



LONG-RANGE PLAN TASK FORCE

April 20, 2016
10:30 - 11:45 A.M.
Walter A. Scheiber Board Room

Tim Lovain, TPB Chair
Jonathan Way, Task Force Vice Chair

*If you would like to participate by conference call, please call: 888-702-9706;
Conference Room Number: 2650; Participant PIN: 6227*

AGENDA

- 10:30 A.M. 1. INTRODUCTIONS**
Chairman Lovain
- 10:35 A.M. 2. PRESENTATION AND DISCUSSION ON “NO-BUILD” SCENARIO DRAFT RESULTS**
Dusan Vuksan, TPB Transportation Engineer
- To provide context for priority setting, the TPB will release a report in the summer of 2016 that will look at two extreme “bookend” scenarios: 1) a “No-Build” scenario that will analyze the effects of not building new transportation capacity over the next 25 – not even the projects in the CLRP; and 2) an “All-Build” scenario that will include most of the major unfunded transportation projects that are part of the approved plans of our member jurisdictions (in addition to the CLRP). At the meeting on April 20, staff will provide a status report on analysis related to the first of the scenarios, the “No Build.”
- 11:20 A.M. 3. DISCUSSION OF THE PLAN TO IDENTIFY PEDESTRIAN AND BICYCLE PRIORITY PROJECTS**
John Swanson, TPB Transportation Planner
Michael Farrell, TPB Transportation Planner
- Staff will describe the proposed process for developing a list of bicycle and pedestrian unfunded priorities that will be included in the multi-modal plan of unfunded priority projects.
- 11:30 A.M. 4. DISCUSSION OF OUTREACH TO MEMBER JURISDICTIONS TO PROMOTE REGIONAL PRIORITIES**
John Swanson, TPB Transportation Planner
- At a TPB work session on January 20, participants agreed that the TPB should document the project selection processes of its member jurisdictions and seek to promote the consideration of regional priorities in those processes.

The working group will discuss a staff proposal to implement those recommendations.

11:40 A.M. 5. WRAP-UP AND NEXT STEPS
Chairman Lovain

The group will discuss its next steps.

11:45 A.M. 5. ADJOURN

The next meeting of the Working Group is scheduled for May 18, 2016 at 10:30 A.M.

The TPB is staffed by the Department of Transportation Planning
of the Metropolitan Washington Council of Governments.

Reasonable accommodations are provided upon request, including alternative formats of meeting materials.
For more information, visit: www.mwcog.org/accommodations or call (202) 962-3300 or (202) 962-3213 (TDD)

LONG RANGE PLAN TASK FORCE: 2040 “NO BUILD” ANALYSIS

Preliminary Summaries

Dusan Vuksan, Feng Xie

Long Range Plan Task Force
April 20, 2016



Long Range Plan Task Force: Background

Objective:

To improve the performance outcomes of the regional long range plan (LRP)

Identify a limited set of currently unfunded multi-modal projects with the greatest potential to improve regional system performance that the TPB can champion for inclusion into the Constrained Long Range Plan (CLRP)



Long Range Plan Task Force: Background

Approach: Three phases over three years

I: Develop a Baseline Report (FY 2016)

II: Develop a list of Unfunded Regional Priority Projects (FY 2017)

III: Incorporate Unfunded Priority Projects into the LRP (FY 2018)



Phase I: Develop a Baseline Report

Analysis of different 2040 futures

- 2040 “No Build” – scenario assumes projected growth in demand (population and employment) but no future capital improvements ✓
- 2040 “Planned Build” – scenario assumes growth in demand and includes capital improvements assumed in the current (2015) CLRP ✓
- 2040 “All Build” – scenario assumes growth in demand and capital improvements in the current (2015) CLRP, plus all of the currently unfunded capital improvements inventoried by the TPB staff



Baseline: No Build Scenario

- 2040 Population and Employment (Round 8.4 Cooperative Forecasts)
- 2015 Transit and Highway Networks (no capital improvements)
 - Includes:
 - Metro Silver Line Phase 1 (VA)
 - VRE Spotsylvania Station (VA)
 - H St. / Benning Road Streetcar (DC)
 - Roadway lane repurposing for bicycle use (DC)
 - ICC (I-270 to Route 1 in MD)
 - Capital Beltway HOT lanes (Springfield to North of Tysons in VA)
 - I-95 HOT lanes (Edsall Road to VA 610 in VA)



Baseline: Planned Build Scenario

- 2040 Population and Employment (Round 8.4 Cooperative Forecasts)
- 2040 Highway and Transit Networks
- 7% more lane miles of roadway, and 14% more miles of rail / streetcar transit
- \$27 billion dedicated to highway expansion and \$15 billion to transit expansion
- Project details, including maps:
https://www.mwcog.org/clrp/resources/KeyDocs_2015.asp



Technical Analysis:

Unlike the CLRP performance analysis

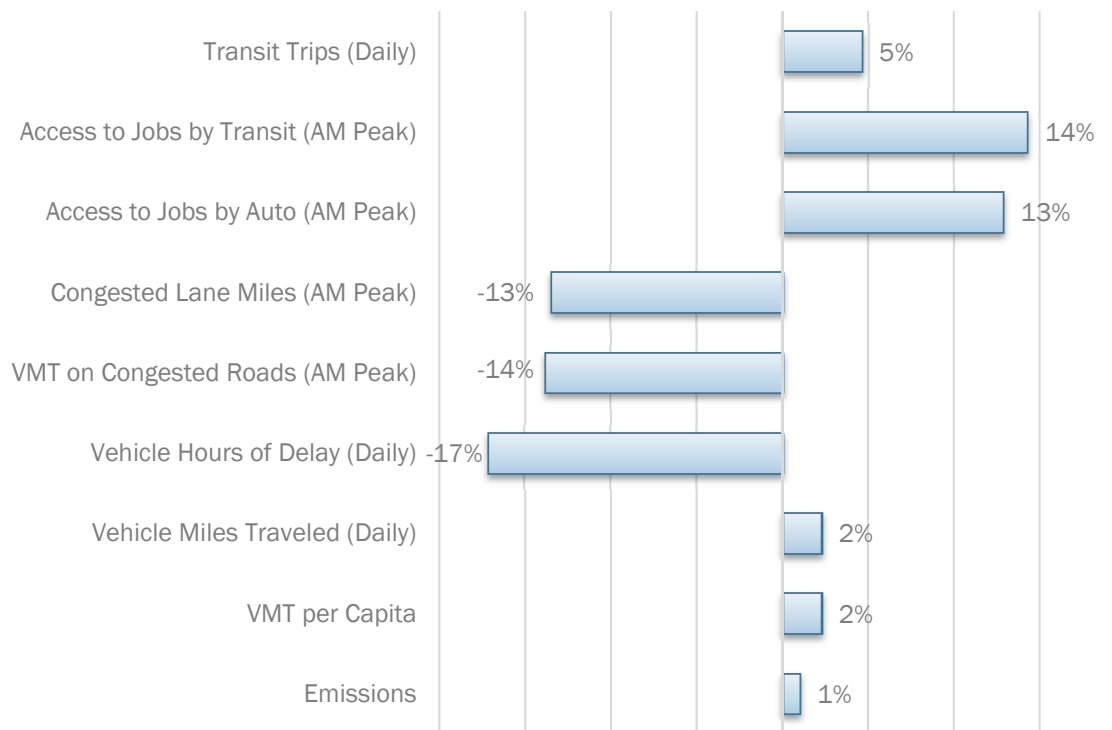
- CLRP Performance Analysis focuses on current and future scenarios:
 - Base: 2015 (CLRP)
 - Build: 2040 (CLRP)
- The Long Range Plan Task Force Analysis focuses on two future scenarios:
 - Base: 2040 No Build
 - Build: 2040 (CLRP)
- Long Range Plan Task Force Analysis evaluates impacts of transportation system improvements in CLRP while holding land use constant



CLRP vs No Build: Key Findings

What Does the CLRP Do?

Performance Analysis: 2040 CLRP versus 2040 NB

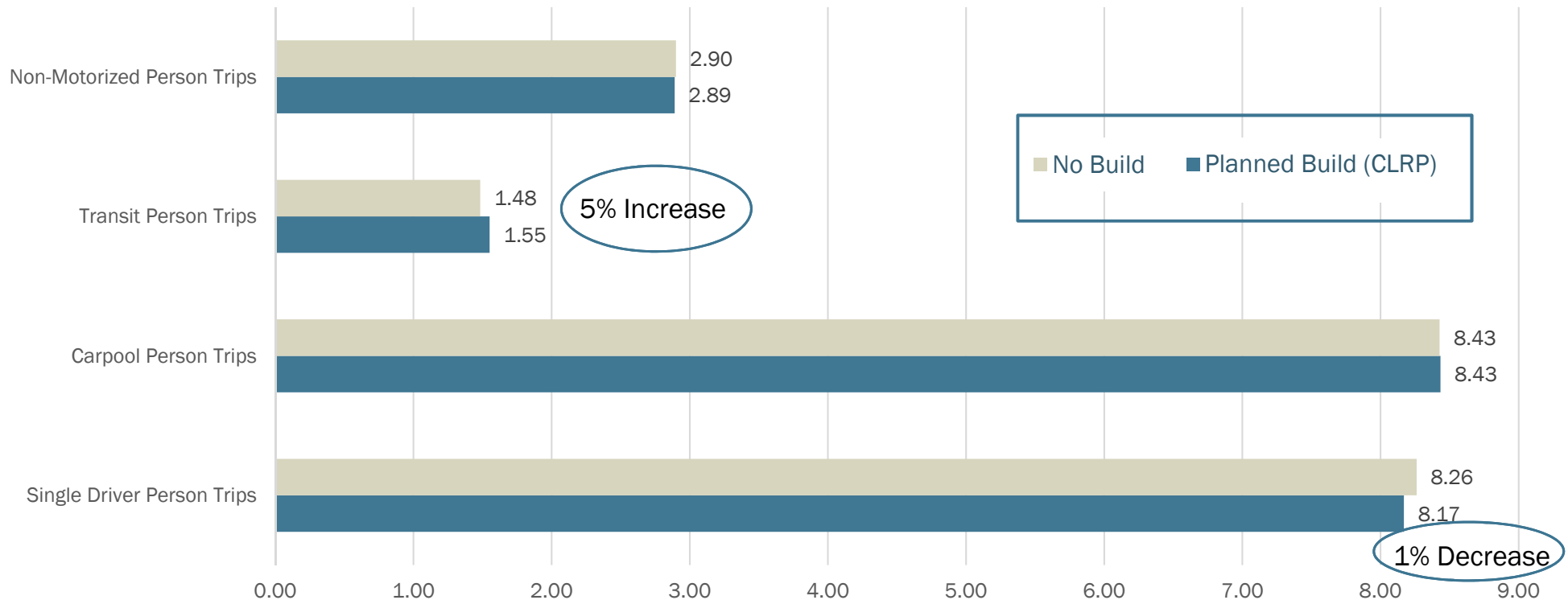


- Transit usage increases
- Access to jobs by transit and auto improves
- Congestion and vehicle hours of delay decrease
- Vehicle miles traveled per capita increase slightly
- Emissions do not change significantly



CLRP vs No Build: Transit Usage

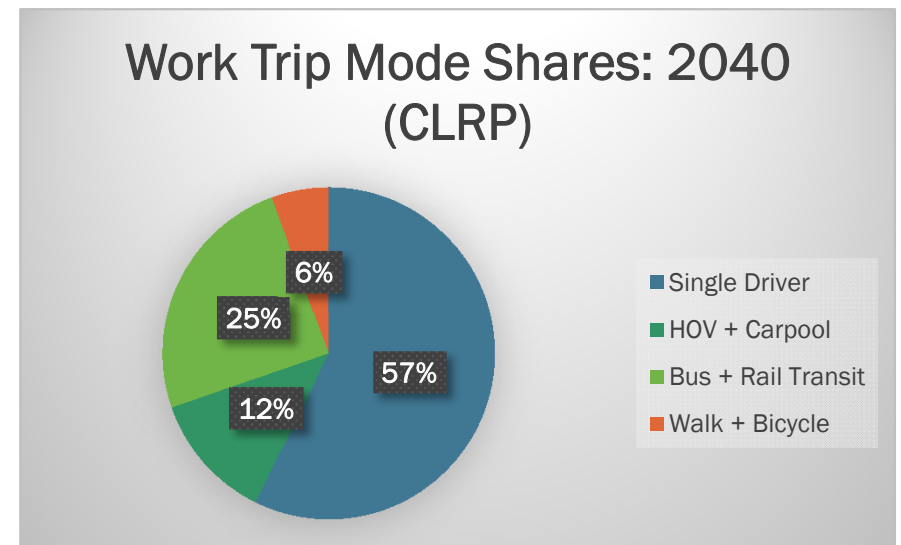
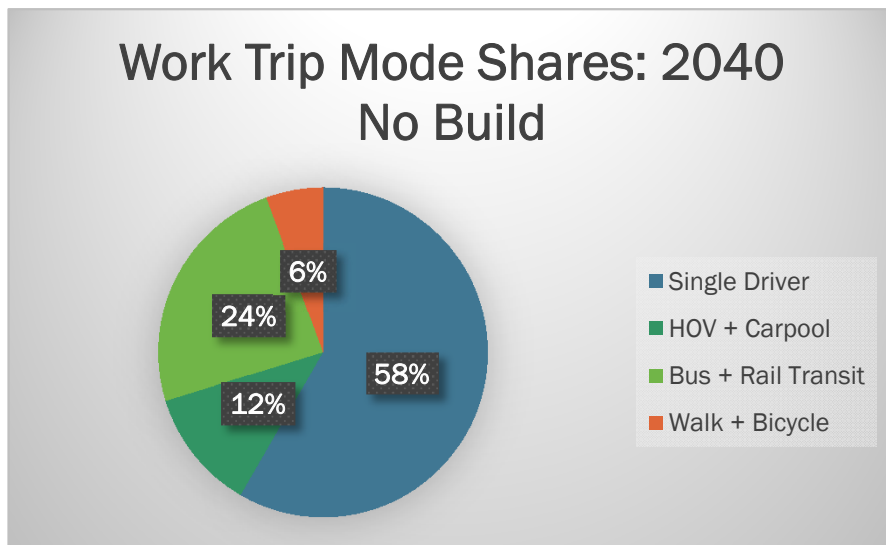
2040 Daily Person Trips for All Purposes (in Millions)



- Daily transit person trips increase; single driver person trips decrease



CLRP vs No Build: Transit Usage

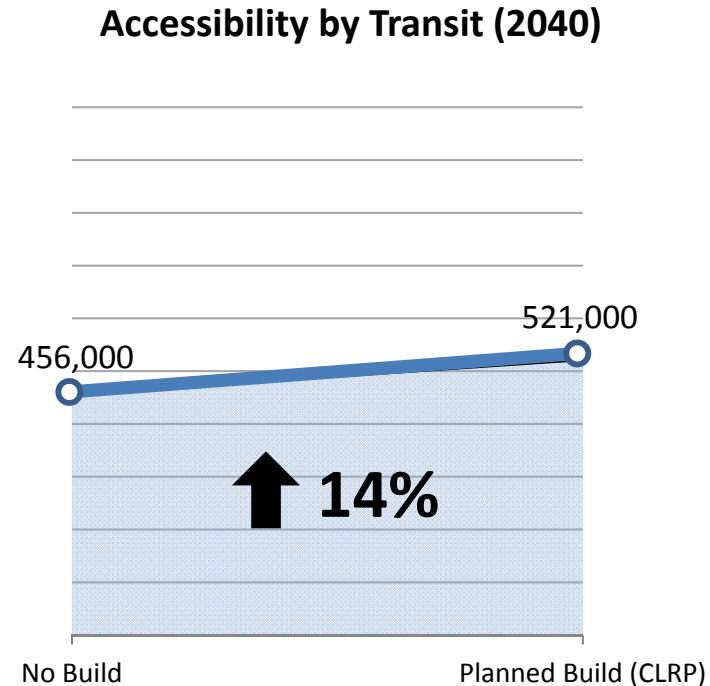
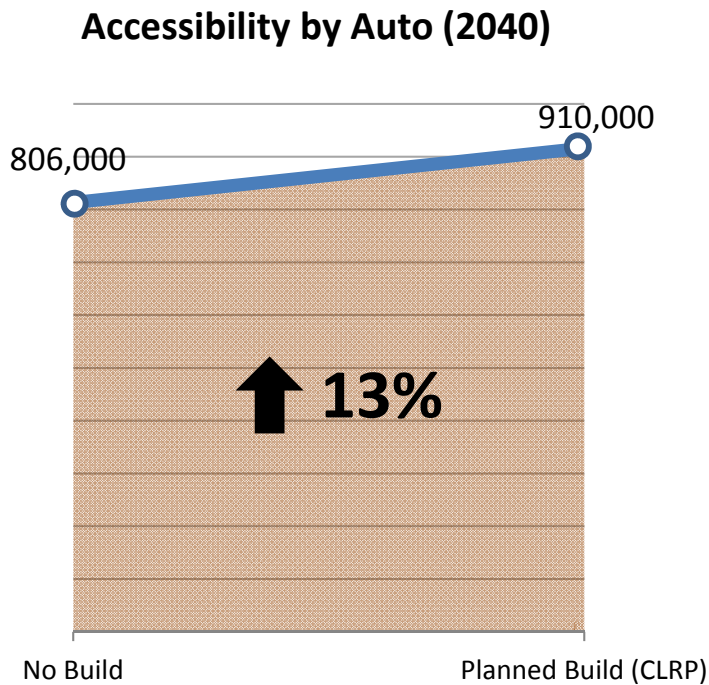


- Share of transit work trips increases; share of single driver work trips decreases
- Share of transit trips for all trip purposes remains unchanged



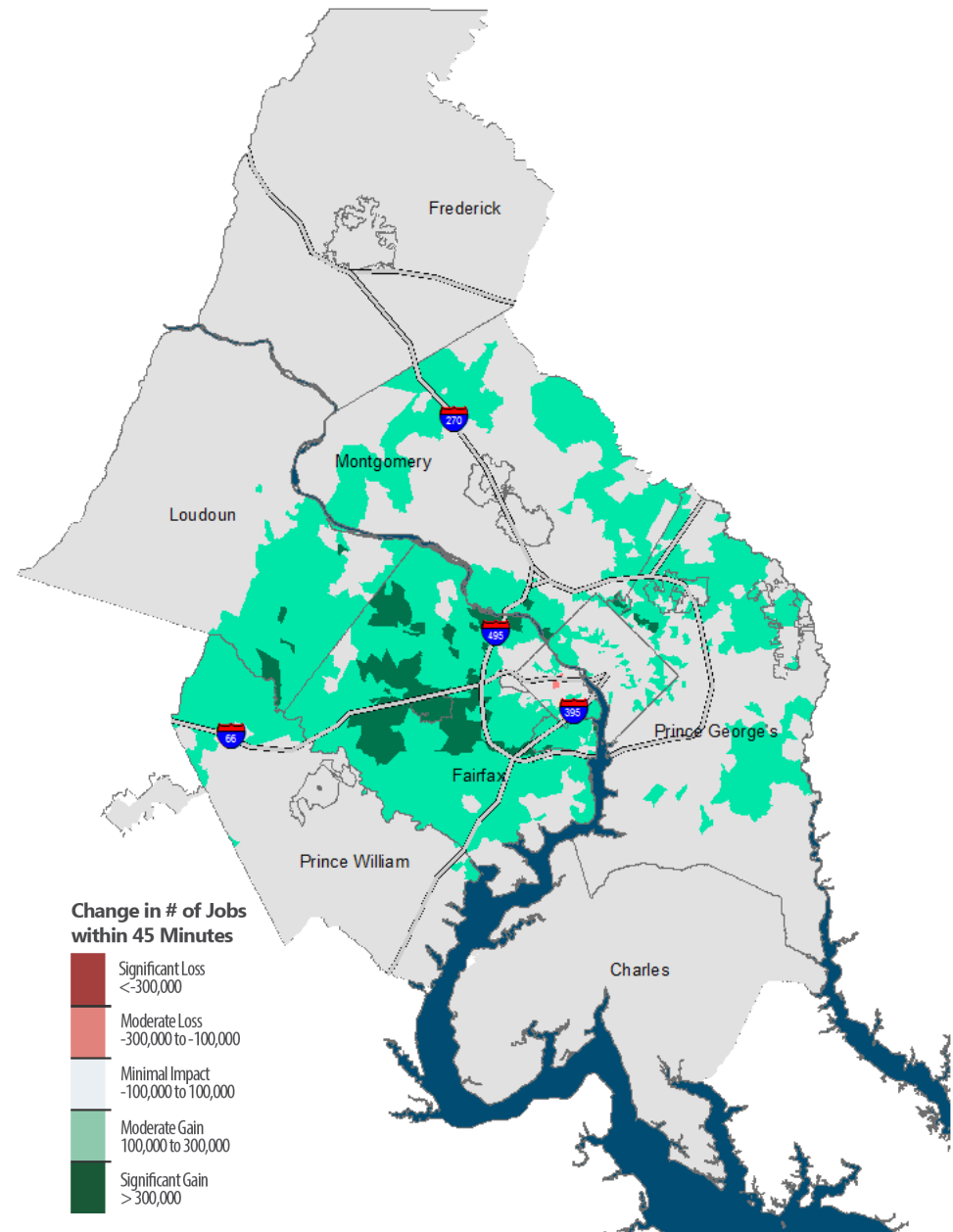
CLRP vs No Build: Jobs Accessibility

- CLRP increases the number of jobs accessible within 45 minutes by automobile and transit



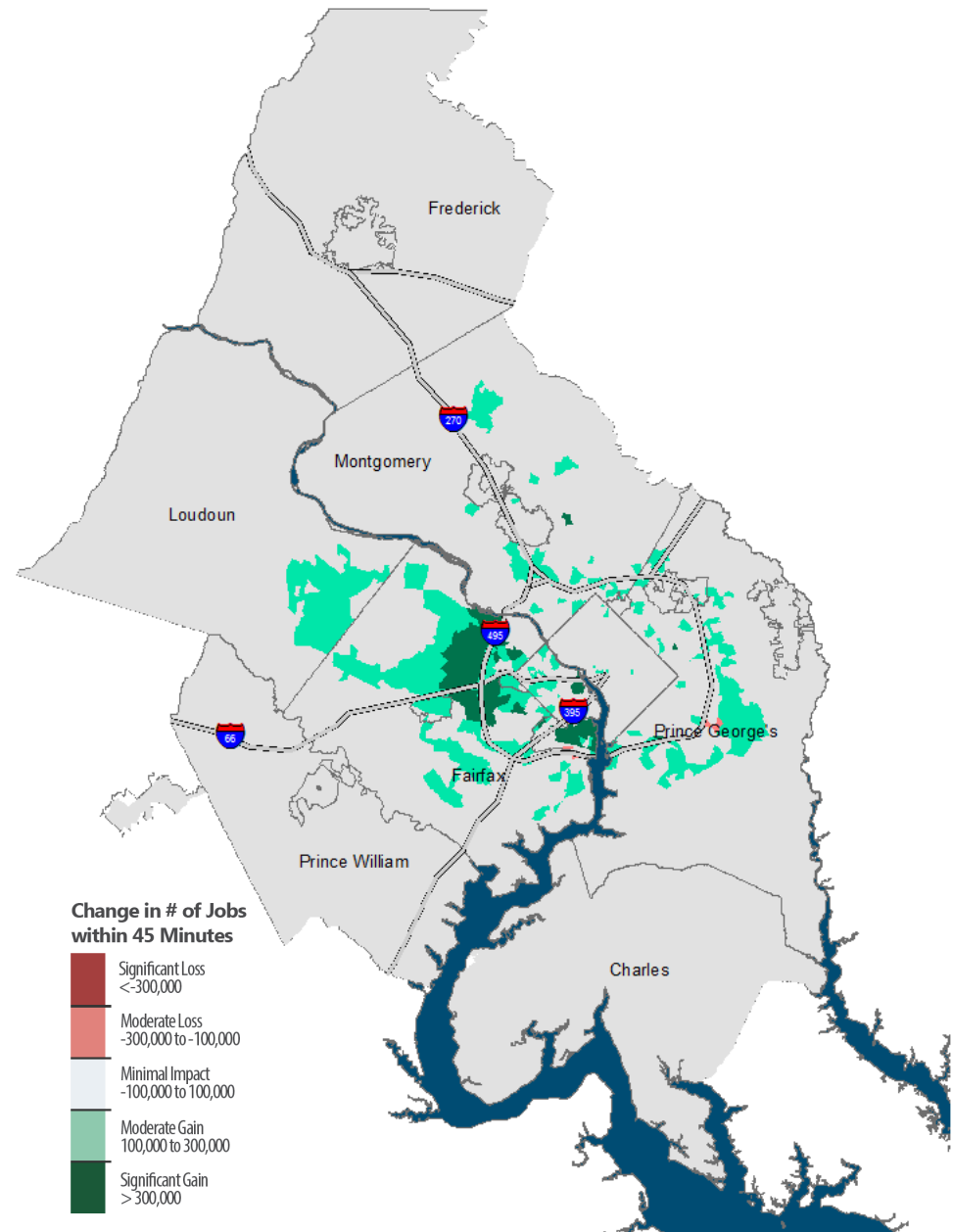
CLRP vs No Build: Change in Auto Access to Jobs

- CLRP increases access to jobs by auto throughout the region, with largest increases in accessibility taking place in the I-66 Corridor Outside of the Beltway



CLRP vs No Build: Change in Transit Access to Jobs

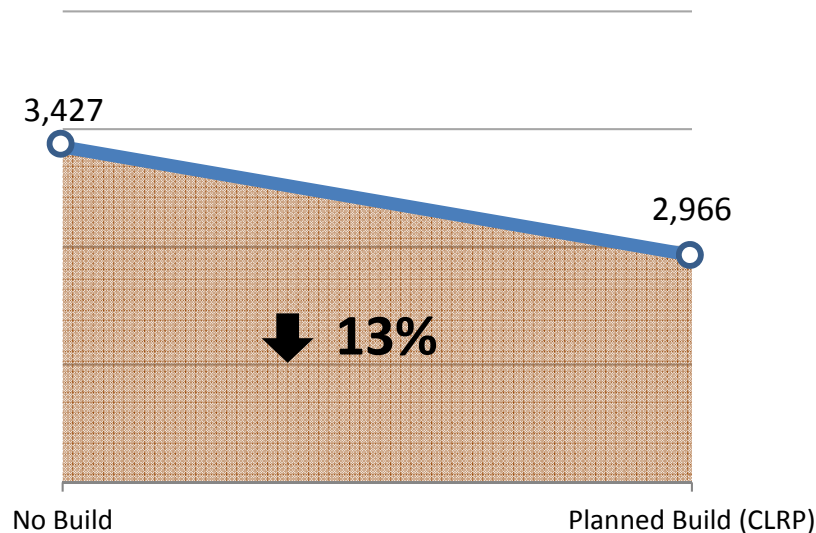
- CLRP increases access to jobs by transit throughout the region
- Increase in the I-66 Corridor Outside of the Beltway with addition of new express bus services
- Increase in Blue / Yellow line corridor in Virginia with addition of Potomac Yards Station



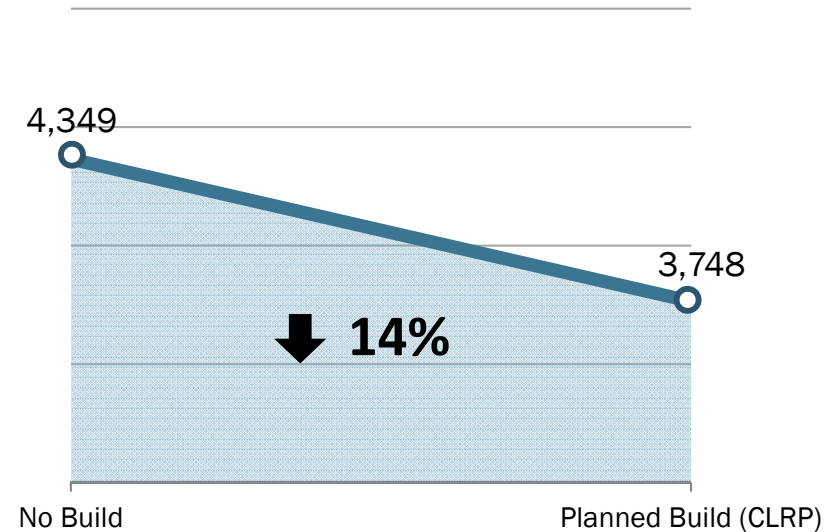
CLRP vs No Build: Roadway Congestion

- Peak hour congested lane miles and VMT on congested roadways decrease

Congested Lane Miles
2040 AM Peak



VMT on Congested Roadways (in 1000s)
2040 AM Peak

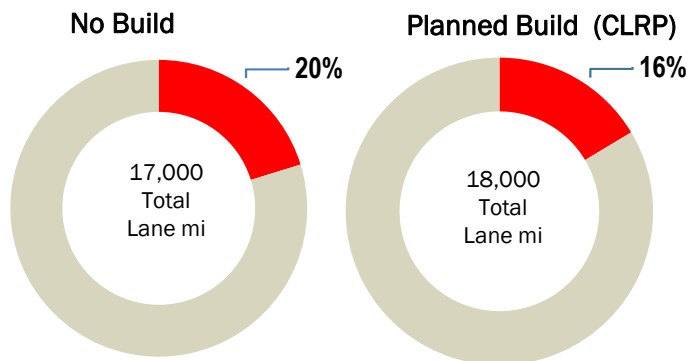


CLRP vs No Build: Roadway Congestion

- Share of total congested lane miles and share of VMT on congested roadways decrease

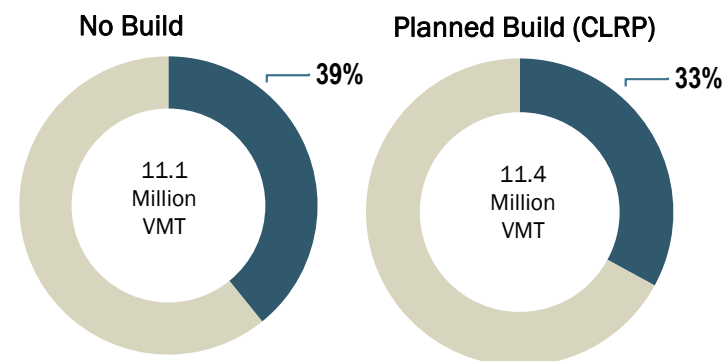
Share of Congested Lane Miles

2040 AM Peak



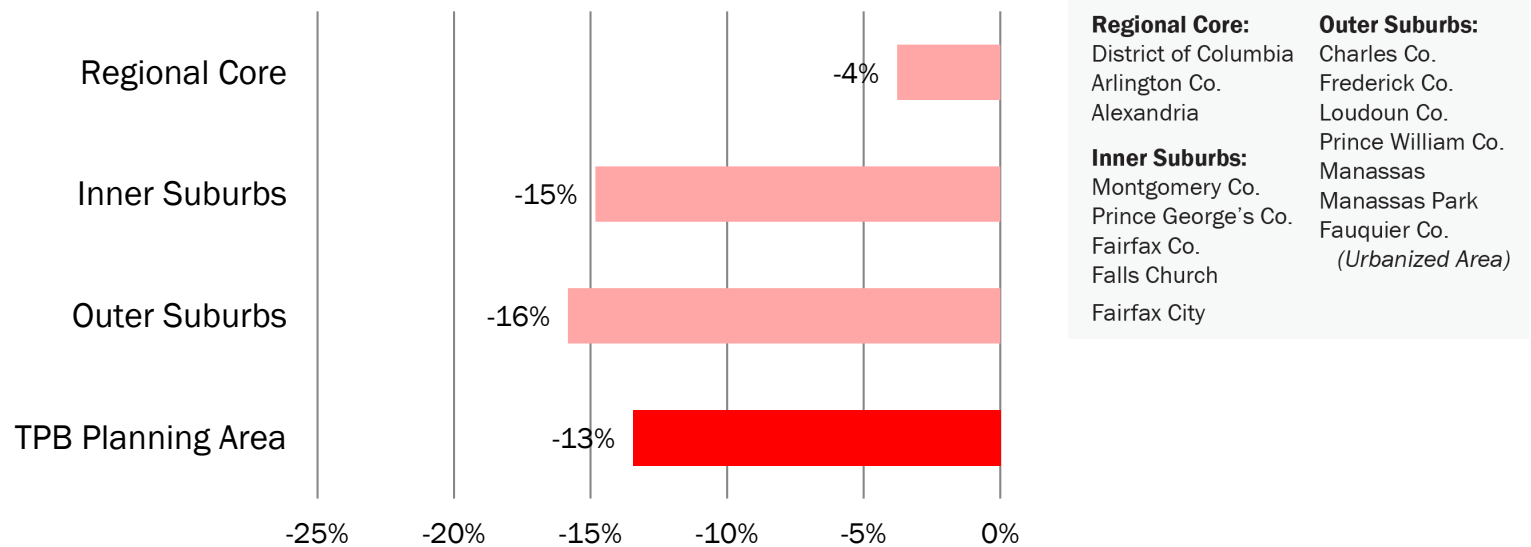
Share of VMT on Congested Roadways

2040 AM Peak



CLRP vs No Build: Geographic Differences in Congested Lane Miles

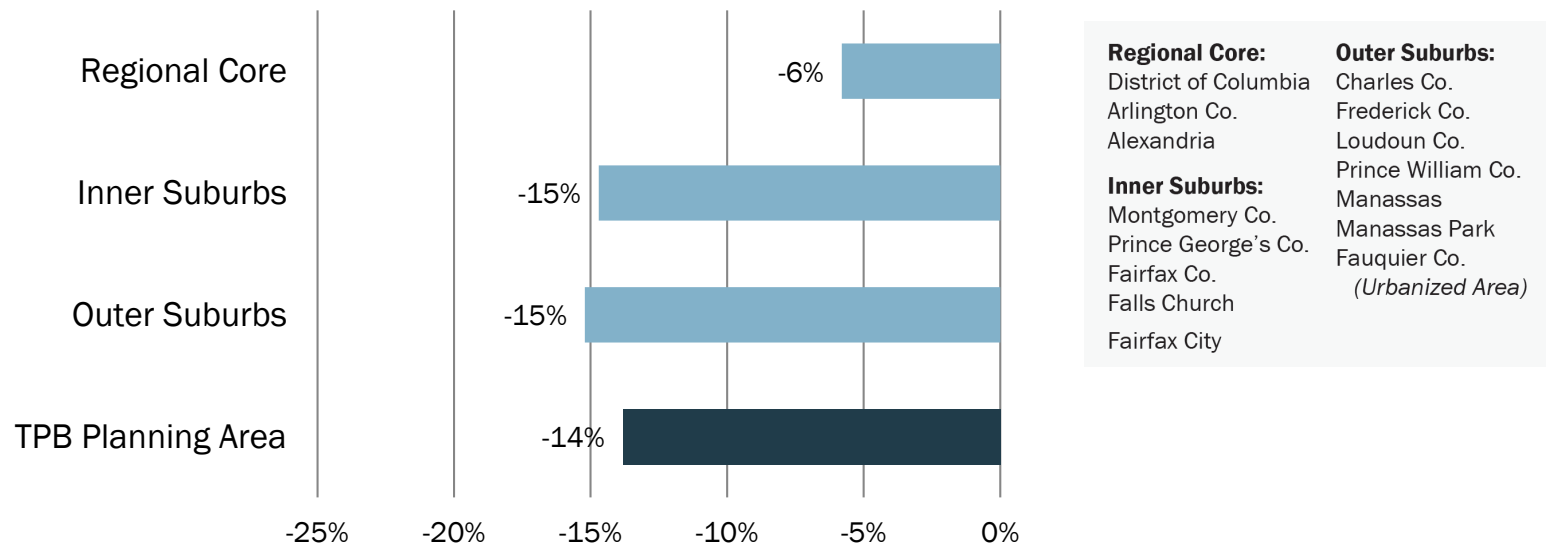
Percent Change in AM Peak Hour Congested Lane Miles



- Congested lane miles in AM Peak decrease in each geographic sub-area, with largest decreases occurring in Inner and Outer Suburbs

CLRP vs No Build: Geographic Differences in VMT on Congested Roads

Percent Change in AM Peak Hour VMT on Congested Roadways

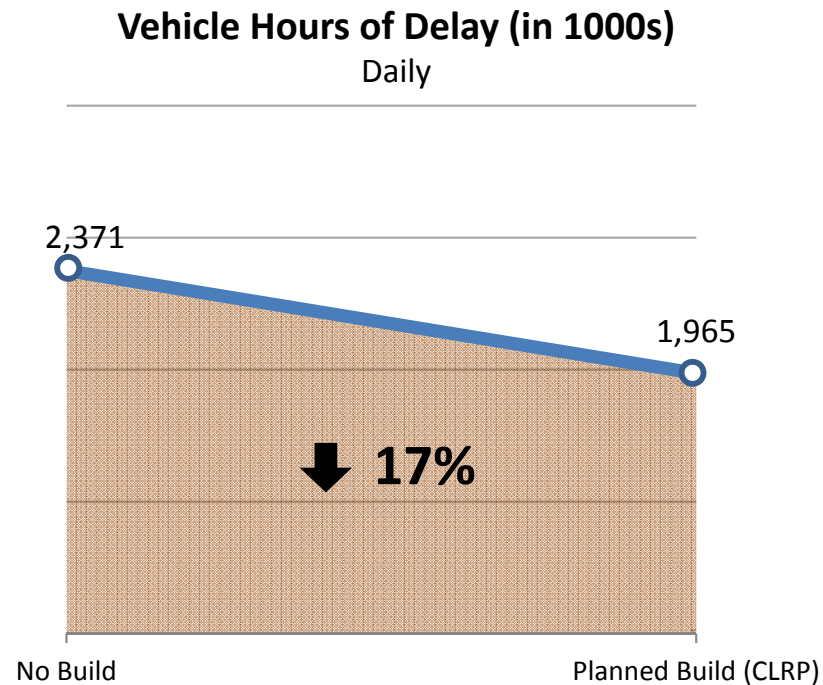


- VMT on congested roadways in AM Peak decreases in each geographic sub-area, with largest reductions occurring in Inner and Outer Suburbs



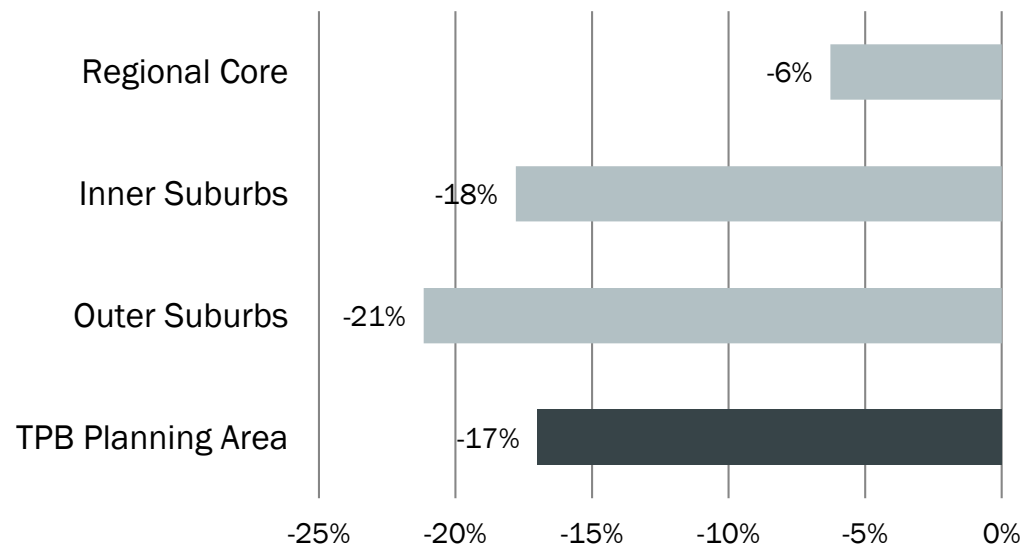
CLRP vs No Build: Vehicle Hours of Delay

- Vehicle hours of delay are reduced



CLRP vs No Build: Geographic Differences in Vehicle Hours of Delay

Percent Change in Daily Vehicle Hours of Delay (VHD) by Geographic Sub-Area

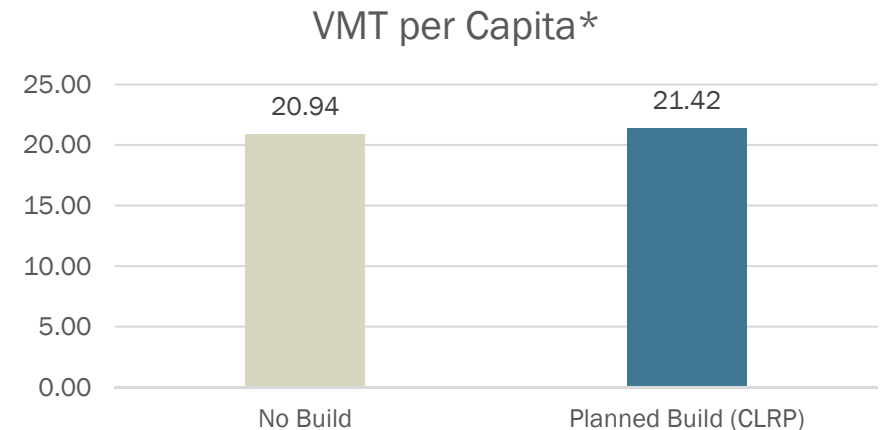
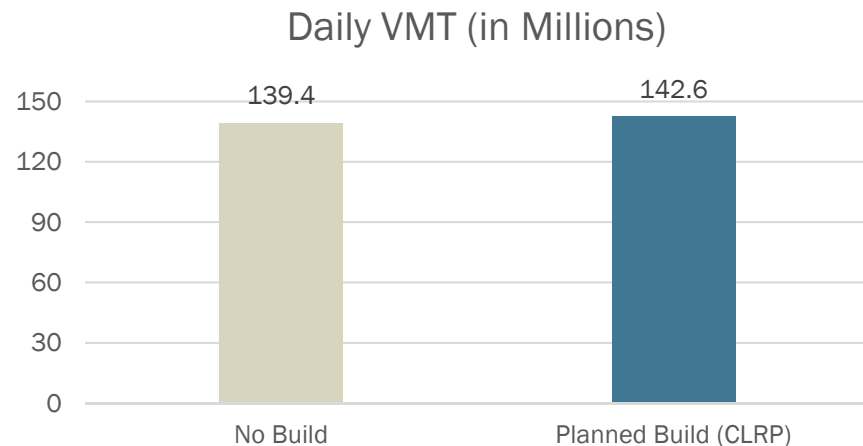


- Daily vehicle hours of delay decline in each geographic sub-area, with largest reductions taking place in Inner and Outer Suburbs



CLRP vs No Build: Vehicle Miles Traveled per Capita

- Daily VMT and VMT per capita increase by 2% in CLRP relative to No Build
- Increased congestion with No Build results in shorter trip lengths and reduced VMT



* 2040 VMT per Capita in NB and CLRP is lower than today



CLRP vs No Build: Mobile Source Emissions

- Very small change in emission levels (within 1%)

UCN Emission Comparisons: Planned Build (CLRP) Vs. No Build

Pollutant*	No Build	Planned Build (CLRP)	Δ	% Δ
Direct PM2.5	724.8	720.1	-4.6	-0.6%
PM 2.5 Precursor NOx	8,036.1	8,111.3	75.2	0.9%
Ozone Season VOC	19.1	19.1	0.0	0.0%
Ozone Season NOx	20.2	20.4	0.2	1.0%
Winter CO	121.3	121.9	0.6	0.5%
CO2e	17.5	17.7	0	0.9%

* Direct PM2.5 and PM2.5 Precursor NOx in tons/year

* Ozone season VOC and NOx, and Winter CO in seasonal tons/day

* CO2e in millions of metric tons/year



Key Findings: What Does the CLRP Do?

- Increases daily transit person trips (5%) and share of transit work trips (1%)
- Decreases daily single person auto trips (1%) and share of single person auto work trips (1%)
- Reduces roadway congestion - vehicle hours of delay (17%), VMT on congested roadways (14%), share of congested VMT (6%) and share of congested lane miles (4%)
- Increases accessibility to jobs by auto (13%) and transit (14%) within 45 minutes during morning commute
- Increases total VMT and VMT per capita by 2%
- Emission estimates in CLRP change very slightly and are within 1% of No Build estimates



What Does This Mean?

- Investments in highway and transit capacity in the CLRP lead to:
 - Significant reductions in congestion relative to No Build
 - Increased transit usage
- System-wide expansion of highway and transit infrastructure leads to sizeable increases in accessibility to jobs
- Reduced congestion due to improvements in system performance results in a slight increase in VMT
- Changes in travel patterns, modes and conditions yield little change in emissions of criteria pollutants and greenhouse gas (CO₂e) emissions



Next Steps

- Staff will continue with input preparations for All-Build scenario



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National Capital Region
Transportation Planning Board



MEMORANDUM

TO: Long-Range Plan Task Force
FROM: John Swanson, Manager of Plan Development and Support
Michael Farrell, Senior Transportation Planner
SUBJECT: Proposal for the development of a list of unfunded pedestrian and bicycle priority projects
DATE: April 14, 2016

This memo describes an approach that TPB staff is proposing to use in the development of a list of pedestrian and bicycle unfunded priorities for inclusion in the TPB's plan of unfunded priority projects.

BACKGROUND

The TPB's Unfunded Capital Needs Working Group approved a scope of work last November that called for the development of a plan of unfunded priority projects. This plan will feature a limited number of multi-modal capital improvements that the region broadly supports and would like to see funded. The plan of unfunded priority projects will be completed in mid-2017, in time for the unfunded projects to be considered for the next quadrennial update of the region's long-range plan in 2018.

The working group's scope of work identified in broad-brush terms the process that the TPB will use to identify unfunded road and transit priority projects. This process will use systems-level analysis, which has long been a hallmark of the TPB's long-range planning activities. TPB staff has already compiled an inventory of nearly all the unfunded road and transit projects that are in the plans of our member jurisdictions. Various packages of these projects will be coded and analyzed, like the CLRP itself, using the TPB's travel demand forecasting model. Through this analysis and outreach, the TPB will identify a limited number of specific road and transit projects that will help the region achieve its goals and will address forecast deficiencies identified in the performance of the CLRP.

The process for identifying pedestrian and bicycle priorities necessarily differs. Non-motorized transportation projects are typically smaller-scale improvements that do not lend themselves to regional travel demand forecasting. Often, they are more a matter of connectivity or accessibility (i.e., do connections exist) rather than the congestion focus of regional travel demand modeling. Therefore, we will put together a different but still robust process for considering bicycle and pedestrian unfunded projects. GIS tools will provide technical underpinnings to this process. Work can grow from related analytical work already performed by member agencies, including WMATA, DDOT, and the National Park Service. And the process will rely on the expertise of member agency staffs for their knowledge of these frequently local projects, albeit with regional impacts.

Improving bicycle and pedestrian facilities is a major policy focus for the TPB and from the beginning of this new planning activity, TPB members have called for the inclusion of unfunded pedestrian and bicycle projects in the plan of unfunded priorities.

The working group's scope, approved last November, acknowledged that a specialized process needs to be established to identify unfunded non-motorized transportation priorities. The scope said that:

“Pedestrian and bicycle projects/priorities will be identified through a separate but integrated process that will be conducted under the guidance of the TPB's Bicycle and Pedestrian Subcommittee. (This activity may largely use the established development process for the TPB's Bicycle/Pedestrian Plan.)”

This memorandum provides a high-level proposal for such a process.

PROPOSAL

According to established TPB policies, the region should promote walking and bicycling as viable transportation options and seek to promote better non-motorized circulation within regional Activity Centers. TPB staff proposes to focus upon those policies by identifying pedestrian and bicycle priority projects linked to the following themes and activities:

- *Identify a package of high-impact access improvements within Activity Centers*

Under the guidance of its Bike/Ped Subcommittee, the TPB will identify a limited set of unfunded bicycle and pedestrian infrastructure improvements that are within Activity Centers and have the potential to improve circulation within the Centers.

Improving access to transit would be the primary focus of this effort, which will build upon a 2014 TPB study (funded through a federal TCSP grant) that identified improvements in access to rail stations and extensively utilize current WMATA's station access planning activities. The prioritization effort will identify a limited list of projects that can be shown to be high-impact and beneficial. The final list of priority projects will be likely to be grouped in some key manner, perhaps limited to a list of locations where improvements are deemed to be most beneficial for the region.

- *Identify high-priority projects to provide key connections between jurisdictions and between Activity Centers*

The TPB will also develop a list of longer-distance bicycle and pedestrian projects that improve connectivity on a wider regional basis. As a starting point, this effort will examine the network in the Regional Bicycle and Pedestrian Plan, which was approved in January 2015; the plan identifies a number of unfunded projects for further consideration. The identification of unfunded non-motorized priorities will also be informed by:

- The National Park Service Paved Trails Network Study, which is identifying approximately 100 projects that will enhance or complete that network;
- The Regional Trails Coalition, which will develop a proposed regional trails network that will build on the proposed NPS network, but include non-NPS properties.
- The Regional Bicycle Beltway Working Group which was formed to identify regional circumferential routes.

The schedule for developing the list of priorities needs elaboration, but we currently anticipate that the Bicycle and Pedestrian Subcommittee would be asked to develop and approve the draft list of priority pedestrian and bicycle projects by the end of 2016 for submission to the Unfunded Capital Needs Working Group. Early in 2017, the Unfunded Capital Needs Working Group will compile a draft plan of unfunded priority projects that encompasses all modes. This full draft will be the subject of additional outreach and analysis in the spring of 2017 before it is presented to the TPB for final approval in late spring or early summer of 2017.

NEXT STEPS

At the March 15 meeting of the Bicycle and Pedestrian Subcommittee, members were asked to provide preliminary feedback on this proposal. Based upon the input received from that group as well as the Long-Range Plan Task Force, TPB staff will develop a more detailed scope and will proceed with activities that are broadly agreed upon.



MEMORANDUM

TO: Unfunded Capital Needs Working Group
FROM: John Swanson, Plan Development and Support Manager
SUBJECT: Promoting regional priorities in the project selection processes of the TPB's member jurisdictions
DATE: March 10, 2016

This memo describes a proposal to develop a system that the TPB can use to promote the consideration of regional priorities in project selection processes at the local, subregional, and state levels.

BACKGROUND

Last fall, during the finalization of the 2015 CLRP Amendment, TPB members expressed a general sentiment that regional priorities and goals did not appear to be adequately reflected in CLRP projects and in the plan as a whole. Members expressed general dissatisfaction with the forecast performance of the future transportation system in relation to regional goals. Some members suggested that in the future, the TPB should establish a process to score or rank CLRP project submissions in relation to regional goals and priorities as identified in the Regional Transportation Priorities Plan.

The TPB convened a special work session on January 20 to discuss ways in which the board can promote regional priorities at many levels of project development. At that meeting, participants agreed to the following recommendations offered by Tim Lovain, TPB chairman, and Kanti Srikanth, TPB staff director:

1. Recognize and leverage the work of the already established Unfunded Capital Needs Working Group.
2. Redefine the TPB's long-range plan to include funded (constrained) and unfunded projects.
3. Keep abreast of project development processes at all levels.
4. Seek to influence project development at all levels.
5. Encourage project evaluation and development processes to incorporate regional considerations.

The first two of these recommendations entail changes in the TPB's long-range planning process. These recommendations are consistent with the scope of work approved by the Unfunded Capital Needs Working Group last November, which will lead to the identification of a set of unfunded regional priority projects reflecting regional goals. The selection of such unfunded projects will provide the TPB with opportunities for enhanced input at the state and local levels during earlier stages in the project development process well before new projects are submitted for the "constrained" element of the long-range plan.

In contrast, recommendations 3-5 will not change the regional planning process, but will call upon the TPB to be more cognizant and active in project development and selection activities at the local,

subregional and state levels. The remainder of this memo provides recommendations for implementing recommendations 3-5.

PROPOSAL

This proposal is premised upon a fundamental fact underlying the TPB's current long-range planning process: By the time a project is submitted for the CLRP, it is already well advanced in the project development process. Typically, projects submitted for the CLRP have already undergone extensive planning activities and have been through a process of prioritization and funding identification at the state and/or local levels. If the TPB wishes these projects to reflect and promote regional goals and priorities, it must find ways to influence project development and selection well before submissions reach the CLRP.

Staff proposes to use the following means to document local, subregional, and state project selection processes and seek to ensure that regional policies and priorities are considered in those processes:

1. *Research and document project selection processes*

Staff will gather information through written questionnaires and telephone interviews on the project selection processes used by local, state, regional transportation agencies. This research will likely address the following questions:

- What are the goals, priorities, or outcomes that the projects are intended to advance?
- How are the projects evaluated against these goals, priorities, or outcomes – qualitatively, quantitatively or a combination?
- How does the quantitative evaluation process, if used, work? What role does qualitative evaluation play in selecting projects?
- How is consensus reached on a package of selected projects?
- Does project selection currently include any explicit consideration of regional policies or priorities?

The gathered information will be condensed in narrative descriptions that will be featured on the TPB's Hub website (www.transportationplanninghub.org). In addition, the information will be synthesized in tables or on spreadsheets.

2. *Develop a set of regional priorities for project selection at all levels*

Consistent with the TPB Vision and using its Regional Transportation Priorities Plan document, the TPB will identify a specific set of regional outcomes that the TPB considers to be regional priorities for projects to address. These outcomes would serve as the project evaluation metrics that would be considered by the TPB member jurisdictions and agencies as they select projects for development and funding considerations.

One of the ways of identifying the above set of regional project priority metrics would be to use the results of the performance outcome of its latest CLRP (2015) and identify specific performance outcomes that the board finds to be deficient. These "CLRP performance deficiencies" are what the TPB would promote for use as part of the project selection process by

the member jurisdictions and transportation agencies.

The above work will also serve to implement the second recommendation (above) agreed upon during the January 20, 2016 TPB work session (“Redefine the TPB’s long-range plan to include funded [constrained] and unfunded projects”), which will require the development of a set of unfunded projects for inclusion in the region’s long-range transportation plan. Again, the development of this plan of unfunded priority projects was part of the scope of work approved by the Unfunded Capital Needs Working Group last November.

3. *Develop a systematized process for providing regional input to local and state project selection*

Working with the staffs of TPB member jurisdictions and agencies, TPB staff will develop a process for the TPB and its staff to use in conducting outreach to local, subregional and state agencies. This process will use a variety of outreach methods to pro-actively foster communication with TPB members across the region. But recognizing the TPB’s limited resources, the process will also be strategic and targeted.

Based upon the steps described above, the TPB will identify a plan for how the board wishes to convey its priorities to member jurisdictions. This plan may include the following components:

- *Provide written information to all members.* On a regular basis, the TPB may convey information in writing about regional priorities to all local, subregional and state boards that are involved in transportation project selection.
- *Develop a calendar of activities.* On an annual basis, TPB staff will develop a calendar of major planning activities that are underway throughout the region, which the TPB may seek to inform.
- *Make presentations to decision-making bodies.* On a regular basis, TPB staff will identify a list of decision-making bodies that could/should be contacted to receive presentations on regional priorities.
- *Seek to inform regular programming activities and events.* Selected annual activities that occur on an annual basis are particularly appropriate venues in which to share information about regional priorities. These include MDOT’s Annual Tour, VDOT’s SYIP development process, NVTAs’s programming, and others.
- *Seek to include regional priorities in scoring and ranking systems.* The TPB may seek to integrate regional priorities and needs with the project evaluation criteria used in local, sub-regional and state level project prioritization processes (qualitative and or quantitative).

NEXT STEPS

The working group will discuss this proposal at their meeting on March 16. TPB staff welcomes all comments and suggestions regarding its implementation.