

City of Alexandria, Virginia**MEMORANDUM**

DATE: MAY 19, 2006

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM: JAMES K. HARTMAN, CITY MANAGER 

SUBJECT: CONSIDERATION OF A RESOLUTION ENDORSING THE *TRANSACTION 2030* TRANSPORTATION PLAN

ISSUE: Consideration of a resolution endorsing the *TransAction 2030* Long-Range Transportation Plan developed by the Northern Virginia Transportation Authority (NVTA).

RECOMMENDATION: That City Council adopt the attached resolution (Attachment 1) endorsing the *TransAction 2030* Transportation Plan.

DISCUSSION: On December 16, 1999, the Transportation Coordinating Council (TCC) approved the Northern Virginia 2020 Transportation Plan (2020 Plan). The City adopted the 2020 Plan through Resolution No. 1936 on October 13, 1999. The 2020 Plan identified multi-modal transportation solutions to the region's growing travel needs and has guided the region's transportation planning and funding decisions. It has also served to document the region's transportation funding shortfall. While the vision statement, goals and strategies outlined in the 2020 Plan remain applicable today, the projects included in the 2020 Plan needed to be updated, regional priorities needed to be established, and other outstanding issues needed to be addressed.

In July 2002, the Virginia General Assembly created the Northern Virginia Transportation Authority (NVTA) and charged it with developing a regional transportation plan. This authority replaced the TCC. The 1999 TCC resolution specified that the 2020 Plan should be presented to the member jurisdictions every five years. In January 2003, the NVTA directed its Interim Technical Committee (ITC) to develop a work plan to update the 2020 Plan.

Since the 2020 Plan was adopted in December 1999, a number of transportation projects have been completed. At the same time, a transportation-funding crisis remains, the region continues to grapple with vexing air quality concerns, and vehicle miles traveled (VMT) has grown by 2.5% each year. Our region's leaders have responded by initiating and supporting efforts that recognize the linkage among transportation, land use, air quality and other quality of life indicators. Some of these efforts include the Metropolitan Washington Council of Government's (MWCOC) Mobility and Accessibility Study, NVTA's Alternative Transportation and Land Use Activity Study (ATLAS), and Commonwealth of Virginia's VTRANS 2025, the statewide, long-range multi-modal transportation plan. The objective of the 2020 Plan update was to take a current snapshot of our transportation system, compare the performance of various transportation networks for different modes, and prioritize improvements needed between now and 2030, noting the lessons offered by other regional and state initiatives.

The seven broad goals for the original 2020 Plan that remain applicable for the Plan update are:

1. Provide an integrated, multi-modal transportation system;
2. Provide responsive transportation service to customers;
3. Respect historical and environmental factors;
4. Recognize the linkage between transportation and land use;
5. Incorporate the benefits of technology;
6. Identify funding and legislative initiatives needed to implement the Plan; and
7. Enhance Northern Virginia relationships among our jurisdictions and agencies, between our customers and clients, and the business community.

Public participation in the preparation of *TransAction 2030* Plan had an excellent response and consisted of several activities. This participation focused on developing a regional consensus on transportation improvement priorities. One of the elements of the outreach effort was a telephone survey of 1,263 citizens. One hundred one (101) responses were from the City of Alexandria. Other citizens participated in seven community events at which they prioritized investments in eight corridors. The City's community event took place during the Red Cross Festival in Oronoco Bay Park, June 18 and 19, 2005, during which 331 participants indicated their transportation priorities in the ballots provided for this purpose.

For the preparation of the *TransAction 2030* Plan, NVTA introduced innovative methodologies for the extensive analysis of transit, bicycle, and pedestrian level of service (LOS) to complement the highway LOS analysis. The transit LOS methodology measures transit availability and quality of service from the passenger point of view. The Multimodal LOS analysis allowed the NVTA to evaluate the interactions between modes (bus, auto, bike, and pedestrian) to better understand the effects of investments on all users of the transportation system. The innovative multimodal LOS analysis methodology was used in Virginia for the first time in the *TransAction 2030* Plan, placing the region on the cutting edge of transportation planning.

The NVTA adopted 19 project-based evaluation criteria to assess the degree to which specific projects are compatible with planning goals, and projects were then prioritized according to how well they performed against these evaluation criteria. These criteria include activity center connections, multimodal choices, person throughput, intermodal connections, management and operations, urgency, need for rehabilitation, right-of-way requirements, mode share, reduction of vehicle miles traveled, compatibility with local comprehensive plans, land use support for transportation investment, improved non-motorized travel options, improved transportation system operations, reduction of roadway congestion, safety, freight movement, cost, and cost share potential.

The NVTA adopted five network-based performance evaluation criteria to measure the performance of the entire transportation system for existing 2005 conditions, and modeled conditions under the Financially Constrained Long-Range Transportation Plan (CLRP) and *TransAction 2030* Plan networks. The five network-based performance evaluation criteria include:

1. Provide an Integrated Multimodal Transportation System;
2. Improve Personal Mobility;
3. Improve Personal Accessibility;
4. Improve the Linkage between Transportation and Land Use; and
5. Protect the Environment

The 2030 plan has several major projects contained within it that the City would like to accomplish before 2030. The 2030 Plan's basic premise was to only look at projects that were in the original 2020 Plan, adopted in 1999. No projects were either added or subtracted from the original 2020 Plan. Since the Eisenhower widening project was not on the original 2020 plan it was not included in this plan, but it will be included in future regional transportation plan updates. It is included in the State's Six Year Plan, the

Transportation Improvement Plan (TIP) and Constrained Long Range Plan (CLRP). The 2030 Plan envisions many projects in Alexandria. Among the most significant were:

1. Construct a Transitway from Crystal City to Potomac Yard
2. Extend the Platform extension at the Eisenhower Avenue Metrorail Station
3. Construct a Metrorail Station in Potomac Yard
4. Implement Priority Bus Service from City of Fairfax to Alexandria
5. Implement Corridor Wide Express Bus from Woodrow Wilson Bridge to American Legion Bridge
6. Widen the Beltway to 8 unrestricted lanes plus four HOV or high occupant toll (HOT) lanes from the Woodrow Wilson Bridge to American Legion Bridge
7. Construct a Beltway Trail from Wilson Bridge to Route 1
8. Construct a trail on local streets along I-95 and US1 Corridor
9. Construct Alexandria local Trail in Eisenhower corridor
10. Construct a trail along Metrorail from Cameron Street to Crystal City
11. Implement Improvements near King Street Metrorail Station

This plan will help the region identify some of the transportation needs, which must be addressed in the future. The plan is not static, however. It is assumed that some major projects will have to be added and subtracted from the plan to keep it current, which will occur in the next update. Inclusion in the 2030 Plan is only the first step in the transportation planning process, since it is a financially unconstrained plan. The most important plan inclusion is the financially constrained CLRP (long range) and TIP (short range), which permit federal funds to be used for the projects within them. After the projects are included in the CLRP and TIP, the City must work to develop a fully workable plan that will incorporate the concerns of City Council and the community. The City will ensure that both City Council and the general citizenry will be involved in the process of refining these and new transportation projects throughout the process of project development.

FISCAL IMPACT: The fiscal impact for the individual jurisdictions has not been determined, as the cost to the jurisdiction will vary according to the funding source for the project. The proposed *TransAction 2030* Transportation Plan has an estimated cost for unfunded projects of \$16.6 billion for the region with \$300 million per year being spent on roadway projects, \$314 million per year on transit projects, and \$2 million per year on bicycle improvements. The study has identified the following as potential funding sources that would generate about \$175 million each year:

1. Increasing the sales tax an extra one-half cent on each \$1 of taxable purchases;
2. Increasing the state income tax an extra \$25 for each \$10,000 of taxable income; and
3. Increasing the gas tax an extra 17 and one-half cents per gallon.

These amounts assume the participation of all Northern Virginia jurisdictions. The new revenue sources above could potentially be used to support revenue bonds for transportation improvements.

ATTACHMENTS:

- Attachment 1. Proposed Council Resolution
- Attachment 2. 2030 Plan Brochure

STAFF:

Richard Baier, Director, Transportation and Environmental Services
Tom Culpepper, Deputy Director, Transportation and Environmental Services
James Maslanka, Division Chief, Office of Transit Services and Programs
Maria Mercedes White, Transportation Planner, Office of Transit Services and Programs

City of Alexandria
Resolution the Northern Virginia Transportation Authority's *TransAction 2030* Long-Range Transportation Plan
May 23, 2006

WHEREAS, the 2002 Virginia General Assembly passed the Northern Virginia Transportation Authority Act and created the NVTA; and

WHEREAS, the NVTA is comprised of 16 members: nine mayors or chairs, or their designees, of the four counties of Arlington, Fairfax, Loudoun, and Prince William, and the five cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park; two members of the House of Delegates; one member of the Virginia Senate; and two citizens appointed by the Governor; and the Director of Virginia's Department of Rail and Public Transportation and the Commonwealth Transportation Commissioner, or designee, serve as non-voting members; and,

WHEREAS, the Virginia General Assembly granted the NVTA the power and function of preparing a long-range transportation plan for regional transportation projects in Northern Virginia. In carrying out this responsibility, the Authority shall, on the basis of a regional consensus, whenever possible, set regional transportation policies and priorities for regional transportation projects; and,

WHEREAS, the City of Alexandria is a member of the NVTA; and

WHEREAS, the City of Alexandria has assisted the Northern Virginia Transportation Authority (NVTA) in preparing a draft update of the Northern Virginia region long-range transportation Plan (*TransAction 2030*); and NVTA has asked member jurisdictions to endorse the plan; and

WHEREAS, the City of Alexandria shares the NVTA's desires that regional transportation policies and priorities be guided by performance-based criteria such as the ability to improve travel times, reduce delays, connect regional activity centers, improve safety, improve air quality, and move the most people in the most cost-effective manner; and,

WHEREAS, the *TransAction 2030* Plan adheres to the adopted vision that,

"In the 21st Century, Northern Virginia will develop and sustain a multimodal transportation system that supports our economy and quality of life. It will be fiscally sustainable, promote areas of concentrated growth, manage both demand and capacity, and employ the best technology, joining rail, roadway, bus, air, water, pedestrian, and bicycle facilities into an interconnected network."

previously endorsed by the City of Alexandria, as part of the Northern Virginia 2020 Transportation Plan on October 13, 1999.

WHEREAS, the *TransAction 2030* Plan is a comprehensive study that identifies multimodal transportation solutions that provide safe, efficient, and economical choices for travel and transport of goods, and which also support expansion of the local economy; and,

WHEREAS, the adoption of the *TransAction 2030* Plan follows proactive public outreach and extensive public input through a scientific telephone survey of 1,263 Northern Virginia respondents, the participation of hundreds of citizens at seven community events, a public open house and hearing, and information dissemination through newsletters, a project website, and telephone information line; and,

WHEREAS, the NVTA found through this analysis that the Northern Virginia region is expected to add more than 650,000 new jobs and 918,000 more residents in the next 25 years; and,

WHEREAS, the Northern Virginia region accounts for 21 percent of the vehicle miles traveled on only eight percent of the Commonwealth's roadway lane miles and 75 percent of transit ridership in the Commonwealth; and,

WHEREAS, the *TransAction 2030* Plan documented a dramatic deterioration of the roadway system in the six years between 1999 and 2005; and,

WHEREAS, investments at the CLRP level are insufficient to counter this deterioration of the road network; and,

WHEREAS, the additional investment called for in the *TransAction 2030* Plan is necessary to improve travel and quality of life in Northern Virginia.

WHEREAS, the City of Alexandria agreed that a long-range transportation plan that is outlined in the *TransAction 2030* Plan will improve mobility.

NOW, THEREFORE, BE IT RESOLVED that the City of Alexandria does hereby endorse the *TransAction 2030* Plan, and that this resolution should be forwarded to the NVTA to be appended to the *TransAction 2030* Plan;

BE IT FURTHER RESOLVED that the City of Alexandria agrees that where significant differences exist among jurisdictional resolutions and/or the *TransAction 2030* Plan, the NVTA should facilitate discussions that assure open and complete deliberation of these issues and their appropriate and timely resolution.

BE IT FURTHER RESOLVED that the City of Alexandria agrees that the following procedural stipulations shall be followed as the NVTA works to implement the transportation strategies contained in the *TransAction 2030* Plan:

- The endorsed resolution of each member jurisdiction shall be appended to the *TransAction 2030* Plan.
- The NVTA shall continue to evaluate any highway corridor that is still projected to experience one hour or more of stop-and-go traffic in 2030, even after the implementation of the *TransAction 2030* Plan in order to find ways to further reduce this congestion.
- The NVTA shall continue to evaluate Metrorail lines into Washington, D.C., in order to understand capacity constraints and further identify improvements that will support additional ridership growth.
- The *TransAction 2030* Plan provides a balance of future investment in highway and transit projects and enhances mobility throughout the region, and retaining this balance should be a goal as the *TransAction 2030* Plan is implemented.
- The *TransAction 2030* Plan shall be updated and presented to the member jurisdictions at least every five years.
- Since *TransAction 2030* Plan did not add or delete projects from the Northern Virginia 2020 Transportation Plan adopted by the Transportation Coordinating Council of Northern Virginia in

December 1999, the next update of the Plan should include a complete review of the project list to determine if changes are necessary.

BE IT FURTHER RESOLVED that the City of Alexandria agrees that the NVT A should continue to review the interdependence between transportation and land use and recommend future measures for improving this linkage.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the City of Alexandria to be affixed this 23 day of May 2006.

ADOPTED: May 23, 2006

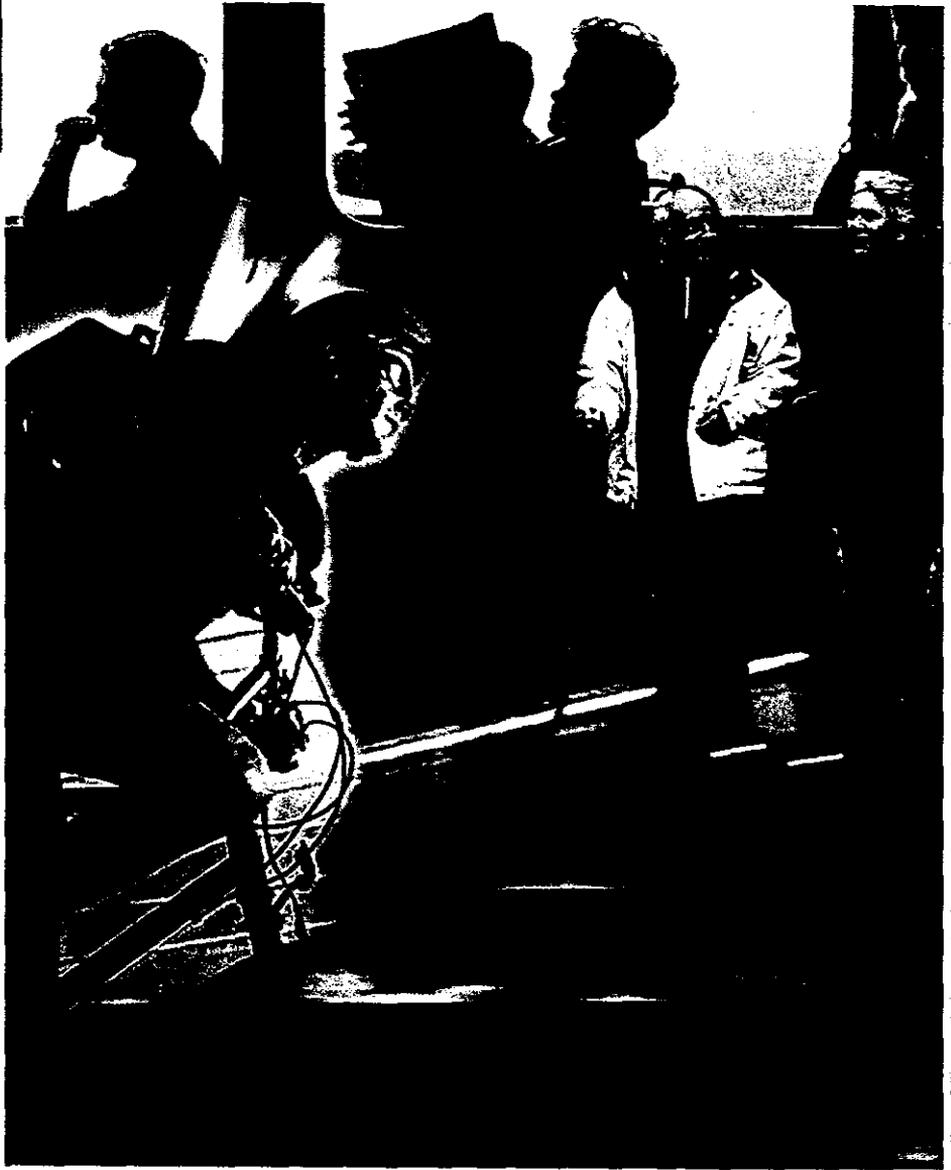
WILLIAM D. EUILLE **MAYOR**
On behalf of the City Council
Of Alexandria, Virginia

ATTEST:

Jackie M. Henderson, CMC City Clerk

TransAction2030

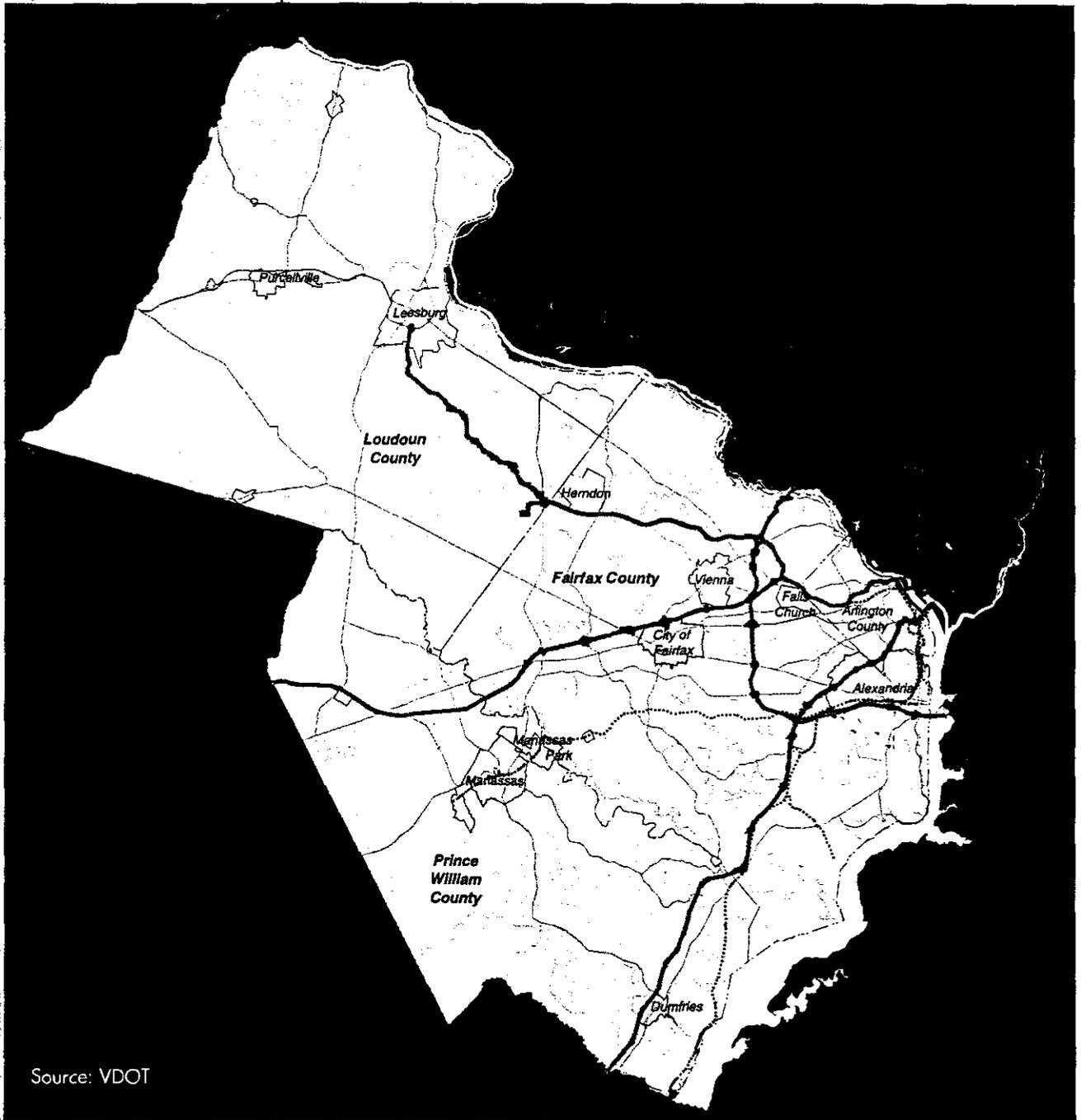
Transportation for Today and Tomorrow



SUMMARY REPORT



North



Source: VDOT

Table of Contents



Introduction	2
Northern Virginia	2
Northern Virginia and the Commonwealth	2
Northern Virginia and the Washington Region	2
TransAction 2030 Plan Process	3
Vision, Goals & Strategies	3
Public Participation	4
Telephone Survey	4
Evaluation Process	5
Constrained Long-Range Plan	5
Highway System Performance	6
1999 Highway System Peak Period Performance	6
2005 Highway System Peak Period Performance	6
2030 CLRP Highway System Peak Period Performance	7
TransAction 2030 Plan Highway System Peak Period Performance	7
Transit Performance	8
2005 Metrorail Passenger Load Level of Service	8
TransAction 2030 Plan Metrorail Passenger Load Level of Service	8
2005 VRE Passenger Load Level of Service	9
TransAction 2030 Plan VRE Passenger Load Level of Service	9
The Multi-Modal System	10
Transit Analysis	10
Travel Demand Model	11
Highway Improvements	11
Transit Improvements	11
Bicycle and Trail Improvements	11
System-wide Technology Improvements	11
Park and Ride Lot Improvements	11
Cost Estimates	12
Funding	12
Next Steps	Inside Back Cover
About the NVTA	Outside Back Cover

Northern Virginia

Northern Virginia is the Commonwealth's fastest growing region in terms of population, employment and development. People continue to be drawn to this area for job opportunities and its educational, cultural and historic attractions. Northern Virginia consists of the counties of Arlington, Fairfax, Loudoun, and Prince William; the cities of Alexandria, Fairfax, Falls Church, Manassas and Manassas Park; and the towns of Dumfries, Herndon, Leesburg, Purcellville, and Vienna.

A fundamental key to maintaining the region's prosperity is a sound transportation system. Northern Virginia's transportation network is multi-modal, consisting of roads, transit, bicycle/pedestrian networks, and two major airports. But the system is currently struggling to serve the traveling needs of residents and countless others traveling in the region for commerce or pleasure. The region must improve its transportation system or the Commonwealth will lose important jobs and their accompanying revenue.

In 2002, the Virginia General Assembly created the Northern Virginia Transportation Authority (NVTVA) and charged it with developing a long-range regional transportation plan. This plan, called the TransAction 2030 Plan, updates the 2020 Transportation Plan and provides the blueprint for establishing investment priorities.



The Washington Post, December 28, 2004



The Washington Post

Northern Virginia and the Commonwealth

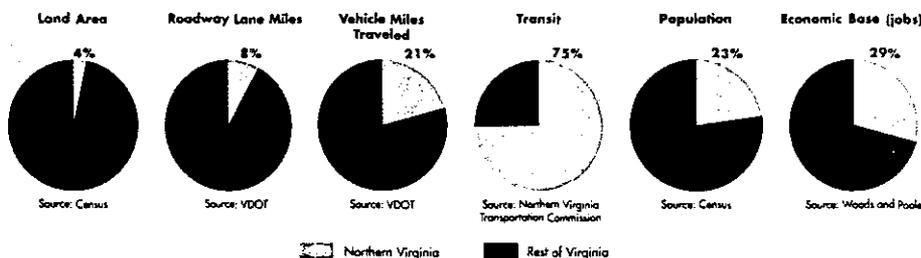
The Northern Virginia region accounts for 21 percent of the vehicle miles traveled (VMT) on only eight percent of the Commonwealth's roadway lane miles. It also accounts for 75 percent of transit ridership within the Commonwealth. The entire transportation system needs an infusion of resources to maintain it in good operating condition and to increase capacity.

Northern Virginia and the Washington Region

Within the next 25 years, Northern Virginia is expected to continue to attract highly educated professionals as the area absorbs approximately 651,400 new jobs, or more than half of the new jobs expected to come to the Metropolitan Washington Region. It is also projected to attract 918,500 new residents or 56 percent of those expected to relocate in the Metropolitan area. Today, Northern Virginia is home to 2,164,700 residents and 1,238,900 jobs.¹

Northern Virginia's growth in jobs and population could contribute to a regional housing shortage anticipated by the Metropolitan Washington Council of Governments. More residents will then be forced to find housing outside the Metropolitan region requiring longer commutes that will compound congestion on area roads.

1. Source: Metropolitan Washington Council of Governments, Round 7.0 Cooperative Forecasts.



The TransAction 2030 Plan findings include:

- Over \$5 billion are needed to complete the projects in the Plan
- All modes of the Northern Virginia transportation network are experiencing increased congestion
- Current transit service in the region's major corridors is inadequate
- Current transit service improves only a small amount of TransAction 2030 needs
- Current transit service shows that commuters have the density to support transit service
- Current transit service projects that 13 million more Northern Virginia residents will be in the region

Challenges

- Improve travel conditions in severely congested corridors
- Better connect activity centers and enhance all modes of transportation
- Strive to attain federally mandated air quality standards
- Fund aging infrastructure needs
- Attain dedicated funding for critically needed transportation projects.

TransAction 2030 Plan Process

Vision, Goals & Strategies

The vision adopted by the Transportation Coordinating Council in 1999 continued to guide this update of the 2020 Plan. However, for the TransAction 2030 Plan a cutting edge approach was used to analyze the extensive transit, bicycle, and pedestrian network to complement the highway network analysis. This multi-modal analysis provides an understanding of the interactions between the modes (driving, taking a bus, walking and biking) to evaluate the effect of investments on all users of the transportation system. The TransAction 2030 planning process also included innovative outreach to all of the communi-

ties that make up the Northern Virginia region. This outreach resulted in input to help prioritize the most desired improvements among eight major transportation corridors. The final set of priorities reflects the public's desire for more multi-modal solutions and includes substantial investment in transit, roads, trails, and sidewalks.

Vision

“In the 21st century, Northern Virginia will develop and sustain a multi-modal transportation system that supports our economy and quality of life. It will be fiscally sustainable, promote areas of concentrated growth, manage both demand and capacity, and employ the best technology, joining rail, roadway, bus, air, water, pedestrian, and bicycle facilities into an interconnected network.”

Goals

The goals developed for the TransAction 2030 Plan build on goals from the 2020 Plan and earlier plans in Northern Virginia and the Metropolitan Washington region. These include:

- Provide an integrated, multi-modal transportation system
- Provide responsive transportation service to customers
- Respect historical and environmental factors
- Recognize the linkage between transportation and land use
- Incorporate the benefits of technology
- Identify funding and legislative initiatives needed to implement the Plan
- Enhance Northern Virginia relationships among jurisdictions, agencies, the public, and the business community.

Measure the extent of transit service in the region

Provide increased road and transit capacity

Improve connections between activity centers

Use technology for more efficient system operations

Maintain the existing system for maximum performance

Provide a multi-modal solution

Public Participation

Thousands of citizens participated in the TransAction 2030 planning process. This participation focused on developing a regional consensus on transportation improvement priorities. One of the elements of the outreach effort was a telephone survey of 1,263 citizens. Other citizens participated in seven community events where they prioritized investments in eight corridors. An interactive website provided online activities and project presentations. A project newsletter reached over 3,000 residents and email broadcasts at major milestones in the study were sent to over 1,100 community leaders. A public hearing and open house was held to share the results of the technical analysis and to receive additional input.

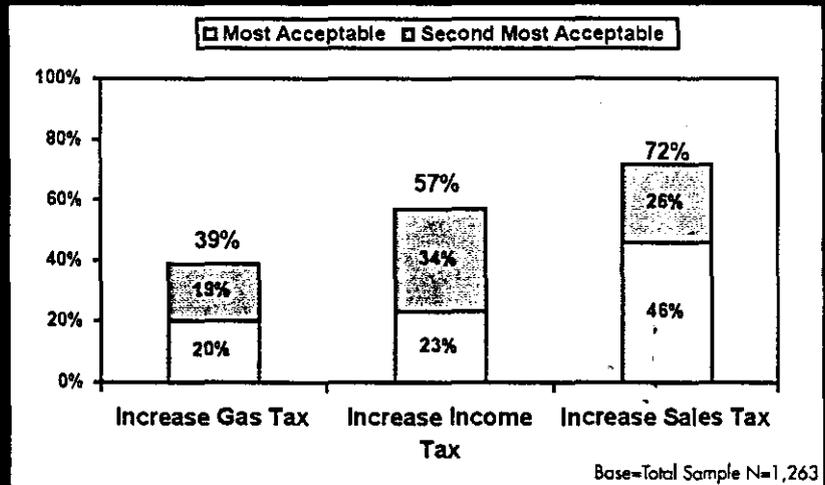
Telephone Survey

One encouraging result of the telephone survey was the indication that a large number of respondents were willing to contribute monetary resources to help pay for improvements to transit and road widening. The survey asked respondents about their preference for financing options including an add-on income tax and increases in the gas tax and the sales tax. This survey of 1,263 Northern Virginia adults over the age of 18 gave insight into what causes the traveling public frustration and respondents' priorities for transit and road widening projects.

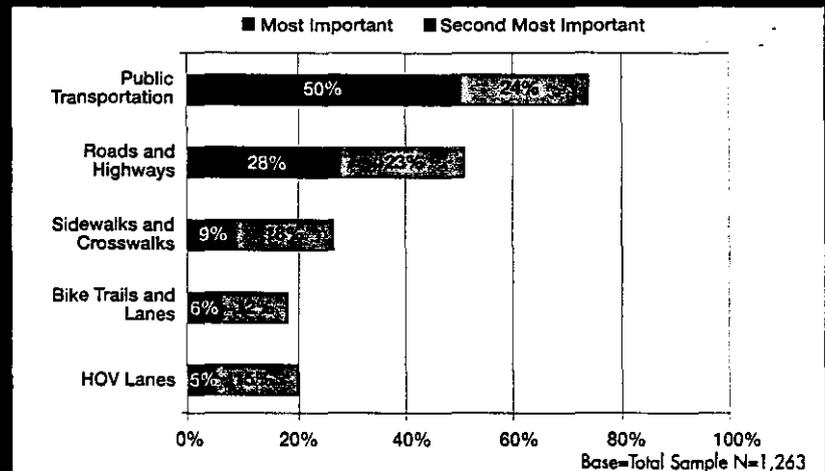
The survey results include:

- The public supported multi-modal solutions
- Those who chose transit as their top priority are willing to pay more to get their project built than are those who chose road widening
- Half of all respondents said that public transportation is their top priority
- Whether living in Prince William County or Arlington County, residents favor transit improvements
- When offered side-by-side comparisons Northern Virginians favored an increase in the sales tax over income or gas tax increases.

Most and Second Most Acceptable Funding Methods



Most and Second Most Important General Transportation Priorities



Source: TransAction 2030 Plan

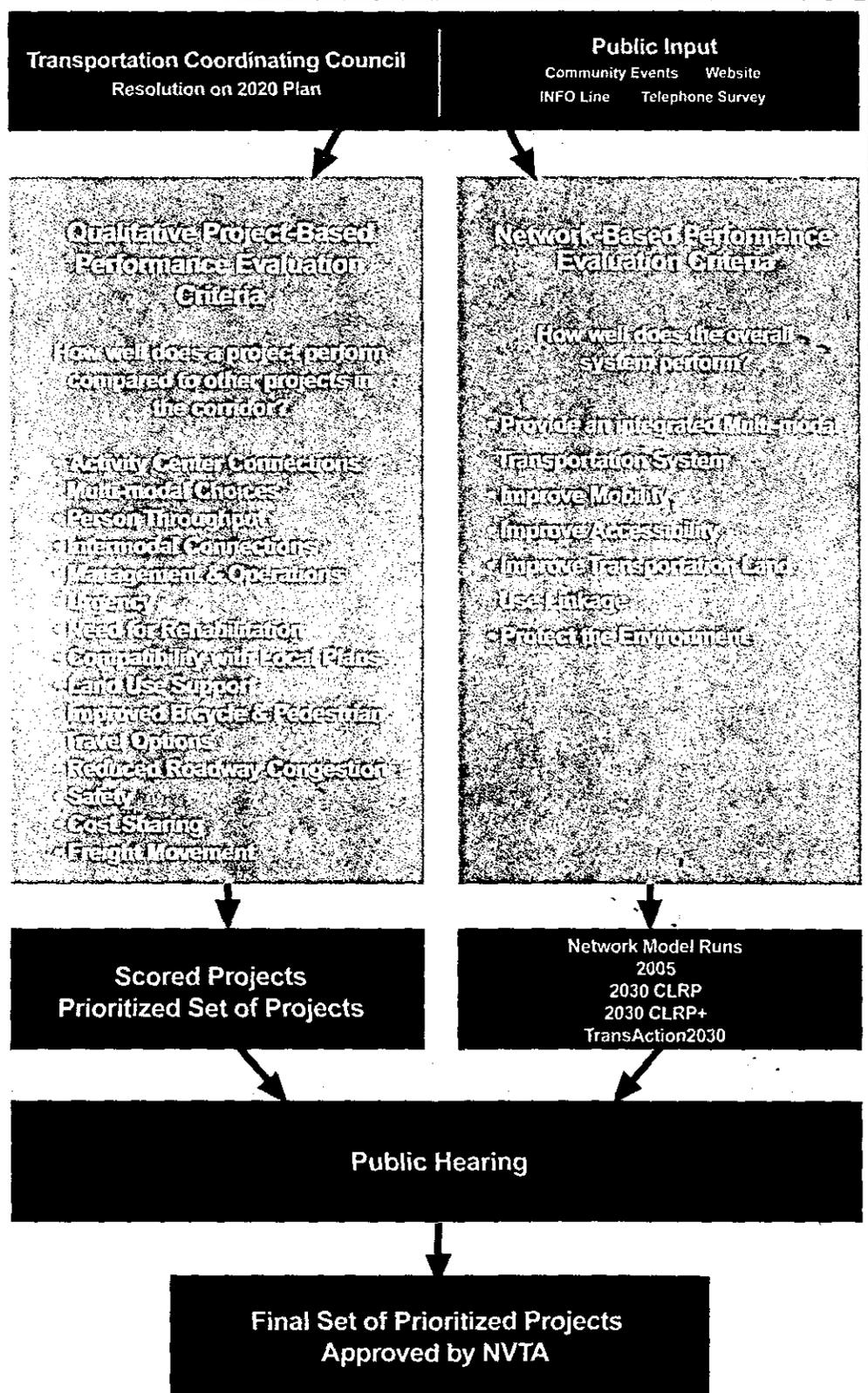
Evaluation Process

One of TransAction 2030's major goals was to present a list of projects to receive priority funding, based on an estimated funding shortfall of over \$15 billion. To prioritize potential improvements, project-specific criteria were used to evaluate and rank projects by corridor and by mode.

Constrained Long-Range Plan

The NVTA's highest priority projects are those currently in the Metropolitan Washington Constrained Long Range Plan (CLRP). The CLRP is a blueprint for transportation projects and strategies that can realistically be implemented over the next 25 years for the Metropolitan Washington area. Basically, the projects must be affordable, meet air quality improvement goals, and include other elements of the region's policies. As funding becomes available, projects identified in the TransAction 2030 Plan will be submitted for inclusion in the CLRP.

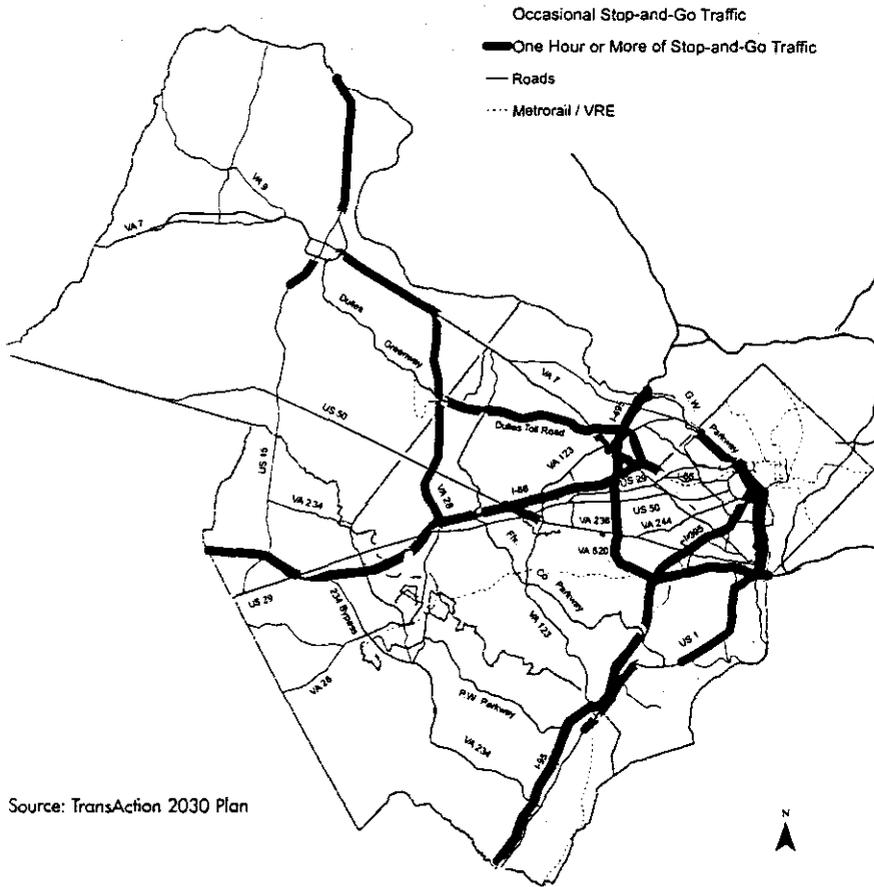
Evaluation Criteria



Source: TransAction 2030 Plan

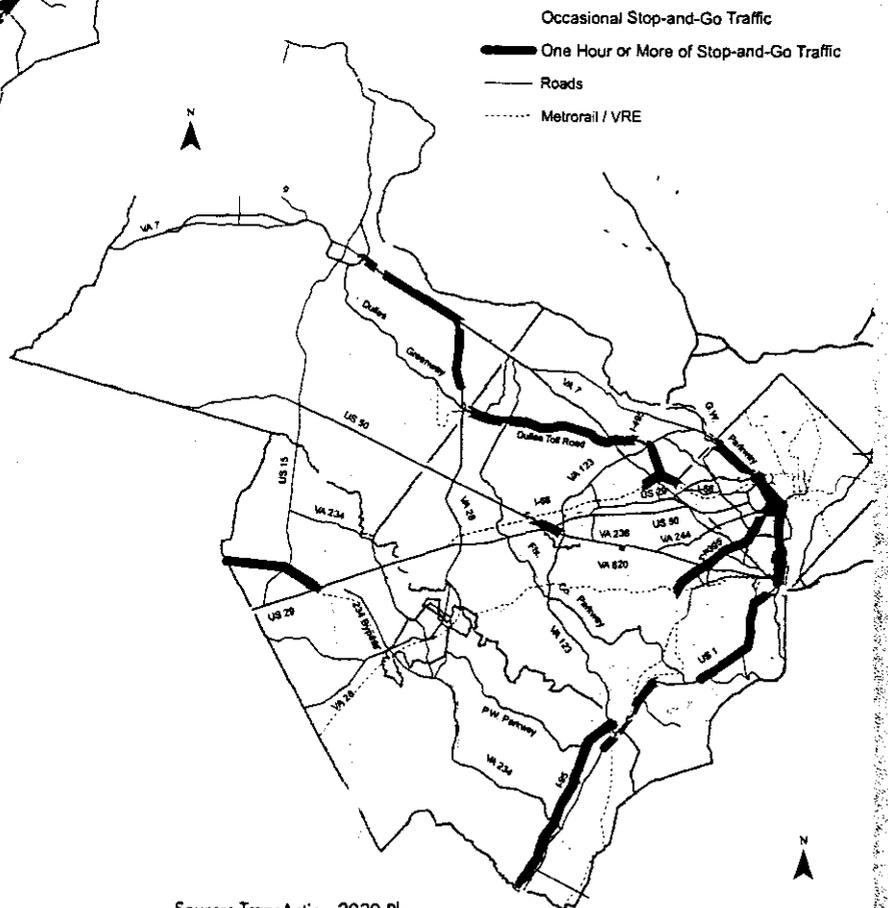
Highway System Performance

2030 CLRP Highway System Peak Period Performance



Source: TransAction 2030 Plan

TransAction 2030 Plan Highway System Peak Period Performance



Source: TransAction 2030 Plan

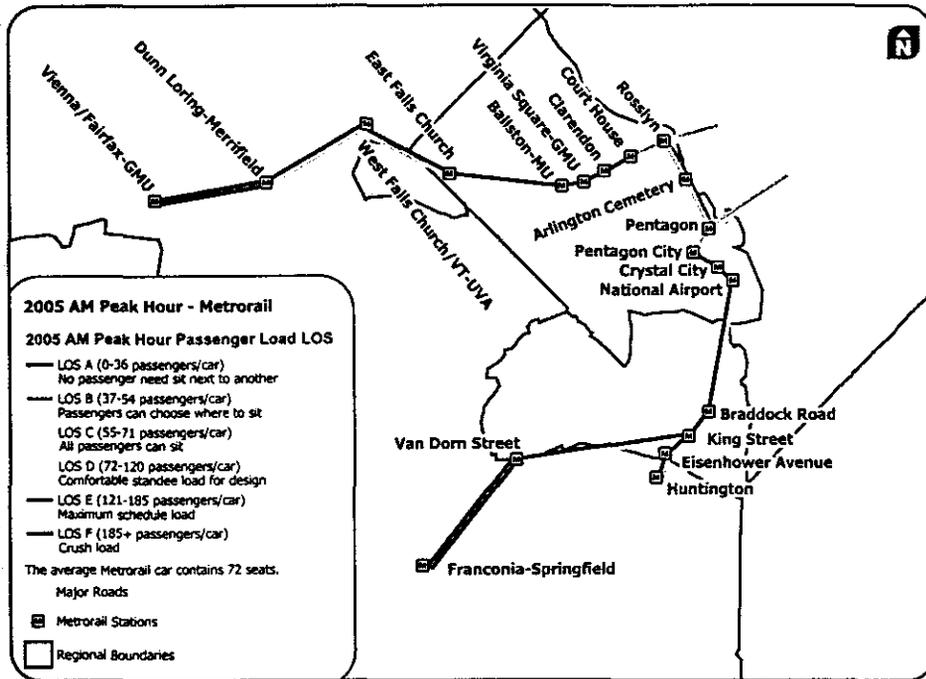
Implementation of CLRP
Projects has little effect on
congestion. The additional
investment called for in the
TransAction 2030 Plan is
necessary to improve travel
and quality of life in
Northern Virginia.

Transit Performance

Metrorail

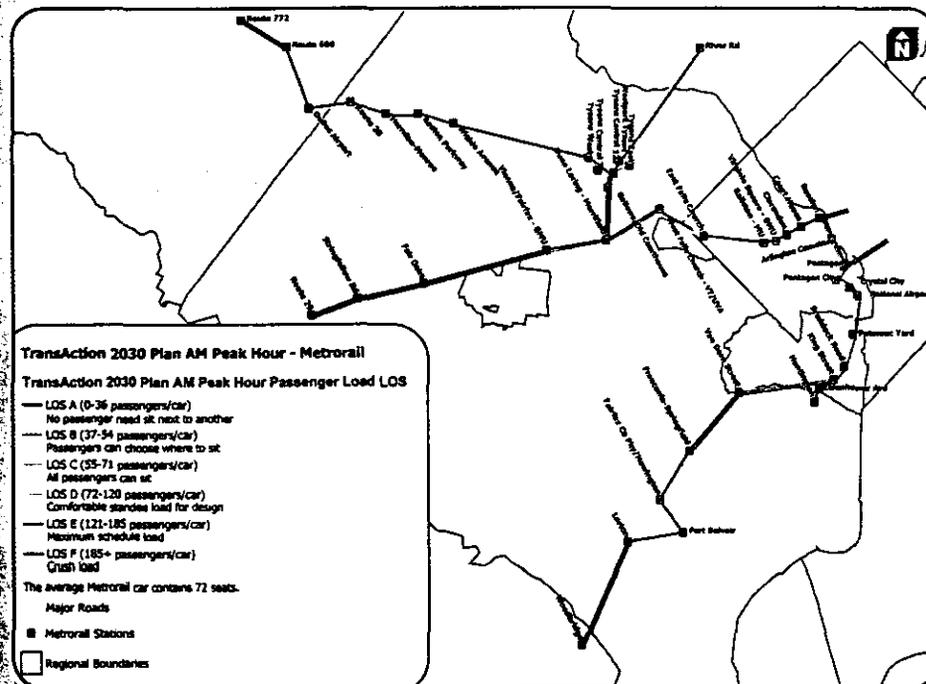


2005 Metrorail Passenger Load Level of Service



Sources: WMATA (train volumes), MWCOG model (base mapping & passenger volumes)

TransAction 2030 Plan Metrorail Passenger Load Level of Service



Sources: WMATA (train volumes), MWCOG model (base mapping & passenger volumes)

Rail is the most popular form of transit. Ridership continues to increase on Metrorail and Virginia Railway Express (VRE) as well as on all bus systems within Northern Virginia. The passenger load level of service shows crowding on various segments of the rail system, in both the current transit network and the future network proposed by TransAction 2030.

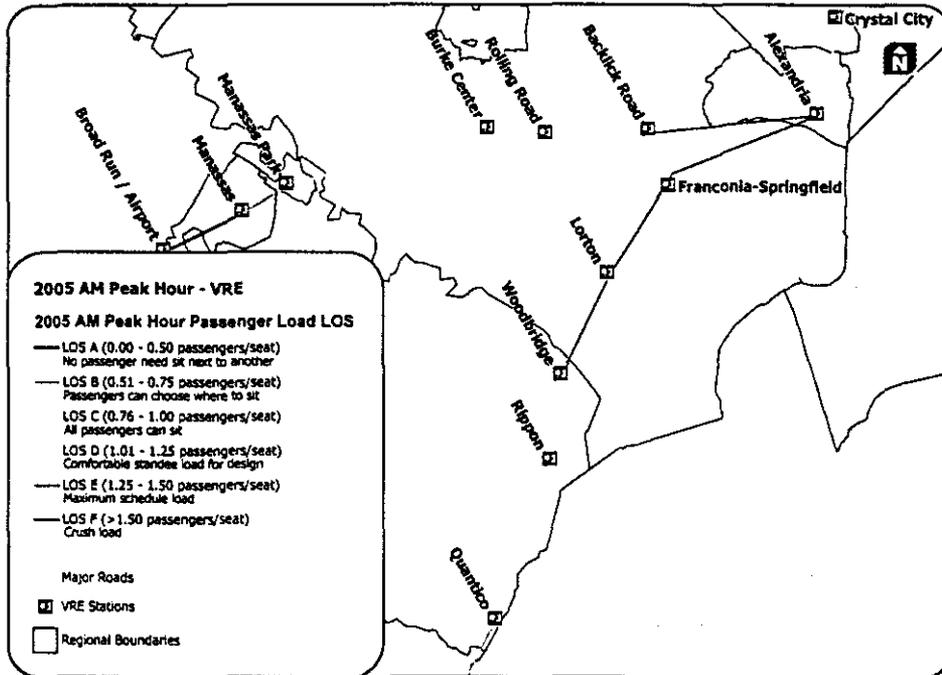
For the 2030 Study, the Dulles Corridor Metrorail Project was assumed to be built. Light Rail is proposed on Columbia Pike, VA Route 7, US Route 1, and VA Route 28. These rail connections and extensions will provide more travel choices and capacity in these corridors.

TransAction 2030 extends Metrorail service into areas not currently served, including a rail crossing of the Potomac River.

Transit Performance

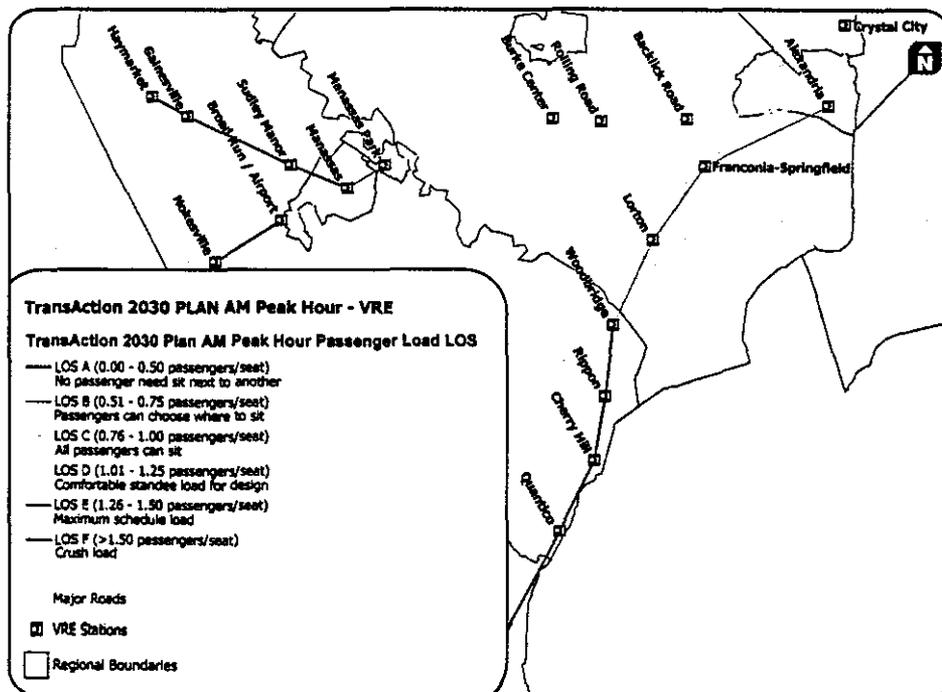
Virginia Railway Express (VRE)

2005 VRE Passenger Load Level of Service



Sources: VRE (train volumes), MWCOG model

TransAction 2030 Plan VRE Passenger Load Level of Service



Sources: VRE (ridership projections), MWCOG model

The TransAction 2030
 network improves service
 of VRE routes

Northern Virginia Transit Trips 2005

- 300,000 average weekday passenger trips on Metrorail
- Another 140,000 average weekday passenger trips on Metrobus and locally operated bus systems
- More than 15,000 average weekday passenger trips on VRE

Source: NVTC FY 2005

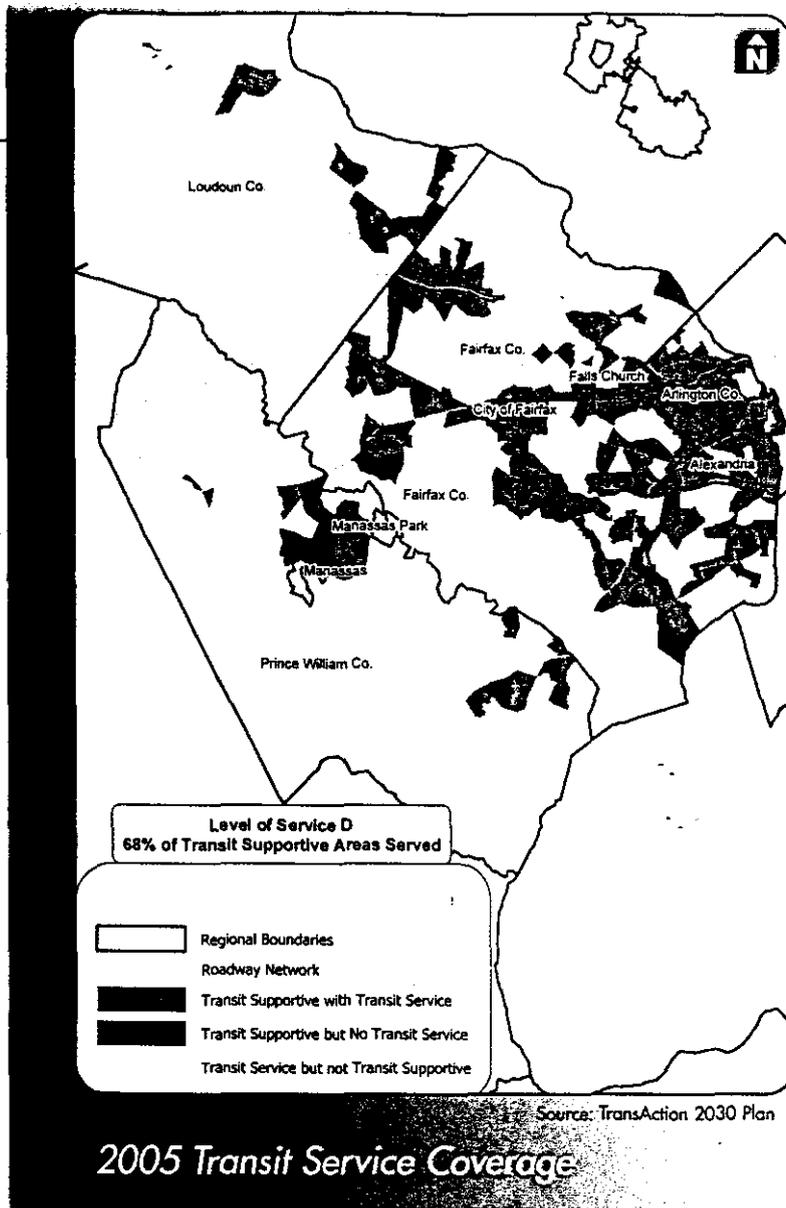
The Multi-Modal System

Transit Analysis

One of the cornerstones of this planning update is the inclusion of a ground-breaking analysis of transit performance. The analysis that was done to assess the existing transit performance, the anticipated performance with the improvements contained within the CLRP plan, and the TransAction 2030 Plan, looked at five measures:

- How much of Northern Virginia is served by transit
- How crowded are trains and buses
- How often can you take a train or bus to get to major destinations
- How many hours during the day is transit available to the public and
- How does the travel time by transit compare with that by car for the same trip.

Transit trips have grown 4% annually



2005 Transit Service Coverage

Level of Service	Automobile	Bicycle	Pedestrian	Bus
A/B				
C/D				
E/F				

Multi-modal Corridor LOS Examples

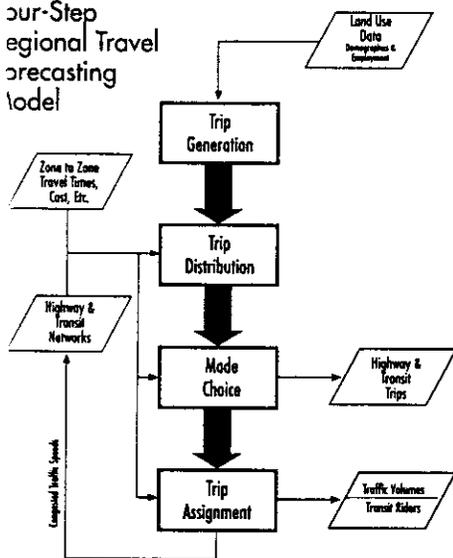
This multi-modal analysis helps us understand the interaction between modes and evaluates the effects of proposed investments on each mode.

Source: Florida DOT Quality/LOS Handbook, 2002

Travel Demand Model

The Travel Demand Model developed by the Metropolitan Washington Council of Governments was used to evaluate the effects of transportation investments before improvements are implemented. The model simulates future traffic patterns and volumes on the road investments based on projected growth in population, jobs, and households, as well as future land use.

Four-Step Regional Travel Forecasting Model



Source: Metropolitan Washington COG

Highway Improvements

The TransAction 2030 Plan proposes roadway improvement projects throughout the Northern Virginia region. The improvements are focused on increasing roadway capacity and improving the efficiency of existing roadways. This includes a range of roadway widening, reconstruction, and facility upgrade improvement projects, including:

- Widening the Beltway, I-66 outside the Beltway, US Route 29, and VA Route 28
- Reconstruction of Elden Street, US Route 15, US Route 29, and Beltway interchanges
- Facility upgrades of VA Route 28 and VA Route 234.

Transit Improvements

A wide range of transit system improvement projects have been evaluated, including:

- Extensions of Metrorail to Centreville and Potomac Mills
- Circumferential Metrorail line in the I-495 Beltway corridor between Dunn Loring and Bethesda, Maryland
- Light Rail lines along VA Route 7/ Columbia Pike and between Manassas and Dulles Airport
- High capacity transit line in the US Route 1 corridor between Alexandria and the Pentagon
- Extensions of VRE to Haymarket and Nokesville
- Priority and express bus service in multiple corridors
- New and expanded HOV facilities.



Bicycle and Trail Improvements

The TransAction 2030 Plan includes over \$60 million in improvements to the Northern Virginia multi-use trail system. These improvements were identified as part of the Northern Virginia Regional Bikeway and Trail Network Study completed by VDOT. Major trail projects include:

- VA Route 7 between Leesburg and Alexandria
- Beltway Trail
- Potomac Heritage Trail
- US Route 1 between Stafford County and the Beltway.



In addition, over 150 individual trail projects are included to improve linkages between activity centers and provide connections along and between existing trails.

System-Wide Technology Improvements

The TransAction 2030 Plan will continue to monitor the benefits of technological advances to our transportation system through:

- Intelligent Transportation Systems (ITS)
- Telecommuting
- Monitoring of technology, particularly relating to transit systems.

Park and Ride Lot Improvements

The TransAction 2030 Plan provides for expanded Park and Ride lots.

Cost Estimates

TransAction 2030 combined the cost estimates for projects currently in the Northern Virginia portion of the Metropolitan Washington region's Constrained Long-Range Plan (CLRP) with estimates for the additional TransAction 2030 improvements recommended in this report. Operation and maintenance costs were then included for all improvements. The results revealed that to fund CLRP projects alone would cost \$30 billion between 2004 and 2030; and funding TransAction 2030 Plan's additional recommended improvements would cost an additional \$16.6 billion. Thus, the full cost of implementing all of these improvements adds up to \$46.6 billion (in 2005 dollars).

\$46.6 billion per year in new funding will be needed to implement the TransAction 2030 Plan

- Funding sources must be arranged to satisfy this need

Current Plan (Northern Virginia Portion of Region's CLRP)⁽¹⁾ Total Cost (2004-2030)⁽²⁾

Average Yearly Cost⁽³⁾

Roadway
Transit
Bike/Pedestrian
Technology
Total

System Expansion \$11.9 Billion

\$ Million

\$ 256
\$ 182
\$ 1
\$ 2
\$ 441

Operation/ Preservation

\$18.1 Billion

\$ Million

\$ 285
\$ 373
\$ 6
\$ 6
\$ 670

= \$30.0 Billion

TransAction 2030 Plan Improvements Added to Current Plan Total Cost (2006-2030)⁽²⁾

Average Yearly Cost⁽³⁾

Roadway
Transit
Bike/Pedestrian
Total

\$15.4 Billion

\$ Million

\$ 300
\$ 314
\$ 2
\$ 616

\$1.2 Billion⁽⁴⁾

\$ Million

\$ 6
\$ 41
\$ 1
\$ 48

= \$16.6 Billion

Grand Total TransAction 2030 Plan Costs

\$27.3 Billion

\$19.3 Billion

= \$46.6 Billion

Notes:

1. Source: MWCOG 2004 Update to the Financially Constrained Long Range Transportation Plan (2004-2030).
2. Source: Results of the Financial Analysis for the 2003 Constrained Long-Range Transportation Plan, Cambridge Systematics, Inc. 2003 costs in report inflated by 10% to reflect 2005 constant dollars.
3. Average yearly capital system expansion estimates equal total cost in 2005 dollars divided by number of years in each Plan. Inflation and debt financing are not included.
4. Operation/preservation cost estimates based on projected year of completion for each project from the 2020 Plan.

Funding

The TransAction 2030 Plan improvements identified will cost more than \$15 billion. In addition, \$1.2 billion will be needed to operate and maintain these improvements. Meanwhile, funding from federal and state sources for highway and transit construction is becoming less certain. It is estimated that by 2018, all available state funding will be dedicated to maintenance, leaving no available money to match federal funding. There is also the challenge of meeting federal air quality standards, which if not met could mean the loss of access to federal funding for highway and transit construction. While many of the projects that are currently in the CLRP are scheduled to be built in out years, they are actually needed much sooner because of the continuing growth in employment and residents. The text box to the right illustrates revenues that could be generated through several mechanisms.

Potential Revenue Sources

Each of the following revenue sources would generate about \$175 million each year.

Increasing the sales tax an extra one-half cent on each \$1 of taxable purchases

Increasing the state income tax an extra \$25 for each \$10,000 of taxable income

Increasing the gas tax an extra 17 and one-half cents on a gallon of gas.

Note: Amounts assume participation of all Northern Virginia jurisdictions. The items above could be used to support bonds for transportation improvements.

Source: NVTC 2005

Next Steps

Adoption of the TransAction 2030 Plan by NVTA represents the first step in making TransAction 2030's vision a reality. More work is needed to secure funding for the highest priority improvements recommended in the Plan. Immediate next steps include:

- Share TransAction 2030 findings with the Virginia General Assembly
- Use TransAction 2030 Plan as input to Metropolitan Washington Constrained Long-Range Plan (CLRP) update
- Conduct additional Northern Virginia discussion on funding
- Incorporate TransAction 2030 Plan into Virginia's long-range transportation plan

TransAction2030

Transportation for Today and Tomorrow

About the NVTA

The Virginia General Assembly created the Northern Virginia Transportation Authority on July 1, 2002 and charged it with development of a long-range transportation plan for the Northern Virginia region. NVTA recommends to the Commonwealth Transportation Board (CTB) which transportation projects should receive funding.

The Authority is comprised of 16 members; nine are mayors or chairs, or their designees, of the nine cities and counties that are members of the Authority; two are members of the House of Delegates; one is a State Senator; and two are citizens appointed by the Governor. In addition, the Director of Virginia's Department of Rail and Public Transportation and the Commonwealth Transportation Commissioner, or designee, serve as non-voting members.

MEMBERS

Chairman and Vice Chairman

David F. Snyder, NVTA Chairman; City of Falls Church

Christopher E. Zimmerman, NVTA Vice Chairman; Arlington County

William D. Euille, City of Alexandria

Robert F. Lederer, City of Fairfax

Gerald E. Connolly, Fairfax County

Scott K. York, Loudoun County

Harry J. "Hal" Parrish, II, City of Manassas

Bryan Polk, City of Manassas Park

Sean T. Connaughton, Prince William County

William C. Mims, Virginia Senate

Vincent F. Callahan, Jr., Virginia House of Delegates

Jeffrey M. Frederick, Virginia House of Delegates

Margaret E. G. Vanderhye, Governor's Appointee

(Vacant), Governor's Appointee, CTB Member

Karen Rae, Director, DRPT

Dennis Morrison, Administrator, Northern Virginia District Office, VDOT



Northern Virginia Transportation Authority
3060 Williams Drive, Suite 510
Fairfax, VA 22031
www.TransAction2030.com

RESOLUTION NO. 2185

WHEREAS, the 2002 Virginia General Assembly passed the Northern Virginia Transportation Authority Act and created the NVTA; and

WHEREAS, the NVTA is comprised of 16 members: nine mayors or chairs, or their designees, of the four counties of Arlington, Fairfax, Loudoun, and Prince William, and the five cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park; two members of the House of Delegates; one member of the Virginia Senate; and two citizens appointed by the Governor; and the Director of Virginia's Department of Rail and Public Transportation and the Commonwealth Transportation Commissioner, or designee, serve as non-voting members; and

WHEREAS, the Virginia General Assembly granted the NVTA the power and function of preparing a long-range transportation plan for regional transportation projects in Northern Virginia. In carrying out this responsibility, the Authority shall, on the basis of a regional consensus, whenever possible, set regional transportation policies and priorities for regional transportation projects; and

WHEREAS, the City of Alexandria is a member of the NVTA; and

WHEREAS, the City of Alexandria has assisted the Northern Virginia Transportation Authority (NVTA) in preparing a draft update of the Northern Virginia region long-range transportation Plan (*TransAction 2030*); and NVTA has asked member jurisdictions to endorse the plan; and

WHEREAS, the City of Alexandria shares the NVTA's desires that regional transportation policies and priorities be guided by performance-based criteria such as the ability to improve travel times, reduce delays, connect regional activity centers, improve safety, improve air quality, and move the most people in the most cost-effective manner; and

WHEREAS, the *TransAction 2030* Plan adheres to the adopted vision that,

"In the 21st Century, Northern Virginia will develop and sustain a multimodal transportation system that supports our economy and quality of life. It will be fiscally sustainable, promote areas of concentrated growth, manage both demand and capacity, and employ the best technology, joining rail, roadway, bus, air, water, pedestrian, and bicycle facilities into an interconnected network."

previously endorsed by the City of Alexandria, as part of the Northern Virginia 2020 Transportation Plan on October 13, 1999.

WHEREAS, the *TransAction 2030* Plan is a comprehensive study that identifies multimodal transportation solutions that provide safe, efficient, and economical choices for travel and transport of goods, and which also support expansion of the local economy; and

WHEREAS, the adoption of the *TransAction 2030* Plan follows proactive public outreach and extensive public input through a scientific telephone survey of 1,263 Northern Virginia respondents, the participation of hundreds of citizens at seven community events, a public open house and hearing, and information dissemination through newsletters, a project website, and telephone information line; and

WHEREAS, the NVTA found through this analysis that the

Northern Virginia region is expected to add more than 650,000 new jobs and 918,000 more residents in the next 25 years; and

WHEREAS, the Northern Virginia region accounts for 21 percent of the vehicle miles traveled on only eight percent of the Commonwealth's roadway lane miles and 75 percent of transit ridership in the Commonwealth; and

WHEREAS, the *TransAction 2030* Plan documented a dramatic deterioration of the roadway system in the six years between 1999 and 2005; and

WHEREAS, investments at the CLRP level are insufficient to counter this deterioration of the road network; and

WHEREAS, the additional investment called for in the *TransAction 2030* Plan is necessary to improve travel and quality of life in Northern Virginia.

WHEREAS, the City of Alexandria agreed that a long-range transportation plan that is outlined in the *TransAction 2030* Plan will improve mobility.

NOW, THEREFORE, BE IT RESOLVED that the City of Alexandria does hereby endorse the *TransAction 2030* Plan, and that this resolution should be forwarded to the NVTA to be appended to the *TransAction 2030* Plan;

BE IT FURTHER RESOLVED that the City of Alexandria agrees that where significant differences exist among jurisdictional resolutions and/or the *TransAction 2030* Plan, the NVTA should facilitate discussions that assure open and complete deliberation of these issues and their appropriate and timely resolution.

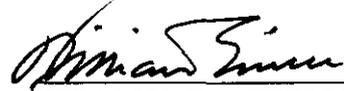
BE IT FURTHER RESOLVED that the City of Alexandria agrees that the following procedural stipulations shall be followed as the NVTA works to implement the transportation strategies contained in the *TransAction 2030* Plan:

- The endorsed resolution of each member jurisdiction shall be appended to the *TransAction 2030* Plan.
- The NVTA shall continue to evaluate any highway corridor that is still projected to experience one hour or more of stop-and-go traffic in 2030, even after the implementation of the *TransAction 2030* Plan in order to find ways to further reduce this congestion.
- The NVTA shall continue to evaluate Metrorail lines into Washington, D.C., in order to understand capacity constraints and further identify improvements that will support additional ridership growth.
- The *TransAction 2030* Plan provides a balance of future investment in highway and transit projects and enhances mobility throughout the region, and retaining this balance should be a goal as the *TransAction 2030* Plan is implemented.
- The *TransAction 2030* Plan shall be updated and presented to the member jurisdictions at least every five years.
- Since *TransAction 2030* Plan did not add or delete projects from the Northern Virginia 2020 Transportation Plan adopted by the Transportation Coordinating Council

of Northern Virginia in December 1999, the next update of the Plan should include a complete review of the project list to determine if changes are necessary.

BE IT FURTHER RESOLVED that the City of Alexandria agrees that the NVTAA should continue to review the interdependence between transportation and land use and recommend future measures for improving this linkage.

ADOPTED: May 23, 2006


WILLIAM D. EULLE MAYOR

ATTEST:


Jacqueline M. Henderson, CMC City Clerk