Northern Virginia
Transportation Commission

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Eleventh Annual Report

Transportation Service

Coordination Plan

September, 1995

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ABSTRACT

This eleventh in the series of reports on the Transportation Service Coordination Plan (TSCP) of the Northern Virginia Transportation Commission reviews the institutional and legislative settings within which transportation policies and programs are planned and implemented in Northern Virginia. Scores of agencies and organizations work to gather data, define problems and opportunities, and craft solutions to the region's mobility needs. The TSCP also assembles performance data for the region's public transit systems, reviews ongoing activities, and discusses the qualities of a good transportation system. The report concludes with a set of issues and recommendations for action to guide NVTC and its jurisdictions as the region shapes long-range plans for its transportation network. Finally, appendices provide data on transportation agencies and organizations, public transit ridership and routes, taxi services, park-and-ride lots, transit fare and transfer policies, and ongoing studies in the region.

Money is scarce, congestion is getting worse, and existing transportation facilities are in need of immediate repair. In the future, the picture only looks more bleak. Between 1990 and 2020, the population of the region is expected to increase by 41 percent, while vehicle trips in the region are predicted to increase by 64 percent, and vehicle miles traveled daily by 74 percent. Planned investments in road and transit networks will not keep up with the traffic. In 1990, for example, during the evening rush hour, 26 percent of vehicle miles travelled in the region were at free-flow speeds, and 45 percent were travelled in stop-and-go conditions. By 2020, these figures are forecast to be 12 and 68 percent, respectively.

Daily public transit ridership in Northern Virginia is about 232,000 on several regional and local systems varying in size from approximately 270 peak-hour Metrobuses in Virginia to the two buses that make up the Tysons Shuttle. Both public agencies and private firms operate transit services. 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.

Among the studies and new initiatives underway in the region are efforts to implement bus and rail service in the Dulles corridor and provide high-speed rail service to Richmond. The region is also looking at a range of improvements in the I-66 and Beltway corridors, and is moving forward with extensions and additions to the HOV network. The new regional paratransit system, MetroAccess, which began operations in May, 1994, is scheduled to expand service in November, 1995.

Recommended actions for future years include enhancements to the transit system, increased attention to bicycle and pedestrian access to facilities, and an effort to implement demand management techniques in the region. In upcoming years, the area will be faced with locating new sources of transportation funding and issues of regional vs. local control over land use and transportation decisions. By considering these issues now, Northern Virginia and the entire region can begin to strive for consensus as to how to best move forward.

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INTRODUCTION

INTRODUCTION

HOV on I-66 -- A Case Study

During his 1993 campaign, Governor Allen promised that, if elected, he would allow cars with two or more passengers onto I-66 inside the Beltway. At the time, the highway was reserved for cars with three or more passengers (HOV-3) during peak periods, had high violation rates, and appeared to many to be underutilized. Currently, VDOT is conducting a one-year demonstration of HOV-2 on I-66 with stepped-up enforcement, with the results to be presented to the region in December, 1995. So far, traffic appears to be moving well on I-66, and the violation rate has dropped dramatically.

On its face, this appears to be a relatively straightforward situation. However, a closer look at how the issue arose and the region's response to it reveals how complex transportation planning is in Northern Virginia -- and how few questions have easy answers.

There are actually two questions involved in the HOV-2 on I-66 discussion. The more obvious of these is: should two-passenger vehicles be allowed on I-66 during peak periods? As noted above, there appeared to be excess capacity on the highway, although HOV lanes, while carrying more people per hour than regular lanes, often look emptier than their conventional counterparts. However, up to 47% of the drivers on I-66 were violating the HOV restriction, suggesting there would be more capacity if violations were curbed. In fact, an NVTC staff analysis found that if two-passenger vehicles were allowed and violations not curbed, traffic would be slowed to stop-and-go conditions, eliminating the incentive to carpool. If, however, the HOV restriction were to change and at the same time violations were eliminated, traffic would be heavier, but at acceptable levels of service.

Commuters from the west were also frustrated by the fact that, outside the Beltway, diamond lanes had been opened that were restricted to vehicles with two or more passengers. Thus, two-person carpools were encouraged outside the Beltway, but then had to exit I-66 and use one of the very congested alternative routes (generally Routes 29 and 50) to continue into the District. Besides the inconvenience this caused HOV-2 commuters, the inconsistent policy resulted in morning rush-hour traffic jams just outside the Beltway, as everyone tried to leave I-66.

However, there were also valid concerns raised about the effects of the proposed change. Transit ridership was expected to drop (and has) in the parallel corridor, meaning that the region would receive fewer benefits from its transit investment. Furthermore, a ridership drop would result in an increased local subsidy, affecting the budgets of jurisdictions such as Alexandria, which would not benefit from the change

on I-66. Concerns were also expressed that three-person carpools might divide into two-person carpools, resulting in many more cars carrying the same number of people.

These issues lead to the second and more contentious question: who should decide what the policy on I-66 should be? This question was first addressed in 1977, in a decision arising out of a lawsuit brought to fight the construction of I-66. One of the stipulations of the decision, which was written by then U.S. Secretary of Transportation William T. Coleman, Jr., was that I-66 was to be HOV-4 during peak periods. Furthermore, any changes to this policy (or any other policies specified in the agreement) were to be agreed upon by the Commonwealth of Virginia; the U.S. Secretary of Transportation; the Transportation Planning Board (TPB), which represents the local jurisdictions in the region; and the Washington Metropolitan Area Transportation Authority, also know as Metro.

The agreement acknowledges, however, that an act of Congress may alter it, and Congress did just this in January, 1984, when it changed the HOV policy from four to three and reduced the duration of the restricted periods by half an hour. Congress did it again in 1994, when a Representative from Fairfax and Loudoun Counties attached an amendment establishing the one-year HOV-2 demonstration period to an appropriations bill in the House. He had attempted such an amendment once before, but it had been killed on the House floor by another local member. Local Northern Virginia elected officials' opinions were divided as to both the project and the procedure by which it was brought about. District of Columbia elected officials were angered that plans to feed more cars into the central city were being made without their input. Ultimately, both the commission and the TPB passed resolutions questioning the process -- for even officials who disagreed about the value of the project agreed that they did not want Congress making their decisions for them. On the other hand, the Commonwealth and the Representative from the outer jurisdictions, who was, after all, representing his constituents, acted within the law to move forward with a project that they perceived to be in the public interest.

There is no easy answer to this situation; instead there are valid points on both sides of both arguments. The point is not that I-66 should or should not be HOV-2. Rather, it is that **the situation is typical of transportation planning in the Washington, DC region: it is complex, it involves individuals from many jurisdictions and many levels of government, it is inextricably linked with land use and environmental issues, it involves large amounts of money, and it has the power to incite great emotion in large numbers of people.**

Overview of Report

The purpose of this report is to shed some light on how transportation planning and investment decisions occur in Northern Virginia. Section II discusses the various contexts in which planning takes place: What are travel patterns like? What laws affect how planning occurs? Who are the people and institutions involved? Finally, what types of funding are available?

Section III describes the many aspects of the transportation system that is in place today, addressing in particular the performance characteristics of the many transit systems operating in the area. Finally, Section IV includes a discussion of how a "good" transportation system might be defined, what the region is doing to create it, and what might be done better. Several appendices containing agency contacts, public transit ridership data, descriptions of ongoing studies, and related information complete the report.

BACKGROUND

History of the Planning Process

In early 1984 the Northern Virginia Transportation Commission initiated a formal process to create a Bus Service Coordination Plan by adopting a set of goals:

- Improve transit information sharing within the region;
- Provide better coordination of bus planning and services; and
- Improve bus service benefits relative to costs.

This is the eleventh in the series of reports on NVTC's Bus Service Coordination Process. However, since the focus of the planning process has expanded beyond buses to include passenger rail and other High Occupancy Vehicle (HOV) strategies as well as related highway improvements, the report has been renamed to reflect the broader emphasis on surface transportation services.

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 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 -- VDOT) to 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 series of reports on its Transportation Service Coordination Plan is focused.

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. **Figure 1** shows the current membership.

NVTC provides a transportation policy forum, and 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 8,000 daily trips in the congested I-66 and I-95 commuting corridors of Northern Virginia.

NVTC has sponsored numerous demonstrations to improve coordination among transportation services, such as private taxis serving Metrorail station in lieu of more expensive bus service. As evidenced by this plan, the commission has assumed an active role in coordinating transportation services in Northern Virginia, and is 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 upgrading the performance of transit operators. The integration and coordination of transit services is an area of intense current interest on the part of the commission, as is leveraging public transit assistance through cooperation with the private sector.

More information about NVTC, its statutory mandate, history and accomplishments, as well as a detailed listing of its 1995 work program, is available in the commission's 1995 Handbook. This document, as well as the earlier reports on the Transportation Service Coordination Plan, are available on request to the commission. The categories of goals enumerated in the Fiscal Year 1996 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

Figure 1

NVTC OFFICERS AND COMMISSIONERS
--1995--

Mary Margaret Whipple, Chairman
Sharon Bulova, Vice-Chairman
Robert E. Harris, Secretary-Treasurer

Arlington County

Ellen M. Bozman[4]
Albert C. Eisenberg
Mary Margaret Whipple[1]

Fairfax County

Ernest J. Berger[2]
Sharon Bulova[3]
Robert B. Dix, Jr.
Gerald W. Hyland[1/3]
Elaine McConnell[3]

Loudoun County

Joan G. Rokus

City of Alexandria

Kerry J. Donley
Patricia S. Ticer[2]

City of Fairfax

Gary Rasmussen

City of Falls Church

David F. Snyder

Virginia Department of Rail and Public Transportation

Leo J. Bevon

General Assembly

Senator Joseph V. Gartlan, Jr.
Senator Edward M. Holland
Delegate L. Karen Darner
Delegate Marian Van Landingham
Delegate Robert E. Harris

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

SECTION II

THE CONTEXT OF REGIONAL TRANSPORTATION PLANNING

PHYSICAL AND CULTURAL CONTEXT

Anyone who commutes regularly in the Washington metropolitan region knows that traffic congestion is an increasingly costly and aggravating problem for the area and its approximately four million residents. In fact, in a recent study conducted by the Texas Transportation Institute, the Washington, D.C. metropolitan area was rated second in roadway congestion behind Los Angeles, California.

While traditionally these congestion problems have occurred on radial "spokes" leading into the urban core, jobs are now moving out into the suburbs. In 1990, more than one-half of all commuting trips in the Washington region were estimated to be suburb-to-suburb.[1] 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. housing too is spreading outward, as families seek cheap land, a 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, such as dropping off clothes at the dry cleaner on the way to work, then stopping by the grocery on the way home. And, of course, 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 congestion we see, not just 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 a triennial Core Cordon Count, in which it enumerates how many cars and people cross an imaginary cordon line around the metropolitan core during the peak morning period (see **Figure 2**). Results of the 1993 count, the most recent conducted, confirm that region-wide (including Maryland, the District of Columbia and Virginia) the number of automobiles entering the core is higher than three years ago; average auto occupancies have dropped; and the percentage of travellers crossing the line using transit has decreased slightly.

In Northern Virginia, the picture is slightly brighter. In this sub-region, the number of travellers using transit to cross the cordon line increased by 16 percent.

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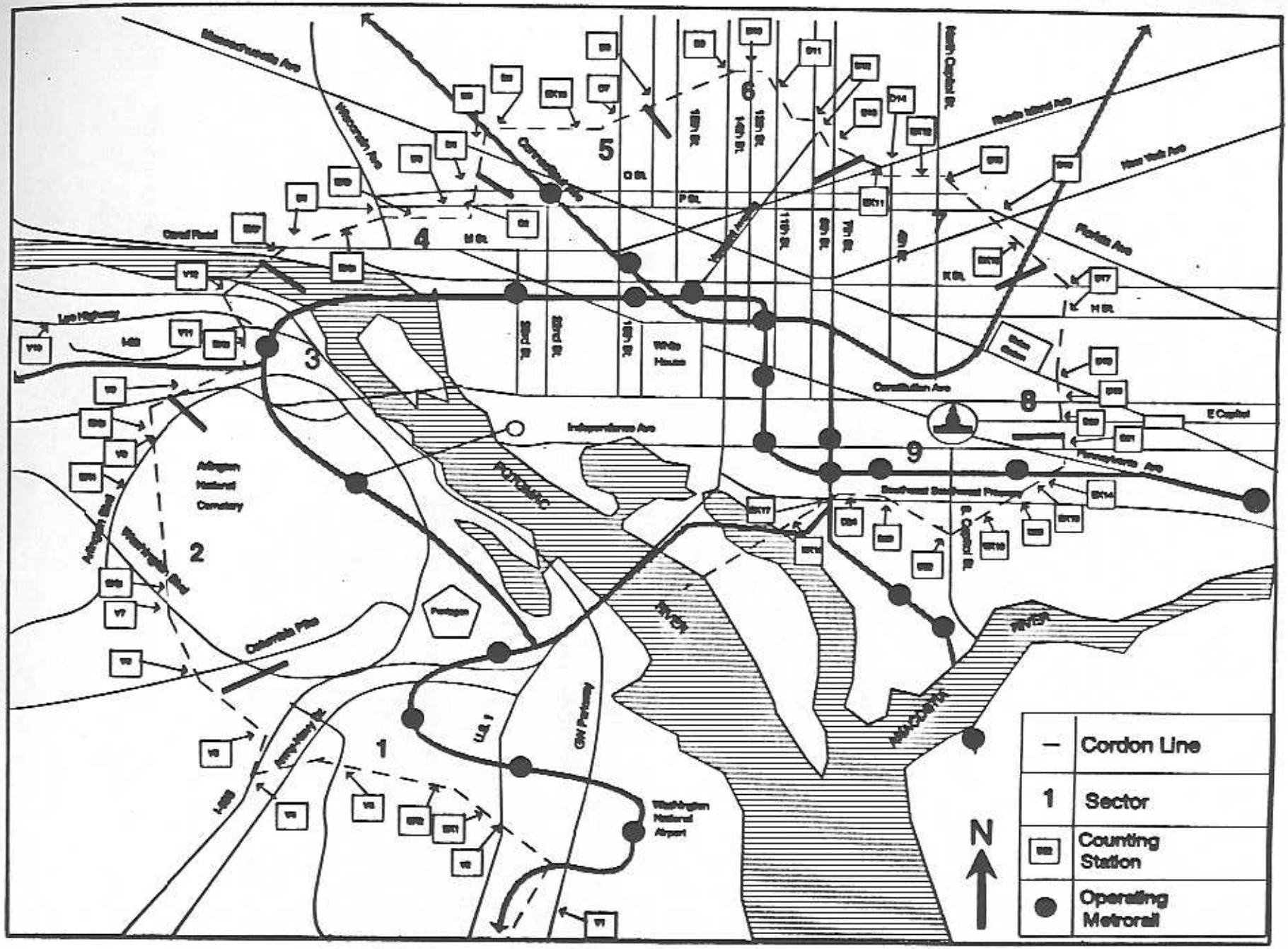
[1]National Capital Region Transportation Planning Board Long-Range Transportation Plan for the National Capital Region. (September 21, 1994).

Metro Core Cordon Count Sites



Furthermore, the percentage of riders on transit as opposed to private automobiles increased by five percent. While the number of cars entering the *region* increased by six percent, in Northern Virginia, it *decreased* by six percent.[2] Clearly, Northern Virginia's efforts to increase transit service levels and ridership have produced results.

A look at the more distant future is sobering. Employment, housing, auto ownership and vehicle trips trends indicate that congestion will only worsen. Between 1990 and 2020, the population of the region is expected to increase by 41 percent, and by 57 percent in Northern Virginia, with the outer suburbs experiencing the greatest growth rate. At the same time, vehicle trips in the region are predicted to increase by 64 percent, from 12.6 million to 20.6 million per day, and vehicle miles traveled daily are expected to increase by 73 percent, from 96 to 167 million vehicle miles.

While considerable investments in both road networks and transit systems are planned during the intervening years, they will not keep up with the traffic. In 1990, for example, during the evening rush hour, only 26 percent of vehicle miles travelled in the region was at free-flow speeds, and 45 percent was travelled in stop-and-go conditions. By 2020, this problem will be much worse; 12 percent of travel will be in free-flow conditions, and a full 68 percent will be stop-and-go traffic.[3] In addition, because suburb-to-suburb travel is increasing, the traditional radial network of transit systems will become less adequate a response.

THE INSTITUTIONAL CONTEXT

Scores of agencies and organizations meet regularly, adopt policies, define programs, and work diligently to improve the mobility of people and goods in Northern Virginia. Some of these groups are mandated by government regulations, some represent certain areas or jurisdictions, and some arise in response to a particular problem. Recent federal regulations (to be discussed in further detail in the next section) have emphasized cooperative planning efforts and public participation; these have caused the achievement of consensus among the many agencies and individuals involved to become more and more critical to the successful implementation of any project designed to relieve traffic congestion.

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

[3]National Capital Region Transportation Planning Board, Conformity Determination of the Constrained Long-Range Plan and the FY 1995-2000 Transportation Improvement Program for the Washington Metropolitan Region with the Requirements of the 1990 Clean Air Act Amendments (Draft). Washington, DC: July, 1994.

In order to participate effectively in the ongoing regional "conversation" regarding the transportation system, one must first be aware of the wide array of agencies and organizations already actively engaged in 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. When pursuing new programs, it is essential to notify and involve these groups to avoid misunderstandings and duplication of effort.

Appendix A gives names, addresses, and telephone numbers for the most important agencies and organizations currently involved in transportation (and related air quality) endeavors in Northern Virginia and the Metropolitan area. For each, a brief synopsis of their current activities is given. The appendix is organized by regional, local, and private sector. **Figure 3** shows the major local governments and population that comprise the Washington Metropolitan Area. **Figure 4** lists the names of the agencies and organizations included in the appendix.

As the lengthy list suggests, areas of responsibility often overlap considerably, despite each of the entities trying to define its individual role in relation to the others. Throughout this report, many of the agencies listed in Figure 4 will be referred to by their acronyms. Please refer to this figure to help recall the full names, and refer to Appendix A for more information.

Partial Listing of Key Players

Among the major participants in Northern Virginia's efforts to improve transportation coordination are, in addition to NVTC, the following organizations:

Federal, State, and Local Agencies: In addition to local jurisdictions listed in Figure 3, both the federal and state departments of transportation and related agencies play key roles in planning for this region. This is especially true in this area because of the federal government's central role in both employment and land ownership. In addition, the federal government directly owns certain facilities, such as the Woodrow Wilson Bridge. However, the federal government is also represented by agencies other than DOT and its modal administrations. Due to the Clean Air Act Amendments of 1990, for example, the Environmental Protection Agency may exert great influence over transportation plans and funding.

The United States Department of Transportation (U.S. DOT) is in the process of reorganizing its administrative offices. Once comprised of 10 departments, the U.S. DOT soon may be made up of only three departments covering the different aspects of travel: aviation, surface transportation, and the Coast Guard. A new funding program, the Unified Transportation Infrastructure Investment Program, would replace the existing funding programs under the proposed reorganization.

Figure 3

1994 POPULATION OF THE METROPOLITAN WASHINGTON AIR-QUALITY NON-ATTAINMENT AREA	
JURISDICTIONS	**1994 POPULATION**
NVTC:	
• City of Alexandria	116,400
• Arlington County	184,000
• City of Fairfax	20,000
• Fairfax County	863,100
• City of Falls Church	9,800
• Loudoun County	103,500
Subtotal:	1,296,800
PRTC:	
• City of Fredericksburg	19,000[1]
• City of Manassas	30,900
• City of Manassas Park	7,300
• Prince William County	243,600
• Stafford County	69,300
Subtotal:	370,100
DISTRICT OF COLUMBIA:	585,000
NATIONAL CAPITAL PARKS AND PLANNING COMMISSION:	
• Montgomery County	802,700
• Prince George's County	764,100
Subtotal:	1,566,800
OTHER MARYLAND COUNTIES:	
• Calvert County	63,000
• Charles County	110,600
• Frederick County	172,600
Subtotal:	346,200
TOTAL:	4,164,900
Source: **Local government population estimates provided by the Metropolitan Washington Council of Governments.**	

[1]1990 figure.

Figure 4

TRANSPORTATION AGENCIES/ORGANIZATIONS

FEDERAL/NATIONAL

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

STATE

- Governor
- Secretary of Transportation
- Virginia Department of Transportation (VDOT)
- Commonwealth Transportation Board (CTB)
- Virginia Department of Rail & Public Transportation (VDR&PT)
- State Corporation Commission (SCC)
- Division of Risk Management (DRM)
- Virginia General Assembly
- Virginia Association of Counties (VACO)
- Virginia Municipal League (VML)
- Virginia Association of Public Transit Officials (VAPTO)
- George Mason University (GMU)

REGIONAL

- Northern Virginia Transportation Commission (NVTC)
- Potomac and Rappahannock Transportation Commission (PRTC)
- Virginia Railway Express (VRE)
- Northern Virginia Planning District Commission (NVPDC)
- Transportation Coordinating Council (TCC)
- Washington Metropolitan Area Transit Authority (WMATA)
- Metropolitan Washington Council of Governments/Transportation Planning Board (COG/TPB)
- Metropolitan Washington Air Quality Committee (MWAQC)
- Metropolitan Development Policy Committee
- Baltimore/Washington Regional Association
- Greater Washington Board of Trade
- Federal City Council (FCC)
- Maryland National Parks and Planning Commission
- Washington Suburban Transit Commission (WSTC)
- Maryland DOT
- Maryland Rail Commuter Service (MARC)
- National Capital Parks and Planning Commission

LOCAL

- Offices of Transportation, Finance, Planning and Public Works
- Citizens Transportation Advisory Boards
- Transit Operators
  - DASH (Alexandria)
  - CUE (City of Fairfax)
  - CONNECTOR (Fairfax County)
  - CRYSTAL CITY TROLLEY (Arlington)
  - OMNIRIDE (PRTC)
  - RIBS (Reston)
  - TYSONS SHUTTLE (Fairfax County)
- Transportation Management Associations
  - Ballston/Rosslyn Area Transportation Association (BATA)
  - Dulles Area Transportation Association (DATA)
  - Reston Area Transportation Association (LINK)
  - Transportation and Environmental Management, and Planning Organization Alexandria, Inc. (TEMPO)
  - Tysons Transportation Association (TYTRAN)

PRIVATE

- Toll Road Corporation of Virginia
- Washington Private Operators Council
- Washington Area Bicyclists Association
- American Automobile Association (AAA)
- Northern Virginia Transportation Alliance
- League of Women Voters

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 quarterly. The technical and citizens committees meet monthly. TCC has adopted procedures to bring closer ties to the Transportation Planning Board and to provide better representation for town governments in the regional allocation process for transportation funds. TCC's Technical Committee initiates the annual process of allocating flexible federal ISTEA funds available to Northern Virginia, and provides recommendations to the TCC policy group, which -- when adopted -- are forwarded to the Transportation Planning Board. TPB's actions are in turn forwarded to the Commonwealth Transportation Board.

Transportation Planning Board (TPB): Designated as the metropolitan planning organization (MPO) for Northern Virginia, suburban Maryland and the District of Columbia, TPB adopts annual lists of projects to receive federal funding and produces long range transportation plans. Members of the board consist primarily of elected officials from the states and the District of Columbia.

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 CTB; the board's 16 members are appointed by the Governor. The group adopts a six-year program, which is updated each year.

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 strategy in the Washington non-attainment area. Once final, these recommendations are folded into Virginia's State Implementation Plan, to be 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.

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.

Metropolitan Washington Council of Governments (MWCOG): In 1966 MWCOG was officially recognized by the federal government as the agency responsible for comprehensive regional planning. MWCOG functions as the Metropolitan Planning Organization (MPO) for purposes other than transportation (e.g., population forecasts).

Metropolitan Development Policy Committee: One of five policy committees which advise the MWCOG Board of Directors, the Metropolitan Development Policy Committee makes recommendations regarding regional forecasts (which are closely linked to the region's transportation planning process) and works to facilitate and oversee interjurisdictional agreements. In a revision to the bylaws of this Committee, passed March 9, 1994, membership was expanded from approximately 45 locally elected officials to about 60 representatives. This broader membership allows not only state and local governments, but also members of private industry, civic and environmental associations, the Greater Washington Board of Trade, and other organizations to be represented.

Potomac Rappahannock Transportation Commission (PRTC): 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 from each jurisdiction, the General Assembly, and VDRPT. PRTC operates the OmniRide (formerly known as CommuteRide) 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.

Transportation Management Associations: Transportation Management Associations (TMA's) form 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 several transit 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, such as the Dulles Area Transportation Association, have also further 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 of local governments. Member dues usually fund the employee outreach programs, surveys, ridematching, and marketing efforts of the TMA's. Occasionally government grants are utilized.

Interstate Transportation Study Commission

The Interstate Transportation Study Commission was formed by Congress to report on funding possibilities and institutional reforms by which interstate transportation in the D.C. area can be improved. The 16 members include state secretaries of transportation, members of Congress, and private citizens appointed by the Governors of Maryland and Virginia and the Mayor of the District of Columbia. Among the concepts the commission has considered are ways to cooperatively plan and finance eastern and/or western bypasses of the Beltway, complete improvements to the Woodrow Wilson Bridge, and combine the operation of the Virginia Railway Express and Maryland's MARC commuter rail systems.

The commission report, presented to Congress and other officials in the region in December, 1994, concluded that "the regional transportation planning process works relatively well but that more needs to be done to implement the region's plans."[4] More specific recommendations regarding the construction of a crossing at the Woodrow Wilson Bridge were also included.

Regional vs. Local Decision Making

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 the front yard of the federal legislature. Many levels of government care about the region, act upon the region, and react to decisions made at other levels that impact the region.

The question may be best examined through the issue of land use. Today's planning standards suggest that land use and transportation should be coordinated, and yet often, land use decisions are made independently by local jurisdictions, and transportation planners are left responsible for providing capacity to developments that are often at odds with the existing transportation policy. The point is not that the placement of all development should necessarily be a function of transportation decisions, but that often the two aspects of planning, while they should be linked, are handled separately, and at different levels of government.

Bus service is another area that often begins the debate as to what level of decision-making is most appropriate. Some advocate a regional bus system that can adjust service in response to demand, regardless of jurisdictional boundaries, tying together disparate areas and enhancing our region's mutual interdependence. Others favor local systems, which can be more responsive -- in part because decisions

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[4]Interstate Transportation Study Commission, Improving Interstate Transportation in the National Capital Region. December 31, 1994.

regarding them do not have to be approved by other jurisdictions -- are more practical. In either case, the question of the most appropriate level at which to plan and implement those plans is one that the region has not yet settled.

LEGISLATIVE CONTEXT

Federal Legislation

Since 1990, three pieces of federal legislation have begun to reshape the context in which transportation decisions are made. The law most directly related to transportation is the **Intermodal Surface Transportation Efficiency Act of 1991, also known as ISTEA**. ISTEA, which establishes federal transportation funding programs, 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.

A year earlier, the **Clean Air Act Amendments of 1990 (CAAA)** established federal air quality standards and deadlines to meet them. The Environmental Protection Agency 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 Metropolitan Washington non-attainment area (see Figure 5) is rated "Moderate" for carbon monoxide, and "Serious" for ozone.

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, including the following elements:

- the development of a financial plan that demonstrates how the plan can be implemented with revenues "reasonably expected to be available."

- consideration of the "likely effect of transportation policy decisions on land use and development and the consistency of transportation plans and programs with the provisions of all applicable short-and long-term land use and development plans."

- a demonstration of conformity with the purpose of plans for meeting national air quality standards, including a demonstration that the transportation plan contributes to annual emissions reductions.

- ♦ 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."

- ♦ the inclusion of "a proactive public involvement process...that supports early and continuing involvement of the public in developing plans," with a formal comment period of at least 30 days for plan amendments.

- ♦ consideration of a list of 15 planning factors defined in ISTEA dealing with efficient management of existing facilities; preservation of future rights-of-way; overall social, economic, energy and environmental effects of transportation decisions; efficient movement of freight; and access to ports, airports, national parks, and military installations.[5]

In carrying out these requirements, a number of planning documents are to be produced. Each state must submit a State Implementation Plan (SIP) to the EPA annually; this plan documents the steps the state will take to attain its air quality goals, and stay within a "budget" of allowable emissions. In the Washington region, MWAQC creates a regional plan, which is then incorporated into the Commonwealth's plans.

Metropolitan areas are responsible for two primary documents, a "constrained" Long Range Plan (CLRP) and a Transportation Improvement Program (TIP). The CLRP outlines all planned projects of regional significance over a longer period of time (in the case of the metropolitan Washington region, 26 years); the document is "constrained" by the amount of funds that can reasonably be predicted to be available for transportation improvements over the same time period. The TIP is a more specific programming of funds in the region over a period of six years. TIP's must be updated every other year, CLRP's at least every three years. The first three years of the TIP are then incorporated into the state-level equivalents of these plans through a consultative process. While not required by the federal planning regulations, the Washington region is also embarking upon a vision planning process, in order to look farther into the future and identify new initiatives and new strategies for funding them. This plan is discussed in greater detail in Section IV.

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. First, ISTEA must be reauthorized in 1997, and the current Congress appears to be considering a different approach to transportation matters than that of ISTEA. Already, in the FY 96 appropriations, the House has lowered the funding for the federal transit assistance program by 13 percent while raising the highway appropriation by three percent.

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[5]National Capital Region Transportation Planning Board, A Citizen Guide to Transportation Planning in the National Capital Region. Washington, DC: July, 1994.

Retreats from the strong pro-planning stance taken by ISTEA have also been suggested, for instance, a Senate proposal to eliminate the requirement for the various management systems. The House has also passed a bill that would eliminate some of the enforcement powers given to the Environmental Protection Agency under the Clean Air Act Amendments. Thus, the environment in which the region makes its transportation-related decisions may be a very different one in one or two years.

The third piece of federal legislation to significantly change the transportation field in recent years is the **Americans with Disabilities Act of 1991**. 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 busses and directional signs in Braille to complete paratransit services, which must be provided by all public transit systems except commuter railroads.

State Legislation

Virginia's General Assembly meets each January through February or March. By the preceding December, NVTC, the Transportation Coordination Council and its member jurisdictions have determined their legislative agendas and communicated desired actions to the Northern Virginia General Assembly delegation. For example, for the 1995 session, NVTC advocated the following actions:

1) Add to all state programs providing state or federal funds to benefit private railroads language that requires recipients first to agree to provide access to railroad facilities for publicly supported commuter or intercity rail passenger operations on terms acceptable to the CTB, local operators and the railroads.

2) Approve several amendments to the WMATA Compact (the legal agreement between Virginia, Maryland, District of Columbia and the U.S. Congress creating WMATA) pertaining to transit police and labor rules.

3) Oppose any earmarking by the General Assembly of federal CMAQ and Regional STP funds allocated to regions (these funding sources are explained below.)

4) Support reenacting the Transportation Efficiency Improvement Fund with monies from statewide sources.

5) Support certain recommendations made by the Governor's Strike Force in 1994, including a study (through TCC) of how to make regional transportation processes more efficient and endorsement of management efficiencies in public transit operations through appropriate use, at local discretion, of private sector vendors in all aspects of transit service and operations.

6) Oppose certain recommendations of the same Governor's Strike Force to alter Virginia's transportation planning and funding processes (including NVTC and TPB), given adverse legal consequences.

7) Support improved HOV enforcement by combining fines, points and tickets by mail.

8) Support appropriate legislation, consistent with Virginia Transportation Secretary Martinez's "Connections" project, to involve the private sector and improve intermodal connections, including a redraft of the Public-Private Transportation Facilities Act.

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, 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 its updated six-year transportation program in June.

The Virginia Department of Rail and Public Transportation, under the direction of the Secretary of Transportation, manages several state-funded programs to assist public transit and ridesharing, including formula assistance (operating) and capital grant programs that now yield almost $60 million annually for NVTC's jurisdictions (excluding another $86 million of bonds for Metro capital projects authorized by the General Assembly in 1993 and 1994). VDRPT and VDOT also manage 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 designee of the Secretary of Transportation (currently the director of VDRPT) serves on NVTC and PRTC, and Northern Virginia's CTB member chairs the TCC. VDOT provides a voting member of TPB and coordinates Northern Virginia's submittal of transportation projects for TPB's TIP. In this way, state policy can be considered and integrated into regional decision making.

NVTC (and PRTC) also profit from the several members of the General Assembly who serve as commissioners. This allows the region's transportation legislative agenda to be effectively communicated to Richmond.

Important issues for the next year that involve these state institutions are:

1) Consideration of additional state transportation funding: Governor Allen has pledged to avoid any new transportation taxes, but statewide business interests and others are advocating increased state fees to support transportation maintenance and investments. By the 1996 General Assembly session, NVTC and Northern Virginia's local governments may have agreed

on strategies to seek more state funding for public transit, in light of growing needs, sharp cutbacks in federal transit aid enacted by the U.S. Congress, and new projects (such as a rail line in the Dulles corridor). For example, a bi-partisan business roundtable group in Northern Virginia is advocating new revenues for transportation projects. Also, there is a need for the Commonwealth to issue the remaining authorized recordation fee-backed bonds for Northern Virginia (for Metro capital expenses, the Fairfax County Parkway, the Manassas By-Pass and other projects).

2) Greater involvement of the private sector in constructing, operating, and financing transportation projects: Virginia's Public-Private Transportation Facilities Act defines new mechanisms for cooperation in creating major new transportation projects. The success of the Dulles Greenway (toll road between Dulles Airport and Leesburg in Loudoun County) which is entirely privately financed, built and operated, has been used as a model to induce investors for similar projects in the future. In 1995, the Commonwealth conducted public hearings and produced administrative regulations for using the act for such projects. VRE's ongoing analysis of the feasibility of acquiring rail right-of-way from the Norfolk Southern Corporation between Manassas and Alexandria includes careful consideration of private sector involvement in ownership, operation and finance. Development of the financial plan for rail in the Dulles Corridor also includes such consideration.

3) Providing detailed Major Investment Studies in several corridors: State agencies are administering studies in such corridors as Dulles, I-66, Richmond-Washington, D.C. and the Beltway. For each of these, transit alternatives are being actively considered. Also under consideration is the role of public transit in mitigating traffic due to reconstruction of the "mixing bowl" (I-95/I-395/I-495 intersection at Franconia/Springfield).

4) Plans and management systems mandated by ISTEA and the Clean Air Act Amendments: State agencies are making progress on several of these, with continuing involvement of the public through revised drafts to the current final versions (e.g. strategic intermodal plan, congestion management system).

FINANCIAL CONTEXT

Federal Funding

As was noted above, ISTEA must be reauthorized in 1997, and 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.[6] 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.

♦ **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. Recently, however, the CTB disbanded the citizens committee, and currently 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 railroad crossings.

♦ **Congestion Mitigation and Air Quality Improvement Program** These funds are apportioned to states on the basis of the 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 three non-attainment areas; in Northern Virginia, the TCC then recommends to the CTB which projects to fund.

♦ **National Highway System** The NHS is a projected system of up to 155,000 miles of existing and proposed roads of "national significance," including the 42,800 mile Interstate System. Congress must approve the system by September 30, 1995 in order to ensure that the program is funded. 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 annually for its completion. The law emphasizes the need to maintain and repair the system while restricting its expansion.

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

Formula money allocated to the metropolitan planning organization

♦ **Regional Surface Transportation Program** A portion of STP monies are reserved for the MPO's to allocate. In the Washington region, that money is then divided among the states to use as they wish; in Northern Virginia, projects are chosen by the TCC.

Discretionary and Formula money allocated directly to transit systems

♦ **Transit, Section 3** These funds are distributed by Congress on a discretionary basis for capital projects only. Funds are divided among new projects, rail modernization, and other activities such as purchasing buses.

♦ **Transit, Section 9** These 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 percentage of each system's allocation that can be used for operating expenses. VRE, WMATA, and the Maryland Mass Transit Administration all receive Section 9 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 is an attempt not to follow each dollar through the process, but to describe in general how state funds are allocated.

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 vehicles sales tax revenues, as well as fees collected for motor vehicle registrations and license plates.

The administrative costs of VDOT and VDRPT are first taken "off the top" of this fund. Some funds ($38.8 million in FY95) are also taken off the top of the mass transit program. A certain amount of the remaining money is then allocated to each locality for the maintenance of its highway system; this amount is determined by a formula 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.

The TTF was created by the Special Session of the General Assembly in 1986 in order to increase transportation funding statewide and to redistribute where that funding went. 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.

These funds are then divided among four modes of transportation. Just over four percent of the proceeds are designated for the Commonwealth Port Fund, to be allocated to specific port projects by the Virginia Port Authority. Another 2.4 percent is reserved for the Commonwealth Airport Fund, and is divided among the state's airports by the Virginia Aviation Board. 8.4 percent is allocated to the Commonwealth Mass Transit Fund, where it is divided as described below. The remaining 85 percent is used for highway maintenance and construction, with 40 percent going to the primary road system, and the remainder being split evenly between the secondary road system and the urban road system.

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 FY95, the Commonwealth spent approximately $120 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. This purpose is achieved by supporting initiatives at the state, regional, and community level that demonstrate

innovative approaches to reducing traffic congestion. Effective approaches to transportation demand management (TDM) is the primary focus of the TEIF Program. This program augments the efforts of the Commonwealth generally and of the Department of Rail and Public Transportation to promote TDM initiatives.

Local Funding

Transit funds allocated to Northern Virginia by the Commonwealth are funneled through NVTC, where they are further allocated to the member jurisdictions using a formula that considers a weighted average of transit subsidies and costs. The Northern Virginia jurisdictions also levy upon themselves a two-percent motor fuels tax, which is collected by the state and returned to NVTC. These funds are dedicated to transit and also go through the formula.

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 associated with the service available.

Due to the nature of the fixed cost allocation in the formula currently in use at NVTC, an inequity exists in the formula such that 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 Metrobus service. The converse is also true; if a jurisdiction increases its Metrobus service, NVTC's formula provides a significant increase in its Metrobus costs and benefits neighboring jurisdictions with reduced costs. Metrobus fixed costs are currently allocated 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.

For the last several years changes to the formula have been discussed by NVTC, but to date no consensus has been reached among the jurisdictions. At the June 1, 1995, NVTC meeting, the commission unanimously passed a resolution calling for a continuation of NVTC's existing allocation formula for FY 1996. However, the commission agreed to establish a committee to work on a recommendation for an improved formula. The committee's recommendation to the full commission is to be provided in December 1995, and to be determined in accordance with the objectives and policies specified in NVTC's Strategic Bus Process (adopted June 9, 1994).

Local jurisdictions also use their own funds to support both highway and transit projects. For example, in fiscal year 1995, Northern Virginia jurisdictions spent $48.1 million in local funds on WMATA and local transit systems alone.

Current and Future Funding

It is clear to most members of the community today that, unless fairly significant changes are made in the way the region finances transportation projects, we will not have the resources available to meet the expected demand in upcoming decades. The information gathered in the development of a financially constrained long range plan highlights this fact: when the projects included in the region's 1991 long range plan were all costed, along with the maintenance and operation of existing facilities, and compared to anticipated revenues, it was found that the region faced an annual shortfall of $538 million, in 1993 dollars. Revenues, it was found, would cover operations, maintenance, and preservation of systems in Maryland and Virginia, but nothing would be left over for system expansions. In the District of Columbia, revenues were not expected to cover the first category of costs.

In order to meet the condition of financial constraint, the region decided to drop a number of significant projects from the plan, and to extend the plan to 2020, taking an extra ten years to complete those projects that were left in. The plan now anticipates that the Northern Virginia area will take in approximately $706 million in revenues annually; of these, $507 million will go to operations and preservation of the existing system, $77 million will be spent on local projects that are not listed in the CLRP, and $122 million will remain for investment in new capacity.[7] This picture may easily become more bleak, as it does not appear likely that the federal government will be contributing any new monies in the near future.

Clearly, the region must look to innovative funding sources and financing mechanisms if it is to keep up with projected growth. In both these areas, 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 residents believe they will benefit. This is the concept behind the Route 28 Tax District in the Dulles corridor.

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[7]Transportation Planning Board Long-Range Plan.

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 $150 a month, tax-free transit benefits of up to $60 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.

A final "new" funding source is also one of the oldest -- the toll. Toll facilities are once again being constructed, for example on the Dulles Toll Road and now, privately, on the Dulles Greenway, and are being considered for other facilities, such as the Woodrow Wilson Bridge. 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.

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. Similarly, 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 is currently modelling the effects of a region-wide congestion pricing program in this area. Preliminary 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.

SECTION III

EXISTING SERVICES

AND FACILITIES

Metrorail

Since its opening in 1976, the Metrorail system has served as the core of the region's transportation system. In fiscal year 1995 the Metrorail system carried over 153 million passengers, with 120,000 of the boardings occurring at Northern Virginia's stations on an average weekday. Systemwide, these passengers traveled almost one billion miles, with an average trip length of 6.47 miles.

Economic Benefits of Metrorail to Northern Virginia

A 1994 study sponsored by NVTC titled "Fiscal Impact of Metrorail on the Commonwealth of Virginia" assesses the tangible economic benefits that accrue to the Commonwealth from tax revenues generated from Metrorail-related development and Metrorail construction and operations.

An earlier study conducted in 1985 projected a 13 percent return on the Commonwealth's investment in Metrorail for the period from 1978 to 1995. According to the 1994 update, this projection -- which used conservative methods --was very accurate. The actual internal rate of return on the Commonwealth's investment in Metrorail was 12.4 percent through 1994. Using the same conservative methods, the 1994 update forecasts a stunning 19.2 percent annual return for the period from 1995 to 2010.

The current study finds that by the year 2010, Metrorail will generate $2.1 billion in additional Commonwealth tax revenues and $1.2 billion in tax revenues net of state contributions to Metrorail; 25 million additional square feet of office space, 1.8 million additional square feet of retail space, 4,000 additional hotel rooms and 31,000 additional residential units; and permanent employment totaling 86,000 office jobs, 1,500 retail jobs and 3,500 hotel jobs.

Planned System Expansions and Enhancements

The Metrorail system is still being constructed, and the currently planned 103-mile system is now scheduled to be completed in 2001. The Franconia/Springfield station, located on the Blue Line, is now under construction and scheduled to open in the summer of 1997. This station complex will also serve the Virginia Railway Express, with its station scheduled to open by December of 1995.

Metrorail is also enhancing its fare collection system by implementing the new SmartCard technology through a demonstration of the "GO Card." The wallet-sized cards are programmed to store fare value and used to gain access to Metrorail, Metrobus, and Metro parking by placing the card near a "target." Fare value is automatically deducted. Currently, 13 Metrorail stations, five Metro bus routes, and five parking lots are equipped with the GO Card and over 450 customers are using the card.

Other plans for Metrorail system improvements are also moving forward. For instance, Arlington County recently received an $800,000 Livable Communities grant from the FTA, which the county will match with $200,000. The funds will be used to improve the Rosslyn Metro station and the surrounding streetscape. Over the next two years, the county, working closely with WMATA, will improve lighting on the upper level and upgrade the entrances and stairways to the station, as well as the bus waiting facilities. The county is also working with adjacent property owners to leverage private investment; the owners of the building above the station are planning improvements to their facility, and Virginia Power is working with the county to improve the appearance of its nearby substation.

In addition, WMATA and the RF&P Corporation, the owner of Potomac Yard in Alexandria and Arlington County, are negotiating an agreement for construction of an additional station in the Alexandria portion of the Potomac Yard. The station's construction would be funded entirely by RF&P, and is required to be constructed as part of the City of Alexandria's approval of the commercial development of the Potomac Yard project. The agreement is anticipated to be completed by the summer of 1996.

Virginia Railway Express (VRE)

The Virginia Railway Express is a joint commuter rail project of the NVTC and PRTC. VRE began service between Washington and Fredericksburg and Manassas in 1992 with stations in the Washington-area employment centers of 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.

On June 22, 1995, VRE recorded its five millionth commuter trip as it celebrated its third year in operation. The success of VRE is reflected in a recent American Public Transit Association survey rating VRE among the top five in larger transit systems in North America for growth of ridership during 1994. In Fiscal Year 1995, the service carried 1.8 million passengers, with weekday boardings now averaging 8,000.

Customers rate the quality of service as excellent and ridership is growing. Despite annual four percent fare increases, VRE's fares remain competitive with the average price of parking automobiles in core employment locations. The long distances traveled on VRE (averaging 27 miles) result in fares per passenger-mile (26 cents) that are very competitive with the cost of owning and operating a single-occupant automobile.

Program Enhancements

VRE's new Lorton Station on the Fredericksburg line opened in January of 1995, with 200 free parking spaces. The VRE portion of the Franconia/Springfield Transportation Center is programmed to open in December of 1995.

Riders can use their 10-trip or monthly VRE tickets on Amtrak trains, effectively doubling 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. VRE anticipates that over 480 passengers per day will use this expanded service, which began on April 3, 1995.

VRE passengers can transfer free to and from many local feeder buses at several stations. VRE 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. For example, the Potomac and Rappahannock Transportation Commission (PRTC) recently expanded its feeder bus service to VRE's Rippon and Woodbridge stations. The feeder bus initially will serve the first, second, third, and fourth VRE trains each weekday morning and the first, third, fourth, and fifth VRE trains in the evening. Passengers possessing a VRE ticket ride free.

To further the goal of regional seamless travel, VRE is discussing with the Federal Transit Administration, the Washington Metropolitan Area Transit Authority (WMATA), and Maryland's Mass Transit Administration the implementation of a new regional pass for use on VRE, Maryland's commuter rail system (MARC) and buses serving Washington, as well as WMATA's Metrorail and Metrobuses. The regional pass would demonstrate the new Smartcard technology currently being tested by WMATA. In addition, the Operations Board recently approved a mutual ticket exchange between VRE and MARC, Maryland's commuter rail service. VRE customers with a valid VRE pass will be allowed on MARC trains, as will MARC riders be accepted on VRE trains, during an initial one-month demonstration period.

January 19, 1995 marked the first anniversary of VRE's guaranteed emergency ride home program, "Special Delivery." So far, in 1995, 163 VRE passengers used Special Delivery to get home in a hurry during mid-day hours when VRE service was not scheduled. This is just over one taxi trip per day compared to the almost 8,000 VRE daily trips. Reasons for using the emergency ride home have been personal and child sickness, frozen pipes, and even husbands rushing to the hospital to assist their wives in labor. Ninety percent of the costs of the emergency rides home are paid by VRE. The average cost to the customer is only $4.80 despite taxi trips of up to 60-miles.

Finally, VRE has developed an ambitious Capital Improvement Program (CIP) for fiscal years 1995-2001. The program involves many of the railroad track improvements that are required by the CSXT contract. The RO to AF interlocking improvements are among the most important to be made. This eight-mile section of track through Arlington and Alexandria contains six 25-mile per hour crossovers. Track operating speeds will increase from 25 miles per hour to 45 miles per hour when the system of signals and interlockings is redesigned.

Intercity Rail

Amtrak, which serves VRE stations at Alexandria, Woodbridge, Quantico, Fredericksburg, and Manassas, offers intercity rail links to various points along the Eastern Seaboard and inland. Some intercity service has been lost recently 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 benefitted 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. Currently approximately 300 VRE trips per day are served by Amtrak.

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 approximately 48 routes in the Northern Virginia area, served by a fleet of 382 buses. During FY 93, the most recent year for which figures are available, Metrobus served over 123 million passengers, providing over 45 million bus-miles of service.

Despite its effective service, Metrobus is not without its problems. One of the greatest of these is that it is perceived to be an expensive service, and has had trouble cutting its costs in proportion with its declining ridership. Many of the region's jurisdictions have responded to this situation by expanding their own services, and have either added new service without requesting it from Metrobus, or have actually replaced Metrobus routes with their own. With the cooperation of local jurisdictions, Metrobus is responding to this problem by conducting a Strategic Bus Plan, which is a high priority of the General Manager. This plan is described in further detail in Section IV.

The Authority has also recently contracted with a market research firm to identify those service characteristics that are most important to the public when deciding whether or not to use transit, in particular, bus service. Safety while waiting at bus

stops, protection from the weather, and travel time were reported to be the primary considerations. Commuters to the District reported that service operating at 20 minute intervals, at a fare of $1.50 to $2.00 and with a travel time within 15 minutes of the same trip by auto would be potentially attractive. Express bus service with similar characteristics was acceptable to commuters travelling within Maryland and Virginia. Some potential for express bus service for reverse commuters from the District of Columbia to the suburbs was also identified. This information will be used by bus service planners in designing and configuring new service patterns.

Local Bus Systems

Many local jurisdictions also offer bus service. In FY 1995, these services carried approximately 10.2 million passengers altogether. As stated above, jurisdictions have found that locally operated service is often more flexible and less expensive than that provided by WMATA; thus, some jurisdictions have chosen to begin or expand their own jurisdictional systems. Others, such as Falls Church, have announced that they are considering moving in this direction.

The locally provided systems and some of the highlights of this past year are as follows:

- **Arlington Trolley** (Arlington County) - Operates along a loop in Crystal City serving Metrorail and VRE stations.

- **CUE** (City of Fairfax) - Serves points in the city, George Mason University, and the Vienna Metrorail station.

- **DASH** (City of Alexandria) - Provides connections to four Metrorail stations and VRE, including express service to the Pentagon. Has recently instituted a shuttle connecting the King Street and Eisenhower Avenue Metrorail stations during peak hours. The shuttle is timed to coordinate as closely as possible with the VRE at King Street and the AT6 at Eisenhower Avenue. The system is currently conducting an operational analysis to examine the effectiveness and efficiency of service and how it might be improved.

- **Fairfax Connector** (Fairfax County) - Serves a portion of the county with connections to Metrorail, Metrobus, DASH, and VRE. Fairfax County staff are examining the possible restructuring of the Reston/Herndon routes, including merging the RIBS and Tysons Shuttle routes into the Connector system. Staff anticipates presenting route changes to the public for comment in the winter of 1995-96, and to implement service changes in the summer of 1996. The Lorton area routes will probably undergo a similar analysis a year later.

- **RIBS** (Fairfax County) - Provides four routes that meet in Reston Center for timed transfers, as well as the Reston Express, which connects Reston with the West Falls Church Metrorail station.

- **Tysons Shuttle** (Fairfax County) - Provides service between Tysons Corner and the West Falls Church Metrorail Station.

Various ridership data and performance measures for these systems are listed in **Figures 5 and 6.** Contact names and telephone numbers, monthly ridership information, and system maps are attached in **Appendix B.**

- **OmniLink (PRTC)**

In addition to the above listed systems, the Potomac and Rappahannock Transportation Commission began operating a feeder bus system in the Prince William area in December, 1994, and local flex-route service in April, 1995. The feeder service, which consists of three routes serving the Rippon VRE station, one serving the Woodbridge station, and one (which began July 31, 1995) serving the Manassas station, now delivers over 300 riders to the rail system each day. The local routes serve the Woodbridge, Dumfries, and Dale City areas. In mid-September, service is scheduled to expand into the Old Bridge/Lake Ridge, Quantico, and Manassas areas as well.

The OmniLink system is unique in that buses may deviate from the scheduled route by up to three-quarters of a mile in order to pick up or drop off passengers. It is also anticipated that routes will be adjusted if necessary in order to best respond to passenger requests over time. The exact location of the buses will be tracked through a Global Positioning System, which will utilize a satellite to read signals from sensors on each bus. 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.

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 the region's many publicly and privately provided commuter bus systems. Together, the services provide approximately 9,600 passenger trips in and out of the urban core daily, often operating out of park and ride lots. A list of the area's commuter bus service providers, along with some of the area's vanpool operators, is provided in **Figure 7.**

Of particular interest in this list is the bus service provided by Loudoun County, Loudoun Commuter Service Bus. The service was taken over by the county in April, 1994, when the two private operators in the area ceased service. The county then contracted with a private firm to provide two buses during the peak period, one serving Rosslyn and downtown DC, the other serving the Pentagon. As ridership has increased, service has been expanded, and the county now provides five buses during each peak period. This is the first time that the county has subsidized transit service. PRTC's CommuteRide is also publicly financed; the other systems are privately owned and operated.

Figure 5

PUBLIC TRANSIT SYSTEMS OPERATING IN NORTHERN VIRGINIA FY 1995

TRANSIT SYSTEM	# PEAK VEHICLES	AVERAGE WEEKDAY BOARDINGS	OPERATING COST	FAREBOX RECOVERY RATIO
Metrobus	270[1]	63,935[2]	$69,467,000[1]	22.5%
Metrorail	N/A	120,761[3]	$94,250,759[4]	66.8%
Fairfax Connector -- Huntington Service	56	10,634	$ 6,860,500	22.1%
Fairfax Connector -- Reston/Herndon Service	37	4,780	$ 2,842,826	25.5%
Fairfax Connector -- Community Service[5]	12	1,321	$ 1,023,463	14.4%
PRTC CommuteRide	43	2,964	$ 3,121,192	68.8%
Virginia Railway Express	44[6]	7,723	$15,675,301	50.2%
Alexandria DASH	25	7,604	$ 3,342,390	45.8%
City of Fairfax CUE	8	3,552	$ 1,554,592	34.7%
Arlington Trolley	2	435	$ 175,000	20.4%

[1]Estimate for Virginia's operations.

[2]Virginia Metrobus routes only, counts taken June, 1995,

[3]Virginia Metrorail stations only.

[4]Estimate for Virginia's operations, FY 1994.

[5]Fairfax Connector Community Service includes RIBS and Tysons Shuttle data.

[6]VRE has 59 railcars and 12 locomotives.

Figure 6

ESTIMATED ANNUAL TRANSIT PASSENGER TRIPS, MILES, AND TRANSFER VOLUMES IN NORTHERN VIRGINIA -- 1995 --			
TRANSIT SYSTEM	TOTAL ANNUAL PASSENGER TRIPS FOR FY 95 (INCLUDING TRANSFERS)	PASSENGER MILES TRAVELED	PASSENGERS TRANSFERRING
Metrobus	123,066,000[1]	528,000,000[1]	36,900,000[1,2]
Metrorail	153,640,000[1]	994,051,000[1]	27,993,000[1,2]
Fairfax Connector -- Huntington Service	2,900,690	4,496,070	312,126
Fairfax Connector -- Reston/Herndon Service	1,131,248	1,753,434	41,000
Fairfax Connector -- Community Service[3]	363,638	563,640	18,422
PRTC CommuteRide	731,598	N/A	N/A
Virginia Railway Express	1,868,490	N/A	N/A
Alexandria DASH	2,238,266	N/A	440,315
City of Fairfax CUE	860,000	N/A	N/A
Arlington Trolley	109,196	24,567	14,323

[1]All Metrobus and Metrorail figures represent entire regional system; the number for Virginia could not be broken out.

[2] Transfers from other buses (not Metrorail) systemwide.

[3]Fairfax Connector Community Service includes RIBS and Tysons Shuttle data.

Figure 7

SUMMARY OF COMMUTER BUS SERVICES AS OF 1995

COMMUTER SERVICE	PHONE	SERVICE AREA	VEHICLES	AVERAGE DAILY TRIPS	FARES **
Aries P.O. Box 192 Fredericksburg, Va 22404	(540) 373-3433	Fredericksburg Spotsylvania/Stafford TO: Fort Belvoir	2 Buses	120	$4.00 one-way/$6.00 return trip $38.00 Every two weeks
Brooks Transit Services Route 2, Box 3340 Front Royal, Va 22630	(703) 635-7644 (703) 636-6148 (703) 635-3797	Front Royal TO: CIA, Pentagon, Crystal City, Navy Annex	5 Buses	240	$32.50
Groome Transportion 5500 Lewis Road Sandstone, Va 23150	(804) 222-7226	Richmond Airport TO: Fredericksburg, National Airport	8 Vans	300+ a day	$20.00 Fredericksburg one-way $27.00 Nat'l Airport one-way
Lee Coaches Route 4, Box 259-S Fredericksburg, Va 22405	(703) 371-6785 (800) 443-4533	Fredericksburg TO: Crystal City, Pentagon, Fort Belvoir	4 Buses	400	$10.00 round trip $8.50 one-way $60.00 Crystal City, Pentagon - 2 weeks $43.00 Fort Belvoir-2 weeks
National Coach Works 10411 Hall Industrial Drive Fredericksburg, Va 22401	(703) 898-6959	Fredericksburg TO: Crystal City, Pentagon, Wash. D.C.,	42 Buses	3500	$75.00 Crys. City, Pentagon-every 2 wks $80.00 Wash. D.C-every two weeks $50.00 10 one-way tickets $15.00 round-trip
Prince William COMMUTERIDE ATE Management & Serv. Co. 2540 Horner Rd. Woodbridge, Va 22192	(703) 494-9166	Prince William TO: Vienna Metro, Pentagon, Downtown Washington	46 Buses	2730	$32.50 Ten trip. $ 5.00 Single Fare
Quick's Commuter Service 41 RV Parkway Falmouth, Va 22405	(703) 373-6027	Fredericksburg TO: Crystal City, Pentagon, D.C., Rosslyn, Bailey's X-roads, Navy Annex	17 Buses	1200	$58.00 Every two weeks to Northern Virginia $62.00 to Wash. D.C. every two weeks
Greyhound/Trailways Route 1 Fredericksburg, VA 22407	(703) 373-2103	Triangle/Woodbridge TO: Washington, DC	N/A	20	$40 for 10 ride tickets which must be used within 30 days
Quick-Livic Bus Company 41 RV Parkway Falmouth, VA 22405	(703) 373-6027	Fredericksburg/Spotsylvania/Stafford Counties TO: Pentagon, Crystal City, Rosslyn Bailey's Crossrds, Vienna, and Washington, DC	14 Buses	960	$60.00 to No. VA and $64 to Washington Every two weeks
Van Pool Services, Inc. (VPSI) 2760 Eisenhower Avenue, Suite 306 Alexandria, VA 22314	1(800) 825-7433	Prince William County, Manassas, Stafford County, Spotsylvania TO: DC, No. VA and Quantico	N/A	N/A	N/A
Transportation Total, Inc. Manassas, VA Lou Pratsch/Sharon McGraw	(703) 960-7433	Northern Prince William County, Manassas, Manassas Park areas, DC, Arlington and Fairfax Counties	30 Vanpools	N/A	N/A
Loudoun Commuter Bus Service 750 Miller Drive, S.E. Suite 800 Leesburg, Va 22075	(703) 771-5665 (703) 478-8416, ext. 5665	Cascade, Purcellville, Hamilton, Leesburg, Ashburn, Sterling TO: Rosslyn, Pentagon, Downtown Washington	5 Buses	272	$40.00 Per 10 one-way tickets. $ 5.00 One Way

N/A = Information not available.
* Some figures are approximate. ** Weekly fares unless otherwise indicated.

Vanpools

A large number of commuters also enter the core in vanpools. Besides the commercially operated pools listed here, many commuters have formed their own. In 1993, the MWCOG Core Cordon Count recorded 423 commuters crossing the Northern Virginia cordon line in vanpools on a typical workday. While this is a significant number, it represents a 26 percent drop from the 1990 counts.

In order to support those commuters taking advantage of vanpools, the Arlington County government has added vanpools to its transit incentive program, in which employees using transit are eligible to be reimbursed up to $60 per month through Metrochek, an employer-provided transit subsidy that is distributed in the form of Metrorail passes. Vanpool drivers are now able to redeem their Metrocheks over-the-counter at any of Arlington's transit stores as well as through WMATA through the mail.

Another important regional incentive program for vanpools is the **VanStart program**, which is designed to provide 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. Vanpool owner/operators must provide documentation to the Ridesharing Program Manager demonstrating the practices he or she has pursued in an effort to start a new vanpool. 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 through the local ridesharing programs. Through the rideshare program, the state also supports the **VanSave Program**, which offers temporary emergency financial support to vanpools that have lost over 25% of the ridership.

Intercity Bus Service

While Greyhound is listed in Figure 7 as providing commuter bus service, this firm and other intercity bus operators also provide an important link between Northern Virginia and other metropolitan regions, often providing connections with markets that are not served by rail. Greyhound service currently stops in Arlington, near Shirlington; the City of Fairfax; Springfield; Triangle; and Fredericksburg, and serves approximately 108,000 passengers at these stations annually.

Up until now, these firms have located bus stops independently of other transit in the area, but Greyhound has been in contact with NVTC, WMATA, and local jurisdictions about the possibility of siting its stops at or adjacent to Metrorail stations. Such an intermodal connection, if implemented, would reduce cost and inconvenience to many bus travellers, and would allow transit connections to be made with less use of the automobile.

TAXICABS

Appendix D gives taxi company names, addresses, and telephone numbers by jurisdiction. Licensed cabs by jurisdiction include:

Alexandria: 615
Arlington: 605
Fairfax County (including Falls Church and City of Fairfax): 417
Loudoun County: 20

In addition, the Washington Flyer provides 350 taxis for service to and from Dulles Airport, and is currently reviewing bids to provide a door-to-door Flyer service.

Taxi companies also serve VRE riders through the "Special Delivery Program" (see Section IV).

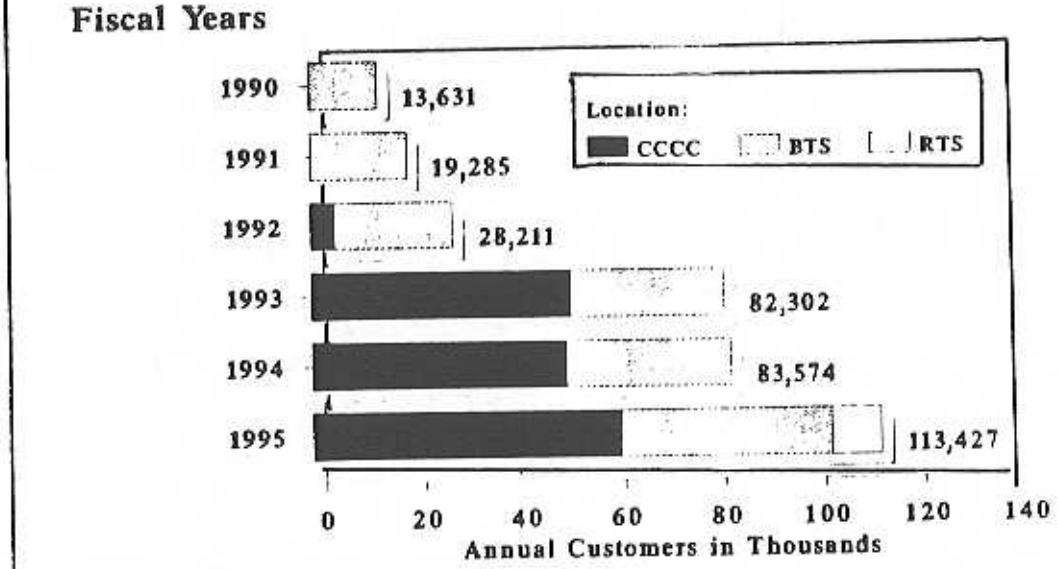
COMMUTER SUPPORT SERVICES

Transit Stores

The Arlington County Commuter Assistance Program's three transit stores, located in Ballston, Crystal City, and Rosslyn, have proven to be an increasingly successful support service for transit riders. The stores provide fare media and schedule information for Metro, VRE, MARC (Maryland commuter rail), OmniRide, the Arlington Trolley, DASH, Prince Georges County's The BUS, CUE, the Fairfax Connector, the Maryland MTA bus system, RIBS, and the Tysons Shuttle. They accept Metrocheks 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 at the three store locations, and WMATA has authorized the stores to accept bike-on-rail permit applications and administer the exams, allowing bicyclists to apply for permits without having to visit WMATA's downtown offices during business hours.

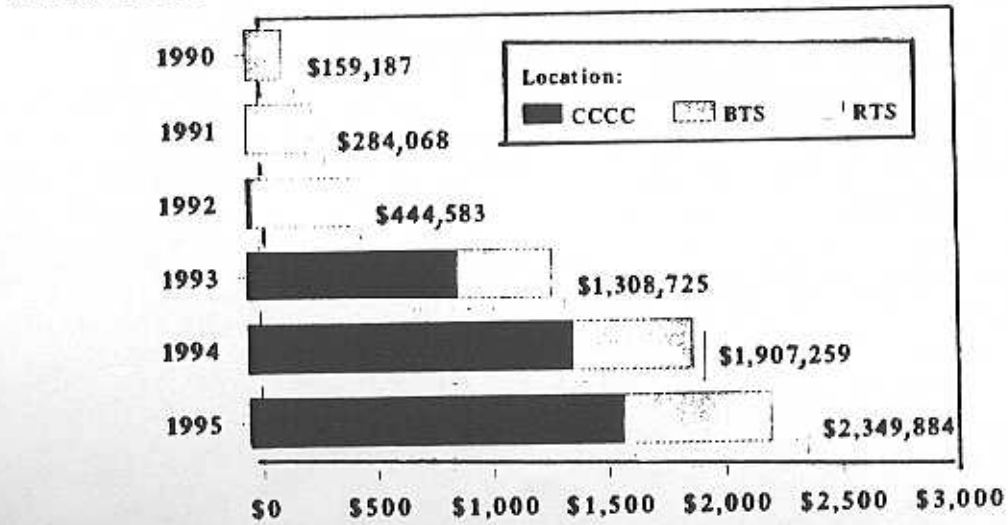
Between FY 1994 and FY 1995, the Ballston and Crystal City stores increased the number of customers served by 36 percent, from 83,574 to 113,427 customers, and increased their sales volume by 23 percent, from $1.9 to $2.3 million worth of fare media. The new Rosslyn store, opened in December, 1994, sold $108,860 worth of fare media in FY 95, with sales growing each month. Charts showing sales since the stores' openings are shown in **Figure 8**.

Commuter Assistance Program's Ballston, Crystal City and Rosslyn Transit Stores
ANNUAL CUSTOMERS SERVED



BTS opened 6/89, CCCC 5/92 and RTS 12/94
Source: Arlington County DPW CAP

Commuter Assistance Program's Ballston, Crystal City and Rosslyn Transit Stores
ANNUAL FARE MEDIA SALES



BTS opened 6/89, CCCC 5/92 and RTS 12/94
Source: Arlington County DPW CAP

The private sector, working through associations such as BATA, has been instrumental to the success of these stores, both in the start-up phase and through the donation of office space and equipment. The City of Alexandria has received a $160,000 state grant to establish a store in Alexandria as well. Market research to identify a good location is planned.

Ridesharing Services

Many jurisdictions in the region actively assist commuters to identify appropriate transit routes or to find other commuters with whom to carpool. The most extensive of these services is the RideFinders Network, coordinated by MWCOG (1-800-743-RIDE.) This service processes over 1,700 applications each month for potential car and van-poolers. The system maintains a computerized database of people interested in ridesharing, so that potential matches can be easily located. This database, which contains between 7,000 and 10,000 names, can be accessed by local jurisdictions as well. Ridesharing information numbers are listed in Appendix A.

Employer Outreach Programs

Renewed emphasis has been given this year to employer outreach programs. With the goals of reducing traffic congestion and demand for parking and increasing transit use and ridesharing, local communities are establishing programs at the "grass roots" level.

In Arlington County, the Ballston/Rosslyn Area Transportation Association (BATA) and the newly incorporated Jefferson - Davis Corridor TMA are assisting employers to establish programs targeted at encouraging employees to ride transit, cycle, and/or carpool. Transportation management associations in Fairfax County are organized to address similar goals, and both TYTRAN and LINK actively work to increase employee awareness of transit and transportation options.

The City of Alexandria continues outreach efforts through its Alexandria Transportation Program (ATP). The ATP assists employers in establishing incentives for employees to use alternative commuting modes. The key component of the program is the city providing up to a fifty percent cash match, for one year to those employers who provide a monthly transit benefit to their employees. Currently,six employers in Alexandria have established a transit benefit program as a result of the ATP.

In addition, VDRPT has been engaged in innovative employee outreach activities through the training of transit sales professionals. During FY 95 VDRPT planned and implemented a customized Dale Carnegie employer sales training program for 20 Northern Virginia rideshare, TDM, and Metro sales staff members.

These efforts will soon be augmented by the regional employer outreach program that was adopted as a FY 96 transportation control measure by the Transportation Planning Board. This measure will provide funds to localities to increase staff, as well as provide for coordinated publicity materials throughout the region.

PARATRANSIT

MetroAccess

The Americans With Disabilities Act requires that all fixed-route transit systems (with the exception of commuter rail systems) provide paratransit for the disabled within their service areas. The Washington region has responded by developing **M**etro**A**ccess, a service that is coordinated by WMATA, but operated by a number of contract carriers, as well as the local jurisdictions (through their individual services, described below) and private operators under contract to **M**etro**A**ccess. Service was initiated on May 16, 1994. Over 4,200 people have now been certified to use **M**etro**A**ccess, and the service is providing an average of 500 trips per day.

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.[8]

The traveller'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.

Service Area: The paratransit service area is that area within 3/4 of a mile (on both sides of the route) from any fixed route bus service or rail station in the WMATA region.

Service Hours: Days and hours of operation are being phased in over a three-year period as follows:

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[8]WMATA ADA Paratransit Guide. Washington, DC: September, 1993.

Service Days	Operating Hours	Effective Period
Weekdays	7:00 a.m. to 6:00 p.m.	Current
Weekdays	5:30 a.m. to 12:00 a.m.	November 5, 1995
Weekends	8:00 a.m. to 6:00 p.m.	November 5, 1995

After November, 1995, **M**etro**A**ccess will operate 365 days a year, including all federal, state, and local holidays, and during special events when the fixed route systems are operating. A final expansion will be implemented in January 1997.

Fares: The **M**etro**A**ccess fare system has been developed in accordance with the federal ADA regulations. Fares are double the regular non-discounted fares for the fastest comparable trips on the fixed-route system.

Demand Estimates: Adjustments to the demand estimates continue to be updated based on the most recent data provided by WMATA. The current draft estimates are provided in **Figure 9**.

Cost Sharing: Local jurisdictions share the costs of the new service according to a formula.

Jurisdictional Services

In addition to **M**etro**A**ccess, a number of local jurisdictions operate their own paratransit systems, many of which are also core carriers for the regional operation. These systems are described below:

Alexandria DOT

The City of Alexandria's began operating DOT paratransit service within the city limits in 1984. In 1993, the service was modified to comply with the Americans with Disabilities Act. This included expanding the service area to all Northern Virginia jurisdictions and extending the service hours. The system requires a one-day advance reservation for paratransit services. Fares start at $1.50 per person per one-way trip for travel within the City of Alexandria. Trips outside the City are based on the number of miles traveled and are double what the fare would be for the same trip on the fixed-route transit system. 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.

SYSTEM NAME: Washington Metropolitan Area Transit Authority CITY: Washington, D.C. STATE:

ADA PARATRANSIT DEMAND AND SERVICE ESTIMATES (Table 4, Page 1)

DEMAND (No. Trips/Year) (Thousands of One-Way Trips)	Actual 1992	Actual 1993	Actual 1994	Est. 1995	Proj. 1996	Proj. 1997
1. ADA Paratransit Trips Provided/Year (000)	115.7	371.5	429.1	573.5	781.8	1,005.7
2. Total Paratransit Trips Provided/Year (000) (Total ADA and non-ADA)	817.7	817.8	840.3	1,010.1	1,221.6	1,427.9
3. Total Paratransit Revenue Hours/Year (000) (Total ADA and non-ADA) [Sec. 15 definition]	272.9	256.1	263.9	364.9	497.5	633.4

In 1991, total paratransit trips (line 2) were: 712.7

ADA PARATRANSIT SERVICE: Purchased Transportation.

4. For 1994, estimate the number of trips on line 1 that were provided by contracted taxi service: 49.7

5. For 1994, estimate the number of trips on line 1 that our system purchased (contracted out) rather than provide in-house: 387.4
(include contracted taxi service from line 4 and other service owned or operated by the contractors)

Fig 9

Arlington Access

Arlington County began an independent paratransit service with the intention of discontinuing service as MetroAccess was phased in. To implement this service, the county contracted with the Arlington chapter of the American Red Cross, Diamond Transportation Service, and the Red Top Cab Company. MetroAccess also began taking calls for Arlington Access in May, 1994. However, due to the capacity constraints of the regional system, and cost differences, Arlington County is reconsidering suspending service. Reservations are needed to travel on Arlington Access, and fares are double that of comparable Metrorail/Metrobus trips. 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 fare is just over $6.

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 and totally 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 the low income by restricting eligibility to those with an annual income at or below $16,500.

Ride On

Loudoun County's Ride On paratransit program services Leesburg and the Sterling area five days per week for approximately eight hours per day. On June 1, 1995, service was expanded to include a western route serving Purcellville, Hamilton, Bluemont, Round Hill, and the surrounding areas. Special runs have also been made to support specific activities in the County. The Ride On fare structure offers fare books of 10 or more trips, or payment on a cash-per-ride basis. Only county residents are eligible to participate.

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 often serve to inhibit non-vehicular trips by destroying the alternatives.

For the most part, decisions regarding when and where to construct sidewalks and bicycle trails are made by local jurisdictions. However, VDOT is increasingly including these facilities in its project designs. A Bicycle Technical Subcommittee under the TPB serves as a forum for jurisdictions to discuss and coordinate their plans region-wide. Across the region, progress towards a network of trails, sidewalks, bicycle lanes and parking, and other support facilities (such as locker rooms) is slowly developing.

In March, 1995, for example, the WMATA Board approved mid-day (10:00 am to 2:00 pm) bicycle access on Metrorail as a permanent feature of the Bike-on-Rail Program. This action followed a six-month pilot program that ended in January. Metro staff testified that there were no problems reported during the pilot and that the number of Bike-on-Rail permit holders increased from 4,600 to 5,400 during the pilot. 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.

Arlington County routinely induces bicycle accommodations such as indoor parking cage, ample outdoor visitor bike parking and on-site employee fitness center with showers and clothing lockers 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.

An update of the Alexandria Drafting Company's (ADC) regional bike route map, which includes Fairfax and Prince William counties, will be available in September, 1995. This map has been prepared with the cooperation of the Bicycle Technical Subcommittee to ensure greater accuracy.

HOV Lanes

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 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. While the lanes may look underutilized, they carry far more persons per hour than do the parallel regular-occupancy lanes. **Figure 10** details the existing segments of HOV lanes and the most recent traffic counts available for each.

Currently, the region has adopted plans to extend the major HOV corridors and construct HOV lanes on other corridors, and is studying other major locations such as the Capital Beltway. Further details of these plans are presented in **Section V.**

VDOT recently completed a study on the safety risk of motorcycles in HOV lanes. ISTEA mandated that motorcycles be permitted to travel on federally funded HOV facilities unless they created a safety hazard or adversely affected HOV operations. Although motorcycles had previously been banned from traveling on 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. However, out of concern over whether this policy should continue, the CTB resolved that VDOT conduct a study to determine whether the cycles presented a safety risk.

The study found that motorcycles account for as much as three percent of the annual traffic on some HOV lanes. However, in the two years after the CTB authorized their travel, there were only five motorcycle crashes on these highways. The study recommended that the CTB allow motorcycles to continue to travel on HOV lanes and the VDOT continue to monitor their travel and accident rates.

Park & Ride Lots

To support its network of HOV lanes, bus routes, and rail lines, Northern Virginia has provided a growing number of park and ride lots. A list of the lots, together providing over 23,000 spaces (including rail stations), is provided in **Appendix E**.

In addition to lots supporting buses, carpools, and vanpools, both WMATA and the jurisdictions that support the Virginia Railway Express provide lots for their riders. The Metrorail lots are particularly well utilized, and with the exception of the Huntington South parking lot, all of the nearly 10,000 spaces provided at rail stations in Northern Virginia are usually full by 10:00 a.m. each workday. Fairfax County has worked with a private developer to make available approximately 450 extra spaces at the Vienna

Figure 10

HIGH OCCUPANCY VEHICLE (HOV) HOURS AND USE					
HOV FACILITY	**PERSONS**	**DIRECTION**	**RESTRICTED HOURS**	**VEHICLES A.M. PERIOD**	**PEOPLE A.M. PERIOD[1]**
I-395/I-95 (D.C. to Newington): (reversible lanes)	HOV-3	Northbound Southbound	6:00 A.M. - 9:00 A.M. 3:30 P.M. - 6:00 P.M.	6,929	34,677[2]
I-95 (Newington to Route 1): (far left diamond lane)	HOV-3	Northbound Southbound	6:00 A.M. - 9:00 A.M. 3:30 P.M. - 6:00 P.M.	4,075	14,999[3]
I-66 (I-495 to D.C.): (HOV only)	HOV-2	Eastbound Westbound	6:30 A.M. - 9:00 A.M. 4:00 P.M. - 6:30 P.M.	8,216	22,794[4]
I-66 (I-495 to Route 50): (far left diamond lane)	HOV-2	Eastbound Westbound	5:30 A.M. - 9:30 A.M. 3:00 P.M. - 7:00 P.M.	3,399[5]	N/A
ALEXANDRIA:					
Washington Street	HOV-2 HOV-2	Northbound Southbound	7:00 A.M. - 9:00 A.M. 4:00 P.M. - 6:00 P.M.	N/A N/A	N/A N/A
Patrick Street/Rte. 1 Henry Street/Rte. 1	HOV-2 HOV-2	Northbound Southbound	6:00 A.M. - 9:00 A.M. 3:00 P.M. - 7:00 P.M.	N/A	N/A

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

[1] Counts include vans and buses.

[2] Counts taken March, 1994, north of Glebe Road.

[3] Counts taken April, 1994, between Newington and VA 7900.

[4] Counts taken Spring, 1995, between Sycamore Street and Fairfax Drive.

[5] Counts taken Spring, 1995, between Route 243 and I-495.

station, where the problem is particularly severe; this lot opened in October, 1994 and charges fees slightly higher than those charged by WMATA. A list of these stations and their connections to feeder bus systems is also included in Appendix E.

AIRPORTS

Residents of the Northern Virginia area are fortunate in having two major Virginia airports easily accessible to them -- Dulles International and Washington National Airports. In 1992, 27.3 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. In order to preserve these advantages, however, maintaining both the quality of the airports themselves and the ease of access to those transportation centers must remain priorities of the region. Listed below are some of the elements of this effort:

Capital Improvement Program

Currently, both National and Dulles airports are undergoing major capital improvements. An entirely new terminal is to be constructed at National, just to the north of the original terminal. This new building will improve not only the airport, but access to it, as it is designed to connect directly to the Metrorail platform. Metro passengers will thus be able to access the terminal and gates without being exposed to airport traffic or the weather. A second Metro farecard plaza, the connection to the new terminal, and two new parking garages directly behind the Metro station are currently under construction, and a portion of the new terminal, including the connections to the Metrorail station, will open in mid-1997.

At Dulles, the existing 600 foot terminal will be expanded to 1,240 feet at three levels, creating an extended curbside area and an extra lane for dropping off or picking up passengers and adding 600,000 square feet of space to the interior. The terminal additions, which measure 320 feet to the east and 320 feet to the west, will mirror the distinctive facade of the existing building, as the architect, Eero Saarinen, originally intended. This new space will accommodate offices, new ticket counters, additional baggage facilities, two new ground transportation centers and other passenger amenities. The project, which began in October, 1993, is scheduled to be completed in 1997, and will be accompanied by improvements to the street system outside the terminal as well. Long-term plans for Dulles Airport include the construction of a people-mover system to carry passengers between the main and satellite terminals.

MWCOG Passenger Survey

In order to track changes in customer needs and preferences, MWCOG performs a survey of airport passengers at the region's three airports every five years. After the 1992 survey, MWCOG reported the following conclusions:

- Approximately 52 percent of locally originating passengers flew out of National Airport, with the rest split between Dulles (25 percent) and BWI (23 percent).

- 62 percent of those surveyed at Dulles Airport and 77 percent of those surveyed at National Airport cited accessibility as the most important reason for choosing the airport they used.

- At Dulles Airport, 76 percent of all passengers arrived by private or rented automobile, and 14 percent by taxi. However, at National Airport, 36 percent arrived by taxi, making this the most common mode of access at that facility, while only 44 percent used a private or rented car.

- Passengers using Metrorail to get to National Airport decreased significantly in 1992, to 9 percent from 15 percent in 1987. This is still one of the highest proportions of any airport in the Nation, and is most likely decreased somewhat due to the hindrance of ongoing construction at the airport. It is also due to fewer non-resident business travelers using Metrorail. Newly constructed terminals will provide much more convenient access to Metrorail in the future.

Ground Access

The Council of Governments has completed a ground access study, which forecasts access demands and capacities in future years. This study found that while the airports currently are well-served in terms of highway access, capacity improvements will be needed in order to keep up with demand. The study noted that airport access traditionally has not been coordinated with other long-range transportation planning, and recommended that this situation be corrected. Other recommendations included:

- Timely construction of airport-serving facilities in the Highway Element of the Long Range Plan.
- Construction of a highway facility in the Western Bypass Study Corridor.
- Full pedestrian integration of Metrorail and the terminal improvements at National Airport.
- Implementation of high-quality transit service in the Dulles Corridor.
- Greater integration of the Washington Flyer service into the region's overall transit system.

A Ground Access Travel Time Study, last conducted in 1988, will be updated by COG staff this year.

One of the most vital aspects of ground access to Dulles Airport is the Dulles Airport Access Road (DAAR), which connects I-66 to the airport. Traffic on the highway is limited to vehicles travelling to and from the airport; other travellers (such as commuters) in the corridor must use the Dulles Toll Road. Over the years, a number of attempts to broaden access to this roadway have been made, and MWAA has allowed busses to use the road during peak hours. The MWAA is currently awaiting reauthorization by Congress, and the current version of the House bill explicitly restricts access to the highway, reserving it for airport users.

Ground Transportation Services

The Metropolitan Washington Airports Authority (MWAA) currently operates the Washington Flyer ground transportation system at an annual subsidy cost of about $400,000. In Fiscal Year 1995, the Flyer carried approximately 1,450 passengers daily, providing over 254,000 trips between the two airports and downtown Washington, DC; 92,000 trips between Dulles airport and the West Falls Church Metrorail station; and 62,00 trips between the two airports.

Scheduled express bus service operates at one-half hour frequency from a terminal at 15th and K Streets in Northwest Washington D.C. to and from National Airport ($8 one-way; $14 round-trip) and to Dulles Airport ($16 one-way and $26 round-trip). Service is also provided to and from major Washington D.C. hotels. Express buses connecting National and Dulles Airports cost $16 one-way ($26 round trip). Finally, from 10:00 A.M. to 6:00 P.M., buses operate every 20-minutes between Dulles Airport and the West Falls Church Metrorail station at a one-way fare of $8. Before 10:00 A.M. and after 6:00 P.M., buses operate every 30-minutes.

These scheduled services are operated under contract to MWAA by a firm that provides all dispatchers and drivers. MWAA also contracts for most other functions associated with the ground transportation system, including ticket sales, operation of the Washington D.C. terminal, a 24-hour, 7-day per week telephone information system, nightly washing and bi-monthly detailing, and tires and fuel. The Authority also operates airline diversion charters (for bad weather, mechanical problems) between National, Dulles and BWI airports, and a shuttle bus service that connects the various terminals, garages, and the Metrorail station at National Airport. This shuttle service alone enables many passengers who would otherwise drive to use Metro and other transit to reach the airport. Finally, Washington Flyer also contracts with a fleet of taxis to serve Dulles airport.

Recently, the MWAA selected a firm to provide door-to-door van service to and from the Virginia airports. The vans, which can carry up to eight passengers, will be limited to three stops per trip in order to minimize delays, and will cost about half the fare of a taxicab ride. Service is expected to begin at National Airport early in 1996, and at Dulles the following year.

SECTION IV

IMPROVING THE REGION'S TRANSPORTATION SYSTEM

DEFINING AN IDEAL TRANSPORTATION SYSTEM

The complexity of transportation and its role in society makes it very difficult to define a "good" transportation system. ISTEA and the CAAA address this when they stress the need for an integrated approach to planning that takes into account complex trade-offs and competing goals. Different people and different groups will, of course, believe that one or another of these goals is primary, and that others are merely luxuries.

The current Virginia Secretary of Transportation's strategic plan for transportation, "Virginia Connections", for example, stresses intermodalism, deregulation, economic development, market forces, privatization, freight, and technological leadership and safety. These are all valuable principles to incorporate into plans, but in stressing the importance of a good transportation system in linking markets and spurring economic development, some of the negative effects of a poorly designed and unconnected system are not mentioned. These include the "externalities" of traffic, including air and noise pollution, heavy traffic on residential streets, loss of green space and wetlands to parking lots, and wasted time and energy. Our present system does not charge directly those who create such broad impacts, nor does it attribute the social benefits of providing mobility to those who lack economic resources or the disabled.

Below are some aspects of a alternative "model" transportation program as NVTC envisions it.

Mobility

An effective transportation system must provide mobility. People and goods should move throughout the region safely, conveniently, and comfortably. Within this category, needs must be balanced; for instance, drivers might have to travel more slowly than they would prefer in some areas in order to allow pedestrian traffic to also move safely. Clear policies could guide decision-makers through the assessment of these trade-offs.

Travel times should be predictable and subject to as little fluctuation as possible. This is especially important for freight carriers as just-in-time shipping is the norm for many businesses. Finally, the benefits of mobility should be widespread; the transportation system should serve all members of the community rather than focus on any particular segment to the detriment of others.

Affordability

In keeping with the goal of providing mobility across all spectrums of society, an ideal transportation system would provide people with affordable options, including public and private sector alternatives. As jobs leave the central city and become dispersed in the suburbs, it has become more and more necessary to have access to a car in order to reach them. This eliminates the members of 12 percent of the households in the Washington, DC area from the market for those jobs -- cutting them off from important income opportunities. Thus, reasonably priced transit should be made available for consumers of transportation.

It is vitally important that the region's transportation system be affordable for society as a whole. According to the Transportation Planning Board's analysis, the Washington region currently spends $1.8 billion annually to preserve, maintain and operate the transportation systems in place today. Every new road or expanded transit service represents not only a large capital investment but an ever increasing commitment to ongoing costs as well. This money spent by governments is in addition to the considerable amount spent by individuals on transit fares and operating and maintaining their automobiles. In the United States, these expenses are estimated to consume, on the average, 17.8 percent of our household budgets.[9] As noted above, many of the social costs of our systems are not included in either of these numbers. A good transportation system is a prerequisite for economic development; however, we must assure that the costs never exceed the rewards.

Efficiency

Closely associated with the issue of affordability and mobility is that of efficiency. A good transportation system will deliver the maximum mobility for the least costs. How this relatively simple concept is measured is the subject of ongoing debate. Many costs -- for example, those caused by air pollution -- have not traditionally been included in cost/benefit or efficiency analyses. Planners are also grappling with how to compare the efficiency of alternative investments in different modes, as must be done as part of a major investment study.

Demand Management

Lacking sufficient resources to supply unlimited amounts of highways *or* transit, our transportation program should seek to reduce the demands made of that system. There are many ways to reduce this demand, two of the most effective (and least popular) being congestion pricing and parking restrictions. Toll roads, where the traveler pays for use of a roadway, are a good example of congestion pricing. The availability of Intelligent Transportation Systems technologies (described below) has made tolling road use much more feasible.

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[9]Federal Highway Administration Our Nation's Highways: Selected Facts and Figures. Publication No. FHWA-PL-95-028 (Washington, DC: 1995)

A study presented at a recent Transportation Research Board conference found that peak period fees of $2 to $3 reduce total travel by 10 to 15 percent depending on alternative routes and fees charged. Furthermore, if congestion pricing is correctly employed, the net benefit to a region could be as great as a 20 percent reduction in traffic congestion.

Restricting the amount of parking available or increasing the cost of parking is another form of managing the demand for automobile travel. Frequently, employers will offer their employees free parking in a benefit package. An alternative to paid parking would be a travel allowance. For example, an employer could provide $60 per month cash for the employee to use on parking, transit, or to bike to work.

Coordinated with and Supported by Land Use

Land use and transportation obviously are closely related, and their planning should be as well. However, the prevailing pattern of land development in the Washington region since the 1960's has been rapid low-density residential development in suburban areas, accompanied by the emergence of suburban commercial centers or "edge cities," such as Tysons Corner. More and more travel takes place between suburbs, yet the region's public transit system is primarily designed to serve traffic in and out of the urban core. Furthermore, at this point, nearly 80 percent of the man-made environment that will exist in the Washington region in 2020 exists now or has already been approved for construction. Consequently, it would be difficult to have a great impact by modifying land use/transportation strategies within the time frame covered by current long-range plans.

A good transportation system with a supportive land use pattern would allow for alternatives to the single-occupant automobile by fostering an environment that permits people to easily use other types of transportation. However, planning for public transportation does not have to imply a radical departure from current development practices. The issue is not to change the land uses that make up a community, but rather to influence their mixture and design. Locating apartment houses on major streets with bus routes and installing sidewalks to bus stops are examples of planning for public transportation.

The way land uses are laid out in relation to a transit facility or route is key to the success of efficient transit services. Uses that are oriented to the transit services and facilities, with physical and visual connections will encourage transit usage. For example, a primary factor that discourages walking is the long distance to various destinations that are characteristic of "sprawling" land use patterns and single-use zoning codes. In pedestrian-friendly land use patterns, shops and services are clustered within walking distance of residences and employment centers. Strategies to increase pedestrian travel can be coherently linked with policies to promote housing affordability, economic revitalization, and fiscal responsibility.

Balancing the landowner rights and the public interest is another key land use issue related to transportation planning. It is important to anticipate rights-of-way needed for future transportation corridors and to plan and budget for necessary land purchases before development escalates costs. Right-of-way purchases and environmental preservation needs often involve difficult choices between public needs and private development and ownership rights.

Environmental Considerations

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.

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 take into account these conflicting needs.

CURRENT MOVEMENTS TOWARD THE IDEAL

Across the region, changes are occurring that move us towards a transportation system that addresses these concerns. Listed below are areas in which the region is making progress that should be encouraged and applauded, as well as areas in which the commission sees further potential.

Fare Integration

In the Washington region, fare collection practices are different for each system, and transferring passengers are required to purchase different fare media. This burdens transit patrons with the purchase and use of multiple tickets to reach their final destination. 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. **Appendix C** demonstrates the many fare and transfer policies currently in effect in Northern Virginia.

Efforts are underway to reduce the number of tickets needed and increase the ability of a transit patron to transfer between transit operators using the same ticket. VRE and Metrorail, for example, are working to integrate fare collection. Of VRE's 8,000 daily passenger trips, over 2,000 transfers are made to Metrorail during the daily commute. Integrating VRE and Metrorail fare media is complicated by the disparate fare validation systems utilized by each operator. VRE employs a proof-of-payment fare collection system which does not limit access to the trains, but 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 restricted access system used by Metrorail, whereby Metrorail access and egress are controlled by faregates. A Metrorail patron opens a faregate by inserting a valid Metrorail farecard. Upon exit the farecard is then debited the price of the trip, which depends upon distance traveled and the time of day.

One form of integration is the SmartCard, a transportation debit card that would allow the holder to move from one form of transit to another, or pay tolls or parking fees, all of which would be deducted from one card. This type of SmartCard technology is currently being demonstrated by Metrorail using the GO Card. The GO Card is a wallet-sized ticket medium that allows the user to store a pre-paid amount out of which travel fares, parking fees, and tolls could be deducted automatically each time the user enters the system. This is a non-contact farecard, meaning the user only needs to pass a ticket reader and without letting go of the card, the proper amount would be deducted from the card. VRE has applied with WMATA for federal funds to demonstrate the value of the GO Card for its commuter rail system while integrating fare collection and reduced-fee transfers with WMATA.

Regionwide, much more could be done to make the fare system less burdensome. The Interjurisdictional Bus Study commissioned by NVTC in 1994 made a number of recommendations as to how this could be accomplished. The first step would be for each system to simplify and consistently apply the fare structure for its own routes and services.

This recommendation primarily applies to the Metrobus operation. Specific recommendations for the Metrobus system include:

- Modifications to the basic fare structure, especially the elimination of the distinction between peak and off-peak fares, and the application of the zonal charge regardless of whether the trip was taken during the peak period or not.

- More consistent application of the fifty-cent fare on those feeder bus routes to which it currently applies.

- Application of the bus and Metrorail round trip transfer fee used by Arlington County to all routes in Northern Virginia that serve Metrorail stations. This fee allows a person transferring from bus to rail in the morning to pay an additional nickel and receive a transfer that gets them onto the return bus trip that evening.

- A listing printed on each type of fare media (passes, tokens, etc.) of the systems and the types of trips for which that fare medium may be used.

- Elimination of the extensive amount of unnecessary information on public timetables, for instance, District and Maryland fares on Virginia timetables.

- Addition to the timetable of information on pass programs and the fare structures of the connecting Northern Virginia bus systems.

Future improvements would involve the development of a regionally acceptable fare structure and transfer coordination policy. This should be accomplished in an intermediate (three to five years) period. **Finally, a longer range effort would involve implementation of a truly "seamless" fare structure that utilizes the latest available technology to collect fares.** The GO Card may be the technology that eventually allows the region to accomplish this important objective.

Guaranteed Ride Home Programs

Often, transit designed to serve the regular commuter is only offered during peak periods, when demand is the highest. For the most part, this is the case with VRE, as well as with many of the region's bus lines. Thus, potential riders who foresee a possible need to return home in the middle of the day for emergencies (parents, for example) often forego transit for the security of having a car, and thus a ride home, available to them just in case. Transit operators in the region are beginning to address this concern.

As described in Section III, VRE offers its riders a guaranteed ride home for only 10% of the usual taxi fare. In case of an emergency, the rider contacts a special number, and staff dispatch a cab to pick up the passenger. Cab fares have been pre-arranged with a number of cab companies, and passengers may then submit their receipt for reimbursement of 90 percent of this fare. On average, the system serves about one customer per day. The May, 1994 customer survey indicates that 12% of new riders were influenced by the Guaranteed Ride Home Program, and 15% of all who ride more now than six months ago do so because of the availability of the program.

Fairfax County has instituted a similar demonstration program for residents of the county who live in areas served by transit only during the peak periods. Participants must register ahead of time and then may be reimbursed for cab fare home in case of an emergency. The City of Alexandria is also moving forward with plans to implement a demonstration of Guaranteed Ride Home for city employees. The Virginia Department of Rail and Public Transportation is also considering a state-wide program that would consist of individually purchased memberships, in many ways similar in operation to a service such as the American Automobile Association.

WMATA is also considering instituting a Guaranteed Ride Home program, to be implemented through employers participating in Metrochek. Such a program would operate differently in that it would carry people from the rail station nearest their home to their house when feeder bus services are not operating. Finally, the region, as part of its air quality program, has committed to implementing a voluntary region-wide Guaranteed Ride Home program in the near future. The details of such a program are, at this point, unclear.

In fulfilling their obligation to implement a region-wide guaranteed ride home program, jurisdictions should be sure to develop a program that either subsumes or complements existing programs, in order to allow the region to provide this important service as efficiently as possible.

Intelligent Transportation Systems (ITS)

ITS is the application of advanced surveillance, computer, and communications technologies to improve safety and operation efficiency of the surface transportation system. For example, highway signs reading "congestion ahead" are one noticeable way to use communication technologies to increase the efficiency of the roadway. Kiosks seen at many transit centers relay travel information to assist transit patrons in using the system.

Virginia's Department of Transportation is implementing an early deployment study intended to identify a strategy to integrate new technologies with existing and planned systems and enhance coordination between the various jurisdictions involved. The initial project activities will focus on an assessment of existing transportation planning, operations and maintenance policies, and the development of a framework by which these factors can be addressed to the satisfaction of all parties involved. The District of Columbia and the State of Maryland are conducting similar studies which will ultimately be enveloped into a "Regional Traveler Information Showcase" sponsored by the Federal Highway Administration.

An on-going ITS study, to include parts of the Capital Beltway, will use existing cellular phone technology to monitor traffic flow data and to disseminate real-time traffic information. Scheduled to begin in April, 1995, the test is a partnership of public and private agencies including the Federal Highway Administration, Maryland State Highway Administration, Virginia Department of Transportation, Bell Atlantic Mobile (BAM), Farradyne Systems and Engineering Research Associates. The surveillance tests will use geo-location equipment in conjunction with existing BAM co-located cellular towers to locate and monitor randomly selected, anonymous, cellular-equipped vehicles to collect traffic data.

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 travellers on all modes.

Employer Outreach/Metrochek Program

The region's various employer outreach programs, which exist at WMATA, the local jurisdictions, and the TMA's, are crucial to introducing transit to new and non-traditional markets. Also vital to these efforts is the Metrochek program, which provides a means for employers to give up to a $60 transit benefit to employees without being taxed. This program makes it convenient for employers who provide parking to offer corresponding benefits to employees who use transit.

The region, as part of its attempts to achieve conformity with federal air quality standards, has just committed to implementing a region-wide employer outreach program. While the details of how this will occur have yet to be worked out, one thing that nearly everyone agrees on is the need for some high-quality shared marketing materials. Beyond that, funds may be used to add staff to the jurisdictional programs, or to contract with various TMA's, for example. **A coordinated employer outreach program should be developed that builds on the many strengths already present in local public and private organizations.**

Transit Stores

The growth of multi-mode commuter-oriented services, such as the transit stores in Arlington (described in Section III) is a great benefit to the region. Besides providing a focal point for fare media purchases and information for transit patrons, store staff have conducted corporate outreach programs aimed at encouraging employers to adopt TDM programs and join the Metrochek program. **Services such as these that promote ease of access to information and fare media for all systems should be encouraged.**

Minimizing of Corridor Splits

In a variety of ways, Northern Virginia planners and officials are attempting to mitigate the impact of traffic corridors on their communities. One example familiar to most people in the region is the "overlaying" of modes within one corridor, such as the Metrorail Orange Line in the median of I-66, or the planning for the Dulles rail line within the Dulles Access Road median. Such joint use of corridors allows the region to benefit from multiple modes without disrupting communities with multiple facilities.

Another important, if less obvious, example, is the "traffic calming" practices being used by many localities. Arlington, for example, installs traffic circles at some intersections in residential neighborhoods, and often extends the curb out into the parking lane at the end of each block. These structures tend to slow traffic speeds and prevent drivers from using the parking lane as an extra or turning lane. This serves to make streets safer for pedestrians and bicyclists, and ensure that cars are a less intrusive presence in residential areas -- minimizing the impact of the streets through those communities.

A particularly innovative example of corridor mitigation is currently being planned in conjunction with the construction of the Fairfax County Parkway through Fort Belvoir. In order to balance the amount of planned development at the fort, the Army has set aside a protected wildlife corridor in which migrating plants and animals can move across the post to the nearby Huntley Meadows Park and the Mason Neck Wildlife Refuge. The planned alignment for the Parkway, however, will infringe on that corridor. In order to allow movement to continue through the corridor, the Army will construct a wide tunnel under the Parkway, and planners are consulting with environmental

specialists in order to make the underpass amenable to wildlife. Here, the Army has acted upon the recognition that the community that needs to be protected from corridor impacts is truly a diverse one.

Planners should continue to look for opportunities to minimize the community and environmental impacts of travel corridors; long-range plans in particular can help the region avoid unnecessary impacts due to loss of the most appropriate rights-of-way, etc.

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, the transit consumer does not so much care about who carries him or her from one place to the other as about the cost of the ride, the time it takes, and the inconvenience it represents. Clearly, anything which transit operators can do to make those 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, which are used by the RIBS system. In a service of this nature where direct service is not available or financially feasible, buses are timed to meet in a central location, allowing people to switch between a number of lines with a minimum of waiting. Another example is timing the arrival of buses at a rail station shortly before the arrival of a train. DASH's introduction of a shuttle bus service between the King Street VRE station and the Eisenhower Valley is an excellent example of this type of coordination. As closely as possible, service is timed to meet the arriving Express trains at King Street and the AT6 buses at Eisenhower Avenue. **System operators should consider such opportunities carefully, and establish timed transfers when possible, while actively publicizing the new benefits for customers.**

Another way in which services can be successfully integrated is through the encouragement of intermodal centers. The more closely systems are physically linked, the simpler transfers between them should be. The planned Franconia/Springfield Transportation Center is an excellent example; the station will link Metrorail, VRE, 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 also make up such a center. Greyhound's recent proposal to WMATA to establish stations at several Metrorail stations offers an opportunity for establishing another important intermodal link. **To the extent possible, opportunities such as these should be pursued. NVTC can play a role in identifying and helping jurisdictions to successfully respond to these types of opportunities, and to sort out issues such as cost and responsibilities in the case of shared facilities. When facilities are upgraded (e.g. historic rail stations in Alexandria using federal grants), opportunities for improved intermodal connections should always be considered.**

Vision Planning

The federal requirement that long-range plans be fiscally constrained is helpful, in that it forces the region to only plan for what it can afford right now. However, as a region, we still need a forum in which to discuss what we would like our community to look like, rather than what bandages we can apply to the situation -- what we aspire to rather than what we can manage. After all, it was only after the Metrorail system had been dreamed of, discussed, and accepted as an important regional goal that the Washington area was able to gather together the financing to begin constructing it.

It is in this spirit that the TPB is undertaking a Vision Planning process titled "Getting There." The work plan calls for an extended public outreach effort to be conducted during October and November 1995 in order to collect opinions as to what type of transportation system would best serve the region. This will be followed by an open-invitation conference in the fall of 1995 to review the public's responses and form task groups charged with developing sample alternative scenarios. The exact composition of these groups has not yet been determined, but the TPB intends for them to be broadly representative of both local governments, citizens, and the private sector. Once a list of scenarios has been generated, a consultant will facilitate the winnowing of the list, until three or four, in addition to the "base case " of the current Constrained Long Range Plan, are left. The TPB will vote on the final list of alternatives to be presented for public response. While currently available funding will not be a criterion for what is included in the plan, funding will be an issue considered as a facet of all alternatives.

Vision planning is also taking place at the local level. In June of 1992, the Loudoun County Board of Supervisors adopted a goal of developing a comprehensive transportation plan consistent with the needs of Loudoun County citizens. Accordingly, the Planning Commission's Transportation Plan Committee has been drafting a County-Wide Transportation Plan (CTP).

The Committee began by outlining the issues, topics, and questions to be addressed during the discussion and development of the CTP. These include the following:

Regional Transportation Objectives
Land Use and Transportation
Natural and Cultural Environmental Considerations
Transit and Parking Policies
Pedestrian and Bikeway Issues
County/State Transportation Responsibilities

Open meetings were held monthly to discuss these issues. The Plan was adopted by the Loudoun County Board of Supervisors in July, and will be available for distribution to the public in December, 1995.

Arlington County also plans to comprehensively examine its transit services, and will be revisiting both its transit policies and how best to implement them. It is expected that the study will take approximately two years.

I-66 Congestion Management Program

In order to cope with the inevitable delays caused by the construction of additional lanes on I-66, VDOT and VDRPT are conducting an innovative I-66 Congestion Management Program (CMP), designed to divert peak hour single-occupancy vehicle trips from the construction corridor. In order to do this, they are focusing on time, convenience, and cost incentives through the following initiatives:

- As of September 1, 1994, 12 Series routes on the Metrobus system have not charged fares.
- As of November 1, 1994, WMATA and PRTC has operated free, peak period, timed-transfer buses between the Vienna Metrorail Station and Tysons Corner, and express buses connecting VDOT-provided park and ride lots with the Vienna station (The Tysons Corner transfer has since been terminated).
- VDRPT has conducted an extensive employer outreach program in the corridor, focussing on raising awareness of carpool and vanpool options for employees.
- VDOT has provided an increased number of park and ride spaces in the corridor.

These services are primarily paid for with federal funds.

Thus far, the program has been very successful. Since its inception, ridership on the feeder bus routes has increased 124 percent, to a daily average of 849 a.m. boardings. An April, 1995 survey of riders found that 34 percent of the respondents had previously used their own automobile to make the trip, indicating that approximately 290 vehicles are being removed from the road during the peak period. In addition, park and ride lot usage in the corridor is now at 61 percent, an increase of 83 percent over pre-program figures, and this occurred while significant additional parking was under construction.

The results of the program have not been positive across the board. As noted above, one of the "12" routes, the connection to Tysons Corner, generated little ridership and was discontinued in May, 1995. VRE ridership dropped substantially on the Manassas line during the course of the study, and boardings at the Vienna Metrorail station dropped slightly, despite the additional riders dropped off. However, WMATA has also been required to *add* trips to other bus routes, and ridership on both rail lines is back up to earlier levels. In addition, it is particularly difficult to pinpoint the exact effects of the I-66 project on rail ridership, both because the "base" measure was taken after construction in the corridor was ongoing, and because the HOV-2 demonstration project occurred during the same time period.

In any case, the project thus far is a testament to the ability of different systems to experiment, to work together for a common cause, and to adopt an response to new information. It is also a lesson in the potential of fare buy-downs to generate transit ridership -- a lesson to which Northern Virginia in particular is paying close attention (see below).

Public Transportation Management System

The Virginia Department of Rail and Public Transportation is in the process of designing a Public Transportation Management System (PTMS), a system that is currently mandated by ISTEA. VDRPT has invited transit operators and planners to participate in this process to ensure that the final product is one that benefits both state and local staff and officials.

In general, the PTMS is envisioned as an asset-tracking database, listing both facilities (such as tracks and garages) and rolling stock. The database will use federal "useful life" guidelines to forecast each operator's replacement needs, as well as needs arising from planned growth. The PTMS will thus not only track each operator's capital requirements, but also allow state officials to anticipate statewide funding needs and plan accordingly (e.g. anticipate years with multiple large projects and plan to "smooth" those costs over a longer period of time). **Such an asset tracking system will be a useful tool to both state and local governments, helping them to anticipate needs and better communicate with their peers across the state. This system should be implemented regardless of the status of the federal legislation that requires it.**

Public/Private Partnerships

The benefits of public/private partnerships are widely recognized, and Northern Virginians are already in a position to experience the reality of those benefits. Three notable examples are now moving forward. The first, the Dulles Greenway, is scheduled to open in September. The toll road was constructed and will be operated by a private corporation, which will earn a regulated rate of return on its investment. This project could not have been accomplished without a great amount of public institutional support, but all financing was private.

WMATA has also recently entered into an innovative agreement with Virginia Tech and the University of Virginia. The two universities are planning to construct an Education Center, which will serve approximately 5,000 students, adjacent to the West Falls Church Metrorail station. WMATA will allow the universities to construct direct vehicular/pedestrian connections to the existing station, and will allow students to use WMATA parking (for the usual fee.) In exchange, the universities will construct an additional 240 parking spaces, which will be available to WMATA patrons for a fee similar to that charged by WMATA. Because classes are to be held in the late

afternoons and evenings, when WMATA garages are beginning to empty out, this arrangement allows both parties to take advantage of the unused capacity of the other. It is estimated that the additional revenues collected by WMATA as a result of this arrangement will be $375,000 annually. **NVTC and local jurisdictions should continue to support WMATA's efforts to encourage and facilitate joint development projects that surround areas served by transit with appropriate land uses.**

The region also benefits from the Virginia Railway Express' arrangements to use private freight railroad's facilities in order to provide commuter rail service. The "rent" that VRE pays for access to the tracks is substantially less that would be the cost of acquiring right-of-way and constructing new tracks through this congested area. At the same time, the railroads benefit not only from the additional income but also from the capital improvements the Commonwealth and VRE are constructing in order to increase the capacity of the tracks. In the future, NVTC believes, **freight modes, such as railroads, that seek to benefit form ISTEA-funds investments should be compelled to cooperate with related passenger modes (e.g. commuter rail) as a pre-condition of benefitting from these taxpayer-provided resources.**

The cooperation between public and private entities should be enhanced by the recent passage of the Public-Private Transportation Act of 1995, which went into effect on July 1, 1995. This legislation enables the Commonwealth, local governments, and other public entities to enter into agreements with private entities to acquire, construct, improve, maintain, and/or operate any qualifying transportation facility. Both solicited and unsolicited proposals may be accepted, and VDOT/VDRPT guidelines outline how such proposals are to be evaluated. Proposers may also propose innovative financing methods, including the imposition of user fees or service payments. Finally, once a project has been selected, a maximum rate of return to the private operator is to be negotiated as part of the comprehensive agreement governing the project.[10]

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[10]The Commonwealth of Virginia, Public-Private Transportation Act of 1995 Implementation Guidelines. July 1, 1995.

Interjurisdictional Bus Study Recommendations

In 1994, NVTC commissioned an Interjurisdictional Bus Study, which focussed on ways to improve the effectiveness and efficiency of the interjurisdictional bus routes. Some of the recommendations of that report have been adopted by WMATA and the jurisdictions; others have been cited elsewhere in this document. Following are other important recommendations of this study.

Garage Facilities: The location of bus storage and maintenance facilities impacts the operating costs of bus services. Costs can be reduced by locating garage facilities closer to the routes that the buses located in that garage serve. Currently, while the Metrobus garage at Four Mile Run in Arlington has adequate capacity, it is not well located with respect to Metrobus routes serving western portions of Fairfax County. **If Metrobus service is to remain as the Interjurisdictional bus operator in Northern Virginia, it should locate at least one bus garage in the western sections of the service area.** The Bus Study also recommends that DASH either find another site for its garage or expand into the vacant land adjacent to its current site, as the DASH garage is currently at capacity; DASH has now announced plans to do so.

Fleet Replacement: In order to keep down costs and maintain quality of service, **WMATA must undergo an extensive program to replace the bus fleet that serves Northern Virginia with a modern and well-equipped fleet.** The following recommendations are presented to guide the fleet replacement:

- The goal of WMATA should be to provide a fleet in Northern Virginia that has an overall average age of six years with no bus exceeding the 12 year replacement guideline suggested by the FTA.

- WMATA should embark on an aggressive fleet replacement program that achieves this goal in five years.

- In replacing the fleet, WMATA should consider the size of the bus that is appropriate for the service being provided. Therefore, a mixed fleet with 40 foot (45 to 50 passengers), 35 foot (35 to 40 passengers) and even smaller 30 foot (28 to 33 passengers) buses should be obtained. The nature of current WMATA bus services has changed to a feeder network with local services within the community, and the bus fleet should be consistent with the new service pattern (e.g. smaller buses may be less disruptive in residential neighborhoods).[11]

[11]Abrams-Cherwony & Associates, for the Northern Virginia Transportation Commission, Study of Coordinating and Integrating Northern Virginia's Interjurisdictional Bus Routes. Washington, DC: October, 1994.

New Bus Routes: The Bus Study suggests three new bus routes, all connecting the outlying portions of Fairfax County with either the Vienna Metrorail station or the Fair Oaks Mall. The consultant estimates that about 225,000 passenger trips would be made on these new routes. In addition, he recommends routes in Loudoun County, and a blueprint for the development of a transit system in that jurisdiction. These routes highlight the fact that, despite the region's extensive existing system, operators must be alert to changing markets and unmet transit needs.

WMATA Strategic Bus Plan

As was discussed earlier, the high cost of Metrobus to the jurisdictions has resulted in some localities contracting out services that are new or were formerly operated by Metrobus. These high costs are not merely a management problem, or a question of "trimming the fat." Because WMATA receives federal funds, it is subject to federal mandates, such as labor wage rates, that do not constrain the local bus systems. The system also has a much older bus fleet than many of the newer local operations, and a labor force with greater seniority, which drives up salaries and the costs of fringe benefits.

In response to this problem, WMATA has spent the past year engaged in a strategic planning effort, which WMATA's General Manager has identified as a top priority for the organization. WMATA and local jurisdictional staff have participated in an extensive data collection and analysis effort. The focus of reports thus far has been on the wage rates of bus drivers and mechanics, which start at a higher level than most other systems and progress at a rate faster than those of most other systems. In addition, on the whole, Metrobus employees contribute less to their pension and health care benefits than do employees of other bus systems.

In its negotiations with labor, WMATA is focussing on a number of potential contract changes, including changes in wage rates and the rate of wage increases, and pension and health insurance contributions. The House FY 1996 transportation appropriations bill provides one change that would also help control these costs: arbitrators ruling on WMATA's labor agreements would consider local and regional wage rates rather then rates at large transit systems around the U.S. Opportunities for contracting out more work and the possible benefits of new technology and automation are also being investigated.

Fare Buydowns

As a result of the effectiveness of the free bus service in generating transit ridership in the I-66 corridor, Northern Virginia planners and officials have begun to seriously consider the possible benefits of fare "buy-downs" on other feeder bus routes. Some jurisdictions have found that paying an additional subsidy to allow fares to drop on certain bus routes generates substantial increased ridership on both the bus route and the rail line it serves. In some cases, the increased rail fare revenues have been enough to cover the costs of the increased subsidy.

This summer, the TPB considered programming funds for fare buy-downs on a limited number of feeder bus routes in order to reduce congestion and air pollution caused by automobiles. The Board decided not to pursue the option this year, but has kept in on the list for consideration next year. **The potential of feeder bus fare buy-downs to cost-effectively generate transit ridership should continue to be investigated, both region-wide and in Northern Virginia, as a means of reducing congestion and air pollution in the future.**

Ease of Access

Another factor vital to maintaining and promoting transit ridership is the ease with which passengers can access the bus or rail station. This factor incorporates a number of issues discussed elsewhere in this plan; park-and-ride lots, bicycle and pedestrian access, and intermodal facilities are all parts of a complicated whole. One other factor that should be explicitly mentioned is the cooperation between the public and private sector that is often required in order to provide and preserve good access.

This issue arose in 1994 in connection with the heavily used bus stop located at the Seven Corners Shopping Center. Due to a major renovation and expansion project underway at the Center, the property managers contacted WMATA and informed them that they would be required to find another location for the stop.

The stop, which has been a critical transfer point for almost 40 years, serves over 2,000 people daily. WMATA required public hearings before abandoning the stops, and no other feasible alternative was both safe and accessible. WMATA quickly explained these difficulties to the property management company, and the two parties worked together to identify a location at the Shopping Center that satisfies the concerns of each group. However, no formal process for working out these concerns has been set forth. **It is only through cooperative efforts such as these that vital transit access to private properties will be maintained, and these lines of communication should be established before a crisis arises. NVTC and local governments have should reach out to the private sector to establish an "early warning system" to prevent these situations. This process might by initiated through the TMA's.**

Quality Transit Information

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 yet another barrier to ridership. Transit stores, which provide a centralized source of information for the many different transit systems in the region, are one effective response to this problem, and WMATA's bus maps, which show all of Metro's routes, as well as the local systems' routes, are also a positive step. But more needs to be done to make information easily available.

The Interjurisdictional Bus Study makes several recommendations for public information improvements, including:

- Simplify the WMATA public timetables. This would most likely be best approached by reducing the number of sub-routes that correspond to each main route, and presenting fare information appropriate to each route on the corresponding timetable.

- Keep the excellent Metrobus system map current.

- Coordinate bus stop signs of the different operators that serve the same stop location, rather than having one sign for each operator. This would serve to make the inter-system connections more clear. Perhaps a device such as NVTC's "connections" logo could be used.

- Provide public information on Metrorail schedules at stations. This would allow passengers to time their trips to coincide with a departing bus at the destination station. Some have argued that with frequent peak service on Metrorail (e.g. every six minutes at some stations) such schedules are unnecessary, but less frequent service during off-peak hours and on weekends is common.

ARTS: While NVTC's consultant found the information provided by ARTS, a regional database of schedule and route information that is maintained and operated by WMATA, to be useful and relatively accurate, local jurisdictions have complained that it is sometimes difficult to receive good information from the database, particularly regarding the locally operated systems.

It appears that much of this inconsistency is a result of the way information is retrieved from the database. For instance, requesting a bus route by departure time may get a different set of transit options than requesting a bus route by arrival time. Likewise, a change in arrival time by a mere ten minutes may result in an entirely different set of transit options. NVTC staff have identified a number of ways in which this service, already good, could be improved, especially for customers seeking information about local bus systems that connect to WMATA.

First, WMATA should provide additional instruction to their operators in order to emphasize ways to ask the database for different types of information. Further, the database programming should be revisited, since this often limits the ease with which operators can retrieve the most useful information. For instance, ARTS will only provide an operator with the three shortest routes in terms of time, when a route five minutes longer, but without a transfer, might be preferable.

Regional jurisdictions have also approached WMATA about expanding the area served by ARTS. Currently, operations such as VRE and PRTC OmniRide are not incorporated into the database because they operate outside WMATA's service area. This policy sells the region short by making it impossible to fully utilize a valuable resource for transit services that feed customers into the regional system. For example, over one quarter of VRE

customers transfer to WMATA to reach their final destination each workday morning.

WMATA staff currently are working with a consultant to investigate the feasibility and costs of such an expansion. One issue affecting whether or not WMATA would expand the system is the cost of collecting and entering the additional information into the system (including maps of the additional counties.) However, the decision also relies on what WMATA and the region see as the Authority's proper role: should it work to promote and provide information for its service area only, or should it be investing resources towards promoting transit use throughout the region? Currently, such actions are not part of the Authority's official mission.

In the interest of regionwide coordination of transit services, WMATA and local jurisdictions should develop an equitable arrangement for funding and implementing the ARTS system expansion.

Public Access Information Channels: Another resource for providing information to a large portion of the public is the public access channels on cable television. Both DASH and the City of Fairfax have submitted proposals to the state to develop cable channels that would disseminate information on schedules, fares, and changes in service. Such a service would make information available 24 hours a day, relieve staff now dedicated to answering telephone requests, and make information easily available to portions of the disabled community, particularly hearing-impaired riders. Neither proposal has been funded, but **it is hoped that jurisdictions will continue to move ahead with these types of marketing plans of their own accord, and that the state will support such marketing efforts in the future.**

Figure 11

Summary of Recommendations

Fare Integration	Implement the recommendations of the 1994 Interjurisdictional Bus Study: 1) Each system should simplify and consistently apply the fare structure for its own routes and services. 2) A regionally acceptable fare structure and transfer coordination policy should be developed. 3) Systems should work together to develop and implement a truly "seamless" fare structure that utilizes the latest available technology to collect fares -- possibly the GO Card.
Guaranteed Ride Home Programs	In fulfilling their obligation to implement a region-wide guaranteed ride home program, jurisdictions should develop a program that either subsumes or complements existing programs, in order to allow the region to provide this important service as efficiently as possible.
Intelligent Transportation Systems (ITS)	The potential for ITS technologies to both decrease vehicular congestion and enhance public transit service should continue to be explored. Those developing systems and conducing research should to ensure that disparate systems are compatible and will ultimately be able to be used by travellers on all modes.
Employer Outreach/ Metrochek Program	A coordinated employer outreach program should be developed that builds on the many strengths already present in local public and private organizations.
Transit Stores	Services such as transit stores that promote ease of access to information and fare media for all systems should be encouraged.
Minimizing of Corridor Splits	Planners should continue to look for opportunities to minimize the community and environmental impacts of travel corridors; long-range plans in particular can help the region avoid unnecessary impacts due to loss of the most appropriate rights-of-way, etc.
Integration of Services	System operators should seek opportunities for timed transfers and other service integration, and actively publicize the new benefits for customers. Opportunities for intermodal transfers should also be pursued. NVTC can help jurisdictions to successfully respond to these opportunities, and to sort out issues such as cost and responsibilities in the case of shared facilities.
Public Transportation Management System	This asset tracking system will be a useful tool to both state and local governments, helping them to anticipate needs and better communicate with their peers across the state. This system should be implemented regardless of the status of the federal legislation that requires it.
Public/Private Partnerships	NVTC and local jurisdictions should continue to support WMATA's efforts to encourage and facilitate joint development projects that surround areas served by transit with appropriate land uses. Freight modes, such as railroads, that seek to benefit form ISTEA-funds investments should be compelled to cooperate with related passenger modes (e.g. commuter rail) as a pre-condition of benefitting from these taxpayer-provided resources.

Figure 11 (continued)

Interjurisdictional Bus Study Recommendations	1) If Metrobus service is to remain as the Interjurisdictional bus operator in Northern Virginia, it should locate at least one bus garage in the western sections of the service area. 2) WMATA should undergo an extensive program to replace the bus fleet that serves Northern Virginia with a modern and well-equipped fleet. 3) The three new bus routes suggested by the consultant, all connecting the outlying portions of Fairfax County with either the Vienna Metrorail station or the Fair Oaks Mall, as well as suggested routes in Loudoun County, should be considered by the appropriate jurisdictions. These routes highlight the fact that, despite the region's extensive existing system, operators must be alert to changing markets and unmet transit needs.
Fare Buydowns	The potential of feeder bus fare buy-downs to cost-effectively generate transit ridership should continue to be investigated, both region-wide and in Northern Virginia, as a means of reducing congestion and air pollution in the future.
Ease of Access	Cooperative efforts to ensure vital transit access to private properties will be maintained should be pursued, and lines of communication established before a crisis arises. NVTC and local governments should reach out to the private sector to establish an "early warning system" to prevent these situations.
Quality Transit Information	The recommendations of the Interjurisdictional Bus Study regarding simplifying and improving public information should be implemented. In addition, WMATA should provide additional instruction to ARTS operators in order to emphasize ways to ask the database for different types of information. Further, the database programming should be revisited, since this often limits the ease with which operators can retrieve the most useful information. In the interest of regionwide coordination of transit services, WMATA and local jurisdictions should develop an equitable arrangement for funding and implementing the ARTS system expansion. Jurisdictions should continue to move ahead with marketing plans such as public access information channels.
Regional Section 15 Reporting	When information regarding the costs and benefits of the regional collection of data is available, this process should be considered by Northern Virginia jurisdictions.
Bike/Pedestrian Access	In order to reduce congestion and the demand for roadways, the region must focus on encouraging bicycle and pedestrian travel. A larger share of travel by bicycle and walking would reduce energy consumption and air pollution.

Regional Section 15 Reporting

Section 9 of the Federal Transit Act allows funding to accrue to the region based on the revenue vehicles miles and passenger miles and operating expenses provided by the transit operator when filing a Section 15 report. WMATA's policy is that these benefits may be passed on to the individual system in the form of capital assistance (as is the case with VRE) or stay within the WMATA budget, where they benefit the entire region and reduce local subsidies.

In FY 95, the Fairfax Connector reported this data, as did Ride-On in Maryland. Both systems allow the incremental funds collected to be credited to WMATA. MTA and VRE also report Section 15 data, and receive the Section 9 funds directly. It is estimated that if DASH and CUE had submitted reports in FY 95, approximately $570,000 more would have been allocated to the Washington area.

However, certain costs are attached to reporting. If an individual system wishes to receive Section 9 monies, it must comply with all conditions of federal grant recipients. Even if it chooses to allow WMATA to keep the money, the system will incur the costs of collecting and reporting Section 15 data. A dilemma arises, in that the cost of reporting may not be worth the reduction in subsidy that would accrue to a small jurisdiction (such as the City of Fairfax) but may be very beneficial to the region overall. NVTC is currently evaluating the benefits of conducting passenger sampling for the Northern Virginia operators, in order to alleviate the data collection burden of reporting. **When information is available, a regional response should be considered by Northern Virginia jurisdictions.**

Bike/Pedestrian Access

Aside from the STP Enhancement program (which is awarded by the states) and local funding, area jurisdictions rarely shift funds from traditional federal and state highway funding programs to pay for eligible bicycle and pedestrian improvements. According to the financial summary in the draft FY 96-01 TIP, the $3.7 million (or about $620,000 per year) the region will spend on bicycle projects in FY 96 represents only 0.19 percent of the region's $1,943.8 million total annual transportation spending.

In order to reduce congestion and the demand for roadways, the region must focus on encouraging bicycle and pedestrian travel. A larger share of travel by bicycle and walking would reduce energy consumption and air pollution.

During National Bike-to-Work Week in May, 1995, the Bicycle Technical Subcommittee of the TPB held three public workshops on the status of bicycle and pedestrian projects in the region. Entitled "What's happening with Bicycling and Walking in Metropolitan Washington," these workshops provided citizens with an opportunity to talk to local planners about what is being done and what should be done to accommodate bicyclists and pedestrians in the overall transportation system. Comments at the Virginia meeting highlighted the need for ways to cross the Beltway, especially in the Eisenhower Valley area; good maps that show the small paved "cut-

throughs" that exist throughout much of the region; maintenance of trails (e.g. snow removal in winter); and better connectivity between existing trails.

Conclusion

Transit cannot be all things to all people. The private automobile is a necessary and beneficial part of many of our lives. But it is possible to have too much of a good thing -- and in Northern Virginia, we do. It is when the costs -- the pollution, congestion, noise, and division of communities -- begin to outweigh the benefits of convenience, time savings, and privacy that we must strive to reduce automobile use.

We do not need to stop using our cars altogether, but rather to use them more judiciously. Commutes can often easily be made on transit or in a carpool, and in many cases a trip to and from the Seven-Eleven for a gallon of milk can be accomplished as quickly on a bicycle as in an automobile. But in order to change their travel choices, we have to offer people alternatives -- comfortable and convenient transit; safe streets, sidewalks, and bikeways; neighborhoods that mix land uses so that the "convenience" store is not two miles away.

As this report documents, Northern Virginia is already doing a great deal to offer those alternatives. But we need to do more. Furthermore, the resources the region will have available to meet these challenges will continue to be limited relative to the needs of the area. The importance of maintaining a functioning transportation system that adds to rather than detracts from the quality of life in Northern Virginia calls planners and citizens alike to strive for cooperation, communication, and innovation in transportation planning as this region grows and develops.

APPENDIX A

TRANSPORTATION AGENCIES

AND ORGANIZATIONS

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Congress

Senators of Virginia:

John Warner (R)
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: 202/224-7245

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

Housing and Urban Affairs Subcommittee
Telephone: 202/224-9204

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

Surface Transportation Subcommittee
Telephone: 202/224-9350

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

Water Resources, Transportation and Infrastructure Subcommittee
Telephone: 202/224-6176

Representatives of Virginia:

1. Herbert Bateman (R)
2. Owen Pickett (D)
3. Robert C. Scott (D)
4. Norman Sisisky (D)

5.	L.F. Payne	(D)
6.	Robert W. Goodlatte	(R)
7.	Thomas Bliley	(R)
8.	James Moran	(D)
9.	Rick Boucher	(D)
10.	Frank Wolf	(R)
11.	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: 202/225-2358

House Energy and Commerce Committee
Telephone: 202/225-2927

House Public Works and Transportation Committee
Telephone: 202/225-4472

Surface Transportation Subcommittee
Telephone: 202/225-4472

Legislation:

Senate and House Bill Status
Telephone: 202/225-1772

*** The number to the left of name indicates Congressional District.**

U.S. Department of Transportation

The Honorable Federico Pena, Office of the Secretary
400 7th Street, S.W., Suite 10200
Washington, D.C. 20590

Telephone: 202/366-1111
Fax: 202/426-4508

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

Federal Transit Administration

Gordon Linton, Administrator
Federal Transit Administration, (FTA)
400 7th Street, S.W.
Washington, D.C. 20590

Telephone: 202/366-4040
Fax: 202/366-3472

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

Telephone: 215/656-6900
Fax: 215/656-7260

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

Federal Highway Administration

The Honorable Rodney Slater, Administrator
Federal Highway Administration, (FHWA)
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

Jolene Molitoris, Administrator
Federal Railroad Administration, (FRA)
400 7th Street, S.W.
Washington, D.C. 20590

Telephone: 202/366-0710
Fax: 202/366-7009

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

Environmental Protection Agency

Carol M. Browner, Administrator
Environmental Protection Agency, (EPA)
401 M. Street, S.W., Room 1200
West Tower
Washington, D.C. 20460

Telephone: 202/260-2090
Fax: 202/260-4700

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

Telephone: 215/597-9800
Fax: 215/597-8255

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

U.S. Army Corps of Engineers

Lt. General Arthur E. Williams
Chief of Engineers
U.S. Army Corps of Engineers
20 Massachusetts Avenue, N.W.
Washington, D.C. 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).

National Park Service

Roger Kennedy, Director
National Park Service
1849 C Street, N.W.
Washington, D.C. 20420

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.

General Services Administration

Roger W. Johnson, Administrator
General Services Administration
18th & F. Street, 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.

Transportation Research Board/National Research Council

Robert E. Skinner, Jr., Executive Director
Transportation Research Board/National Research Council
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.

American Association of State Highway and Transportation Officials

Frank Francois, Executive Director
American Association of State Highway and Transportation Officials
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 Public Transit Association

Jack Gilstrap, Executive Vice President
American Public Transit Association
1201 New York Avenue, N.W.
Washington, D.C. 20005

Telephone: 202/898-4000
Fax: 202/898-4029

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. Peer review groups are sometimes organized to offer advice to individual operators, such as the group that advised WMATA on its efforts to "winterize".

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.

Office of the Secretary of Transportation

The Honorable Robert G. 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 Department of Transportation

David Gehr
Commissioner,
Virginia Department of Transportation, (VDOT)
1401 East Broad Street
Richmond, Virginia 23219

Telephone: 804/786-2700
Fax: 804/786-2940

Claude D. Garver
Assistant Commissioner for Operations
Virginia Department of Transportation, (VDOT)
1401 East Broad Street
Richmond, Virginia 23219

Telephone: 804/786-2700

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

Commonwealth Transportation Board

The Honorable Robert G. Martinez, Chairman
Commonwealth Transportation Board
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.

Virginia Department of Rail and Public Transportation

Mr. Leo J. Bevon, Director
Virginia Department of Rail and Public Transportation
1401 East Broad Street
Richmond, Virginia 23219

Telephone: 804/786-1051

Function: Technical and financial assistance to Virginia's public transit, ridesharing, and railroad operators.

State Corporation Commission

The Hon. Preston C. Shannon, Commissioner
The Hon. Theo B. Morrison, Jr., Commissioner
The Hon. Hullihen William Moore, Commissioner
1300 East Main Street, 11th floor
Richmond, Virginia 23219

Telephone: 804/367-0268

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.

Division of Risk Management

Mr. Don W. LeMond, Director
James Madison Building - 4th Floor
109 Governor 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.

Senator Hunter Andrews
Majority Leader, Chairman of Finance Committee
Virginia Senate 1st District
16 S. King Street P.O. Box B
Hampton, Virginia 23669

Telephone: 804/722-2581
Fax: 804/727-4707

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

Telephone: 804/786-2366

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

Telephone: 804/399-3600

Delegate 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

Telephone: 703/344-7111

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

Telephone: 804/786-8826

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 Municipal League

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 Association of Public Transit Officials (VAPTO)

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

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

Turner Spencer
President
Pentran
3400 Victoria Boulevard
Hampton, VA 23661

Telephone: 804/722-2837
Fax: 804/722-9662

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. Provides annual awards honoring outstanding public officials, transit systems and innovative programs. Sponsors a rodeo for transit drivers and mechanics.

George Mason University

George W. Johnson
President
George Mason University
Fairfax, Virginia 22030-4444

Telephone: 703/993-8000
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.

Northern Virginia Transportation Commission (NVTC)

Mary Margaret Whipple, 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 $70 million annually of state/federal funds to assist public transit. Co-sponsor of the Virginia Railway Express. All 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.

Potomac and Rappahannock Transportation Commission (PRTC)

Terrance Spellane, Chairman
Leo P. Auger, PRTC Executive Director
1549 Old Bridge Road, Suite 209
Woodbridge, Virginia 22192-2737

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.

Virginia Railway Express

Sharon Bulova, Chairman of Operations Board
Stephen T. Roberts, Director of Operations
6800 Versar Center at Hechinger Drive, Suite 247
Springfield, Virginia 22151

Telephone: 703/642-3808
Fax: 703/642-3820

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

Northern Virginia Planning District Commission (NVPDC)

Albert C. Eisenberg, Chairman
G. Mark Gibb, Executive Director
7535 Little River Turnpike, Suite 100
Annandale, Virginia 22003

Telephone: 703/642-0700

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

Transportation Coordinating Council

Byron Waldman, Chairman
Terrance Spellane, Vice-Chairman
c/o Carolyn Zeller
Northern Virginia District Office
VDOT
3975 Fair Ridge Drive
Fairfax, Virginia 22033

Telephone: 703/934-7300

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 (Sid Steele) of the Secretary of Transportation.

Washington Metropolitan Area Transit Authority

Kirk Wineland, Chairman
Larry Reuter, 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.

Metropolitan Washington Council of Governments

777 North Capitol St., Suite 300
Washington, D.C. 20002-4201
Telephone: 202/962-3200

Jack Evans, Chairman
Ruth A. Crone, Executive Director

Function: In 1966, MWCOG 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.

National Capital Region Transportation Planning Board

Patricia Ticer, Chair
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.

Metropolitan Washington Air Quality Committee

Ellen M. Bozman, Chairman
777 North Capital Street, Suite 300, N.E.
Washington, D.C. 20002-4201

Staff Contact: Travis Monkle
Assistant Director of the Department
of Environmental Programs
777 North Capital Street, Suite 300
Washington, DC 20002-4201

Telephone: 202/962-3200

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 Development Committee

William J. Becker, Chairman
777 North Capital Street, Suite 300
Washington, D.C. 20002-4201

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

Function: Policy committee which advises the MWCOG Board of Directors. Makes recommendations regarding regional forecasts and works to facilitate and oversee interjurisdictional agreements.

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.

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.

Maryland-National Park and Planning Commission

Elizabeth Hewlett, Acting Chairman
PC Regional Office
City Administration Building
14741 Govenor Oden Drive
Upper Marlboro, MD 20772

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

Trydye 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.

Washington Suburban Transit Commission

John Davey, Chairman
8720 Georgia Avenue, Suite 904
Sliver 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.

Maryland Department of Transportation

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

Telephone: 410/859-7397
Fax: 410/859-7615

Tom Donahue, Acting Manager of Washington Area Transit Programs
8720 Georgia Avenue, Suite 904
Silver Spring, Maryland 20910-3602

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

John A. Agro, Jr., Administrator
Mass Transportation Administration
300 West Lexington Street
Baltimore, MD 21201-3415

Telephone: 410/333-3885
Fax: 410/333-3279

Function: Provides Maryland jurisdictions' WMATA funding.

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.

National Capital Planning Commission

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

Telephone: 202/724-0176
Fax: 202/724-0195

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

District of Columbia Department of Public Works

Larry King, 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.

Virginia Department of Transportation

Northern Virginia District Office
3975 Fair Ridge Drive
Fairfax, Virginia 22033

Tom Farley, District Administrator
Telephone: 703/934-7300

Joan Morris, Acting Director of Public Affairs
Telephone: 703/934-7322

Dulles Toll Road Operations Center
Telephone: 703/734-9754

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

Metropolitan Washington Airports Authority

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.

Washington Metropolitan Area Transit Commission

Agnes M. Alexander, Chairman
W.H. McGilvery III, Executive Director
WMATC
1828 L. Street, N.W., Suite 703
Washington, D.C. 20036-5104

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

Function: Created in 1960 as part of the Washington Metropolitan Area Transit Regulation Compact signed by Virginia, Maryland and the District of Columbia. Composed of one member from each of the three jurisdictions, each from the respective regulatory commissions of those jurisdictions. Geographic jurisdiction includes the Washington Metropolitan Transit District. The Commission 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. Examples of regulatory activities include setting maximum interstate taxi rates for D.C. cabs. As of July, 1992, a total of 28 Virginia-based Companies held WMATC certificates, including commuter bus operators, charter buses, and limousine services.

OFFICES OF TRANSPORTATION (AND RELATED AGENCIES)

City of Alexandria

City Hall
301 King Street
Alexandria, Virginia 22314

Department of Transportation & Environmental Services

Thomas F. O'Kane, Jr., Director
Mary J. Anderson, Deputy Director/Administration
City Hall, Room 1400
Telephone: 703/838-4966

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

Office of Transit Services and Programs

Valerie Sikora, Division Chief (Room 5100)
Telephone: 703/838-3800

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

Arlington 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: 703/358-3371

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

City of Fairfax

10455 Armstrong Street
Fairfax, Virginia 22030-3630

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

Richard R. Fruehauf, Director of Transit and Utilities
Telephone: 703/385-7920

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.

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.

Fairfax County Office of Transportation

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

Shiva K. Pant, Director
Telephone: 703/324-1100

Andy Szakos, Chief, Transit Operations Section
Telephone: 703/324-1100

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

Loudoun County

Sanjeev Malhotra, Chief of Transportation Planning
Julie Pastor, Director, Department of Planning
750 Miller Drive, S.E.
Leesburg, Virginia 22075

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

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

RIDESHARING OFFICES

Alexandria

Mary Bowler, Ridesharing Coordinator
Alexandria Rideshare
P.O. Box 178
City Hall, Room 5100
Alexandria, Virginia 22313

Telephone: 703/838-3800

Arlington County

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

Telephone: 703/358-3575 (Business)
703/528-3541 (Rideshare)

Fairfax County

Dorothy Cousineau
Fairfax County Ridesources
12055 Government Center Parkway
Suite 1034, Tenth Floor
Fairfax, Virginia 22035-5511

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

Loudoun County

Lynne Roberts
Ridesharing Coordinator
Loudoun County
750 Miller Drive, S.E., Suite 300
Leesburg, Virginia 22075

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

Prince William County

Lauretta Ruest
Project Director
Potomac & Rappahannock Transportation Commission
1519 Davis Ford Road, Suite 1
Woodbridge, Virginia 22192

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.

Metropolitan Washington Council of Governments Ride Finders Network

Jon Williams, Chief, Short Range Transportation Programs
MWCOG
777 N. Capitol St., N.E., Suite 300
Washington, D.C. 20002-4201

Telephone: 202/962-3200

LOCAL CITIZENS TRANSPORTATION ADVISORY BOARDS

Arlington Transportation Commission

C/O Kathleen N. Ausley, Chairman
James R. Hamre
Arlington Department of Pubic Works
2100 Clarendon Blvd.
Arlington, Virginia 22201

Telephone: 703/358-3681

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

Alexandria Traffic and Parking Board

C. Peter Schumaier, Chairman
C/O George Jivatode
Alexandria Department of Transportation & Environmental Services
301 King Street, Room 5150
Alexandria, Virginia 22314

Telephone: 703/838-4411

Fairfax County Transportation Advisory Commission

C/O Don Emerson, Chairman
Fairfax County Office of Transportation
12055 Government Center Parkway
Suite 1034, Tenth floor
Fairfax, Virginia 22035-5511
If mailing to this address, ATTN: Dan Southworth

Telephone: 703/324-1100

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

Falls Church Planning Department

Citizens Advisory Committee on Transportation
Elizabeth Macaulay, Chairman
C/O Planning Department
300 Park Avenue
Falls Church, Virginia 22046

Telephone: 703/241-5040

LOCAL TRANSIT OPERATORS

Arlington Trolley in Crystal City

Chris Hamilton
Transit Engineer
#1 Courthouse Plaza, #706
2100 Clarendon Blvd.
Arlington, Virginia 22201

Telephone: 703/358-3575

Function: Serves Crystal City 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: Over 60 full and part-time employees operate seven routes and carry about 2.0 million passengers annually. Non-profit corporation with seven shares of capital stock all owned by the City of Alexandria. The Board of Directors is elected annually by the City Council. The Company owns all assets but has no employees. Operations are contracted to the ATE Management and Service Company, which employs the General Manager. All other transit employees work for Transit Management of Alexandria, Inc., a wholly owned subsidiary of ATE.

OmniRide

Potomac & Rappahannock Transportation Commission
1519 Davis Ford Road, Suite One
Woodbridge, Virginia 22192-2737
Attn: Norman Hall

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.

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.

Fairfax Connector

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

Telephone: 703/324-1172
Fairfax Connector Information: 703/339-7200

Function: County-owned public bus system.

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.

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.

Ballston/Rosslyn Area Transportation Association (BATA)

Ms. Robin Bard, Transit Store Manager
4238 Wilson Blvd., Suite 1244
Arlington, Virginia 22203

Telephone: 703/528-3541

Function: Contract operator of the Ballston Transit Store, now located at Ballston Commons Shopping Mall, and the Rosslyn Transit Store, located at 1700 N. Monroe Street, both funded by Arlington County. Works closely with the Ballston Partnership.

Crystal City Commuter Service Center

Laura Maddox, Manager
Crystal City Commuter Service Center
1615 B Crystal Square Arcade
Arlington, Virginia 22202

Telephone: 703/413-4287
Fax: 703/413-4291

Function: Sponsored by Arlington County.

Dulles Area Transportation Association (DATA)

Sidney Steele, President
2340 Dulles Corner Road
Herndon, Virginia 22071

Telephone: 703/713-0103
Fax: 703/713-0105

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. Activities include assessing transportation needs, identifying issues, formulating strategies, and providing a forum. Publishes quarterly newsletter "TransActions."

Reston Transportation Management Association (LINK)

Karl J. Ingebritson, Director
LINK
1760 Reston Parkway, Suite 513
Reston, Virginia 22090-5604

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

Function: Improving mobility in the Reston Area.

Transportation and Environmental Management and Planning Organization Alexandria, Inc. (TEMPO)

Ms. Cynthia Fondriest, Executive Director
c/o Fondriest & Associates
5750 Heritage Hill Drive
Alexandria, VA 22310

Telephone: 703/519-8970
Fax: 703/739-2697

Function: A private, non-profit TMA founded in July, 1989. The TMA serves as a resource center for transit and ridesharing information.

Tysons Transportation Association (TYTRAN)

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

Telephone: 703/821-3000
Fax: 703/903-4106

Function: Actively works to improve mobility.

Loudoun County Transportation Association

Dave Daugherty, President
LCTA
P.O. Box 2833
Leesburg, Virginia 22075

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

Function: Improve mobility.

Toll Road Corporation of Virginia

Michael Crane, CEO
Gen. Charles Williams, Chief Operating Officer
109 Carpenter Drive #200
Sterling, VA 20164

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

Function: This private organization has been working for several years to design, finance and construct an extension of the Dulles Toll Road to Leesburg. The Corporation will operate the road after its 1995 opening.

Washington Private Operators Council

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

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

Function: Created in January 1992, this non-profit association consists of a group of for-profit transportation companies seeking to educate the public and elected officials about the benefits of contracted public transit services. Start-up costs are partially covered by FTA through George Mason University. Has begun to publish a monthly newsletter. Current members include American Contract Management, Inc., Diamond Transportation, ATE Management & Services, Inc., American Coach Lines, Inc., Barwood Taxi, and Transportation General, Inc.

Washington Area Bicyclist Association (WABA)

Ellen Jones, Director
1819 H. Street, N.W., Suite 640
Washington, D.C. 20006

Telephone: 202/872-9830
Fax: 202/862-9762

Function: Promote bicycling.

American Automobile Association

Ron Kosh, General Manager
12600 Fair Lakes Circle
Fairfax, Virginia 22033-4904
Telephone: 703/222-4200
Fax: 703/222-4049

Function: Advocacy group for automobile owners.

Northern Virginia Transportation Alliance

Gary Garczynski, President
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.

Virginia VanPool Association, Inc.

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

Telephone: 202/310-2700

Function: Advocacy group for vanpools.

National Railroad Passenger Corporation (Amtrak)

Ed Walker, District Superintendent-Commuter Rail Service
Amtrak
900 Second Street, Suite 111
Washington, D,C, 20002

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

Function: Contract operator for VRE commuter rail service.

APPENDIX B

PUBLIC TRANSIT

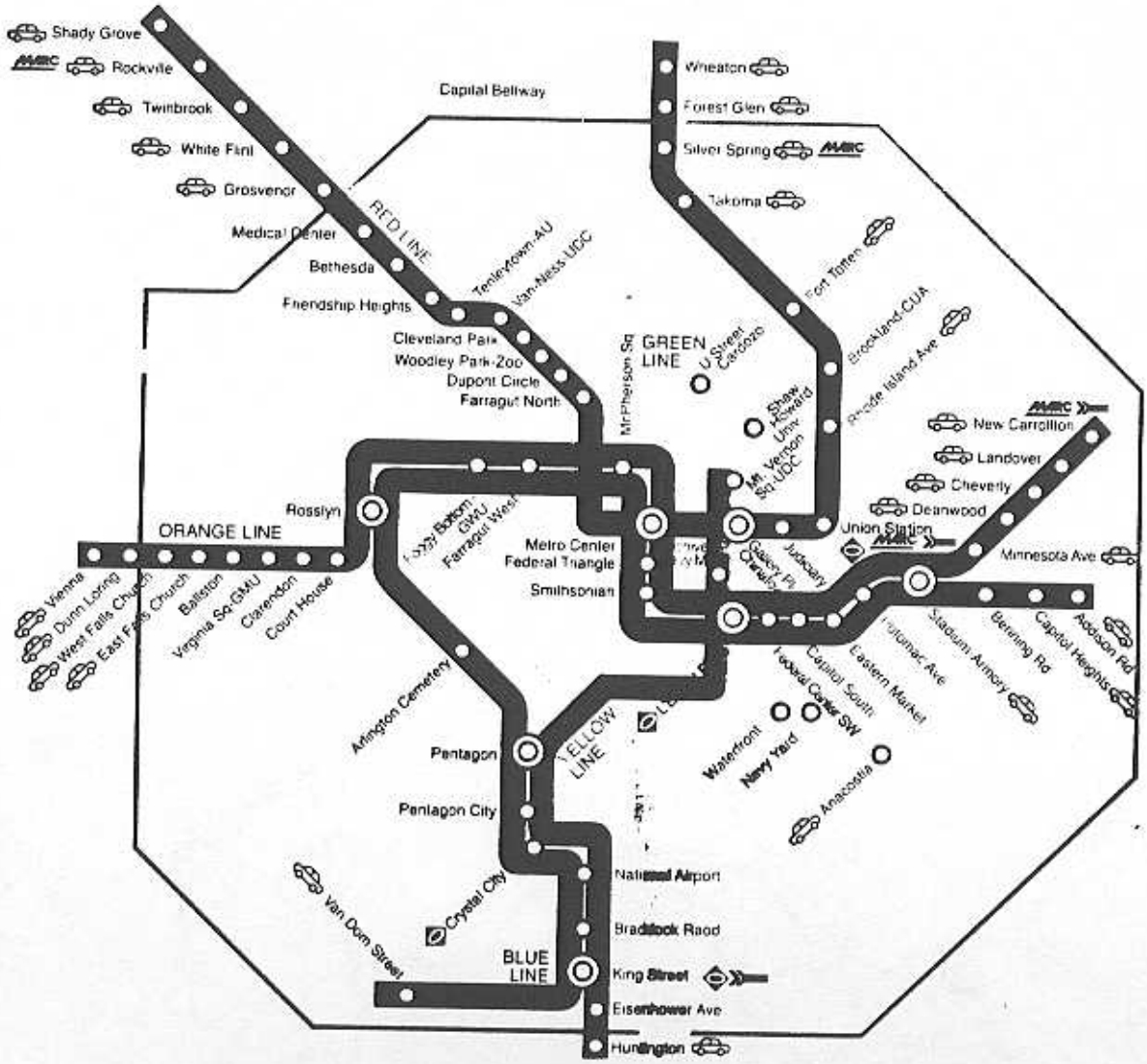
RIDERSHIP AND ROUTES

TRANSIT SYSTEM PHONE NUMBERS

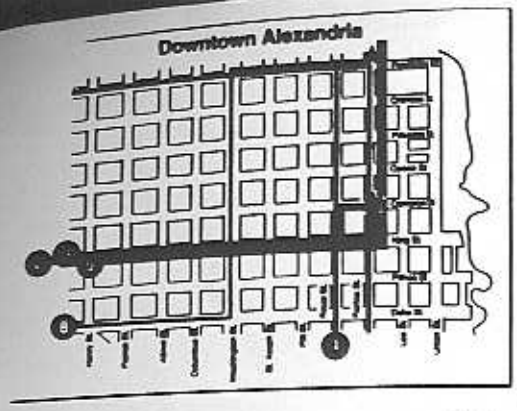
Alexandria	
DASH	(703) 370 DASH
	(800) 828-11250 (TDD)
DOT: Specialized Transportation for	(703) 838-3800
Persons with Disabilities	(703) 836-5222 (Reservations)
	(800) 828-1120 (TDD)
Senior Taxi	(703) 838-4414
Office of Transit Services & Programs	(703) 838-3800
	(703) 838-5056
Arlington	
Arlington Trolley in Crystal City	(703) 358-3575
Arlington Access	(703) 358-3681
City of Fairfax	
CUE Bus	(703) 358-7859 (Voice/TDD)
City Wheels (Paratransit)	(703) 385-7920
City of Falls Church	
Farewheels (Paratransit)	(703) 241-5042
Fairfax County	
Fairfax Connector	(703) 339-7920
Washington Metropolitan Area Transit Authority	
General Information	(202) 637-7000
MetroAccess	(301) 588-8181
Bicycle Services	(202) 962-1116
Potomac and Rappahannock Transportation Commission	
OmniLink	(703) 490-4811
	(800) 828-1120 (TDD)
Feeder Bus Service	(703) 490-4811
	(800) 828-1120 (TDD)

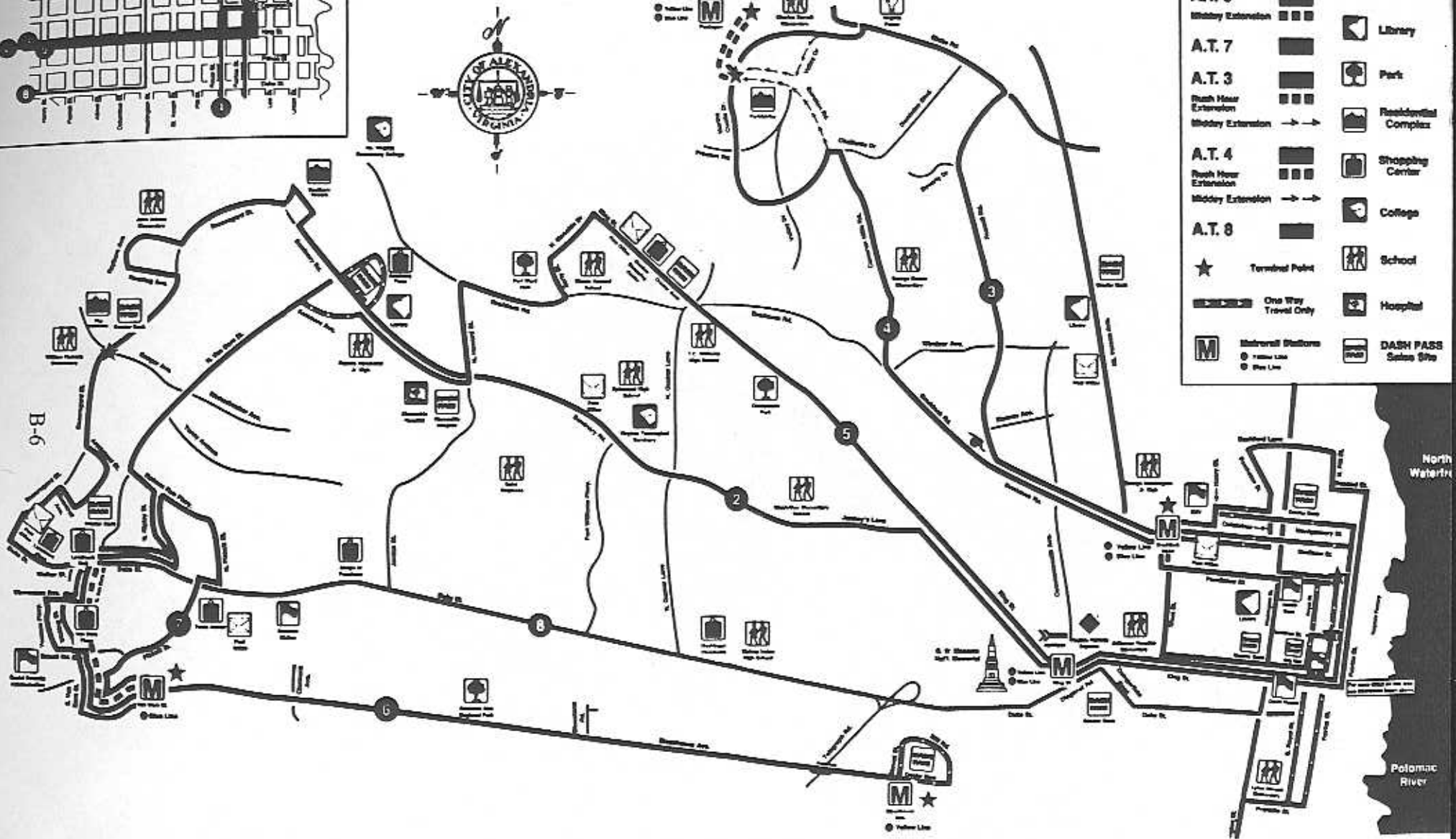
TRANSIT SYSTEM MAPS

Metro System



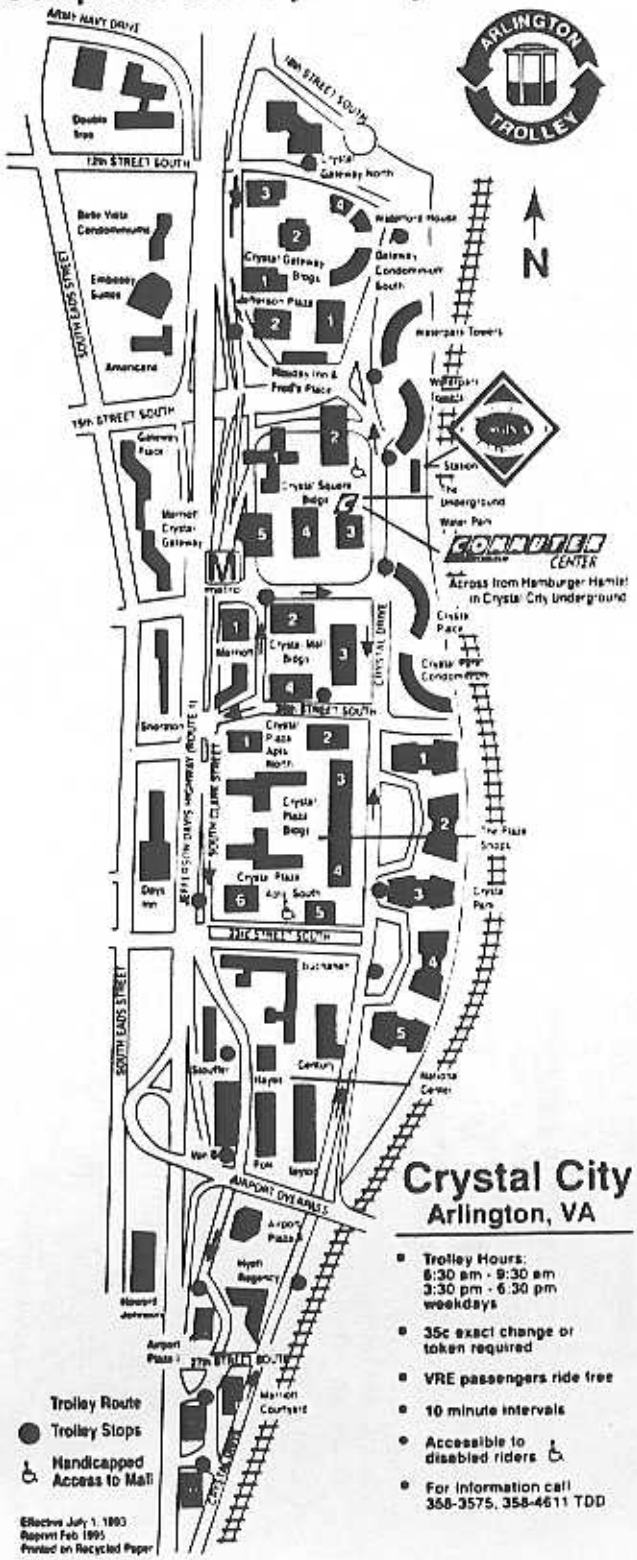
DASH TRANSIT MAP





The Arlington Trolley in Crystal City

Completes Your Crystal City Connection

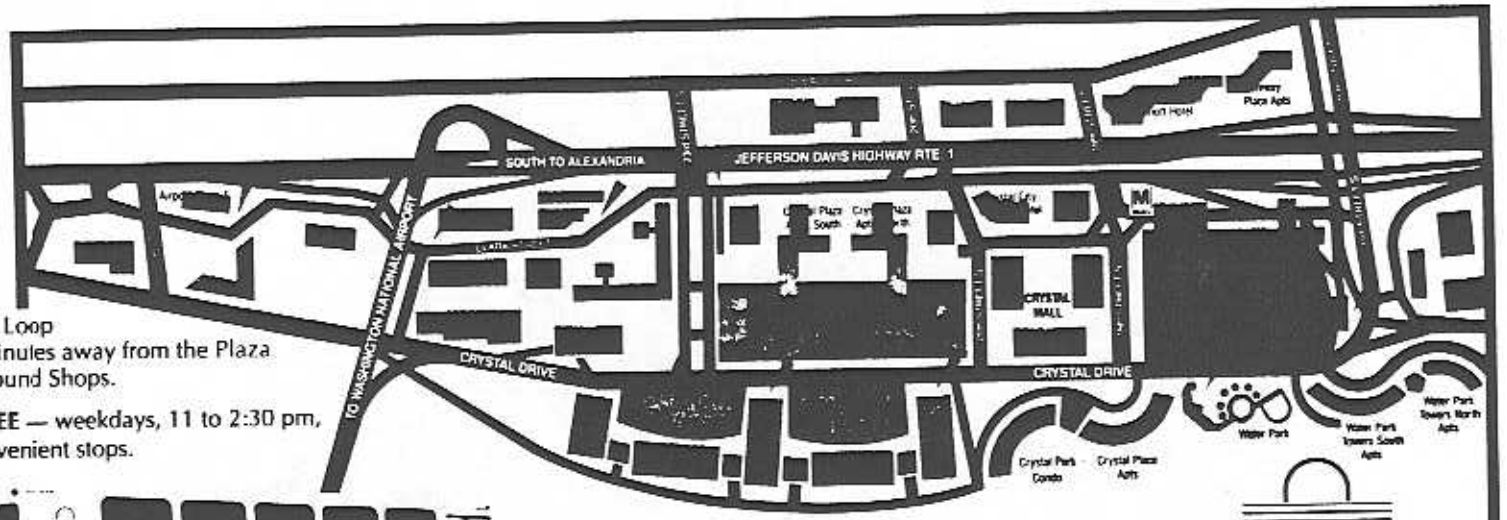


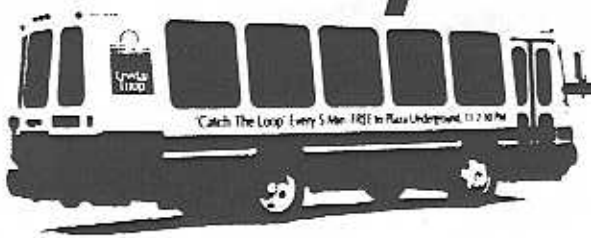
Crystal City
Arlington, VA

- Trolley Hours:
  6:30 am - 9:30 am
  3:30 pm - 6:30 pm
  weekdays
- 35c exact change or token required
- VRE passengers ride free
- 10 minute intervals
- Accessible to disabled riders
- For information call 358-3575, 358-4611 TDD

The Crystal Loop
is only 5 minules away from the Plaza
& Underground Shops.

Catch it **FREE** — weekdays, 11 to 2:30 pm,
from 9 convenient stops.

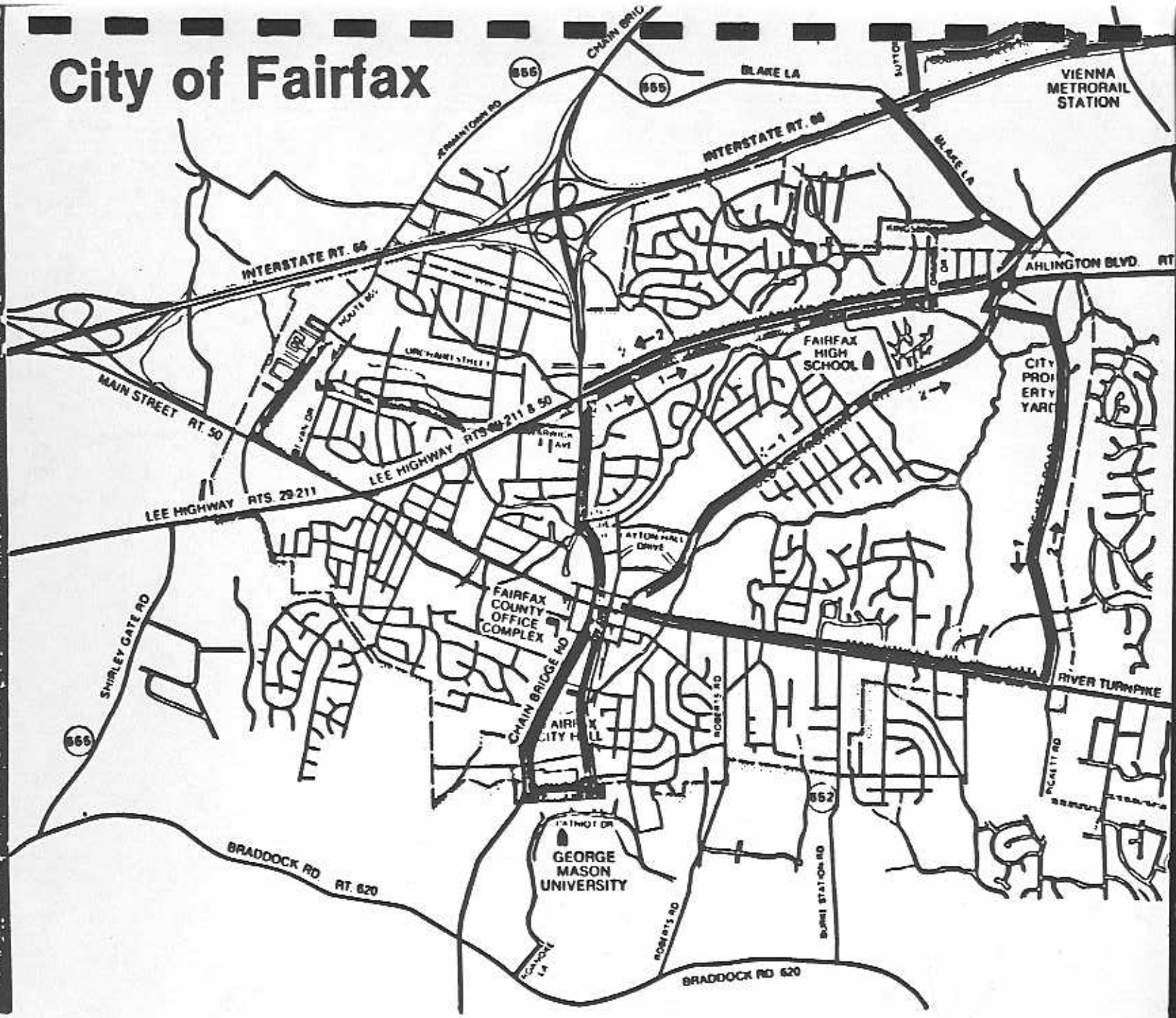




Look for the Crystal Loop boarding signs at the 9 convenient street locations indicated on the map above.

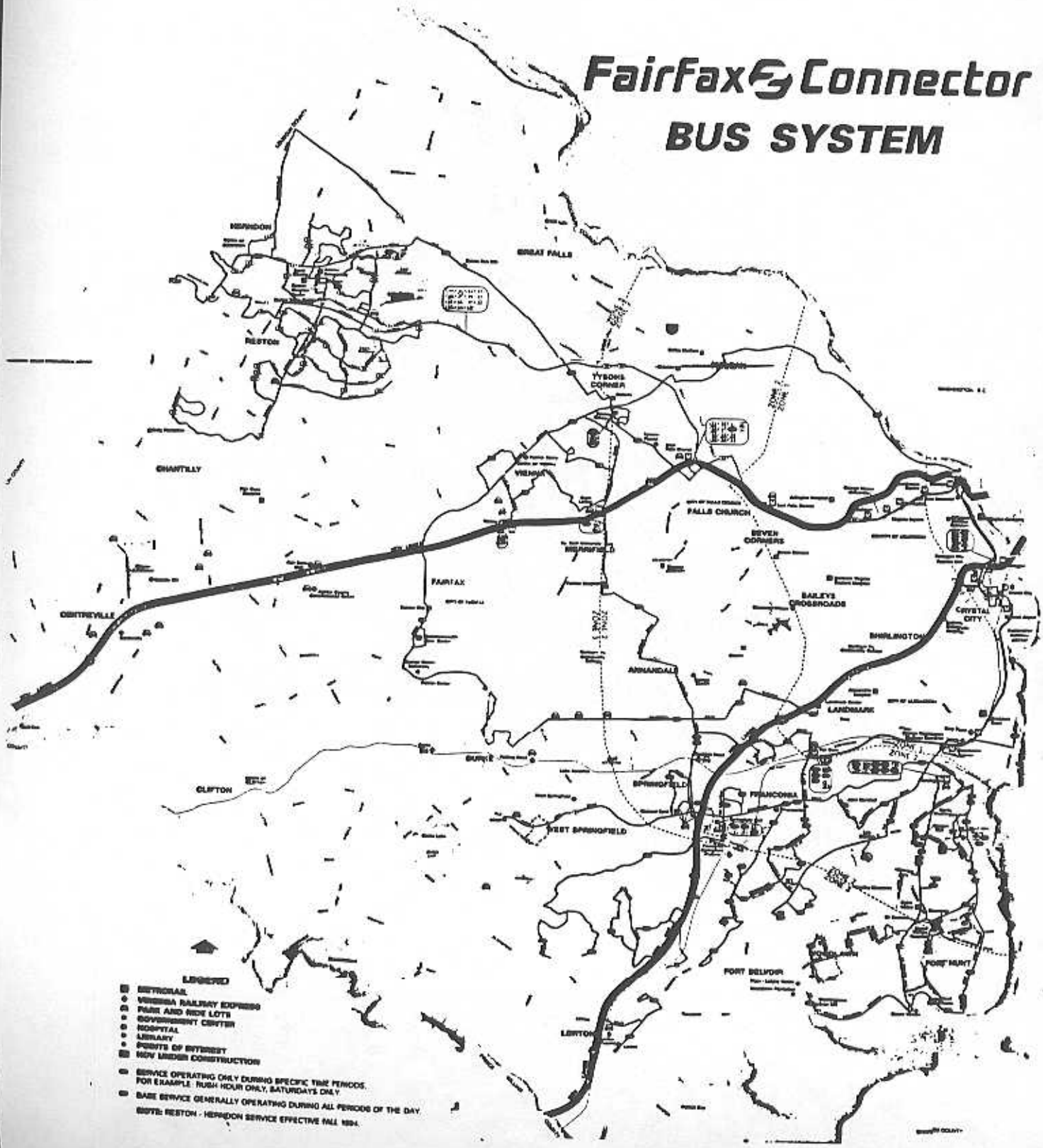
Crystal Loop

City of Fairfax

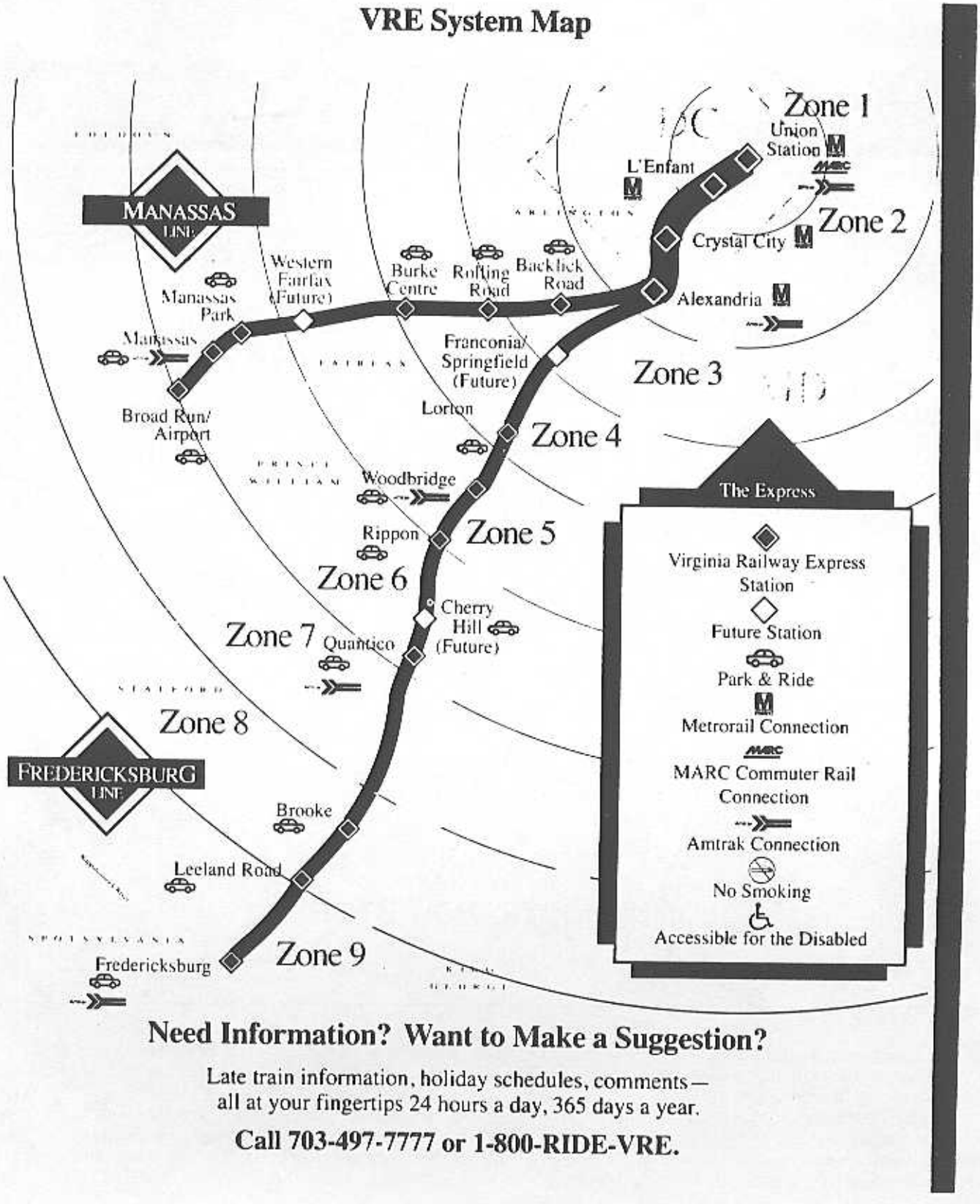


B-9

CUE Bus Routes


Fairfax Connector
BUS SYSTEM
HERNDON
GREAT FALLS
RESTON
TYSONS CORNER
CHANTILLY
VIENNA
FALLS CHURCH
SEVEN CORNERS
FAIRFAX
CENTREVILLE
BAILEYS CROSSROADS
CRYSTAL CITY
ARLINGTON
ANNANDALE
LANDMARK
BURKE
CLIFTON
SPRINGFIELD
FRANCONIA
WEST SPRINGFIELD
FORT BELVOIR
FORT HUNT
LEGEND
METRORAIL
VIRGINIA RAILWAY EXPRESS
PARK AND RIDE LOTS
GOVERNMENT CENTER
HOSPITAL
LIBRARY
POINTS OF INTEREST
HOV UNDER CONSTRUCTION
SERVICE OPERATING ONLY DURING SPECIFIC TIME PERIODS. FOR EXAMPLE: RUSH HOUR ONLY, SATURDAYS ONLY.
BASE SERVICE GENERALLY OPERATING DURING ALL PERIODS OF THE DAY.
NOTE: RESTON - HERNDON SERVICE EFFECTIVE FALL 1994.

VRE System Map

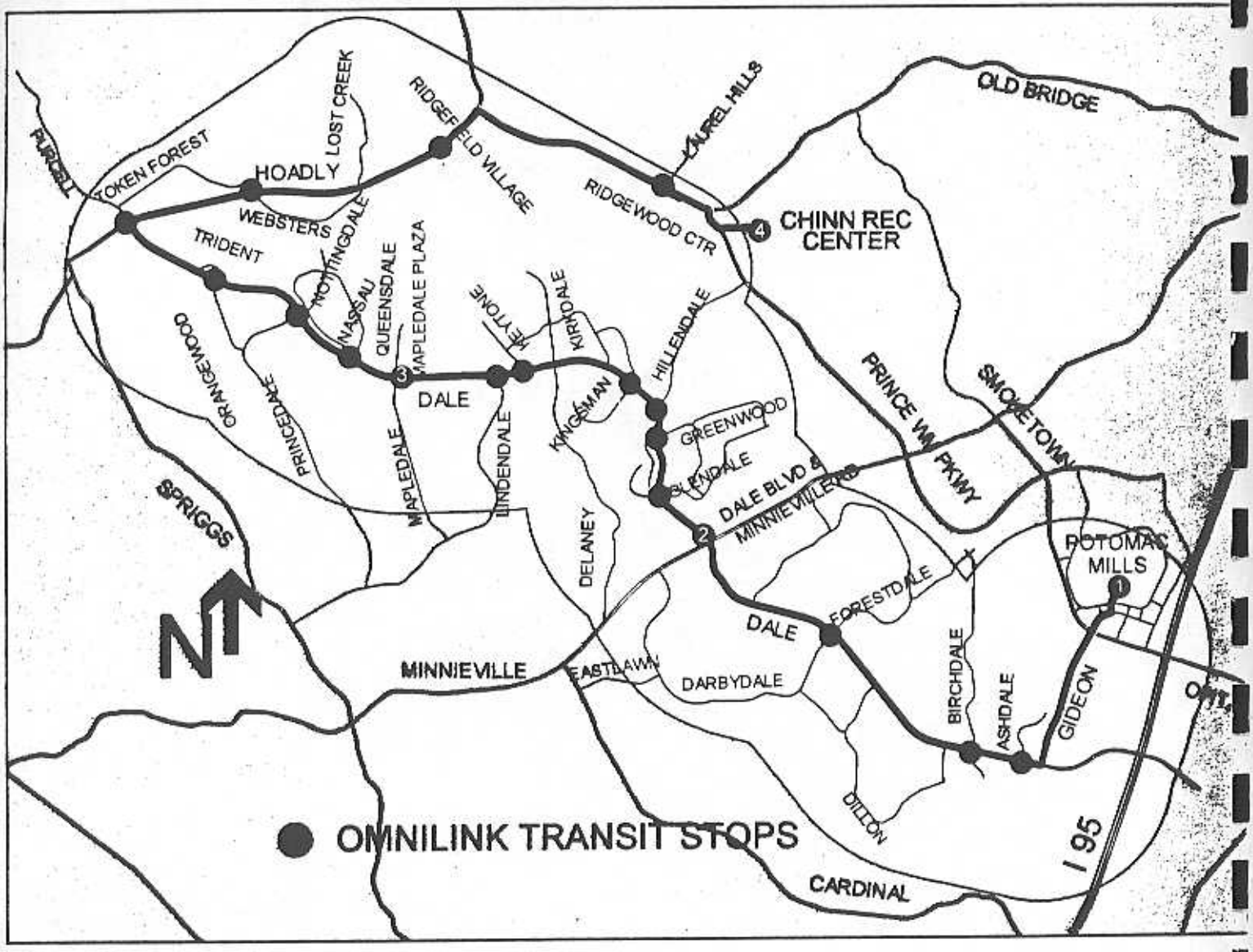


Need Information? Want to Make a Suggestion?

Late train information, holiday schedules, comments—
all at your fingertips 24 hours a day, 365 days a year.

Call 703-497-7777 or 1-800-RIDE-VRE.

Dale City

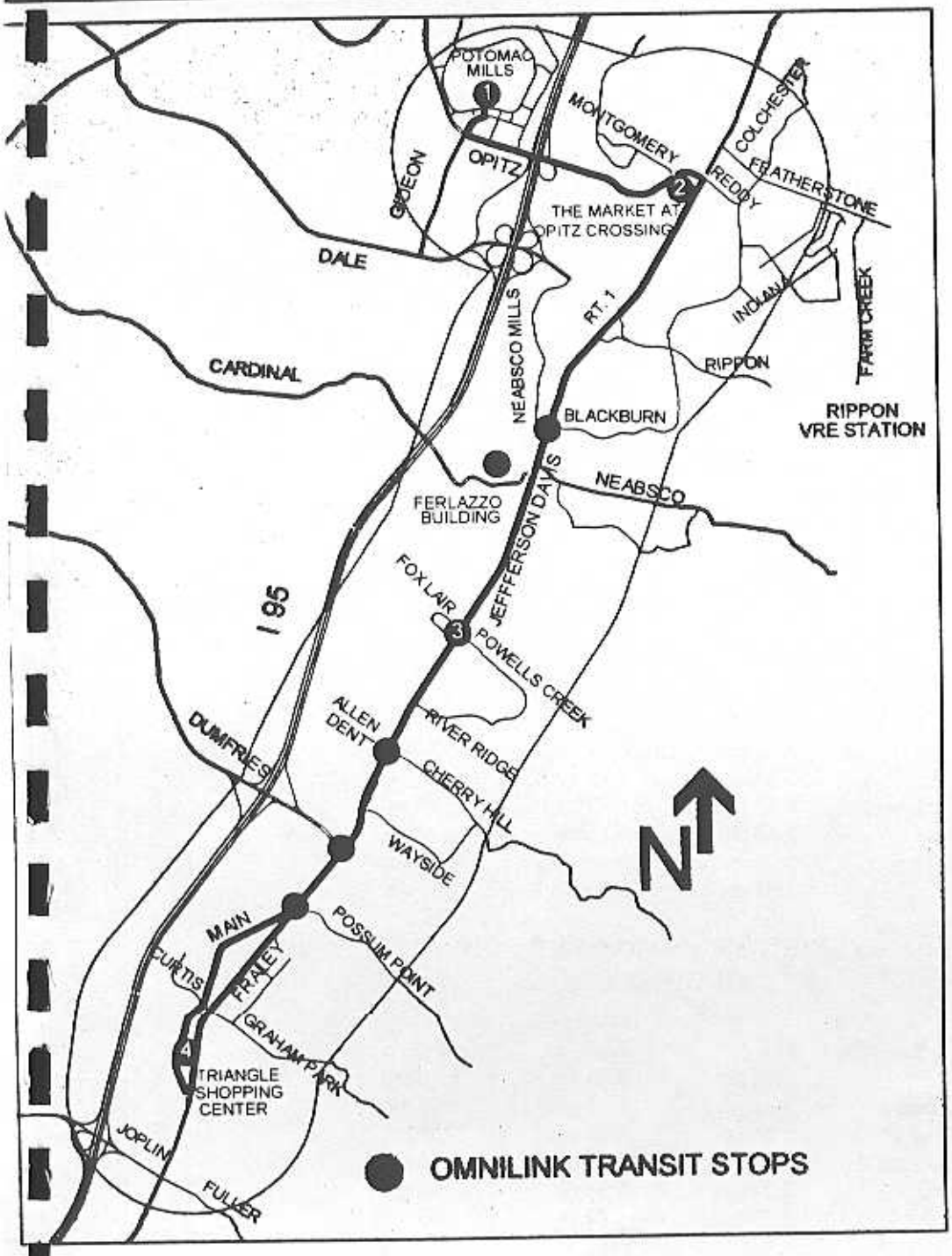


The unshaded areas on the map show where this OmniLink service is available. OmniLink vehicles will stop at all of the OmniLink stops shown on the map. If you can't get to one of the OmniLink stops, or if your destination is not close to a stop, call OmniLink at 490-4811 to make a reservation.

As OmniLink vehicles may not travel on the centerline 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 8:00 am Potomac Mills bus leaves at 8:00 am and goes to Dale Blvd. & Minnieville Rd. at 8:09 am, then on to Mapledale Plaza at 8:18 am and then arrives at the Chinn Center at 8:27 am.

Dumfries



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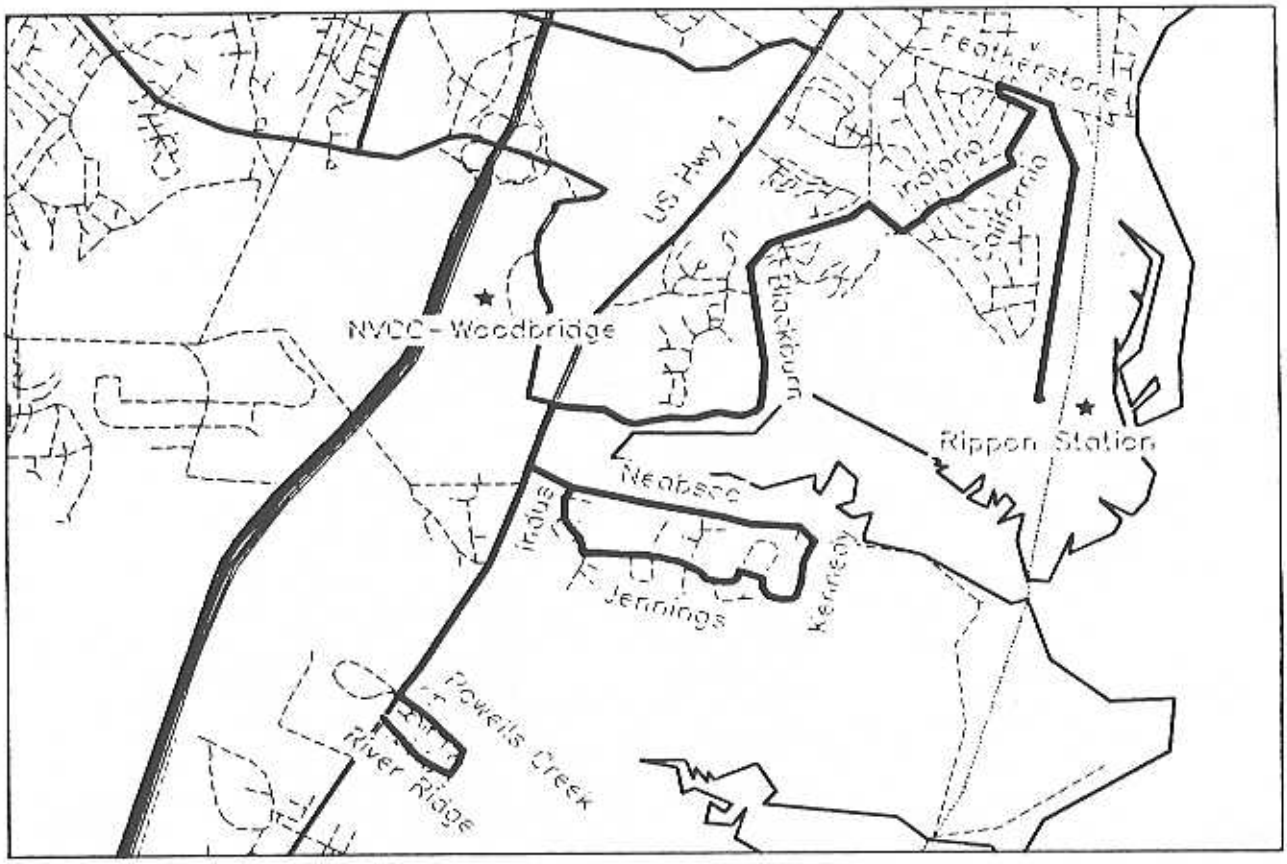
As OmniLink vehicles may not travel on the centerline streets between the points shown, be sure to wait only at transit stops or reservation locations. Refer to other OmniLink brochures or call us to see how OmniLink can serve your travel needs.

This schedule reads across the columns, for example, the 8:00 am Potomac Mills bus leaves at 8:00 am and goes to Opitz Crossing at 8:04 am, then on to Fox Lair Dr. at 8:14 am and then arrives at the Triangle Shopping Center at 8:27 am.

PRTC FEEDER BUS ROUTE ONE SCHEDULE



MORNING TRIPS TO RIPPON VRE TRAIN STATION

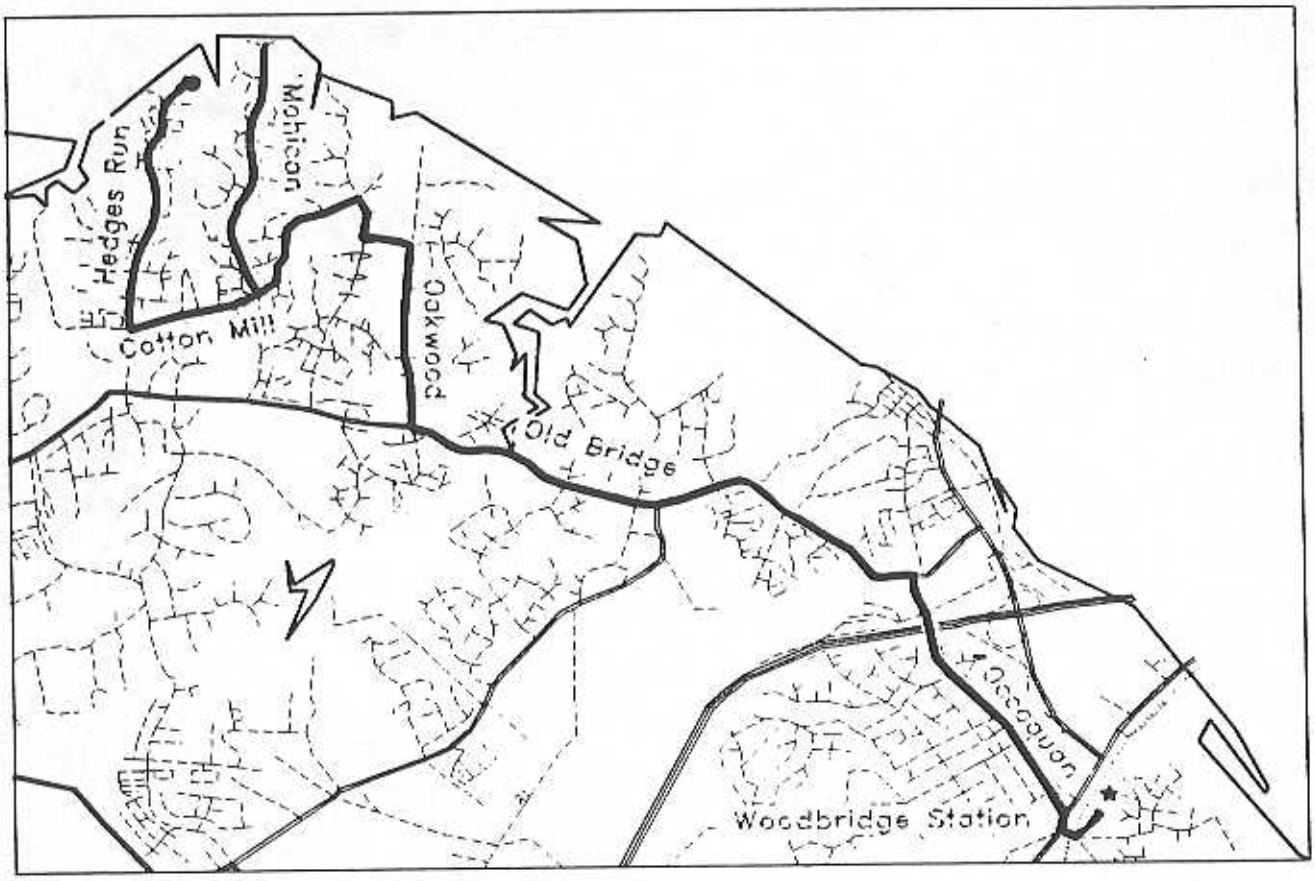
TO MEET VRE TRAIN	#1	#2	#4
River Ridge Boulevard at Route 1	5:23 am	6:19 am	7:23 am
Indus Drive at Jennings Street	5:30 am	6:26 am	7:30 am
Blackburn Road at Rippon Boulevard	5:37 am	6:33 am	7:37 am
Indiana Avenue at Illinios Road	5:40 am	6:36 am	7:40 am
Arrive at Rippon VRE Train Station	5:47 am	6:43 am	7:47 am
VRE TRAIN DEPARTS	5:57 am	6:53 am	7:57 am

EVENING TRIPS FROM RIPPON VRE TRAIN STATION

TO MEET VRE TRAIN	#1	#2	#4
VRE TRAIN ARRIVES	5:06 pm	6:05 pm	7:16 pm
Depart Rippon VRE Train Station	5:11 pm	6:10 pm	7:21 pm
Indiana Avenue at Illinios Road	5:21 pm	6:20 pm	7:31 pm
Blackburn Road at Rippon Boulevard	5:24 pm	6:23 pm	7:34 pm
Indus Drive at Jennings Street	5:32 pm	6:31 pm	7:42 pm
River Ridge Boulevard at Route 1	5:43 pm	6:42 pm	7:53 pm

EFFECTIVE DECEMBER 19, 1994

PRTC FEEDER BUS LAKE RIDGE SCHEDULE



MORNING TRIPS TO WOODBRIDGE VRE TRAIN STATION

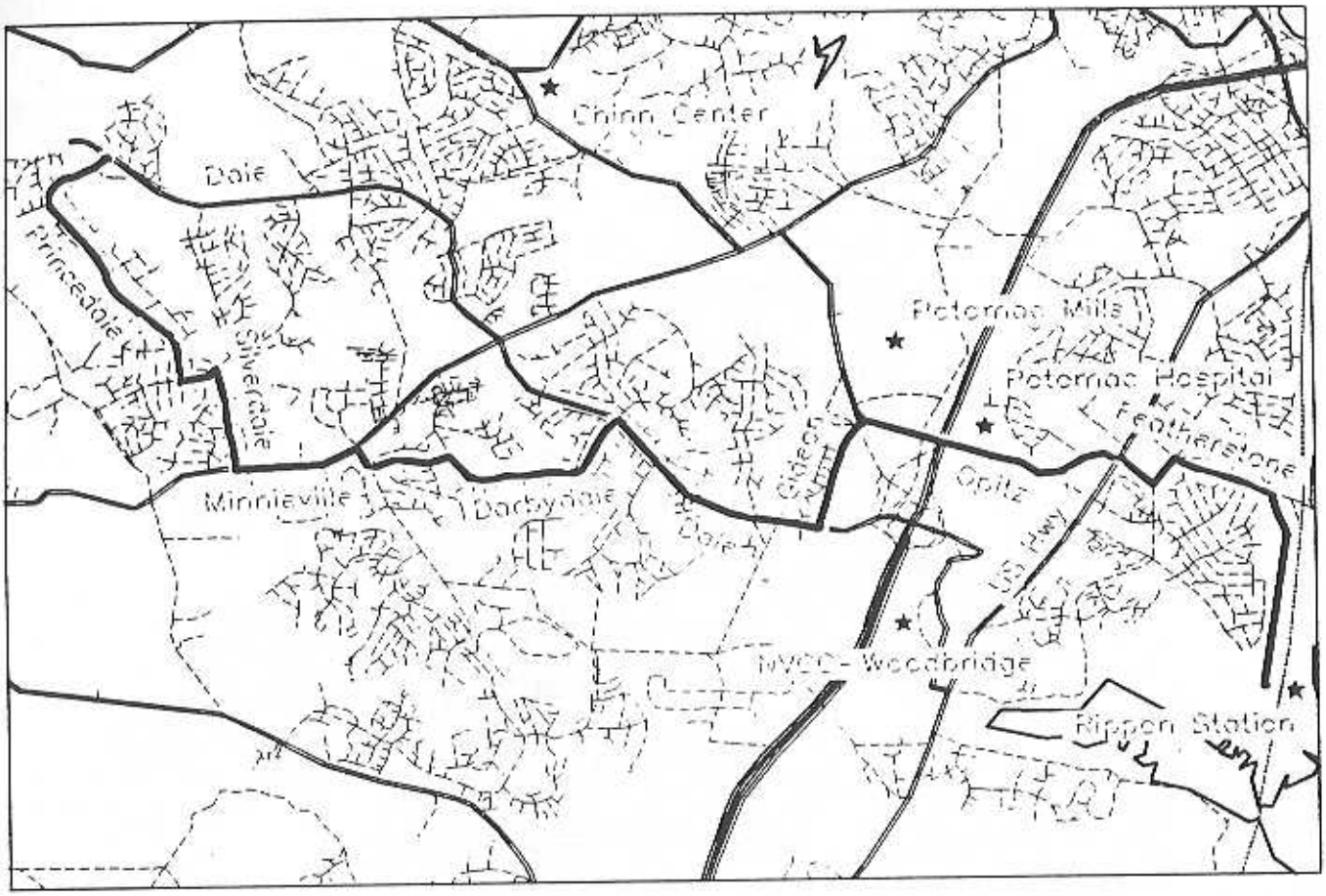
TO MEET VRE TRAIN	#1	#2	#4
Hedges Run Drive at Aegean Terrace	5:21 am	6:18 am	7:21 am
Mohican Road at Hill Meade Lane	5:28 am	6:25 am	7:28 am
Deepford Drive at Oakwood Drive	5:35 am	6:32 am	7:35 am
Old Bridge Road at Tacketts Mill	5:39 am	6:36 am	7:39 am
Old Bridge Road at Occoquan Road	5:47 am	6:44 am	7:47 am
Arrive at Woodbridge VRE Train Station	5:53 am	6:50 am	7:53 am
VRE TRAIN DEPARTS	6:03 am	7:00 am	8:03 am

EVENING TRIPS FROM WOODBRIDGE VRE TRAIN STATION

TO MEET VRE TRAIN	#1	#2	#4
VRE TRAIN ARRIVES	5:01 pm	6:00 pm	7:11 pm
Depart Woodbridge VRE Train Station	5:06 pm	6:05 pm	7:16 pm
Old Bridge Road at Occoquan Road	5:14 pm	6:13 pm	7:24 pm
Old Bridge Road at Tacketts Mill	5:21 pm	6:20 pm	7:31 pm
Deepford Drive at Oakwood Drive	5:24 pm	6:23 pm	7:34 pm
Mohican Road at Hill Meade Lane	5:30 pm	6:29 pm	7:40 pm
Hedges Run Drive at Aegean Terrace	5:37 pm	6:36 pm	7:47 pm

EFFECTIVE DECEMBER 19, 1994

PRTC FEEDER BUS DALE CITY SCHEDULE



MORNING TRIPS TO RIPPON VRE TRAIN STATION

TO MEET VRE TRAIN	#1	#2	#4
Princedale Drive at Dale Boulevard	5:19 am	6:15 am	7:19am
Minneville Road at Cardinal Drive	5:27 am	6:23 am	7:27 am
Darbydale Avenue at Dale Boulevard	5:32 am	6:28 pm	7:32 am
Featherstone Road at Blackburn Road	5:44 am	6:40 pm	7:44 am
Arrive at Rippon VRE Train Station	5:47 am	6:43 pm	7:47 am
VRE TRAIN DEPARTS	5:57 am	6:53 pm	7:57 am

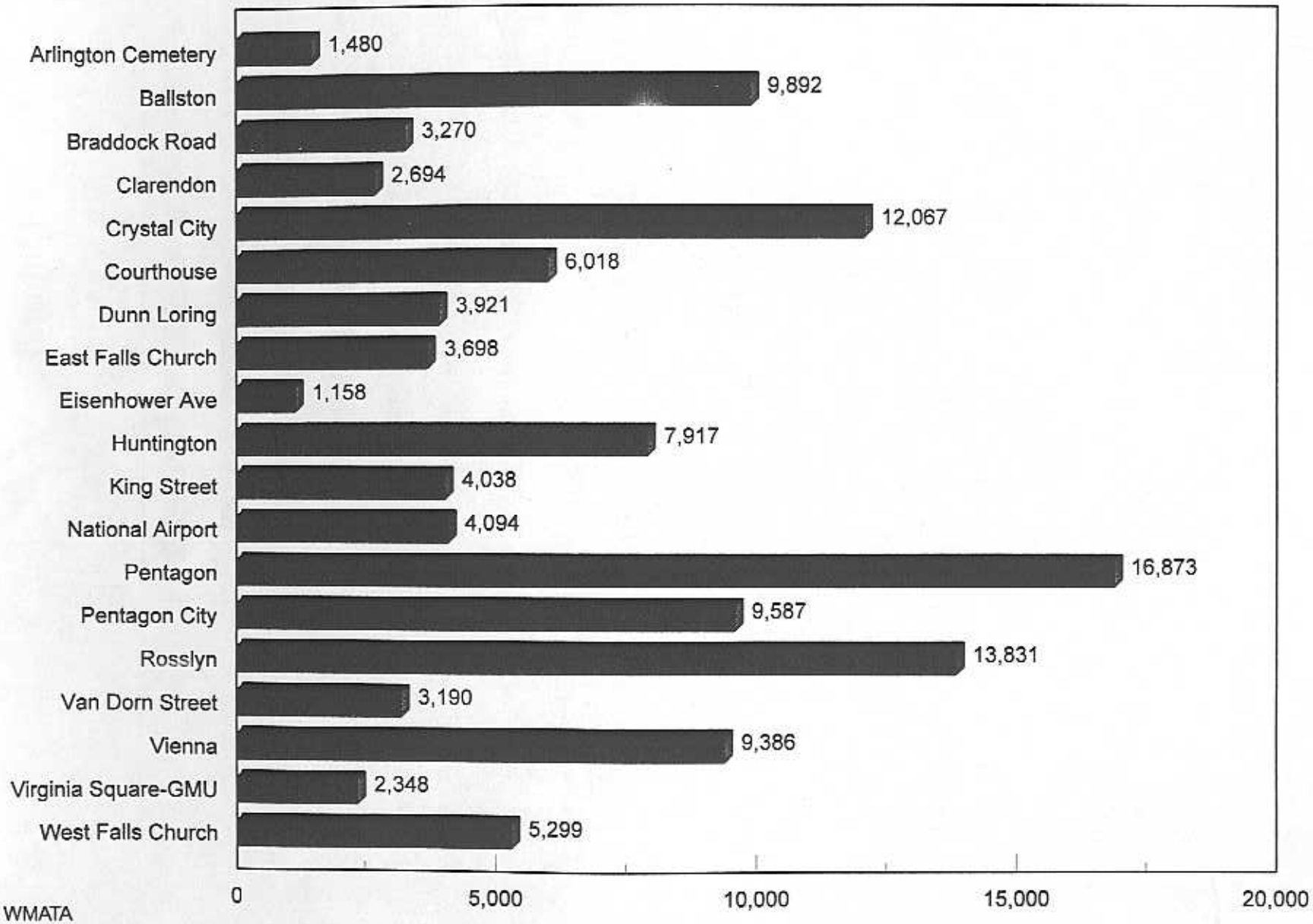
EVENING TRIPS FROM RIPPON VRE TRAIN STATION

TO MEET VRE TRAIN	#1	#2	#4
VRE TRAIN ARRIVES	5:06 pm	6:05 pm	7:16 pm
Depart Rippon VRE Train Station	5:11 pm	6:10 pm	7:21 pm
Featherstone Road at Blackburn Road	5:21 pm	6:20 pm	7:31 pm
Darbydale Avenue at Dale Boulevard	5:36 pm	6:35 pm	7:46 pm
Minneville Road at Cardinal Drive	5:42 pm	6:41 pm	7:52 pm
Princedale Drive at Dale Boulevard	5:52 pm	6:51 pm	8:02 pm

EFFECTIVE DECEMBER 19, 1994

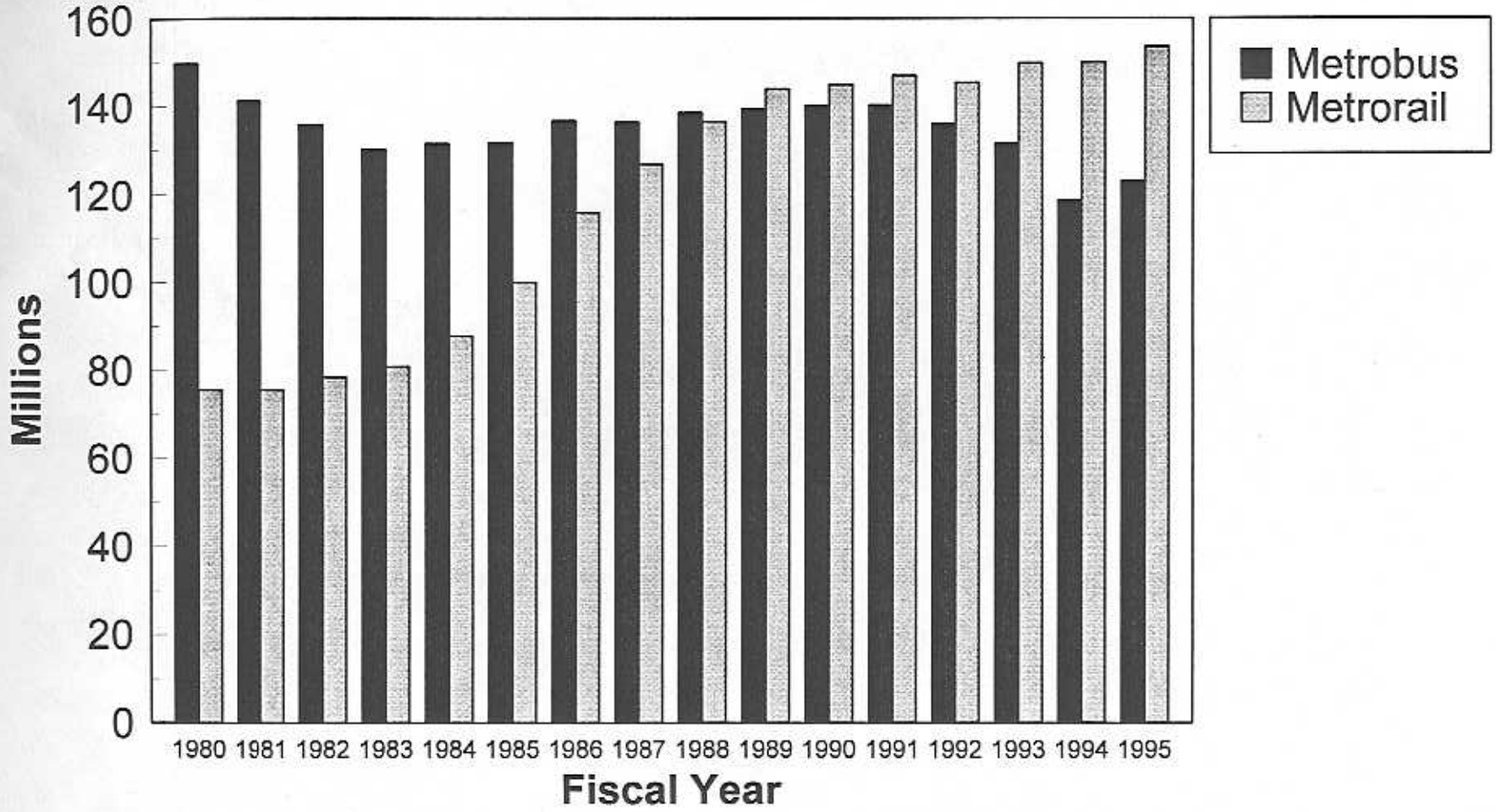
TRANSIT SYSTEM RIDERSHIP

Daily Metrorail Passenger Boardings
May, 1995 Virginia Stations Only



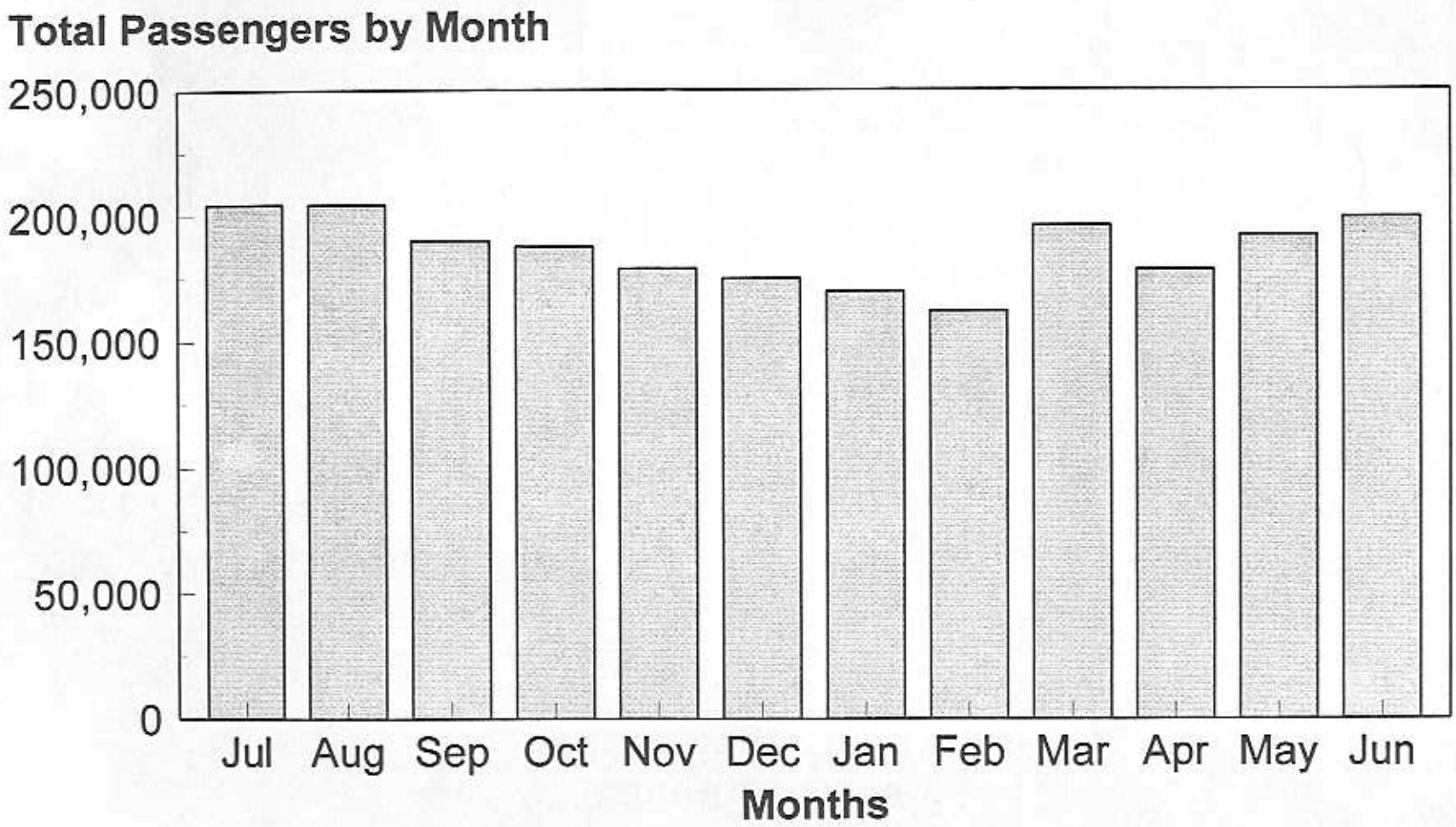
Source: WMATA

Systemwide Metrorail & Metrobus Ridership by Fiscal Year, 1980-1994



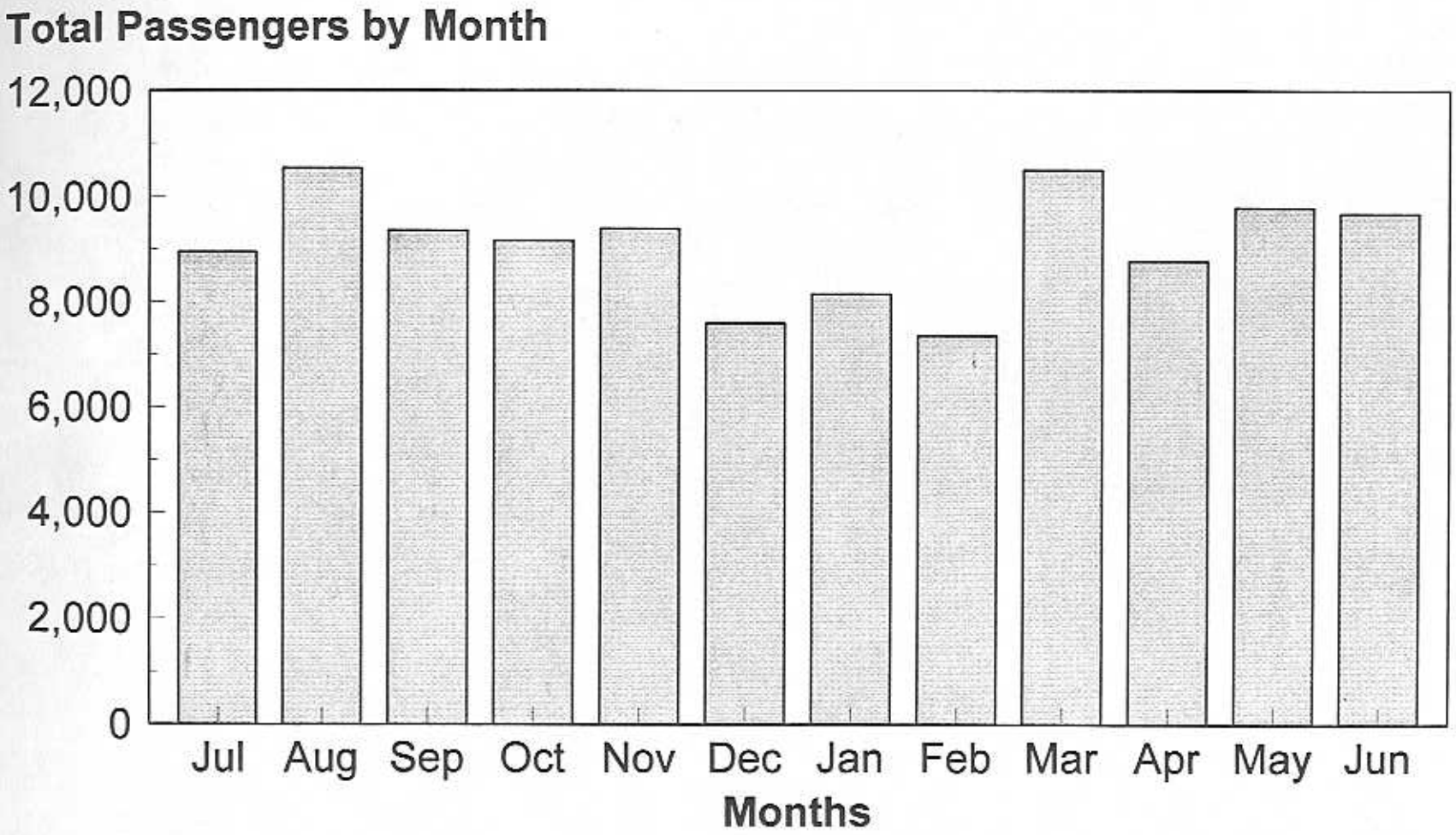
Source: WMATA

DASH
Ridership for FY 1995



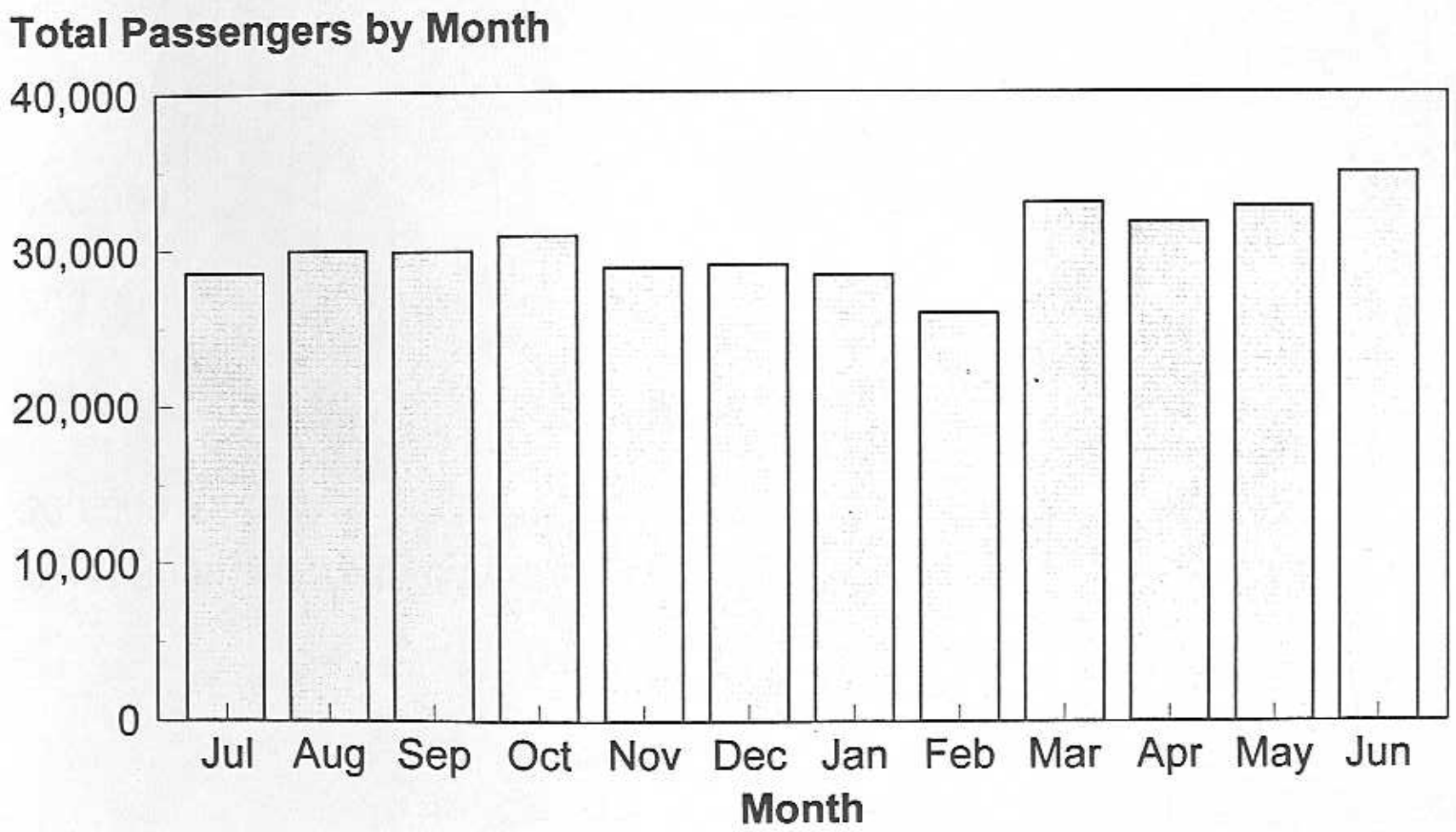
Source: DASH

Arlington Trolley
Ridership for FY 1995



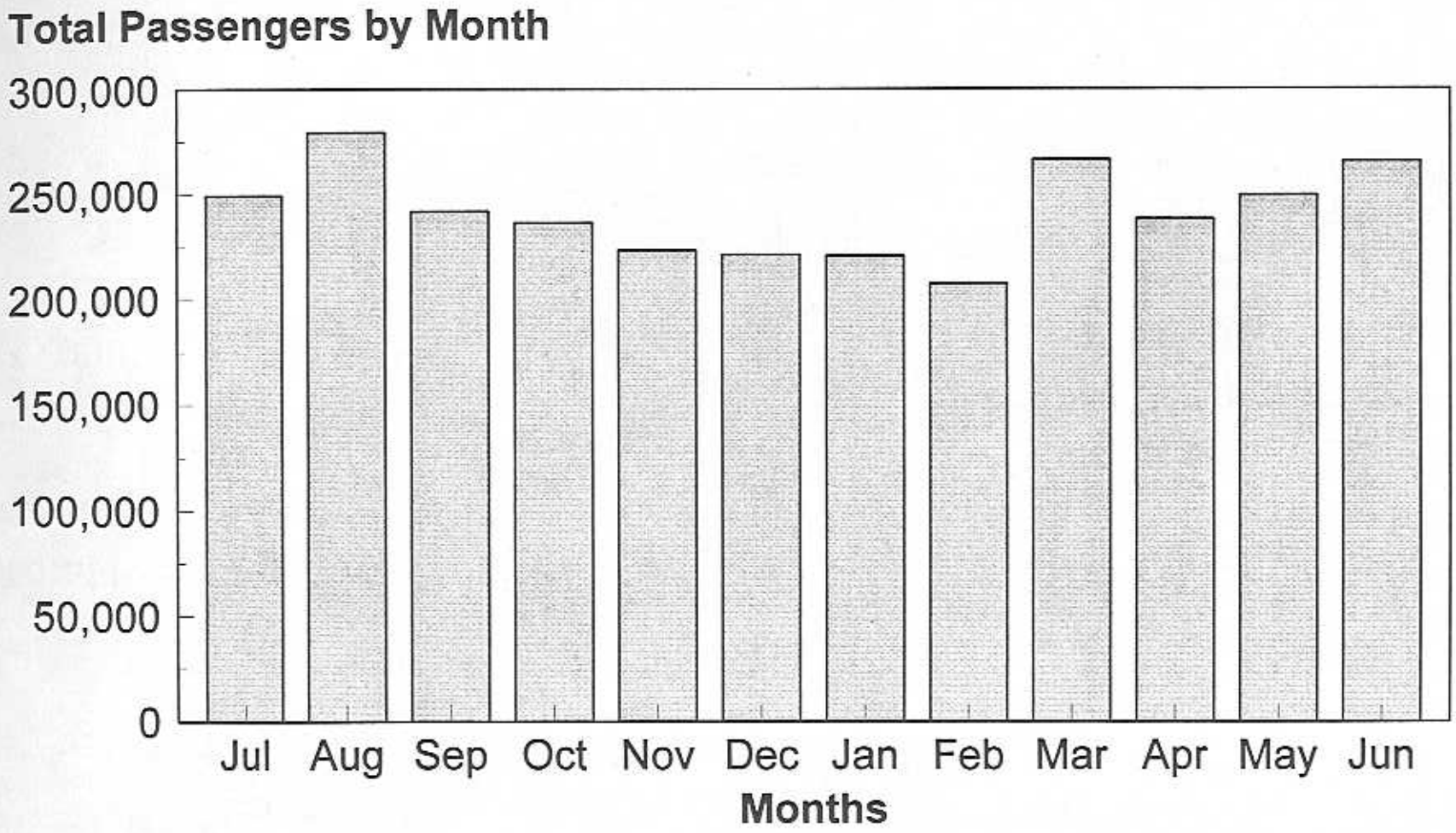
Source: Arlington County Department of Public Works

Fairfax Connector - Community Service Division
Ridership for FY 1995



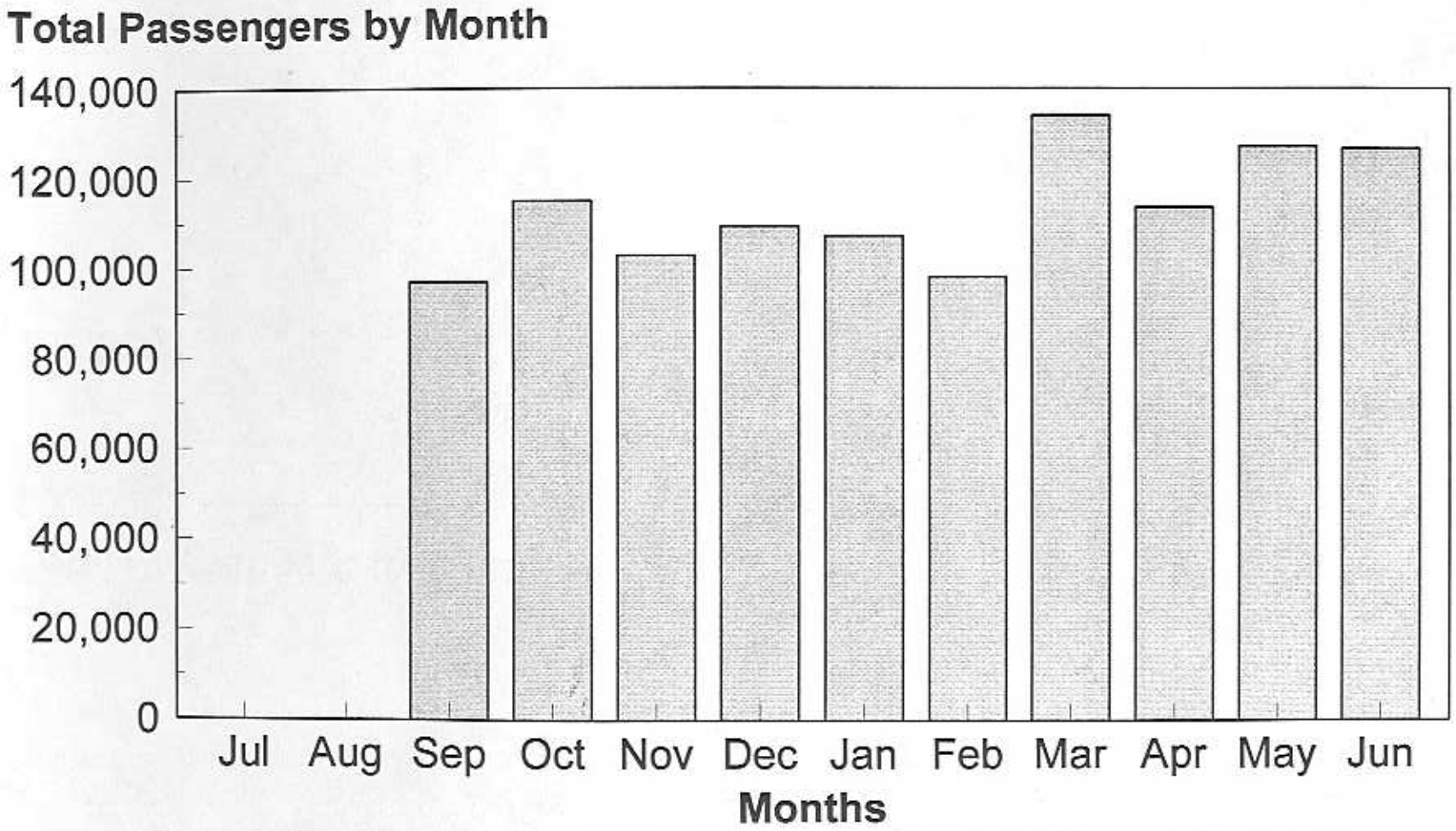
Source: Fairfax County Office of Transportation

Fairfax Connector - Huntington Division
Ridership for FY 1995



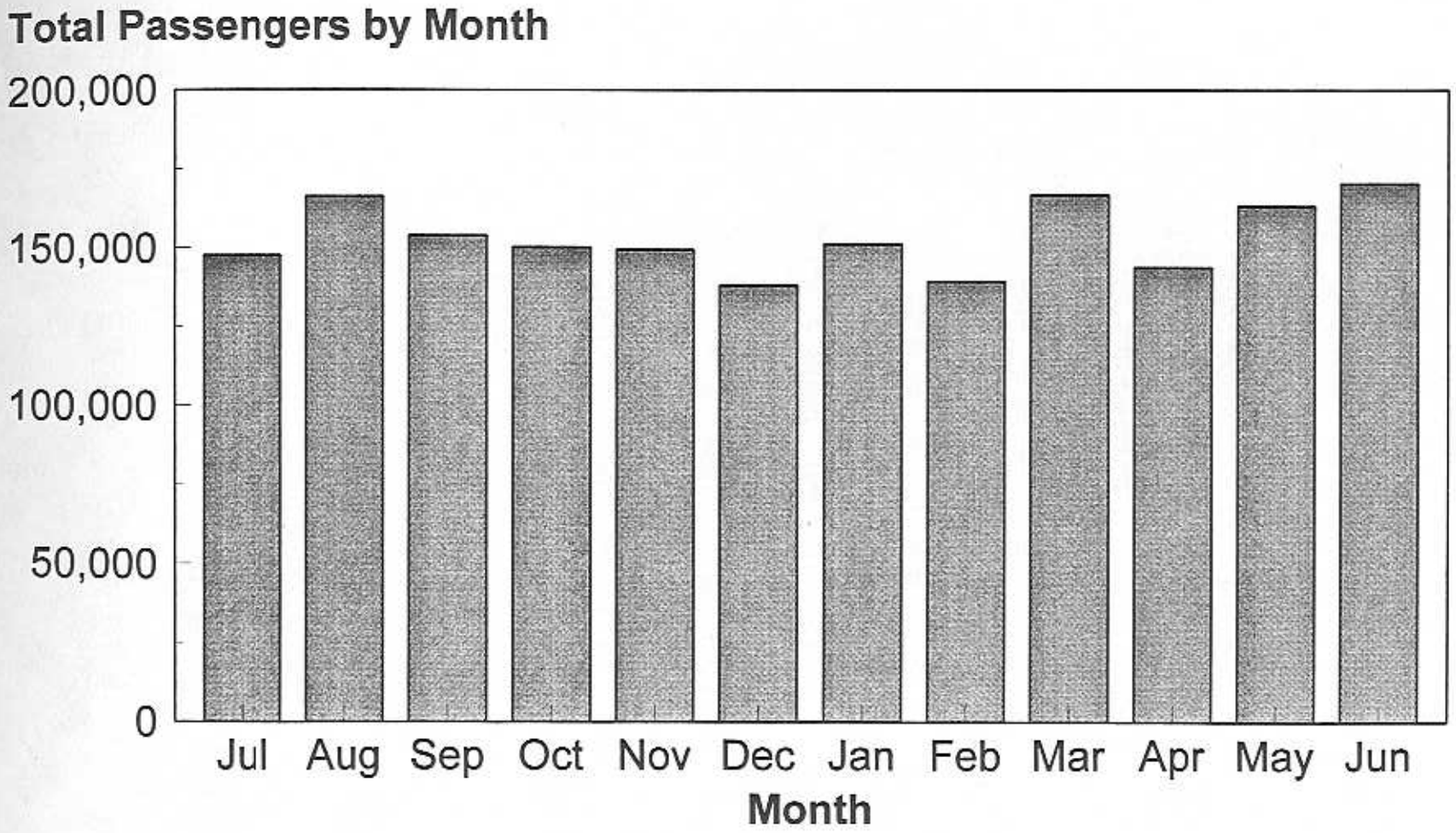
Source: Fairfax County Office of Transportation

Fairfax Connector - Reston/Herndon Division
Ridership for FY 1995



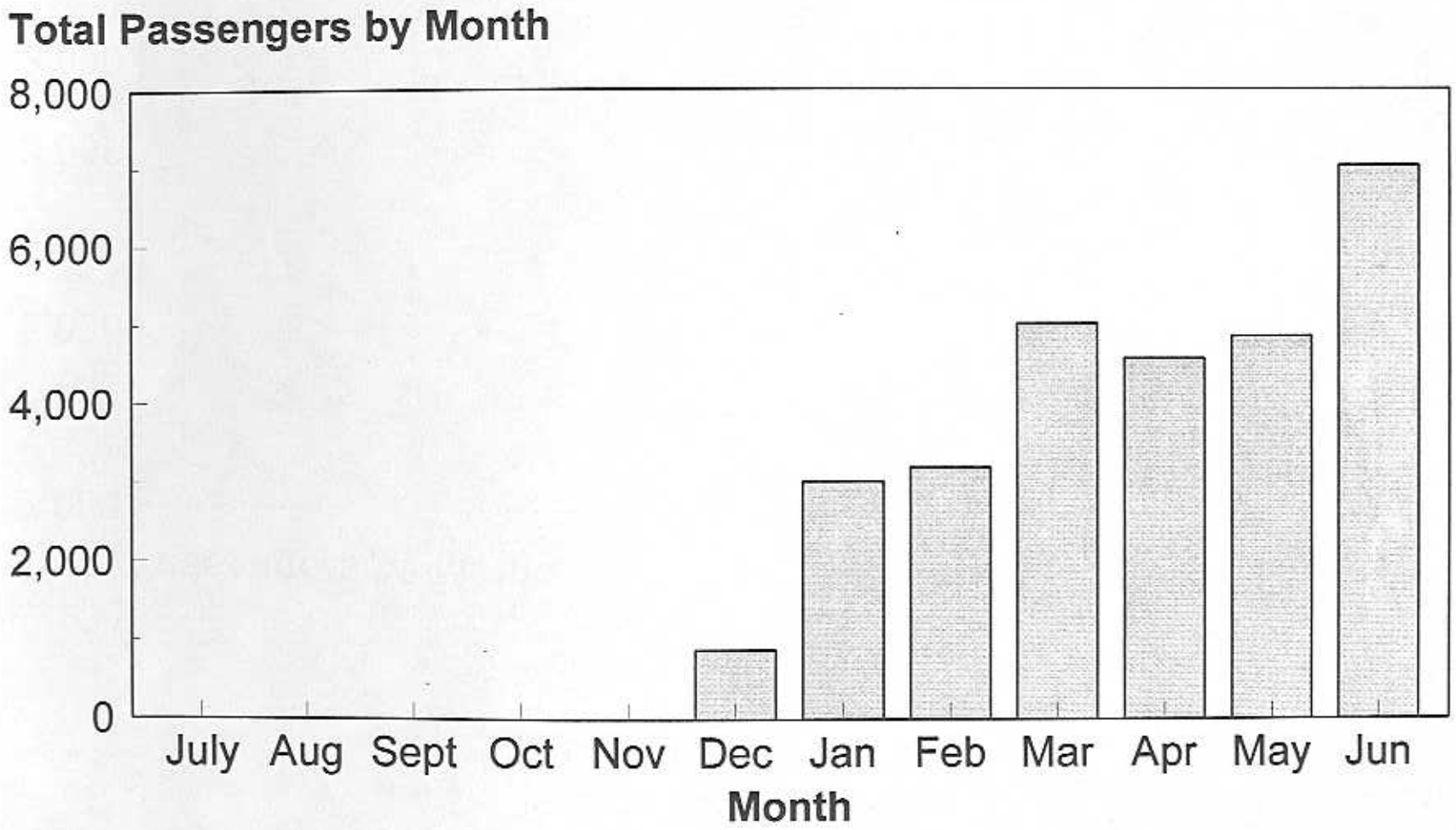
Source: Fairfax County Office of Transportation

Virginia Railway Express
Ridership for FY 1995



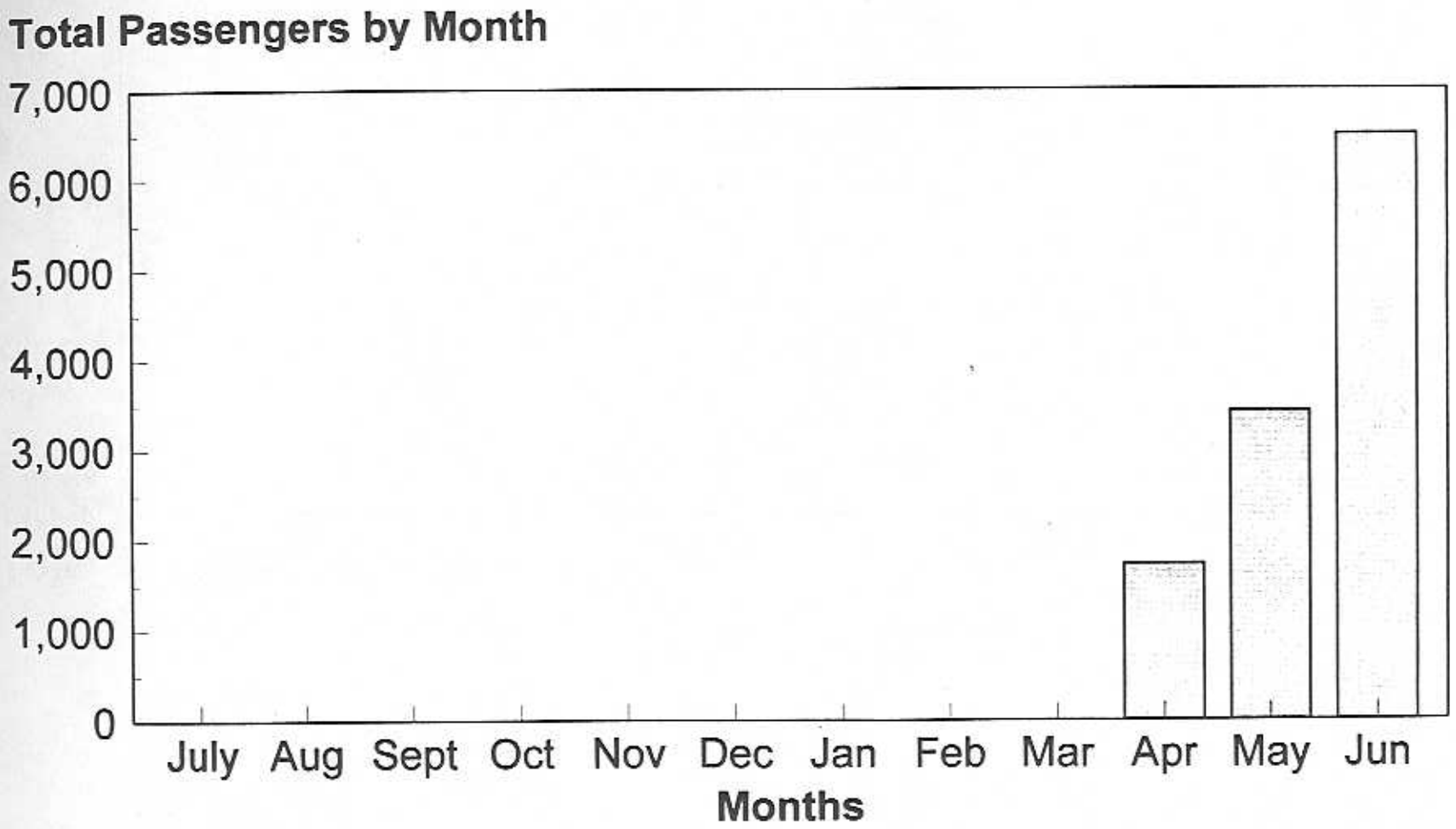
Source: VRE

PRTC
VRE Feeder
Ridership for FY 1995



Source: PRTC

OmniLink Service
Ridership for FY 1995



Source: PRTC

APPENDIX C

FARE AND TRANSFER POLICIES

Appendix C, Part 1

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% bonus on $20.00 or more.
• Each additional composite mile over 3 up to 6	0.190		• Rail Fast Pass - $50.00 - 2 weeks unlimited travel. Period begins on day pass when first used by patron
• Each composite mile over 6	0.165		
• Maximum peak period fare	3.25		• One Day Pass - unlimited travel - $5.00 after 9:30 AM on weekdays; all day weekends, holidays.
• First 7 composite miles		$1.10	
• Composite miles over 7 up to 10		1.60	• Bus/Rail Super Pass - $65.00 - unlimited travel for two weeks.
• Composite miles exceeding 10		2.10	• Metrorail Short-Trip Pass - $35.00 - unlimited rail trips costing $1.60 or less for two weeks. Period begins on day pass when first used by patron.
			• Metrorail 28-Day Pass - $100.00 - unlimited rail trips for 28 consecutive days. Period begins on day pass is first used by patron.

COMPARISONS OF PUBLIC TRANSIT FARES

TRANSIT	PEAK FARES		OFF-PEAK FARES	
Metrobus Virginia - Partial Listing	CASH	WITH RAIL TRANSFER	CASH	WITH RAIL TRANSFER
• Within one zone in Virginia	$1.10	$ .85	$1.10	$ .85
• Between Virginia Zones G & 1 - Arlington	1.10	.85	1.10	.85
• Virginia Zones G & 1 - Alexandria	1.45	1.20	1.10	.85
• Virginia Zones G & 2	1.80	1.55	1.10	.85
• Virginia Zones G & 3	2.15	1.90	1.10	.85
• Washington DC to Virginia Zone G	1.45	.60	1.45	.60
• Virginia Zone G to Washington DC	1.45	1.20	1.45	1.20

MULTIPLE TRIPS - Metrobus Flash Passes - valid for 2 weeks:

1. Virginia Base Flash Pass - $20 with no rail value. Full base fare within Virginia.
2. Virginia 2 - Zone Pass - $27.00 with no rail value, two-zone trip within Virginia and base fare in Maryland 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 Virginia, Maryland, Washington DC, during peak hours. Full Metrobus fare anywhere during off-peak.
4. Arlington County Flash Pass - $25.00 with $15.00 Metrorail value. Valid for full Metrobus fare in Arlington County only. Metrorail fare value can be used anywhere.

   In Arlington County only pay $1.15 for Metrobus round trip to and from a Metrorail station.
5. Maryland/DC Pass - $30.00 - good for one zone in Virginia during peak period and for full fare anywhere during the off-peak periods.
6. Bus/Rail Super Pass - $65.00 - unlimited trips on Metrobus/Metrorail for two weeks.

COMPARISONS OF PUBLIC TRANSIT FARES

TRANSIT SYSTEM	REGULAR FARES	MULTIPLE TRIPS
Alexandria DASH - DASH honors Metrobus Va. Flash passes, Metrobus tokens, commuter tickets, and Metrobus and Fairfax Connector transfers for base fare, D.C. - Maryland Flash passes, and monthly VRE passes.	Base $.75 with $.25 surcharge to Pentagon Metrorail Station at all times.	$25.00 Monthly pass $35.00 Pentagon Metrorail station pass
Arlington Trolley	$.35 fare.	$11.20 40-token roll.
City of Fairfax CUE	$.50 at all times. Persons with valid George Mason University I.D. ride free. Senior Citizens Pass and school children through High School pay 25-cents. Children under three ride free with an adult.	NO DISCOUNT
Fairfax Connector	$.50 base fare on all feeder routes. $1.00 base + zone on all express routes.	
Loudoun Rideshare	$4.00 one-way fare.	$40.00 ticket for 10 one-way rides.
PRTC Commuteride	$5.00 one way cash fare to Pentagon. $1.25 to Vienna Metro shuttle station.	$32.50 - 10-ride token pack
Reston RIBS	Base fare $.25 with Reston/Metrobus transfer worth full fare. Reston Express- West Falls Church Metrorail Shuttle is $.75.	NO DISCOUNT
Tysons Shuttle	Fare $.75 ($1.20 round trip) at all times. No transfers given or accepted.	$6.00 11-trip card.
Virginia Railway Express	9 zone fare structure - distance based. Full fare single ride ticket	Ten-trip ticket - 15% discounted Monthly, unlimited travel - 30% discounted Additional discount Fares Zones 4-9. See chart for complete fare structure.

DISCOUNT FARES ON NORTHERN VIRGINIA'S PUBLIC TRANSIT SYSTEMS -- 1995 --

TRANSIT SYSTEMS	DISCOUNTS AVAILABLE
Metrorail[1]	• 10 percent bonus on farecard purchase of $20 and over.
Metrobus[2]	• Flashpasses, which allow for unlimited use of the bus system for a period of time, are available.
VRE	• 30 percent discount on monthly passes. • 30 percent discount on group (20+) sales. • 15 percent discount on Ten-Trip Tickets.
Arlington Trolley	• 20 percent discount on a 40-token purchase.
Tysons Shuttle[3]	• 20 percent discount on purchase of 2 one-way tickets. • 27 percent discount on 11-trip card.
Reston Ribs	NO DISCOUNTS
City of Fairfax CUE[4]	NO DISCOUNTS
Alexandria DASH[5]	• Approximately 20 percent discount on monthly passes.
Fairfax Connector[6]	NO DISCOUNTS
Prince William County Commuteride	• 35 percent discount on 10-token purchase.

[1] System provides half fares for elderly/disabled riders all day.

[2] System provides 50-cent fares for elderly/disabled riders all day (on all routes except those that have surcharges–11Y).

[3] System provides half fares for elderly/disabled riders.

[4] System provides 25-cents fare for elderly/disabled riders and children up to age 18. GMU students ride free.

[5] System provides free transfers to any other DASH bus (including return trip) within four hours of first boarding.

[6] System provides 35-cents discount with Metrorail-to-bus transfers and valid Metro elderly and disabled identification card.

Appendix C, Part 3

NORTHERN VIRGINIA TRANSIT TRANSFER POLICIES

TO: → / FROM: ↓	METRORAIL	METROBUS	VRE	ARLINGTON TROLLEY	TYSONS SHUTTLE	RESTON RIBS	CITY OF FAIRFAX CUE	ALEXANDRIA DASH	FAIRFAX CONNECTOR	PRTC COMMUTERIDE
METRORAIL	FREE	25¢ discount	——	——	——	——	——	——	35¢ discount on express routes	——
METROBUS	——	FREE within zone	——	——	——	FREE	——	FREE	FREE	——
VRE*		FREE	——	FREE	——	——	——	FREE	FREE	——
ARLINGTON TROLLEY	——	——	——	——	——	——	——	——	——	——
TYSONS SHUTTLE	——	——	——	——	——	——	——	——	——	——
RESTON RIBS	——	25-cents discount	——	——	——	FREE	——	——	——	——
CITY OF FAIRFAX CUE	——	——	——	——	——	——	FREE	——	——	——
ALEXANDRIA DASH	——	75-cents discount	——	——	——	——	——	FREE (includes return trip if within 4 hours)	——	——
FAIRFAX CONNECTOR	FREE or discount w/Metro Flash Pass	FREE or discounted	——	——	——	——	——	Free or discounted	FREE or discounted	——
PRTC COMMUTERIDE	——	——	——	——	——	——	——	——	——	free from Pentagon to Crystal City

* Free transfers apply at Alexandria & Crystal City Stations

APPENDIX D

TAXI SERVICE BY JURISDICTION

TAXI SERVICE BY JURISDICTION

JURISDICTION		COMPANY	PHONE[1]	# OF VEHICLES
Alexandria	1.	Alexandria Diamond Cab 3035 Mt. Vernon Ave. Dispatch Office	549-1100 548-7505	147
	2.	Alexandria Yellow Cab 3025 Mt. Vernon Ave. Dispatch Office	549-2500 836-2500	198
	3.	VIP Cab 3700 Jefferson Davis Hwy.	549-6900	58
	4.	Columbus Cab 50 S. Pickett St., Ste. 106	684-7373	45
	5.	King Cab 104 S. Henry St.	549-3530	57
	6.	White Top Cab 3706 Mt. Vernon Ave. #100	683-4004	110
			TOTAL	**615**
Arlington	1.	Arlington Red Top Cab 3251 Washington Blvd.	522-3333	274
	2.	Arlington Yellow Cab 3251 Washington Blvd.	527-2222	110
	3.	Arlington Blue Top Cab 1008 N. Randolph St.	243-8294	145
	4.	Crown Cab Company 2324 N. Dinwiddie St.	528-0202	23
	5.	Friendly Cab Company 3022 S. 22 St.	892-4144	20
	6.	Hess Cab Company 2711 Jefferson Davis Hwy. #200	451-9202	33
			TOTAL	**605**

[1] **All telephone numbers are area code 703.**

Fairfax County & Other Areas	1.	Fairfax Red Top Cab Co. 11 Hillwood Ave.	934-4444	70
	2.	Yellow Cab Company 11 Hillwood Ave	534-1111(main)	245[2]
		- Annandale Yellow Cab	941-4000	
		- Bailey's Cross Rds Yellow Cab	820-2626	
		- Burke Yellow Cab	941-4000	
		- Fairfax Yellow Cab	941-4000	
		- Falls Church Yellow Cab	534-1111	
		- McLean Yellow Cab	356-3151	
		- Tysons Corner Yellow Cab	534-1111	
		- Vienna Yellow Cab	938-7272	
	3.	Springfield Yellow Cab* [3] 7956E Twist Lane, Springfield	451-2255	69
	4.	Herndon-Reston Cab* 7956E Twist Lane	451-7200	13
	5.	Belvoir Taxi Service* 7956E Twist Lane	781-7040	10
	6.	Fairfax White Top Cab Company 3706 Mt. Vernon Ave., #100, Alexandria	683-4004	10
			TOTAL	**417**
Loudoun County	1.	Country Side Cab* 7956E Twist Lane	444-2259	2
	2.	Airport Transportation, Inc. 22636 Glen Drive, #206, Sterling	430-2000	7
	3.	Loudoun County Yellow Cab 11 Hillwood Ave	437-9100	5
	4.	Dulles Express Cab Company 113 W. Church Rd., Sterling	406-3333 450-0045	3
	5.	Sterling Cab Company 113 W. Church Rd.	430-4444 450-0045	3
			TOTAL	**20**
Other Taxi Services				
	1.	Washington Flyer Taxi 1008 N. Randolph St., Arlington	661-8230	315

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[2] **Represents corporate total for all branches of Yellow Cab.**

[3] **All taxi companies marked with (*) are owned by Paul Wallace Management Inc., 8016 Russell Rd., Alexandria, Va. 22309.**

TAXI OVERSIGHT AGENCIES

Alexandria:	Hack Inspector's Office Officer Jim Oaks	838-4240
Arlington:	Hack Inspector's Office Detective Dan Wines	358-4258 358-4255
City of Fairfax:	There is no oversight agency.	
Fairfax County:	Consumer Affairs Office Dave Reidenbach	222-8435
Falls Church:	Falls Church Police Department Alan Freed, Hack Inspector	241-5054
Loudoun County:	There is no oversight agency.	

APPENDIX E

PARK-AND-RIDE LOTS

IN NORTHERN VIRGINIA

PARK AND RIDE LOTS IN NORTHERN VIRGINIA

Jurisdiction/Name of Lot	Address	Capacity	Served by Transit
Alexandria:			
Van Dorn Metrorail	Van Dorn St & Eisenhower	361	DASH/Metrobus/Metrorail/ Fairfax Connector
Jones Point Park	Off Royal Street under the Woodrow Wilson Bridge	187	N/A
Arlington County:			
Ballston Commons Garage	Wilson Blvd. & Glebe Rd.	750	Metrobus/Metrorail
East Falls Church Metrorail Station	North Sycamore & Washington Blvd.	422	Metrobus/Metrorail
Four Mile Run Parking Lot	Columbia Pike & Four Mile	28	Metrobus
Washington-Lee Parking Lot	N. Quincy & N. 15th St.	71	Metrobus
Clarendon Metered Lot	N. Hartford St. in Clarendon	17	Metrobus/Metrorail
City of Fairfax:			
Kutner Park	Jermantown Rd. & Main St.	50	CUE
Municipal Lot	Intersection of Old Lee Hwy. & North St.	96	CUE
Fairfax County:			
Ames Dept. Store	6457 Edsall Rd. (East of Edsall Rd. Interchange w/Shirley Hwy.)	50	Metrobus/Fairfax Connector

PARK AND RIDE LOTS IN NORTHERN VIRGINIA - CONTINUED

Jurisdiction/Name of Lot	Address	Capacity	Served by Transit
Blackies House of Beef	6710 Commerce Street	183	Metrobus/Fairfax Connector
Canterbury Woods Park	Wakefield Chapel Road	34	Metrobus/Fairfax Connector
Centreville	U.S. 29 and Stone Road	370	Metrobus
Centreville Square	Centreville Square Shopping Center at intersection of Rt. 28 & Rt. 29	220	Metrobus
Centreville United Methodist Church	New Braddock Rd./VA 28	147	N/A
Chi-Chis Restaurant	7010 Old Keene Mill Rd.	65	Fairfax Connector/Metrobus
Commuter Court/Mason Hirst	1805 Michael Faraday Court	320	Metrobus
Dunn Loring Metrorail Station	Gallows Road at I-66	1,233	Metrorail/Metrobus/Fairfax Connector
Fairlanes Bowling Center	13814 Lee Highway	33	None
Fair Oaks	Fair Oaks Mall Parking Areas 8 & 9, off Legato Rd., north of Hecht's	150	Metrobus
Government Center	Government Center Parkway & Post Forest Dr.	170	Metrobus
Greenbriar Park	Melville Lane, near Stringfellow Road	60	Metrobus
Hechinger	6555 Little River Turnpike, Annandale	54	Metrobus
Holiday Inn	6401 Brandon Ave. in Springfield	43	Fairfax Connector/Metrobus
Huntington Metrorail Station	Huntington Ave (Between Telegraph Rd. & Richmond Hwy.)	3,090	Fairfax Connector/Metrobus/Metrorail

PARK AND RIDE LOTS IN NORTHERN VIRGINIA - CONTINUED

Jurisdiction/Name of Lot	Address	Capacity	Served by Transit
Nottoway Park	Courthouse Road near Nutley Street	220	Metrobus/Fairfax Connector
Poplar Tree Park	Stringfellow Road. near Fair Lakes Pkwy.	279	Metrobus
Parkwood Baptist Church	8726 Braddock Road	38	Metrobus
Reston Park and Ride	Corner of Sunset Hills Rd. & Wiehle Ave.	357	Metrobus/Reston Express/Ffx. Connector
Reston South	Fox Mill Rd. at Lawyers Rd. & Reston Pkwy.	411	Metrobus/Fairfax Connector
Rolling Valley Mall	Old Keene Mill Rd. East of Shiplett Blvd.	628	Fairfax Connector/Metrobus
South Run District Park	Pohick Rd. & Lee Chapel Rd.	324	Metrobus
Springfield Mall	Mall parking lot on Spring Mall Rd. between Frontier Dr. and Loisdale Rd.	243	Fairfax Connector/Metrobus
Springfield Plaza	Bland St. between Old Keene Mill Rd. & Amherst Ave.	219	Fairfax Connector/Metrobus
Springfield United Methodist Church	7047 Old Keene Mill Rd. (entrance on Spring Rd.)	101	Fairfax Connector/Metrobus
Sully Station Park and Ride Lot	Stonecroft Blvd. near Westfields Blvd.	140	Metrobus
Vienna Park and Ride Lot	Nottoway Park Courthouse Rd. near Nutley St.	14	Metrobus
Wakefield Chapel Recreation Center	Queensbury Rd & Braddock Rd.	50	Metrobus/Fairfax Connector
West Falls Church Metrorail Station	Haycock Rd., South of I-66 Reston Express/Tysons Shuttle	1,037	Metrobus/Metrorail
Worldgate	Worldgate Drive (behind Cosmetic Center)	150	Metrobus/Fairfax Connector

PARK AND RIDE LOTS IN NORTHERN VIRGINIA - CONTINUED

Jurisdiction/Name of Lot	Address	Capacity	Served by Transit
Loudoun County:			
Ashburn Farm	Summerwood Court & Ashburn Farm Prkwy	20	Loudoun County Commuter Services
Ashburn Village	Grottoes Dr. & Gloucester Prkwy	40	Loudoun County Commuter Services
Cascades Park & Ride	Palisades Parkway & Whitefield Place	60	Loudoun County Commuter Services
Hamilton	Baptist Church, Old Route 7	50	N/A
Innovation Avenue	Innovation Ave. & VA 28	75	N/A
Leesburg	Harrison Street Park	15-20	Loudoun County Commuter Services
Leesburg Village	Catoctin Circle @ shopping center	45	N/A
Purcellville	Route 7 & Hatcher Street	20	Loudoun County Commuter Services
Sterling Shaw Road	Holiday Inn Drive at Shaw Road	45	N/A
Sterling Park Shopping Center	Enterprise Street near Park Pharmacy	60	Loudoun County Commuter Services
Walmart	Route 28 & Pacific Blvd.	100	Loudoun County Commuter Services
City of Manassas:			
Giant Supermarket	Liberia and Centreville Avenues	N/A	CommuteRide, OmniLink

PARK AND RIDE LOTS IN NORTHERN VIRGINIA - CONTINUED

Jurisdiction/Name of Lot	Address	Capacity	Served by Transit
Prince William County:			
Brittany Commuter Lot	Exeter Dr. at Rt. 234, South of Montclair	200	None
Dale City Commuter Lot	Minneville Rd. (Route 640)	555	CommuteRide, OmniLink
Old Bridge Festival SC	Old Bridge Rd. & Smoketown Rd.	75	CommuteRide, OmniLink
Hechinger's Lot	Gordon Blvd. & Old Bridge Rd.	380	CommuteRide, OmniLink
Hillendale	Hillendale & Rt. 784	200	CommuteRide, OmniLink
Horner Road	Horner Rd. (Rt. 639) @ I-95	470	CommuteRide
K-Mart	Sudley Manor Drive	N/A	CommuteRide, OmniLink
Lake Ridge	Rt. 640 & Harbor Dr.	200	CommuteRide, OmniLink
Lindendale Lot	Northside of Dale Blvd. one block west of Lindendale Rd.	214	CommuteRide, OmniLink
Manassas Mall	Route 234	N/A	CommuteRide, OmniLink
Marumsco Plaza	U.S.1 & Longview Drive	100	CommuteRide, OmniLink
Montclair Commuter Lot	Dumfries Rd (Rt. 234) South of Stockridge Dr.	97	CommuteRide
NVCC Commuter Lot	Manassas Campus, Rt. 234	226	CommuteRide, OmniLink
Potomac Mills	Potomac Mills Rd.	500	CommuteRide, OmniLink
Prince William Square	Smoketown Rd. & Gideon Dr.	45	OmniLink
Prince William Stadium	Stadium Lot at County Complex	53	None

PARK AND RIDE LOTS IN NORTHERN VIRGINIA - CONTINUED

Jurisdiction/Name of Lot	Address	Capacity	Served by Transit
Prince William County, continued:			
I-95 & Rt. 123 Commuter Lot	I-95 & VA 123	700	CommuteRide
Triangle Lot	Rt. 619 & Rt. 1	35	CommuteRide, OmniLink
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	241	N/A
Stafford County:			
Aquia	Rt. 610 & Rt. 684	770	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	539	Private Bus Companies

PARKING AND TRANSIT FEEDER SERVICES AT VRE STATIONS

STATIONS	PARKING SPACES	DAILY FEE	TRANSIT FEEDER SERVICE
MANASSAS LINE:			
Broad Run/Airport	320	$1.25/day-$20/month	
Manassas	348	$1.00 non-residents $1.00/month-residents	CommuteRide, OmniLink
Manassas Park	300	$1.00 residents $1.25 non-residents	
Burke Centre	400	-----	Metrobus Routes 17L; 26G,H
Rolling Road	400	-----	
Backlick Road	220	-----	Metrobus Routes 18A,B,F Fairfax Connector 401
FREDERICKSBURG LINE:			
Fredericksburg	100	Free -available to residents only	Shuttle from Lee's Hill in Spotsylvania County
Leeland Road	300	Free to residents $2.00 non-residents	
Brooke	300	-----	
Quantico	125	$1.25	
Rippon	300	$1.25	OmniLink
Woodbridge	588	$1.25	OmniLink
Lorton	100	-----	

SHARED STATIONS:		TRANSIT FEEDER SERVICE
Alexandria	-----	Metrorail Yellow/Blue Lines Dash Route-AT2, 5, and 8 Metrobus Routes-28A,B; 29K,N Amtrak
Crystal City	-----	---------- Metrorail Yellow/Blue Lines Metrobus Routes-5N; 9A,B,C,E; 10A; P11,13; 23A,C,T Arlington Crystal City Trolley
L'Enfant	-----	---------- 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	-----	---------- 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

PLANNED ADDITIONS:		SCHEDULED TO OPEN:
Burke Centre	150	December, 1995
Franconia/Springfield	300	Summer, 1995

METRORAIL PARKING IN NORTHERN VIRGINIA		
STATION	**LOCATION**	**SPACES**
1. Huntington	Huntington Ave. at Fenwick Dr. Kings Highway north of Fort Dr.	3,090
2. Vienna	Median of I-66 at Nutley Rd.	3,572
3. Dunn Loring	Median of I-66 at Gallows Rd.	1,323
4. West Falls Church	Median of I-66 at Leesburg Pike	1,062
5. East Falls Church	Median of I-66 at N. Sycamore Rd.	422
6. Van Dorn	Eisenhower Avenue in Alexandria	361

APPENDIX F

REGIONAL STUDIES AND PLANS

The State of Virginia is currently embarking on a number of simultaneous Major Investment Studies (MIS) -- analyses that will help the region determine how best to address mobility needs in each corridor. An MIS, which is required before projects can be constructed using federal funds, 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. Other studies, more limited in scope, are also ongoing. Some of these focus on a particular mode of travel that was decided upon in an earlier analysis; others are merely concerned with one aspect of travel, such as safety. Below, we list a number of these studies that are more regional in nature.

DULLES CORRIDOR

The Dulles corridor is expected to experience exponential growth in the coming years, growth that will add to the already congested traffic in this part of the region. The problem is being addressed in a truly multi-modal manner: highway, bus, and rail projects are all in various stages of progress, as described below.

Dulles Toll Road

The Dulles Toll Road, which regularly experiences heavy traffic during peak periods, is soon to be expanded by one lane. This lane, a fourth in each direction, will be reserved for HOV-2 traffic during peak periods in peak directions. Engineering for the road widening is ongoing, and is being coordinated with the Dulles Rail Study in 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 Spring, 1998.

In coordination with the opening of the Dulles Greenway, a new automated "FasToll" collection system will be installed on the Highway. This system will allow "drive-through" toll collection using transponders that automatically deduct tolls from drivers' accounts. This technology broadens the possible use of tolls for new and existing facilities by eliminating much of the delay and administrative burden of traditional toll collection. Legislation passed by the General Assembly in 1994 allows Metro and other buses to travel the highway without paying tolls.

Toll revenues do exceed debt service requirements on the highway, and the Commonwealth Transportation Board has earmarked up to 85% of the excess tolls for future rail in the corridor. The excess tolls are also available to leverage federal grants for buses and rail-related bus services. However, the debt service for the HOV-lane expansion will use up the bulk of the funds that would have otherwise been "surplus," greatly reducing the funds available for transit projects in the corridor.

Dulles Greenway

The Dulles Greenway, currently under construction, will be one of few privately constructed and operated toll roads in the U.S. The level of tolls will be controlled by the Virginia Corporation Commission, an independent state regulatory body in Richmond. The tolls will then be applied to debt service on the highway and to provide a regulated rate of return to private investors.

The complete Greenway will extend approximately 14 miles from the Dulles Airport northwest to Leesburg and will offer four operational lanes and seven interchanges. Two additional lanes and two additional interchanges are planned. In addition, an automated toll collection system that is fully compatible with that on the Dulles Toll Road will be installed. Rail right-of-way will also be preserved throughout the road corridor, in case of future rail extensions to Leesburg.

Construction of the road is nearly complete, and is running ahead of schedule. The official opening of the Greenway was originally planned for April, 1996, but the ribbon-cutting is now scheduled for September 29, 1995.

Bus Service in the Dulles Corridor

Two separate projects for increased transit in the Dulles Corridor are currently being developed. In coordination with the fourth lane/HOV widening, Fairfax County has received an FTA grant to construct two park-and-ride garages -- one at Wiehle Avenue and one at Monroe Avenue. These garages will support ridesharing in the corridor, as well as increased express bus service, another improvement currently under consideration. The garages are now being designed, and are scheduled to open in late 1997.

In addition, in January, 1994, Representative Frank Wolf obtained an earmark for $950,000 of federal Section 3 capital funds from the Federal Transit Administration to implement an express commuter bus service travelling from the Dulles Airport area to Tysons Corner and the West Falls Church Metrorail station. Four feasible operating scenarios have been proposed. The simplest of these would operate as a shuttle with six peak flow trips each morning and evening from a park-and-ride site near Dulles Airport to the station. One key issue to be resolved is the funding source for operating the service, as the grant may only be used for capital expenditures (such as bus purchases or the lease of the park-and-ride lot).

Other federal restrictions tied to the grant are also problematic. For example, the grant will require execution of an agreement certifying that labor will be protected (required by Section 13 (c) of the Federal Transit Act). Jurisdictions must agree upon how this potential financial obligation will be shared and then organized labor must agree to the specific terms of this arrangement. At this time, Loudoun County is considering the many options available in providing this service.

Contact: Fairfax County Office of Transportation: (703) 324-1100

Western Regional Park & Ride Study

VDOT's 1992 Dulles Corridor Plan concluded that park and ride lots were needed in both western Fairfax and eastern Loudoun counties. Consequently, VDOT conducted a study to determine the most feasible locations for such lots. The study is divided into three phases. First, six possible sites on which to locate facilities were evaluated. Assessment was made of environmental issues, compatibility with future rail, accessibility, bus routing, carpool usage, financial requirements, and interjurisdictional issues.

Following a series of meetings with local jurisdictions and the public, the Technical Committee recommended that three sites be further evaluated. Based on the results of this analysis, VDOT recommended that funding be pursued for the construction of lots at two sites. These are located north of the Dulles Toll and Access Roads just east of the Fairfax/Loudoun County line (Kay/CIT Site) and at the northwest corner of the airport, north of Route 606 and the planned extension of the Toll Road (Site 5A East.) The three jurisdictions involved, Fairfax and Loudoun counties and the town of Herndon, have all officially endorsed the sites, and VDOT, Loudoun County, and the Airports Authority are coordinating efforts to clear up outstanding environmental issues. When these are settled, VDOT will proceed with the design work for the two lots, which are scheduled to open in the spring of 1998, in conjunction with the HOV lanes.

Contact: VDOT, Northern Virginia District Office: (703) 934-7322

Dulles Corridor Rail Study

The Virginia Department of Rail and Public Transportation is currently leading a study of rail alternatives in the Dulles corridor. If built, the rail line is anticipated to begin at the West Falls Church Metrorail station and follow the right of way of the Dulles Access Road to and possibly beyond Dulles International Airport.

A consultant has been hired to develop alternatives, forecast ridership and cost levels for each, conduct a preliminary environmental assessment of the alternatives, and lead an extensive public participation program. The end result of this process is expected to be the selection by VDRPT of a Locally Preferred Alternative (LPA), which would then be subject to more rigorous analysis in order to meet FTA funding requirements. The Policy Committee is expected to approve an LPA for recommendation to the Secretary of Transportation in December, 1995.

At this point, the consultant, working closely with a technical committee made up of regional and local representatives, has developed a list of fifteen alternatives to test for ridership and cost implications. Included in these are no-build and express-bus-only scenarios. Issues to be decided include the type of rail system to be built, whether portions of the system will be underground or aerial, and whether each station will be located within or outside the median.

Another central issue is how the project would be funded. Currently, the rail line is not included in the region's Constrained Long Range Plan, because adequate funds have not been identified or earmarked for the project. Part of the scope of the study is to examine this question and recommend funding and financing options.

Contact: Dulles Corridor Study Hotline: 1-800-960-RAIL

Dulles Airport Study Commission

In recognition of the economic importance of the Dulles corridor, the 1994 General Assembly created the Dulles Airport Regional Economic Study Commission. The Commission's charge is to develop and publish for public comment a broad, feasible, strategic, long-term economic development plan for the Dulles Airport region that: 1) maximizes the potential of Washington Dulles and the surrounding area it serves; 2) presents a balanced and integrated economic, transportation, international trade, finance, advanced technology, investment and economic development unit for Virginia; and 3) provides adequate access to Washington Dulles from throughout the Commonwealth.

To this end, the commission members have been meeting with transportation and economic development leaders from around the state in order to examine ways in which Dulles Airport might better serve as a magnet for air cargo, and thus enhance its role as an economic engine for the state. The results of these discussions will be used to draft a report and legislative recommendations, to be delivered to the legislature in time for the 1996 session.

NVTC's Transportation Plan for the Smithsonian's National Air and Space Museum Annex

In 1990 NVTC led a regional task force to produce a plan to serve the new museum annex when it opens later in the decade. Delays in congressional appropriations have upset the initial 1995 timetable for completion of the facility, to be located on 185 acres about five miles south of the main terminal at Dulles Airport. Peak daily attendance for the first phase could reach 17,700, with public transit forecast to serve from five to 10 percent of these persons.

NVTC's plan calls for new shuttle bus service linking the museum extension with the Vienna Metrorail station at a total annual subsidy cost ($1990) of $800,000 to $1 million, as well as a system of van shuttles linking the Dulles terminal with the museum annex for another $217,000 annual subsidy cost.

I-66 Corridor

As a result of the Disney Corporation's decisions, first, to open a historic theme park in Haymarket, Prince William County, and then not to do so, the I-66 corridor has been subject to intense scrutiny and discussion. Even without the theme park, transportation improvements are needed in the corridor, and will be required in the future. Below, we discuss what projects are currently under construction or planned for construction, and what alternatives are being examined.

Highway Construction

Outside the Beltway, 11 miles of I-66 are currently being widened from four to eight lanes, extending from Route 50 to Route 234. The innermost lane in each direction will be a diamond lane, and will be reserved for HOV-2 vehicles during the appropriate peak period hours. This construction should be finished in late 1996. In the meantime, the Congestion Mitigation System described in Section III has played an important role in decreasing the impact of the construction on traffic.

Some money has also been programmed for preliminary engineering for road widening to eight lanes from Route 234 to Route 29 and to six lanes between Routes 29 and 15, at Haymarket. However, no construction money is currently programmed, and it is anticipated that the commitment to continue to pursue those projects would be contingent on the results of the ongoing MIS, described below.

Contact: VDOT Northern Virginia District Office: (703) 934-7322

I-66 Major Investment Study

When Disney was planning to open its theme park, the Commonwealth initiated two separate studies -- an I-66/Haymarket Transportation Study, which would address near-term transit options to the Haymarket area and the formerly proposed Disney's America site, and a Rail Feasibility Study devoted to examining long-term rail options in the corridor. Now that Disney has canceled its plans and development is not expected to occur as quickly as was formerly anticipated, these studies have been merged into a more complete I-66 Major Investment Study. This analysis will be broader in scope, looking at a range of alternatives that could be implemented in the corridor. Among these might be rapid rail, such as Metrorail; commuter rail, such as VRE; improvements to the highway system, either through construction or through the addition of intelligent transportation technology that helps traffic to move more efficiently; and transportation demand management techniques such as the facilitation of ridesharing in the corridor.

Among the issues affecting new rail service in the corridor is whether sufficient right-of-way will be preserved as HOV lanes are added. Currently VDOT's plans for I-66 west of Route 28 do not preserve sufficient right-of-way in the median, and two significant incursions have already occurred to the east. In addition, the MIS will coordinate with an ongoing analysis of the possible purchase of the Norfolk-Southern tracks through Manassas and a rail by-pass of Manassas. These studies are being conducted by the Virginia Railway Express in cooperation with the VDRPT, and by VDRPT/VDOT, respectively.

A consultant has been hired to conduct the MIS, and a scope of work is now being finalized. It is expected that an interim report will be delivered to the General Assembly during the 1996 session, and a locally preferred investment strategy recommended to the legislature during the 1997 session.

Contact: I-66 MIS Hotline: 1-800-811-4661

Bristol Rail Passenger Study

At the direction of the General Assembly, the Virginia Department of Rail and Public Transportation has conducted a study of potential rail passenger service connecting Bristol, VA to both Richmond and Washington, D.C. The Washington D.C. service would pass through Manassas and continue along the I-66 corridor. The study assesses the conditions and capacities of the existing transportation network, makes service recommendations, projects potential ridership and revenues for the service alternatives, and lists improvements required in order to support the various service levels. A draft report issued in May, 1995 suggests that a service level of two trains per day in each direction would be the most feasible alternative.

This service would provide the Northern Virginia region with an important non-highway link with the rest of the state. In addition, expanded intercity rail service could lead to more state funding for VRE if the services are integrated. A final report is due in October, 1995.

Contact: Alan Tobias, VDRPT: (804) 786-1063

HOV-2 Inside Beltway

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. By January of 1984 the HOV requirement was reduced to three. In March of 1995, VDOT began an HOV-2 demonstration project. An interim draft report was published in July and a final version should be available mid-August. The report provides preliminary results of the project after approximately three months of HOV-2+ operation. A final report documenting the project results and recommendations is anticipated to be completed toward the end of this one-year project period.

The goal of this project, according to Secretary Martinez, is to provide an opportunity to evaluate optimum use of I-66 through increased person movement and car pooling in the I-66 corridor and at the same time alleviate traffic congestion on the parallel roadways such as Routes 29 and 50. The predominant occupancy requirement for existing HOV facilities across the nation is HOV-2, and they have proven to be successful facilities with low violation rates. At the conclusion of the demonstration period, this study will provide a recommendation to revert to HOV-3 or to maintain HOV-2 on I-66 based on the evaluation criteria stated in the work plan.

Mr. Martinez assured the local jurisdictions that the Coleman decision will be followed if the demonstration project analysis results in a recommendation to continue HOV-2 on I-66. This ruling, issued by then U.S. Secretary of Transportation Coleman before the construction of I-66, calls for any changes in the HOV status of the highway to be made cooperatively by the U.S. Secretary of Transportation, Washington Metropolitan Area Transit Authority, the full TPB and the Commonwealth of Virginia.

Western Bypass

VDOT has formally begun a Western Washington Bypass Major Investment Study, and has presented the process to the TPB. The study will be a full MIS, including both no-build and multi-modal scenarios within its range of alternatives. It will also encompass a financial analysis and plan, and a pro-active public participation program similar to that of the Dulles Corridor study. The public involvement program will include the development of a mailing list for newsletters, maintenance of a study hot-line, and three series of meetings to be held in each of the potentially affected counties (Stafford, Fauquier, Prince William, and Loudoun. The small part of Fairfax County that falls within the study corridor will be addressed at the Loudoun County meetings.) The first series of these meetings were held in June, 1995.

The study corridor is bordered by points between Routes 15 and 17 on the west, points just to the east of Routes 28 and 234 on the east, Route 17 and I-95 to the south, and the Potomac River to the north. The state of Maryland has indicated that it will cooperate with the study as long as river crossings are limited to the Point of Rocks crossing into Frederick County, and Secretary Martinez has agreed to this position. Some citizens have pointed out the complications of Virginia's position; a road placed far enough to the west to cross the Potomac at Point of Rocks has been found in the past to divert little traffic from the Beltway, and yet roads further to the east, if they cannot cross the Potomac, will also serve very little purpose as an actual "by-pass" of the Beltway.

Because MARC's commuter rail line serves Point of Rocks, and because CSXT may have the ability to route freight in that direction and avoid the congested Washington D.C. areas, VRE has requested that possible improved rail connections be investigated as part of this MIS.

The study schedule calls for the development of alternatives this summer, with analysis continuing through November. Alternatives will then be refined, with final evaluation taking place during January and February, 1996. Further public meetings are planned for October, 1995 and February, 1996, and a preferred alternative should be chosen during March, 1996.

Contact: Western Bypass MIS Hotline: 1-800-960-8448

Eastern Loudoun County Cut-Through Traffic Impact Study

Loudoun County staff has asked VDOT to conduct a subarea transportation analysis of eastern Loudoun County. The area of analysis is bounded by Route 7 to the north, Dranesville Road to the east, Route 606 to the south, and Sterling Boulevard to the west. The study will determine how planned east-west highway improvements will impact the roadway facilities within the area, allowing local planners to better determine how cut-through traffic on nearby residential roads might be affected.

In the course of the study, VDOT will model traffic in this subarea for 1990 and 2010, testing six alternative networks in the 2010 time frame. From this, they will provide an estimate of cut-through traffic on many of the local roads, and show where the cut-through traffic is originating. It is anticipated that a report will be issued this fall.

Beltway

I-495 Capital Beltway Improvement Study

The Virginia Department of Transportation has long had plans to construct a fifth, possibly HOV, lane on the Beltway. During early discussions of this proposed project, members of the community and elected officials raised concerns about the safety of a fifth lane on the Beltway. In particular, there was concern that, due to the cost of right-of-way in the corridor, lanes might by narrowed or shoulders virtually eliminated. NVTC has also expressed concern that, without barrier-separated HOV lanes, lack of enforcement would destroy HOV incentives.

In response to these concerns, as well as in response to both federal requirements and the need to coordinate plans with Maryland, VDOT and VDRPT have elected to put these plans on hold and enter into a joint MIS process with the state of Maryland. The study, which will cover the entire facility, will examine HOV lanes, but will also evaluate other transit and transportation demand management strategies, as well as a no-build alternative.

It is expected that a candidate set of alternatives to be examined will be presented to the public for comment in the fall of 1995, and a final set of alternatives recommended for detailed study in summer, 1996. In the spirit of an MIS, it will be important for both planners and the public to keep an open mind as to the final outcome of the study; even after the announcement of the MIS, various official documents around the region have referred to the analysis as the "Beltway HOV" or "Beltway Fifth Lane" study.

Capital Beltway Safety Study

In January of 1994, the Capital Beltway Safety Team began work to evaluate and implement recommended safety improvements for the Capital Beltway. The team, chaired by Tom Farley, District Administrator of Northern Virginia VDOT, generated its first report in September, 1994. Focus group and work team participants from this phase of the project identified the need to increase law enforcement presence on the Beltway as a deterrent to speeding and other erratic driving behavior. Upon examination, it was determined that the cost would be prohibitive on a permanent basis. In January, 1995, however, team members devised an alternate response that identifies and targets selected Beltway locations for concentrated enforcement activity that focuses on tailgating, changing lanes without signaling, and speeding.

Contact: Capital Beltway Safety Team: (703) 934-0767

I-95 Corridor

Planned Improvements to Reversible HOV Lanes

VDOT is currently in the process of extending the reversible HOV lanes on I-95 from Springfield to Quantico Creek, a 19-mile project extending through Fairfax and Prince William Counties. As with the Springfield to Newington segment, the project will be opening in stages. The extensions are scheduled to open as follows:

Newington - Occoquan River	December, 1995
Occoquan River - Opitz Boulevard	Spring, 1996
Opitz Boulevard - Quantico Creek	Summer, 1997

In addition, it is expected that by the year 2010, VDOT will restripe the reversible lanes on I-395 in order to provide three lanes. This segment of highway was originally designed with extra shoulder width to allow for such a contingency.

Contact: VDOT, Northern Virginia District Office: (703) 934-7322

Richmond-Washington Rail Corridor Study

The Virginia Department of Rail and Public Transportation recently conducted a study of the feasibility of high speed rail service in the Washington, D.C. - Richmond corridor. Tasks undertaken for the study include an assessment of current travel conditions, a forecast of travel demand, recommended system improvements, and cost projections.

The study found that the current distribution of trips among modes is weighted heavily to the automobile (84.7 percent) with both bus and rail carrying only about seven percent of the total trips in the corridor. Rail improvements to increase capacity and speed as well as improve safety would be needed to implement service.

The study suggests six phases of improvements aimed at introducing a 110 mile per hour tilt train service. The total cost is projected to be over $360 million. With a 97-minute travel time and three round trips offered daily, the projected ridership would increase over 51 percent from existing ridership. Reducing the travel time to 90 minutes is projected to increase ridership to 64 percent from existing ridership and by the year 2000, ridership could increase to almost 80 percent.

Contact: Alan Tobias, VDRPT: (804) 786-1063

Springfield Interchange Congestion Management Project

In June of 1995, VDOT initiated the planning of a Congestion Management Program (CMS) for the construction of a new I-95/I-395/I-495 interchange. The project is expected to last anywhere from 10 to 30 years, and will substantially disrupt traffic. Planning for the CMS will build off the experience gained from the ongoing I-66 CMS.

The design of the construction project itself will be presented for public comment in the fall of 1996. It will then proceed through eight phases of construction, each to be bid separately. It is not anticipated that any traffic will actually need to be diverted until Spring, 1998. During construction, contractors will be required to maintain the current number of peak period lanes, but lanes will be taken during other times of the day. The number of HOV lanes may also be reduced during portions of the construction.

The CMS is expected to incorporate the following features:

- Establishment of pre-construction conditions.
- Market research in order to identify best opportunities to "sell" transit and high-occupancy vehicles.
- Identification of capacity reductions during each phase of construction (i.e., how many vehicles must be removed from the roadway in order to continue to allow traffic to flow smoothly?)
- Use of a traffic coordinator to help rearrange traffic patterns during construction (this task is often handled by the construction company itself, rather than a traffic engineer.)
- Coordination with construction projects in parallel corridors (e.g. Route 1) in order to avoid backing up alternative routes when they are most needed.

For planning purposes, four groups have been created: transit, ridesharing/HOV, incident management, and traffic management. These groups will jointly develop a plan to submit to the Federal Highway Administration for funding.

U.S. Route One Corridor Study

The 1994 session of the Virginia Legislature directed through House Joint Resolution No. 256 that VDOT conduct a complete and comprehensive study of the Route One Corridor in Fairfax and Prince William Counties. The study, which is being managed by the Northern Virginia District Office of VDOT, will center on the U.S. Route One corridor from the Stafford County/Prince William County Line to the Fairfax County/City of Alexandria Line. In coordination with state and local officials, VDOT will inventory existing transportation related features; document existing traffic conditions and deficiencies and recommend appropriate short-term improvements; project future demand; and develop and evaluate alternatives which would address the transportation needs while accommodating county-specific economic development goals for the corridor.

VDOT is currently in negotiations with a consultant for the study, and it is anticipated that the study will require between 18 and 24 months once the consultant begins work. Citizen participation will be a key aspect of the study, and VDOT plans to hold at least six major public meetings (three in each county) to obtain a wide range of citizen input.

Woodrow Wilson Bridge

The Federal Highway Administration, which owns the Woodrow Wilson Bridge, is currently conducting a Major Investment Study (MIS) of this facility in accordance with the recent federal planning regulations. The MIS will address both the deteriorated structural condition of the bridge and its constrained capacity. A Woodrow Wilson Bridge Improvement Study Coordination Committee, made up of elected officials and senior government executives from a number of jurisdictions, identified a wide range of alternatives. This list has since been narrowed to six alternatives, including the no-build. Other scenarios still under consideration are the construction of a tunnel under the river, a tunnel combined with a drawbridge, two drawbridges side by side, a doubledeck bridge, and a high bridge further to the south of the existing bridge.

FHWA is now proceeding with an environmental analysis of these alternatives, and a draft Environmental Impact Statement is expected to be released in November, 1995. A final Record of Decision, which would recommend one alternative over the others, should be released in the summer of 1996. Once an alternative has been selected, it is anticipated that three years for design work and three years for construction will be required.

Because of the deteriorated condition of the bridge, and because of its complicated interstate status, the Interstate Transportation Study Commission focussed on this project in its report to Congress. The commission recommended that:

- "A new authority be created to own, construct, operate and maintain an enhanced southern Beltway crossing of the Potomac River as recommended by the Woodrow Wilson Bridge Coordination Committee and approved by the National Capital Region Transportation Planning Board.

- "the life of the Interstate Study Commission be extended under the sponsorship of The Greater Washington Board of Trade in order to spearhead adoption of legislation at the state, District of Columbia, and federal levels to create the new authority.

- "This new authority shall seek federal funds to construct the recommended Potomac River crossing and include local elected officials on its governing board. In addition, the new authority will not be activated until the availability of federal funds is determined by the federal government.[1]

[1]Interstate Transportation Study Commission, Improving Interstate Transportation in the National Capital Region (December, 1994).

Legislation regarding the establishment of such an authority was passed by both the Maryland and Virginia legislatures during the 1995 session, and has been introduced in Congress. The federal legislation will most likely go forward this session, and representatives of the two states are working to agree upon a compromise version of their two resolutions. Once these differences have been addressed, the District of Columbia City Council will also have to pass legislation before the authority can actually be created.

As part of the initial examination of alternatives, COG staff conducted ridership forecasts for potential rail crossing the bridge, linking the Branch Avenue and Eisenhower Avenue Metrorail station and supplying the rail station with feeder bus service. Even with rail, the percentage of people using transit to cross the bridge was forecast to be relatively low. However, only about one third of the transit trips generated crossed the river; the rest either stayed within their origin state or traveled to the District. Of these, most were new trips by *bus*. This outcome suggests that effective, neighborhood-based bus networks in these areas might more cost-effectively generate transit ridership.

Contact: Woodrow Wilson Bridge Improvement Study: (703) 519-9800

Western Fairfax Study

This study, which is being managed through the VDOT Northern Virginia District Office, addresses traffic through the Clifton area of Fairfax County. Policy guidance is being provided by a joint subcommittee made up of three supervisors from each of Fairfax and Prince William counties. Fairfax County has also appointed a citizens committee to provide input. A scope of work is now being drafted, and VDOT is doing preliminary modelling to examine future capacity and demand at the crossings of the Occoquan River.

Contact: VDOT, Northern Virginia District Office: (703) 934-7322

APPENDIX G

HOLIDAY SCHEDULES OF

LOCAL TRANSIT SYSTEMS

REGIONAL TRANSIT SERVICE

HOLIDAY SCHEDULES FOR FISCAL YEAR 1996

	(1995) New Year's Eve Sun., Dec. 31	(1996) New Year's Mon., Jan 1	MLK Day Mon., Jan 15	Presidents' Day Mon., Feb. 19	Memorial Day Mon., May 27
METRORAIL	8A - 2A (Mod. Sun.)	8A - 12M (Sunday)	5:30A - 12M (Mod. Sat.)	5:30A - 12M (Mod. Sat)	8A - 12M (Sunday)
METROBUS	Sunday	Sunday	Sat. + Supp	Sat. + Supp	Sunday
METRO-ACCESS[5]	Sunday	Mod. Weekday	Mod. Weekday	Mod. Weekday	Mod. Weekday
RIDE-ON	Sunday	Sunday	Sat. + Supp	Sat. + Supp	Sunday
DASH	Sunday	No Service	Saturday	Saturday	Sunday
CUE	Sunday	No Service	Mod. Weekday	Mod. Weekday	Saturday
FAIRFAX CONNECTOR	Sunday	Bus "5S" Only	Saturday	Saturday	Sunday
TYSONS SHUTTLE	No Service	No Service	Bus "A" Only	Bus "A" Only	No Service
CRYSTAL CITY TROLLEY	No Service	No Service	No Service	No Service	No Service
RIBS	No Service	No Service	Mod. Saturday	Mod. Saturday	No Service

[5]Subject to expansion of service

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May 5, 1995

REGIONAL TRANSIT SERVICE

HOLIDAY SCHEDULES FOR FISCAL YEAR 1996

	(1995) Fourth of July Tue., July 4	Labor Day Mon., Sept. 4	Columbus Day Mon., Oct. 9	Veterans Day Fri., Nov. 10	Thanksgiving Thurs., Nov. 23	Thanksgiving Fri., Nov. 24	Christmas Mon., Dec. 25
METRORAIL	8A - 1A (Mod. Sat.)	8A - 12M (Sunday)	5:30A - 12M (Mod. Sat.)	5:30A - 12M (Mod. Sat.)	8A - 12M (Sunday)	5:30A - 12M (Weekday)	8A - 12M (Sunday)
METROBUS	Sat. + Specials	Sunday	Sat. + Supp.	Sat. + Supp.	Sunday	Weekday	Sunday
METRO-ACCESS	No Service	No Service	Weekday	Weekday	Mod. Weekday[1]	Weekday	Mod. Weekday[1]
RIDE-ON	Sunday[2]	Sunday	Sat. + Supp.	Sat. + Supp.	Sunday	Weekday	Sunday[3]
DASH	Sunday	Sunday	Saturday	Weekday	No Service	Weekday	No Service[4]
CUE	No Service	Saturday	Mod. Weekday	Weekday	No Service	Mod. Weekday	No Service
FAIRFAX CONNECTOR	Saturday	Sunday	Saturday	Saturday	Bus "5S" Only	Weekday	Bus "5S" Only
TYSONS SHUTTLE	No Service	No Service	Bus "A" Only	Bus "A" Only	No Service	Weekday	No Service
CRYSTAL CITY TROLLEY	No Service	No Service	No Service	No Service	No Service	Weekday	No Service
RIBS	No Service	No Service	Mod. Saturday	Mod. Saturday	No Service	Weekday	No Service

[1] Subject to expansion of service
[2] Ride-On will operate Saturday service on C8, Y6 and Z2
[3] Sunday, December 24, 1995,(Christmas Eve) Ride-On service will end at 7:00 p.m.
[4] Sunday, December 24, 1995,(Christmas Eve) DASH service will end at 7:00 p.m.

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May 5, 1995

REGIONAL TRANSIT SERVICE
HOLIDAY SCHEDULES FOR FISCAL YEAR 1996

	(1995) New Year's Eve Sun., Dec. 31	(1996) New Year's Mon., Jan. 1	MLK Day Mon., Jan. 15	Presidents' Day Mon., Feb. 19	Memorial Day Mon., May 27
VRE	No Service	No Service	No Service	No Service	No Service
MARC	No Service	No Service	Hol. Sched.	Hol. Sched.	No Service
MTA SERVICES					
--Laurel Flyer/320	No Service	No Service	Weekday	Weekay	No Service
--Rt. 29 Flyer 929	No Service	No Service	Hol. Sched	Hol. Sched	No Service
--I-95 Express	No Service	No Service	Hol. Sched.	Hol. Sched	No Service
--Annapolis/921	No Service	No Service	Weekday	Weekay	No Service
--Annapolis/922	No Service	No Service	No Service	No Service	No Service
--Crofton/923	No Service	No Service	No Service	No Service	No Service
--Hagerstown- --Frederick/991	No Service	No Service	Hol. Sched.	Hol. Sched.	No Service
--Rt. 5 Flyer/905	No Service	No Service	No Service	No Service	No Service
--Rt. 4 Flyer/904	No Service	No Service	No Service	No Service	No Service
"THE BUS"	No Service	No Service	No Service	No Service	No Service
CONNECT-A-RIDE	Sunday	No Service	Weekday	Weekday	Saturday
PRTC COMMUTERIDE	No Service	No Service	Mod. Weekday	Mod. Weekday	No Service

SERV/Market Analysis

May 5, 1995

REGIONAL TRANSIT SERVICE

HOLIDAY SCHEDULES FOR FISCAL YEAR 1996

	(1995) Fourth of July Tue., July 4	Labor Day Mon., Sept. 4	Columbus Day Mon., Oct. 9	Veterans Day Fri., Nov. 10	Thanksgiving Thurs. Nov. 23	Thanksgiving Fri., Nov. 24	Christmas Mon., Dec. 25
VRE	No Service	No Service	No Service	No Service	No Service	Mod Weekday	No Service
MARC	No Service	No Service	Hol Sched	Hol Sched	No Service	Hol Sched	No Service
MTA SERVICES:							
--LAUREL FLYER/320	No Service	No Service	Weekday	Weekday	No Service	Weekday	No Service
--Rt 29 Flyer 929	No Service	No Service	Hol Sched	Hol Sched	No Service	Hol Sched	No Service
--I-95 Express	No Service	No Service	Weekday	Weekday	No Service	Weekday	No Service
--Annapolis/921	No Service	No Service	Weekday	Weekday	No Service	Weekday	No Service
--Annapolis/922	No Service	No Service	No Service	No Service	No Service	No Service	No Service
--Crofton/923	No Service	No Service	No Service	No Service	No Service	Weekday	No Service
--Hagerstown--							
--Frederick/991	No Service	No Service	Weekday	Weekday	No Service	Weekday	No Service
--Rt 5 Flyer/905	No Service	No Service	Weekday	Weekday	No Service	Weekday	No Service
--Rt 4 Flyer/904	No Service	No Service	No Service	No Service	No Service	Weekday	No Service
"THE BUS"	No Service	No Service	No Service	No Service	No Service	Weekday	No Service
CONNECT-A-RIDE	No Service	Saturday	Weekday	Weekday	No Service	Weekday	No Service
PRTC COMMUTERIDE	No Service	No Service	Mod Weekday	Mod Weekday	No Service	Mod Weekday	No Service

SERV/Market Analysis
May 5, 1995