NORTHERN VIRGINIA TRANSIT FUNDING RESOURCE GUIDE

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ABSTRACT

The Northern Virginia Transportation Commission serves its six member jurisdictions by coordinating funding of public transit systems in a territory exceeding 1,000 square miles and 1.5 million people. The Washington Metropolitan region ranks at least fourth worst in traffic congestion, and transit needs (operations, maintenance, expansion) are at least $367 million a year in Northern Virginia through 2020. Existing financial resources fall far short of needs, even though these needs are essential. For example, transit capital is underfunded by at least $25 million annually for the next two decades.

This resource guide describes the many sources of funds available to sponsors of transit projects at various levels of government and in the private sector. The table of contents can serve as a checklist of alternative components of financial plans. For many of the program funding sources, amounts of funds available are listed in the text, together with contacts (program administrators, web sites). The report is meant to provide citizens and project planners a seismic map for mining for transit capital project gold.

Several figures give detailed information about transit funding received by Northern Virginia from various sources and the potential yield from new revenue sources that have been proposed for this region.

To help visualize the complex programs being described, the concept of a pyramid is used, with federal funds at the base and revenues from projects and beneficiaries at the pinnacle. The funding agencies form rooms in the pyramid, and faucets and hoses guide the flow of funds to and from the rooms. Lessons are provided about how and where to tap into these flows.

Because of the variety of financial programs available, sponsors are counseled to design their proposed projects as flexibly as possible to permit access to a wider range of funding sources. As potential funding sources in a preliminary financial plan are identified, the project (and associated customer markets) can also be fine-tuned to match the required funding criteria.

This guide book lists over 50 federal and 30 state, plus several regional, local and project specific funding programs. Hundreds of millions of dollars now being used for Northern Virginia projects and potentially available over the next several years are identified. But the descriptions of these sources emphasize that failure to appropriate sufficient funds for the authorized programs is a very common phenomenon.

Finally, of all the levels of government reviewed, arguably the commonwealth of Virginia displays the most serious underfunding of transit programs. Compared to neighboring states and to its own statutory objectives, Virginia needs to do more.

INTRODUCTION

Operating, maintaining and expanding Northern Virginia's transit systems presents an enormous funding challenge. For Northern Virginia's share of WMATA's Metrorail and Metrobus, for the Virginia Railway Express's commuter rail system and for six other local bus systems, total subsidies (costs less farebox and other system revenues and federal aid) in FY 2001 were well over $150 million.

Paying for transit capital projects requires an active and flexible partnership between the various transit agencies, their customers and local government sponsors on the one hand and regional, state and federal funding agencies on the other. For FY 2002, the federal government is budgeting about $6.75 billion for public transit (almost all for capital programs). Statewide in Virginia, over $100 million is being provided from state-funded programs to support transit. Northern Virginia's regional and local governments have budgeted over $60 million of their funds for transit capital and operations, with transit passenger revenues providing another $115 million in this region.

Looking to the future, the Metropolitan Washington regional constrained long range plan produced by the Transportation Planning Board (TPB), which applies only revenue sources reasonably expected to be available, has not included sufficient funds for WMATA's known capital needs. Northern Virginia's Transportation Coordinating Council (TCC) has identified a shortage of funds for needed transit capital projects of $25 million annually through 2020.

Accordingly, identifying sources of funding is crucial just to continue current transit systems in operation and perform needed maintenance and rehabilitation as transit ridership reaches record levels. To expand those successful transit systems to meet growing demand, relieve accelerating traffic congestion, continue to meet clean air targets, channel growth into sustainable patterns, test and implement new technologies and improve customer service (so that riders will choose transit over their personal automobiles) requires resources of an even greater magnitude.

This guide is designed to provide a basic illustration of alternative components of financial plans for existing and proposed transit capital projects, with capsule descriptions of most of the programs that form the available financial building blocks. It is meant to provide citizens and project planners a seismic map for mining for transit capital project gold.

Competing for general purpose funding at all levels of government pits transit advocates against other interests, including education and health care. Consequently, it is essential to know the sources of funds that have already been set aside to support transit projects.

To use a different analogy, transit funding programs can be viewed as rooms in a giant pyramid: layered by level of government, interspersed with a maze of conduits connecting to funding faucets, and regulated by an army of officials and policy-makers both inside and outside the pyramid. Ancient pyramids were built by societies with an advanced understanding of leverage. That same principle is needed to produce realistic and effective transit capital financial plans today.

The Transit Capital Funding Pyramid

Picture a large pyramid built of money and other financial instruments. At the base are federal funds. The federal government is the largest component of the pyramid because it has access to the broadest array of taxing and borrowing powers. Now picture the federal portion of the pyramid as being divided into many different rooms filled with money. Some of the rooms have many partitions (program offices, regional administrations). Each federal executive branch agency with programs of benefit to transit will guide the flow of funds according to its own rules. The flow of funds can be imagined as a series of faucets, providing access to the rooms, with hoses connecting to other federal agencies as well as state, regional and local governments and the transit system itself. In many cases, federal agency officials control the flow of funds using rules and regulations based on legislative guidance enacted by Congress; but sometimes members of Congress, through earmarks, can alter the flows. And members of Congress can be responsive to their constituents – many of whom are likely to be transit system customers.

Some rooms are large, with many faucets and a series of connecting hoses that are easy to see and have been in existence for a long time. An example is the Federal Transit Administration (FTA) which has been in existence since 1964 (formerly known as the Urban Mass Transit Administration). But other rooms are much smaller, may be new and have hidden faucets with hoses that seem to spiral through an almost impenetrable maze. Many social service and economic development programs of the US Department of Housing and Urban Development, the Department of Health and Social Services and the Department of Commerce may appear in this manner to transportation professionals more accustomed to the traditional federal programs of FTA. But partnerships with local agencies and interest groups who do business with these "non-transportation" federal agencies can reveal the hidden spigots.

Another complication is that some federal programs may offer loans, loan guarantees or full funding grant agreements. In the case of a guarantee, what is flowing through the imaginary hose is a federal promise to pay if needed, which makes it possible for the transit system to borrow money on the open market on much more favorable terms than would otherwise be the case. A full funding grant agreement provides a stronger likelihood that a stream of federal funds will continue and allows the transit system to borrow against that stream to

accelerate projects. In the case of a loan, funds flow first to the transit system and at some future date flow back to the lending agency.

Even though a federal agency's room in the pyramid is packed with money, there may be intense competition for the funds with many other transit systems. Consequently, those building a financial plan for a transit system's capital project should consider a broad array of potential sources from all parts of the pyramid, and the timing and scope of the project should be as flexible as possible to qualify for a broad array of funding sources.

Continuing with the pyramid analogy, state sources are on the next level. Many of the state agency rooms are packed with money exclusively from state funds, but some also are connected to federal rooms with hoses bringing a steady flow of federal funds. Some of the hoses merely pass through the state rooms without discharging any funds; this represents federal programs that allocate funds to recipients but use state agencies primarily as conduits (such as the flexible funds of the Congestion Mitigation and Air Quality program known as CMAQ).

The next levels in the pyramid are regional and local government sources. In Virginia, the commonwealth reserves many tax sources for itself, thereby relegating these other governments to a narrower level of the pyramid. While some funds flow directly from the state sources to the transit systems, some pass through local or regional agencies, and in some cases these funds are redirected. For example, NVTC receives the proceeds (almost $20 million annually) of a two percent motor fuels tax collected by the state and returned to NVTC, which in turn provides the funds to its member local governments according to where the taxes were paid (point of sale). NVTC also receives about $70 million annually in state transit aid which it reallocates among its members based on their relative transit subsidies paid. NVTC also receives from time to time the proceeds of bonds issued by the commonwealth using local sources of revenue to cover debt service. So tracking these funds in our model of a pyramid features many loops and reverse flows.

Making up the pinnacle of the pyramid are sources from private users and other beneficiaries of transit projects such as developers proffering transit improvements in exchange for approval of development plans, engineering firms offering design-build proposals including equity contributions, or special taxation districts taxing beneficiaries of transit improvements. These revenue streams from projects include transit riders and automobile users who help pay for transit-related improvements with fares or tolls.

Sitting on scaffolding along the sides of the pyramid are policy-makers and other decision-makers whose actions influence the flow of funds into and out of the program rooms by authorizing and appropriating money, levying taxes and redefining program rules. Swarming around the pyramid are hordes of transit

systems and their supporters, all clamoring for access, with buckets to fill from whatever faucet or hose presents the greatest opportunity.

Observing the pyramid for the first time may give a daunting impression of a huge and extremely complex Tower of Babel. But thinking of the funding programs in this way does lead to some helpful rules of thumb:

1) Funding programs should be thought of as interconnected with a time dimension. Old programs die or become oversubscribed but others are born. If one program door is shut, be prepared to knock on a neighboring door as you plot a course through the rooms and connecting faucets and hoses that make up the pyramid.

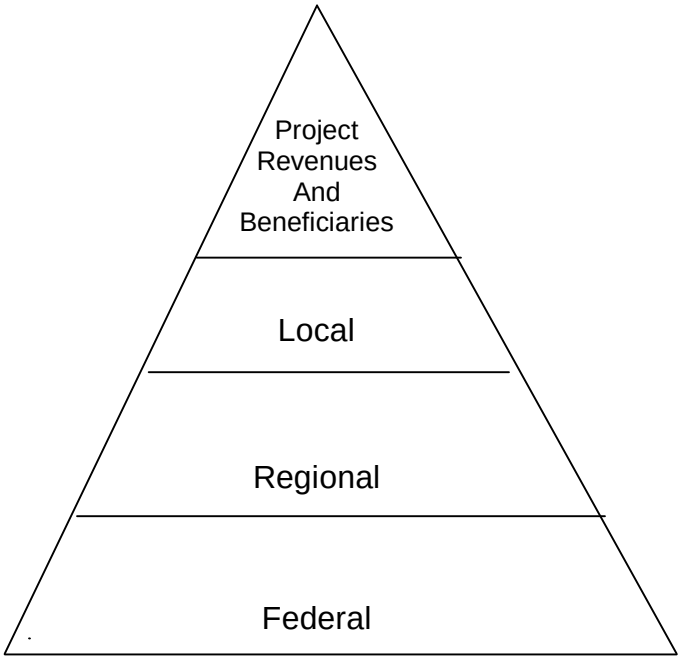
2) Cultivate the decision-makers working in the rooms as well as sitting outside on the scaffolding, since they have different ways to influence the flow of funds to your project. For example, even if the executive branch administrators of funds report that a program is fully subscribed, a congressional or state legislative earmark can create an opportunity.

3) Since the same program may be accessible at different levels of government, the best way to gain access to program funds must be determined on a case-by-case basis. But project sponsors should at least be aware of the restrictions governing the funds they seek to obtain. For example, a private entity is generally not eligible to receive directly transit grants from the Federal Transit Administration. If funds are needed to support transit operations (bus driver salaries), don't seek funds restricted to capital or which don't allow wages as an eligible expense.

4) For defining the project scope, let the potential access to funds influence the precise nature of the project. Some tweaking of its definition and target markets may provide access to a level of the pyramid not otherwise available.

5) The Table of Contents of this guide book can be used as an initial checklist to sort through various funding possibilities, starting at the base of the pyramid with federal sources.

Figure 1



The Transit Project Funding Pyramid
(without the hoses and faucets)

Sources of Additional Information

Throughout this guide there are references to compilations of information and specific program contacts. One promising source is a National Cooperative Highway Research Project (20-24 (13)). The project designed and implemented an innovative transportation finance clearinghouse that is web based. The web site is www.innovativefinance.org. For more information contact the Transportation Research Board's project manager, Chris Hedges at (202) 334-1472.

FEDERAL FUNDING SOURCES

Sources of Federal Revenues

An excellent overview of funds available from the Transportation Efficiency Act for the 21st Century (TEA-21) authorizations is provided in TEA-21 Funding Provisions –A Primer on Transit Funding Provisions of the Transportation Equity Act for the 21st Century and Related Laws, APTA (April 12, 1999). Among the helpful publications from federal funding agencies is Financing Techniques for Public Transit by the Federal Transit Administration (2000) which describes 45 innovative financing transactions valued at $5.7 billion.

Title 49, Chapter 53 of the U.S. Code contains the provisions of federal funding for public transit, while Title 23 speaks to the federal highway program. The Internal Revenue Code of 1986, Subtitle 1, describes the use of federal motor fuel taxes for highway and transit programs. The National Capital Transportation Act separately authorized funding for construction of WMATA's Metrorail system, but the last funds from this source were appropriated in FY 1999.

A motor fuel tax on gasoline of 18.4 cents per gallon (and on diesel fuel of 24.4 cents) yields about 60 percent of the revenues going to the Federal Highway Trust Fund and includes 2.86 cents per gallon for the Mass Transit Account yielding about $4.5 billion per year. Transit receives about $6.8 billion in specific annual appropriations through the budget of the U.S. Department of Transportation, with the remainder from general funds.

Federal Transit Administration

This agency within U.S. DOT was created in 1964 (as the Urban Mass Transit Administration.) It has several regional offices headed by Administrators. For Virginia, the Region III FTA Office is in Philadelphia, and the Administrator is Susan Schruth (telephone (215) 656-710; website www.fta.dot.gov). Most FTA grants are administered by this regional office, but FTA headquarters in Washington, D.C. also has discretionary grant authority (often to support current priorities such as innovations in technology). The current FTA Administrator is Jennifer L. Dorn (telephone (202) 366-4040; website www.fta.dot.gov). Within the headquarters office an official is designated as a liaison to the Washington Metropolitan Area Transit Authority. That person is Doug Kerr at (202) 219-3562.

While FTA is the prime source of transit project funding, the Federal Transit Act as amended from time to time by Congress includes many requirements that must be met to qualify. These include regulations that provide labor protection (Section 13 (c)), require that production of equipment occur primarily in the U.S., that recipients certify that fair competition has occurred, civil

rights have been protected, and the beneficiaries of the project are not inequitably concentrated by income level or other demographic characteristics.

Congress is in the practice of authorizing FTA's program funds every six years (e.g. the Intermodal Surface Transportation Efficiency Act for FY 1992-1997 or ISTEA; Transportation Efficiency Act for the 21st Century or TEA-21, enacted for FY 1998-2003. Each year Congress then enacts appropriations bills, which generally have been less than the authorized levels (but equal to the "guaranteed" levels specified in the authorization bills).

FTA funds are authorized for a set of formula programs and several discretionary programs. The **urbanized area formula programs** (Section 5307) received guaranteed TEA-21 authorizations of $2.3 to $3.4 billion annually, and appropriations are matching these authorized levels. **Non-urbanized area formula grants** (49 USC 5311) which are apportioned to states were authorized funding levels of $134 to $240 million annually. **Elderly Individuals and Individuals with Disabilities** (49 USC 5310) received authorizations of $62 to $90 million annually, with apportionments going to states.

The discretionary programs (Section 5309) have authorized levels of 40 percent of these funds for fixed guideway new starts, 40 percent for fixed guideway modernization and 20 percent for buses and bus facilities.

Sec. 5307 Urbanized Area Formula Grants

FTA's transit formula allocation program uses National Transit Database (NTD) data from two years earlier to provide a share for each urbanized area with bus or rail systems. Different formulas are used for different parts of the formula program. For example, fixed-guideway (rail) systems get about 29 percent of the total and commuter rail systems receive a minimum apportionment of 0.75 percent.

In the Washington metropolitan region, the Washington Metropolitan Area Transit Authority (WMATA) receives and uses almost the entire regional allocation with only the Virginia Railway Express (VRE), the Potomac and Rappahannock Transportation Commission (PRTC) and Maryland's commuter rail system (MARC) receiving smaller shares based on the additional revenue their formula factors contribute to the regional total.

This program requires 20% non-federal match and can be used for capital purposes. Capital is broadly defined to include preventive maintenance, non-fixed route paratransit service, leasing, safety and facilities incorporating community services such as day care and health. Eligible transit enhancements include historic preservation, landscaping, public art, pedestrian/bike access and access for persons with disabilities.

Areas under 200,000 can use formula funds for operations and capital. Within Virginia, $3.8 million of total federal operating funds are allocated for FY '01 to urbanized areas of 200,000 or less population, plus $1.2 million for capital, with $119,000 unallocated.

Sec. 5309 Bus and Bus Facilities Program

For FY '01, $521 million was appropriated, but all was earmarked by Congress. This is one of three major FTA Section 5309 capital programs (with rail modernization and new starts). TEA-21 guaranteed authorized levels vary from $400 to $557 million per year.

Section 5309 Fixed Guideway New Starts and Extensions

This capital program for new transit projects (49 USC 5309 (m) (1) (b)) has stringent rules designed in part to help restrain demand (which far exceeds annual appropriations). Applicants are encouraged to provide "overmatch" – more than the minimum 20 percent. FTA evaluates and ranks applicants each year. By negotiating and executing "full funding grant agreements," applicants are assured of FTA's intentions to continue to provide funds each year according to an approved budget, subject to sufficient appropriations by Congress. Guaranteed authorizations range from $800 million to $1.2 billion annually.

Section 5309 Fixed Guideway Modernization

Rail modernization funds from FTA are provided from this section (49 USC 5309 (m) (1) (A)) based on a multi-tiered formula. WMATA and VRE receive allocations ($4.4 million for FY '01 for VRE). VRE became eligible for its tier after seven years of operation, while WMATA has been receiving funds under Tier 2 since FY 1992. NTD reports filed annually provide the basis for determining each rail system's share. The program requires a 20% non-federal match and can be used for capital purposes only. Guaranteed authorizations range from $800 million to $1.2 billion per year.

FTA Clean Fuels Formula Program

TEA-21 program (49 USC 5308) with $200 million authorized nationwide each year (FY '98-03). For FY '01 $100 million of these funds was appropriated to the FTA bus and bus facilities program and all earmarked by Congress. The remaining $100 million was never appropriated.

Rural Transportation Accessibility Incentive Program

For public and private bus services to become accessible (P.L. 105-178 Section 3038). Criteria for selection include need and commitment. Authorizations in TEA-21 vary from $2 to $7 million per year.

Job Access/Reverse Commute

This new program (authorized in TEA-21) funds capital improvements and offers financial assistance for operations that can boost the productivity of a proposed project by expanding anticipated ridership in a predominantly counter-flow direction. Over the life of TEA-21, guaranteed FTA authorizations vary from $50 to $150 million.

Source 1: For FY 2000 FTA had $75 million appropriated nationwide to subsidize transit service to help welfare recipients get to jobs and improve transit connections between urban areas and suburban job centers. Annual applications are due in May with winners announced by the end of July. FTA's Region III had 18 projects for FY 2000, with eight congressional earmarks and 10 competitive.

WMATA has a $1 million grant, partnering with six regional social service agencies and several transit agencies to develop a clearinghouse for transit access information and provide brokered transportation service contracts, supplements to existing van service to Dulles Airport and fund bus service to Potomac Mills Mall. Funds from Sources 2 and 3 below can be used to match Source 1 funds. The source 1 matching ratio is 50%. Funds can be used for new or expanded service only (no construction).

Source 2: Temporary Assistance for Needy Families (TANF) block grants to states administered by the U.S. Department of Health and Human Services (HHS), total $16.5 billion annually. See Section 401 of the Social Security Act. State maintenance of effort funds are also available.

Source 3: The Welfare to Work formula and competitive grant program administered by the U.S. Department of Labor (DOL) totals $3 billion annually, including formula grants to states and competitive grants to localities. At least 85 percent of state funds are passed through to local Workforce Investment Boards. Additional funding sources can include social services block grants, community services block grants, Medicaid, and Workforce Investment Act.

Large transit systems apply directly to FTA, while smaller systems apply to the Virginia Department of Rail and Public Transportation (VDRPT) which packages applications in priority order and submits them to FTA. The statutory citations for this program are: TEA-21 (Section 3037), Pub. L 105-206, Pub. L

105-200, Title VIII of HR. 3424 Competitive Grants Notice Fed. Reg. 13209 (3/10/2000). Contacts: Elvin Tobin, WMATA (202) 962-1051; US DOT, Office of Research, Demonstration and Innovation (202) 366-4052, http://www.fta.dot.gov/wtw/.

Additional FTA Programs

Among several other FTA programs are those that support planning (49 USC 5303, 5304, 5305 and 5313 (b)), with guaranteed authorizations under TEA-21 of $47.8 to $73 million annually. For support of research (49 USC 5311 (b) (2), 5312, 5313 (a), 5314, 5315 and 5322), guaranteed authorizations vary from $44 to $49 million annually.

Federal Highway Administration Programs

The current federal surface transportation authorizing legislation (TEA-21) provides that many of the programs described next can be transferred to transit uses. Since FY 1992 (first under ISTEA), nearly $5 billion has been transferred and over the life of TEA-21 through FY 2003, over $121 billion of "highway" funds can potentially be used for transit (out of $171 billion authorized).

For transit projects, FHWA has less stringent regulations (e.g. no labor protection although Davis-Bacon wage rates (unionized) are required). However, most "flexed" highway funds will be transferred, first by the request of the state FHWA office to FHWA headquarters in Washington, D.C., over to FTA. But for multi-modal facilities, it is preferable from the standpoint of administrative burden to try to use highway funds directly rather than as highway funds flexed to transit.

National Highway System

TEA-21 allocations (23 USC 103 (b)) are made to each state based on miles of principal arterial, vehicle miles traveled (VMT), diesel fuel used and per capita lane miles, for projects on the NHS and Interstate System (includes connectors to other modes, public bus terminals, and Intelligent Transportation System (ITS) capital).

Interstate System/Maintenance

Within NHS, IM funding (23 USC 119) is allocated based on lane miles of I-routes, VMT, and commercial vehicle contributions to the Highway Trust Fund. States without IM needs can transfer funds to NHS projects.

TEA-21 Minimum Guarantee

TEA-21 (23 USC 105) provides that Virginia should receive at least 90.5 percent of the federal gas tax revenues it collects (up from 80 percent under ISTEA). For FY 2000, Virginia's Commonwealth Transportation Board (CTB) used $4 million of these funds (received as Surface Transportation Program funds) for VRE's rail access fees and again for FY 2001 (supplemented with an additional $800,000). The initial minimum guarantee funds are apportioned by FHWA to STP, and the remainder is split among several other programs, including CMAQ.

Surface Transportation Program (STP)

These funds (23 USC 133) are allocated to states based on lane miles, VMT and contributions to the Highway Trust Fund. Transit capital is eligible as well as ITS and public and private bus terminals. Ten percent goes for safety, 10 percent for enhancements and 50 percent to urbanized areas of greater than 200,000.

Regional Surface Transportation Program

TEA-21 funds are allocated by Virginia's CTB by formula to non-attainment areas. The program requires a 20 percent non-federal match which is provided by the CTB. Allocations including match average about $25 million annually for Hampton Roads from FY '01 through '06; about $11 million for Richmond and about $25 million for Northern Virginia. If spent on transit, funds are "flexed" from FHWA to FTA and recipients must apply through FTA. In Northern Virginia, the Transportation Coordinating Council (TCC) allocates these funds which must be adopted by TPB in its Constrained Long Range Plan (CLRP) and Transportation Improvement Program (TIP) and by CTB in its State Transportation Improvement Program (STIP).

STP Enhancements

At least 10 percent of each state's STP funds must be set aside for enhancements. Other federal funds can be used as match. Enhancements can be stand-alone or added to existing projects. Intermodality must be included in some way. The enhancement should increase the value of a project or improve its aesthetics with a "quality of life" benefit. It should not be common practice. There are 11 categories, ranging from bike and pedestrian facilities through scenic or historic easements, landscaping, rehabilitation of historic facilities and preservation of abandoned railroad corridors. For FY 2001, CTB received 220 applications from Virginia localities totaling $79.1 million and awarded 118 for $19.4 million, using a statewide, competitive process. For example, Fairfax

County received $75,000 toward purchase and installation of 30 bus shelters costing $300,000.

Congestion Mitigation and Air Quality

This program (23 USC 149) is described in more detail below under state allocated funds. FHWA allocates these funds by formula through states to regions that have failed to meet air quality standards. Virginia is receiving about $40 million annually which regions use for projects that will help improve air quality.

STP Safety Program

At least 10 percent of each state's STP funds must be set aside for safety, including rail grade crossing, bikes and hazard elimination at public transit facilities.

State and Community Safety Grants

A formula grant program of which at least 40 percent must be spent by each state on local traffic safety problems.

Seat Belt Incentive Grants

States with savings on medical costs based on seat belt use are eligible for grants toward any Title 23 project (which can be flexed to transit).

Incentive Grants for Alcohol Programs

States with active driving under the influence (DUI) laws are eligible for incentive grants for any eligible project under Title 23 of the U.S. Code.

Transportation and Community and System Preservation (TCSP)

For planning and implementation of ideas and projects to promote efficiency, land use/transportation interactions and reduce the need for building more highways. Localities, transit agencies, metropolitan planning organizations (MPO's) and states apply to the FHWA state office which submits them to FHWA headquarters for award.

In FY 2000, $35 million was appropriated (the authorization was only $25 million). About $24 million of the $35 million was earmarked. There were 292 applications for the remaining $11 million. Application deadlines are at the end of January each year. The web site is www.fhwa.dot.gov/tcsp.
Contact: Felicia Young at (202) 366-1263.

Value Pricing

Section 1216 (a) of TEA-21 provided a contract authority of $51 million for demonstrations of pricing. This replaced ISTEA's Congestion Pricing Pilot program. Fifteen state and local projects are being considered.

Demonstration, Priority and Special Interest Projects

The Highway Title of TEA-21 contains 1,850 earmarks for specific projects costing $9.4 billion over six years. Additional earmarks appear each year in appropriations bills.

511 ITS Support Program

FHWA has published a request for applications from public agencies for conversion of existing traveler information telephone numbers to a common 511 national access number. The Federal Communications Commission (FCC) has assigned 511 for that purpose. The program will last three years and contain up to $5 million. The target individual grant will be $50,000, with a 20 percent cash or in-kind non-federal match required. Applications require information on regional coordination, a technical plan and a financial plan. Statutory reference: Fed. Reg. Volume 65 No. 154 (August 9, 2000) @ 48797-99 Sec. 50001 (a) (5). Contact: www.its.dot.gov/511/511.htm.

Intelligent Transportation System Deployment

Section 5208 of TEA-21 provided $679 million of contract authority for ITS.

ITS Peer to Peer Program

Jointly administered with FTA, 120 ITS professionals are available for free technical consulting on all aspects of ITS for any public organization/agency.

Contact: Michael Baker, Jr. Inc.
180 Admiral Cochrane Drive, Suite 210
Annapolis, MD 21401
Phone: 1-888-700-7337
Fax: 1-410-571-6400
E-mail: dotpeer@erols.com

Transportation Infrastructure Finance and Innovation Act (TIFIA)

Created by Section 1501-1504 of TEA-21 (Pub.L.105-178) public and private sponsors of highway, transit and other surface transportation projects can receive secured direct loans, lines of credit or loan guarantees. Up to a third of the project cost can be provided. For FY 2000, $81 million was authorized to provide $1.7 billion of credit enhancements for projects with total costs of $6.5

billion. For FY 2001 there was $110 million of budget authority plus any unused authority from FY 2000, expected to provide $2.2 billion of federal credit. Credit from $1.8 to $2.3 billion annually should be available through FY 2003.

Applications are selected competitively using eight selection criteria, such as economic benefits, leveraging private capital and promoting new technology. Projects must be at least $100 million (or $30 million for ITS) and have user charges or dedicated revenues. Among the projects selected to date is a $600 million loan guarantee for WMATA. WMATA anticipates savings of $15 to $20 million compared to commercial credit.

After creation of the program there was an extended period of uncertainty pending completion of rules that were eventually published on July 19, 2000 in the Federal Register #44941. Further information is available from FHWA's Paul Marx at 202/366-1734 or on the website at http://tifia.fhwa.dot.gov. A new joint program office has been created within FHWA. Contact Bryan Grote at (202) 366-9656.

State Infrastructure Banks

Four states (CA, FL, MO and RI) are currently designated for a pilot federal program in which they have capitalized banks with federal-aid highway funds from FY 1998-03 to provide revolving credit for transportation projects. They can finance projects using loans, guarantees, interest-rate buy-downs, or other techniques. This program was established by Section 1511 of TEA-21. There were 34 other state infrastructure banks authorized (including Virginia), but these can't use TEA-21 funds for capitalization

GARVEES/FRANS

These grant anticipation revenue vehicles/federal revenue anticipation notes were created by Section 122 of Title 23 in the 1995 National Highway Designation Act and allow reimbursement of up to 80 percent of debt service using federal aid. For GARVEES issued for a short term, the primary risk to lenders is the failure of Congress to appropriate funds authorized in TEA-21. For longer term GARVEES, the additional risk exists that Congress will not reauthorize the federal aid program funding debt service. Lenders will require evidence of greater coverage through secondary revenue sources.

These federal grant anticipation notes have been issued in several states (OH, MA, NM and NJ) with several others exploring such issues. Governor Gilmore made GARVEES a centerpiece of his Virginia Transportation Act of 2000, with as much as $590 million authorized. A possible shortcoming, from the point of view of project beneficiaries, is that Virginia's policy requires districts receiving these funds to repay them from future allocations. Since VTA 2000

was sold as a source of “new” revenue, this realization has not been popular with local transportation officials.

Section 129 Loans

Section 129 loans (created by Section 1012 of ISTEA) also provide for the use of federal aid to repay loans.

Federal Railroad Administration

This agency within USDOT has fewer grant and loan programs than does FTA, but its focus on safety and promotion of high speed rail does offer some funding opportunities. The Administrator is Allan Rutter (telephone (202) 493-6014, website www.fra.dot.gov)

Next Generation High Speed Rail Development

This program continues the Swift Rail Development Act of 1994 with Section 7201 of TEA-21 to build incrementally high-speed rail corridors. The program funds rail research, development and technology to foster demonstrations of high-speed service. FRA will pay up to 50 percent of planning and 100 percent of technology improvements. Grantees can include private firms and right-of-way costs are eligible. The FY 2000 authorization was $35 million but only $27.2 million was appropriated in FY 2000. The appropriations bill directed funding to train control, non-electric locomotives, grade crossings and track/structures, with several earmarks. Contact Bob McCown at (202) 632-3854.

High Speed Rail Corridor Assistance

This program funds capital improvements in designated corridors, including grade crossings. It was created by Section 1103 of TEA-21. Section 1103 (c) provides $5.25 million for grade crossing improvements, with another $15 million of general funds authorized each year. (This additional amount has not been appropriated). All of the FY 2000 appropriations were earmarked by Congress.

First corridors are designated to be eligible and then funding is provided in response to state applications. Corridor operations must exceed 90 miles per hour. Among the eight designated corridors is the Southeast (Washington D.C.–Richmond-Newport News-Raleigh-Greensboro-Charlotte).

Contact John Cikota at (202) 493-6364 or Gareth Rosenau at (202) 493-6054.

Maglev

Section 1218 of TEA-21 provided $60 million of contract authority plus $950 million of Highway Trust Fund authorizations for competitively awarded Maglev demonstrations. Project grants are for pre-construction planning to states (or agencies designated by states) for deployment of systems capable of safe operation at speeds exceeding 240 miles per hour. Baltimore-Washington is one such corridor. For FY 2000, $20 million was available and $25 million for FY 2001. The federal share cannot exceed two-thirds, but CMAQ and STP funds can be used for the remaining share. Contact: Neil Moyer, FRA (202/493-6365).

Amtrak Bonding Bill

Amtrak's future is being debated. A legislative proposal to help it raise funds for its capital program has such positive implications for Virginia, this potential funding source is described here, even though it is unlike the other programs listed here (since it is only a proposal). FRA has helped VRE and VDRPT produce programs of projects for the Washington-Richmond corridor, which Amtrak shares. The projects are designed to facilitate high-speed rail service but will also benefit existing operations of VRE and Amtrak. Bills are pending in Congress to provide Amtrak $12 billion in bonding authority to meet its capital needs. A 20 percent non-federal match is needed, with the interest earnings used to repay the principal when due. In the meantime, tax write-offs are provided to investors in lieu of interest. For Virginia, this means the $65 million already identified for high-speed rail in Virginia's six-year Transportation Development Program (TDP) could leverage $325 million in total investments in the Washington-Richmond corridor. (Richmond-Newport News–Raleigh-Greensboro-Charlotte). Private and public grade crossings are eligible with a 100 percent federal share.

Other pending bills go far beyond the assistance levels contained in the above proposal. House Transportation and Infrastructure Committee Chairman Don Young has proposed a $71 billion funding program for railroads, including help for Amtrak and VRE's corridor via the states.

Railroad Rehabilitation and Improvement Financing Program

What appeared to be a promising source of loans and loan guarantees has not yet been effectively implemented. Created by Section 7203 of TEA-21, it authorized $3.5 billion for direct loans and loan guarantees to state and local governments, government-sponsored authorities and corporations, railroads and related joint ventures. Of the $3.5 billion, $1 billion must go for non-Class I railroads. It was enacted to assist grantees to acquire, improve, rehabilitate, develop or establish new passenger and commuter railroads, intermodal transfer and rail freight facilities. It requires collateral, analysis of present and future demand, demonstrated benefits, safety enhancements and maintenance of new

or improved equipment, as well as environmental analysis and third-party financial evaluation. Terms of the loans are up to 25 years, with no minimum or maximum size. A credit risk premium (perhaps five percent) must be included but either Congress or the applicant can pay.

Congress has not appropriated funds to provide these loans and this program has been delayed. Contact Jo Ann McGowan at (202) 493-6390.

Light Density Rail Line Pilot

This is a pilot program for light rail projects with a report due by March, 2003. Section 7202 of TEA-21 authorized $105 million of general funds.

Operation Lifesaver

This program promotes rail/highway grade crossing safety with funding from states as well as FRA. Its office is in Alexandria, VA. Section 1103 (c) of TEA-21 authorizes $500,000 per year of federal funds.

Sources Other Than U.S. DOT

As described below, many federal agencies have grant and loan programs that include transportation facilities and services as eligible components. In some cases the programs are actually designed to help achieve mutual agency goals (e.g. ISTEA and TEA-21 transportation funding programs are designed to help achieve clean air mandates of the Environmental Protection Agency). Another example is the Job Access and Reverse Commute initiatives of U.S. DOT and the U.S. Department of Health and Human Services in which HHS funds can be used to match DOT funds to support new reverse commute and other transit initiatives to improve access to jobs.

Even if the programs described below cannot be used to help fund a particular transit capital improvement, the constituents that do use such funds can be approached to join local coalitions that can boost community support for transit in general and a particular transit facility in particular.

Compilations of Information

Several sources of information are available that describe these less traditional federal sources of funding for transit projects. These include:

- Community Transportation Resource Guide, Community Transportation Association of America (2000), available on the web at www.ctaa.org/ct/resource/funding_resources.shstml.

- Building Mobility Partnerships – Opportunities for Federal Funding, Community Transportation Association for U.S. Department of Health and Human Services (2000).

- Planning Guidelines for Coordinated State and Local Specialized Transportation Services, Coordinating Council on Access and Mobility/U.S. Department of Health and Human Services/USDOT (Draft: July 26, 2000).

- Catalog of Federal Domestic Assistance (Updated twice each year) at www.cfda.gov.

Department of Agriculture

Several rural development programs include public works as eligible projects. These include grants, loans and guarantees, including the Rural Community Advancement Program (RCAP) funded at over $700 million for FY 2000 and the Rural Development Loan Fund ($38.3 million). See www.rurdev.usda.gov. Some of these funds are provided to the Community Transportation Association of America for allocation to rural transit development projects. Contact Patrick Kellogg (202/661-0210).

Another DOA program provides small grants of $25,000 for demonstrating bio-diesel technology.

Department of Commerce

The Economic Development Administration (EDA) had FY 2000 funding of almost $400 million for grants, including transportation facilities, in economically distressed areas. See www.doc.gov/eda.

Department of Defense

A program of the Office of Economic Adjustment covers base realignment and closure assistance, including transportation. Total FY 2000 funding was almost $700 million. See emissary.acq.osd.mil/oea/home.nsf for a listing of all military bases.

Department of Energy

The Clean Cities Research Demonstration and Development Program is funded at $3 million as of FY 2000 for grants to pursue applied research involving energy efficiency. Transportation is one of seven priority areas. Only state energy and research organizations are eligible.

The department's Oil Overcharge Settlement Program provided settlement funds to the states. NVTC used funds from this program to help purchase hybrid-electric buses. No match is required. USDOE also has grants awarded competitively to states for special projects, including alternative fuel vehicles.

Department of Health and Human Services

Many programs provide funding for transportation services, including Temporary Assistance for Needy Families (TANF) funded at $16.6 billion in FY 2000 and distributed to states by formula; Head Start ($5.3 billion); and Community Services Block Grants ($510 million).

Social Services Block Grants ($1.7 billion) and Senior Centers ($310 million) also provide grants that can be used for transportation facilities. See www.acf.dhhs.gov/programs.

Department of Housing and Urban Development

Transportation for persons with disabilities and elderly persons can be funded from grant programs in the Office of Housing. The Office of Community Planning and Development manages $4.8 billion of Community Development Block Grants, most of which are allocated by formula to cities, states and urban counties. Section 108 loan guarantees are also available. See www.hud.gov/cpd/cdbg.html.

HUD programs for Urban Empowerment Zones and Enterprise Communities (FY 2000 funding of $55 million) have also been used for transportation facilities in distressed areas. Such a designation also provides preference to receive grants from other federal grant programs. See www.hud.gov/cpd/ezec/ezeclist.html.

Department of Justice

Weed and Seed programs ($33.5 million as of FY 2000) seek to combat violent crime via grants that can include transportation facilities. Contact Stephen Rickman (202) 616-1159 and www.ojp.usdoj.gov/eaws.htm

Settlement actions with various industries can generate sources of transit project funding, including oil overcharges (administered by the U.S. Department of Energy) and more recently the pending settlements with the tobacco industry that will accrue to states and can potentially be used for transit at state discretion. In Virginia, for example, such tobacco settlement funds were proposed for use for transit projects after being "securitized" (a future stream of benefits sold for a current lump sum). The Virginia General Assembly did not enact the Governor's proposal, however.

Department of Labor

In addition to the Welfare to Work formula and competitive grant programs mentioned above, DOL has labor-management cooperation grants to improve labor relations at unionized worksites. Contact: Peter Regner, Federal Mediation and Conciliation Service (202/606-8181).

Environmental Protection Agency

Environmental Protection State and Tribal Assistance Grants, with FY 2000 funding of $885 million, can be used to improve transportation facilities. Only states or tribal agencies are eligible but are encouraged to form partnerships. See www.epa-gov/p2. Other grants for air pollution control provide up to 60 percent of project costs for prevention and control of air pollution.

EPA's Heavy Duty Diesel Engine Voluntary Retrofit Program provides $50,000 grants for diesel exhaust enhancements. WMATA applied for a FY 2001 grant from this program. A related program uses settlement funds from Cummins Engine as part of an EPA consent decree.

EPA's Clean Air Transportation Communities program provided 10 grants for FY 2001 to reduce transportation emissions, totaling $1.27 million. An example is a grant of $150,000 to Owings Mills, MD for transit-oriented development. Contact: Cathy Milbourn at 202/564-7824 and www.epa.gov.

Of greatest importance is the link between EPA's definition and enforcement of federal air quality standards and the transportation funding in ISTEA and TEA-21 that is designed to provide regions that fail to meet the standards a financial means with which to comply. On the other hand, if regions do not meet their clean air targets, they risk a loss of all federal transportation funding (as occurred in Atlanta).

Federal Coordinating Council on Access and Mobility

In its Guidelines for Coordinated State and Local Specialized Transportation Services released on August 1, 2000, the Council (which is composed of representatives of USDOT and the U.S. Department of Health and Human Services) describes 11 DOT and 12 HHS programs worth $10 billion in funding to help meet transportation needs.

Federal Emergency Management Agency

FEMA's public assistance grants ($2.8 billion in FY 2000) can replace damaged transit vehicles or facilities. See www.fema.gov/r-n-r/pa007.htm. Also, a $25 million Section 83.551 Project Impact Grant program can pay for transportation facilities that help mitigate disasters before they occur. See www.fema-gov/impact.

Following the September 11th terrorist attack, Congress has appropriated $40 billion for disaster recovery, with half to be used in New York, Pennsylvania and Virginia. NVTC and its transit systems are working with FEMA officials to obtain reimbursement for emergency transit services provided during the immediate aftermath and the succeeding weeks of traffic gridlock as recovery continues.

STATE FUNDING SOURCES

Virginia Information

The Virginia Resource Access System is an on-line searchable catalog of financial and technical assistance programs. See www.cns.state.va.us/dhcd/vras.cfm. Examples include the Virginia Recreational Trails Fund Program administered by the Virginia Department of Conservation and Recreation. Total funds available are about $1 million, with average grants of about $50,000 requiring a 20 percent non-state match (e.g. 15 percent federal/5 percent local).

Sources of State Revenues

Nationwide, almost half of total state revenues (as of 1999) comes from sales taxes (33.2% general and 14.8% selective). Another 40 percent comes from income taxes (34.5% personal and 6.1% corporate).

In Virginia, transportation revenues are derived approximately as follows (total of $2.6 billion as of FY 1999):

- Fuel/road taxes = 28%
- Vehicle/aviation sales and rental = 16%
- Vehicle registrations = 10%
- Retail sales tax = 13%
- Federal funds = 24%
- Interest = 1%
- General Funds = 2%
- Other = 6%

Major Virginia transportation revenue sources include a gas tax of 17.7 cents per gallon, 3% vehicle sales and use tax, $26.50 license fee and ½ cent retail sales tax.

For Virginia highways, most revenues are held in the Highway Maintenance and Operations Fund (HMOF) and the Transportation Trust Fund (TTF). The HMOF funds maintenance and (if any funds are available) construction while the TTF funds construction. TTF funds, after off the top allocations and match for the federal Interstate Highway program are used as follows:

- 5.7% to unpaved secondary roads
- 40% to primary roads
- 30% to secondary roads
- 30% to urban system

These funds are further allocated by construction district and locality. The allocation factors include:

- Primary system = 5% needs, 70% vehicle miles traveled, 25% lane miles
- Secondary System= 80% population, 20% land area
- Urban System = 100% population

The Virginia Commonwealth Transportation Board (CTB) selects the Interstate and primary projects, county boards select secondary projects and the CTB approves urban system projects at the request of city/town councils. The urban system funds can be used for transit capital.

Priority Transportation Fund

Established by the 2000 General Assembly in the Virginia Transportation Act of 2000 (VTA 2000), various sources of funds are used. Transit projects costing over $242 million are listed in CTB's FY 01-06 TDP. The Northern Virginia District has $190,225,000 (78.4 percent). These transit projects include the Dulles Corridor ($75 million) WMATA rolling stock ($45 million), WMATA parking ($26.0 million), VRE express service ($10 million) and high-speed rail ($29.2 million). High-speed rail in other districts ($18.2 million in Fredericksburg and $18.2 million in Richmond) also benefit the Virginia Railway Express (VRE).

The use of general funds for transit projects has proven to be a double-edged sword. At the close of FY 2001, the Department of Planning and Budget has swept up all such general funds, regardless of whether they are obligated by state agencies. These funds may be reallocated to other uses within the proposed FY 2003 budget. NVTC has $4.6 million of such funds at risk, even though it has a signed contract with the commonwealth and has in turn executed contracts with vendors for such items as 350 SmarTrip-compatible fareboxes and related garage revenue collection systems. The lesson here is for grant recipients to do everything possible to move state funds into their own project bank accounts (which is difficult since most state transit program funds are reimbursable and require local recipients to pay bills for subsequent repayment by the state).

State Revenue Sharing

As was true at the federal level, state programs from non-transportation agencies can be used for transit capital. For example, formula allocated revenue sharing is a 50/50 program with local governments for projects costing up to $1 million per year.

Contrasts Between State Funding of Highways and Transit

In Virginia, highway projects have several advantages over transit in competing for state funding:

Item	Highways	Transit
Dedicated sources for non-federal match	Dedicated state sources (e.g. gas tax)	None
Annual maintenance and operating costs	Paid fully by state and therefore not an issue in project selection	Largely local responsibility
Federal funds to support operations	Some	None in urbanized areas above 200,000.
Federal matching ratios	80 to 90%	Maximum of 80% and often much lower for big projects
State matching ratio	98 to 100%	Statutory 80% for operations, 80-95% for capital, but actual ratios are much lower due to lack of funding

Accordingly, the Virginia Transit Association and others have established as a top priority desired legislative changes to create more balance in the level of state support for highways and transit. In the 2001 General Assembly, for example, HB 2224 adjusted state matching ratios for transit programs so that for FY 2003, the state may provide 90 percent for transit operations (if sufficient funds are appropriated). This represents an increase from ratios as low as 50 percent (as of FY 2001) for transit administrative costs.

Programs Administered by the Virginia Department of Rail and Public Transportation

This small executive branch department began as a division within VDOT before it was established as an independent department under the Secretary of Transportation in 1992. Its programs are funded by a combination of state trust fund revenues established by statute, general funds, and discretionary federal STP and other federal formula grants awarded by the CTB.

In Northern Virginia, NVTC coordinates applications for the two biggest state transit assistance programs (formula and capital) for five of its member jurisdictions (all except Loudoun County). Jurisdictions apply directly for several of the other programs, including ridesharing, Transportation Efficiency Improvement Fund (TEIF), demonstrations and intern support.

Commonwealth Transit Assistance Programs

For FY '01 transit received $101,825,200 from the Transportation Trust Fund (14.7 percent plus interest of $1,475,000). Another $3.4 million was added to reflect a previous state revenue surplus and $800,000 deducted for the paratransit program. With other adjustments the total is $105 million. Of this, 73.5 percent goes to the transit formula program, 25.0 percent to the transit capital program and 1.5 percent for special projects.

FY '01 state funds for transit programs also include $1,955,000 for TEIF and $20,585,038 of general funds for the statewide vehicle and equipment program (SVEP). Federal funds include $14,288,000 of statewide STP for SVEP, $5.0 million of FTA Section 5307, $5.0 million of FTA Section 5311 and RTAP, $1.1 million of FTA Section 5303, $236,432 of FTA Section 5313 (b), and $1.6 million of FTA Section 5310.

Thus, total transit funds controlled by VDRPT are $126,198,000, plus $27,289,000 of federal funds allocated by the state.

Not included in these totals is $808,000 of funds taken off the top of TTF for bus fare buy-downs in Northern Virginia.

Universal Transportation Access Initiative

Governor Gilmore announced on July 18, 2000 an initiative to help relieve traffic congestion in the "northern part of Virginia." A total of $14.4 million, was provided from several sources for a telework incentive program and the Universal Transportation Access Initiative. Other parts of the program include an interactive ridesharing and kiosk initiative, employer shuttle initiative, mobile

commuter store initiative and VRE initiative [leasing 10 MARC rail cars ($140,000); location study for joint VRE/Manassas parking garage ($250,000); and temporary parking in Manassas Park ($100,000)].

The Universal Transportation Access Initiative also will expand WMATA's SmarTrip farecards to Northern Virginia's local bus systems and VRE. VDRPT is providing over $5 million for this purpose to NVTC. Both the VRE funding and NVTC's SmarTrip purchase are now at risk, as explained above.

Statewide Vehicle and Equipment Program (SVEP)

Created by the General Assembly to begin in FY '01, this program is funded with $20,585,038 of general funds and $14,288,000 of federal (SSTP) funds to total $34,873,038. Transit projects funded from this source include local bus systems asking for less than $5 million each year for capital projects, with an 80 percent state share. Additional projects from properties with larger capital needs were funded from the traditional state transit capital program at a state match of only 56 percent in FY 2001 (and 41 percent in FY 2002), versus a statutory target of 95 percent.

For FY '02, $29 million of combined state/federal funds are expected to be available for allocation by CTB.

For FY '01 allocations, NVTC received $18.2 million to cover 56 percent of non-federal capital project costs of WMATA and another $2.9 million for 80 percent of local bus capital costs. If NVTC had received the maximum allowed by state statute (95 percent), another $12.7 and $0.5 million would have been provided, respectively. Statewide these amounts are $18.5 million and $3.9 million, respectively. These "shortfalls" of state funds are described further below. Unfortunately, this program has not been authorized beyond the FY '01-02 biennium.

Transit Formula Assistance

Each transit system reports to VDRPT its audited costs (fuel, tires, maintenance and administration—labor costs are not eligible) for the most recent fiscal year. This determines each system's share of available funds. Only eligible costs (net of fare revenues) can be used to qualify for grants. For FY 2002, the maximum share of fuel, tires and maintenance costs is 80 percent; the maximum share of administrative costs is also 80 percent. Both will rise to 90% in FY 2003. For FY 2001, $76.8 million of state funds were provided. Eligibility for FTM and administrative assistance statewide is $106.8 million. Consequently the shortfall is $30 million. For NVTC the shortfall is $9 million.

In FY 2002, NVTC's shortfall is $30.3 million with $24 million of aid received. These shortfalls are shown in Figure 2. For further details about transit assistance to NVTC for WMATA, VRE and Northern Virginia's local bus systems, refer to NVTC's annual handbook, published each January and available at www.cns.state.va.us/nvtc.

Figure 2

FY 2002 STATE TRANSIT ASSISTANCE FOR NVTC SYSTEMS WITH FY 2001 COMPARISONS

	FY 2002		FY 2001		Difference	FY 2002 Shortfall
CAPITAL						
WMATA	$15,037,658	@41%	$18,167,737	@56%	$(3,130,079)	$(19,805,695)
Local	1,795,467	@80%	2,855,915	@80%	(1,060,448)	(336,650)
	4,171,717	@41%	-		4,171,717	(5,494,457)
Subtotal	21,004,842		21,023,652		(18,810)	(25,636,803)
VRE	3,568,432	@41%	5,297,971	@56%	(1,729,539)	(4,699,886)
Subtotal	24,573,274		26,321,623		(1,748,349)	(30,336,689)
FTM/ADMIN						
WMATA/Local	48,770,417		49,240,391		(469,974)	(32,080,283)
VRE	5,281,332		4,638,027		643,305	(1,265,306)
Subtotal	54,051,749		53,878,418		173,331	(33,345,589)
COMBINED CAPITAL / FTM/ADMIN						
WMATA/Local	69,775,259		70,264,043		(488,784)	(57,717,086)
VRE	8,849,764		9,935,998		(1,086,234)	(5,965,192)
TOTAL	$78,625,023		$80,200,041		$(1,575,018)	$(63,682,278)

Transit Capital Assistance

For FY 2001, NVTC received a grant of $18.2 million for WMATA and $2.9 million for local bus systems at a state matching ratio of 56 percent for WMATA and 80 percent for local buses. NVTC received another $5.4 million for VRE (at 56 percent) plus $4.8 million for track leases from another source. See Figure 2 for details.

VDRPT's capital assistance program has a statutory matching ratio of 95 percent of non-federal costs, but since eligible projects far exceed appropriated funds, the actual matching ratio is typically much lower. For FY 2002, the ratio is 41 percent. Systems with large capital projects ($5 million or more) receive funding from this program (including WMATA, VRE and the Fairfax Connector) while smaller systems are funded from the Statewide Vehicle and Equipment Program at an 80 percent match.

Technical Assistance

For FY 2001, $216,720 in federal funds and $27,090 in state funds covered 90 percent of the cost of seven projects statewide (none in Northern Virginia). One example is a grant to the Virginia Transit Association for over $60,000 for a transit training and safety program.

VDRPT Intern Program

For FY 2001, $200,157 was allocated to cover 95 percent of the costs of interns at seven agencies, including the Fairfax Connector, Alexandria DASH and PRTC.

State Capital Assistance for Paratransit

With $800,000 taken off the top of transit's allocation from the TTF, grants were provided by the CTB in FY '01 for vehicles at matching ratios of 95 percent. Two Northern Virginia agencies received over $144,000.

Special Projects/Demonstrations

VDRPT pays up to 95 percent of eligible costs. For FY 2001, $1,134,465 of state funds were used to support $1,461,674 of project costs (averaging about 78 percent). Three Northern Virginia projects received funding, including $152,000 to NVTC for a marketing project.

FTA Section 5303

For FY ’01, CTB allocated $1.1 million of FY ’00 federal funds and $138,000 of state funds to Metropolitan Planning Organizations around the commonwealth, including $475,200 to cover 90 percent of costs for eligible planning projects.

FTA Section 5310

For FY ’01, CTB allocated $1.5 million of FY ’00 FTA funds to cover 80 percent of the costs of grants for vehicles to private, non-profit agencies providing transportation for the elderly and persons with disabilities. Only one agency in Northern Virginia received funding totaling $26,400 for one center aisle van.

FTA Section 5311 Program

For FY ’01, $4.6 million of federal FY ’00 operating funds were allocated by Virginia’s CTB to small/rural transit systems, including $508,802 to the Loudoun County Transportation Association. Another $360,000 was devoted to statewide Rural Transportation Assistance Programs (RTAP).

FTA Section 5313 (b)

For FY ’01, CTB allocated $216,720 of FY ’00 FTA funds together with $27,090 of state funds to cover 90 percent of rural and small urban projects, including VTA’s transit training and safety program.

Rail Safety Improvement Program

VDRPT will contribute $10.8 million from its Rail Safety Improvement funds for grade separation of tracks and roads in downtown Manassas. The first phase is $4 million and the second (to be bid in 2006) is for $31.6 million. The Norfolk Southern Railway (NS) will provide up to $4 million. Manassas and VDOT will provide the balance.

State Rail/Highway Crossing (Section 130)

This program uses part of federal safety set-aside funds. Bicycle safety at rail crossings is allowed. For FY 2001, $7.1 million was allocated by CTB statewide, with $960,000 remaining unallocated. Northern Virginia projects received $2.2 million.

High Speed Rail Corridor Safety Programs

The Section 130 program provided $450,000 in FY 2001, including $200,000 in the Northern Virginia District. The Section 1103 program provided $472,000 statewide in FY 2001 (none in Northern Virginia).

Virginia High Speed Rail Program

The 2000 General Assembly provided funding which, for FY 2001, will be distributed by VDOT construction district in the Richmond-Washington D.C. corridor. $18.2 million will go to Richmond, $18.2 million to Fredericksburg and $29.2 to Northern Virginia for a total of $65.6 million over six years. These funds will be spent by VDRPT for projects included in the corridor plan. The priorities are being discussed with CSXT, VRE, FRA, Amtrak and others.

Each year VDRPT applies to FRA for grants from the High Speed Rail Corridor Assistance Program (Section 1103) and has received $400-500,000 annually, with $750,000 for FY 2001. Contact is George Conner at 804/786-1052.

Transportation Efficiency Improvement Fund (TEIF)

For FY '01, $2,893,230 of project costs have been allocated, including $1,954,862 statewide, plus $171,722 of state Transportation Demand Management (TDM) funds. In Northern Virginia, five local ridesharing programs receive $662,816, with Arlington receiving another $118,000 for its Transportation Partners Incentive Fund and the Potomac and Rappahannock Transportation Commission (PRTC) receiving $180,000 to expand OmniLink's hours. Altogether the Northern Virginia District received almost $1 million, or 45 percent of the total available.

The program is jointly administered by VDOT and VDRPT. The VDRPT contact is Gus Robey at 804/786-7968.

Programs Administered Primarily by the Virginia Department of Transportation

The Virginia Transportation Development Plan (VTDP), which covers a six-year period and is updated annually is the Bible of state transportation funding sources. The Commonwealth Transportation Board seeks public input at hearings (held last in July, 2001) and approves transit formula and capital projects each June and the rest of the program in September each year. The VTDP lists the status and source of funding for all approved projects.

Many federal funding sources are used from FHWA, including Appalachian Development, Defense Access, Bridge Replacement and Rehabilitation, Interstate and Interstate Maintenance, among others described below. State sources include toll facilities, general funds, trust funds and bonds.

Total funding in the plan for FY 2001 is $2.2 billion, with over $10.3 billion projected for the entire six years.

Northern Virginia Transportation District Bonds

Since 1993 the Virginia General Assembly has authorized a series of bonds to support transportation projects in Northern Virginia using local revenue sources to help cover debt service (e.g. recordation fees, telecommunications fees). Transit projects have been included (about $100 million for WMATA stations and railcars and smaller amounts for local station improvements). Currently $16 million in bonds approved by the 1999 General Assembly for Metrorail railcars were sold at the end of September, 2001. (See Figure 3).

The Virginia Treasury Board issues the bonds at the request of the CTB. NVTC receives the WMATA-related bond proceeds from VDOT and allocates the funds among its members using its approved formula. NVTC then holds the funds in trust until instructed by each locality to release the funds for eligible WMATA billings.

The CTB is the second largest issuer of state debt in Virginia with almost $1 billion outstanding. Virginia enjoys the top bond rating, as do several Northern Virginia jurisdictions. The commonwealth's debt capacity model, which is used as a guide to how much debt can be authorized by the General Assembly, uses a maximum target of tax-supported debt service of no more than five percent of revenues over a 10-year horizon. This very conservative model (localities generally use a 10 percent target) currently shows excess capacity for state debt of $1.4 billion over the FY 2001-02 biennium. The actual debt service ratio is closer to three percent than the target of five percent. This is true even though all authorized debt issues are included, whether or not they have actually been issued. Refer to Figure 4.

Figure 3

STATE ISSUED BONDS FOR NORTHERN VIRGINIA TRANSPORTATION DISTRICT TRANSIT PROJECTS

General Assembly Approved	VDOT Issues Bonds	Amount for Transit	Examples of Transit Projects
1999	2001	$ 16,000,000	Metro Rail Cars
		4,200,000	King Street Access
		6,000,000	Dulles Corridor Enhanced Transit
		6,200,000	Ballston Station Improvements
	Total 01	$ 32,400,000	
1998	1999	13,300,000	Metro Capital Improvements
		4,400,000	King Street Platform
	Total 99	$ 17,700,000	
1994	1996	20,328,674	Metro Capital Improvements
1994	1995	19,678,161	Metro Capital Improvements
1993	1993	45,593,165	Metro Capital Improvements
	Total 93-96	$ 85,600,000	
Total		$ 135,700,000	

The primary source of debt service on the 1996 and prior bond issues is from local recordation funds. For the 1999 and 2001 bond issues, debt service is funded approximately 60 percent from local funds, as shown (with dollars in millions):

	1999	2000	2001	2002
Recordation (local)	17.0	17.0	17.0	17.0
ROW (local)	3.2	3.8	4.4	5.4
Contract (local)	0.8	0.8	0.8	0.8
State General Funds	2.1	3.2	11.2	11.2
State HMOF Surplus	-	4.8	3.5	3.5
	$ 23.1	$ 29.6	$ 36.9	$ 37.9
Local Funds:				
Recordation	17.0	17.0	17.0	17.0
ROW fees	3.2	3.8	4.4	5.4
Local contract amounts	0.8	0.8	0.8	0.8
	$ 21.0	$ 21.6	$ 22.2	$ 23.2
Percent Local Funds:	91%	73%	60%	61%

Figure 4

Comparisons of Target Debt Ratios and Bond Ratings of Northern Virginia Jurisdictions and the Commonwealth of Virginia.

Jurisdiction	Target Ratio	Bond Ratings
Loudoun County	10%	Aa1 Moody AA+ S&P
City of Alexandria	1.10% Fair Market Value of Real Property 2.25% Debt per capita as percentage of per capita income 8% Net debt service to general government expenditure	Aaa Moody AAA S&P
City of Fairfax	10%	Aa1 Moody AA+ S&P
Fairfax County	10%	AAA S&P
Falls Church	5% General funds from net asset value of taxable property	AA2 Moody A+ S&P
Arlington County	8% (actual)	Aaa Moody AAA S&P AAA Fitch
Prince Williams County	10% limit	AA+ Moody AA1 Fitch
Commonwealth of VA	5%	Aaa Moody AAA S&P

FHWA Allocated Funds

The following Virginia programs are among those funded by monies allocated to VDOT by FHWA from the Federal Highway Trust Fund. The programs and amounts for FY 2001 received by the Northern Virginia District are (all in millions of dollars) compared to statewide totals:

National Highway System-Interstate:	$54.6/$203.4
NHS – Non Interstate:	18.8/ 68.4
TEA-21 High Priority (including Wilson Bridge)	23.2/ 64.5
Safety	4.6/ 14.4
Enhancement	2.1/ 18.9
Rail Safety	2.4/ 8.5
STP – Statewide	7.6/ 21.0

VDOT recommends these allocations for specific projects in each district and the Commonwealth Transportation Board adopts the allocations in its six-year Transportation Development Program. While the above funds could all be flexed to transit, only $4 million of FY '01 STP-Statewide was actually provided for transit uses (VRE track leases).

State Allocated Funds

As mentioned above, VDOT/CTB provide three major types of formula-driven funding programs for highways (with some ability to flex for transit uses). These are, with amounts allocated to Northern Virginia in FY 2001 (in $millions) compared to statewide totals:

Primary:	$28.4/$201.7
Urban:	15.8/ 163.5
Secondary:	50.7/ 229.5

A new discretionary program described above that was created by the 2000 General Assembly in the Virginia Transportation Act (VTA 2000) is the Priority Transportation Fund. In FY 2001, Northern Virginia received $13.6 million from this source for all transportation projects, compared to $140.0 million statewide.

Other sources include discretionary or earmarked projects using state general funds ($26.5 million for Northern Virginia in FY 2001 versus $259.9 million statewide) and $132 million in the proceeds of Federal Revenue Anticipation Notes (FRANS) which must be reimbursed from this district's future allocations, versus $502.6 million statewide.

Congestion Mitigation and Air Quality

VDOT reallocates these federal funds from FHWA to regions that have failed to meet air quality standards based on severity of pollution and population. The regions, using their own criteria within the constraints of the federal program, then decide how to spend the available funds. They must obtain metropolitan planning organization (MPO) approval for inclusion in the TIP and VDOT must ultimately include the projects in its annual STIP.

Northern Virginia used $11.5 million for highways and $8.6 million for transit in FY 2001. A 20 percent local match is required. Statewide amounts were $13.2 million for transit and $24.1 for highways.

For flexible funds (such as CMAQ and RSTP), transit project sponsors must first arrange with VDRPT and VDOT to have the funds transferred from FHWA to FTA before they can begin to receive funds. FTA uses its criteria to approve the grants and administer the funds.

Allocations (excluding match) average about $8.5 million annually from FY '01 through '06 for Hampton Roads, $400,000 for Tri-cities, $4.5 million for Richmond, $850,000 for Fredericksburg, $16.5 million for Northern Virginia and $4 million distributed by the CTB for Transportation Emission Reduction Measures (TERMS). In Northern Virginia, TCC allocates funds to specific projects which are then included by TPB in its CLRP and TIP and by CTB in its STIP. FTA and FHWA ultimately determine if specific projects are eligible. If spent on transit, funds are "flexed" from FHWA to FTA and recipients must apply through FTA.

A concern for the future in Virginia is that new areas (e.g. Charlottesville) may qualify based on changing EPA definitions and 2000 census results, but no additional funds would be available. Therefore allocations to each current recipient would fall. TEA-21 authorizations continue through FY 2003.

Regional Surface Transportation Program

VDOT reallocates these funds from FHWA to regions that have failed to meet clean air standards. The regions decide how to allocate the funds and then obtain MPO approval (include the projects in the TIP). VDOT must then include the projects in its STIP. RSTP funds require no local match.

Northern Virginia used $21.9 million in FY 2001 for highway projects and $2.4 million for transit, compared to statewide totals of $44.1 million and $15.1 million respectively.

Transportation Enhancement Program

For FY 2001, $18.9 million was provided in average grant sizes of $200-$300,000 to local applicants. The VDOT contact is Bob Terrell at 804/786-2872.

The National Transportation Clearinghouse also provides information about projects (the program in mandated by TEA-21 as a set aside of STP funds allocated to the state). See www.enhancements.org

In Virginia, local governments often sponsor applications of other groups, especially if the groups have available the required 20 percent non-state match. Endorsement from the local metropolitan planning organization is also needed, as is a public hearing.

Northern Virginia received only $1.8 million in FY 2000 and $2.0 million in FY 2001 of the statewide totals.

These projects should relate to intermodal transportation and make projects more aesthetically pleasing, as well as providing a "quality of life" benefit. VDOT has 11 categories of projects from pedestrian and bicycle facilities through preservation of rail corridors, outdoor advertising removal and historic preservation. For FY 2001, 220 applications for $79.1 million were received, with 118 funded.

STP Safety Programs

CTB allows localities to leverage these funds by using state construction allocations to match these federal funds. CTB selects projects from a statewide priority list. Funds for this program are approximately $19 million annually. Related programs include $4.0 million for FY 2001 only from the Open Beverage Container program and $1.4 million over the next three fiscal years from FRA grants. For FY '01 Northern Virginia had no projects funded from these STP funds that are related directly to public transit or rail safety, although $50,000 was provided from the Open Container program for a new pedestrian overpass east of Route 7 for Seven Corners Shopping Center (which is served by Metrobus).

From the Section 120 rail grade crossing program, Northern Virginia received $2.5 million for FY '01 out of $7.1 million statewide, plus another $200,000 from the Section 130 high-speed rail corridor program out of $450,000 statewide. Northern Virginia received no funds from the Section 1103 high-speed rail corridor program (100% federal) out of $472,000 statewide. Another $960,000 is unallocated for elimination of rail hazards. Thus, total statewide rail safety project funds for FY 2001 totaled $8.5 million.

In some cases these TEA-21 federal funds flow to Virginia's Department of Motor Vehicles (not VDOT). For example, in FY 2001 DMV received $3.7 million of federal funds to continue enforcing the 0.8 blood-alcohol content law in Virginia and another $3.2 million to target aggressive or intoxicated motorists with radar, in-car video cameras and alcohol-screening instruments.

State Hazard Elimination Safety Improvement Program

This program uses part of the federal safety set-aside funds (Section 152) and provided $10.4 million in funding in FY 2001, including $3.3 in Northern Virginia.

Open Beverage Container Safety Program

Using $4.0 million of federal funds statewide, it provided several grants for Northern Virginia projects including Fairfax, Alexandria and Prince William highway advisory radio at $188,000 each.

States without open container laws have a portion of their NHS, STP and IM funds transferred to their highway safety program for use in hazard elimination projects. Virginia's total is about $6 million annually. This amount is allocated by CTB for projects such as Route 50 pedestrian improvements in Fairfax County.

Recreational Access

Up to $3.0 million statewide discretionary funding is available via the secondary roads division of VDOT.

State Industrial, Airport and Rail Access

Up to $5.5 million annual statewide discretionary funding is available via VDOT's secondary roads division.

VDOT Traffic Calming

This program is designed primarily for cities.

Cut Through Traffic Reduction

Cities and counties can request projects to be funded at the discretion of the resident engineer.

REGIONAL REVENUE SOURCES

Currently NVTC and PRTC in Northern Virginia receive the proceeds of two percent taxes collected by the Virginia Department of Taxation from retail service stations. Proceeds now are $30 million annually. See Figure 5. NVTC's gas taxes are required by statute to help support WMATA and are allocated by NVTC to the point of sale with the exception of Loudoun County (which joined NVTC in 1990 and can use its gas tax allocation for any transportation purpose consistent with the county's transportation plan). PRTC jurisdictions also can use their gas tax proceeds for any transportation purpose although most funds are used to support VRE.

Northern Virginia's General Assembly delegation has sought to pass legislation that would allow a referendum on a regional sales tax increase for transportation and education or for transportation alone. So far such legislation has not passed.

NVTC has issued and refinanced several series of bonds to help VRE build stations and buy railcars and locomotives. The initial issue was $79.4 million in 1980, followed by $37.6 million in 1993, $23 million in 1997, and $31.7 million in 1998. At the close of FY 2001, remaining obligations were $87.4 million in principal and $36.3 million in interest. Under the powers of the Transportation District Act, these bonds did not require a referendum. Since passenger revenues do not cover all operating expenses, the bonds are secured with a general pledge of other VRE revenues, federal grants, and local jurisdiction contributions. In effect the state and local governments must agree each year to appropriate funds to cover debt service, but are under no obligation to do so. Thus, these bonds, known as "appropriations-based credit," depend on the essential nature of the public service being provided by VRE. Also, bond insurance (financial guaranty bond) was purchased at the cost of a few basis points to achieve an investment grade bond rating and favorable interest rates for these tax-exempt bonds.

Projected Yields of Regional Revenue Sources

Regional and local funding sources traditionally rely on motor fuel taxes, sales taxes, property taxes and income taxes. In the Washington Metropolitan Area in general and Northern Virginia in particular, proceeds of some of these taxes are available but others have been precluded. For example, the District of Columbia has been unable to persuade Congress to tax the incomes of commuters living outside the District while in Northern Virginia the Commonwealth has been unwilling to permit the region to use some of the revenue raising measures reserved for the state.

Figure 5

Gross Gas Tax Received During Fiscal Year 2001 by the Northern Virginia and Potomac and Rappahannock Transportation Commissions as Reported by the Virginia Department of Taxation

NVTC		
Arlington County	$2,126,000	
Fairfax County	12,156,000	
Loudoun County	3,401,000	
Alexandria	2,009,000	
City of Fairfax	926,000	
Falls Church	472,000	
Total NVTC		$21,090,000
PRTC		
Prince William County	5,035,000	
Stafford County	1,668,000	
City of Manassas	868,000	
City of Manassas Park	413,000	
City of Fredericksburg	872,000	
Total PRTC		$8,856,000
Total NOVA		$29,946,000

Several studies have indicated the anticipated yields from various regional and local taxes that could be used to support transit capital projects if legislative permission were granted. They are shown in the attached figures.

The Greater Washington Board of Trade has argued that an additional $1 per day per household in the Washington Metropolitan region can be leveraged to yield $20 billion over 20 years. Considering the current levels of federal, state, and regional motor fuel taxes, drivers pay no more than three cents per mile. The Federal Highway Administration estimates that it costs about 30-cents per mile to provide peak period highway facilities. Since drivers are not charged full costs for using roads during peak periods, excess demand (congestion) results, costing drivers in the Washington Metropolitan area 46 hours of traffic delay per person in 1999 (valued at $780 per person per year).

To achieve MWCOG's Vision Plan, $1.74 billion more per year is needed over the next 25 years (87-cents per gallon gas tax or 4.4 percent sales tax or 1.9 percent income tax). While these amounts are enormous, consider that the costs of congestion are $3 billion per year in the Washington Metropolitan region. The public choice amounts to spending less than $2 billion more each year for transportation facilities to avoid $3 billion in congestion costs each year.

In addition to raising more revenues from regional and local taxes, available revenues can be increased by improving the shares of revenue from other levels of government that flow here. Examples include the successes in ISTEA and TEA-21, in which discrepancies between donor and recipient states were narrowed and Virginia received several millions of dollars of additional federal aid each year because more of the federal taxes collected here were returned. Similarly, if Northern Virginia's share of state aid were to grow along with its population, tens of millions of dollars would shift to this region each year from elsewhere in the commonwealth.

Finally, there are many potential sources of regional and local revenue that could be considered for transportation projects, including taxes on: energy use, inflation-adjusted motor fuels, rental cars, congestion, development and impacts thereof, emissions, and vehicle miles traveled. Staff of MWCOG/TPB have estimated that a regionwide $1 per space per day surcharge on parking would yield $1 billion over the next three years.

Figure 6

Washington Metro Region
Sources of $100 Million Annually

Tax	Proposed Additional Tax	Current Rate
Gas	4¢ per gallon	D.C.=20¢; MD=23.5¢; VA=17.5¢
Parking	$5 per non-resident space	None
Payroll	$3 per employee per month	None
Sales	¼ ¢	D.C.=5.75-13%; MD=5%; VA=4.5%
Road pricing	20-25¢ per mile on 200 lane-miles	None
Vehicles	$3 per vehicle/month	Varies

Source: Cambridge Systematics for MWCOG (1998)

Figure 7

Fairfax County Sales Tax Yields
(Assuming Six Percent Annual Revenue Growth)

Tax	Level	Yield
Sales	½ ¢ in 2003	$80.1 million
	½ ¢ in 2012	$135.1 million

Source: Fairfax County

Figure 8

Northern Virginia Local Income Tax Revenue Estimates
(1996-99)

Locality	Rate	Yield
Arlington	¼%	$ 9.7 million
	1%	$ 39.0 million
Fairfax County	¼%	$ 48.5 million
	1%	$194.0 million
Loudoun County	¼%	$ 6.0 million
	1%	$ 24.1 million
Prince William County	¼%	$ 8.0 million
	1%	$ 32.0 million
Alexandria	¼%	$ 5.9 million
	1%	$ 23.5 million
City of Fairfax	¼%	$ 0.8 million
	1%	$ 3.1 million
Manassas	¼%	$ 1.1 million
	1%	$ 4.4 million
Manassas Park	¼%	$ 0.2 million
	1%	$ 0.8 million
Total (1996)	¼%	$ 80.2 million
	1%	$320.8 million
Projected Total (1999)	¼%	$107.4 million
	1%	$429.6 million

Source: VDOT (2/17/99)

Figure 9

Virginia Yield of Statewide Revenue Sources

Tax	Increase	Yield
Gas	1¢ per gallon	$ 44 million per year
Vehicle Sales and Use	1%	$140 million per year
Retail Sales and Use	½%	$350 million per year
Vehicle Registration	$1	$ 6 million per year

Source: VDOT (March, 1998)

Figure 10

Northern Virginia Revenue Yields

Tax	Increase	Yield
Gas	1¢/gallon	$9.2-9.4 million per year
	5¢/gallon	$46-47 million per year
	20¢gallon	$184-188 million per year
Sales	¼%	$57-60 million per year
	1%	$228-240 million per year
Income	¼%	$107-114 million per year
	½%	$215-228 million per year
	1%	$429-456 million per year

Source: Dulles Corridor Task Force

Figure 11

Washington Metro Region Revenue Yields

Tax	Increase	Yield
Gas	1¢ per gallon	$ 19.4 million per year
	10¢ per gallon	$194.2 million per year
	25¢ per gallon	$485.5 million per year
Sales	¼%	$ 93.6 million per year
	1%	$374.4 million per year
	2%	$748.8 million per year
Income	¼%	$223.2 million per year
	1%	$892.8 million per year
	2%	$1,785.6 million per year
Property	2.5¢ per $100 assessed valuation	$ 51.8 million per year
	10¢ per $100 assessed valuation	$207.1 million per year
	20¢ per $100 assessed valuation	$414.2 million per year

Source: Greater Washington Board of Trade (1997)

Other Regional Sources

Several regional agencies occasionally obtain federal or state funds for specific transportation purposes. For example, the Northern Virginia Regional Commission has obtained two grants to study the before and after land use implications of VRE. Two more specific examples follow.

MWCOG/TPB

State agencies (VDOT, VDRPT) also provide federal planning funds (from FHWA and FTA) to the Metropolitan Washington Council of Governments/Transportation Planning Board. These funds, primarily for planning, can be programmed to support transit projects.

ITS Implementation Institute

A consortium of three Virginia universities (George Mason, Virginia Tech, Virginia) received authorizations under TEA-21 of about $2 million annually for FY 1998-03. These grants to university-based transportation centers require a 50 percent match. Among the areas of special expertise are project evaluations. Contact: John Collura of Virginia Tech at (703) 538-8457.

LOCAL FUNDING SOURCES

Local governments receive allocations from some of the state sources described above and can choose whether to use some of these funds to support transit. And to the extent that WMATA and VRE receive funding from federal and other sources, local governments (as "funders of last resort") have lower subsidies. Statewide in Virginia, localities provided about $86 million in FY 1999 to offset operating costs of transit, with 69 percent provided by Northern Virginia's local governments. For transit capital costs, Northern Virginia's localities provided $32 million out of $59 million statewide, or 91 percent.

Northern Virginia's local governments use the proceeds of property taxes and license fees, plus local bonds, to pay their shares of transit project costs. Local property taxes on automobiles are being phased out with other state revenues being provided to local governments to offset their losses. But this places pressure on state sources of funds for transit.

Even if the Virginia General Assembly provided new local taxing authority (with or without a required referendum), individual jurisdictions would have difficulty seeking to levy such taxes because the transit projects are usually regional in scope and the "free rider" problem would disadvantage those jurisdictions levying the tax while their neighbors did not. An existing statute does allow Northern Virginia governments to conduct a referendum on a local income tax surcharge but it was flawed in this manner (as well as not allowing lower tax increments or use of some of the tax revenues for non-transportation purposes) and a sunset clause made it difficult to leverage the proceeds through bonding.

Figure 12 shows that as of FY 2001, NVTC estimates that Northern Virginia's local governments and transit customers paid over two-thirds of the non-federal costs of transit capital and operations, by investing over $175 million out of the $260 million in total transit revenue sources in this region. Regional sources paid less than 10 percent and the state provided a quarter. These figures exclude VRE and are based on actual expenses in that year (other tables are based on budgeted expenses).

Figure 12

Fiscal Year 2001 Northern Virginia Transportation Commission
Jurisdictions Transit Expenditures for Operations and Capital by Source
($ in millions)

	WMATA Subsidies						
		NVTC Aid					
Jurisdiction	Local Funds	Regional Gas Tax	State Aid	Total Funds	% Local Funds	% Regional Funds	% State Funds
Alexandria	$ 8.8	$ 1.8	$ 8.7	$ 19.3	45.6%	9.3%	45.1%
Arlington	18.5	2.3	14.6	35.4	52.3%	6.5%	41.2%
City of Fairfax	(0.7)	1.0	0.5	0.8	-87.5%	125.0%	62.5%
Fairfax County	20.5	12.1	30.0	62.6	32.7%	19.3%	47.9%
Falls Church	0.1	0.6	0.5	1.2	8.3%	50.0%	41.7%
Loudoun County	-	-	-	-	0.0%	0.0%	0.0%
	47.2	17.8	54.3	119.3	39.6%	14.9%	45.5%
Passenger / Other Revenue	108.7	-	-	108.7	100.0%	0.0%	0.0%
	$ 155.9	$ 17.8	$ 54.3	$ 228.0	68.4%	7.8%	23.8%

	Local Transit Subsidies						
		NVTC Aid					
Jurisdiction	Local Funds	Regional Gas Tax	State Aid	Total Funds	% Local Funds	% Regional Funds	% State Funds
Alexandria	$ 2.8	$ -	$ 2.5	$ 5.3	52.8%	0.0%	47.2%
Arlington	0.6	-	0.9	1.5	40.0%	0.0%	60.0%
City of Fairfax	0.7	-	0.7	1.4	50.0%	0.0%	50.0%
Fairfax County	9.3	-	8.5	17.8	52.2%	0.0%	47.8%
Falls Church	-	-	-	-	0.0%	0.0%	0.0%
Loudoun County	-	3.4	-	-	0.0%	100.0%	0.0%
	13.4	3.4	12.6	26.0	51.5%	13.1%	48.5%
Passenger / Other Revenue	6.4	-	-	6.4	100.0%	0.0%	0.0%
	$ 19.8	$ 3.4	$ 12.6	$ 32.4	61.1%	10.5%	38.9%

	Total Subsidies						
		NVTC Aid					
Jurisdiction	Local Funds	Regional Gas Tax	State Aid	Total Funds	% Local Funds	% Regional Funds	% State Funds
Alexandria	$ 11.6	$ 1.8	$ 11.2	$ 24.6	47.2%	7.3%	45.5%
Arlington	19.1	2.3	15.5	36.9	51.8%	6.2%	42.0%
City of Fairfax	-	1.0	1.2	2.2	0.0%	45.5%	54.5%
Fairfax County	29.8	12.1	38.5	80.4	37.1%	15.0%	47.9%
Falls Church	0.1	0.6	0.5	1.2	8.3%	50.0%	41.7%
Loudoun County	-	3.4	-	-	0.0%	0.0%	0.0%
	60.6	21.2	66.9	145.3	41.7%	14.6%	46.0%

Passenger / Other Revenue	115.1	-	-	115.1	100.0%	0.0%	0.0%
	$ 175.7	$ 21.2	$ 66.9	$ 260.4	67.5%	8.1%	25.7%

REVENUES FROM PROJECTS AND BENEFICIARIES

Transit projects themselves can deliver future benefits that can be captured to help finance the projects. Examples are user fees such as fares or tolls, high occupancy tolls (HOT) lane pricing, ITS information services, sale of naming rights, joint development payments, and parking fees. Special taxation districts and benefits assessment districts can be created to institutionalize these streams of revenue.

Special Transportation, Benefits Assessment and Taxation Districts

Virginia statutes permit several types of districts to be formed with the potential for generating revenues. For example, transportation districts contiguous to NVTC (or to other districts contiguous to NVTC) can levy a two percent motor fuels tax. Special taxation districts (such as that for Route 28) can through referendum establish levies and have other powers (eminent domain, access to the commonwealth's credit) but these powers are constrained (cap on tax rate, restrictions on types of property, land use protections).

The Route 28 district has yielded $139 million (varying from $4 to $8 million annually) since 1989. The district includes about 828 structures with 16.7 million square feet and improved assessments of $1.1 billion and land assessed at $0.8 billion. Population is 97,000 and employment 63,000.

In 2001, the General Assembly amended the statutes to permit a higher tax rate in the Dulles Corridor when (and if) a new district is created there.

Transit projects create value in many ways. A 1994 study by KPMG Peat Marwick for NVTC found that the commonwealth's investments in Metrorail created great returns by generating new economic activity focused on the transit system and its customers. Conservative estimates of the commonwealth's returns were 12.4 percent annually from 1978 through 1994 and 19.2 percent annually from 1995 through 2010. These returns are realized through increased state tax collections, including sales, personal and corporate income and recordation. With returns of this magnitude, local governments in Northern Virginia believe that the commonwealth should at least make it easier for localities to capture more of the economic benefits (some are realized through local property taxes) to support additional transit investments.

Sale of Assets

Transit systems are allowed to retain all income and proceeds from sale or lease of real estate acquired with federal assistance and to use the funds for transit-related expenditures. WMATA has established a Transit Infrastructure Investment Fund for such uncommitted proceeds, to be used to support joint

development activities. Funds will be allocated among jurisdictions using the rail construction formula.

Joint Development

One rule of thumb is that about eight percent of the assessed value of a jointly developed project at a transit station could be captured by the transit system and used to help finance the transit portion of the project (e.g. new stations in the Dulles Corridor). Since March 14, 1997, FTA has permitted joint development project revenues to be freely usable by transit systems for eligible purposes, as long as the transit system retains some assurance that the joint development will be accessible to the transit system for the life of the project.

Partnership Contributions

Private and non-profit partners may have their own revenue sources that can be used to build portions of the transit capital project. For example, Metropolitan Washington Airports Authority (MWAA) has access to Passenger Facility Charges at Dulles Airport that can be used (in the future since current revenues are already pledged for debt service on previous airport improvements) to pay for the portion of the Dulles Corridor Bus Rapid Transit (BRT)/Metrorail project that will be constructed on the airport.

Developers may have agreed to proffer some transit improvements as a condition of zoning changes or special use permits. These proffers can be combined or enhanced by the transit system in a partnership.

Design-build-operate-maintain (or some combination thereof) contracts for major transit projects offer the potential to reduce the costs for a transit agency compared to more traditional separate procurements or use of in-house staff. Further, such groups may be in a position to offer contributed equity (such as developers who donate land for stations since their remaining land will become more valuable due to access to the new transit improvements).

One novel proposal called for businesses to voluntarily give up tax credits for the value of stock options that are exercised by employees and officers. During more prosperous times for “dotcom” companies in Northern Virginia, it was estimated that this measure could yield $60-70 million per year to be used for new transportation, a portion of which would be transit projects.

While partners may not be willing to donate equity to a transit project, they may be large corporate entities able to forego immediate returns by lending funds at favorable rates for mutually beneficial projects.

Sale of Naming Rights and Other Advertising Revenues

Transit improvements that serve to congregate large numbers of people can be very valuable and generate offers of millions of dollars for naming rights. To a lesser extent advertising access (on transit vehicles or at stations) can also generate significant revenues. Since transit systems operate at deficits, such

advertising revenue is typically not available to support capital improvements, but in concept a future multi-year flow of advertising revenue from a new facility could be capitalized to support construction.

Sale of Access for Fiber Optics and Other Communications Revenues

Transit corridors can provide valuable access for fiber optic cables, especially in dense urban areas. Other ITS-related improvements can also yield project revenues, although again these are more likely to be used to support operating budgets. Examples are variable advertising on in-station or bus stop message signs, advertising on customer e-mail and fax alerts, and joint sponsorship and co-marketing of Smartcard fare media with financial institutions.

Bay Area Rapid Transit (BART) is currently considering a proposal from a communications company to pay $1 million per year to wire BART's tunnels to permit use of cell phones. The firm would then sell access to providers of cell phone service. Several of BART's customers have objected to the "noise pollution" this would generate inside the trains and BART has agreed to conduct public hearings before going ahead with the transaction.

Donated Rights-of-Way

Contributions of land, buildings and bridges can be used as non-federal match. St. Louis financed its Metrolink light rail project with such contributions valued at as much as $100 million, thereby constructing an almost $1 billion project with virtually no non-federal cash outlays. In the Dulles Corridor, the Metropolitan Washington Airports Authority is providing access to very valuable right-of-way for the Bus Rapid Transit/Metrorail project.

These types of matching contributions are sometimes called "in-kind" or "soft" matches. Another example is the use of state-collected toll revenues as a credit toward required non-federal matching shares of federal grants.

Consulting

Transit systems have offered their engineering expertise to others as a means to keep their staff fully employed. The potential exists for exchanges to help construct transit projects (e.g. trade engineering services to a city in exchange for land for a transit garage).

Fares, Tolls and Other Fees

Some amounts of money can be used to support new transit projects by imposing surcharges on current fares, with the proceeds escrowed for capital improvements. Similarly, a portion of highway tolls (perhaps in the same corridor) can be reserved to build transit projects and thereby help overall mobility in that corridor. Some tolls from the Dulles Toll Road are earmarked to help build the BRT/Metrorail extension there, although CTB has not followed its

own 1990 policy to reserve at least 15 percent of toll revenues for transit in that corridor.

Bonds can often be sold to finance parking structures at transit facilities with debt service covered by future parking fees.

Advance sale of long-term leases for concession space (day care, florist, dry cleaner) at transit facilities could generate some funds to help build the facility. The facility can be designed to accommodate more of such revenue-producing activities.

Virginia Public-Private Transportation Act

Virginia has a process established that permits private entities to make unsolicited proposals for transportation improvements together with an eligible government sponsor with a state selection panel convened and a negotiated award (after notice to allow potential competitors to come forward). Such proposals have been submitted for the Dulles Corridor BRT/Metrorail project.

Tax Free Transit Benefits

With an April, 2000 Executive Order, President Clinton extended maximum benefits of $65 per employee per month to federal employees in the Washington, D.C. area (and as a pre-tax option to federal employees elsewhere, later upgraded to match Washington D.C.). Public and private employees can provide up to $65 month per employee for transit which is tax free to the employee and a tax write off to the employer as a business expense. The benefit will grow in January, 2002 to be $100 per month. Some states (e.g. Maryland) have similar programs to provide tax deductions or credits against state tax. In the Washington D.C. region, WMATA sells Metrocheks for those who receive this benefit.

With the availability of such a tax-friendly subsidy option, fare increases become more palatable as a means to help raise funds for transit capital projects.

Foundations/Trade Associations

In the private, non-profit sector, grants may be available to help define the need for the transit project, refine its scope and modify its design, perhaps through public outreach or research. For example, the Price Waterhouse Coopers Endowment for the Business of Government offers research grants (averaging $15,000) and sponsors leadership forums (averaging $20,000).

The American Public Transit Association provides grants ($5,000) to sponsor local transit coalitions.

The Transportation Research Board has several research programs, such as the National Cooperative Transit Research Program, jointly funded by federal and state member agencies. Some funds are available on very short notice to commence important and practical research projects.

Another TRB resource is called the Transit IDEA program (Innovations Deserving Exploratory Analysis) with current emphasis areas including transit, high speed rail and ITS. Review cycles begin each March 1 and September 1. An example of a recent IDEA project is testing of new rail grade crossing guards employing video monitoring. The agency has almost $1 million from FRA and FHWA to test ITS related IDEA projects. (Contact: Harvey Berlin, 202/334-3310, hberlin@nas.edu; www.nationalacademies.org/trb/idea).

The Great American Station Foundation

This non-profit organization provides grants in three categories ranging from $2,500 to $30,000, for preserving, restoring and improving local rail stations. The most recent grant cycle resulted in $250,000 awarded to 14 cities in July, 2001.

Community Transportation Development Fund

Loans are provided up to $1 million on negotiable terms with low interest for private and government sponsors of projects that promote economic development in low-income areas. Contact: Patrick Kellogg at 202/661-0210 and www.ctaa.org.

Easter Seals Accessible Transit Projects

For FY '02 there is $1 million available in eight award categories. Applications are due to Project Action by October 10, 2001. Grants will primarily focus on training but may also include research syntheses and accessible taxis. Contact: Karen Nnamini at 202/347-3066 and www.projectaction.org.

Forms of Creative Finance

Depending on the particular program, assistance may take the form of cash, credit or technical expertise (which can reduce overall project costs). Assistance in the form of credit may be direct loans or loan guarantees from a federal or state agency or the transit system could transform a future flow of cash assistance into current resources by borrowing. This latter approach is known by the acronyms GARVEE or FRAN (grant anticipation revenue vehicles as described above and federal revenue anticipation notes, respectively).

Other (often very complex) techniques are available to provide a streamlined source of capital. One is a **"blind pool"**, in which a joint powers authority (such as NVTC) would issue bonds to fund a pool and invest the proceeds in guaranteed investment contracts. A transit authority then could borrow from the pool with lower transaction costs and considerable time savings compared to issuing its own debt. Federally sponsored state infrastructure banks are a variation on this theme of revolving pools of credit.

Leveraged leases take many forms. **Certificates of participation**, **sale-leaseback**, **lease-leaseback** and others offer transit systems a return of some modest percentage of the value of the secured asset by engaging in complex transactions (with correspondingly stiff administrative and legal fees). **Cross-border leases** offer returns to transit systems based on tax savings to foreign corporations. **Safe-harbor leases** provided very favorable returns to U.S. transit systems through sale-leaseback transactions offering tax savings to U.S. corporations, but a change in the tax code eliminated this particular opportunity.

States are expecting substantial future returns from **settlements** with tobacco companies. These settlements would accrue to each state as a stream of payments; by borrowing against this stream (called **"securitization"**) states could fund transit projects now, with the logic that transit system improvements promote clean air and environmental health.

Transit systems need to examine their own pools of funds to be certain they are being used most efficiently. **Refinancing** may offer sufficient present value savings to cover the administrative costs of recalling and reissuing debt. It may be possible to **borrow against escrow accounts or debt service reserve funds**, for example. VRE purchased a surety to replace a $10 million debt service reserve fund and thereby was able to use the previously inactive funds to match federal grants over a multi-year period.

NVTC has had success issuing **"appropriations-based debt"** on behalf of VRE. Without pledging any real assets and with a deficit-producing service (as are all transit systems), NVTC nonetheless has been able to borrow and (with the purchase of insurance) gain strong investment grade ratings, without jeopardizing its local government members' own bond ratings. To accomplish this NVTC and its advisors have demonstrated that VRE is performing an essential public service so that its members are likely to continue their voluntary annual contributions to keep VRE running and to fund its budget (including debt service).

Even more complex **derivatives** and **hedging transactions** can be used. An example is the use of **interest rate swaps** to produce synthetic advance refunding of outstanding bonds. The Metropolitan Washington Airports Authority has selected a team of advisors for such a transaction.

Since 1998 WMATA has closed tax-advantaged lease transactions on 680 railcars with net benefits of $82 million. The Authority is now developing a term sheet with two private leasing companies, with expectations of netting another $20 million on its next series of railcars, depending on the timing of delivery and interest rates. Of the expected $20 million, $13 million has already been programmed for the purchase of new CNG buses.

In some cases, **vendor financing** will be available. The supplier may be willing to absorb some finance costs as a competitive device to help win the contract. Unless a foreign government is involved, the vendor may not be able to provide tax-advantaged leases or other credit, while the transit system may have such access to tax-free instruments. Accordingly, experts will need to evaluate the benefits and costs of vendor finance compared to other possible concessions.

Section 1302 of TEA-21 allows a **flexible or variable matching ratio** (perhaps one that averages 80 percent over an extended period with a "balloon" toward the end of the period with a non-federal overmatch).

As late as 1997 transit systems, including VRE, were exploring **lease in-lease out (lease-lease back)** transactions that offered returns of four to 10 percent of asset values for new and used rolling stock, buildings and other equipment. These were fully defeased (all lease payments and the balance due on exercise of the final purchase option at the end of the lease term are funded with initial deposits held by a trustee). Transaction sizes were minimums of $50 million with a maximum of $500 million and $250 million ideal, over a 35-year term. Transaction fees averaged $500,000.

VRE ultimately did not proceed because it had funded most of its rolling stock with tax-exempt debt and bond counsel believed that IRS private activity regulations precluded these assets from eligibility.

CONCLUDING POLICY CONSIDERATIONS

Policy Considerations

Among the lessons apparent from the description above of available revenue sources are:

1) The commonwealth of Virginia falls short compared to its neighboring state of Maryland in helping to pay for transit improvements ($17 and $94 per capita per year, respectively).

2) The commonwealth also does not sufficiently fund its existing programs to meet statutory levels. (NVTC jurisdictions are underpaid by $63.7 million in FY 2002, for a shortfall of 81 percent).

3) The commonwealth should make more efficient use of its bonding powers. While precluding local governments from raising new revenues, the commonwealth has $1.4 billion of unused debt capacity for the current biennium, even using its very conservative debt capacity model.

4) Federal and state gas taxes should be inflation adjusted. In the case of Virginia, the current 17.5 cents per gallon is less (when adjusted for inflation) than the 11 cents per gallon rate effective in 1984.

Concluding Example

Figure 13 compiles the several sources of funding obtained by NVTC for one of its projects.

NVTC frequently patches together several grants from various sources over a period of time to complete financial plans for its transit capital projects. For example, a hybrid-electric demonstration in Falls Church (known as Electrek) received the following grant awards:

Figure 13

Sources of Funds for NVTC's Hybrid-Electric Bus Project

Fiscal Year	Agency	Source	Amount (Unmatched)
1995	VDOT	Virginia Alternative Fuels Revolving Fund (VARF)	$90,000
1998	VDOT	VARF	$83,404
1998	FTA	Section 5309 via congressional earmark	$390,879
1999	FTA	Section 5309 via congressional earmark	$397,000
1998	VDRPT	Transportation Efficiency Improvement Fund (TEIF)	$345,000
1999	VDRPT	TEIF	$310,900
1999	FTA/FHWA	Congestion Mitigation and Air Quality (CMAQ)	$564,000
1999	Virginia Power	In-kind for electric charger	$100,000
1999	WMATA	In-kind for staff and engineering consultants	$100,000
2000-2002	Falls Church	$40,000 per year	$120,000
1998-2002	NVTC	In-kind	$ 60,000
		Total	$2,561,183

As can be seen, federal funds make up 52.8 percent of the total, state funds 32.4 percent and local and private sources 14.8 percent. The financial plan calls for purchasing four buses and operating them as a two-year demonstration.

Specific scopes of work were developed for each of the grants. For example, one grant focuses on the use of new technology. NVTC has used this grant to acquire bus stop enunciators to comply with the Americans with Disabilities Act and automated maintenance systems that are electronically probed each day to reveal the performance of key components.

This example reveals that obtaining funds for transit projects may require creativity, aggressiveness and resilience, in addition to a solid knowledge of potentially available program sources.

NVTC would appreciate comments on this resource guide. Contact us at nvtc@nvtdc.org.