



TransAction 2040

Open House Presentation

April 18, 2012



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Talking Points:

This public Open House is for TransAction 2040, the latest revision to the Northern Virginia Regional Transportation Plan.

The Northern Virginia Transportation Authority (NVTA) is charged with preparing this Plan, to include transportation improvements of regional significance.

This presentation focuses on the work currently underway and the findings of the technical analyses completed to date.




TransAction 2040 Vision

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.

Adopted by the NVTA

Talking Points:


The TransAction 2040 vision reinforces the notion of developing a multimodal transportation plan that serves to improve the transportation system while addressing key goals.



TransAction 2040 Goals

Goals
Provide an integrated, multimodal transportation system
Provide responsive transportation service to customers
Respect historical and environmental factors
Maximize community connectivity by addressing transportation and land use together
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


Adopted by the NVT



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Talking Points:

These seven goals guide the assessment and prioritization of projects found in TransAction 2040.



TransAction 2040 Overview

- Planning horizon is Year 2040
- Coverage
 - Counties of Arlington, Fairfax, Loudoun, and Prince William
 - Cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park
 - Towns of Dumfries, Herndon, Leesburg, Purcellville, and Vienna
- Projects included address roadway, transit, bicycle, and pedestrian improvements
- Focused on eight regional corridors connecting major origins and destinations

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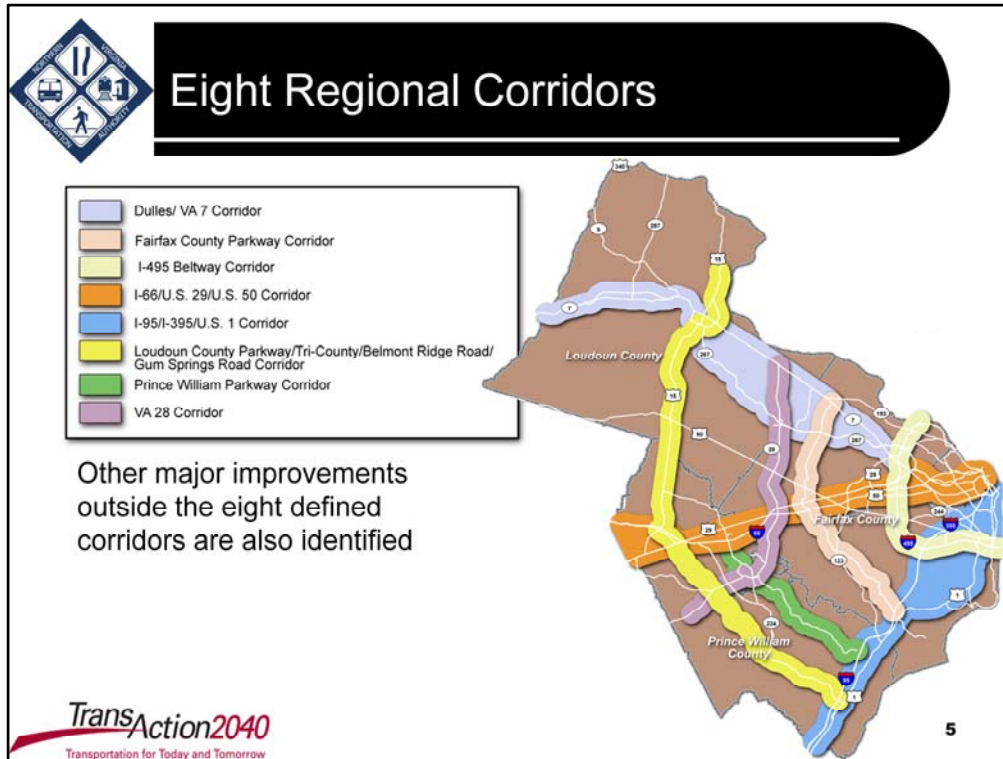
Talking Points:

TransAction 2040 has a planning horizon of the year 2040, allowing for consistency with the region's adopted Fiscally-Constrained Long-Range Plan (CLRP).

The CLRP is developed cooperatively by governmental bodies and agencies represented on the National Capital Region Transportation Planning Board and identifies all regionally significant transportation projects and programs that are planned and funded in the Washington metropolitan area between 2011 and 2040.

TransAction 2040 is focused on Northern Virginia; the study area covers the communities and transportation facilities noted here.

TransAction 2040 is a multimodal plan, addressing bicycle, transit, and roadway projects.




Talking Points:

TransAction 2040 is focused on eight regional corridors connecting major origins and destinations:

- Dulles Toll Road/VA 7 Corridor
- Fairfax County Parkway Corridor
- I-495 Beltway Corridor
- I-66/U.S. 29/U.S. 50 Corridor
- I-95/I-395/U.S. 1 Corridor
- Loudoun County Parkway/Tri-County/Belmont Ridge Road/Gum Springs Road Corridor
- Prince William Parkway Corridor
- VA 28 Corridor

Other major improvements outside the eight defined corridors have also been identified, including the Eastern Potomac River Crossing and the Western Transportation Corridor.



Relationship to TransAction 2030

- Extended planning horizon
- Updated and added new projects
- Modified evaluation and prioritization process
 - Introduced a more transparent approach for prioritization
 - Included quantitative evaluation measures
 - Retained many of the same qualitative measures
- Introduced benefit/cost analysis


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Talking Points:

TransAction 2040:

- Represents an update of TransAction 2030, the current Northern Virginia Regional Transportation Plan, which was endorsed by the NVTA in 2007;
- Extends the planning horizon to 2040;
- Updates existing projects carried forward from the 2030 plan and also includes new projects;
- Permitted inclusion of a larger list of projects than in TransAction 2030;
- Uses an updated and transparent evaluation and prioritization process, while retaining many of the same measures; and
- Introduces a cost-benefit analysis.



Major Project Activities

- Identify Initial Project List (Completed)
- Establish Evaluation Framework (Completed)
- Analyze Projects Using TPB Version 2.3 (Release 37) Model (Completed)
- Assign Ratings and Perform Preliminary Project Prioritization (Completed)
- Prepare LOS Maps (Completed)
- Issue Newsletter #1 (Completed)
- Conduct Public Open House (Now)
- Determine Revised Project List (May)
- Perform Model Analysis of Revised Build Scenario (May-June)
- Finalize Project Prioritization (June-July)
- Issue Newsletter #2 and Prepare Final Reporting (July-September)

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Talking Points:


TransAction 2040 technical evaluation has progressed to a point of having:

- A project list, organized by corridor and project type;
- An evaluation framework;
- A set of regional travel demand model runs (Current, Baseline, and Build); and
- Highway and transit LOS maps.

As highlighted elsewhere in the room, the TransAction 2040 progress has also benefited from guidance from several oversight bodies, including the NVTA Board.

After this public Open House we will:

- Gather the comments and feedback to date;
- Work to revise the project list;
- Perform a final model analysis and update to the prioritization; and
- Complete the TransAction 2040 Plan documents.



Scenarios Tested Using the Travel Demand Forecasting Model

- 2007 Scenario
 - 2007 Land Use
 - 2007 Network
- 2040 Base Scenario
 - 2040 Round 8.0 land use
 - All projects in the Financially Constrained Long Range Plan (CLRP) in place, including Silver Line and 495 Express Lanes
- 2040 Build Scenario
 - 2040 Round 8.0 land use
 - All projects in the CLRP in place
 - All of the TransAction 2040 projects

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Talking Points:

The regional travel demand forecasting model adopted by the National Capital Region Transportation Planning Board (TPB) is used for long-range planning and air quality conformity testing in the region.

Using this model, forecasting was conducted for Northern Virginia for the following three scenarios:

- Scenario 1: Current - Existing land use and transportation network.
- Scenario 2: Baseline - Year 2040 land use and transportation network representing all projects in the CLRP in place by 2040, including the Silver Line and I-495 Express Lanes.
- Scenario 3: Build - Year 2040 land use and transportation network including all projects in the CLRP as well as all proposed TransAction 2040 projects.



Major Projects in the Build Scenario

- Over 100 highway projects adding 785 lane-miles
 - Western Transportation Corridor
 - Eastern Potomac River Crossing
 - Urban street grids at major activity centers (e.g., Tysons Corner, Crystal City, etc.)
 - HOV lanes on the Fairfax County Parkway


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Talking Points:

The multimodal project list is a key input to all travel forecasting and includes needs across different types of transportation modes.

Some of the major highway projects included in the Build scenario are listed here.



Major Projects in the Build Scenario


- More than 50 transit projects
 - Metrorail extensions to Gainesville and Potomac Mills
 - Metrorail connections across the Wilson and Legion Bridges
 - Expand Metrorail fleet to all 8-car trains
 - Light rail on VA 28 and VA 7
 - VRE extensions to Haymarket and Fauquier County
 - Priority Bus services on the Capital Beltway, Fairfax County Parkway, Duke Street, and other corridors
 - Park-and-Ride lot construction in outer counties
- Over 40 projects to improve bicycle/pedestrian conditions
 - Bikesharing
 - Grade-separated crossings
 - Trails

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Talking Points:

Some of the major transit and bicycle and pedestrian projects included in the Build scenario are listed here.



Travel Pattern Changes

- **Round 8.0 Land Use is a Primary Driver**
 - Growth in residential and employment opportunities throughout region
 - Proportionally more jobs than residences added in areas outside the core
 - Arlington County is forecast to continue to have more jobs than workers
 - Fairfax County is forecast to have slightly more jobs than workers
 - Loudoun and Prince William Counties are forecast to continue to have more workers than jobs
- **Transportation Network also Influences Travel Patterns**
 - Model reflects the idea that people have a travel time budget
 - If faster access is available, people travel farther to reach opportunities

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Talking Points:


The poster collection provides illustrations.

Land use is a primary driver to travel patterns, particularly the concentration, balance, and mix of employment and residential opportunities. Highlights include:

- Northern Virginia continues to grow and is forecast to have significant population and employment growth between now and 2040.
- TransAction 2040 accepts the regionally adopted land use forecast.
- The balance of jobs and residences shifts somewhat over this time period, with Fairfax forecast to have more jobs than workers by 2040.
- Arlington (and D.C.) will continue to be strong employment cores, but jobs will also be added in Prince William and Loudoun counties.

The transportation network also influences where people conduct activities and how they travel. Highlights include:

- Greater accessibility leads to a greater range of choices for origins and destinations.
- The TransAction 2040 projects enhance both roadway and transit accessibility.



Corridor-Level Observations

- All Corridors Have Expanded Multimodal Capacity
 - The 2040 Build Scenario includes increased lane miles (i.e., new or widened roads) and improved transit service in all corridors
 - In most corridors, proportionally less VMT is added than lane miles resulting in lower levels of congestion in the 2040 Build Scenario
 - In some corridors, there is an increase in the ratio of person travel (PMT) to vehicle travel (VMT), indicating more efficient travel in the 2040 Build Scenario, perhaps due to improved transit options

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Talking Points:


The technical evaluation and travel demand modeling allow us to make several observations at the regional and corridor level.

First, the increased activity and travel pattern changes that occur from 2007 to 2040 do result in increased travel demand in the future year. As illustrated in the poster collection, many corridors experience worsening congestion under the 2040 Baseline.

The TransAction 2040 projects do help, although there is still congestion present. The posters show some of the improvements, there is also additional technical analysis that has been done to look at improvements within each corridor.

On the transit side, TransAction 2040 offers extensive improvements that result in improved level of service (also illustrated in the posters).

TransAction 2040 does not eliminate congestion, but it does expand mobility options and improves travel conditions as compared with the 2040 Baseline scenario.



Corridor-Level Observations


- Level of Service Effects
 - Comparing 2007 to 2040 Base, more vehicle travel occurs on congested roadways in nearly all of the corridors
 - Comparing 2040 Base to 2040 Build, more vehicle travel occurs on uncongested roadways in virtually all of the corridors
 - This shows that the Build projects help reduce congestion
 - Despite major improvements, the 2040 Build scenario still has higher levels of congestion than 2007

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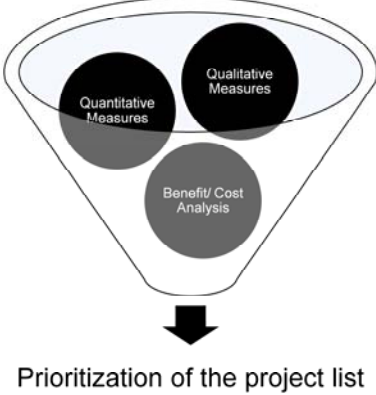
Talking Points:

Our review of the details available to us in the technical evaluation indicate these level of service effects looking at the corridor analysis.



Preliminary Project Prioritization

- Each project assessed using set of evaluation criteria to facilitate the evaluation of potential benefits
- Project scoring involved qualitative and quantitative performance measures
- Benefit/cost analysis performed for each project
- Prioritization methodology was developed in coordination with project oversight and advisory bodies



Prioritization of the project list

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Talking Points:

The project scoring and ranking approach used for TransAction 2040 is transparent and was approved by the NVTA Board in July of 2011.


The specific evaluation criteria are listed on the poster which is positioned with our display of the preliminary prioritization of each project.

The scoring method involved the model and made use of both qualitative and quantitative measures.

Projects were ranked within corridor and within project type.

The benefit cost methodology considered the project score as well as the project cost and ranked projects within project type.

Together, the score and the benefit/cost rating are intended to inform decisions about priorities for investment, recognizing that there remain challenges to funding all desired transportation improvements.



Preliminary Project Prioritization

- Preliminary prioritization of the project list is available tonight at one of our Board stations (also posted to NVTA website)
 - Projects are prioritized within corridors and within project type
 - Benefit/Cost ratings are also provided
- Written comments on the projects and prioritization are welcome

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Talking Points:

The public is encouraged to provide input on the preliminary prioritization of the project list.

The poster providing the ratings is staffed to allow easy review of the lists.

In written comments, you can identify projects by their rank and the first portion of the description.



Next Steps

- Modify project list and perform second model run to support finalization of project prioritization
- Anticipated final report Summer 2012
- Anticipated adoption Fall 2012



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Talking Points:


TransAction 2040 is on track to produce a draft plan in the Summer of 2012.

Following the Open House, a revised project list will be developed based on the feedback obtained from the public.

Next, a supplemental run of the adopted regional travel forecasting model for the revised Build scenario will be conducted.

Based on the results of the supplemental model run, prioritization of the modified project list will be finalized.

A second newsletter will be developed to keep the public informed and a final report will be prepared.



Your Input Is Welcome

- Comment Sheet
- Website: www.thenovaauthority.org
- E-mail: theauthority@thenovaauthority.org
- Contact:
Kala Leggett Quintana
Director of Communication for TransAction 2040
c/o Northern Virginia Transportation Commission (NVTC)
2300 Wilson Boulevard, Suite 620
Arlington, VA 22201
- Thank you!

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Talking Points:

Your input and suggestions on the project list are requested. You can provide written comments in the following ways:

- Complete a comment sheet and leave it in the box provided;
- Mail your comment sheet to NVTC at the address above; or
- E-mail your comments to theauthority@thenovaauthority.org.