



# TransAction2040

## Transportation for Today and Tomorrow

August 27, 2012

Newsletter 2

The TransAction 2040 Northern Virginia Regional Transportation Plan has progressed through the April 2012 Open House and completed the technical evaluation stages. This second and final newsletter describes the key technical evaluation forecasting findings, project prioritization process, and final steps to complete the TransAction 2040 update.

### *TransAction 2040 Update*

Newsletter #1, published in March 2012, provided an overview of the process for developing TransAction 2040. The newsletter contained details about the TransAction 2040 vision, goals, methodology, and project schedule. It also depicted the communities and facilities that are covered in TransAction 2040 on a corridor map. Newsletter #1 can be viewed at: <http://www.thenovaaauthority.org/projects.html>.

A public Open House was conducted on April 18, 2012 to present the findings from the technical analysis and to solicit input on the preliminary project prioritization for consideration in development of a second model run. The display boards and presentation from the meeting can be viewed at: <http://www.thenovaaauthority.org/projects.html>.



## ***TransAction 2040 Vision***

In the 21<sup>st</sup> 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.

## Technical Evaluation Findings

As described in Newsletter #1, the regional computer model for travel forecasting adopted by the Metropolitan Planning Organization, the National Capital Region Transportation Planning Board (TPB), was used to forecast travel patterns for the following three scenarios: Current, Baseline, and Build. Based on feedback, a fourth scenario, Build 2, was added following the Open House to further enhance the highway and transit network performance versus the original Build scenario.

Each of the scenarios was tested to see how the different combinations of transportation projects would impact regional mobility. The evaluation included an assessment of: person miles of travel (PMT), vehicle miles of travel (VMT), work trip mode share, and job accessibility. Major observations are described and shown in graphs throughout the newsletter.

**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, including Silver Line Beltway HOT Lanes;

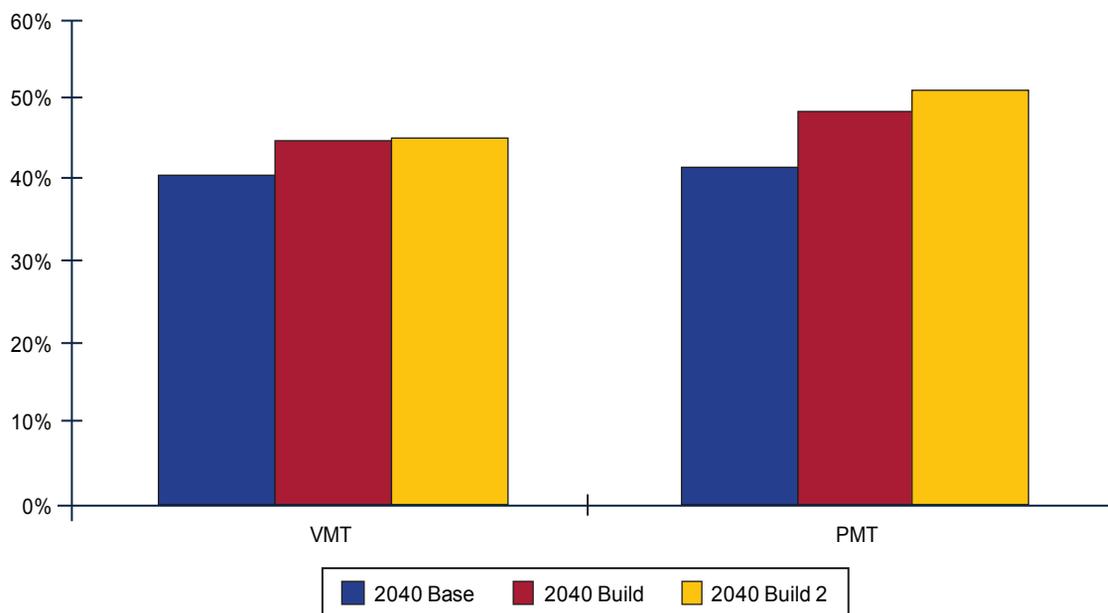
**Scenario 3: Build** – Year 2040 land use and transportation network, including all projects in the CLRP as above, as well as all proposed TransAction 2040 projects; and

**Scenario 4: Build 2** – Year 2040 land use and transportation network, including all projects in the CLRP, proposed TransAction 2040 projects (six new projects and two revisions to previously proposed TransAction 2040 projects).

## Person Miles of Travel and Vehicle Miles of Travel

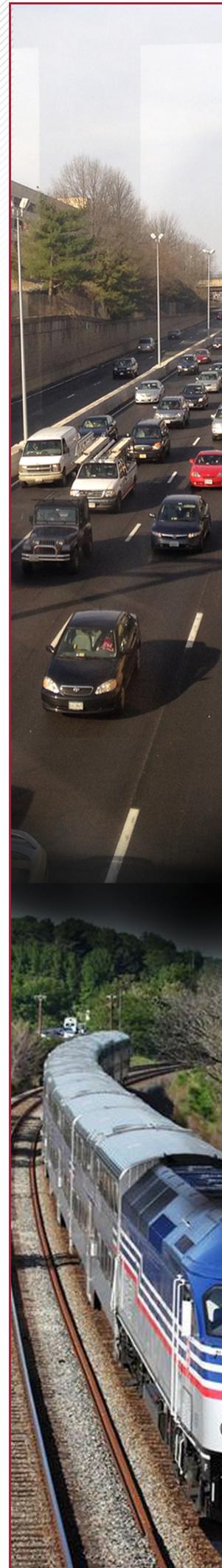
- PMT increases in all of the 2040 scenarios compared to 2007 conditions, indicating increased multimodal travel opportunities in both of the Build scenarios.
- In each of the 2040 scenarios, PMT increases more than VMT, clearly indicating that more people are using alternatives, such as bus, rail, and ridesharing, to single occupancy vehicles (SOV).

### Increase in Travel Compared to 2007



*VMT – Vehicle Miles Traveled: A measure of total travel made by vehicles on roadways.*

*PMT – Person Miles Traveled: A measure of total travel made by people whether in cars or on rail transit.*

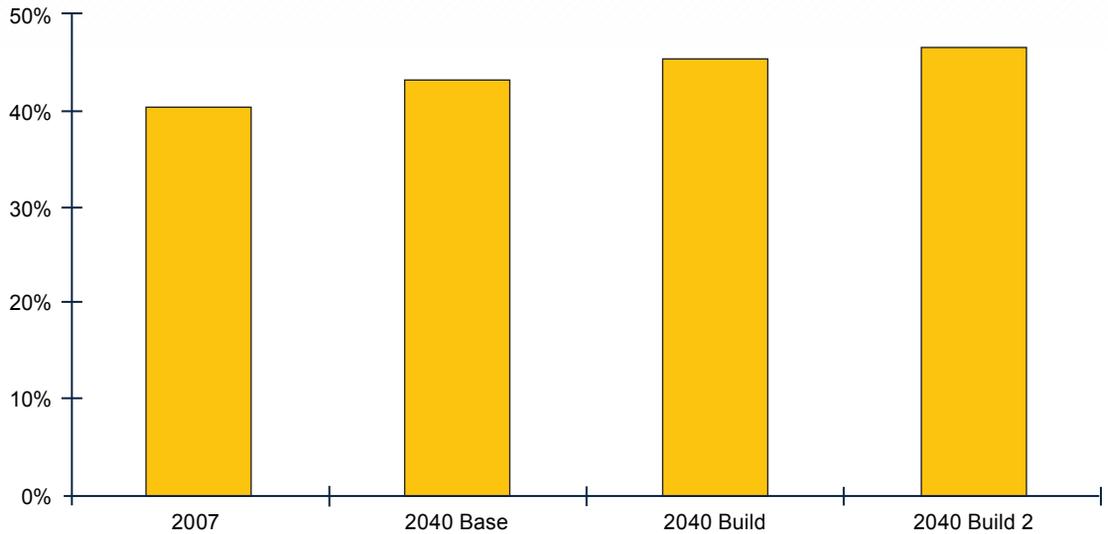




## Work Trip Mode Share

- Mode share (percentage of trips) for non-SOV modes, including transit and HOV, also increases for work trips in 2040.
- Projects in both of the Build scenarios further increase the use of alternative modes, such as bus, rail, and ridesharing.

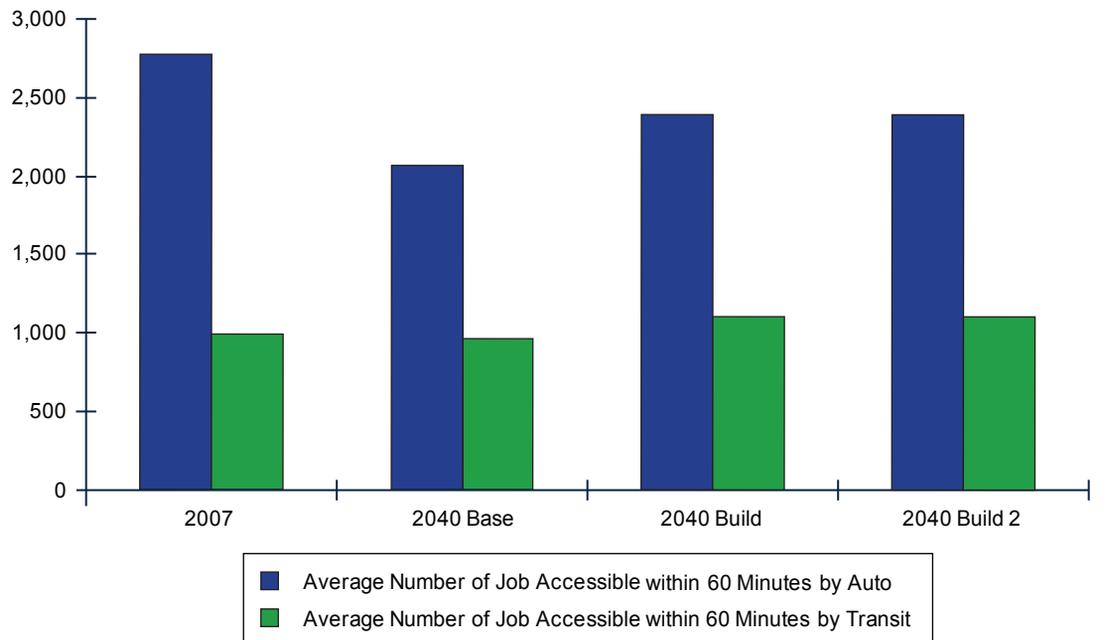
**Percent Non-SOV Work Trips**



## Job Accessibility

- Due to increased congestion by 2040, the 2040 Baseline scenario shows a decrease in accessibility, or ease of traveling as compared to 2007 results.
- Projects in both of the Build scenarios decrease congestion and improve accessibility for automobiles compared with the 2040 Baseline scenario.
- Projects in both of the Build scenarios include major transit investment projects, increasing transit accessibility over the 2040 Baseline scenario.

**Changes to Job Accessibility**



## Project Prioritization

TransAction 2040 prioritizes a set of multimodal projects by corridor and by project type (e.g., bicycle/pedestrian, transit, highway). A summary table of projects by corridor and type, with selected multimodal example projects is provided. The Build scenario project listing includes:

Over 100 highway projects adding 785 lane-miles, including:

- Urban street grids at major activity centers (e.g., Tysons Corner, Crystal City, etc.);
- HOV lanes on the Fairfax County Parkway;
- Western Transportation Corridor; and
- Eastern Potomac River Crossing.

More than 50 transit projects including:

- Metrorail extensions to Gainesville and Potomac Mills;
- Metrorail connections across the Wilson and Legion Bridges;

- Expansion of Metrorail fleet to all eight-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; and
- Park-and-Ride lot construction in outlying counties.

Over 40 projects to improve bicycle/pedestrian conditions:

- Grade-separated crossings;
- Paths and bicycle trails; and
- Bikeshare.

Corridor	Highway	Transit	Bicycle/Pedestrian
Dulles/VA 7 Corridor	18	5	4
Fairfax County Parkway Corridor	7	1	0
I-495 Beltway Corridor	5	4	5
I-66/U.S. 29/U.S. 50 Corridor	22	14	7
I-95/I-395/U.S. 1 Corridor	21	22	9
Loudoun County Parkway/Tri-County/ Belmont Ridge Road/Gum Springs Road Corridor	7	1	6
Prince William Parkway Corridor	3	0	0
VA 28 Corridor	15	2	3
Other	9	9	8

Fifteen factors were used to address prioritization (comprising 18 different measures) and each project and measure received a “low,” “medium,” or “high” score. The majority of the performance evaluation criteria were used to identify the extent to which individual projects impacted transportation system performance. The remainder of the criteria were used to help distinguish between projects receiving the same score in the transportation system performance dimensions, in order to help identify which projects would better meet the regional transportation needs.

To view the results of the preliminary prioritization, visit: <http://www.thenovaauthority.org/projects.html>.

## Next Steps

Once all of the technical activities have been completed, the findings will be presented in a brochure. A map listing projects across all eight corridors will also be provided. The final plan will document the study process and outcomes. Adoption of TransAction 2040 by the NVTA is proposed for Fall 2012.

## Contact Information

Kala Leggett Quintana  
 Director of Communication  
 for TransAction 2040  
 c/o Northern Virginia Transportation  
 Commission (NVTc)  
 RE: TransAction 2040  
 2300 Wilson Boulevard, Suite 620  
 Arlington, VA 22201

<http://www.thenovaauthority.org>

[theauthority@thenovaauthority.org](mailto:theauthority@thenovaauthority.org)

