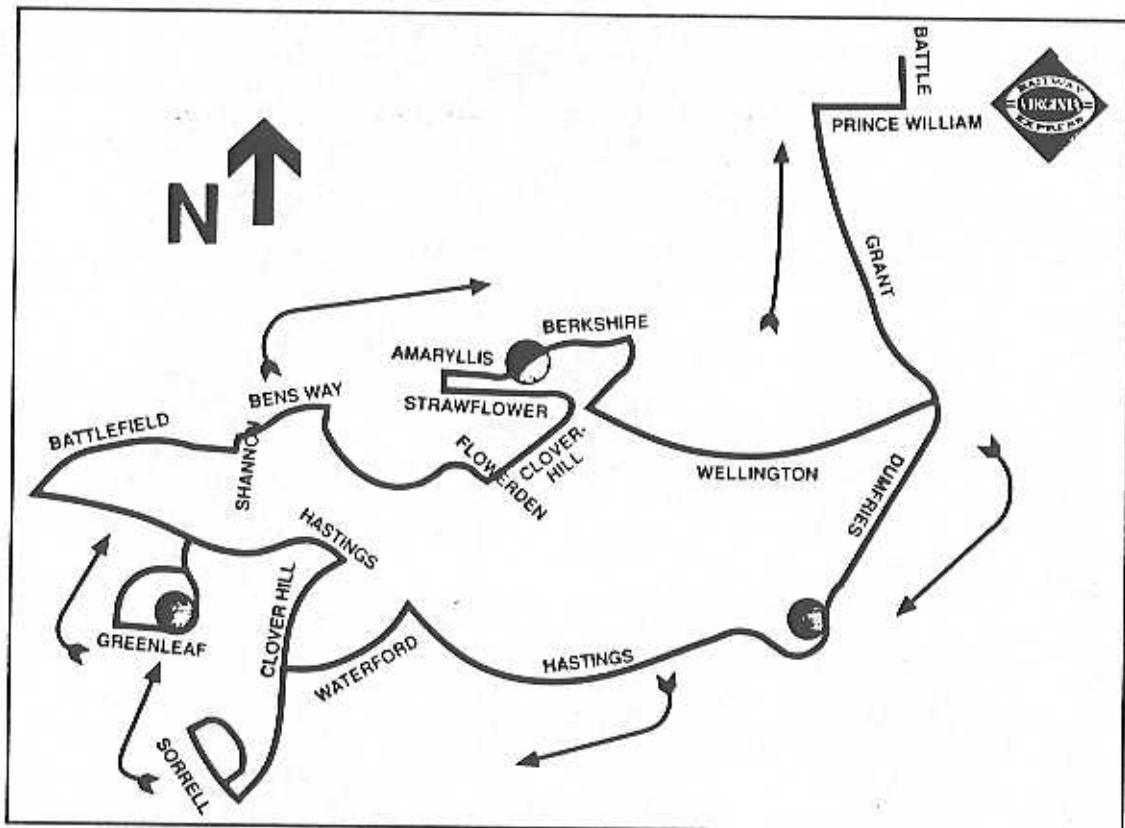
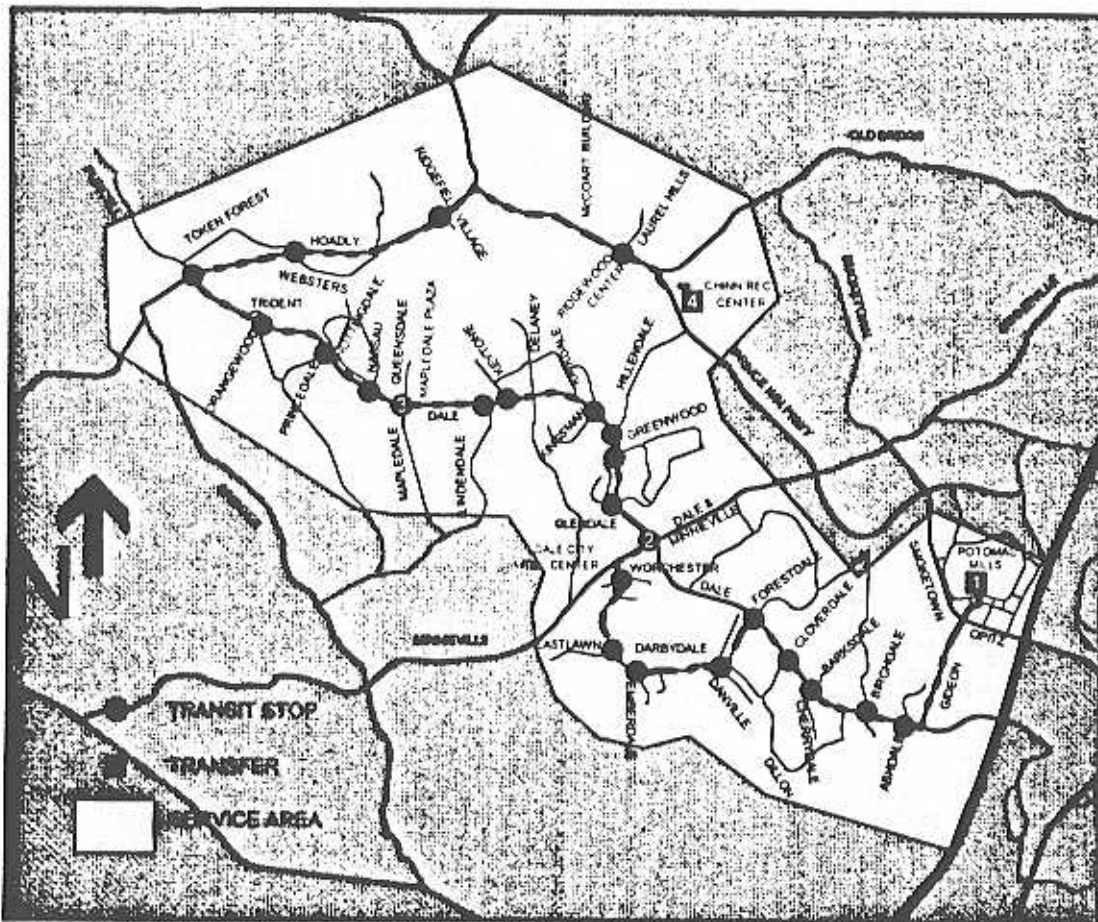


Figure 16

OmniLink Local Service - Dale City

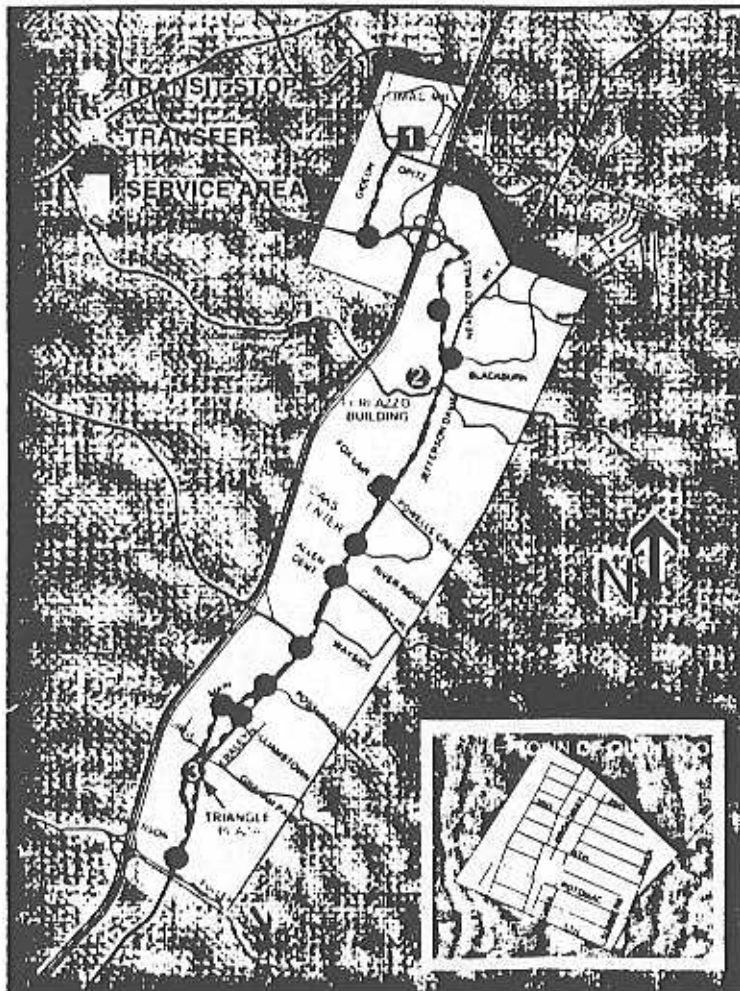


The white area on the map shows where this *OmniLink* service is available. *OmniLink* vehicles will stop at all of the *OmniLink* stops. If you cannot get to one of the stops, or if our destination is not close to a stop, call *OmniLink* at 490-4811, ext. 2 to make a reservation. As *OmniLink* vehicles may not travel on the center line streets between the points shown, be sure to wait only at transit stops or reservation locations. Refer to other *OmniLink* brochures or call us to see how *OmniLink* can serve your travel needs. This schedule reads across the columns, for example, the first Potomac Mills bus departs Chinn Center at 7:32 am, then goes to Mapledale Plaza at 7:42 am, then to Dale Blvd. & Minnieville Road at 7:55 am, arriving at Potomac Mills at 8:15 am. If your stop is between two of the key stops shown on the schedule, use the time for the stop before yours as a guide and plan to arrive at your stop 5 minutes early.

Figure 17

OmniLink Local Service - Dumfries

Dumfries

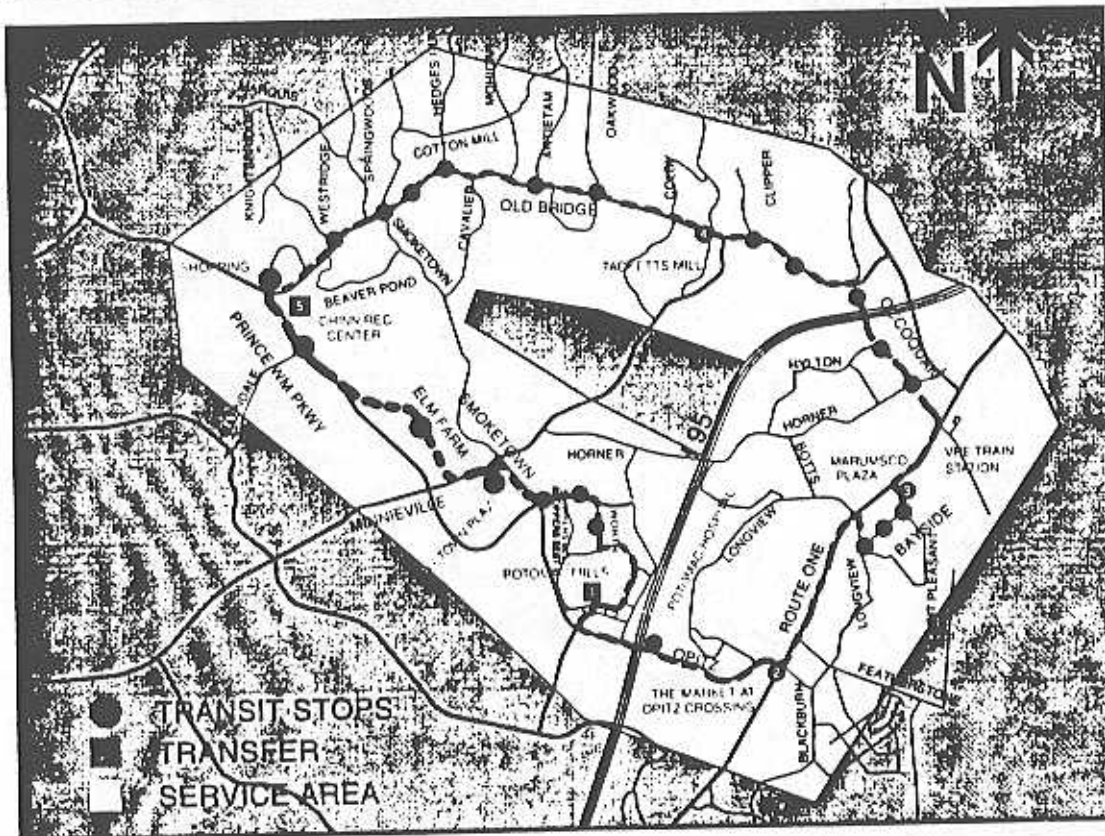


The white area on the map shows where this OmniLink service is available. OmniLink vehicles will stop at all of the OmniLink stops. If you cannot get to one of the OmniLink stops, or if your destination is not close to a stop, call OmniLink at 490-4811, ext. 2 to make a reservation. **Buses enroute to or from the Town of Quantico are not authorized to stop or deviate from the Fuller Road/Potomac Avenue corridor to pick up or discharge passengers inside Marine Corps Base boundaries.** As OmniLink vehicles may not travel on the center line streets between the points shown, be sure to **wait only at transit stops or reservation locations.** Refer to other OmniLink brochures or call us to see how OmniLink can serve your travel needs. This schedule reads across the columns, for example, the first Potomac Mills bus leaves at 8:15 am then goes to the Ferlazzo Building at 8:29 am and continues to Triangle Plaza at 8:47 am, arriving in Quantico at 8:59 am.

Figure 18

OmniLink Local Service - Woodbridge/Lake Ridge

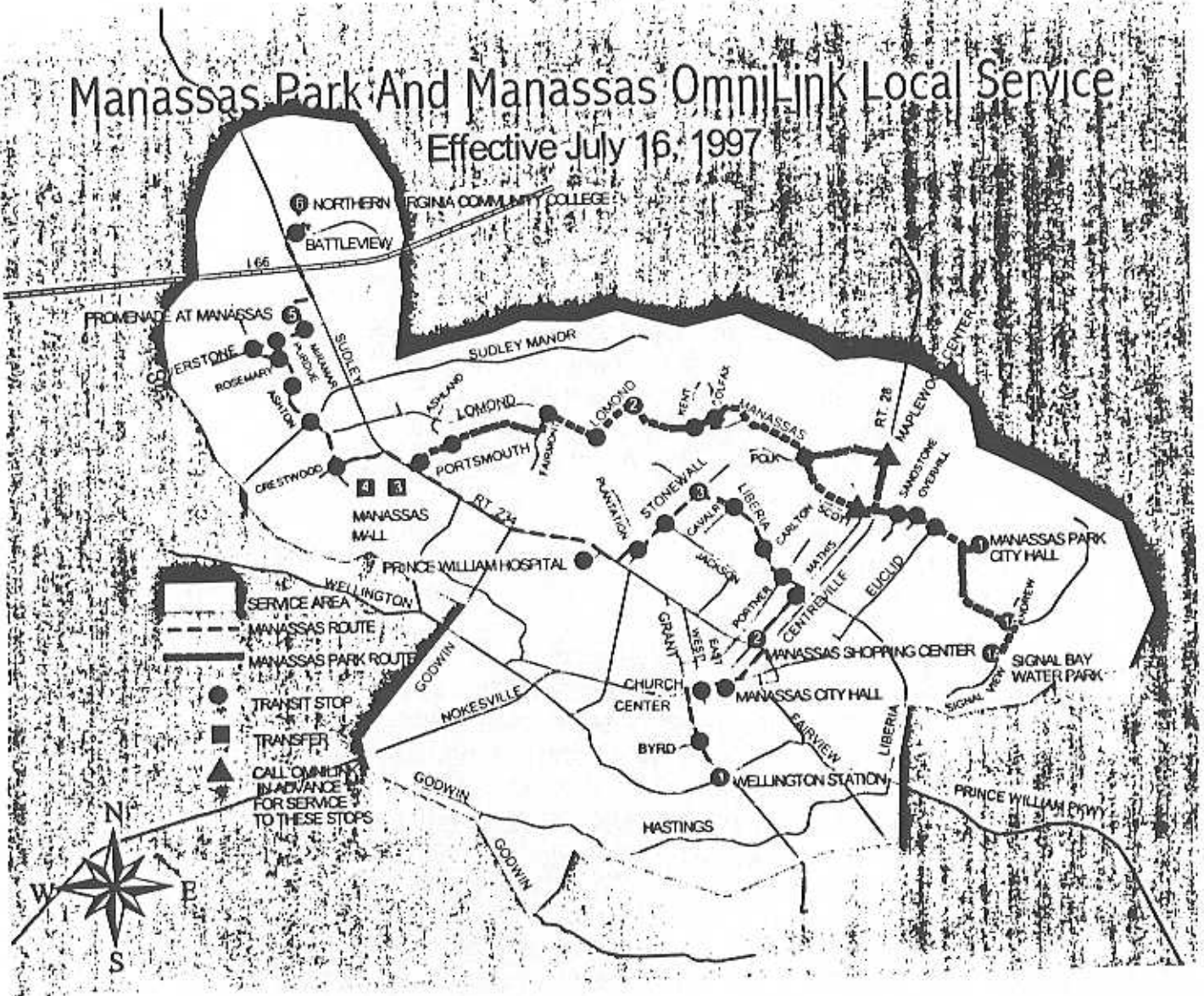
Woodbridge - Lake Ridge



The white area on the map shows where this OmniLink service is available. OmniLink vehicles will stop at all of the OmniLink stops. If you cannot get to one of the OmniLink stops, or if your destination is not close to a stop, call OmniLink at 490-4811, ext. 2 to make a reservation. As OmniLink vehicles may not travel on the center line streets between the points shown, be sure to wait only at transit stops or reservation locations. Refer to other OmniLink brochures or call us to see how OmniLink can serve your travel needs. This schedule reads across the columns, for example, the first Tacketts Mill bus running counterclockwise, leaves at 7:25 am then goes to Chinn Center at 7:45 am then arrives at Potomac Mills at 8:05 am.

Figure 19

OmniLink Local Service - Manassas Park & Manassas



all indicated that they do not wish to receive this money directly, as it brings with it many other burdensome federal requirements.

Commuter Bus Systems

While many of Northern Virginia's commuters use local bus systems, residents who live further from the core often avail themselves of one of the region's many publicly and privately provided commuter bus systems. Together, the services provide over 10,600 passenger trips in and out of the urban core daily, often operating out of park and ride lots. A list of the area's private commuter bus service providers, along with some of the area's vanpool operators, is provided in **Table 11**.

Vanpools

A large number of commuters also enter the core in vanpools. Besides the commercially operated pools listed in **Table 11**, many commuters have formed their own. According to MWCOC's 1996 Core Cordon Count, approximately 390 vanpools crossed into the core during the morning peak commuting period from Virginia. This number is down by 32 percent since 1990.

In order to support those commuters taking advantage of vanpools, the Arlington County government includes vanpools in its transit incentive program, in which employees using transit are eligible to be reimbursed up to \$65 per month through Metrochek, an employer-provided transit subsidy that is distributed in the form of Metrorail passes. Vanpool drivers may redeem their Metrocheks over-the-counter at any of Arlington's transit stores or mailing them to WMATA.

Another regional incentive program for vanpools is the **VanStart Program**, which provides an impetus for new vanpool formation by temporarily funding empty seats during the critical start-up phase. The program is open to all owner/operators of new vanpools who register for assistance with a local Rideshare Program. Assistance is granted at the discretion of the local organization based on the applicant's demonstrated aggressiveness in recruiting passengers. Eligible vanpools may receive cash assistance equivalent to the average per passenger cost for between one and four passengers for up to four months. The program is funded by the Commonwealth through the local ridesharing programs. Through the rideshare program, the Commonwealth also supports the **VanSave Program**, which offers temporary emergency financial support to vanpools that have lost over 25 percent of their ridership.

In order to increase the amount of vanpooling in the region, the Transportation Planning Board committed to funding a new package of incentives in 1996. Jurisdictional and agency staff have identified a particularly promising incentive which involves providing a direct subsidy to vanpool operators to cover

TABLE 11: SUMMARY OF COMMUTER BUS AND VAN POOL SERVICES AS OF 1997

COMMUTER SERVICE	PHONE	SERVICE AREA	VEHICLES	AVERAGE DAILY BOARDINGS	FARES **
Aries P.O. Box 192 Fredericksburg, Va 22404	(540) 373-3433	Fredericksburg Spotsylvania/Stafford TO: Fort Belvoir	2 Buses	120	\$4 one-way/\$6 return trip \$38 Every two weeks
Brooks Transit Services Route 2, Box 3340 Front Royal, Va 22630	(540) 636-6148	Front Royal TO: CIA, Pentagon, Crystal City, Navy Annex	5 Buses	240	\$32.50
Groome Transportation 5500 Lewis Road Sandstone, Va 23150	(804) 222-7226	Richmond Airport TO: Fredericksburg, National Airport	11 Vans	300+	\$23 Fredericksburg one-way \$30 National Airport one-way
Lee Coaches Route 4, Box 38 Sealston, VA 22547	(540) 371-6785 (800) 443-4533	Fredericksburg TO: Crystal City, Pentagon, Fort Belvoir	14 Buses	400	\$10 round trip \$8.50 one-way \$60 Crystal City, Pentagon-two weeks \$45 Fort Belvoir-two weeks
National Coach Works 10411 Hall Industrial Drive Fredericksburg, Va 22401	(540) 898-6959	Fredericksburg TO: Crystal City, Pentagon, Wash. D.C.,	42 Buses	3500	\$75 Crys. City, Pentagon-for two weeks \$80 Wash. D.C-for two weeks \$50 10 one-way tickets \$12 round-trip \$10 noon shuttle
Prince William OmniRide PRTC 3460 Commission Court Woodbridge, Va 22192	(703) 490-4811	Prince William TO: Vienna Metro, Pentagon, Downtown Washington	53 Buses	2730	\$35.50 for 10-trip. \$5 Single Fare
Quick's Commuter Service 41 RV Parkway Falmouth, Va 22405	(540) 373-6027	Fredericksburg TO: Crystal City, Pentagon, D.C., Rosslyn, Bailey's Crossroads	17 Buses	1100	\$58 Every two weeks to No. Virginia \$62 Every two weeks to Wash. D.C.
Greyhound/Trailways Route 1 Fredericksburg, VA 22407.	(540) 373-2103	Triangle/Woodbridge TO: Washington, DC	N/A	20	\$40 for 10-ride tickets which must be used within 30 days
Van Pool Services, Inc. (VPSI) 2760 Eisenhower Avenue, #306 Alexandria, VA 22314	(800) 826-7433	Prince William County, Manassas, Stafford County, Spotsylvania TO: DC, No. VA and Quantico	170 Vanpools	2000	Depends on route
Loudoun Commuter Bus Service Harrison St. S.E., 3rd Floor Leesburg, Va 20177	(703) 771-5665 (703) 478-8416, ext. 5665	Cascade, Purcellville, Hamilton, Leesburg, Ashburn, Sterling TO: Rosslyn, Pentagon, Downtown Washington	6 Buses	272	\$40 Per 10 one-way tickets \$5 one-way

N/A = Information not available.

* Some figures are approximate.

** Weekly fares unless otherwise indicated.

their capital costs. Because the federal government allows federal transit funds to be used to pay the capital portions of a contract with a private sector party, the region may use these funds to subsidize vanpools with which it has a contract.

In exchange for this subsidy, the vanpool operator would be required to submit information on the number of passengers in the vanpool, the distance each travels, and other such data needed to complete National Transit Database report. Because the amount of the federal funds that is allocated to the region is determined by the amount of transit provided in the region and reported to the NTD, this information from the vanpool operators would allow the region to earn additional dollars. Preliminary estimates indicate that the money earned for the region each year would most likely be several million dollars more than the amount required to subsidize the vanpools. This measure is particularly exciting because it appears to not only be an effective way to reduce automobile traffic and emissions, but to also raise additional transit funds for the Washington, D.C. region.

Integration of Services

As is clear from this report, Northern Virginia has a large number of individual services which mesh and interact with varying degrees of success. For the most part, transit consumers do not so much care about who carries them from one place to the other as they care about the cost of the ride, the time it takes, and its convenience. Clearly, anything that transit operators can do to make transfers as fast and convenient as possible will boost ridership and lead to a more loyal customer base.

One technique often used to integrate services is timed transfers. Where direct service is not available or financially feasible, buses are timed to meet in a central location to facilitate bus transfers. Another example is coordinating arrival and departure times for transfers between buses and trains. WMATA plans to conduct demonstrations at the terminal stations in Virginia (Huntington, Franconia-Springfield and Vienna) where flashing lights installed outside the train station will alert bus drivers when a train is entering the station, thus facilitating transfers for train passengers. As closely as possible, DASH service is timed to meet VRE trains serving the Alexandria station. System operators should consider transfer coordination opportunities carefully, and establish timed transfers when possible. Bus schedules should actively publicize opportunities for timed transfers.

Given the number of transit providers in the region, it can be difficult to keep track of schedule changes in order to coordinate transfers. To remedy this situation, NVTC has initiated a Quarterly Service Change Report which includes information on schedule and service changes for each transit operator.

Another opportunity to integrate services is through the use of multimodal centers. The more closely systems are physically linked, the simpler transfers between them should be. Three recent examples include the new Franconia/Springfield Transportation Center which links VRE with Metrorail and various bus systems while providing parking and opportunities for ridesharing; the adjacent Metrorail, VRE, and Amtrak stations and bus bays at King Street in Alexandria; and the new National Airport terminal where passengers can easily connect to Metrorail.

SECTION 5

PARATRANSIT

SECTION 5: PARATRANSIT

MetroAccess

The Americans with Disabilities Act (ADA) requires that all fixed-route transit systems (with the exception of commuter rail systems) provide paratransit for persons with disabilities who are certified paratransit eligible. The Washington region has responded by developing **MetroAccess**, a regional paratransit service operated by WMATA and its member jurisdictions since it was initiated on May 16, 1994. As of August, 1997, 9,370 people were certified to use **MetroAccess**, and the service is providing a weekday average of 1,050 trips.

In FY97, WMATA provided over 239,500 trips, and demand for paratransit services is expected to grow in future years. To minimize funding requirements, WMATA is evaluating the current management strategy and considering alternative systems. Some of the initiatives being considered include increased driver training, utilization of contract taxi service where appropriate, and designated **MetroAccess** stops to facilitate passenger pick-up.

Eligible Users: People are considered eligible for paratransit service if they are:

1. A person who is unable, as the result of a physical or mental impairment, to get on, ride, or get off any vehicle on the transit system; or
2. A person who needs the assistance of a wheelchair lift or other boarding assistance device and is able, with such assistance, to get on, ride, and get off any accessible vehicle, BUT such a vehicle is not available on the route when the person wants to travel; or
3. A person who has a specific impairment-related condition which prevents travel to or from a bus stop or rail station.²

The traveler's need for paratransit service must be certified by a healthcare professional, and a complete application returned to WMATA in order for a person to be approved to use the service.

The paratransit service area is that area within 3/4 of a mile from of any WMATA bus or rail station service area. As specified by the ADA, operating hours are from 5:30 A.M. to 12:00 A.M. on weekdays and from 8:00 A.M. to 12:00 A.M. on weekends and major holidays. **MetroAccess** operates 365 days a year,

²WMATA ADA Paratransit Guide, Washington, DC: September, 1993.

including all federal, state, and local holidays, and during special events when the fixed route systems are operating. Fares are double the regular non-discounted fares for the fastest comparable trips on the fixed-route system.

Jurisdictional Services

In addition to **MetroAccess**, a number of local jurisdictions operate their own paratransit systems, many of which are also core carriers for the regional operation. **MetroAccess** provides regional paratransit services for all ADA eligible users. ADA eligibility is not required for jurisdictional paratransit passengers. Alexandria, Arlington, and Fairfax County are considered core carriers because they serve some **MetroAccess** passengers as well. These systems are described below:

Alexandria DOT

The city of Alexandria began operating DOT paratransit service within the city limits in 1984. DOT was modified to comply with the Americans with Disabilities Act in 1993. Anyone living within the city limits of Alexandria who has a disability which prevents the use of regular transit service is eligible to use DOT. Participation is by application to the city of Alexandria.

Arlington Access

Arlington County began an independent paratransit service contracting with the Arlington chapter of the American Red Cross, Diamond Transportation Service, and the Red Top Cab Company. Reservations are needed to travel on Arlington Access, and participation is not based on place of residence, but need for the service.

City Wheels

The city of Fairfax City Wheels program offers alternative transportation within the city of Fairfax to the Vienna Metrorail station, to George Mason University, and to Fair Oaks Hospital. Participation is by application to the City of Fairfax. Coupons for transportation are obtained by placing a mail order prior to each month. Orders may take up to two weeks to process. Rides are arranged by the participant by contacting the transportation company directly. The average passenger fare is two times the CUE bus fare, which is \$1.

Fare Wheels

The city of Falls Church Fare Wheels program services the cities of Falls Church and Fairfax, and Arlington County. Fare Wheels allows participants to use redeemable coupons to pay for transportation services. Individuals may choose from among a pool of participating transportation providers, selecting the one that best meets their needs. Participants must be residents of the City of Falls Church, at least 62 years of age or permanently disabled, with an annual income not to exceed \$30,000. Participation is by application to the City of Falls Church.

Fastran

Fairfax County owns and operates the Fastran fleet, which offers curb-to-curb service within Fairfax County to county residents. Fares are paid on a cash basis and average between \$1 to \$3 per trip. Trips are scheduled by the participant through Fastran. Participation is by application to Fairfax County. The program is structured to meet the transportation needs of low income persons by restricting eligibility to those with an annual income at or below \$16,500.

LCTA

Loudoun County Transportation Association provides door-to-door, including paratransit, services in Leesburg and the Sterling area five days per week for approximately eight hours per day. Special runs have also been made to support specific activities in the county. Fare books of 10 or more trips can be purchased, or payment can be made on a cash-per-ride basis. Only county residents are eligible to participate.

Table 12 compares costs for paratransit service providers in the region. The information provided under core carriers shows the trips referred to the local jurisdictions from **MetroAccess**. The local provider information is additional service provided by the local jurisdictions for their residents. Service costs vary based on the type of service provided by the carrier. Programs using strictly taxi cab service for their paratransit trips spend much less than those programs with dedicated service vehicles. **MetroAccess** costs are significantly higher because they include costs for management of the entire system (approximately \$1.2 million). Arlington's Diamond Cab service is more expensive than other cab service because they handle all of the ambulatory trips which require special accommodations for the passenger.

Table 12: Comparison of Paratransit Costs (Fiscal Year 1996)

	Core Carriers										Local Providers	
	Metro Access ¹	Fairfax County		Alexandria DOT ²	Arlington County		Montgomery County ³	Prince Georges County ²	Alexandria DOT ²			City of Fairfax, City Wheels ²
		Fastran ²	Taxi ²		Diamond ²	Red Top ²						
Operational Information:												
Trips Completed	112,100	3,853	1,239	1,681	7,824	42,000	2,000	49,540	2,304			
Hours Operated	113,914	3,048		649			3,514	18,434	5,520			
Revenue Hours		2,085		358				10,167	5,520			
Revenue Miles	1,406,200	29,941		6,972				198,112	5,760			
Costs:												
Fixed Overhead												
System Management	\$4,283,300	\$12,548										\$6,000
Oper/Admin	\$407,700	\$0	\$0	\$2,251				\$63,950	\$1,200			\$240
Non Personnel		\$692		\$138				\$3,931				
Private Provider		\$133,726	\$19,495	\$15,365	\$70,188			\$436,551				\$13,738
Vehicle Lease/Rental		\$21,416										
MIS Maintenance		\$502										
Support												
Eligibility Cert												
Other Costs	\$4,100											
Total Costs	\$4,695,100	\$168,884	\$19,495	\$17,754	\$70,188	\$1,373,700	\$58,488	\$504,432	\$15,178			
Revenue	\$188,000			\$2,852				\$81,028	\$2,304			
Total Subsidy	\$4,507,100	\$168,884	\$19,495	\$14,902	\$70,188	\$1,373,700	\$58,488	\$423,404	\$12,874			
Service Area Size		399	399	473			487	473	7			
Subsidy per Trip	\$40.21	\$43.83	\$15.73	\$8.86	\$8.97	\$32.71	\$29.24	\$8.55	\$5.59			

* Ambulatory Service

** MetroAccess' System Management costs exclude \$1.2 mil in costs for the management of assigning trips to all of the core carriers.

sources of information: 1 FY 1998 WMATA Budget Book

2 Report provided by jurisdiction

3 FY96 Regional Paratransit Report dated 3/20/97

Paratransit Issues in Northern Virginia

MetroAccess is responsible for providing all **interjurisdictional** paratransit trips and any **intrajurisdictional** trips that cannot be accommodated by the core carriers. The jurisdictional paratransit providers identified above provide **intrajurisdictional** service for their own residents. Since the unit costs of the core and jurisdictional carriers are lower than **MetroAccess** costs (see **Table 12**), jurisdictions seek to maximize the number of trips provided by the local and core carriers.

One way Northern Virginia carriers have identified to keep costs down is the proposed bill back procedure, which would allow core carriers to provide service to nonresidents and bill the jurisdiction of residence for the trip. For example, if a Fairfax County resident wants to travel from King Street Metrorail Station to Old Town, the trip could be provided by Alexandria DOT, as long as the cost of the trip could be billed to Fairfax County.

One issue that must be resolved before the bill-back procedure could be implemented is the accuracy of **MetroAccess** billing information. Data used by WMATA to allocate service costs does not accurately assign jurisdictions of residence, and thus far, WMATA has been unable to correct these errors. A Virginia-only pilot program has been proposed to demonstrate the bill-back procedure, once WMATA has resolved the system errors that result in inaccurate billing.

Table 13: Paratransit Contacts

Paratransit Service Provider	Contact	Phone
WMATA MetroAccess	Glen Millis	(202) 962-1100
Fairfax County Fastran	Steve Yaffee	(703) 324-7075
Alexandria DOT	Betsy Massie	(703) 838-3800
Arlington Access	Jim Hamre	(703) 358-3698
City Wheels (city of Fairfax)	Alex Verzosa	(703) 385-7889
Fare Wheels (city of Falls Church)	Halsey Green	(703) 241-5092
Loudoun County	Mark McGregor	(703) 777-2708
Prince Georges County	Geralyn Bruce	(301) 883-5685
Montgomery County	Carolyn Bigers	(301) 217-2184

SECTION 6

HOV LANES AND TOLL ROADS

SECTION 6: HOV LANES AND TOLL ROADS

In addition to its extensive highway network, Northern Virginia enjoys one of the country's most successful High Occupancy Vehicle, or HOV, systems. Currently, HOV lanes exist in three corridors: the Shirley Highway (I-395) and a portion of I-95 to the south, the I-66 corridor both inside and outside the Beltway, and on Route One and the George Washington Parkway through Old Town, Alexandria. The region also has two toll roads, the Dulles Toll Road, which will soon include HOV lanes, and the Dulles Greenway. Both utilize FastToll, an automated toll collection system which has proved to be very popular with motorists.

Public Perception of Use

One of the area's best kept secrets seems to be that the HOV lanes on I-95/I-395 actually carry more people toward D.C. each day than do the conventional lanes. While the lanes may look underutilized because traffic flows smoothly through HOV lanes, they carry far more persons per hour than do the parallel regular-occupancy lanes. **Table 14** details the existing segments of HOV lanes and the most recent traffic counts available for each. Traffic counts for the traditional Low Occupancy Vehicle (LOV) lanes are also provided. As the numbers show, the HOV lanes are performing as designed, by providing a privilege (reduced travel time) for making what some consider to be a sacrifice (sharing a vehicle). If the HOV lanes were congested, the benefit of carpooling would be reduced.

Commuters stuck in traffic in the LOV lanes often see traffic in the HOV lanes traveling by at 55+ miles per hour, which over time has led to the perception that the HOV lanes are underused. However, there are many instances where more **people** are moved in HOV lanes than in LOV lanes. This year, concerns regarding this issue on I-95/I-395 were raised and the Virginia Department of Transportation (VDOT) initiated a policy study to examine changing the HOV requirement from HOV-3 to HOV-2.

Violations

Violation rates are between three percent and 10 percent on barrier separated HOV lanes and between eight percent and 30 percent on the diamond lane facilities. Many of the violations happen during the first and last half hour of the restricted period, meaning that the violation rate is very low during the remainder of the HOV period. Currently fines range from \$79 for the first offense to \$529 for the fourth offense.

TABLE 14: FALL 1996 VEHICLE AND OCCUPANCY COUNT SUMMARY

HOV FACILITY*	PERSONS	DIRECTION	RESTRICTED HOURS	HOV LANE VEHICLES**	LOV LANE VEHICLES	HOV LANE PEOPLE**	LOV LANE PEOPLE
<u>I-395</u> Count North of Glebe Road	HOV-3	Northbound Southbound	6:00 A.M. - 9:00 A.M. 3:30 P.M. - 6:00 P.M.	18,210 (TOTAL)	48,430 (TOTAL)	72,110 (TOTAL)	57,370 (TOTAL)
<u>I-95</u> Count South of Franconia/Springfield Parkway	HOV-3	Northbound Southbound	6:00 A.M. - 9:00 A.M. 3:30 P.M. - 6:00 P.M.	12,340 (TOTAL)	27,350 (TOTAL)	36,260 (TOTAL)	31,070 (TOTAL)
<u>I-66</u> Count between Sycamore Street and Fairfax Drive (Road only for HOV use)	HOV-2	Eastbound Westbound	6:30 A.M. - 9:00 A.M. 4:00 P.M. - 6:30 P.M.	20,900 (TOTAL)	N/A	39,000 (TOTAL)	N/A
<u>I-66</u> Count between Rt. 123 and Nutley Street	HOV-2	Eastbound Westbound	5:30 A.M. - 9:30 A.M. 3:00 P.M. - 7:00 P.M.	13,985 (TOTAL)	39,420 (TOTAL)	23,820 (TOTAL)	45,640 (TOTAL)
<u>ALEXANDRIA:</u> Washington Street Patrick Street/Rte. 1 Henry Street/Rte. 1	HOV-2 HOV-2 HOV-2 HOV-2	Northbound Southbound Northbound Southbound	7:00 A.M. - 9:00 A.M. 4:00 P.M. - 6:00 P.M. 6:00 A.M. - 9:00 A.M. 3:00 P.M. - 7:00 P.M.	Data to be released in 1998	Data to be released in 1998	Data to be released in 1998	Data to be released in 1998

Sources: Transportation Planning Division, Virginia Department of Transportation
Alexandria Transportation and Environmental Services Department

*I-395/95 consists of 2 reversible HOV lanes and a minimum of three LOV lanes in each direction. I-66, outside the Beltway, is made up of one HOV lane and three LOV lanes. It should therefore be noted that during the peak periods, all the HOV lanes mentioned above move more people per lane than the LOV lanes.

** Includes Violators

VDOT's policy is that once the HOV period begins, all non-HOV vehicles must leave the highway at the next exit. State police have begun enforcing this requirement, since otherwise these "shoulder" periods become very crowded, which negates the time-savings incentive for people to use carpools. The long distances now traveled on HOV lanes makes any other policy unworkable. For example, a driver could enter the HOV lanes five minutes before the restricted period and travel thirty miles in the HOV lanes, which is clearly unfair to those who have established carpools in order to take advantage of those lanes. Some local judges have chosen to interpret the rule differently, and have questioned tickets written soon after the HOV period begins. VDOT is in the process of developing new wording on HOV signs that make this policy more clear.

Motorcycles on HOV Lanes

As mandated in ISTEA, motorcycles are permitted to travel on federally funded HOV facilities unless they create a safety hazard or adversely affect HOV operations. Although motorcycles were previously banned from Virginia's HOV lanes, the Commonwealth Transportation Board (CTB) authorized motorcycle travel on HOV facilities in Virginia as of September 21, 1992, for a two-year trial period. As there were only five motorcycle crashes on the highways during the trial period, motorcycles were able to continue to travel on HOV lanes with VDOT monitoring accident rates.

HOT Lanes

A less traditional option for the area may be the introduction of High Occupancy Vehicle Free/Toll Others (HOT) lanes, which were first implemented in southern California on I-91. These lanes are operated with the objective of assuring free flow conditions by limiting the type and number of vehicles in a lane without denying access altogether. This limitation occurs by restricting use to HOV lanes and those willing to pay. While the flexibility of the lanes and their ability to generate revenue are certainly encouraging, violation rates remain an issue.

Improvements to Current System

Currently, the region has adopted plans to extend existing HOV lanes and construct HOV lanes in other corridors. The construction of HOV lanes on the Capital Beltway is also being studied. The region is currently reviewing system expansion, occupancy rates, and HOV policies such as hours of restriction. These studies are described below, and further details are presented in Section 18: Regional Studies.

I-95 Corridor

VDOT has extended the reversible HOV lanes on I-95 south. The project opened in stages, as sections were completed. In February of 1997, the final section of the HOV extension opened, extending lanes through Rt. 234 in Prince William County.

Based on a directive from the Secretary of Transportation, VDOT is conducting a study which will consider reducing occupancy requirements on I-95/395 from HOV-3 to HOV-2. The study includes changing HOV on all or part of the corridor, considering hours or HOV restrictions, and access and egress issues. Consideration is being given to the entire I-95/I-395 HOV corridor from the Potomac River to Rt. 234 in Prince William County. A number of concerns regarding this study have been expressed by citizens, local jurisdictions and transit agencies. One of the primary concerns has been that a loss in roadway efficiency could occur. Consideration should be given to the fact that even if the highway becomes more effective at moving cars, it may actually move fewer people and divert riders from transit and carpools. This phenomenon was seen when restrictions along the same corridor were reduced from HOV-4 to HOV-3.

I-66 Corridor

I-66 opened in late 1982 with an HOV-4 status during peak direction, peak period operation. As a result of federal legislation, several subsequent changes have occurred. In January of 1984 the HOV requirement was reduced to three, and further reduced in March of 1995 after a one-year demonstration project. The change to HOV-2 will continue as long as certain thresholds of traffic are not exceeded (1,950 vehicles per lane per hour). If the average volume over a two week period reaches 1,950 then VDOT must report to TPB, triggering a reversion to HOV-3.

The additional vehicles on I-66 increased the region's automobile emissions, while ridership on WMATA's Orange Line decreased. As a result, VDOT chose to fund a bus fare buydown in the affected corridor. The funding will continue until the road reverts to HOV-3. This year the money is being applied toward bus service in the Vienna and Franconia/Springfield areas. Information on routes affected and fares can be found in **Table 15**.

Dulles Toll Road and Dulles Greenway

The Dulles Toll Road, which regularly experiences heavy traffic during peak periods, is currently being expanded by one lane. This fourth lane in each direction will be reserved for HOV-2 traffic during peak periods in peak directions. The design of the road was coordinated with the Dulles Rail Study in

Table 15: FY 1998 I-66 Fare Buydown Program

Buydown Routes	FY 1997 Fare	Fare 7/97-6/98	Special Promotion Fare** 9/97-11/97
Metrobus 12C, 12 D, 12 E, 12F, 12L, 12M, 12R, 12S (Centerville to Vienna Metro)	\$0.00	\$0.25	none
Metrobus 20F, 20W, 20X, & 20Y (Chantilly to Vienna Metro)	\$0.00	\$0.25	none
New FY 1998 Buydown Routes Metrobus 18R & 18S (Burke Centre, Rolling Valley, West Springfield to Franconia-Springfield Metro)	\$0.50*	\$0.25	free
CONNECTOR 20A (Government Center to Vienna Metro)	\$0.00	\$0.25	none
CONNECTOR 101, 102, 103, & 108 (Fort Hunt, Bucknell Manor to Huntington Metro)	\$0.25	\$0.25	none
CONNECTOR 109, & 110 (Rolling Valley, West Springfield, Franconia Rd, to Van Dorn, and Huntington Metros	\$0.25	\$0.25	free
CONNECTOR 5V 5Y, & 5Z (Reston-Herndon to WFC Metro)	\$0.75	\$0.50	none
CONNECTOR 111 (Rolling Valley, West Springfield to Old Keene Mill Rd to Franconia-Springfield Metro)	\$0.50*	\$0.25	free
CONNECTOR 202, 204 (Beulah Street, Bren Mar, Fort Belvoir to Franconia-Springfield Metro)	\$0.50	\$0.25	free
CONNECTOR 203 (Kingstowne to Van Dorn Metro)	\$0.50	\$0.25	none
CONNECTOR 301, 303, 304, 305 & 311 Hayfield, Kingstowne, Lorton, Saratoga, Newington Forest to Franconia Springfield Metro)	\$0.50*	\$0.25	free
CONNECTOR 5A, 5B, 5C, 5E, 5F, 5G, 5H, 5J, & 5W	\$0.25	\$0.50	none
City of Fairfax CUE Gold and Green Routes	\$0.50	Free with Transfer	free

* Fairfax County Feeder Bus Fare

** Special Promotional Fare for Franconia-Springfield only, Monday, 9-1-97 through Sunday, 11-30-97.

order to minimize potential future impacts on the road if rail is also constructed in the corridor. The HOV lanes are scheduled to open in the spring of 1999.

The Dulles Greenway, which opened in September, 1995, is one of the few privately constructed and operated toll roads in the U.S. The Greenway extends approximately 14 miles from the Dulles Airport northwest to Leesburg. Two additional lanes and interchanges have been planned should future expansion become necessary, and rail right-of-way has been preserved to allow for future rail extensions to Leesburg.

In July, 1996, the Toll Road Investors Partnership II (TRIP II), missed an interest payment to its bondholders, and was forced to seek an agreement with them to avoid foreclosure on the highway. As congestion on parallel roads like Route 7 becomes worse, and development in Loudoun County increases along the corridor, it is likely that traffic levels on the Greenway will continue to increase. However, TRIP II's experience will likely lead to more careful examination of the financial feasibility of future projects before the private sector agrees to provide financing. The Greenway experience also raises interesting questions about how much people are in fact willing to pay to avoid congestion; in this case, TRIP II misjudged the initial market.

Tolls

The level of tolls on the Dulles Toll Road and Dulles Greenway is controlled by the Virginia State Corporation Commission, an independent state regulatory body in Richmond. Greenway tolls are applied to debt service on the highway and then provide a regulated rate of return to private investors. Tolls from the Dulles Toll Road are added to a set aside account to be used for transit.

One aspect of tolls that has traditionally been problematic is their impact on traffic speeds. VDOT has been working to address this problem through the introduction of the Fastoll system. This electronic toll collection system can read a transponder on a vehicle's windshield, link that transponder to an account the driver has established, and bill the toll to that account. Drivers must pre-pay a minimum of \$35.00 to open an account, and may agree to have the account automatically replenished when the balance falls below \$10.00. Fastoll, available both on the Dulles Toll Road and Greenway, has proved to be so popular with motorists that VDOT has set aside one lane at the main toll plaza in each direction for Fastoll users only, greatly increasing the time savings for those users.

Table 16 lists agencies and individuals to contact for more information on HOV issues.

Table 16: HOV Contacts

Subject	Agency	Contact
HOV Violations	Virginia State Police	Rick Keevill (703) 845-6090
Local HOV Lanes and Occupancy	VDOT	Stephen Read (703) 383-2216
Fastoll	Fastoll	1-888-Fastoll (1-888-327-8655)
HOV 2-3 Policy Study	VDOT	Larry Trachy (804) 786-2814

SECTION 7

PARK AND RIDE

SECTION 7: PARK AND RIDE

Taking advantage of the park and ride lots throughout the area has become a more common commuting trend in recent years. This section provides information on over 125 park and ride lots in Northern Virginia as well as an update on some lot enhancements being considered for the future.

Park and Ride Lots

To support its network of HOV lanes and transit service, Northern Virginia has provided a growing number of park and ride lots. Specific information on park and ride lots is provided in **Tables 17, 18, 19, and 20** and has been cross checked against the many individual jurisdiction and agency lists to provide the most accurate list. Together, these lots provide nearly 45,000 spaces in the order of magnitude listed below in **Table 21**.

Type of Lot	Percentage of Spaces
Metrorail Parking in Northern Virginia	37%
VRE Station Parking	12%
Other Park and Ride Lots Located in the City of Manassas, Prince William County, Spotsylvania County, and Stafford County	31%
Other Park and Ride Lots in NVTC Jurisdiction	20%

Despite the fact that WMATA provides the greatest number of park and ride lot spaces in the area, the Metrorail lots are usually full before 10:00 A.M. each workday. While WMATA may wish to add more spaces at some lots, a lack of available land may require them to build up rather than out. In a current effort to help alleviate the parking situation, WMATA is promoting regional and customer service enhancements at several area lots. One of the projects being developed is value added parking, which would offer guaranteed parking at the stations. The WMATA Board approved the concept in July of 1997 and requested that staff discuss this project and ideas for implementation with the local jurisdictions. Staff will return the issue to the Board for a decision in the Fall of 1997.

Table 17: Metrorail Parking in Northern Virginia

Station	Location	Parking Capacity	Utilization Rate	Pedestrian Access	Bus Service
Huntington	Huntington Ave. at Fenwick Dr. Kings Highway north of Fort Dr.	3,090	87.60%	fair bike and pedestrian access	DASH, Fairfax Connector, Metrobus
Vienna	Median of I-66 at Nutley Rd.	3,572	100%	good bike and pedestrian access	Fairfax Connector, Metrobus, CUE
Dunn Loring	Median of I-66 at Gallows Rd.	1,319	100%	good bike and pedestrian access	Fairfax Connector, Metrobus
West Falls Church	Median of I-66 at Leesburg Pike	1,037	100%	fair bike and pedestrian access	Fairfax Connector, Metrobus
East Falls Church	Median of I-66 at N. Sycamore Rd.	422	100%	good bike and pedestrian access	Metrobus
Van Dorn	Eisenhower Ave. in Alexandria	361	100%	poor bike and pedestrian access	DASH, Fairfax Connector, Metrobus
Franconia/Springfield	Franconia/Springfield Pkwy. and Frontier Drive	3,856	TBD	bike and pedestrian access	Fairfax Connector, Metrobus
Total		13,657			

Note: All Metrorail park and ride lots are marked and have bike racks and bus shelters.

Table 18: Parking and Bus Service at VRE Stations

Stations	Parking Spaces	Daily Fee	Bus Service
Manassas Line:			
Broad Run/Airport	300 paved 200 gravel	free	n/a
Manassas	367	\$1/day, \$12/annual pass for residents	OmniRide, OmniLink
Manassas Park	300	\$1.25/day, \$1/monthly pass for residents, \$22/monthly pass for non-residents	n/a
Burke Centre	543	free	Metrobus Routes 17L
Rolling Road	367	free	Metrobus Routes 17L
Backlick Road	220	free	Metrobus Routes 18A, B, F; Fairfax Connector 401
Fredericksburg Line:			
Fredericksburg	310	108 free spaces for residents-only and 202 spaces for rent	Shuttle from Lee's Hill in Spotsylvania
Leeland Road	320	free	n/a
Brooke	300	free	n/a
Quantico	227	free	n/a
Rippon	300	free	OmniLink
Woodbridge	588	free	OmniLink
Lorton	200	free	n/a
TOTAL	4,595		
Shared Stations:		Other Transit Service:	
Alexandria	n/a	Metrorail Yellow/Blue Lines; DASH Rts AT2, AT5, AT6 & AT8; Metrobus Rts 28A, B, 29K, N; Amtrak; DASH Eisenhower Ave. Shuttle; Ffx.Connector Route 110	
Crystal City	n/a	Metrorail Yellow/Blue Lines; Metrobus Routes 5N, 9A, B, C, E, 10A, P11, 13, 23A, C, T; Arlington Trolley	
L'Enfant Plaza	n/a	Metrorail Yellow/Blue/Orange/Green Lines; Metrobus Routes A9, 42, 46, 48, 13A, B, C, D, 30, 32, 34, 36, 52, 70, 71, 73, 87, M2, P1, 17, V4; 6 MTA Buses	
Union Station	n/a	Metrorail Red Line; MARC; Amtrak; MTA Buses; Metrobus Routes 40, 42, 44, 46, 80, 87, 90, 91, 92, 96, D2, 4, 6, 8, M2, X2, 4, 5, 8, 9	
Franconia/Springfield	n/a	Connector Routes: 109, 110, 111, 202, 204, 301, 303, 304, 305, 311 and 401; Metrobus Routes 18R and 18S	

Table 19: Park and Ride Lots in NVTC's Jurisdiction

Jurisdiction/ Lot Name	Address	Parking Capacity	Bike Racks	Pedestrian Access	Bus Service	Bus Shelters	P&R Marked
Alexandria:							
Jones Point Park *	Off Royal St. under the Woodrow Wilson Bridge	176	no	bike and pedestrian access	Free shuttle service to Old Town	no	yes
Total		176					

Arlington:							
Ballston Public Parking Garage *	Randolph and Wilson Blvd.	500	no	pedestrian access	Metrobus	yes	yes
Four Mile Run *	Columbia Pike and Four Mile Run	24	no	bike and pedestrian access in vicinity	Metrobus	no	no
Washington-Lee *	N. Quincy & N. 15th St.	350	yes	excellent bike and pedestrian access	Metrobus	n/a	yes
Total		874					

City of Fairfax:							
Kutner Park	Jermantown Rd. North of Main St.	50	yes	bike and pedestrian access	Metrobus, Cue	no	yes
North Street *	Old Lee Highway and North St.	96	yes	bike and pedestrian access	Metrobus, Cue	no	yes
Sipan Lot	North St. and University Drive	86	yes	bike and pedestrian access	Cue	no	no
Total		232					

n/a = information not available
* Official VDOT park-and-ride lot

Table 19: Park and Ride Lots in NVTC's Jurisdiction Cont'd

Jurisdiction/ Lot Name	Address	Parking Capacity	Bike Racks	Pedestrian Access	Bus Service	Bus Shelters	P&R Marked
Fairfax County:							
Ames Department Store	6457 Edsall Rd (E. of I-395)	23	no	n/a	Metrobus, Fairfax Connector	no	no
Blackies House of Beef	6710 Commerce Street near Bowie St.	183	no	some pedestrian access	Fairfax Connector	no	yes
Bowman Towne Lot	Bowman Town Road west of Reston Parkway	60	no	good bike and pedestrian access	Fairfax Connector near by	no	yes
Canterbury Woods Park	Wakefield Chapel Road	34	no	some pedestrian access	Metrobus nearby	no	no
Cardinal Forest Plaza	Old Keene Mill and Rt. 638	80	no	yes	Metrobus, Fairfax Connector on street	no	yes
Centreville *	U.S. 29 and Stone Rd.	370	yes	some pedestrian access	Metrobus	yes	yes
Centreville Square Shopping Center *	Rt. 28 & 29	220	no	some pedestrian access	Metrobus	no	yes
Centreville United Methodist Church *	New Braddock Rd. and Rt. 28	147	no	some pedestrian access	Metrobus	yes	yes
Chi-Chi's Restaurant	7010 Old Keene Mill Rd., Rolling Valley Mall	65	no	some pedestrian access	Metrobus	no	yes
Fairlanes Bowling	13814 Lee Highway (Rt. 29 next to Centerville Plaza)	35	no	n/a	n/a	no	yes
Fair Oaks Mall	Interior Mall Rd. and Rt. 50	150	no	n/a	Metrobus	no	no
Fairfax Government Center	Government Center Pkwy and Post Forest Dr.	170	no	n/a	Fairfax Connector	no	yes
Greenbriar Park	Melville Lane, near Stringfellow Rd.	55	yes	good bike and pedestrian access	Metrobus	no	no
Hechinger	6555 Little River Turnpike, Annandale	56	no	n/a	Metrobus	no	no

n/a = information not available
 * Official VDOT park-and-ride lot

Table 19: Park and Ride Lots in NVTC's Jurisdiction Cont'd

Jurisdiction/ Lot Name	Address	Parking Capacity	Bike Racks	Pedestrian Access	Bus Service	Bus Shelters	P&R Marked
Fairfax County:							
Lorton *	Lorton Rd. and Gunston Cove Rd.	100	no	some pedestrian access	Fairfax Connector	yes	yes
Nottoway Park	Courthouse Rd. near Nutley St.	14	no	good pedestrian and bike access	n/a	no	no
Parkwood Baptist Church	8726 Braddock Road	18	no		Metrobus	no	no
Poplar Tree Park	Stringfellow Rd. near Fair Lakes Pkwy.	279	no	pedestrian and bike access	Metrobus	no	no
Reston East	Wiehle Avenue	827	yes	pedestrian and bike access	Fairfax Connector	yes	yes
Reston North *	Corner of Sunset Hills and Wiehle Ave.	320	yes	good pedestrian and bike access	Fairfax Connector	yes	yes
Reston South	Fox Mill Rd. at Lawyers and Reston Parkway	400	yes	good pedestrian and bike access	Fairfax Connector	yes	yes
Ridge Ford Drive	Shana Place and Burke Rd.	367	yes	some pedestrian access	Metrobus and VRE	no	no
Rolling Valley Mall *	Old Keene Mill Rd. East of Shiplett Blvd.	628	no	some pedestrian access	Metrobus, Fairfax Connector	yes	yes
South Run Park	Fairfax County Pkwy, & Lee Chapel Road	340	no	n/a	Metrobus	no	no
Springfield Mall	Mall parking lot on Spring Mall Rd. between Frontier Dr. and Loisdale Rd.	80	no	some pedestrian access	Fairfax Connector	no	yes
Springfield Plaza	Bland St. between Old Keene Mill Rd. & Amherst Ave.	155	no	some pedestrian access	Metrobus, Fairfax Connector	yes	yes

n/a = information not available
* Official VDOT park-and-ride lot

Table 19: Park and Ride Lots in NUTC's Jurisdiction Cont'd

Jurisdiction/ Lot Name	Address	Parking Capacity	Bike Racks	Pedestrian Access	Bus Service	Bus Shelters	P&R Marked
Fairfax County:							
Springfield United Methodist Church	7047 Old Keene Mill Rd. (entrance on Spring Rd.)	48	no	some pedestrian access	Metrobus, Fairfax Connector	yes	yes
St. Paul's Catholic Church	Rippling Pond Dr. and Fair Lakes Pkwy.	100	no	some pedestrian access	Metrobus nearby	no	yes
Sully Station	Stonecroft Blvd. near Westfields Blvd.	140	no	some pedestrian access	Metrobus	yes	yes
Wakefield Chapel Park	Queensbury Rd. and Braddock Road	50	yes	pedestrian and bike access		no	no
Worldgate	Worldgate Dr. behind Cosmetic Center	150	yes	some pedestrian access	Fairfax Connector	no	yes
Total		5664					
Fairfax County Lot Under Construction:							
Hemdon-Monroe	Sunrise Valley Dr. opposite Roark Drive	1,800			To Open in Winter of 1998		
Total		1,800					

Jurisdiction/ Lot Name	Address	Parking Capacity	Bike Racks	Pedestrian Access	Bus Service	Bus Shelters	P&R Marked
Loudoun County:							
Ashburn Farm	Summerwood Ct. & Ashburn Farm Parkway	20	no	good bike and pedestrian access	none	no	no
Ashburn Village	Grottoes Dr. & Gloucester Parkway	40	no	good bike and pedestrian access	none	no	no
Cascades Park & Ride	Palisades Parkway and Whitefield Place	55	no	some pedestrian access	none	yes	yes
Charles Town Pike	Rt. 9 and Rt. 690 (beside Hillsboro Cemetery)	10	no	n/a	none	no	no
Hamilton Baptist Church	Rt. 7 and Rt. T-710	75	no	easy bike and pedestrian access	none	no	no

n/a = information not available
 * Official VDOT park-and-ride lot

Table 19: Park and Ride Lots in NVTC's Jurisdiction Cont'd							
Jurisdiction/ Lot Name	Address	Parking Capacity	Bike Racks	Pedestrian Access	Bus Service	Bus Shelters	P&R Marked
Loudoun County:							
Holiday Drive *	Holiday Drive between Shaw Road and Rt. 28	150	no	no sidewalks, bike trail 1 mile away	none	no	yes
Holy Trinity Church	Rt. 7 and Fairview	50	no	n/a	none	no	no
Leesburg	Harrison Street Park	20	no	some pedestrian access	Loudoun Commuter Bus	no	no
Virginia Village Shopping Center	Catoctin Circle and Harrison Street	40	no	n/a	Loudoun Commuter Bus	no	no
Purcellville *	Route 7 and Hatcher St.	20	no	easy bike and pedestrian access	Loudoun Commuter Bus	no	yes
Shell Gas and Foodmart	Rt. 9 and Wilt Road	30	no	n/a	none	no	no
Sterling Park Shopping Center	Enterprise St. between Sterling Blvd. and Food Lion	45	no	some pedestrian and bike access	none	no	yes
Sterling Walmart	Route 625 and Pacific Blvd., near Rt. 28	107	no	n/a	Loudoun Commuter Bus	no	no
Total		662					
Loudoun County Lot Under Construction:							
Western Regional Park and Ride Lot	Dulles Greenway and Rt. 606	750			To Open in October of 1998		
Total		750					

n/a = information not available
 * Official VDOT park-and-ride lot

Table 20: OTHER PARK AND RIDE LOTS SERVED BY TRANSIT

Jurisdiction/Name of Lot	Address	Capacity	Served by Transit
<u>City of Manassas:</u>			
Manassas Junction Shopping Center	Liberia and Route 28	84	OmniRide, OmniLink
		84	
		Total	
<u>Prince William County:</u>			
Bethel United Methodist Church	Smoketown and Minnieville	60	OmniRide
Brittany Neighborhood Park	Exeter Dr. at Rt. 1	80	None
Cherrydale Road	Cherrydale and Dale Blvd.	20	OmniLink
Christ Chapel Church	Smoketown Rd. and Prince William Pkwy.	20	None
Church of the Brethren	Millwood Drive and Horner Rd.	29	None
Cloverdale Subdivision	Cloverdale Rd. East of Dale Blvd.	46	OmniRide
Dale Blvd.	Dale Blvd. And Ashdale Circle	15	OmniLink
Dale City Commuter Lot *	Dale Blvd. And Gemini Way	595	OmniRide, OmniLink
Dumfries Shopping Center	Route 1 and Graham Park Rd.	55	OmniRide, OmniLink
Featherstone Square	Route 1 and Featherstone	15	OmniRide, OmniLink
Good Shepherd United Meth. Church	Dale Blvd. And Birchdale	50	None
Old Bridge Festival Shopping Ctr.	Old Bridge Rd. & Cricket Lane	75	OmniRide, OmniLink
Harbor Drive Commuter Lot *	Harbor Dr. and Minnieville	200	OmniRide, OmniLink
Hechinger's Old Bridge *	Lake Ridge Rd. and Rt. 123	385	OmniRide, OmniLink
Hillendale *	Hillendale & Dale Blvd.	241	OmniRide, OmniLink
Homer Road *	Homer Rd. (Rt. 639) @ I-95	600	OmniRide
Independent Hill	Rt. 234 and Dumfries Rd.	28	None

TABLE 20: OTHER PARK AND RIDE LOTS SERVED BY TRANSIT - Continued

Jurisdiction/Name of Lot	Address	Capacity	Served by Transit
<u>Prince William County, continued:</u>			
K-Mart, Dale City	Dale Blvd. And Gideon Dr.	92	OmniRide
K-Mart, Sudley Square	Sudley Manor Dr.	200	OmniRide, OmniLink
Kirkdale Drive	Dale Blvd. and Kirkdale	41	OmniRide
Lake Ridge Commuter Lot *	Minnieville Road & Old Bridge Rd.	700	OmniRide, OmniLink
Lindendale Lot *	Northside of Dale Blvd. one block west of Lindendale Rd.	214	OmniRide, OmniLink
Manassas Mall	Route 234 and Rixlew	84	OmniRide, OmniLink
Manassas Mall/Montgomery Wards	Route 234 and Irongate Way	425	OmniRide, OmniLink
Marumco Plaza	U.S.1 & Longview Dr.	200	OmniRide, OmniLink
Montclair Commuter Lot *	Dumfries Rd (Rt. 234) South of Stockridge Dr.	110	OmniRide
North Forestdale Avenue	N. Forestdale Ave. and Dale Blvd.	15	OmniLink
NVCC Commuter Lot Oakwood Dr.	Manassas Campus, Rt. 234 Oakwood Dr. and Old Bridge Rd.	226 44	OmniRide, OmniLink OmniRide
Portsmouth *	Portsmouth Rd.	620	OmniRide
Potomac Mills	Potomac Mills Circle & Beddeford Way	569	OmniRide, OmniLink
Prince William Square SC	Smoketown Rd. & Gideon Dr.	45	OmniLink
Prince William Stadium	Stadium Lot at County Complex	245	OmniLink
Princedale @ Northton *	Princedale Dr. west of Dale Blvd.	43	OmniRide, OmniLink
Sudley Road	Route 234 and Digges Rd.	50	OmniRide

TABLE 20: OTHER PARK AND RIDE LOTS SERVED BY TRANSIT - Continued

Jurisdiction/Name of Lot	Address	Capacity	Served by Transit
Prince William County, continued:			
Sudley Town Plaza	Rt. 234 and Rt. 1566	200	OmniRide
Tackett's Mill	Minnieville and Old Bridge Rd.	176	OmniRide, OmniLink
Triangle Lot *	Rt. 619 & Rt. 1	35	OmniRide, OmniLink
I-95 & Rt. 123 Commuter Lot *	I-95 & VA 123	700	OmniRide
	Total	7548	
Spotsylvania County:			
Fredericksburg Commuter Lot	Rt. 3 & I-95 Old Salem Church	705	Private Bus Companies
Route 208 Commuter Lot	VA 208 1/4 mile off U.S. 1	302	Private Bus Companies
Route 3 Commuter Lot	Route 3 west of I-95/Old Salem Church	715	Private Bus Companies
Stafford County:			
Garrisonville	Rt. 610 & Rt. 684	775	Private Bus Companies
Falmouth Commuter Lot	Rt. 17 & I-95 (West of Falmouth)	1035	Private Bus Companies
Joint-Use Auxiliary Commuter Lot	Rt. 17 north of Falmouth Commuter Lot	58	Private Bus Companies
Stafford Commuter Lot	Rt. 630 & I-95	530	Private Bus Companies
	Total	4120	

* VDOT Official park-and-ride lot

Monthly Parking - WMATA Proposed Demonstration Program

As mentioned above, WMATA is considering offering monthly parking options. In an effort to provide customers with more convenient service and increase rail ridership, WMATA has chosen six demonstration sites to test monthly permit parking. These test sites include West Falls Church and Franconia/Springfield in Virginia; Greenbelt and Twinbrook in Maryland; and Minnesota Avenue and Anacostia in Washington, D.C.

Two types of passes will be offered initially, a guaranteed monthly permit and a first-come, first-served monthly permit. The first-come, first-serve permit would cost 20 times the daily rate and can be used on any park and ride space which is available. These permits will be more convenient for customers because no cash is required. The price is 20 times the daily rate and if the space was used 22 times per month (the average number of work days per month), a passenger who travels via Metrorail each day would save the cost of two days parking.

The guaranteed permit was designed to provide assurance to late arriving customers that they would have spaces. If a guaranteed parking customer arrives to find that all of the guaranteed spaces have been taken, he/she will be provided a space at an alternative location at no cost. The price is 25 times the daily rate, so customers would pay a slight premium for a guaranteed space.

Location	Daily Parking Charge	Total No. of Spaces	First-Come, First-Served (cost/month)	No. of Spaces for First-Come, First Served	Guar. Space (cost/month)	No. of Spots for Guar.
Virginia Lots						
Franconia/Springfield <i>CURRENT</i>	\$1	3,856	\$20	15%	N/A	0
Franconia/Springfield <i>AS OF 1/1/98</i>	\$2.25	3,856	\$45	15%	N/A	0
West Falls Church	\$2.25	1068	\$45	15%	\$56.25	58 (5%)
Maryland Lots						
Greenbelt	\$1	3,364	\$20	673+	\$25	168
Twinbrook	\$2.25	1,098	\$45	220+	\$56.25	55
District Lots						
Anacostia	\$2	808	\$40	160+	\$50	40
Minnesota Avenue	\$1	333	\$20	67+	\$25	47

WMATA will sell the permits at all WMATA sales offices and by mail. Mail payments will be accepted in the form of check or credit card and an automatic monthly credit card charge will be available. Pass booklets will also be sold for parking payment at any of the demonstration sties. They will be sold in increments of ten and redeemed at the face value printed on the ticket. Once a demonstration program has been completed, WMATA will evaluate the success of the program based on the number of permits sold being equal or greater to a percentage of the total park and ride spaces used. In addition, the program must generate sufficient income beyond current revenues to cover expenses.

Mixed-Use Parking

In November of 1996, the University of Virginia/Virginia Tech opened its new Northern Virginia center adjacent to the West Falls Church Metrorail station in Falls Church, VA. As the West Falls Church park and ride lot was consistently over-crowded by 8:30 A.M., the universities arranged, with WMATA and Fairfax County, to offer 240 spaces in their lot to Metrorail passengers. This arrangement was attractive since the peak Metrorail demand is during the day while the universities is during the evening (from 7:00-9:50 P.M.), and the close proximity of the center to Metrorail reduces the number of students requiring parking spaces.

Overall, this arrangement has been well received and Metrorail ridership at the West Falls Church station is up 7.4 percent. This increase supports the need for additional parking at Metrorail stations and should be considered an example of the innovative thinking this region should consider when available land and finances are tight.

Contacts are listed below in **Table 23**.

Table 23: Park and Ride Contacts			
Subject	Agency	Contact	Phone
WMATA Guaranteed and Permit Parking Options	WMATA	Ron Habegger	(202) 962-1504
UVA/WMATA Mixed Use Parking	Northern Virginia Center	George Feagans	(703) 536-1135
VRE Park and Ride Lots*	VRE	Corey Hill	(703) 642-3808
VDOT Park and Ride Lots	Northern Virginia VDOT	Valerie Pardo	(703) 383-2227

* VRE parking lots are the responsibility of the local jurisdiction.

SECTION 8

**PEDESTRIAN AND
BICYCLE FACILITIES**

SECTION 8: PEDESTRIAN AND BICYCLE FACILITIES

Bicycle and pedestrian facilities have too often been regarded as amenities rather than integral parts of the transportation system. Fortunately, this view is changing, as planners and the community in general realize that roadways can be designed to offer multi-modal transportation options for pedestrian, bicycle, and motor vehicle traffic.

Bicycle and pedestrian traffic has increased significantly in Northern Virginia in recent years. For example, a comparison of traffic counts on the Washington and Old Dominion trail (W&OD) in 1988 and 1996 show a 50 percent increase in bicycle traffic and a 150 percent increase in pedestrian traffic.³ Decisions regarding when and where to construct sidewalks and bicycle trails are made by local jurisdictions for the most part. However, VDOT is increasingly including these facilities in its project designs, and the Bicycle Technical Subcommittee under the TPB serves as a forum for jurisdictions to discuss and coordinate plans region-wide. Across the region, progress towards a network of trails, sidewalks, bicycle lanes, racks, and other support facilities (such as shower and locker facilities) is slowly developing.

Arlington County routinely induces bicycle accommodations such as indoor parking cages, ample outdoor visitor bike parking and on-site employee fitness centers with showers and clothing lockers. This has occurred in new buildings by accepting owner/developer proffers in exchange for permission to exceed by-right building densities in development site plans. Currently, Virginia law does not require bicyclist accommodations and prohibits localities from enacting zoning ordinances that do. The bicyclist accommodations in Arlington County's site plan conditions are a national model for localities facing this problem. Most recently, Arlington County received \$880,000 in enhancement funds to construct a bicycle/pedestrian crossing under I-395 on the Four Mile Run trail.

WMATA allows mid-day (10:00 A.M. to 2:00 P.M.) bicycle access on Metrorail to patrons with a Bike-on-Rail permit. There are four sites to apply for a Bike-on-Rail permit: WMATA offices, Rosslyn Transit Store, Ballston Transit Store, and the Crystal City Transit Store. A test (which takes about 30 minutes) is required as well as a \$15 service fee. The permit is valid for three years.

Two Transportation Control Measures (TCMs) have been adopted to encourage bicycle use.⁴ TCM 70A provides funding for the purchase and installation of bike racks over a three year period. VDOT has identified proposed locations for the first year rack installation scheduled to occur in the Winter and Spring of 1997/98. Racks will be installed on public property in the first year, with

³ MWCOG. (1996). Before and After Study on the W&OD Trail.

⁴ See section 15: Environmental Issues for more information on TCMs.

the possibility of providing racks where requested by private property owners in the future. TCM 70B will provide funds to develop informational materials on commuting by bicycle to support employer outreach efforts and encourage alternative commuting options. Another measure involving improved pedestrian access to Metrorail stations has been considered.

The city of Fairfax, in conjunction with Fairfax County, received \$63,000 in enhancement funding to finish the Accotink-Gateway connector trail that will run from Lake Accotink Park to the Northern Virginia Community College and Vienna Metrorail station. Phases one and two of the project have been completed, and the additional funding will be used to complete phase three. Also in Fairfax County, on-street bicycle lanes and sidewalks are being added in conjunction with the reconstruction of Beula Street, and the town of Clifton is constructing a bicycle and pedestrian plaza on Main Street. In Alexandria, pedestrian improvements will be made around the King Street Metrorail station, and a feasibility study is underway for a pedestrian tunnel from the King Street Metrorail station to the nearby Amtrak station.

The town of Leesburg has initiated a unique "Yellow Bike" program. To provide internal transportation and encourage bicycle use, abandoned and/or confiscated bicycles accumulated by the police department were painted bright yellow and made available at eight bike racks throughout the town for public use. The program was started with 20 bicycles in 1996, and since that time, some of the bikes have been stolen or vandalized. Remaining bicycles must be borrowed from the police station. A project evaluation is underway and it is anticipated that additional bikes will be added, as they become available, and the project will be continued. Bicycle donations are also accepted; call Doug Taylor at (703) 771-4522 for more information.

A 1996 Alexandria Drafting Company (ADC) regional bike route map for the Washington metropolitan area is available at most book stores. For more information on bicycle and pedestrian issues, contact Ann Mesner with the Northern Virginia VDOT office at (703) 383-2337, Ann Marie Barstow, MWCOG at (202) 962-3760, or Allen Muchnick with the Washington Area Bicyclist Association (WABA) (202) 872-9830.

SECTION 9

AIRPORTS

SECTION 9: AIRPORTS

Residents of the Northern Virginia area are fortunate to have two major Virginia airports easily accessible to them -- Dulles International and Washington National Airports. In 1996, over 28 million passengers traveled to or from the region through these airports. Both airports are vital to the economic development of the region, and indeed, Dulles is seen as the key to fueling anticipated growth in the Dulles/Route 28 area. Collectively, the airports generated 25,215 direct jobs in 1995 and \$904 million in direct personal income for area residents.⁵ To preserve these advantages, both the quality of the airports and the ease of access must be maintained. The \$2 billion capital improvement program includes the expansion and upgrade of parking, runways, airfields, terminal services and facilities. Both National and Dulles airports have recently undergone major capital improvements as part of the program. These improvements are much needed considering the increasing demand being placed on the airports, seen in **Figure 20**. Listed below are some elements of this effort.

Capital Improvement Program - National Airport

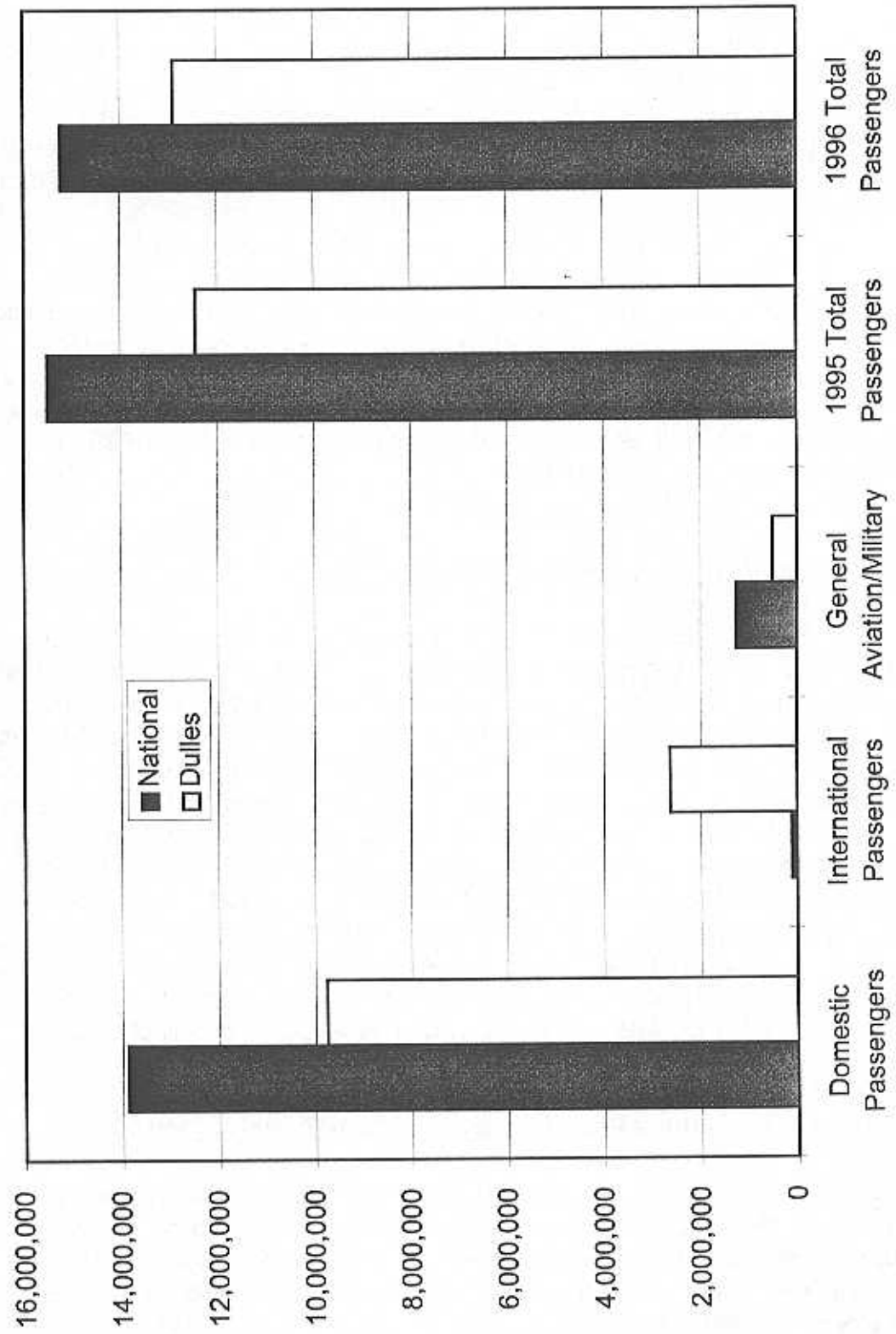
A newly constructed 1,600 foot long terminal opened for service July 27, 1997. The new terminal connects directly to the Metrorail platform. With just a seven-minute walk between the platform and the jet gates, National Airport has the fastest, most direct route from train to jet of any airport in the U.S. While for many years, the walk was long and unprotected from airport traffic and the weather, the new walkway is completely covered, except for a 50-foot stretch of the new north platform. In addition, a series of moving sidewalks and a pedestrian bridge links Metrorail to the terminal. In 1987, about 15 percent of National's daily passengers took Metrorail to the airport, but that figure had dropped to less than 10 percent during construction in 1992. To date, the new arrangement has resulted in a 50 percent increase in transit access to National Airport. Airport officials are confident that these numbers will continue to rise despite the fact that the Airport now has an additional 5,300 parking spaces, as part of the expansion project.

Capital Improvement Program - Dulles International Airport

At Dulles, the existing 600-foot terminal was expanded providing an additional 600,000 square feet of interior space. The terminal additions mirror the distinctive facade of the existing building. This new space accommodates offices, new ticket counters, additional baggage facilities, two new ground transportation centers, an extended curbside area and extra lane for passenger pick-up and

⁵ Metropolitan Washington Airports Authority, "Washington National and Washington Dulles International Airports: Economic Catalysts for the Metropolitan Washington Region, p. 1.

Figure 20: National and Dulles Airports Total Passenger Statistics



drop-off, and other passenger amenities. The entire expansion project was completed in September of 1997.

Construction is also underway on the first of three permanent midfield concourses which will eventually replace the existing facility. The 44-gate bi-level facility is being constructed in phases with the first 17-gates to be opened in the summer of 1997. The existing midfield concourse (C/D) was built as a temporary structure in the mid-1980's in response to rapid domestic air service growth. Passengers are currently transported between the midfield concourse and the main terminal by shuttles; however, plans for an underground people mover are being drafted.

Airport Shuttle Services

In addition to local taxi cab companies providing service to the airports, there are ground transportation services to the airports. In February of 1997, Supershuttle began providing door-to-door shared ride van service to and from National Airport. Service to Dulles Airport began in late August of 1997. Supershuttle was first implemented in Los Angeles and currently serves over 15 million people in 15 cities across the country. The vans carry up to eight passengers and are limited to three stops per trip to minimize delays. Fares are about half the comparable taxicab rate.

The Metropolitan Washington Airports Authority (MWAA) also operates the Washington Flyer express bus service to several area locations. Because of a duplication of effort with Supershuttle, the Washington Flyer ceased operation of service between National and Downtown in February of 1997. Fares and ridership for both the Washington Flyer and Supershuttle are shown in **Table 24** below.

Table 24: Washington Flyer and Supershuttle Fares and Ridership			
Provider	Fare	Frequency	Average Yearly Ridership (1996)
Supershuttle between Downtown and National	\$6-13 (fares are determined by zip codes)	Scheduled trips between 5:30 A.M. and 12:30 A.M.	N/A
Supershuttle between Virginia and National	\$6-21	Scheduled trips anytime between 5:30 A.M. and 12:30 A.M.	N/A
Washington Flyer Express Bus Service between Dulles and Downtown	\$16 one-way \$26 round-trip	Every 30 minutes between 5:20 A.M. and 10:20 P.M.	255,500
Washington Flyer Express Bus Service to between National and Dulles	\$16 one-way \$26 round-trip	Hourly from 6:00 A.M. to 11:00 P.M.	54,750
Washington Flyer Express Bus Service between West Falls Church Metrorail and Dulles	\$8 one-way \$14 round-trip	Every 20 minutes between 10:00 A.M. and 6:00 P.M., every 30 minutes all other times.	127,750

Rail to Dulles

In June of 1996, VDRPT completed a two-year MIS that examined transit options in the Dulles Corridor. The Policy Committee, made up of local officials, WMATA staff, and the Metropolitan Washington Airports Authority, adopted a preferred alternative calling for a ten station, metro-like rail extension. The proposed rail line would branch out from the Orange Line at West Falls Church and run through Tysons Corner before returning to the median of the Dulles Access Road. After reaching the airport, the line would continue into Loudoun County via the Dulles Greenway, terminating at Route 722. The Policy Committee also recommended that enhanced express bus service be operated in the corridor as an interim measure.

In August of 1996, the Commonwealth Transportation Board (CTB) voted to adopt the recommendations of the Policy Committee, including the expanded express bus service during the design, funding, and construction of rail facilities. The CTB authorized the director of VDRPT to develop a finance plan which would include preliminary engineering and the capital costs of construction.

In July of 1997, Virginia Governor George Allen presented a \$2 billion rail financing plan. The proposal includes federal, state, and local government financing as well as private contributions. Once a funding agreement is reached, the project could be completed within 10 years. While the Toll Road itself cannot

be expanded beyond the HOV lanes currently being constructed, the rail line would provide the capacity equivalent of several lanes. As many as 115,000 passengers are expected to use the rail line daily.

MWCOG Passenger Survey

To monitor changes in customer needs and preferences, MWCOG performs a Regional Airport Passenger Survey for the region's three airports every five years. The last survey was conducted in 1992 and while an update was planned for 1997, funding was not made available. As a result, the survey is being pushed back until the spring of 1998. The survey will include information on accessibility to the airports and modes of arrival.

Table 25: Additional Airports Studies

Project Name	Last Update	Next Scheduled Update
Regional Airport System Plan - Commercial Airports Element	1998	1999
Regional Airport System Plan - Ground Access Element	1993	2000
Regional Airport System Plan - Air Cargo Element	1997	2001
Regional Airport System Plan - General Aviation Element	1998	2003
Regional Air Passenger Survey	1992	1998
Ground Access Travel Time Study	1995	2000

** All projects are conducted as part of the Continuous Airport System Planning (CASP) Program. Additional information is available from Ken Flick, CASP Program Manager at the Metropolitan Washington Council of Governments.*

Airport Contacts

For more information on Airports, contact Ned Carey at the Metropolitan Washington Airports Authority (703) 417-8745, Peggy Dyer at the Washington Airports Task Force (703) 661-8040, or Ken Flick with MWCOG Aviation Technical Subcommittee at (202) 962-3295.

SECTION 10

TAXI SERVICES

SECTION 10: TAXI SERVICES

A persistent issue for all taxi and shuttle services has been the local reciprocity policies, which limit the ability of taxicabs to cross into jurisdictions other than the one in which they are licensed. District officials have become concerned that cabs from the surrounding counties may be picking up fares illegally, thus causing the D.C. cabs to lose business. For example, if a District cab were to carry a passenger from D.C. to Arlington, it would be illegal to pick up a fare call in Arlington. The policy is relatively hard to monitor because cabs are permitted to pick up fares in other jurisdictions if the destination is in their "home" jurisdiction. The monitoring agencies for each jurisdiction are listed in the Taxi Contact section.

A list of taxi companies, addresses, and telephone numbers by jurisdiction follows in **Table 26**. There are 615 cabs registered in Alexandria, 610 in Arlington, 437 in Fairfax County (including Falls Church and City of Fairfax), and 19 in Loudoun County.

Table 26: Taxi Service By Jurisdiction

Jurisdiction	Company and Address	Phone	Number of Vehicles	
Alexandria	Alexandria Diamond Cab, 3035 Mt. Vernon Ave.	(703) 549-1100 (703) 549-6200 (Dispatch)	146	
	Alexandria Yellow Cab, 3035 Mt. Vernon Ave.	(703) 549-2500 (703) 549-2500 (Dispatch)	198	
	VIP Cab, 3600 Jefferson Davis Hwy.	(703) 549-6900	58	
	Columbus Cab, 50 S. Pickett St, Suite 106	(703) 684-7373	45	
	King Cab, 104 S. Henry Street	(703) 549-3530	57	
	White Top Cab, 3706 Mt. Vernon Ave, #100	(703) 683-4004	111	
TOTAL			615	
Arlington	Arlington Red Top Cab, 3251 Washington Blvd.	(703) 522-3333	299	
	Arlington Yellow Top Cab, 3251 Washington Blvd.	(703) 527-2222	90	
	Arlington Blue Top, 1008 N. Randolph St.	(703) 243-8294	145	
	Crown Cab Company, 2324 N. Dinwiddie St.	(703) 528-0202	23	
	Friendly Cab Company, 3022 S. 22 St.	(703) 892-4144	20	
	Hess Cab Company, 2711 Jefferson Davis Hwy.	(703) 841-1555	33	
TOTAL			610	
Fairfax	Fairfax Red Top Cab, 11 Hillwood Ave.	(703) 934-4444	70	
	Yellow Cab Company, 11 Hillwood Ave. • Annandale Yellow Cab • Bailey's Cross Roads. Yellow Cab • Burke Yellow Cab • Fairfax Yellow Cab • Falls Church Yellow Cab • McLean Yellow Cab • Vienna Yellow Cab	(703) 534-1111 (main) (703) 941-4000 (703) 820-2626 (703) 941-4000 (703) 941-4000 (703) 534-1111 (703) 356-3151 (703) 938-7272	247 (includes all companies in bullets)	
	Springfield Yellow Cab, 7956E Twist Lane	(703) 451-2255	72	
	Herndon-Reston Cab, 7956E Twist Lane	(703) 451-7200	13	
	A. Alexandria Yellow Cab, 7956E Twist Lane	(703) 781-7040	10	
	Fairfax White Top Cab, 3706 Mt. Vernon Ave.	(703) 644-4500	25	
	TOTAL		437	
	Loudoun	Country Side Cab, 7956E Twist Lane	(703) 444-2259	2
		Airport Transportation, 22636 Glen Drive, #206	(703) 430-2000	7
		Loudoun County Yellow Cab, 11 Hillwood Drive	(703) 437-9100	5
Dulles Express Cab, 113 W. Church Road		(703) 406-3333	2	
Sterling Cab Company, 113 W. Church Road		(703) 450-0045	3	
TOTAL		19		

Table 27: Taxi Oversight Contacts

Agency	Contact	Telephone
Alexandria Oversight Office, Hack Inspector's Office	Officer Jim Oaks	(703) 838-4240
Arlington Oversight Office, Hack Inspectors Office	Detective Andy Sekellick	(703) 358-4258
Fairfax County Oversight Office, Consumer Affairs Office	Dave Reidenback	(703) 222-8435
City of Falls Church Oversight Office, Police Department	Alan Freed	(703) 241-5054
Supershuttle Van Service		1-800-258-3826
Washington Flyer		(703) 685-1400

** There is no taxi oversight agency for the City of Fairfax or Loudoun County.*

SECTION 11

**THE REGIONAL TRANSPORTATION
NETWORK--QUANTIFYING THE
BENEFITS AND COSTS OF
PUBLIC TRANSIT**

SECTION 11: THE REGIONAL TRANSPORTATION NETWORK— QUANTIFYING THE BENEFITS AND COSTS OF PUBLIC TRANSIT

Public transit systems facilitate the movement of people, relieve traffic congestion, improve air quality, reduce energy consumption and promote economic growth. Survey data indicates that public transit enjoys widespread popularity in Northern Virginia; yet, the effectiveness of public transit is often questioned. Virtually every dollar of public expenditures is undergoing scrutiny as emphasis on budget cutting and deficit reduction continues. In such an environment, it becomes even more important to identify the benefits associated with public transit services. This section summarizes current transportation conditions, and reviews the impact and performance of Northern Virginia transit systems.

Existing Conditions

Commuters in the Washington metropolitan region know that traffic congestion is an increasingly costly and aggravating problem for the area and its 4.2 million residents. In fact, a 1996 study conducted by the Texas Transportation Institute rated the Washington, D.C. metropolitan area second only to Los Angeles in roadway congestion. Delays and fuel costs attributable to traffic congestion were the highest in the nation at \$820 per person annually, for a total cost of \$2.79 billion.⁶

While congestion problems have traditionally occurred on radial "spokes" leading into the urban core, jobs continue to move out into the suburbs. In 1994, over 52 percent of all commuting trips in the Washington region were estimated to be suburb-to-suburb.⁷ Some employers cluster, creating "edge cities" such as Tysons Corner, but many are just part of the low-density development that characterizes the suburbs of this region. The residential population is also spreading outward, as families seek cheap land, a bigger home far from the city, or — in the case of many two-worker households — a location between two distant offices. These land use patterns are the most difficult to serve by traditional transit, which in the past has relied on a large number of people making similar trips.

The two or more-worker household is hard for traditional transit to accommodate for other reasons as well. The greatest of these is that these families often must squeeze errands in at the beginning and end of the work day,

⁶ Texas Transportation Institute (1996.) *Urban Mobility Study*.

⁷ National Capital Region Transportation Planning Board 1994 Household Travel Survey of the Metropolitan Washington Region (September 21, 1994).

such as dropping off clothes at the dry cleaner on the way to work, then stopping by the grocery on the way home, and bringing the kids to and from day care. In addition, at least one parent often wants to have a car available in case of an emergency during the day – when transit service might not be convenient or operating.

Thus, trips today are often longer, occur from suburb to suburb, and involve multiple stops along the way. All of these factors contribute to the region's congestion, not only on major highways, but on many of the region's arterial and local roads as well.

As part of a regional traffic monitoring effort, the Metropolitan Washington Council of Governments conducts triennial Core and Beltway Cordon Counts, in which the number of vehicles and people crossing imaginary cordon lines around the metropolitan core and the Beltway during the peak commuting periods are counted (see **Figures 21 and 22**). Results of the 1996 Core Cordon count, the most recent conducted, show that region-wide the number of vehicles going into the core decreased by three percent over the last three years while in Northern Virginia, the number of vehicles entering the core *increased* by seven percent.⁸

The Beltway Cordon Count shows that between 1992 and 1995, the number of automobiles crossing the Beltway in Northern Virginia increased by seven percent, while it decreased by one percent in Maryland. The increase in Virginia varied greatly by corridor, increasing by 43 percent in the Dulles corridor, by 9 percent in the I-66 corridor, remaining flat along I-95, and decreasing by four percent along Route One.

A look at the more distant future indicates that conditions are not likely to improve. Regional planners expect the regional population to increase by 43 percent between 1990 and 2020, and by 60 percent in Northern Virginia with the outer suburbs experiencing the greatest growth rates (see **Table 28**). The number of jobs is forecast to increase by 68 percent in Northern Virginia and by 43 percent in the region over the same 30 year period. Over the same time period, vehicle trips are predicted to increase by 64 percent, from 12.6 million to 20.6 million per day, and vehicle miles traveled daily were expected to increase by 78 percent, from 101 to 182 million vehicles miles in the region and from 29.5 to 52.5 million vehicle miles in Northern Virginia. Clearly, both the growth and the dispersions of jobs and people will add to the region's traffic, and will make the provision of effective transit services a greater challenge.

⁸National Capital Region Transportation Planning Board, 1993 Metro Core Cordon of Vehicular and Passenger Volumes. Washington, DC: May, 1994.

Figure 21

Beltway Cordon Sector and Station Locations

N

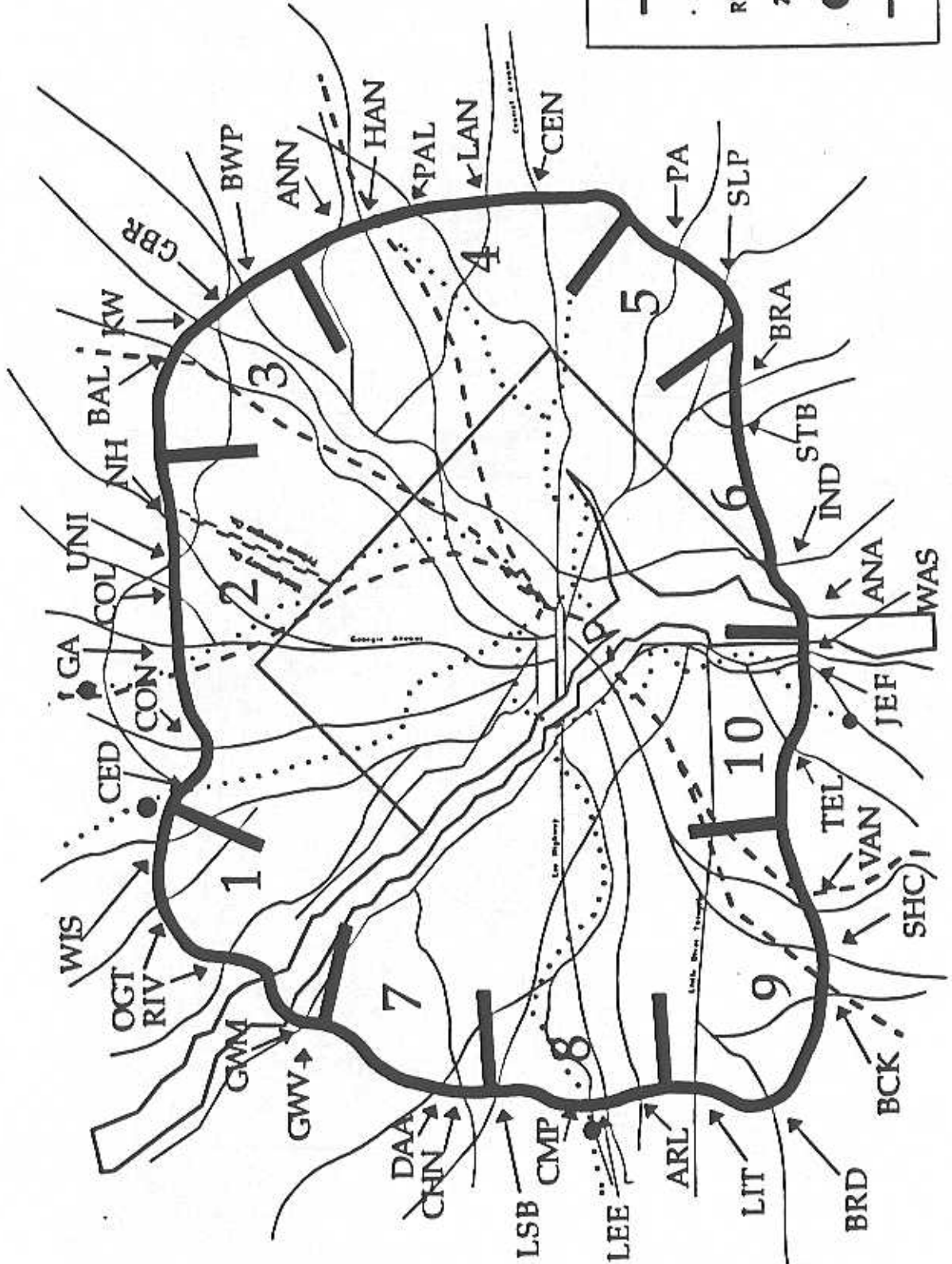


Figure 22

Metro Core Count Stations and Locations

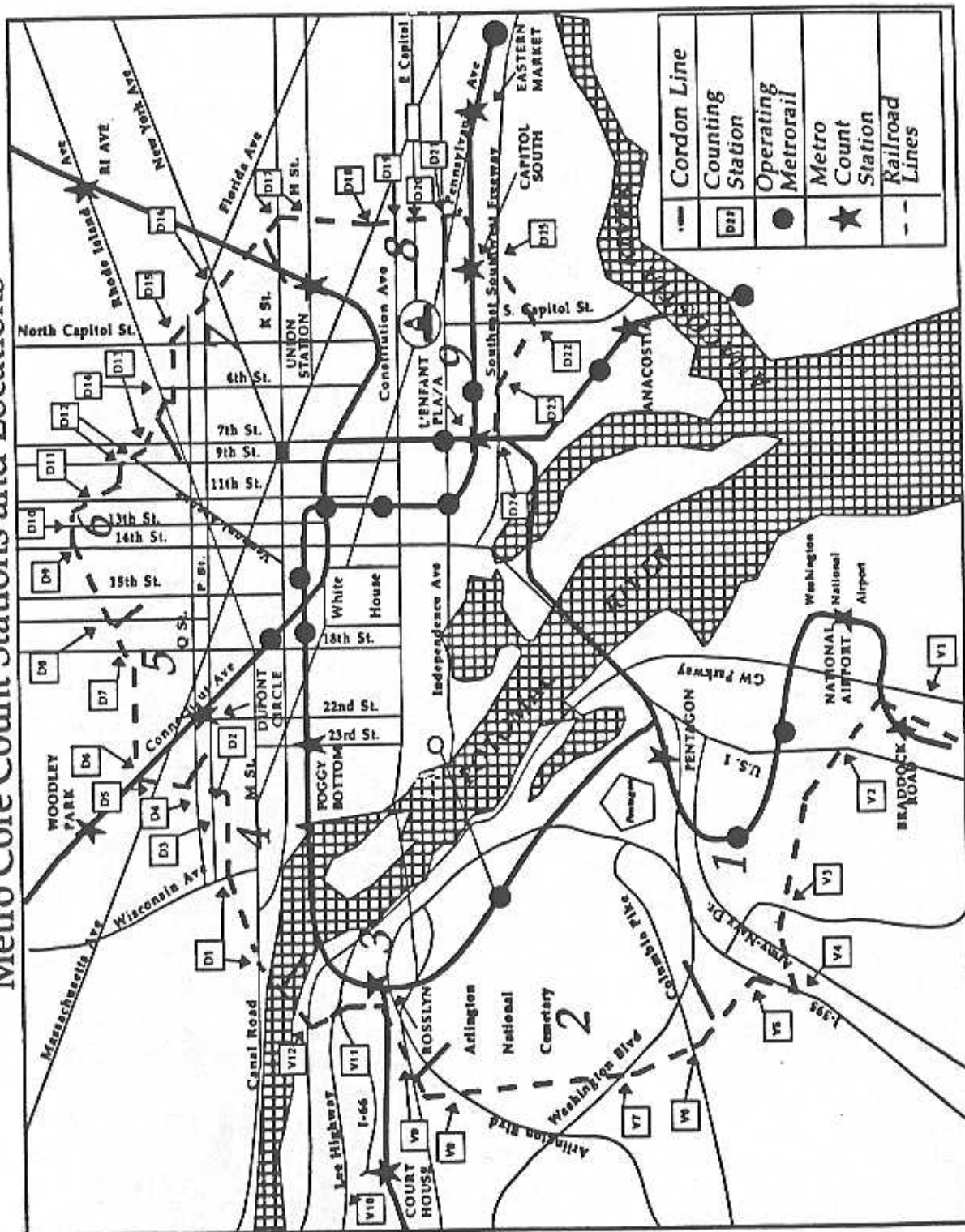


Table 28: Population and Employment Trends in Metropolitan Washington and Northern Virginia Jurisdictions

Jurisdictions	1996 Population ('000)	Forecast Change 1990-2020	1996 Jobs	Forecast Change 1990-2020
NVTC Subtotal:	1356.3		752,900	
Arlington County	185.5	21.4%	159,793	53.5%
City of Alexandria	117.3	18.7%	82,547	20.1%
Fairfax County	899.7	47.4%	428,806	66.4%
City of Fairfax	20	16.3%	15,742	16.9%
City of Falls Church	10	13.5%	12,106	4.3%
Loudoun County	123.8	232.1%	53,906	186.5%
PRTC Subtotal:	377.2		103,503	
Prince William	253.5	98.7%	67,504	145.1%
City of Manassas	33.2	44.1%	16,971	35.8%
Manassas Park	8	n/a	2,146	
Stafford County	82.5	72.5%	16,882	231.6%
Northern Virginia Subtotal	1,733.5	60.4%	959,906	68.4%
Prince George's County	773.8	32.6%	280,268	54.3%
Montgomery County	819	33.9%	384,171	52.2%
Maryland Subtotal	1,953.9	42.0%	775,502	47.9%
District of Columbia	543.2	2.9%	623,000	7.9%
Total	4,230.6	43.1%	2,358,408	42.9%

Source: MWCOG. (July, 1997). Economic Trends in Metropolitan Washington, 1992-1996, round 5.3 cooperative forecast

System Performance and Utilization

Table 29 compares operating statistics and performance measures for Northern Virginia transit providers.

There are many transportation options in the Washington metropolitan area (particularly during peak commuting periods), and a number of factors to consider when choosing a primary mode of transportation. Some of those considerations may include: access to the desired destination, travel costs, ability to drive, parking costs, travel time, level of congestion, safety, convenience, familiarity, and environmental impacts (air quality, fossil fuel dependence). Local travel options include: driving alone, driving with others, riding a bus, taking Metrorail, commuter rail (VRE), a taxi, MetroAccess, or private shuttle services. Each mode provides service that addresses the needs of different user groups to meet the overall demand for transportation.

Transportation Costs

The ongoing competition for transportation funds has inspired an equally persistent debate over the true costs of transportation and who pays them. Highway advocates argue that public transit requires subsidies while highway travel does not. Transit advocates, on the other hand, argue that highway travel is also subsidized, and in fact, benefits from transit investments.

Efforts to quantify the costs associated with transportation usually lead to debates over the types of costs that should be included and the methodologies used to calculate the various costs. For example, controversy has arisen as to whether the value of travel time should be included in cost estimates as well as the way time is valued when comparing transportation costs for different modes. Typically, travel time is calculated as a percentage of the average wage for the region. As a result, costs associated with pedestrian and bicycle trips are high because travel time is longer. While it is consistent to use one value for travel time, it has been argued that people place different values on time spent walking and biking than on time spent sitting in traffic or waiting at a bus stop because they consider the former activities to be enjoyable. Some may even argue that costs associated with travel time should not be included in the calculation at all. Similar arguments are made in reference to the methodology for calculating many other costs. While many studies have been commissioned to explore the true costs of transportation, each takes a somewhat different approach and a wide range of results has been reported.

In July, 1996 MWCOCG hired K.T. Analytics to review the costs of auto use that have been identified in other transportation cost studies. The review was not intended to quantify costs particular to the Washington area. Rather, the study

**Table 29: Northern Virginia Public Transit Systems
Operating Statistics and Performance Indicators, FY 1997**

	PRTC					Loudoun					
	Metrobus ¹	MetroRail ¹	Fairfax Connector	OmniRide	Omnalink	VRE	DASH	CUE	Arlington Trolley	Commuter Service	Transportation Assoc.
Total Annual Passenger Trips for FY 97 (Including Transfers)	16,121,513	29,975,652	4,458,103	620,223	304,564	1,751,392	2,241,739	45,000	101,470	118,047	45,000
Number of Peak Vehicles	258	724	105	46	17	62	29	8	2	8	8
Average Weekday Boardings	50,441	159,732	17,000	2,471	1,200	7,032	7,751	3,191	409	484	175
% of VA Boardings	23.3%	61.5%	6.5%	1.0%	0.5%	2.7%	3.0%	1.2%	0.2%	0.2%	0.1%
Passengers Transferring	1,947,827	5,935,179	374,000	32,600	100,023	556,407	459,818	1,070	64,983	n/a	n/a
Average Trip Length (miles)	3.83	7.4	n/a	24.71	6.12	33	10.4	≥ 3	2.2	64	3.8
On Time Performance	n/a	n/a	96.0%	98.5%	n/a	90.0%	97.3%	98.0%	n/a	n/a	n/a
Operating Costs	\$272,641,700	\$343,567,300	\$12,199,290	\$5,063,984	\$3,513,114	\$18,468,123	\$3,680,017	\$1,605,000	\$210,500	\$655,662	\$355,000
Farebox Recovery Ratio	31%	66%	22%	39%	6%	41%	45%	11%	53%	71%	6%
Passenger Miles Traveled	419,473,265	1,095,496,000	n/a	15,325,710	1,863,932	56,228,917	n/a	n/a	24,861	7,555,008	n/a
Operating cost/passenger mile	\$0.65	\$0.31	n/a	\$0.33	\$1.88	\$0.33	n/a	n/a	\$8.47	\$0.09	n/a
Vehicle Miles	33,742,569	42,275,451	3,981,239	1,795,204	756,539	4,147,302	1,049,048	478,926	39,315	258,048	171,000
Operating cost/vehicle mile	\$8.08	\$8.13	\$3.06	\$2.82	\$4.64	\$4.45	\$3.51	\$3.35	\$5.35	\$2.54	\$2.08

¹ Metrobus and MetroRail annual passenger trips are for Virginia only, all other figures are systemwide statistics

focused on defining user, public, private and external costs associated with auto use, comparing the cost estimates from previous reports, and identifying policy implications.

The review of previous cost of driving studies showed total driving costs ranging from \$0.45 to \$0.84 per vehicle mile, which puts driving costs in the Washington metropolitan area somewhere between \$14 and \$28 billion per year. Based on the combination of development patterns, congestion levels, air quality and parking characteristics in the Washington area, the report concluded that the region would probably be near the upper bounds of the range. Direct user fees (ownership, operations and maintenance costs) are estimated to cover between 52 and 76 percent of driving costs.

A comparison of transportation costs by mode has been not been done for the Washington metropolitan area to date, studies for other urban areas generally conclude that user fees do not cover the full costs for any travel mode. Society often chooses to provide public services without the expectation that users will pay the full cost of the service (e.g. public libraries). Public transit does cover a portion of operating costs directly from users (see **Table 29** above), and others benefits from transit can also be quantified. As noted above, the comparative costs of transportation can be calculated many different ways.

Public Versus Private Service Costs

Some critics of public transit also argue that private sector operation would be more cost effective. Local governments have the ability to select bus service from a variety of operators, including Metrobus. DASH, OmniRide, OmniLink, Arlington Trolley, and Fairfax Connector are all operated by private firms. Another example of private sector involvement in public transit is the VRE track lease agreement with private sector owners. Amtrak is contracted to operate the VRE trains as well as maintain the railcars and locomotives.

The issue of whether private operators provide lower cost service is not easily answered. Just as there are many ways to calculate the cost of driving, there are a number of factors that complicate the public versus private cost calculation, including the acceptance of federal capital and operating support, the value of staff time spent procuring and managing the service, and the age of the system.

While one of the major sources of funding for the system has been the federal government, all recipients of federal funds must comply with specific procedures and requirements that often raise costs. Federal labor regulations, for example, are often credited with causing significant increases in operating costs. Transit service provided without any federal contribution may be less costly to provide, but funding must be generated solely from state and local sources for which there is greater competition.

Another way that public and private transit costs might be unfairly compared is the calculation of staff time. For example, when service is contracted out, the contract is likely to include capital and operating costs, but some of the overhead costs may be borne by the contracting agency. In other words, jurisdictional or agency staff time spent planning routes and managing the contract may not get factored into the cost of the service, thereby creating a situation where transit system costs are not directly comparable.

The age of the system also affects the cost calculation. Capital costs associated with bus purchases are not always included in the contract price. In addition, employee benefit costs are much lower for newly hired employees than for employees that have been with an organization a long time. These are some examples of how private and public system costs may differ and the factors that may complicate a true cost comparison.

Transit Investment

Economic development studies have repeatedly found that effective public transit systems serve as economic engines. For example, in a study of Washington, D.C. and Atlanta:

Average office rents near stations rose with systemwide ridership; joint development projects added more than three dollars per gross square foot to annual office rents. Office vacancy rates were lower, average building densities higher, and shares of regional growth larger in station areas with joint development projects.⁹

In a study commissioned by NVTC, KPMG Peat Marwick found that the Commonwealth of Virginia's investments in Metrorail since 1977 had yielded an annual rate of return of 12.4 percent. Looking to the future, returns are forecast at 19.2 percent annually through 2010. Investment returns for the Commonwealth by 2010 will include \$2.1 billion in tax revenue (and \$1.2 billion net of contributions to Metrorail); development including 25 million additional square feet of office space, 1.8 million square feet of retail space, 4000 hotel rooms and 31,000 additional residential units; and permanent employment in Virginia of 86,000 additional office jobs, 1,500 retail jobs and 3,500 hotel jobs. The firm's earlier forecasts in 1985, using the same methods, were found to be very accurate.

In Northern Virginia alone, public transit systems provide 225,000 daily trips. Without its investment in Metrorail, the region would require seven more

⁹ Cervero, Robert. (1994). "Rail Transit and Joint Development: Land Market Impacts in Washington, D.C. and Atlanta," Journal of the American Planning Association Vol. 60, No. 1 Winter.

bridge lanes crossing the Potomac to accommodate peak period travel, as well as additional highway lanes leading to those bridge lanes and additional capacity on the District of Columbia streets. For those who wish to continue to drive alone in their automobiles during peak hours, the availability of good public transit is essential to clear some space on the roads.

Regional Significance

In planning future transportation improvements, it is often noted that the Washington D. C. area ranks second only to Los Angeles in severity of traffic congestion. Some conclude, therefore, that only roads should be built. Building new highways, however, induces additional driving that in turn clogs the highway system even more. "If we build roads, cars will come" is the message of a University of California study that verifies additional roadway capacity induces new auto travel as well as diverting cars from nearby roads.¹⁰ A combination of investment in transit, demand management and highway capacity is necessary to enable the region to grow in a manner that maintains quality of life.

As elected officials and other policy makers plan the transportation future for Northern Virginia and the Washington metropolitan area, the need for comprehensive, accurate data on existing conditions and anticipated trends becomes increasingly clear. An understanding of the dynamics that have created the current conditions, how the systems are performing and the comparative costs and benefits of different transportation modes is vital in making decisions regarding the funding of future transportation projects.

Decisions are further complicated by the interconnectedness of transportation systems. For example, the only major highway in the region where traffic conditions improved overall between 1993 and 1996 was the I-95 corridor where HOV lanes have been extended 11 miles from Springfield to Route 234.¹¹ The southern extension of HOV lanes improved travel time for both the HOV and general purpose lanes. One of the unforeseen impacts of the highway improvements was a decline in VRE and express bus ridership. The average number of daily trips on VRE declined by almost 9 percent between FY96 and FY 97 as more passengers switched to carpools or back into single occupant vehicles.

The change from HOV-3 to HOV-2 on I-66 had a similar effect on Metrorail's Orange Line ridership between Vienna and Rosslyn. Peak period ridership on the Orange Line declined by an average of four percent, and the revenue losses have been estimated at approximately \$1,000,000 per year. To mitigate this impact, state funding was provided to encourage ridership through reduced feeder bus fares.

¹⁰ Do New Highways Generate Traffic? (Fall, 1995). Access, No. 7 pp. 16-22.

¹¹ Skycomp. (Spring, 1996). Traffic Quality on the Washington Metropolitan Area Freeway System.

The examples above illustrate the potential impact that individual decisions can have on transportation patterns within individual corridors. Each component of the transportation network provides links and alternatives to other modes, so that changes in one area can have unanticipated system-wide impacts. System-specific measures of cost and performance and an understanding of the conditions that drive these measures will allow planners and decision makers to maximize the efficiency of the transportation system.

Towards this goal, NVTC has applied for and received funding to collect previously unavailable information from bus passengers using the different bus systems operating in Northern Virginia. Information about where passengers are coming from, where they are going, and how they got there will allow for more efficient system management. Origin-destination data will allow bus routes to be evaluated in terms of how well they serve customers travel demands, rather than just tracking ridership trends on existing routes.

The recently completed Cost of Driving study by TPB's consultant concluded that **corridor specific** driving cost estimates would be more useful than developing region-specific estimates. Corridor specific information would allow for comparison of transportation options, and therefore be of greater value in local planning efforts and policy decisions. For example, cost of driving estimates developed for the I-95 corridor could be used to inform efforts to mitigate congestion anticipated in conjunction with the I-95/395/495 "Mixing Bowl" project, to calibrate the VRE patronage forecasting model, and to evaluate different proposals for the HOV2-3 study (see Section 18: Regional Studies for more information on these regional studies).

Measures of transit service and performance are already used to allocate federal Urbanized Area funds nation-wide. In addition, the state is also considering using performance measures to allocate new sources of transit operating assistance that may be made available. Under the proposed system, transit systems demonstrating improved performance over time (such as lowering operating costs per passenger mile, or increasing the number of passenger miles per operating mile), would receive a greater percentage of the available operating funds. A report is due to the 1998 General Assembly by VDRPT.

Table 30 lists some studies currently underway in the region that address the need for cost and performance information in the transportation planning process.

Table 30: Regional Studies Related to Transportation Costs and Performance

Study Title	Lead Agency	Status	Contact
Core Cordon Count	MWCOG	Conducted every three years, the next Core Cordon Count will be completed in 2000	Jim Hogan (202) 962-3313
Beltway Cordon Coun	MWCOG	Conducted every three years, the next Beltway Cordon Count will be completed in	Jim Hogan (202) 962-3313
Bus Data Collection	NVTC	RFP issued, data collection to begin Spring, 1998	Heather Wallenstrom (703)524-3322
Cost of Driving Study	MWCOG	Completed Summer, 1997	Ann Marie Bairstow (202) 962-3760
Performance Measures in Transit Funding Allocation	VDRPT	Interagency coordination and review in progress, recommendation anticipated	Chip Badger (804) 786-8135

Transit service plays a vital role in providing mobility in the heavily congested Washington Metropolitan area. Regional forecasts show that the region will continue to grow, especially in suburban areas which are often the most challenging places to serve efficiently. Sustained efforts to gather accurate, consistent information will help decision makers allocate resources in the most efficient manner to promote mobility, minimize costs and congestion, and improve air quality.

SECTION 12

**TRANSIT FARE POLICIES—
EXISTING CONDITIONS AND
VISIONS FOR THE FUTURE**

SECTION 12: TRANSIT FARE POLICIES -- EXISTING CONDITIONS AND VISIONS FOR THE FUTURE

Transit fares play an important role in encouraging or discouraging ridership, and therefore, a number of factors must be considered when establishing policies. Different transit providers may target very broad or distinct markets, and as a result, establish different fare policies. For example, Metrobus operates in two states and the District of Columbia, providing service throughout the week to those who cannot drive as well as to customers in both dense urban and suburban neighborhoods outside the Beltway. CUE bus, operated by the City of Fairfax runs two circulator routes connecting the city with George Mason University and the Vienna Metrorail station. While both systems provide bus service, their range and target markets differ significantly, and it is easy to understand why Metrobus has a variable fare structure based on the type of service, and the CUE bus fare is a flat fee.

Transit providers must balance competing goals such as providing affordable, comprehensive service, and ensuring that farebox revenue covers a set portion of the operating costs. **Table 31** lists some of the options that are evaluated in establishing a fare policy. In **Tables 32** and **33**, the different fare and transfer policies currently in effect in Northern Virginia are identified and compared in **Table 34** and **35**.

Table 31: Factors Considered in Establishing Fare Structures and Policies
<p>Technology Issues:</p> <ul style="list-style-type: none"> • Fare Collection – barrier vs. proof of payment • Payment Media – cash, tokens, passes, credit, stored value • Level of Automation – magnetic stripe, Smart Cards • Media Distribution – automated, sales outlets
<p>Policy Issues:</p> <ul style="list-style-type: none"> • Regional Compatibility – isolated service vs. connecting service • Income – low, middle, high, range • Service Goals – provide mobility, mitigate congestion, improve air quality • Hours of Operation – peak period, day, evening, weekend
<p>Fare Structure Issues:</p> <ul style="list-style-type: none"> • Farebox Recovery Ratio – firm or variable • Rate Structure – flat, zone, miles • Transfers – free, fee, discount • Discounts – frequent user, group, student, senior, disabled • Competitive Pricing – with auto travel and other transit modes

Table 32: Comparisons of Public Transit Fares

Transit System	Regular Fares		Multiple Trips
	Peak Periods	Off-Peak Periods	
Metrorail:			
First 3 composite miles	\$1.10		High Value-10 percent bonus on \$20.00 or more.
Each additional composite mile over 3 up to 6	\$0.195		Rail Fast Pass-\$50.00-2 weeks unlimited travel. Period begins on day pass first used by patron.
Each composite mile over 6	\$0.165		One Day Pass-\$5.00-unlimited travel, after 9:30 a.m. on weekdays, all day Sat., Sun., and Holidays
Maximum peak period fare	\$3.25		Metrorail Short-Trip Pass-\$35.00-unlimited rail trips costing \$1.60 or less for 2 weeks. Period begins on day pass first used by patron.
First 7 composite miles		\$1.10	
Composite miles over 7 up to 10		\$1.60	Metrorail 28-day Pass-\$100.00-unlimited rail trips for 28 consecutive days. Period begins when first used by patron.
Composite miles exceeding 10		\$2.10	Bus/Rail Super Pass-\$65.00-2 weeks unlimited travel.

Table 32: Comparisons of Public Transit Fares - Continued

Transit	Peak Fares		Off-Peak Fares	
	Cash	with Rail Transfer	Cash	with Rail Transfer
Metrobus Virginia - Partial Listing				
Within one zone in Virginia	\$1.10	\$0.85	\$1.10	\$0.85
Between Virginia Zones G & 1-Arlington	\$1.10	\$0.85	\$1.10	\$0.85
Virginia Zones G & 1-Alexandria	\$1.45	\$1.20	\$1.10	\$0.85
Virginia Zones G & 2	\$1.80	\$1.55	\$1.10	\$0.85
Virginia Zones G & 3	\$2.15	\$1.90	\$1.10	\$0.85
Washington DC to Virginia Zone G	\$1.45	\$0.60	\$1.45	\$0.60
Virginia Zone G to Washington DC	\$1.45	\$1.20	\$1.45	\$1.20

MULTIPLE TRIPS - Metrobus Flash Passes - valid for two weeks:

1. Virginia Base Flash Pass - \$20.00 with no rail value. Full base fare within one zone in Virginia.
2. Virginia 2 - Zone Pass - \$27.00 with no rail value, two-zone trip within VA and base fare in MD or Washington DC during peak periods, and full fare for Metrobus trips anywhere during off peak.
3. Virginia 3 - Zone Flash Passes - \$34.00 with no rail value. Full Metrobus fare within VA, in MD or Washington DC during peak periods, and full fare for Metrobus trips anywhere during off peak.
4. Arlington County Flash Pass - \$25.00 with \$15.00 rail value. Valid for full Metrobus fare in Arlington County only. Metrorail fare value can be used anywhere.
5. MD/DC Pass - \$30.00 - good for one zone in VA during peak period and for full fare anywhere during off-peak periods.
6. Bus/Rail Super Pass - \$65.00 - unlimited trips on Metrobus/Metrorail for two weeks.
7. Senior/Disabled Pass - \$15.50 - unlimited use on Metrobus routes in MD/DC/VA for 2 week period, plus \$5 rail value.

Table 32: Comparisons of Public Transit Fares - Continued

Transit System	Regular Fares	Multiple Trips
<p>Alexandria DASH - DASH honors Metrobus tokens, Metrobus VA flash passes, Metro Superpass, MD/DC Metrobus flash pass (rush hour only), Metrobus & Connector transfers, DASH tourist token, DASH courtesy coupon, DASH "Give you a lift" coupon, & VRE ticket.</p>	<p>Base \$0.85 with \$0.25 surcharge to Pentagon Metrorail Station at all times.</p>	<p>\$28.00 Monthly Pass; \$38.00 Pentagon Metrorail Station Pass</p>
<p>Arlington Trolley</p>	<p>\$0.35 fare</p>	<p>\$11.20 40-token roll, (\$.28/trip)</p>
<p>City of Fairfax CUE</p>	<p>\$0.50 at all times. Persons with valid George Mason University I.D. ride free. Senior Citizens and school children pay \$0.25. Children under three ride free with an adult.</p>	<p>No Discount</p>
<p>Fairfax Connector</p>	<p>\$0.50 fare for local service, \$0.75 fare for express feeder service, \$1.00 for mid-day routes (306, 404), \$2.55 for routes (301, 302, 303, 304, 305) and Pentagon service (5P,N). \$0.50 for seniors/ disabled fare, \$0.35 with rail transfer.</p>	<p>No Discount</p>
<p>Loudoun County Commuter Service</p>	<p>\$5.00 one-way fare.</p>	<p>\$40.00 ticket for 10 one-way rides.</p>
<p>Loudoun Transit</p>	<p>\$1.00-\$3.00 local. \$1.00 within Leesburg. \$2.00 Demand Response Service. \$5.00 to Dulles Airport.</p>	<p>No Discount</p>
<p>PRTC OmniLink</p>	<p>\$0.75 base fare; \$0.25 base transfer, \$0.35 base fare and \$0.10 transfer for seniors and the disabled.</p>	<p>No Discount</p>
<p>PRTC OmniRide</p>	<p>\$5.00 one way cash fare to Pentagon; \$1.75 to Vienna, West Falls Church and Franconia/ Springfield Metro stations as of July 7, 1997.</p>	<p>\$35.00 - 10-ride token pack</p>
<p>Reston RIBS</p>	<p>Fare \$0.50. \$0.35 with rail transfer for seniors and the disabled.</p>	<p>No Discount</p>
<p>Tysons Shuttle</p>	<p>Fare \$0.75 at all times. No transfers given or accepted.</p>	<p>No Discount.</p>
<p>Virginia Railway Express</p>	<p>9 zone distance based fare structure, full fare single ride tickets</p>	<p>Ten-trip ticket - 15% discounted; Monthly unlimited travel - 30% discount; Additional discount between fare zones 3-9. See chart for complete fare structure.</p>

TABLE 33: Discount Fares on Northern Virginia's Public Transit Systems

TRANSIT SYSTEMS	DISCOUNTS AVAILABLE	ELDERLY AND HANDICAPED FARES
Metrorail	10% bonus on farecard purchase of \$20 and over.	Half the rush hour fare for elderly/disabled riders all day with valid ID.
Metrobus	Flashpasses, which allow for unlimited use of the bus system for a period of time, are available.	\$0.50 fare for elderly/disabled riders all day, except those that have surcharges with valid ID.
VRE	30% discount on monthly passes; 15% discount on ten-trip tickets; 30% off group sales (20+)	50% discount for elderly/disabled
Arlington Trolley	20% discount on a 40-token purchase.	N/A
Tysons Shuttle	NO DISCOUNTS	N/A
Reston Ribs	NO DISCOUNTS	N/A
City of Fairfax CUE	GMU students ride free.	\$0.25 fare for elderly/disabled and children under 18.
Alexandria DASH	Approximately 20% discount on monthly passes.	Free transfers to all DASH buses w/in four hours of first boarding.
Fairfax Connector	NO DISCOUNTS	\$0.35 discount with transfers and valid Metro elderly and disabled ID cards.
Prince William OmniLink	Feeder: Free to VRE passengers	\$0.35 base fare and \$0.10 transfer during off-peak periods on local routes (Monday through Friday).
Prince William OmniRide	30% discount on 10-token purchase.	N/A

TABLE 34: Northern Virginia Transit Transfer Policies

FROM:	TO: Metrorail	Metrobus	VRE	Arlington Trolley	Tysons Shuttle/RIBS	City of Fairfax Cue	Alexandria DASH	Fairfax Connector	PRTC OmniRide
Metrorail	FREE	25-cents discount ¹	~	~	~	From Vienna FREE	~	\$.25 discount on routes 301-306 & 404	~
Metrobus	~	10-cents	~	~	~	~	FREE	Free within zone	~
VRE	~	FREE	~	FREE	~	~	FREE	FREE	~
Arlington Trolley	~	~	FREE	~	~	~	~	~	~
Tysons Shuttle/Reston RIBS	~	\$0.75 discount	~	~	~	~	~	FREE	~
City of Fairfax Cue	~	~	~	~	~	FREE	~	~	~
Alexandria DASH	~	85-cents discount	~	~	~	~	Free (within 4 hours)	\$0.85 discount or free	~
Fairfax Connector	~	base fare discount	~	~	FREE	~	base fare	Free	~
PRTC OmniRide	~	~	~	~	~	~	~	~	FREE
OmniLink	~	~	FREE	~	~	~	~	~	~

1. Does not apply to bus routes with special reduced fares.

Table 35: Comparison of Fare Policies for Northern Virginia Transit Providers

Control Strategy	Metro	Metrobus	VRE	Arlington Trolley	Tyson's Shuttle	Reston RIBS	City of Fairfax Cue	Alexandria DASH	Fairfax Connector	Loudoun Commuter Service	PRTC OmniRide
Barrier	X	X		X	X	X	X	X	X		X
Proof of Payment			X								
Fare Media/ Payment Method											
Cash	X	X		X	X	X	X	X	X	X	X
Credit	X		X								
Debit	X		X								
Smart Card	X			X	X	X	X	X		X*	X
Tokens/Tickets	X	X		X	X	X	X			X*	X
Passes	X	X	X								
Service Periods											
Peak period only		varies by route	X	X	X				varies by route	X	X
weekday	X	varies by route				X	X	X	varies by route		
weekend	X	varies by route				Saturday	X	X	varies by route		
evening	X	varies by route					X	X	varies by route		
Ticket Sales											
On Board		X		X	X	X	X	X	X	X	X
Vending Machine	X		X								
Mail Order	X										
Sales Outlets	X	X	X	X	X	X	X	X	X		X
Fare Structure											
Flat				X	X	X	X	X	X	X	X
zone based										X	
mileage based	X	X	X							X	

* Metrobus issued

Because transit fares differ on each system, transferring passengers are usually required to purchase different fare media to reach their final destinations. The psychological effect of repeatedly paying for a trip that the patron perceives to be one integrated movement contributes to a negative perception of transit as an expensive and inconvenient travel mode. In addition, where multiple service providers operate in the same area, customers must learn the routes, schedules, fare and transfer policies for each system.

Regional policy makers recognize that current fare structures can be confusing, and efforts are underway to simplify transit fares. In Virginia, jurisdictional staff and system operators have met over the past year to discuss possible simplifications to WMATA's fare structures and the implementation of a more consistent structure across all the systems. Fare simplification has also been identified within WMATA's Regional Mobility Panel (see Section 4: Bus Services for more information) as one component of a larger effort to improve regional bus service.

As part of the fare simplification process, jurisdictional staff have been working with WMATA to develop a revenue neutral fare simplification strategy. To date, some of the policies that have been explored include a flat fare for all bus trips, and the elimination of the Virginia peak period zone fares, interstate charges for cash trips, the rail-to-bus transfer discounts, and the \$0.10 transfer fee. Routes offering "express" service would be assigned a separate, higher fare. Although the policy changes listed above would simplify the fare structure for regional bus service, the impact on revenue is not as clear. Farebox revenue would certainly be reduced if zone charges, transfer fees and rail-to-bus transfer discounts were eliminated. The issue of revenue neutrality is not as clear. Increases in ridership as a result of providing more user friendly service could offset projected revenue losses. In fact, several transit operators (Baltimore MTA, San Diego MTDB, Denver RTD, San Jose SCCTA, Sacramento RT, San Bernardino Omnitrans, and Los Angeles County Foothill Transit) have implemented innovative fare structures and increased both ridership and revenue as a result.¹² This analysis and discussion should be continued over the next year, and changes implemented as they are agreed upon by local jurisdictions and transit operators.

Metrochek

WMATA's Metrochek program provides a means for employers to give transit benefits of up to \$65 to employees without being taxed. This program makes it convenient for employers who provide parking to offer corresponding, although not equivalent, benefits to employees who use transit. While the benefits are issued in the form of Metrorail fare cards, Metrocheks may be exchanged for other transit fare media at any of the transit stores. As of August, 1997, 1,443

¹² Carter, Douglas W. (April 25, 1997). Presentation to Maryland Service Planing Symposium: Are You Considering A Fare Change? Booz, Allen and Hamilton Inc.

regional employers participate in the Metrochek program with over 55,000 employees receiving Metrochek each month. Within the organizations offering Metrochek benefits, approximately 24 percent of all employees utilize Metrocheks, with each new Metrochek program resulting in a 12-20 percent conversion rate to transit at an employment site. Although Metrochek does provide a universal fare media, the fare cards usually must be exchanged when non-WMATA transit systems are used, and therefore, greater efforts must still be made to simplify regional transit fares.

Smart Cards

Another method of integrating fare policies throughout the region is the Smart Card. The Smart Card is an electronic payment option that operates as a stored value or cash card, offering two primary advantages to transit providers: an integrated regional fare media, and reduced operating and maintenance costs associated with cash handling. There are four types of Smart Card currently available: contact, contactless, hybrid and combi-cards. Contact cards require physical contact between the card and a reader; contactless cards rely on a battery powered radio frequency to communicate with the reader; hybrid cards combine a Smart Card with a magnetic stripe; and combi-cards combine both the contact and the contactless capabilities. Smart Cards may be used in open or closed operating environments. Open systems include multiple card issuers and service providers, like credit or debit cards. In a closed system, the card is issued by a single entity and can be used only for that entity's services.

WMATA is the first transit agency within the region to pursue Smart Card technology. In 1995, WMATA launched a one year demonstration of the "GO Card," which is a product of the Cubic Automatic Revenue Collection Group (Cubic). The wallet-sized contactless cards were programmed to store fare value and used to gain access to Metrorail, Metrobus, and WMATA parking by placing the card near a "target" which automatically deducted the fare. For the demonstration phase, 19 Metrorail stations, 22 Metrobuses, and five parking lots were equipped with the card readers. At the end of the demonstration period there were over 1,700 active passenger accounts and 840 employee accounts. Passengers could only use the card for a limited number of trips because not all stations were equipped with card readers during the demonstration.

WMATA plans to re-launch the Smart Card program as SmarTrip in January, 1998 after installing Smart Card readers and debit and credit capabilities at all Metrorail stations. SmarTrip will initially operate as a closed system until an agreement can be reached with a financial institution. In the future, WMATA plans to encourage a more open system architecture, whereby the card could also be used on other transit agencies and at convenience retail stores.

Implementation of any new payment system that would include all the regional transit providers would raise issues of compatibility and coordination. Some of the issues and concerns that need to be addressed include¹³:

Institutional- which agencies will participate in the program, when will they begin participating, how will the system be organized and operated, and what legal/regulatory requirements must be addressed

Technological- what type(s) of card will be used, what are the design requirements, how will the new technology be integrated into the existing system, and how can compatibility with future technological advancements be ensured

Financial- what are the expected costs and benefits of the program to each potential participant

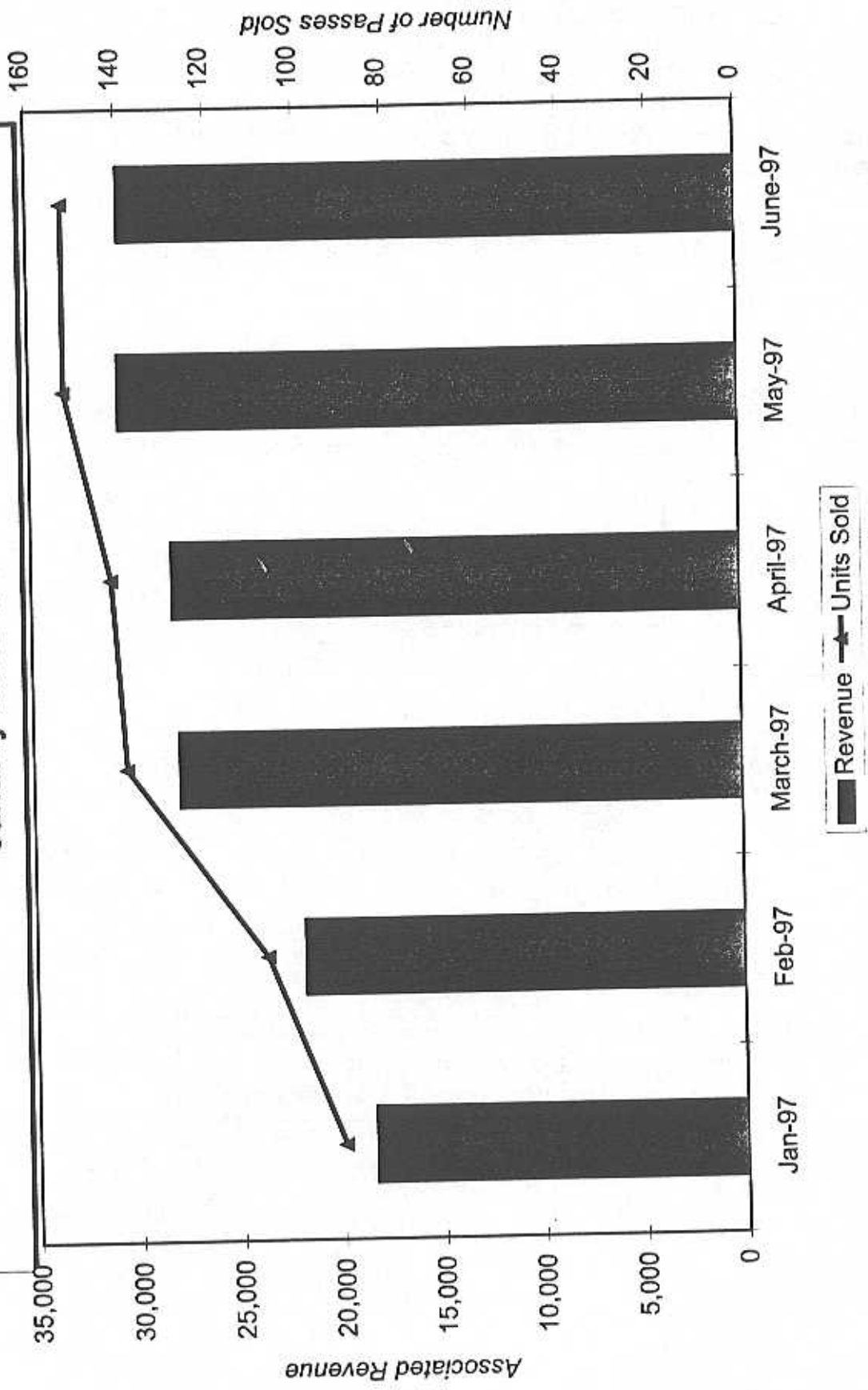
Customer-Related- to what extent will customers participate in the program, and how will their concerns be addressed (e.g. privacy)

These issues will need to be addressed as part of NVTC's project to extend WMATA's SmarTrip project to the VRE and local bus systems. Approximately \$1.6 million has been approved for the project. VRE passengers using SmarTrip would also receive a \$0.25 discount on each connection to Metrorail or a free transfer to local bus systems. This project is an important step towards a universal fare media for the region, and should be a high priority for the area's transit operators and policy makers.

As an interim measure, WMATA and VRE agreed to participate in a one year demonstration to reduce the number of tickets needed and increase the ability of a transit patron to transfer between transit operators using the same ticket. In January, 1997, VRE and Metrorail began new monthly fare medium, called the Transit Link Pass (TLC). The TLC pass is an unlimited Metrorail pass with a VRE monthly pass printed on the other side. The process was complicated by the disparate fare validation systems utilized by each operator. VRE employs a barrier-free proof-of-payment fare collection system, which relies upon random checks by conductors to verify that the proper fare has been paid. Fares vary by zones according to the approximate distance traveled. This fare policy is quite different from the controlled faregates used by Metrorail, whereby Metrorail access and egress are controlled by faregates and the price of the trip depends upon distance traveled and the time of day. **Figure 23** shows the number of TLC passes sold and the associated revenue since January, 1997 when the demonstration program was initiated.

¹³ FTA, Transit Cooperative Research Program. (December, 1996). Multipurpose Fare Media: Developments and Issues.

Figure 23: Number of VRE TLC Passes Sold and Associated Revenue, January-June 1997



A regionally acceptable fare structure and transfer coordination policy should be accomplished within the next two to three years. Over the longer term, a truly "seamless" fare structure that utilizes the latest available technology to collect fares, pay for parking, tolls and other convenience purchases should be implemented. The Smart Card may be the technology that eventually allows the region to accomplish this important objective.

Some of the agencies and groups working towards fare simplification and Smart Card deployment include:

Table 36: Agencies and Groups Working Towards Fare Simplification

Agency/Group	Status	Contact
WMATA Budget Office	Exploring fare simplification alternatives and the revenue implications	John Fularz (202) 962-1270
WMATA Budget Office	Managing the SmarTrip project, pursuing bank participation and working towards an open Smart Card system	Peter Benjamin (202) 962-1200
NVTC	Managing expansion of SmarTrip on to VRE and some Northern Virginia bus systems	Heather Wallenstrom (703) 524-3322
NVTC, <i>Management Advisory Committee</i>	Coordinating Northern Virginia jurisdictional perspectives on fare simplification	Heather Wallenstrom (703) 524-3322
VRE	Identifying issues to be resolved to facilitate the deployment of Smart Card technology	Corey Hill (703) 642-3808
CUBIC <i>Automated Revenue Collection Group</i>	Contracted by WMATA to install hardware for SmarTrip	Peter Hellerman (703) 734-8910
ITS Task Force, <i>Electronic Payment Working Group</i>	Identifying issues by agency to be resolved to facilitate the regional deployment of Smart Card technology	Heather Wallenstrom (703) 524-3322

SECTION 13

**REGIONAL MARKETING
AND OUTREACH PROGRAMS**

SECTION 13: REGIONAL MARKETING AND OUTREACH PROGRAMS

Many persons who might otherwise use transit do not do so because they do not know the service exists, or they are unsure how to take advantage of it. This lack of information provides another barrier to ridership. Transit operators throughout the area are offering incentives to encourage transit use and reduce the number of vehicle trips while increasing revenue. In order to achieve the targeted decrease in Low Occupancy Vehicles (LOVs), a high profile marketing campaign is needed.

Innovative Regional Programs

Several current regional outreach programs are described below.

Kiosk Programs

One of the primary initiatives currently planned to enhance ridesharing services is the development of information kiosks. The kiosks are designed to extend the capabilities of the employer outreach programs by making ridesharing information available in high density pedestrian areas, such as a mall. Several jurisdictions, as well as VDRPT and MWCOG are currently developing kiosk projects.

MWCOG is in the process of placing 9 touch screen kiosks in the District and Northern Virginia. The software and hardware is currently being developed and is expected to be completed in the Fall of 1997. A consultant study determined that kiosks should be located in the following locations:

Northern Virginia

Fair Oaks Mall
Pentagon
Springfield Mall
Tysons Corner
Woodbridge Wal-Mart
Mobile Kiosk*

District of Columbia

La Promenade at L'Enfant Plaza
Union Station
Mobile Kiosk*

** These mobile kiosks will be moved to different locations throughout the program as well as be available for use at events around the region, such as fairs.*

The Ballston-Rosslyn Area Transportation Association's TEIF grant sponsored kiosk project is using the same contractor as the MWCOG program and is the test pilot for the regional deployment later this year. The Commuter Kiosk at

the Ballston Common Mall was deployed in late August and another will be established at the Pentagon City Mall in the fall.

ARTS/Commuter Connections

TPB's Commuter Connections program has developed a database of information on commuting alternatives, such as car/vanpooling and transit information. As part of a recent upgrade to this software, WMATA provided access to their routing and scheduling database known as ARTS. Commuters can call an operator and provide their origins and destinations and the software will list the available transit options for the trip. The software used to run the ARTS database is scheduled to be upgraded in the Spring of 1998. More information on the ARTS database can be found in Section 14: Taking Advantage of New Technologies.

Regional Mass Marketing Campaign

An air quality analysis must be performed before the Transportation Planning Board (TPB) can approve the Constrained Long Range Plan (CLRP) and Transportation Improvement Program (TIP). The Constrained Long Range Plan (CLRP) and Transportation Improvement Program (TIP). This year, during the FY98 - 2003 CLRP and TIP process, the results of the analysis showed increases in nitrogen oxide (NO_x) emissions which had to be mitigated through the implementation of a Transportation Control Measure (TCM). The TCM recommended by the TPB Technical Committee and its Travel Management Subcommittee was a consumer based mass marketing campaign.

The campaign is designed to be a continuing marketing effort which includes a consumer advertising campaign that describes the benefits of ridesharing and transit. The goal of the campaign is to reduce mobile source air pollution created by automobiles by recruiting Low Occupancy Vehicle (LOV) travelers to ridesharing or transit modes. This consumer campaign will use radio and TV to reach such commuters. Funding is expected to begin in FY 2002, with the official launching of the program in July of 2002. The first four years of the program are expected to cost just over \$3.7 million. By 2008, the program will be continued in only a maintenance mode and the cost will stabilize at \$400,000 per year through 2020, which is the end of the plan period.

One way to measure the success of a campaign is using gross rating points (GRP) to determine the reach and frequency of the message. The higher the GRPs, the higher the frequency and reach of the message. For example, this TCM is expected to achieve 150 GRPs per week, allowing 150 opportunities to see or read the specific ad for every 100 individuals in the target group. The result is expected to be three percent penetration and 8,200 LOV commuters switching modes each year during the first four years.

Regional Guaranteed Ride Home Program

Often, transit designed to serve the regular commuter is only offered during peak periods, when demand is the highest. Thus, potential riders who foresee a possible need to return home in the middle of the day for emergencies (because of an illness, or to care for a sick child) often forego transit for the security of having a car. In an effort to alleviate this concern, the region implemented a regional Guaranteed Ride Home program in January of 1997.

The program provides participants with a free ride home in the event of a personal or family emergency, illness, or unscheduled overtime. Commuters who walk, bicycle, carpool, vanpool, or ride transit three times per week are eligible. Registered participants can receive up to four rides home per year. While advanced registration is encouraged, a one time exception is allowed under emergency circumstances for non-registered commuters. Rides must work within the Metropolitan Statistical Area (MSA) and terminate within the MSA or another approved destination. Both Fairfax County and VRE had similar programs, which were eliminated once the region-wide program began. As of July, 1997, over 3,600 commuters are registered and 285 trips have been provided. Information on the cost of the program can be found in Section 16: Environmental Impacts, **Table 44**.

Telework Centers

Another way to reduce demand for transportation during the peak commuting periods is by encouraging employees to work in or near their homes. Telecommuting involves working from home using telecommunications equipment to keep in touch with the main office. To encourage more employers to offer telecommuting as an option to employees, information packets have been developed by MWCOG and marketing efforts are underway.

Telework centers are based on the idea of telecommuting, but an alternative work location with office equipment is set up closer to areas where the employees live than the main office. GSA has eight telework centers operating in Northern Virginia. All centers are available for public use except the Manassas center which is run by Lockheed Martin and limited to federal government employees.

Web Pages

Due to the increasing need for commuters to have access to information 24 hours a day, most marketing departments and service providers have web pages available on the internet. In addition to providing schedules and route information, information on web pages is updated regularly, so the information is always

current. Timely updates are especially useful during inclement weather or other service disruptions. **Table 37** provides web page addresses for local jurisdictions and service providers.

Transit Ridership Development Initiative (TRDI) Program

The Arlington County TRDI program was developed in response to declining ridership on Metrobus routes serving Arlington County and increasing in traffic congestion and air pollution. The program is designed to use an improved information system to make the system easier to understand as well as conduct a targeted advertisement program for key routes in the area. Areas being targeted include South Arlington's Columbia Pike and Shirley Highway Corridors. In an effort to customize existing Metro system information specifically for the market in Arlington, both schedule information and local outreach will include bilingual components. These efforts are designed to target both geographic and demographic markets that currently have access to the Metrobus service corridors in the Arlington area.

Commuter Stores

In April of 1997, the three transit stores located in Ballston, Crystal City, and Rosslyn joined together to become *The Commuter Store*. The stores have proven to be an increasingly successful support service for transit riders, providing fare media and schedule information for Metro, VRE, MARC (Maryland commuter rail), OmniRide, the Arlington Trolley, DASH, Prince George's County's The BUS, CUE, the Fairfax Connector, the Maryland MTA bus system, RIBS, and the Tysons Shuttle. This year the transit stores began selling the joint TLC pass between MARC, VRE, and Metro. Metrocheks are accepted as payment, providing a convenient outlet for commuters to exchange these for fare media for the system of their choice. Store staff also provide rideshare matching services and WMATA has authorized the stores to accept bike-on-rail permit applications and administer the exams, as well as process MetroAccess ID cards.

In August of 1997, the Commuter Store began offering Washington-area commuters access to local transit fares via the Internet. Fares are purchased by credit-card through a secure, on-line transaction. Metro, VRE, MARC, local transit and commuter bus tickets, tokens, and passes are all available via The Commuter Page internet site at www.co.arlington.va.us/commute/.

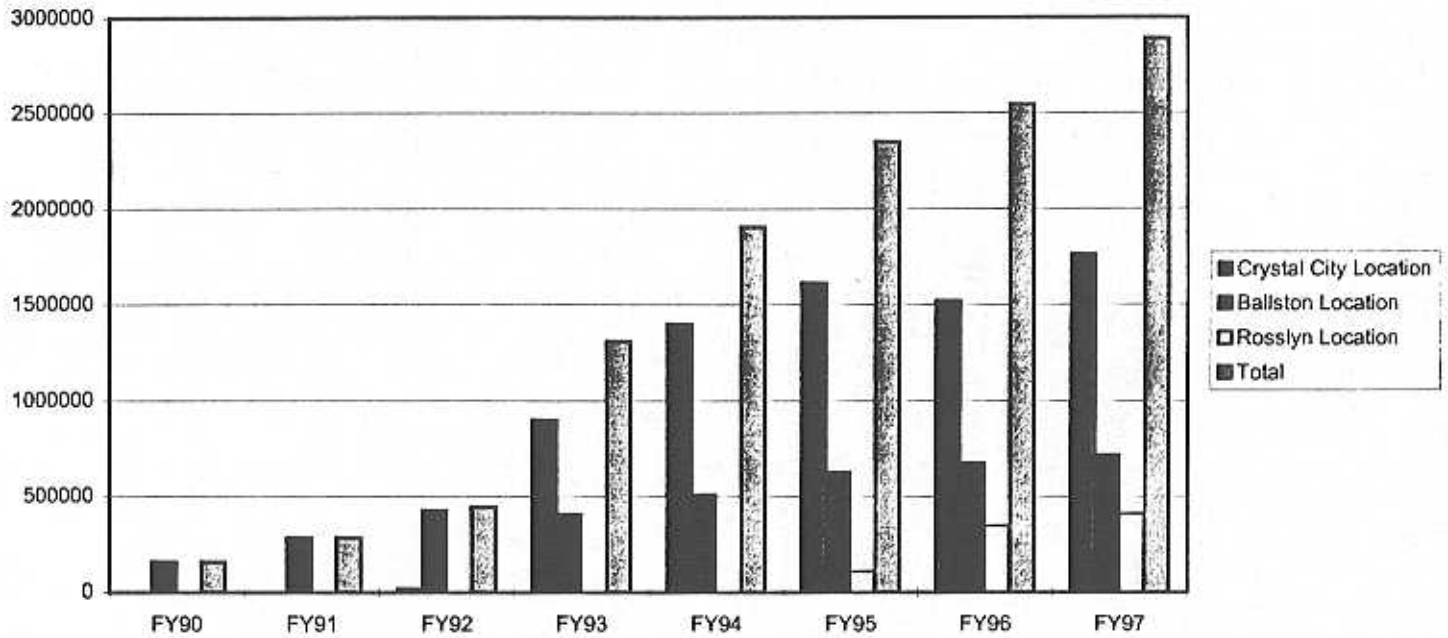
During FY97 Arlington's three stores served 156,196 customers, or 20 percent more than the 129,370 served in FY96. Crystal City served 76,282 customers, Ballston, 46,101 and Rosslyn 33,813. \$2,891,490 in fare media was sold at the three stores during FY97, or an increase of 13 percent over last year's figure. Charts showing sales and customers served since the stores openings are provided in **Figure 24**.

Table 37. Organizations Involved in Transportation Related Marketing Initiatives

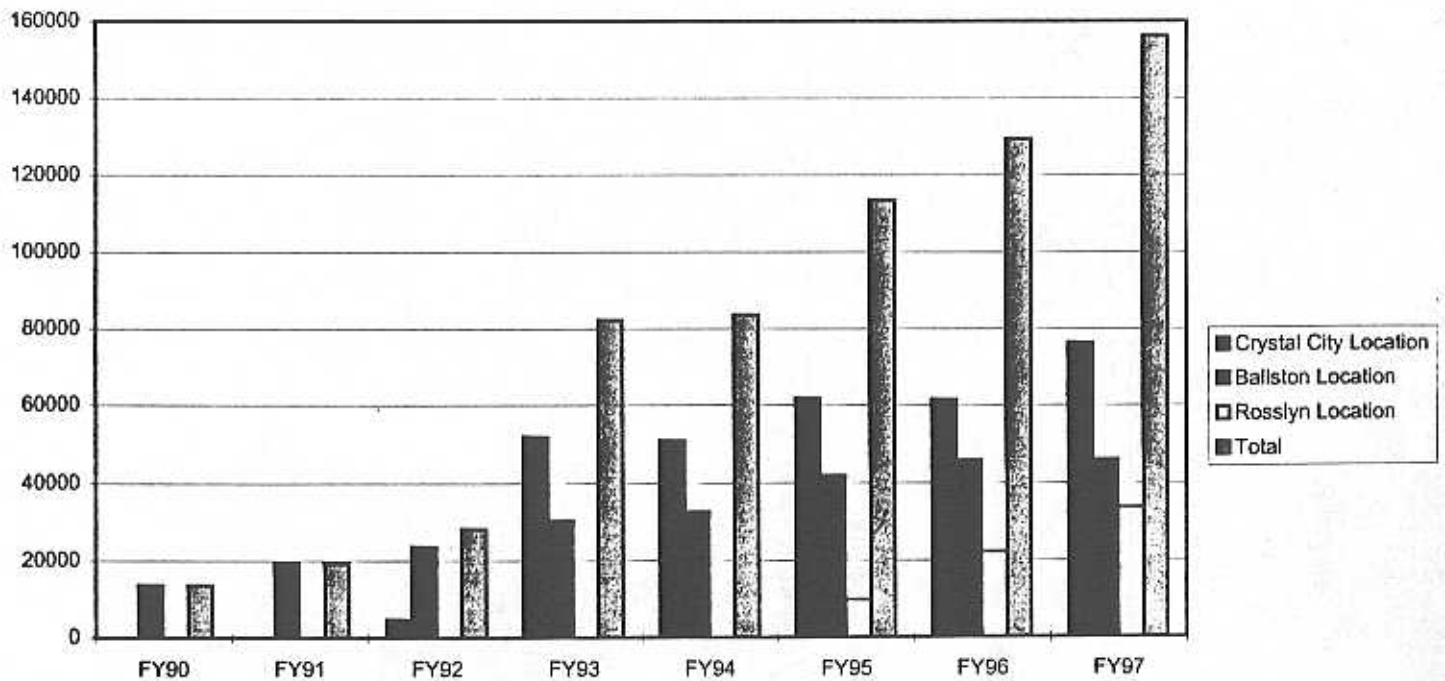
JURISDICTION	FY 97 MARKETING BUDGET	FY 98 MARKETING BUDGET	Web Page Address	CONTACT
City of Alexandria and DASH	\$10,000 (Alexandria) and \$7,000 (DASH)	\$10,000 (Alexandria) and \$7,000 (DASH)	In the process of developing.	Betsy Massie, Alexandria (703) 838-3800 Mary Jane Dye, DASH (703) 370-3274
Arlington County Commuter Assistance Program	\$40,000 for commuter stores and TMAs, and \$155,250 for TRDI	\$75,000 for commuter stores and TMAs, and \$101,000 TRDI	The Commuter Page at: www.co.arlington.va.us/commute	Chris Hamilton (703) 358-3725
DATA - Dulles Corridor	Minimal (majority of annual operating budget of \$120,000 is used for staff salaries)	Minimal (majority of annual operating budget of \$150,000 is used for staff salaries)	DATA and TYTRAN to join the LINK web page. Est. completion in early 1998.	Susan Davis (703) 871-1307
Fairfax County	\$13,000	\$33,500	planning future development	Dottie Cousineau (703) 324-1109
LINK/ Reston TMA	\$35,000	\$35,000	www.linkinfo.org	Karl Ingebritsen (703) 435-LINK
Loudoun County	\$16,899	\$19,219	Plan to add bus schedule info to Loudoun Co. page	Tara Shelton (703) 771-5665
Metropolitan Washington Council of Governments	\$210,000	\$578,000	www.mwcog.org	Nick Ramfos (202) 962-3200
Potomac and Rappahannock Transportation Commission (PRTC)	\$340,000	\$250,000	www.omniride.com	Beverly Le Masters (703) 490-4811
TYTRAN	\$15,000	\$10,000	TYTRAN and DATA to join the LINK web page. Est. completion in early 1998.	Kathleen Jackson (703) 799-5394
Virginia Railway Express (VRE)	\$430,000	\$355,000	www.vre.org	Ann King (703) 642-3808
Washington Metropolitan Area Transit Authority (WMATA)	\$500,000	\$1,000,000	www.wmata.com	Ralph Frisbee (202) 962-2766

Figure 24: The Commuter Store Service History

Customers Served



Fare Media Sales



As part of a grant received by the City of Alexandria, a transit store is being planned for the Landmark Mall. This location was decided upon with information from a local phone survey. A Request for Proposal (RFP) will be issued in the Fall of 1997.

Transportation Management Associations

Transportation Management Associations (TMA's) are a relatively new institutional mechanism that can be used to coordinate the needs of activity centers with ridesharing and transit services. These associations have been critical to the opening of the three Commuter Stores in Arlington, and often work closely with both local government agencies and private businesses to ensure that the transportation needs of employees in their areas are met. Some TMA's have also enhanced regional communication through sponsoring conferences on topics of interest to the area and have encouraged new transit services, ridesharing, and highway improvements.

TMA's usually have full- or part-time executive directors or managers who serve at the pleasure of a Board of Directors. This Board generally consists primarily of private business people, with some representation from local governments. Member dues and occasionally grant funds are used to fund the employee outreach programs, surveys, ridematching, and marketing efforts of the TMA's.

Local TMA's include:

1. **Dulles Area Transportation Association (DATA)** is a membership organization serving the 150 square miles around Dulles Airport. Membership of DATA includes employers, public officials, and property owners. This year DATA held six transportation fairs.
2. **LINK** is an organization serving the Reston area. Annual events include participation in Rideshare Week, Try Transit Week, and a recognition event to honor exemplary commuters. LINK also provides a newsletter and maintains a web site.
3. **TYTRAN** is a membership organization serving Tysons Corner made up of 50 large employers in the area. The membership is targeted for commuter benefit programs and advocates telecommuting and flextime. In addition to operating vanpool and carpool promotions, they also hold transportation fairs at employer sites. TYTRAN also

operates a Guaranteed Ride Home program, produces "CommuterNews," and maintains a web site.

4. **Ballston-Rosslyn Area Transportation Association (BATA)** was established in 1990 and provides free commuter services for employers operating businesses in or relocating to Arlington County. BATA is a member of MWCOG's Commuter Connections Employers Services program.
5. **Jefferson Davis Corridor Transportation Management Association (JDC TMA)** was established in 1995 and provides free commuter services for employers. JDC TMA is also a member of MWCOG's Commuter Connections Employers Services program.

Marketing budgets and contact information for each TMA is shown in **Table**

37.

SECTION 14

**TAKING ADVANTAGE OF
NEW TECHNOLOGIES**

SECTION 14: TAKING ADVANTAGE OF NEW TECHNOLOGIES

Intelligent Transportation Systems (ITS)

Throughout the nation, new technologies that provide information to travelers and transportation agencies are being used to help alleviate congestion and improve highway and transit safety. These new technologies are often referred to as Intelligent Transportation Systems, or ITS, which is essentially a blanket category including any use of advanced technology to address transportation needs. Some projects identify opportunities for future ITS implementation, while others involve infrastructure deployment. The most recent ITS project to be launched in the Washington area is the SmarTraveler information network which began providing real time travel information via the internet and telephone in July, 1997. **Table 38** below list the ITS projects in various stages of planning or implementation in the region and information as to the current status of each project. This section will focus on transit related ITS projects.

VDOT has completed an early deployment study to identify a strategy for integrating new technologies with existing and planned systems and enhancing coordination between the various jurisdictions and transportation agencies. The District of Columbia and the State of Maryland are conducting similar studies, all of which will be used to guide regional ITS deployment efforts. Based on the study results, VDOT developed a *Smart Travel Business Plan for 1997-2006*, which "will be used to identify, provide justification for, and support projects that meet the vision and goals for ITS in Virginia."¹⁴

At the regional level, TPB approved the formation of an ITS Task Force in January, 1997. The Task Force was created to coordinate and facilitate the deployment of technology for transportation purposes throughout the region. Since its inception, the Task Force has identified goals and proposed that a number of working groups be established to focus on some areas in more detail. The recommendations are listed in **Table 39**.

New Technologies Currently in Use

SmarTraveler

Maryland, Virginia, and the District of Columbia entered into a public-private partnership with Battelle and its subcontractors to collect traffic and transit data from public agencies, combine it with additional information from private sources, and make travel information available to the public. Partners In

¹⁴ Virginia Department of Transportation. (1997). *Smart Travel Business Plan, 1997-2006*.

Table 38: Status of Current ITS Projects

	Location			Lead Agency	Location
	Regional	Sub-Reg.	Local		
Freeway and Incident Management					
O Aerial Video Surveillance Phase I			X	VDOT	FX Co
O Aerial Video Surveillance Phase II			X	MdSHA	MG Co
O Chesapeake Highway Advisories Routing Traffic		X		MdSHA	MD
O MdSHA Traffic Operations Center		X		MdSHA	MD
O NOVA Traffic Operations Center		X		VDOT	FX/PW Co
O VDOT ATMS		X		VDOT	NOVA
O Montgomery County Traffic Operations Center			X	MG Co	MG Co
O Montgomery County ATMS			X	MG Co	MG Co
R/P Automated Vehicle Location for VDOT and Police Fleets		X		VDOT	NOVA
R/P Regional Traffic Operations Center Information Exchange	X			VDOT	NOVA/MD
R/P Automated Vehicle Location on Maryland DOT & WMATA Fleets		X		MdSHA	MD
R/P Truck Rollover Projects			X	MdSHA	MD
R/P Capitol Beltway Ramp Metering/Maryland			X	MdSHA	MD
R/P Fastoll Traffic Management		X		VDOT	NOVA
R/P Road Weather Sensors in D.C.			X	DCDPW	DC
Traffic Signal Systems					
U Arlington County "Scoot" System			X	Arl. Co	Arl. Co
U NOVA Traffic Signal System		X		VDOT	NOVA
U Fairfax City Traffic Signal System			X	city of FX	city of FX
U D.C. Signal System Upgrade			X	DCDPW	DC
Traveler Information					
U Metropolitan Washington Traveler Information Services	X			FHWA, VDOT	Metro Area
U Fairfax City AVL/GPS Program			X	city of FX	city of FX
U MWCOG Regional Kiosk Project			X	MWCOG	Metro Area
U Arlington County Kiosk Project	X			Arl. Co, DPW	Arl. Co.
U VRE TRIP		X		VRE	NOVA ¹
U WMATA Kiosk Demonstration Program	X			WMATA	Metro Area
U Fairfax County Kiosk Program			X	FX Co	FX Co
R/P Redskins Stadium			X	MdSHA	Stadium
Electronic Payment Systems					
O Fastoll ETC		X		VDOT	FX/LDN Co
R/P Metropolitan Washington Airports Authority AVI Study			X	MWAA	NOVA Airports
U WMATA Go-Card	X			WMATA	NOVA ¹
R/P NVTC Smart Card	X			NVTC	Metro Area
R/P Woodrow Wilson Bridge ETC			X	VDOT	WWB
Advanced Public Transportation Systems					
U PRTC OmniLink		X		PRTC	PW/MSS/MPK
O Montgomery County Ride-On			X	MG Co	MG Co
R/P Dynamic Signing for Transit and Park and Ride/MD			X	MG Co	MG Co
Commercial Vehicle Operations					
U CVISN	X			FHWA	MD/VA
R/P Motor Carrier Information Services	X			FHWA	Region
Communications Infrastructure					
U Baltimore & Washington Surveillance Infrastructure		X		FHWA	MD
R/P Maryland Telecommunications Requirements		X		MdSHA	MD
R/P Virginia Wireless Resource Sharing		X		VDOT	VA
Planning					
R/P MWCOG Transportation Planning	X			MWCOG	Metro Area
R/P Northern Virginia EDP		X		VDOT	NOVA
R/P I-95 Corridor Coalition	X			FHWA	Metro Area
R/P Washington, D.C. EDP			X	DCDPW	DC
R/P Umbrella Study	X			VDOT	Metro Area
U Montgomery County ATMS Data			X	MG Co	MG Co

Status: O = Operational, U = under development, R/P = Research and Planning

¹ Northern VA except Loudoun

RECOMMENDATIONS FOR METROPOLITAN ITS PLANNING, FROM THE WASHINGTON REGION ITS TASK FORCE
July 25, 1997

	ISSUE	BACKGROUND	RECOMMENDATION
1	Near-term future actions and agenda items for the Washington Region ITS Task Force	Following on from the April 25, 1997 <i>National Capital Region Umbrella ITS Early Deployment Study</i> , priority focus areas and agenda items are needed for the ITS Task Force.	The ITS Planning Work Group met on June 19, 1997, and made recommendations contained in this table. These recommendations were expanded and approved by the full ITS Task Force on July 25, 1997.
2	Develop an ITS element of the National Capital Region (financially) Constrained Long Range Transportation Plan (CLRP)	No document currently addresses the future of ITS for the region as a whole, with the exception of the Umbrella Study. The CLRP is the best vehicle to get ITS into the regional planning process. Entries into the CLRP could be of either a policy nature, and/or a project-specific nature.	COG/TPB staff will produce the CLRP element, with the advice of the ITS Task Force and other committees and subcommittees as necessary. No working group of the ITS Task Force is needed; will be an agenda item of the full Task Force on the occasions when needed.
3	Providing ITS assumptions for Major Investment Studies (MISs)	So far, MISs have not taken into account that, even if there are no changes to the transportation infrastructure itself, there will be changes of private vehicle and related technologies, and these will change the operating characteristics of today's transportation facilities.	A group of ITS experts could conduct one or more workshops for those undertaking MISs, to educate them and forge consensus on appropriate ITS assumptions for MISs.
4	Electronic payment planning and coordination	Electronic technology can ease, simplify, and unify payment for transportation services, including transit, tolls, and parking. There is a strong need for interagency collaboration and coordination.	Form an electronic payment work group.
5	A regional ITS database of transit, tourist, and/or parking information	Two needed databases are to maintain an inventory and status of ITS plans and projects in the region. Second is the sharing of ITS-generated data, particularly systems usage and condition data.	Form a ITS regional database work group.
6	Interagency coordination of traffic operations and management	Facilitate and improve communications among those who have responsibilities for the operations of roadway systems.	Form a traffic operations group.
7	Education and dissemination of ITS information to the region	Inform and educate elected officials, other officials, and the public on the importance, benefits, and possible uses of technology in transportation.	Support members of the ITS Task Force with speaking materials and visual aids.
8	Provide input and coordination to the Washington Metropolitan Traveler Information Service (WMTIS)/Partners In Motion	Keep tabs on and advise one of the most significant ITS projects in the region.	Keep as an agenda item on the ITS Task Force as needed.
9	Inform and coordinate with the TPB and its subcommittees	There are important points of coordination between the ITS Task Force and the TPB, the TPB Technical Committee, the Travel Management Subcommittee, and the Commuter Connections Subcommittee.	Staff or Task Force/committee members can attend or give briefings to other groups
10	Collection, archiving, and dissemination of ITS-detected data for general transportation planning purposes	Ensure that data for planning purposes can be obtained from ITS installations.	Form a planning data retrieval work group.
11	Planning and coordination for traffic signal pre-emption or priority for transit vehicles	Explore opportunities for the coordination of traffic signals and transit vehicle movement.	Form a traffic signal/transit vehicle coordination work group.

Motion (consortium of public agencies and private contractors) launched SmarTraveler which provides real time travel information to the public via phone and internet after a six month process which involved gathering information from regional transportation systems. During the remainder of 1997, additional service capabilities will be added and information will be disseminated to participating agencies.

The total budget for the three year start up of the Washington Metropolitan Traveler Information Service (WMTIS) project is estimated to be \$12.4 million. In FY96, \$4 million was earmarked for ITS improvements on the Capital Beltway, and an additional \$4 million was earmarked in FY97. The remaining funding was provided by Battelle in cash and in-kind contributions. While federal funding is being used for the start-up phase, the contractors expect profits after year three to cover future operational costs and provide a return on the initial private sector investment.

ARTS

In the 1980's, WMATA initiated a regional database of schedule and route information now referred to as ARTS. Over the years, information on other transit systems has been added, additional needs have been identified, as a result WMATA has budgeted \$150,000 in its fiscal year 1998 Capital Improvement Program (CIP) for an upgrade of the existing ARTS system.

The two primary changes that have been identified include expansion of the ARTS system and making the system compatible with Windows software. Currently, transit providers such as VRE and PRTC OmniRide are not incorporated into the database because they operate partially outside WMATA's service area. The planned upgrade will include these regional providers as well as providing Windows compatibility. Work is scheduled to be completed in the spring of 1998.

VRE TRIP

VRE is in the process of installing Global Positioning System (GPS) equipment on all trains that will communicate with station audio and visual systems to disseminate information to passengers on the platform and via an automated telephone response system. Additional capabilities include customized paging and faxing for customers who ask to be contacted if their train is delayed, and a dynamic system map for the web page that will use train icons to represent the schedule adherence of VRE trains. The projects, referred to as TRIP (Train Information Provider) and Express Link are scheduled to be operational in May, 1998. The dynamic system map will also be made available via SmarTraveler so that passengers can check on the status of their train before leaving the home or office.

PRTC OmniLink

In 1995, PRTC initiated a flex-route bus service designed to combine transit and paratransit services in Prince William County. To maximize the responsiveness of the flex-route service, a Global Positioning System has been installed to track the exact location of each bus. Using satellite signals (GPS) to track bus locations, requests for pick-up can be handled more efficiently when dispatchers can keep track of where each bus is and how well it is keeping schedule. Because this system is a demonstration of one of the most promising new technologies in the transportation field, PRTC has been able to leverage federal, state, and private funds in order to buy the buses and the computer system as well as cover initial operating expenses.

Electronic Payment

Two contactless electronic payment systems were also recently introduced into the region. Along the Dulles Toll Road and Greenway, the *Fastoll* system (described in Section 6: HOV and Toll Roads) uses a transponder installed in the vehicle to collect tolls. A dedicated *Fastoll* only lane has been opened at the main toll gate to allow *Fastoll* participants the benefit of a more speedy entry and exit by avoiding the cash payment lines.

WMATA's Smart Card demonstration project allowed Metrorail and some Metrobus patrons to pay fares and parking fees with an electronic stored value card. The District of Columbia is exploring opportunities to implement an electronic payment process for parking meters. Opportunities to use electronic fare payment devices should be expanded throughout the region. Over the longer term, the payment mechanisms should be integrated so that one payment device can be used to pay all transportation fees. For example, one payment mechanism would allow travelers to drive up to New York without stopping to pay a toll, or allow transit users to take Metrorail to Union Station, Amtrak to New York, and transfer to the subway with one card. See Section 12 on Transit Fare Policies for more information on electronic payment.

On the Horizon

At the request of Representative Frank Wolf, the ITS Task Force drafted a report identifying projects that could be initiated over a short period of time to make the Washington Metropolitan area an ITS showcase region. Cost estimates and sketch plans were developed for five primary program areas, including:

1. Simplified payment methods for transportation services;
2. Improved traffic safety on the Beltway;

3. Improved Beltway operating conditions;
4. Accurate, timely transportation information; and
5. Improved information dissemination and cost-effectiveness of emergency response efforts.

Additional funding for ITS projects may be allocated in fiscal 1998 through the federal appropriations process. If additional funds are allocated to the region, the state DOTs will then make decisions as to how the ITS funds should be spent.

Other transit related ITS projects on the horizon include signal preemption for buses, and providing real-time information at bus stops. Signal preemption is being evaluated primarily for routes in the District of Columbia, and would require the buses to install GPS technology. Bus systems that have or plan to add GPS equipment (CUE, PRTC OmniLink and Montgomery County Ride On) are exploring opportunities to provide real time bus stop information. The GPS equipment allows electronic tracking of the bus location, so an estimated arrival time could be displayed at bus stops.

The potential for ITS technologies to both decrease vehicular congestion and enhance public transit service should continue to be explored. Those parties developing systems and conducting research should cooperate to ensure that disparate systems are compatible and will ultimately be able to be used by travelers on all modes. Transit operators should actively pursue funding for and participate in ITS deployment projects in order to ensure that transit patrons benefit from new technologies.

Contacts

For more information on ITS initiatives in the Washington Metropolitan area, contact Andrew Meese, MWCOG, (202) 962-3789, or Pamela Marston, FHWA Region 3, (410) 962-0777, x 3054.

SECTION 15

PLANNING

SECTION 15: PLANNING

Current Federal Legislation

Since 1990, three pieces of federal legislation have worked to reshape the context in which transportation decisions are made.

1. **Clean Air Act Amendments of 1990 (CAAA).** The CAAA established federal air quality standards and deadlines to meet them. The Environmental Protection Agency (EPA) measures air pollution levels across the country, and counties found to be in non-attainment of the federal standards are rated on a scale from extreme to marginal for a number of pollutants. The CAAA also specifies that in order to receive federal transportation funds, a region's Constrained Long Range Plan (CLRP) and Transportation Improvement Program (TIP) must conform with the region's air quality program.
2. **Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).** ISTEA established federal transportation funding programs and emphasizes increasing funding flexibility among modes, so that states and metropolitan areas can choose to construct and enhance those modes of transportation that best meet their particular needs. The Act outlines criteria that must be considered when states and metropolitan areas plan their transportation systems, and requires that these entities establish management systems in order to track the condition of infrastructure such as pavement, bridges, and transit systems, and to monitor conditions such as congestion.
3. **Americans with Disabilities Act of 1991 (ADA).** This act, along with rules promulgated during 1991 by the U.S. Justice Department, Architectural and Transportation Barriers Compliance Board, U.S. DOT, and others, generally requires that accessibility to public spaces and services be guaranteed. In the field of public transit such rules require changes ranging from lift-equipped buses and directional signs in Braille to complete paratransit services, which must be provided by all public transit systems except commuter railroads.

Together, ISTEA and the CAAA require improved long-term planning on the part of Metropolitan Planning Organizations such as the Transportation Planning Board. In October of 1993, the U.S. Department of Transportation issued regulations that attempt to clarify the nature and extent of these requirements. The most central of these is that each region must prepare a long-range transportation plan which must include the elements listed below.

Long-Range Plan Requirements:

1. Must include a financial plan which shows an implementation plan with revenues "reasonably expected to be available."
2. Must include consideration of the "likely effect of transportation policy decisions on land use and development."
3. Must include consideration of the "consistency of transportation plans and programs with...short-and long-term land use and development plans."
4. Must demonstrate conformity with the purpose of plans for meeting national air quality standards.
5. Must demonstrate that the transportation plan contributes to annual emissions reductions.
6. Must show the development of a congestion management system "that provides for effective management of new and existing transportation facilities through the use of travel demand reduction and operational management strategies."
7. Must include "a proactive public involvement process...that supports early and continuing involvement of the public in developing plans...."
8. Must consider the 15 planning factors defined in ISTEA.

Documents Required by ISTEA and the CAAA

1. **State Implementation Plan (SIP):** The state must submit this document to the EPA. The SIP documents the steps the state will take to attain its air quality goals, and to stay within a "budget" of allowable emissions. As part of the SIP, any area classified as "serious" or above for ozone nonattainment (as the Washington area is) must submit to EPA revisions to the SIP which show how emissions contributing to the formation of ozone will be reduced by 15 percent and then by three percent per year until the area reaches attainment of the standards.

As part of this process for the Washington area, a 15 percent plan and a post-1996 rate of progress plan (9 percent plan) have been developed to show how the area will achieve emissions reductions required by 1999. The phase I attainment plan includes both the 9 percent plan and other steps which the region is taking to reach attainment.

2. **Constrained Long Range Plan (CLRP):** Every metropolitan area must submit a CLRP which outlines all planned projects of regional significance

over an extended period of time. The CLRP is "constrained" by the amount of funds that can reasonably be predicted to be available for transportation improvements over the same time period. The CLRP must be updated at least every three years.

Projects that are included in the CLRP must have funding identified in order to be included. Often it is the case that once the Major Investment Study (MIS) is complete, some preliminary work, such as right-of-way acquisition could be initiated. Currently, federal funds can not be used for such right-of-way acquisition until the project is listed in the CLRP and environmental work is complete. However, if full funding has not been identified, the project cannot be included in the CLRP, which means environmental work stalls and right-of-way can not be preserved.

Based on this issue, the Transportation Planning Board (TPB) has recommended creating a new category in the CLRP for projects which have been recommended through the MIS process, but for which funding has not yet been identified. After some discussion, the TPB determined that this issue could be resolved within the ISTEA reauthorization process and adopted a position on advance preservation of right-of-way in relation to the reauthorization of ISTEA at the January 1997 meeting. If this issue is not resolved through the ISTEA reauthorization, the TPB could still create a new category in the region's CLRP that would formally designate MIS recommendations in the document. Currently, the only way to preserve right-of-way for projects not included in the CLRP is to request approval from the Federal Highway and Transit Administrations to use federal funds for protective land acquisition under a "extraordinary cases or emergency situations" provision.

3. **Transportation Improvement Program (TIP):** All metropolitan areas must submit a TIP, which is a more specific programming of funds in the region over a period of six years. The TIP must be updated every other year, although many regions, including Washington, D.C., Virginia and Maryland, update them annually. TIP's for all Virginia jurisdictions are combined to form the State Transportation Improvement Program (STIP), which is submitted to the Commonwealth Transportation Board (CTB).

Future Federal Legislation

The legislative arena is a fluid one, and this year, that is certainly true of the transportation sector. Many aspects of the situation described above could change in the near future. The most wide-sweeping of these will probably be the reauthorization of ISTEA, which will determine the amount of money available for transportation over the next few years, how much control states and metropolitan areas will have over how that money is spent, prerequisites for project

expenditures, and public participation requirements. A discussion of the proposed financing options is included in the Funding Section.

State Legislation

At the state executive level, the institutional context in which transportation policy and funding decisions are made is centered on the Commonwealth Transportation Board (CTB). Among its responsibilities, the CTB approves the Statewide Transportation Improvement Program (STIP) and long range state transportation plan. Each spring CTB conducts a series of public hearings around the commonwealth before adopting the six-year transportation program in June. The legislation is also able to maintain influence by passing independent resolutions as described below.

Coordination of Efforts

The federal regulations discussed above have emphasized cooperative planning efforts and public participation. As a result, the achievement of consensus among the many agencies and individuals involved has become critical to the successful implementation of many projects. With all these groups taking part in transportation planning, it should come as no surprise that the issue of the appropriate level at which decisions should be made arises frequently. The issue is particularly contentious in this region, which combines two states and an independent district -- and happens to be in the front yard of the federal legislature. As a result, almost all of these players are found involved in one or more of the regional planning studies discussed below.

MWCOG Vision Plan

The federal requirement that long-range plans be fiscally constrained is designed to force the region to only plan for what it can currently afford. However, as a region, it is also important to discuss what the community should look like. In 1995, the TPB initiated a Vision Planning process entitled "Getting There." This process was designed to engage citizens, elected officials, and interested organizations in developing a bold transportation vision for the first half of the 21st century. Phase I involved an outreach effort to solicit public comment and input through a series of public meetings. Phase II of the vision planning process took place from July, 1995 to June, 1996, and focused on developing alternative visions and strategies for the implementation of regional transportation initiatives. To accomplish these tasks, three groups were formed to develop alternative visions. One task force focused on economic prosperity, another emphasized quality of life, and the third looked at access to opportunities.

The TPB has established a Vision Planning Steering Committee to guide the presentation of alternative visions to the public and develop a preferred alternative. The vision plan will be used as a guide to update the region's Constrained Long Range Plan (CLRP). The Steering Committee has revised the vision statement and goals and will develop objectives and strategies to achieve these goals. A two part public outreach process is being discussed and the final vision plan is expected in the spring of 1998. More information on this project can be found in the Studies and Plans Section.

Board of Trade Plan

In an effort to improve future transportation and respond to the 2020 CLRP and Vision Plan, the Greater Washington Board of Trade is releasing a series of five studies. These are being used by the Board of Directors of the Greater Washington Board of Trade to develop formal positions on the region's transportation needs. The reports include consideration of projected travel demand, cost of not meeting this demand, additional transportation improvements, and funding options. The emphasis is on the need for roads and bridges to meet changed travel patterns. The five reports are titled as follows:

1. History and Current Conditions.
2. Regional Forecast and CLRP Assessment.
3. Economic Quality of Life Costs of Not Meeting Transportation Needs.
4. Highways and Transit Solutions.
5. What Better Transportation Will Cost and How to Pay for It.

The first four reports are released and the fifth report will be released soon. More information on the study can be found in Section 18: Regional Studies.

Virginia Commission on the Future of Transportation (HJR 160)

The Commission on the Future of Transportation was appointed by the General Assembly to identify the public transportation needs, determine the amount of additional revenue required to cover those needs, and the means of raising these funds. Restructuring agencies and combining existing agencies will also be considered. Finally, the Commission will conduct a review and update of the results from the Commission on Transportation for the 21st Century and the committee reviewing the Transportation Trust Fund.

The Commission submitted an interim report addressing Virginia's needs in September, 1997, and the final report and recommendations will be presented to the Governor and General Assembly by the end of December of 1997. A Technical Advisory Committee has been formed which is updating estimated

transportation needs. For FY1998-2003, this committee estimated the total transit needs at \$1.9 Billion in capital costs and \$1.6 Billion in operating costs.

Public Transit Plan for Northern Virginia (HJR 572)

The purpose of the transit plan is to identify the area's long-term transit needs and develop a transit plan. Alternatives being considered include circumferential and radial rail service, with complementary bus service. Specific rail alternatives in the Virginia Beltway corridor are also being considered. The study has not yet officially begun, but should be launched in early September. An estimated completion date of January 1999 has been established. The Virginia Department of Rail and Public Transportation is managing the study.

Contacts are listed in **Table 40**.

Table 40: Planning Contacts		
Project	Agency	Contact
Virginia Commission on the Future of Transportation (HJR 160)	VDRPT	Chip Badger (804) 786-8135
Public Transit Plan for Northern Virginia (HJR 572)	VDRPT	Gary Kuykendall (804) 786-1051

SECTION 16

ENVIRONMENTAL IMPACTS

SECTION 16: ENVIRONMENTAL IMPACTS

Air and water quality are growing concerns in the National Capital Region. The Washington region's most serious air pollution problem is ozone, an invisible component of smog that is harmful to the lungs and breathing passages. Crops, trees and other plants also suffer from ozone exposure. Cars, trucks, buses and motorcycles generate more than a third of the ozone-causing emissions in the metropolitan Washington area. Vehicle emissions also contribute to water pollution, and this problem is compounded when a large portion of land is paved over. This prevents water runoff from seeping into the ground where it can be naturally purified; instead it finds its way directly into streams and reservoirs, along with all the pollutants it is carrying.

Environmental considerations must also take into account the transportation system's impact on neighborhoods and on the natural movement of animals. Most highways and at-grade heavy rail lines create a physical barrier that divides communities and endangers any person or animal attempting to cross it. An excellent example of this conflict is the Route 50 corridor at Seven Corners, where six lanes of rapidly moving traffic separate two shopping centers. The site has been the location of numerous fatalities, as no crosswalk is provided and people often attempt to cross in front of the speeding cars. Their alternative, however, is to walk nearly a quarter mile to a light, and then backtrack to the other shopping center. A model transportation system would better address and balance these conflicting needs.

Air Quality

The Environmental Protection Agency has established ambient air quality standards for six major air pollutants, called criteria pollutants. These pollutants are ground level ozone, carbon monoxide, particulate matter, lead, sulfur dioxide and nitrogen dioxide. Many urban areas exceed the ambient air quality standards for at least one pollutant and are classified as nonattainment areas. As shown in **Table 41**, the Washington metropolitan region is a nonattainment area for ground level ozone. Standards for ozone and other national air quality standards are compared to 1996 measures of ambient air quality in Northern Virginia are also included in **Table 41**.

Ozone is formed when nitrogen oxide (NO_x) interacts with volatile organic compounds (VOCs) in the presence of sunlight,¹⁵ so NO_x and VOC emissions must be reduced to decrease ozone formation. In the Washington region, just under one half of the ozone forming pollutants come from traffic. The Clean Air Act

¹⁵ MWCOG. (January 23, 1997). Draft Phase I Ozone Attainment Plan State Implementation Plan Revision for the Washington DC-MD-VA Area.

Table 41: Criteria Pollutants of Concern in the Washington Area

Pollutant	Description	Impact	Auto/Truck Emissions	Air Quality Standards	Northern Virginia
Carbon Monoxide (CO)	Colorless and odorless, formed during the incomplete combustion of all fossil fuels.	Affects a person's ability to deliver oxygen to vital tissues.	Car =20.36g/mi Truck = 27.46g/mi	8 hr = 9ppm* 1hr= 35ppm*	8 hr max = 5.4 ppm; 1 hr max = 8.2 ppm
Nitrogen Oxide (NO _x)	Formed by the combustion of fossil-fuels and causes a brown-yellow haze.	Can irritate lung and lead to bronchitis, pneumonia, and lower the ability to resist respiratory infections.	Car =1.61g/mi Truck=2.05g/mi	Annual arithmetic mean = 0.053ppm	.026 ppm
Ozone (O ₃)	Caused when Nox and VOCs are cooked in the sun. Result is ground level ozone or smog. Not to be confused with the stratospheric layer of ozone which protects the earth from the sun's radiation.	Causes irritation to the respiratory track, aggravates asthma, reduced lung function, and has been know to cause permanent lung damage.	N/A	1hr = 0.12 ppm**	0.125 ppm Non-Attainment Area
Particulate Matter	Dust, smoke and soot suspended in the air. Most transportation particulates come from diesel trucks.	Respiratory Irritant	Car =.04 g/mi Diesel Truck/ Bus: 0.17 g/mi	Annual arithmetic mean = 50 µg/m3	20-23µg/m3
Sulfur Dioxide	Oxidized sulfur, primarily from burning coal.	Contributor to acid rain	Car =.07g/mi Truck=.23g/mi	Annual arithmetic mean = 0.03; 24 hr = 0.14 ppm	annual = 0.009 ppm; 24 hr = .053 ppm
Volatile Organic Compounds (VOCs)	Also known as hydrocarbons, they are caused by fuel combustion in cars/trucks, evaporation of solvents and gasoline, and petroleum refining.	Is know to be a precursor to the formation of ozone.	Car = 2.57g/mi Truck=3.20g/mi	Regional Emissions Targets: 1990 = 527 1996 = 386 1999 = 362 tons/day	Virginia Emissions Targets: 1990 = 228 1996 = 167 tons/day

*Not to be exceeded more than once a year

**Expected number of exceedance days shall not be more than one per year (3 yr avg)

requires non-attainment areas to set limits on emissions of NO_x and VOCs and to slow a decrease of three percent/per year until the standards are attained. Table 42 shows the overall target emissions and mobile transportation emissions budgets for NO_x and VOCs.

Table 42: Ozone Precursor Emissions Targets (tons/day)				
	Regional Emissions Targets	Virginia Emissions Targets	Mobile Budget	
			Region	Virginia
VOC	1990 = 527	1990 = 228	1996 = 137.9	53.8
	1996 = 386	1996 = 386	1999 = 123.3	
	1999 = 362			
NO _x	1999 = 637	1999 = 206.1	1999 = 199.2	84.3

EPA has proposed and adopted new standards for ozone and particulate matter. The new, more stringent standards are being reviewed by Congress to determine whether they constitute an unfunded mandate to state and local governments. The new ozone standard would likely require additional VOC and NO_x emissions reductions. Since no data on ambient air quality for particulate matter as small as .5 microns, has been collected, no additional requirements would result over the short-term.

Regional Transportation Related Air Quality Organizations

The following chart identifies the primary organizations and committees involved in transportation related air quality issues in the Washington metropolitan area. Contacts within MWAQC and the EPA can be found in the Appendix.

Table 43: Organizations Addressing Air Quality in the Washington Metropolitan Region

Organization/Committee	Function	Contact and Phone Number
Environmental Protection Agency (EPA)	Responsible for mandates of the Clean Air Act and establishing regulations to provide state and local compliance.	W. Michael McCabe EPA Region III (215) 566-5000
Metropolitan Washington Air Quality Committee (MWAQC)	Consists of elected officials from localities, states, and D.C. Develops recommendations for a regional air quality attainment strategy for the Washington area. These recommendations then become part of the State Implementation Plan which goes to the EPA.	Stewart Freudberg MWWOG (202) 962-3200
Endzone	Endzone is a public-private partnership aimed at creating an increased awareness of how people contribute to air pollution. Endzone works to inform people of health effects of ground-level ozone and promote easy and effective voluntary action to reduce air pollution.	MWWOG/Endzone: Joan Rohlfis (202) 962-3358
Transportation Planning Board	Determines conformity of transportation plans.	Mike Clifford MWWOG (202) 962-3313

Federal Requirements

As mentioned above, the Washington, DC. region has been designated a serious nonattainment area for ground-level ozone pollution under the 1990 Amendments to the Clean Air Act. This designation was significant in that specific requirements were placed on the Washington region, including the implementation of a plan to reduce emissions of volatile organic compounds (VOCs) by 15 percent below 1990 VOC emissions. The EPA is still in the process of establishing a regional budget for NOx emissions.

A number of reports are required to demonstrate conformity with federal air quality requirements. Below is a summary of the reports that are required, due dates and the issues yet to be resolved.

- Washington region classified as "serious" for ozone.
- EPA requires State Implementation Plans (SIPs) to demonstrate how emissions contributing to the formation of ozone will be reduced by 15 percent from 1990-1996, and then by 3 percent per year until the area reaches attainment standards.
- The attainment date for the Washington area is 1999, therefore, a minimum reduction in emissions of 24 percent is required from 1990-1999.
- In December, 1993, MWAQC submitted a 15 Percent Plan as the first effort to show milestone emissions reductions. EPA required revisions to the Plan.
- Both Virginia and Maryland's 15 percent plans have received conditional approval from EPA, and issues are being addressed so that the District's 15 percent plan will be approvable. If any state's 15 percent plan is disapproved, the Phase I Plan for that state cannot be considered complete. Final action is expected on the Virginia 15 Percent Plan by the end of May, 1998.
- The post-1996 Rate of Progress Plan, also referred to as the 9 Percent Plan, (15+9=24 percent) must show how the remaining emissions reductions will be achieved by 1999.
- The 1996 Rate of Progress Plan, plus additional commitments required by EPA, plus a status report on air quality modeling are the three components of the Phase I Attainment Plan.
- It is not certain that the region will be able to meet the NOx mobile emissions budget set by the Plan in the years from 2010-2020 unless EPA promulgates the heavy duty engine rule, which is expected by

October, 1997. MWAQC will not submit the Phase I Plan until the heavy duty engine rule is promulgated.

- MWAQC and the states must submit the Phase I Attainment Plan to EPA by January 3, 1998 or face sanctions.
- Revised 15 Percent Plans Revisions must be submitted to EPA by May, 1998.

If EPA does not approve the Phase I Attainment Plan, the region will face sanctions on point source emissions in April, 1998, and transportation sanctions in July, 1998. Point source sanctions would prohibit approval of any action resulting in additional point source emissions throughout the region. Transportation sanctions would prohibit funding of any transportation project that would adversely affect air quality.

Transportation Control Measures (TCM)/ Transportation Emissions Reduction Measures (TERM)

Each year MWCOG does an air quality conformity analysis to determine if the region is staying within its emissions budget. The conformity analysis is based on a model that calculates the change in emissions by considering regional travel forecasts, planned transportation improvements, and programs. Previous air quality conformity analyses have identified emission increases associated with TIP and CLRP updates (see Planning section for more information on the TIP and CLRP). These increases have been mitigated each year through the development and programming of emissions-reducing measures which enabled each TIP to meet air quality conformity requirements. These measures are called Transportation Emissions Reduction Measures (TERMs, formerly called Transportation Control Measures, or TCMs). **Table 44** shows the measures adopted by the TPB to mitigate transportation emissions in TIP years 1994-1998.

Table 44: Adopted Transportation Control Measures, 1992-1997

Adopted	Description	NO _x Emission Reductions (tons per day) by:						Total TIP Cost	DC/MD/NA % Share
		June 1999	June 2000	June 2003	June 2010	June 2020			
1998 TIP M-101a	Mass Marketing Campaign	-	-	0.177	0.686	0.782	\$2,295,000	10/45/45	
1997 TIP TCM 77B	Vanpool Incentives	0.26	0.26		0.26	0.28	97-02 TIP \$4.7 million	0/0/100	
TCM 70B	Employer Outreach for Bicycles	0.001	0.001		0.001	0.001	\$70,000	0/50/50	
TCM 103	Taxicab Replacement	0.14	0.2		0.48	0.48	\$4.2 million	0/100/0	
M-101a	Mass Marketing Campaign					0.48	N/A		
1996 TIP TCM 47C	Employer Outreach	0.3	0.3		0.3	0.33	96-01 TIP \$4.27 million	10/45/45	
TCM 47C	Guaranteed Ride Home	0.27	0.52		0.68	0.85	\$6.59 million	10/45/45	
TCM 70A	Bicycle Parking	0.01	0.01		0.01	0.01	\$400,000	0/50/50	
TCM 103	Taxicab Replacement					0.6		100/0/0	
1995 TIP TCM 47	Integrated Ridesharing	0.16	0.15		0.13	0.12	95-00 TIP \$1.46 million	35/0/65	
TCM 92	Enhanced Telecommunications	0.66	0.7		0.8	0.6	\$2.69 million	12/0/88	
TCM 24	Regional Speedlimit Adherence				1.03	1.39	N/A		

N/A = not applicable

SECTION 17

FINANCIAL CONTEXT

SECTION 17: FINANCIAL CONTEXT

Federal Funding

As was noted above, ISTEA expires in September of 1997. While reauthorization appears likely, the new legislation may involve substantial changes in the structure of federal transportation funding. In the meantime, however, funds of particular interest to the Northern Virginia region are generally passed down to states and localities in one of three ways:

Formula money allocated to the state. Includes the following programs:

- **Surface Transportation Program.** STP funds may be used for any mode of surface transportation (e.g. rail, highways, or bicycle and pedestrian paths) and therefore are the most adaptable to local needs.¹⁶ In Virginia, STP funds are allocated in three ways. One part of it is distributed to areas of the state based on population; this becomes the regional share (see below). Another portion (roughly 30 percent) is allocated to specific projects by the Commonwealth Transportation Board. The remainder goes into the regular state distribution formula. In FY97, \$18 million in statewide STP funds was programmed in Northern Virginia. Of these funds, \$7.4 million was flexed to transit or intercity rail projects.
- **Enhancements and Safety Set-Asides.** Ten percent of all STP funds must be reserved for transportation enhancements such as scenic, historic, and environmental projects which enhance the aesthetic or environmental aspects of the intermodal transportation system. Virginia invites local jurisdictions to submit proposals for enhancements funding; in the past, these were reviewed by VDOT, VDRPT, and a citizens committee, which screened the proposals and made recommendations to the CTB. However, the CTB disbanded the citizens committee in 1995, and now screens all proposals itself.

An additional ten percent of the STP funds must be set aside for safety programs. Among other activities, these funds are available for the improvement of at-grade railroad crossings.

- **Congestion Mitigation and Air Quality Improvement Program (CMAQ).** These funds are apportioned to states on the basis of the

¹⁶Funding program descriptions adapted from State Expenditures of Federal Surface Transportation Funds: Do They Reflect the New Directions? Surface Transportation Policy Project. (Washington, DC) 1993.

population living in areas that violate federal air-quality standards weighted by the severity of the pollution. Funds are to be used for the purpose of improving air quality and reducing traffic congestion. VDOT uses its own formula to allocate these funds among the state's four non-attainment areas; in Northern Virginia, the TCC then recommends to the TPB and then to the CTB which projects to fund. In FY98, \$8.9 million in CMAQ funds was programmed in Northern Virginia.

- **National Highway System (NHS).** The NHS is a system of 156,500 miles of existing roads of "national significance," including the 42,800 mile Interstate System. Up to 50 percent of this money may be transferred to the STP fund and used for any mode; the other 50 percent may also be transferred with the U.S. Secretary of Transportation's permission. In addition, transit projects in an NHS corridor (VRE, for instance) are eligible for NHS monies.
- **Interstate Programs (Completion and Maintenance).** ISTEA acknowledges that the Interstate system is virtually complete, and authorizes only a few billion dollars annually for its completion. The law emphasizes the need to maintain and repair the system while restricting its expansion.

Formula money allocated to the metropolitan planning organization

- **Regional Surface Transportation Program (RSTP).** A portion of STP monies is reserved for the MPO's to allocate. In Northern Virginia, projects are chosen by the TCC and forwarded to TPB and CTB for confirmation. In FY97 Northern Virginia flexed \$10 million in RSTP funds to transit, out of a total of \$23.6 million.

Discretionary and formula money allocated directly to transit systems

- **Transit, Discretionary Grants (P.L. 1103-272, § 5308).** These funds are distributed by the federal government on a discretionary basis for capital projects only. Normally, these distributions are made by the Federal Transit Administration, but in recent years, Congress has earmarked available funds as part of the annual appropriations action. Funds are divided among new projects, rail modernization, and other activities such as purchasing buses.
- **Transit, Block Grants (P.L. 1103-272, § 5336).** These funds (formerly called Section 9 funds) are distributed on a formula basis, and are reserved for capital and operating transit expenses in urban areas. Because operating dollars are generally spent more quickly than capital dollars, Congress has limited the amount of each system's allocation that can be used for operating expenses. VRE, WMATA, and the

Maryland Mass Transit Administration all receive urbanized area funds; of these, WMATA is the only system to receive operating monies.

State Funding

The sources of state transportation funding and the formulas by which that funding is allocated have grown and changed over time, resulting in a complicated method of distributing state transportation monies. The following describes in general how state funds are allocated.

There are two primary streams of state transportation funds. The bulk of transportation revenues in the state flow to the Highway Maintenance and Operating Fund (HMOF). The sources of these funds include gas tax and motor vehicle sales tax revenues, as well as fees collected for motor vehicle registrations and license plates. In 1986, a Special Session of the General Assembly created a second funding source, called the Transportation Trust Fund (TTF) to increase and redistribute transportation funding statewide. Like the HMOF, the fund is made up of revenues from the state sales tax, various transportation user fees (e.g., tax on automobile rentals) and other smaller sources.

Administrative costs of VDOT and VDRPT are first taken "off the top" of the HMOF fund. A certain amount of the remaining money is then allocated to each locality for the maintenance of its highway system, which is based on the number of lane-miles and types of roads in each jurisdiction. The remaining money is used for highway construction, and is distributed by state allocation formula.

Transportation trust funds are divided among four modes of transportation: highways (85 percent), mass transit (8.5 percent), ports (4.1 percent) and airports (2.4 percent). The money set aside for mass transit is managed by the Virginia Department of Rail and Public Transportation (VDRPT), under the direction of the Secretary of Transportation. In FY97, the Commonwealth spent approximately \$140 million on transit state-wide. Financial assistance to mass transit programs is divided into three sub-categories:

1. Formula Assistance - 73.5 percent of the total funds are made available to public transit systems for operating-related expenses (administration, fuels, lubricants, tires, and maintenance parts and supplies) and ridesharing program expenses under a distribution formula based on total operating expenses.
2. Capital Assistance - 25 percent of the funds are used as capital grants which are awarded on a discretionary basis. The state participation ratio will vary from year to year according to the demand for capital assistance, but in any one year, the state participation ratio will be the same for all capital grants awarded.

3. Special Programs - 1.5 percent of the funds will be used to award special programs grants for independent ridesharing programs, technical assistance, and experimental public transportation projects on a discretionary basis.

The capital assistance sub-program funds available to be distributed each year are determined by adding together 25 percent of the total amount of financial assistance to mass transit and any surplus of formula allocations. Each year, the Commonwealth Transportation Board approves an annual capital program of projects to be funded. All capital projects approved in the annual program will receive the same percentage of state participation up to a maximum of 95 percent of the non-federal share. The actual percentage of state participation in capital projects may vary from year to year depending on the total amount of the funding requests; in recent years it has ranged from 30 to 50 percent.

The Transportation Efficiency Improvement Fund (TEIF) supports projects that reduce the demand for new or expanded transportation facilities that serve single occupant vehicles and contribute to the attainment of the National Ambient Air Quality Standard in non-attainment areas of the Commonwealth. The primary purpose of the TEIF program is to support state, regional, and community level initiatives that demonstrate innovative approaches to reducing transportation demand and traffic congestion.

In fiscal year 1996 the level of federal funding allocated for transit operating assistance was reduced by 48 percent in Northern Virginia. To offset some of the operating budget deficit resulting from the reduction in federal funds, the General Assembly earmarked an additional \$1 million in fiscal 1997, and \$4.1 million in 1998. In FY 1998, the additional funding was generally allocated to transit providers based on the relative percentage of federal operating assistance lost.

The policy objective of allocating the additional transit assistance has been called into question by some members of the General Assembly. In response, the General Assembly directed VDRPT to initiate a study to determine how a performance-based allocation program could be set up. The study is expected to be completed and forwarded to the 1998 General Assembly.

Another state level initiative that may impact future funding levels is the statewide transportation needs assessment being updated by the Commission on the Future of Transportation. The most recent study of transportation system needs was completed in 1994, and the General Assembly has requested current information. An interim report is due in September, 1997, with a final report and recommendations to be presented to the Governor and the General Assembly in December, 1997. For more information on this issue, see Section 15: Planning.

Local Funding

Transit funds allocated to Northern Virginia by the Commonwealth are provided primarily through NVTC and PRTC. At NVTC, they are further allocated to the member jurisdictions using a formula that considers a weighted average of transit subsidies and costs. The Commonwealth also collects for the Northern Virginia jurisdictions a two-percent motor fuels tax, which is dedicated to WMATA expenses within the five NVTC jurisdictions supporting WMATA and is available for any transportation expense in the other jurisdictions.

NVTC allocates up to \$100 million annually to its member jurisdictions to support public transit systems. The costs used in the calculation of the formula include Washington Metropolitan Area Transit Authority (WMATA) total capital and operating costs for the Northern Virginia portion of the bus and rail lines and costs of locally provided transit services. Subsidies are the total costs less the ridership revenue and grant funds associated with the service provided.

The nature of the fixed cost allocation in the formulas currently in use at WMATA and NVTC causes an inequity. If a jurisdiction chooses to discontinue Metrobus service, it effectively increases the costs allocated to the other jurisdictions, even though the other jurisdictions have had no voice in the decision to reduce service. The converse is also true; if a jurisdiction increases its Metrobus service, the formulas provide a significant increase in its Metrobus costs and benefits neighboring jurisdictions with reduced costs. This is because Metrobus fixed costs are currently allocated by NVTC to each member jurisdiction based on the level of Metrobus service it provides, even though Northern Virginia's total fixed cost allocation from WMATA is based on the level of peak-hour buses in service in 1975. Therefore, the increase or decrease of service in any one Virginia jurisdiction will cause a significant shift in the fixed costs allocated to the other jurisdictions.

Once Metrorail subsidies, Metrobus operating costs, revenues, and fixed costs have been assigned to Northern Virginia jurisdictions, NVTC determines how available transit aid is allocated among its member jurisdictions to pay these costs. The formula established to allocate transit aid assigns relative subsidies paid by each jurisdiction a weight of three-quarters, and relative transit costs a factor of one-quarter. For the last several years changes to the NVTC formula have been discussed as well as changes in the way fixed costs are assigned to Virginia by the WMATA formula. Recommendations as to how the WMATA formula could be changed will be made by the Regional Mobility Panel in September, 1997 (see the Rail Services section for more information).

Local jurisdictions also use their own funds to support both highway and transit projects. For example, in fiscal year 1996, Northern Virginia jurisdictions spent at least \$32.7 million in local funds on WMATA and local transit systems alone. NVTC's Subsidy Allocation Model (SAM) uses Metrorail subsidies,

Metrobus operating costs, revenues, and fixed costs to allocate NVTC transit aid by jurisdiction.

Future Funding

The region must look to innovative funding sources and financing mechanisms if it is to keep up with projected growth. The most promising suggestions focus on mechanisms which in some way charge the costs of the system more directly to its users, i.e., some type of user fees or pricing. A listing of a few types of pricing that have been suggested in the Washington region demonstrate the different levels of specificity and the different impacts various strategies might have.

A very general form of pricing is a special tax district, in which a particular area agrees to tax itself in order to pay for a facility from which the businesses or residents believe they will benefit. This is the concept behind the Route 28 Tax District in the Dulles corridor.

Another type of pricing is "cash-out parking", a system in which an employee may choose to receive employer-paid parking privileges, as most employees in this region do, or the cash equivalent. In this way, employees can make the best use of the benefit available to them -- either by continuing to take advantage of the parking spot, by using the money for transit fares or bicycle maintenance, or by profiting from the fact that they have chosen to live near their office and can walk to work. Right now, the federal tax code, by allowing tax free parking benefits of up to \$170 a month, tax-free transit benefits of up to \$65 a month, and no tax-free benefits for other forms of transportation, creates a bias towards providing free parking. There are signs that this policy may change; in southern California, cash-out parking is mandated for some employers -- and the IRS is among the offices complying with that local law.

Toll facilities are another form of pricing that is becoming more prevalent. In Northern Virginia, the Dulles Toll Road and Greenway charge tolls for use. New technologies such as Automatic Vehicle Identification (AVI) allow tolls to be deducted automatically from drivers' accounts, or billed to them later, increasing both the capacity and the safety of toll facilities. A variation, also made more feasible by AVI technology, is congestion pricing, in which tolls are imposed or are increased during peak periods, providing an incentive for people to share trips during those times or drive at other times if their schedules are flexible. This technology, which is discussed further in Section 6: HOV Lanes and Toll Roads, is now being used very successfully in California.

It is important to differentiate pricing from "just another tax." Many of the costs of driving, such as air and noise pollution, are not borne only by the drivers, and thus, driving is overconsumed. For the most part, society does not acknowledge that certain driving times are more "expensive" than others. For

instance, if everyone wants to drive during the same hour, then a highway that accommodates them must be twice as large as it would if they were to spread their trips out over two hours. Through encouraging people to better distribute their trips, congestion pricing can serve not only to raise revenues for new construction, but also to limit the amount of new construction required.

The TPB staff has modeled the effects of a region-wide congestion pricing program in this area, and results suggest that it would generate large amounts of revenue, while decreasing travel demand more than many other strategies. Of course, many issues, involving both equity and logistics, would have to be settled before any such program could be implemented, but the fact that the investigation is starting is a promising sign.

Virginia has also taken steps to encourage private investment opportunities through the passage of the Public-Private Transportation Act of 1995. This Act grants public entities the authority to allow private entities to construct and/or operate certain transportation facilities. Individually negotiated agreements define the rights and obligations of both the public and private parties, and proposals do not have to be competitively procured. This Act allowed the construction of the Dulles Greenway, and has led to proposals around the state from private developers.

In a similar type of funding initiative, Virginia was among the first states to initiate development banks for highways and transit. Federal funds were made available to help start the bank, which will rely on debt financing payments to fund additional projects. One of the projects that VDOT has proposed as a candidate for this type of financing is an 800-space parking deck at the Vienna Metrorail station. New financing initiatives such as these hold the promise of transportation improvements beyond those the region is currently able to afford.

Table 45 lists contacts for more information on funding.

Table 45: Contacts for More Information on Funding		
Agency	Funding Type	Contact
APTA	Federal	(202) 898-4000
Virginia Department of Transportation	State	Bob McDonald (703) 383-2226
Virginia Department of Rail and Public Transit	State	Chip Badger (804) 786-8135
NVTC	Local	Rick Taube (703) 524-3322
WMATA	Local	Leona Agouridis (202) 962-1051

ISTEA Reauthorization

As described above, the **Intermodal Surface Transportation Efficiency Act of 1991**, also known as **ISTEA**, establishes federal transportation funding programs which emphasize increasing funding flexibility among modes. This flexibility allows states and metropolitan areas to choose to construct and enhance those modes of transportation that best meet their particular needs. The Act outlines criteria that must be considered when states and metropolitan areas plan their transportation systems, and requires that these entities establish management systems in order to track the condition of infrastructure such as pavement, bridges, and transit systems, and to monitor conditions such as congestion.

ISTEA expires in September of 1997 and advocacy groups representing a wide variety of interests have begun to express their positions on portions of the law which they would like to see either altered or retained. Reauthorization will impact the amount of money available for transportation, the amount of control states and metropolitan areas have over how the money is spent, prerequisites for designing project expectations, and public participation requirements.

There are currently several ISTEA reauthorization proposals in Congress; however, it is unlikely that any of them will be passed by October, 1997. **Table 46** (ISTEA Reauthorization: Comparison of Proposals) outlines each of the following reauthorization proposals:

- ISTEA Integrity Restoration Act (Step 21)
- ISTEA Reauthorization Act (ISTEA Works)
- National Economic Crossroads Transportation Efficiency Act (NEXTEA)
- Surface Transportation Authorization and Regulatory Act (STARS 2000)
- Transportation Empowerment Act

One component of the NEXTEA proposal that may be of particular interest to transit providers is the President Clinton's Welfare to Work program. The NEXTEA proposal includes a six-year, \$600 million incentive grant program to start new or expand existing transportation services to link welfare recipients to jobs. Grants would be targeted based on both the size of the welfare population and the area's state and local financial commitment and coordination. The 1998 budget also seeks \$10 million to expand HUD's Bridges to Work demonstration

Table 46: ISTEA Reauthorization: Comparison of Proposals

Proposal	Total Annual Average Funding	Years	Funding Allocation	Program Structure
Current ISTEA Program	\$25 Billion*	1991-1997	Emphasizes increasing flexibility among modes; allowing states and metropolitan areas to make decisions based on individual needs.	Programs include: National Highway, Interstate Construction and Maintenance, Surface Transportation, Bridge, Congestion Mitigation and Air Quality, Intelligent Vehicle Highway Systems, Safety, Demonstration Projects, and Mass Transit.
ISTEA Integrity Restoration Act** (STEP 21)	\$23.5 Billion	1998-2002	Highway and Highway Safety programs only. Does not address transit, motor carrier safety, or NHTSA programs.	Restructures ISTEA programs into two elements: NHS and Streamlined STP (SSTP). No demonstration projects.
<ul style="list-style-type: none"> • H.R. 674 (DeLay) • S.335 (Warner) Based on H.R. 674				
ISTEA Reauthorization Act (ISTEA Works)	\$ 32.1 Billion	1998-2003	Transit programs funded out of Highway Trust Fund Mass Transit Account.	Retains basic ISTEA programs but combines ISTEA, NHS, and IM. No demonstration projects.
<ul style="list-style-type: none"> • H.R. 1609 (Molinari) • S. 586 (Moynihan) Based on H.R. 1609				
National Economic Crossroads Transportation Efficiency Act (NEXTEA)	\$29 Billion	1998-2003	Highways, transit, safety, research, Amtrak, and Misc. programs	Retains basic ISTEA programs (IM, NHS, STP, and CMAQ). No demonstration projects.
<ul style="list-style-type: none"> • H.R. 1268 (Administration Bill) • S. 468 (Administration Bill) 				
Surface Transportation Authorization and Regulatory Act (STARS 2000)	\$ 27.1 Billion	1998-2003	Addresses traditional highway and highway safety construction programs. Does not address transit, motor carrier safety, of NHTSA programs.	Includes a reduced set of categorical programs and replaces most existing categorical highway programs with block grants in FY1998-2001. Money is then devoted to states beginning in FY2002.
<ul style="list-style-type: none"> • S. 532 (Baucus) 				
Transportation Empowerment Act	\$18.2 Billion	1998-2002	Funding varies significantly from year to year. Transit program funded from general fund at an average of \$0.89 Billion per year.	Includes a reduced set of categorical programs and replaces most existing categorical highway programs with block grants in FY1998-2001. Money is then devoted to states beginning in FY2002.
<ul style="list-style-type: none"> • H.R. 1470 (Kasich) • S. 667 (Mack) 				

*While a total of \$150 Billion was authorized for a six year period, this amount is not appropriated in its entirety. For example, in FY97, \$29.8 Billion was authorized and only \$25 Billion was appropriated.

** Note: this proposal was introduced by the Coalition for a Streamlined Transportation Efficiency Program for the 21st Century which is a coalition made up of 22 states, including the Commonwealth of Virginia.

program, which provides job placement and transportation services to link city residents with suburban jobs.¹⁷

Ultimately many competing interests will weigh in on what the "new ISTEA" should look like. It will be left to federal lawmakers to determine how much flexibility they want to provide to state and local transportation officials, and how much accountability they will demand in return.

Contacts are listed in **Table 47**.

Table 47: ISTEA Reauthorization Contacts		
Subject	Agency	Contact
ISTEA Reauthorization	Office of the Secretary/ Office of the Budget and Programs	Margaret Alkon (202) 366-9642
	APTA	Kip Banks (202) 898-4121
Welfare to Work Partnership		Kevin Talley (202) 955-3005 x321
Bridges to Work Program	Public/Private Ventures	Beth Palubinsky (215) 558-4400

¹⁷ U.S. Department of Transportation. May 20, 1997. NEXTEA, Moving Americans from Welfare to Work.

SECTION 18

REGIONAL STUDIES

SECTION 18: REGIONAL STUDIES

The Commonwealth of Virginia, in partnership with local and regional governments and agencies, is currently embarking on a number of simultaneous Major Investment Studies (MIS). These MIS's are analyses which help the region determine how best to address mobility needs in each corridor. An MIS is required for certain major infrastructure projects using federal funds. The study must define the needs of a transportation corridor and examine multiple modes of travel and their possible interactions before recommending a particular course of action.

While these studies receive a great deal of media and public attention, other studies, more limited in scope are also underway in the region. Some of the studies focus on a particular mode or travel corridor, while others are concerned with one aspect of travel, such as safety. **Table 48** contains a list of studies that are regional in nature, demonstration projects, or new developments of particular interest.

Study Issues, Themes, and Cost

Based on the prices available for the studies listed, over \$50 million is being spent in this region for studies alone. While most studies have not reached the recommendation phase, those that have will require billions more for engineering and construction costs. While this area has some of the worst traffic problems in the country, the transportation budget is constrained and funds have not been identified to cover the cost of implementing the study recommendations. While the region struggles to find funding for current projects, new projects develop and even more funding is needed. The General Assembly's Commission on the Future of Transportation reported that such plans for new roads, railways, and port terminals would cost \$1.8 billion a year MORE than Virginia is scheduled to spend. More information on the Commission on the Future of Transportation can be found below in **Table 48: Regional Studies** and in Section 15: Planning.

Many projects are forced to solicit alternative funding sources, such as the Woodrow Wilson Bridge project, for which the region is hoping to obtain 100 percent federal assistance. As money becomes more constrained and needs grow, these types of alternative funding sources may become more the norm. For now, the region must prioritize and make sound financial decisions with what funding it currently has.

Table 48: Regional Studies

Study	Purpose and Study Area	Status	Study Completion Date	Estimated Cost of Study	Cost of Project	Lead Agency	Contact Phone
14th Street Bridge Feasibility Study	Purpose is to consider both short and long-term improvements to the 14th Street bridge. Includes options which address congestion and safety issues. Beyond the Bridge, the study area runs to Constitution Ave. on the east, Rt. 27 and Shirley Highway on the west, and also includes a small portion of the GW Parkway on the north and Rt. 110 on the south.	A range of options is under consideration including an improvement to signage, additional lanes in each direction, HOV restrictions on express lanes, and additional SOV capacity.	Summer 1997	\$965,000	Up to \$100 Million if all options are built. However, it is likely not all options will be selected, lowering the cost significantly.	Virginia Department of Transportation, Northern Virginia Office	(703) 383-2000
I-66 MIS	Purpose is to analyze multi-modal investment strategies in the I-66 corridor. Study area includes the I-66 corridor from the Beltway (east) to Rt. 15 in Haymarket (west), to Dulles National Airport (north), to Manassas (south).	Fourteen strategies have been developed as part of Screen 2. These strategies will be reconfigured and evaluated so the locally preferred investment strategy for the corridor can be chosen. In addition, the travel forecasting model is under final review.	June 1997	\$3 Million (includes Virginia model development)	TBD	Virginia Department of Rail and Public Transportation	1-66 Hotline 1-800-811-4661
I-95 HOV Expansion Study	Purpose is to consider expanding HOV lanes from the Prince William County line to Route 3 in Spotsylvania.	Study is expected to begin in December of 1997 or January of 1998.	TBD	\$500,000	N/A	Virginia Department of Transportation	(540) 899-4093

Table 48: Regional Studies - Continued

Study	Purpose and Study Area	Status	Study Completion Date	Estimated Cost of Study	Cost of Project	Lead Agency	Contact Phone
1-95/1-395 HOV Policy Study	Purpose is to consider reducing occupancy requirements on I-95/395 from HOV-3 to HOV-2. Includes changing HOV on all or part of the corridor, considering hours or HOV restrictions, and access and egress issues. The study area includes the entire length of the HOV facility from DC to Rt. 234 in Prince William County.	Study goals and Measures of Effectiveness have been established. RFP to be released in late summer of 1997.	January 1999	To be Determined	N/A	Virginia Department of Transportation	Larry Trachy (804) 786-2814
Board of Trade Transportation Study	Purpose is to analyze 2020 CLRP. Includes consideration of projected travel demand, cost of not meeting this demand, additional transportation improvements, and funding options. Emphasis need for roads and bridges to meet changed travel patterns. The study Area consists of the TPB planning area.	First four reports released. The fifth report, funding option, will be released late this summer.	Late summer of 1997	\$300,000	N/A	Greater Washington Board of Trade with funding from several sources, including the Washington Post.	Bob Grow (202) 867-5935
Board of Trade VRE/MARC Service Integration Study	Purpose is to improve MARC and VRE operations by providing run-through service. Includes analysis of cost savings and time savings. Study area is made up of MARC and VRE service corridors.	The commuter rail subcommittee is reviewing a draft of preliminary problems with system coordination.	Late Fall of 1997	\$150,000	N/A	Greater Washington Board of Trade	(202) 867-5935 Bob Grow

Table 48: Regional Studies - Continued

Study	Purpose and Study Area	Status	Study Completion Date	Estimated Cost of Study	Cost of Project	Lead Agency	Contact Phone
District of Columbia Six-Year Strategic Action and Investment Program	Purpose is to identify and prioritize investments and operational strategies which can take place entirely in the next six years. Program is considered first step in part of implementing 20 year comprehensive plan. The study area is the District of Columbia.	The study is in the planning stage. A public hearing was held in July of 1997.	August 1997	N/A	N/A	Washington D.C. Office of Public Works	Michelle Pourciau (202) 939-8115
Dulles Corridor Transportation MIS	Purpose is to study and recommend options for transit in the Dulles corridor. The study area extends from West Falls Church to Tysons, through the corridor to Dulles Airport, and ends at the Greenway and Rt. 772 in Loudon County.	Feasibility study complete and the policy committee has disbanded. The draft financial plan is being circulated for comment by VDRPT. Private proposals are also pending.	Complete	\$750,000 (does not include cost of model development)	\$1.4 Billion	Virginia Department of Rail and Public Transportation	(804) 225-3930 Bill LaBaugh
Maryland 1-95/ I-495 HOV Transit MIS	Purpose is to consider extending HOV lanes through the MD portion of the Beltway. Options include HOV lanes in both directions and transit alternatives which may provide circumferential links to area corridors. The study area runs from the American Legion Bridge to the Woodrow Wilson Bridge. Areas outside Beltway are also being considered for the rail corridor.	Transit alternatives are currently being planned, including options for alignment alternatives. Preliminary planning of HOV lanes is also underway. An open house is held monthly for interested members of the public.	Mid 1998	\$2.5 Million	HOV = \$1.2 Billion and Light Rail for Maryland = \$2.5 to 4 Billion	Maryland Department of Transportation	Maryland Hotline 1-800-548-5026

Table 48: Regional Studies - Continued

Study	Purpose and Study Area	Status	Study Completion Date	Estimated Cost of Study	Cost of Project	Lead Agency	Contact Phone
Metropolitan Washington Council of Governments Vision Plan	Purpose is to review transportation projects and policies through 2050. Includes considering projects not currently in CLRP and developing potential funding sources. The study area is the TPB planning area.	The Steering Committee has revised the vision statement and goals and is drafting objectives and strategies to achieve the goals. In addition, a two part public outreach process is being developed.	Final Vision Plan expected in Spring of 1998	N/A	N/A	Metropolitan Washington Council of Governments	Gerry Miller (202) 962-3319
Outer Connector Study - Northeast Quad MIS (Stafford and Spotsylvania Counties)	Purpose is to consider the need for transportation improvements to the areas north and east of Fredericksburg. Study area includes the corridor from U.S. Route 1 in Stafford County to U.S. Route 17 in Spotsylvania County.	Alternative strategies have been determined. The study team is evaluating these potential strategies.	January 1998	\$600,000	TBD	Virginia Department of Transportation	Outer Connector Hotline 1-800-862-1386
Outer Connector Study - Northwest Quad EIS and MIS (Stafford and Spotsylvania Counties)	Purpose is to consider transportation improvements to the corridor from U.S. Route 1, north of Fredericksburg, in Stafford County to Route 3, west of Fredericksburg in Spotsylvania County. Study area could shift slightly based on outcome of I-95 interchange study.	A draft EIS is being finalized for the five build alternatives and a no-build alternative. A public hearing is scheduled for November.	Early 1998	\$1.5 Million (includes cost of EIS)	TBD	Virginia Department of Transportation	Outer Connector Hotline 1-800-862-1386

Table 48: Regional Studies - Continued

Study	Purpose and Study Area	Status	Study Completion Date	Estimated Cost of Study	Cost of Project	Lead Agency	Contact Phone
Public Transit Plan for Northern Virginia (HJR 572)	Purpose is to identify the area's long-term transit needs and develop a transit plan. Considering circumferential and radial rail service, with complimentary bus service. Rail alternatives for the Virginia portion of the Beltway may also be considered. While the study area is currently being defined as "Northern Virginia," a more specific range may be determined once the study has begun.	Study has not yet begun.	January 1999	\$1 Million	TBD	Virginia Department of Rail and Public Transportation, local jurisdictions, and WMATA	Gary Kuykendall (804) 786-7948
Regional Mobility Panel	Purpose is to consider the region's current and future bus service mobility needs. Includes reviewing funding options, the role of Metrobus, and how to coordinate coordinated bus service in the region. Study area includes the WMATA transit zone.	The study is considered to be on schedule. A report from the funding subcommittee is due to the full panel by the end of October.	November 1997	\$250,000	N/A	Regional Mobility Panel	Rod Burfield (202) 962-1004

Table 48: Regional Studies - Continued

Study	Purpose and Study Area	Status	Study Completion Date	Estimated Cost of Study	Cost of Project	Lead Agency	Contact Phone
U.S Route 1 Corridor MIS	Purpose is to conduct a complete and comprehensive study of the Route 1 Corridor in Fairfax and Prince William Counties. Study area includes the Route 1 corridor from the Stafford County/Prince William line to the Fairfax County/City of Alexandria line.	The consultant has selected its preferred concept and has forwarded the information to the steering committee for their recommendation. Several public hearings have been held in both Fairfax and Prince William Counties.	November 1997	\$1.2 Million	Estimated cost of consultant's preferred concept: roadway and right of way = \$255M; interchange and bridge = \$220M, totaling \$475M	Virginia Department of Transportation, Northern Virginia Office	Joe Langley (703) 383-2000
Virginia I-95/I-495/I-395 Interchange Congestion Management Plan MIS	Purpose is to develop mitigation options for the anticipated traffic congestion expected to occur during the reconstruction of the "Springfield mixing bowl" interchange. The study area extends from the end of the I-95/I-395 HOV lanes to the American Legion Bridge.	Alternatives have been developed. Those being considered include increasing commuter and/or feeder service to the Franconia/Springfield station; bus fare, parking, or VRE service buy downs; additional bus service in corridor, and HOV operational changes.	Spring 1998	\$33 Million (primarily engineering cost, study is a small percentage of the total).	\$320 Million including Right of Way	Virginia Department of Transportation, Northern Virginia Office	Joe Langley (703) 383-2000

Table 48: Regional Studies - Continued

Study	Purpose and Study Area	Status	Study Completion Date	Estimated Cost of Study	Cost of Project	Lead Agency	Contact Phone
Virginia Capital Beltway Improvements MIS	Purpose is to develop and consider improvements to the Virginia portion of the Capital Beltway. Study area includes the I-495 corridor within Fairfax County.	Express lanes and HOV lanes have been recommended for additional consideration. While rail is being considered elsewhere, transit is not part of this study. VDOT has recommended that the area of the Beltway between the I-95/395 interchange and the GW Parkway be entered into the NEPA process.	MIS is complete. The NEPA review must receive FHWA approval before moving forward.	\$3.485 Million (Engineering Only)	Order of Magnitude cost is \$2 Billion	Virginia Department of Transportation, Northern Virginia Office	(703) 383-2000
Virginia Commission on the Future of Transportation (HJR 160)	Purpose is to identify major transportation system construction projects planned during the next 25 years. Includes needs of public transportation, the amount of additional revenue required to cover these needs, and means of raising these funds. The study area is the entire state of Virginia.	The Technical Advisory Committee has forwarded an updated estimate of transportation needs to the Advisory Committee. The report is expected to go to the Commission in late August.	December 1997	In-kind contributions from VDRPT, VDPT, the Department of Aviation, and Virginia Port Authority.	TBD	Appointed Commission reporting to the General Assembly	Chip Badger (804) 786-8135
Virginia Study of Consolidation of the TCC/NVTC/PRTC/VRE (TCC Study)	Purpose is to determine and measure the costs and benefits of consolidating the planning, operating, and financing responsibilities of some or all of the TCC, NVTC, PRTC, and VRE. The study area is the Northern Virginia District.	A study advisory group and consultant have been chosen. A series of interviews with stakeholders have been conducted.	A draft report is scheduled to be completed by early September 1997.	\$90,000	TBD	TCC	Farid Bigdell (703) 383-2000

Table 48: Regional Studies - Continued

Study	Purpose and Study Area	Status	Study Completion Date	Estimated Cost of Study	Cost of Project	Lead Agency	Contact Phone
Western Transportation Corridor MIS	Purpose is to examine north-south travel needs west of Fairfax County. Study area includes points between Routes 15 and 17 on the west, points east of Routes 28 and 234 on the east, Route 17 and I-95 to the south, and the Potomac River to the north.	A public hearing is scheduled for early August. The Advisory Committee is working toward forwarding recommendations to the CTB in Fall of 1997.	Fall of 1997	\$1.2 Million	To be Determined	Virginia Department of Transportation	Western Transportation Corridor Hotline 1-800-960-8448
Woodrow Wilson Bridge Improvement Study	Purpose is to develop replacement options for the Woodrow Wilson bridge. Includes consideration of traffic congestion, operational issues, and structural problems. The study area extends from Telegraph Road, past and including Rt. 1, to the Wilson Bridge, to I-295, to Maryland 210 and all roadways in between. Outstanding issues include to implement a toll and its impact on air quality and the financial role of the federal government.	A 70-foot high, 12-lane twin drawbridge is being recommended. The final report has gone to FHWA and is being prepared for Congress.	Fall of 1997	Engineering only = \$1.79 Million, Environmental Study = \$14 Million	Estimated cost of selected alternative is \$1.6 Billion	Federal Highway Administration	Woodrow Wilson Bridge Hotline 703-519-9800

Ongoing Studies in Neighboring Jurisdictions

The following is a list of studies which are currently being conducted in the region. While the study areas may not be within the NVTC jurisdictions, the outcome of the study may affect the regional transportation system.

Table 49: Ongoing Studies in Neighboring Jurisdictions

Study	Lead Agency	Contact	Phone
I-270/ U.S. 15 Corridor MIS	MDOT	Michelle Hoffman	(410) 545-8547
Addison Road to Largo Town Center Metrorail Extension MIS	MTA WMATA	Rick Bochner	(410) 767-3772 (202) 637-1252
Bristol Rail Passenger Study	VDRPT	Alan Tobias	(804) 786-8410
Branch Avenue Metro Access Study	State Highway Administration	Monte Rahman	(410) 545-8524
Intercounty Connector	MDOT	Denis Atkins	(410) 545-8548
Maryland Comprehensive Transit Plan	MDOT	Bruce Gartner	(410) 865-1049
Maryland U.S. 29 Busway MIS	MDOT	Bruce Gartner	(410) 865-1049
Maryland DOT Infrastructure Financing Committee	MDOT	Bruce Gartner	(410) 865-1049
Maryland I-495 Capital Beltway HOV Study	MDOT	Sue Rajan	(410) 545-8514
U.S. 301 South Corridor MIS	MDOT	Ray Moravec	(410) 865-8500

Public Participation

Federal regulations (discussed above in the Planning Section) have emphasized cooperative planning efforts and public participation. For the transportation community, effectively involving the public in planning and project development poses a significant challenge. Some citizens are skeptical about whether they can truly influence the outcome of a highway or transit project.

Many others are discouraged by the complexity of the local, state and federal planning processes and requirements. The goal of public participation efforts is to provide information to the public and stimulate discussion early on in order to be aware of concerns and ideas on the part of the public, and to attempt to achieve consensus earlier in the transportation planning process, rather than run up against conflict at the end of it.

In addition to holding public hearings, as is required by law, there are a number of other mechanisms that can be used to encourage public involvement. Agencies have begun providing information on major transportation projects, such as the Woodrow Wilson Bridge project, on an internet web page. Users are provided with the names and phone numbers of people to contact for more information. Some web sites allow users to be added to the mailing list. This new, low cost mechanism of providing information to the public has been very successful.

Another way to encourage public participation is by setting up informational displays at fairs throughout the region. Open houses are also being held to promote public awareness. Interested citizens can sign up at fairs, open houses or via the internet to receive newsletters that will keep them informed as the process moves forward. Although public involvement efforts are required at many points in the transportation planning process, the number of people that participate as a result of those efforts is often very low. Unless the project is extremely controversial, the average citizen does not get involved.

As part of the TCC Study, consideration is being given to improving the MIS process. As part of this study, the TCC Citizens Advisory Committee is advocating a consulting study to focus on cost effective means to educate and involve the public in transportation decision-making. Discussion on the process has included consideration of whether TCC should be designated as a clearinghouse for all Northern Virginia MIS's. Advocates of this option believe that this designation would ensure coordination and consistency among the MIS's. Improvements would come in the prioritization of the individual projects at the end of an MIS as well as ensuring consistent assumptions and methodologies. More information can be found in the Regional Players Section.

CONCLUSION

Conclusion

As the thirteenth in the series of reports on NVTC's Transportation Service Coordination Plan, the 1997 TSCP serves as a tool for understanding and analyzing transportation issues around the region. By providing both historical background and current information, this report also works toward changing the way members of local and state governments and the private sector think about, analyze and solve transportation problems. This year, NVTC is especially proud of the original components included in this year's report. These components, which include a matrix of regional studies and projects, a list of area park and ride lots cross checked against all state and jurisdictional lists, and a matrix of comparative transit performance measures, should serve as a valuable resource for persons involved with the transportation industry.

Below is a review of the top regional transportation coordination initiatives which were presented in the introduction. More information on each of these issues can be found in the preceding text.

Top Ten Regional Transportation Coordination Initiatives

1. Regional Mobility Study: Determines regional plans for the area's future bus service together with subsidy allocation and funding alternatives. Also supports regional goal of fare simplification. This WMATA effort has the potential to halt the decline in Metrobus service, cut Metrobus operating costs, and restore balance to the sharing of subsidies among WMATA's jurisdictions.
2. TPB Vision Plan: Promotes long-range planning of projects occurring between now and 2050. The plan is demonstrating how intense public involvement and creative thinking can be tempered with political and financial reality to create a dynamic blueprint for the future.
3. ITS/SmarTraveler: Real-time access to traffic congestion and transit on-time performance information places this region in the forefront of practical applications of cutting-edge technologies.
4. TCC MIS Enhancement: Improves the coordination and effectiveness of the way the region makes decisions, in part by placing local elected officials and citizen representatives in the role of key advisors to the transportation agencies that plan and implement major new transportation projects.
5. HJR 572 (Transit Plan): Identifies long-term transit needs for Northern Virginia in the context of a multi-modal system.

6. HJR 160 (Statewide Transportation Needs): Forecasts transportation needs with the potential to improve the financial situation for the region through additional state resources.
7. WMATA SmarTrip, NVTC Smart Card: Improves convenience of commuting for area train riders through joint fare media, offers the potential for sponsors from the financial services sector to participate, and cuts transit fare collection and maintenance costs.
8. NVTC Bus Data Collection: Coordinates, collects and disseminates performance data for Northern Virginia transit operators not currently reporting NTD data, allowing a larger share of federal funds for the region, and providing performance information to permit better management.
9. VDOT Mixing Bowl Traffic Mitigation Plan: Plans for commuting options during a major construction project projected to last 12 years should provide strong incentives for public transit use.
10. Joint TLC Pass between MARC, Metro and VRE: Promotes fare coordination among regional agencies and improves convenience of commuting, while serving as an important first step toward regionwide transit fares and fare media.

Collectively, it is initiatives such as those listed above which will shape the region's future. Throughout this report, NVTC has worked to identify issues which are important to the region and the transportation industry and to offer solutions and resources to stimulate further problem solving. The commission would appreciate your feedback on this report and ways in which the TSCP could be more helpful in the future.

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City of Alexandria

City Hall
301 King Street
Alexandria, Virginia 22314

Alexandria Department of Transportation & Environmental Services

Thomas F. O'Kane, Jr., Director
David Ruller, Acting Deputy Director/Administration
City Hall, Room 4100

Telephone: 703/838-4966
Fax: 703/838-6438

Function: Planning, construction and maintenance of streets, sidewalks, HOV-facilities, and bridges. Manages traffic control systems and provides public works programs management.

Alexandria Office of Transit Services and Programs

Valerie Sikora, Division Chief
City Hall, Room 5100

Telephone: 703/838-3800
Fax: 703/739-9415

Function: Overseeing operation, planning, and marketing of commuter services, including transit, ridesharing, paratransit, and transportation demand management programs. Planning, construction, and maintenance of transit facilities.

Alexandria Rideshare

Tanya Husick, Ridesharing Coordinator
City Hall, Room 5100

Telephone: 703/838-3800
Fax: 703/739-9415

Alexandria Planning Commission

W.B. Hurd, Chairman
c/o Sheldon Lynn
Alexandria Department of Planning & Zoning
301 King Street, Room 2100
Alexandria, Virginia 22314

Telephone: 703/838-4666
Fax: 703/838-6393

Alexandria Traffic and Parking Board

C. Peter Schumaier, Chairman
c/o George Jivatode
Alexandria Department of Transportation & Environmental Services
301 King Street, Room 4100
Alexandria, Virginia 22314

Telephone: 703/838-4411
Fax: 703/838-6438

Alexandria Transit Company – See DASH

American Association of State Highway and Transportation Officials (AASHTO)

Frank Francois, Executive Director
444 N. Capitol Street, N. W., Suite 249
Washington, D.C. 20001

Telephone: 202/624-5800
Fax: 202/624-5806

Functions: Trade association for state departments of transportation. Very active in lobbying Congress. Also collects some data from its members.

American Automobile Association (AAA)

Ron Kosh, General Manager
12600 Fair Lakes Circle
Fairfax, Virginia 22033-4904

Telephone: 703/222-5655
Fax: 703/222-4049

Function: Advocacy group for automobile owners.

American Public Transit Association (APTA)

William Millar, President
1201 New York Avenue, N.W.
Washington, D.C. 20005

Telephone: 202/898-4000
Fax: 202/898-4070

Function: National trade association for public transit operators and suppliers. Several active committees evaluate proposed regulations and advocate legislative positions, including legislative and policy committees as well as modal committees such as commuter rail.

Amtrak – See National Railroad Passenger Corporation

Arlington County

Arlington County Commuter Assistance Program (CAP)

James Hamre, Transit Section Chief
Christopher Hamilton, CAP Manager
2100 Clarendon Blvd., Suite 706
Arlington, Virginia 22201

Telephone: 703/358-3525 or 703/358-3725
Fax: 703/358-3594
E-mail: jhamre@co.arlington.va.us

Function: Coordinate commuter assistance, marketing and TDM within Arlington County including The Commuter Stores, BATA and JDC TMA, The Commuter Page internet site, and Transit Ridership Development marketing of Metrobus in Arlington.

Arlington County Department of Public Works

Sam Kem, Director
Ken Hook, Deputy Director
James R. Hamre, Transit Programs Coordinator
No. 1 Courthouse Plaza
2100 Clarendon Blvd., Suite 717
Arlington, Virginia 22201-5445

Telephone: 703/358-3711
Fax: 703/385-3594

Function: Planning, construction and maintenance of streets, bridge, transit and HOV-facilities. Coordination and marketing of ridesharing commuter stores, and other commuter services.

Arlington Transportation Commission

Nancy Iacomini, Chairman
c/o James R. Hamre
Arlington Department of Public Works
2100 Clarendon Blvd.
Arlington, Virginia 22201

Telephone: 703/358-3681

Arlington Trolley in Crystal City

Chris Hamilton
Transit Engineer
2100 Clarendon Blvd., Suite 706
Arlington, Virginia 22201

Telephone: 703/358-3575
Fax: 703/358-3594
E-mail: chamil@co.arlington.va.us

Function: Serves Crystal City with connections to Metrorail.

Ballston/Rosslyn Area Transportation Association (BATA)

Cynthia Fondriest, Executive Director
Taryn Egelanian, Outreach Manager
Robin Bard, Promotions Coordinator
Shareese Thomson, TMA Assistant
1735 North Lynn Street, Suite 113
Arlington, Virginia 22209

Telephone: 703/247-9299
Fax: 703/247-9297

Function: TDM employer services and community outreach in the Ballston-Rosslyn corridor, sponsored by Arlington County CAP.

Commonwealth Transportation Board (CTB)

The Honorable Robert E. Martinez, Chairman
1401 East Broad Street
Richmond, Virginia 23219

Telephone: 804/786-6670
Fax: 804/786-6683

Function: Policy Board for VDOT. Chaired by Secretary of Transportation. Adopts six-year program for highway and transit projects.

The Commuter Store

Three Locations: Ballston Common Mall
Crystal City Underground Mall
Rosslyn Center, Mall Level 2

Main address and contact information:

Laura Maddox, Manager
1615-B Crystal Square Arcade
Arlington, Virginia 22202

Telephone: 703/413-4287
Fax: 703/413-4291
E-mail: comstorecc@aol.com

Function: Commuter information, services and fare media sales for all area transit and TDM programs. Operated by a private contractor through the Arlington County Commuter Assistance Program.

CUE Bus (City of Fairfax)

Paul Briggs, Transit Superintendent
10455 Armstrong Street
Fairfax, Virginia 22030

Telephone: 703/385-7827

Function: Provides local transit service with connections to Metrorail.

DASH (Alexandria Transit Company)

William B. Hurd, Chairman
Sandy Modell, General Manager
116 S. Quaker Lane
Alexandria, Virginia 22304

Telephone: 703/370-3274

Function: Non-profit corporation managing operations of local bus service contracted to the ATE Management and Service Company.

District of Columbia Department of Public Works

Cell Bernardino, Acting Director
2000 14th Street, N.W.
Washington, D.C. 20009

Telephone: 202/939-8000
Fax: 202/939-8191

Function: Advises WMATA Board members and cooperates in transportation projects such as VRE's L'Enfant station.

Dulles Area Transportation Association (DATA)

Tanya Matthews, President
14501-A Lee Jackson Hwy.
Chantilly, VA 22021

Telephone: 703/817-1307
Fax: 703/817-1407

Function: Dedicated to improving mobility in the Dulles Airport/Route 28 employment center (Fairfax, Loudoun, Prince William County). Members include employers, property owners, local governments and other groups.

Environmental Protection Agency (EPA)

The Honorable Carol M. Browner, Administrator
Environmental Protection Agency, (EPA)
401 M. Street, S.W., West Tower
Washington, D.C. 20460

Telephone: 202/260-4700
Fax: 202/260-0279

W. Michael McCabe
Regional Administrator, Region III
841 Chestnut Street
Philadelphia, PA 19107

Telephone: 215/566-5000
Fax: 215/566-2901

Function: Responsible for mandates of the Clean Air Act and establishing regulations to provide state and local compliance.

City of Fairfax

10455 Armstrong Street
Fairfax, Virginia 22030-3630

David Hudson, Director, Community Development and Planning
Telephone: 703/385-7932

John Veneziano, Director, Department of Public Works
Telephone: 703/385-7920

Alex Verzosa, Transportation Director
Telephone: 703/385-7846

Paul Briggs, Transit Superintendent
Telephone: 703/385-7827
Telephone: 703/385-7859 (Information for CUE Bus)

Function: City government responsible for planning, construction and maintenance of street, bridge, transit and HOV-facilities, and operation of the CUE Bus System.

Fairfax Connector Bus

Andy Szakos, Office of Transportation
12055 Government Center Parkway, Suite 1034
Fairfax, Virginia 22035-5511

Telephone: 703/324-1172
Bus Information: 703/339-7200

Function: County-owned public bus system.

Fairfax County Office of Transportation

Shiva K. Pant, Director
Andy Szakos, Chief, Transit Operations Division
12055 Government Center Parkway, Suite 1034
Fairfax, Virginia 22035-5511

Telephone: 703/324-1100
Fax: 703/324-1450

Function: County agency responsible for planning and coordinating roads, bridges, HOV-facilities and public transit.

Fairfax County Ridesources

Dorothy Cousineau
12055 Government Center Parkway, Suite 1034
Fairfax, Virginia 22035-5511

Telephone: 703/324-1109 (Business)
703/324-1111 (Rideshare)

Fairfax County Transportation Advisory Commission

Don Emerson, Chairman
c/o Dan Southworth, Transportation Planner II
Fairfax County Office of Transportation
12055 Government Center Parkway, Suite 1034
Fairfax, Virginia 22035-5511

Telephone: 703/324-1100
Fax: 703/324-1450

Function: Members are appointed by the County Board of Supervisors, with one member from each magisterial district. TAC responds to Board requests for advice.

City of Falls Church

Halsey Green, Assistant Director of Financial Services
300 Park Avenue
Falls Church, Virginia 22046

Telephone: 703/241-5092

Function: City government responsible for planning, construction and maintenance of streets and finance.

City of Falls Church Planning Department

Citizens Advisory Committee on Transportation
Maureen Budetti, Chairman
c/o Planning Department
300 Park Avenue
Falls Church, Virginia 22046

Telephone: 703/241-5040

Fastoll

Tom Sines, Vice President, Customer Service Center
11301 Sunset Hills Road, Suite #A3
Reston, Virginia 22090

Telephone: 703/708-9342 or 1-888/327-8655
Fax: 703/736-3472

Function: Maintains electronic collection of tolls on the Dulles Greenway and Toll Road.

Federal City Council

Tom Foley, President
1155 15th Street, N. W., Suite 301
Washington, DC 20005

Telephone: 202/223-4560
Fax: 202/659-8621

Function: Undertakes studies of regional issues.

Federal Highway Administration (FHA)

The Honorable Jane F. Garvey, Acting Administrator
400 7th Street, S.W.
Washington, D.C. 20590

Telephone: 202/366-0650
Fax: 202/366-3244

Functions: Administer grants to support flexible investments in surface transportation.

Federal Railroad Administration (FRA)

The Honorable Jolene Molitoris, Administrator
400 7th Street, S.W.
Washington, D.C. 20590

Telephone: 202/632-3114
Fax: 202/632-3700

Function: Provide grants, primarily for safety purposes, and regulate safety of railroads. Administer major grant programs to develop new technology, such as magnetic levitation.

Federal Transit Administration (FTA)

The Honorable Gordon Linton, Administrator
400 7th Street, S.W.
Washington, D.C. 20590

Telephone: 202/366-4040
Fax: 202/366-9854

Sheldon Kinbar, Regional Administrator
FTA Region III
1760 Market Street, #500
Philadelphia, PA 19103

Telephone: 215/656-7100
Fax: 215/656-7260

Function: Administer grants to support public transit capital investments operations and research.

Fredericksburg Area Metropolitan Planning Organization (FAMPO)

William Jones, Chairman
Stephen H. Manster, Administrator
512 Lafayette Blvd.
Fredericksburg, VA 22401

Telephone: 540/373-2890
Fax: 540/899-4808

Function: Serves as a Planning Organization. FAMPO is comprised of three voting jurisdictions: Fredericksburg, Stafford County and Spotsylvania County and two non-voting members: Caroline and King George's Counties. RADCO provides staffing for FAMPO.

General Services Administration

David J. Barram, Administrator
18th & F Streets, N.W
Washington, D.C. 20405

Telephone: 202/501-0800
Fax: 202/219-1243

Function: Helps determine parking and transportation arrangements for federal agencies. Would be involved in a coordinated regional strategy to boost public transit and ridesharing use among federal employees.

George Mason University (GMU)

Alan Mertin, President
George Mason University
Fairfax, Virginia 22030-4444

Telephone: 703/993-1000
Fax: 703/993-8707

Dr. Roger Stough, Northern Virginia Chair in Local Government
Institute of Public Policy
George Mason University
Fairfax, Virginia 22030-4444

Telephone: 703/993-2280
Fax: 703/993-2284

Ellie Doyle, Director, Transportation and Land Use Policy
GMU-Alumni House
4400 University Drive
Fairfax, Virginia 22030

Telephone: 703/993-3351

Function: State-supported university located in Fairfax County/City of Fairfax. Has active transportation education and research programs. Emphasis is on Intelligent Vehicle Highway Systems and traveler information systems. Recipient of several federal transportation research grants and active supporters of private-sector involvement.

Greater Washington Board of Trade

John Tydings, President
1129 20th Street, N.W., Suite 200
Washington, D.C. 20036-3494

Telephone: 202/857-5900
Fax: 202/223-2648

Function: Advocates improvements for the regional economy.

Loudoun County

Sanjeev Malhotra, Chief of Transportation Planning
Julie Pastor, Director, Department of Planning
1 Harrison Street, Leesburg, Virginia 22075
P.O. Box 7000, Leesburg, VA 20177

Telephone: 703/777-0246
Fax: 703/777-0441

Function: County agencies responsible for planning and coordinating roads, bridges, HOV-facilities and public transit.

Loudoun County Rideshare

(vacant)
Ridesharing Coordinator
1 Harrison Street, Leesburg, VA 22075
P.O. Box 7000, Leesburg, Virginia 20177

Telephone: Metro: 703/478-8416 (ext. 5665)
Local: 703/771-5665

Loudoun County Transportation Association (LCTA)

Mark McGregor, President
P.O. Box 2833
Leesburg, Virginia 20177

Telephone: 703/777-5246
Fax: 703/777-2552

Function: Improve mobility.

MARC

Kathy Waters, Director
P.O. Box 8718
BWI Airport, Maryland 21240-8718

Telephone: 410/859-7400
Fax: 410/859-5713

Function: Operator of MARC commuter rail service. Part of Maryland Mass Transit Administration.

Maryland Department of Transportation (MDOT)

The Honorable David L. Winstead
Maryland Secretary of Transportation
P.O. Box 8755
BWI Airport, Maryland 21240-0755

Telephone: 410/865-1000
Fax: 410/865-1334

(vacant), Manager of Washington Area Transit Programs
8720 Georgia Avenue, Suite 904
Silver Spring, Maryland 20910-3602

Telephone: 410/792-0273
Fax: 410/565-0241

Ronald L. Freeland, Administrator
Mass Transportation Administration
6 St. Paul Street
Baltimore, MD 21201-3415

Telephone: 410/767-3943
Fax: 410/333-3279

Function: Provides Maryland jurisdictions' WMATA funding.

Maryland-National Park and Planning Commission

The Honorable Elizabeth Hewlett, Chairman
County Administration Building
14741 Governor Oden Bowie Drive
Upper Marlboro, MD 20772

Telephone: 301/952-3560
Fax: 301/952-5074

Trudye Morgan Johnson, Executive Director
6611 Kenilworth Avenue
Riverdale, Maryland 20737

Telephone: 301/454-1747
Fax: 301/454-1750

Function: Joint agency for Montgomery and Prince George's County that plans and analyzes transportation improvements.

Metropolitan Development Policy Committee

The Honorable Joan Rokus, Chairman
777 North Capital Street, N.E., Suite 300
Washington, D.C. 20002-4201

Telephone: 202/962-3200
Fax: 202/962-3201

Function: Advises the MWCOG Board of Directors on all planning, land use, forecasting, and economic development issues, and seeks to promote the effective coordination of regional land use, transportation and environmental policies.

Metropolitan Washington Air Quality Committee

The Honorable Gary G. Allen, Chairman
777 North Capital Street, Suite 300, N.E.
Washington, D.C. 20002-4201

Staff Contact: Jackie Seneschal, Assistant Director of the Department
of Environmental Programs

Telephone: 202/962-3254

Function: Consists of elected officials from localities, states, and the District of Columbia. Develops recommendations for a regional air quality attainment strategy for the Washington area; these recommendations become part of the State Implementation Plan, which is submitted to the Environmental Protection Agency.

Metropolitan Washington Airports Authority (MWAA)

James A. Wilding, General Manager MA-1
44 Canal Center Plaza
Alexandria, Virginia 22314

Telephone: 703/417-8610
Fax: 703/417-8949

Washington Flyer: 703/685-1400
703/661-2700

Function: Regional agency operating Washington National and Washington Dulles International Airports. Also offers Washington Flyer bus, van and taxi system serving both airports.

Metropolitan Washington Council of Governments (MWCOC)

The Honorable Robert B. Dix, Jr., Chairman
Ruth A. Crone, Executive Director
777 North Capitol St., Suite 300
Washington, D.C. 20002-4201

Telephone: 202/962-3200
Fax: 202/962-3201

Function: In 1966, MWCOC was officially recognized by the federal government as the agency responsible for comprehensive regional planning and agreed with the TPB to use the latter as its Transportation Policy Committee.

Metropolitan Washington Council of Governments Commuter Connections

Nicolas Ramfos, Chief, Alternative Commute Programs
777 N. Capitol St., N.E., Suite 300
Washington, D.C. 20002-4201

Telephone: 202/962-3200

National Capital Planning Commission

Reginald W. Griffith, Executive Director
801 Pennsylvania Avenue, N.W., Suite 301
Washington, D.C. 20576-2604

Telephone: 202/482-7211
Fax: 202/482-7272

Function: Must approve federal construction projects in the District of Columbia, and consider transportation implications.

National Capital Region Transportation Planning Board (TPB)

The Honorable Derick P. Berlauge, Chairman
Ron Kirby, Director, Office of Transportation
777 North Capital Street, Suite 300, N.E.
Washington, D.C. 20002-4201

Telephone: 202/962-3200

Function: Serves as Metropolitan Planning Organization and provides extensive database and modeling capability for population, employment and transportation studies. TPB now includes representatives of 18 cities and counties, plus three state transportation agencies, MWAA, WMATA, and five federal agencies. A weighted voting procedure is employed. MWCOG staff operate the Ride Finders network, which provides a centralized carpool and vanpool matching database. A citizens advisory committee is chaired by Ms. Anne Haynes.

National Park Service

Denis Galvin, Acting Director
1849 C Street, N.W.
Washington, D.C. 20240

Telephone: 202/208-4621
Fax: 202/208-7889

Function: Controls access to certain federal lands, including the George Washington Parkway. Permits are required when encroaching on Park Service land, such as at VRE's L'Enfant station.

National Railroad Passenger Corporation (Amtrak)

Wade Hall, Deputy General Manager
900 Second Street, N.E., Suite 111
Washington, D.C, 20002

Telephone: 202/906-2619
Fax: 202/906-3569

Function: Contract operator for VRE commuter rail service.

Northern Virginia Planning District Commission (NVPDC)

The Honorable Christopher Brown, Chairman
G. Mark Gibb, Executive Director
7535 Little River Turnpike, Suite 100
Annandale, Virginia 22003

Telephone: 703/642-0700
Fax: 703/642-5077

Function: State planning review agency. Conducting land use study of the Virginia Railway Express (VRE).

Northern Virginia Transportation Alliance

Gary Garczynski, President
Bob Chase, Director
P.O. Box 6149
McLean, Virginia 22106-6149

Telephone: 703/883-1355
Fax: 703/883-1850

Function: This non-partisan interest group lobbies for completion of transportation facilities in Northern Virginia and coordinated land use policies. For example, the group strongly supports completion of a western bypass.

Northern Virginia Transportation Commission (NVTC)

The Honorable Kerry Donley, Chairman
Richard K. Taube, NVTC Executive Director
4350 N. Fairfax Drive, Suite 720
Arlington, Virginia 22203

Telephone: 703/524-3322
Fax: 703/524-1756

Function: Created by the General Assembly in 1964, currently has 19 members from six jurisdictions. Members are elected officials from local jurisdictions and the General Assembly, with a designee of the Commissioner of VDOT. Concentrates on finance, and allocates up to \$100 million annually of state/federal funds to assist public transit. Co-sponsor of the Virginia Railway Express. NVTC Commissioners are also members of the Transportation Coordinating Council. Four NVTC members are appointed by the Commission to the WMATA Board of Directors. Levies a two percent motor fuels tax generating \$12 million annually; the funds are used primarily for Metro operating costs and debt service.

OmniRide

Eric Marx
Potomac & Rappahannock Transportation Commission
3460 Commission Court
Woodbridge, Virginia 22192-1759

Telephone: 703/490-4422
Fax: 703/490-5254

Function: Provides commuter bus service to core locations with connections to Metrorail and feeder bus service to some VRE stations within Prince William County.

Potomac and Rappahannock Transportation Commission (PRTC)

The Honorable Alvin Y. Bandy, Chairman
Stephen MacIsaac, Acting Executive Director
3460 Commission Court
Woodbridge, Virginia 22192-1759

Telephone: 703/490-4811
Fax: 703/490-5254

Function: Created in 1986 under authority of Section 15.1-1342 of the Code of Virginia: (Transportation District Act). Current members include Prince William and Stafford Counties, and the cities of Fredericksburg, Manassas and Manassas Park. Operates the Commuteride commuter bus system, a ridesharing program, and is a co-sponsor of VRE commuter rail service. Commissioners are appointed from each jurisdiction and the General Assembly including as many of six principals and six alternates from Prince William County. Total commissioners are 15, with 14 alternates. The two percent motor fuels tax levied within PRTC yields almost \$5 million annually.

Prince William County Rideshare

Lauretta Ruest, Project Director
3460 Commission Court
Woodbridge, Virginia 22192-1795

Telephone: Metro: 703/643-0239
Local: 703/490-4422

Function: Administer local ridesharing services and marketing in cooperation with MWCOG's regional network, known as the Ride Finders Network.

Rappahannock Area Development Commission

Ferris Belman, Chairman
Stephen H. Manster, Executive Director
512 Lafayette Blvd.
Fredericksburg, VA 22401

Telephone: 540/373-2890
Fax: 540/899-4808

Function: Planning agency for five localities: City of Fredericksburg, Stafford County, Spotsylvania County, Caroline County and King George's County. Provides staffing for Fredericksburg Area Metropolitan Planning Organization (FAMPO).

Reston RIBS

Andy Szakos, Office of Transportation
12055 Government Center Parkway, Suite 1034
Fairfax, Virginia 22035-5511

Telephone: 703/324-1172
Reston RIBS Information: 703/548-4545

Function: County-funded public bus system.

Reston Transportation Management Association (LINK)

Karl J. Ingebritson, Director
1760 Reston Parkway, Suite 513
Reston, Virginia 20190

Telephone: 703/318-9663 or 435-LINK
Fax: 703/318-0817

Function: Improving mobility in the Reston Area.

State Corporation Commission

The Honorable Clinton Miller, Commissioner
The Honorable Theo B. Morrison, Jr., Commissioner
The Honorable Hullahen William Moore, Commissioner
1300 East Main Street, 11th floor
Richmond, Virginia 23219

Telephone: 804/371-9608
Fax: 804/371-9376

Function: Provides authority to operate and regulates fares for certain privately owned transportation services (e.g. intercity bus service) within the Commonwealth. Must approve tolls to be charged by the Virginia Toll Road Corporation for its Dulles Toll Road Extension to Leesburg. Does not regulate government-owned bus systems nor private carriers operating within the Washington Metropolitan Area Transit Zone.

Transportation Coordinating Council (TCC)

The Honorable Robert T. Lee, Chairman
c/o Northern Virginia District Office
VDOT
3975 Fair Ridge Drive
Fairfax, Virginia 22033

Telephone: 703/383-2233

Function: The TCC was created by Governor Wilder in 1990 based on earlier plans by NVTC Chairman John Milliken. Member jurisdictions adopted resolutions to participate. The Council consists of three parts: 1) A policy group with 35 elected officials (plus alternates) from NVTC, PRTC and selected towns. This group is chaired by the Northern Virginia member of the Commonwealth Transportation Board. 2) A TCC Technical Committee with staff representatives of local and regional jurisdictions, chaired by the Northern Virginia District Administrator of VDOT. 3) A TCC Citizens Committee chaired by an appointee (Doug Ham) of the Secretary of Transportation.

Transportation Research Board/National Research Council

Robert E. Skinner, Jr., Executive Director
2101 Constitution Avenue
Washington, D.C. 20418

Telephone: 202/334-2933
Fax: 202/334-2003

Function: Sponsors cooperative research programs for surface transportation, and often is directed by Congress to manage special transportation studies.

Toll Road Corporation of Virginia

Michael Crane, CEO
45240 Business Court, Suite 100
Sterling, VA 20166

Telephone: 703/707-8870
Fax: 703/707-8876

Function: This private organization worked for several years to design, finance and construct an extension of the Dulles Toll Road to Leesburg. The Corporation has operated the road since its 1995 opening.

Tysons Transportation Association (TYTRAN)

William J. Menda, Chairman and President
P.O. Box 3264
Tysons Corner, Virginia 22103

Telephone: 703/714-3406
Fax: 703/714-4854

Staff Contact: Kathleen A. Jackson, Director of Transportation
Telephone: 703/799-5394

Function: Actively works to improve mobility.

Tysons Shuttle

Andy Szakos, Office of Transportation
12055 Government Center Parkway, Suite 1034
Fairfax, Virginia 22035-5511

Telephone: 703/324-1172
Tysons Shuttle Information: 703/548-4545

Function: County-funded public bus system.

U.S. Army Corps of Engineers

Lt. Gen. Joe N. Ballard, Chief of Engineers
20 Massachusetts Avenue, N.W.
Washington, DC 20314-1000

Telephone: 202/761-0001
Fax: 202/761-1683

Function: Must award permits to approve surface transportation construction affecting wetlands (e.g. at WMATA's Franconia/Springfield Station).

U.S. Congress

Senators of Virginia:

The Honorable John Warner (R)
The Honorable Charles Robb (D)

U.S. Senate

Washington, D.C. 20510
Telephone: 202/224-3121 (U.S. Capitol Switchboard)

Senate Committees:

Senate Appropriations Committee
Telephone: 202/224-3471

Transportation Subcommittee
Telephone: 202/224-7281

Senate Banking, Housing and Urban Affairs Committee
Telephone: 202/224-7391

Senate Commerce, Science and Transportation Committee
Telephone: 202/224-5115

Surface Transportation Subcommittee
Telephone: 202/224-4852

Senate Environmental Public Works Committee
Telephone: 202/224-6176

Transportation and Infrastructure Subcommittee
Telephone: 202/224-6176

Representatives of Virginia:

District 1 -	The Honorable Herbert Bateman	(R)
District 2 -	The Honorable Owen Pickett	(D)
District 3 -	The Honorable Robert C. Scott	(D)
District 4 -	The Honorable Norman Sisisky	(D)
District 5 -	The Honorable Virgil H. Goode, Jr.	(D)
District 6 -	The Honorable Robert W. Goodlatte	(R)
District 7 -	The Honorable Thomas Bliley	(R)
District 8 -	The Honorable James Moran	(D)
District 9 -	The Honorable Rick Boucher	(D)
District 10 -	The Honorable Frank Wolf	(R)
District 11 -	The Honorable Thomas Davis	(R)

U.S. House of Representatives

Washington, D.C. 20515

Telephone: 202/224-3121 (U.S. Capitol Switchboard)

House Committees:

House Appropriations Committee
Telephone: 202/225-2771

Transportation Subcommittee
Telephone: 202/225-2141

House Commerce Committee
Telephone: 202/225-2927

House Transportation and Infrastructure Committee
Telephone: 202/225-9446

Surface Transportation Subcommittee
Telephone: 202/225-6715

Legislation:

Senate and House Bill Status

Telephone: 202/225-1772

U.S. Department of Transportation (USDOT)

The Honorable Rodney E. Slater, Secretary of Transportation
400 7th Street, S.W., Suite 10200
Washington, D.C. 20590

Telephone: 202/366-1111
Fax: 202/426-7202

Function: Set policy and coordinate activities of the modal administrations.

Van Pool Services, Inc. (VPSI)

Ms. Trish Ashley, Manager
2760 Eisenhower Avenue, #306
Alexandria, Virginia 22314

Telephone: 800/826-7433

Function: Provides van pool services to the Washington, D.C. region and nation-wide.

Virginia Association of Counties (VACO)

James D. Campbell, Executive Director
1001 E. Broad Street, Suite LL20
Richmond, Virginia 23219

Telephone: 804/788-6652
Fax: 804/788-0083

D.C. Office:
Telephone: 202/393-6226

Function: Advocacy group for Virginia's County governments. Each year adopts legislative agenda, including transportation components.

Virginia Department of Rail and Public Transportation (VDRPT)

Mr. Leo J. Bevon, Director
1401 East Broad Street
Richmond, Virginia 23219

Telephone: 804/786-1051
Fax: 804/786-7286

Function: Rail, public transportation, and TDM program planning, implementation, advocacy, and financial assistance. Policy and technical advice and assistance to localities and to transit operators. Policy and technical advice to the executive and legislative branches of Virginia state government.

Virginia Department of Transportation (VDOT)

David Gehr, Commissioner
1401 East Broad Street
Richmond, Virginia 23219

Telephone: 804/786-2701
Fax: 804/786-2940

Claude D. Garver, Assistant Commissioner for Operations

Telephone: 804/786-2711
Fax: 804/786-6250

Function: State agency responsible for planning, constructing and maintaining surface transportation improvements.

Northern Virginia VDOT District Office

Tom Farley, District Administrator
3975 Fair Ridge Drive
Fairfax, Virginia 22033

Telephone: 703/383-2000
Fax: 703/383-2470

Joan Morris, Director of Public Affairs
Telephone: 703/383-2465

Dulles Toll Road Operations Center
Telephone: 703/383-2696

Function: The Northern Virginia office manages construction and maintenance of highways in the district and controls ramp meters and other facilities.

Virginia Division of Risk Management

D.B. Smith, Acting Director
James Monroe Building - 6th Floor
101 North 14th Street
Richmond, Virginia 23219

Telephone: 804/225-4619
Fax: 804/371-8400

Function: Risk manager for the Virginia Railway Express. On behalf of NVTC/PRTC, manages VRE's insurance program which provides \$200 million of protection and incorporates \$20 million of cash reserves.

Virginia General Assembly

Function: Sessions are held for two or three months each year beginning in January, but committee hearings occur all year. Created NVTC in 1964. Designates NVTC's members from the General Assembly and the number of members from each jurisdiction. Specifies the method of sharing NVTC's administrative costs and allocating the majority of NVTC's state aid.

In a special session in 1986, created a new Transportation Trust Fund with public transit to receive 8.4 percent allocated according to a statutory formula. Public transit funding was doubled.

The Honorable Richard Saslaw
Democratic Leader
Virginia Senate
P.O. Box 1856
Springfield, Virginia 22151

The Honorable Joseph B. Bendetti
Republican Leader
Virginia Senate
P.O. Box 8726
Richmond, Virginia 23236

Susan Clark Schaar, Clerk
Senate
P.O. Box 396
Richmond, Virginia 23219-0396

Telephone: 804/786-2366
Fax: 804/225-3434

The Honorable Thomas W. Moss, Jr.
Speaker of the House of Delegates
Delegate for the 79th District
P.O. Box 6190
Portsmouth, Virginia 23705

The Honorable Richard Cranwell
Majority Leader of the House of Delegates, Chairman of Finance Committee
Delegate for the 14th District
P.O. Box 459
Vinton, Virginia 24179

Bruce F. Jamerson, Clerk
House of Delegates
P.O. Box 406
Richmond, Virginia 23203-0406

Telephone: 804/786-8826

Virginia Municipal League (VML)

R. Michael Amyx, Executive Director
P.O. Box 12164 (13 East Franklin Street)
Richmond, Virginia 23241

Telephone: 804/649-8471
Fax: 804/343-3758

Function: Advocacy group for Virginia's cities and towns. Pursues an annual legislative agenda. Provides management services for the Virginia Association of Public Transit Officials.

Virginia Office of the Governor

The Honorable George Allen, Governor
Commonwealth of Virginia
P.O. Box 1475
Richmond, Virginia 23212

Telephone: 804/786-2211

Function: Proposes financing measures for transportation; appoints Secretary of Transportation and members of various boards and commissions.

Virginia Office of the Secretary of Transportation

The Honorable Robert E. Martinez, Secretary
Commonwealth of Virginia
1401 East Broad Street, Room 414
Richmond, Virginia 23219

Telephone: 804/786-6670
Fax: 804/786-6683

Function: Oversees the Virginia Departments of Transportation and Rail and Public Transportation, serving as chairman of the Commonwealth Transportation Board.

Virginia Railway Express (VRE)

The Honorable Gerald Hyland, Chairman of Operations Board
Stephen T. Roberts, Director of Operations
1500 King Street, Suite 202
Alexandria, Virginia 222314-2730

Telephone: 703/684-1001
Fax: 703/684-1331

Function: Joint operating board created by NVTC and PRTC to manage operations.

Virginia Transit Association (VTA -- formerly called VAPTO)

Linda McMinimy, Administrator
1511 Chauncey Lane
Richmond, Virginia 23233

Telephone: 804/643-1166
Fax: 804/643-1155

VML Staff Contact: Janet Areson, Liaison
13 East Franklin Street, P.O. Box 12164
Richmond, Virginia 23241

Telephone: 804/649-8471
Fax: 804/343-3758

Turner Spencer, Chairman
Pentran
3400 Victoria Boulevard
Hampton, VA 23661

Telephone: 757/722-2837
Fax: 757/722-9662

Function: Trade group for Virginia's public transit operators and associated suppliers. Primarily focused on state legislation, VAPTO employs a lobbyist and uses VML for secretarial services.

Virginia VanPool Association, Inc.

Dick Boyd
P.O. Box 1016
Woodbridge, Virginia 22193

Telephone: 202/310-2700

Function: Advocacy group for vanpools.

Washington Area Bicyclist Association (WABA)

Ellen Jones, Director
818 Connecticut Ave., N.W., Suite 300
Washington, D.C. 20006

Telephone: 202/237-8967

Fax: 202/833-4626

Function: Promote bicycling.

Washington Metropolitan Area Transit Authority (WMATA)

The Honorable Jack Evans, Chairman
Richard A. White, General Manager
600 Fifth Street, N.W.
Washington, D.C. 20001

Telephone: 202/637-1234

Metro Bus/Rail Information: 202/637-7000

Metro On-Call Lift-Equipped Buses: 202/962-1825

Elderly Disabled Assistance I/D Cards: 202/962-1245

Function: Operates the Metrorail and Metrobus systems within a service territory established by an interstate compact; this area includes the cities of Alexandria, Fairfax and Falls Church; and Arlington and Fairfax Counties.

Washington Metropolitan Area Transit Commission

The Honorable Agnes M. Alexander, Chairperson
The Honorable Claude Ligon, Chairperson
Judge Clinton Miller, Chairperson
W.H. McGilvery III, Executive Director
1828 L. Street, N.W., Suite 703
Washington, D.C. 20036-5104

Telephone: 202/331-1671
Fax: 202/653-2179

Function: Regulates for-hire transportation between points in the District (or for routes outside zone if operated under Interstate Commerce Commission authority with a majority of passengers in the District), including taxicabs operating between jurisdictions. The Commission does not regulate water, air or rail transit; federal, state, local or WMATA transportation; school transit; or transit solely within Virginia.

Washington Private Operators Council

Kenneth W. Butler, Executive Director
11350 Random Hills Road, Suite 800
Fairfax, VA 22030

Telephone: 703/620-4914
Fax: 703/620-4709

Function: Educates the public and elected officials about the benefits of contracted public transit services.

Washington Suburban Transit Commission

The Honorable John Davey, Chairman
8720 Georgia Avenue, Suite 904
Silver Spring, Maryland 20910-3602

Telephone: 301/565-9665
Fax: 301/565-0241

Function: Provides a forum for Maryland's members of the WMATA Board of Directors.

