FROM NO-BUILD TO ALL-BUILD

Analyzing a Continuum of Transportation Scenarios for the National Capital Region

Report on Phase I of the TPB Long-Range Plan Task Force John Swanson, Transportation Planner

National Capital Region Transportation Planning Board November 16, 2016





Long Range Plan Task Force

Goal:

Improve performance outcomes of the regional long-range transportation plan

Objective:

Identify and highlight unfunded capital needs <u>as part of</u> the regional long-range transportation plan

Approach:

- ✓ Inventory locally identified unfunded projects (inputs)
- Determine potential improvement in system performance from all unfunded projects (analysis)
- Identify a limited set of unfunded priority projects for inclusion in the long-range plan (next steps)



Task Force Activities

- Inventory of Unfunded Capital Needs Initiated Fall of 2014
- Unfunded Capital Needs Working Group Established Summer 2015
- Work Plan Approved November 2016
 - Phase I: Develop a Baseline Report
 - 3 Scenarios No-Build, Planned-Build (CLRP), and All-Build (Unfunded projects) scenarios
 - Plan to incorporate unfunded projects into the region's 2018 long-range transportation plan to highlight unmet funding needs.
 - Phase II: Plan of Unfunded Priority Projects
 - Develop a consensus list of limited multi-modal unfunded projects and promote funding.



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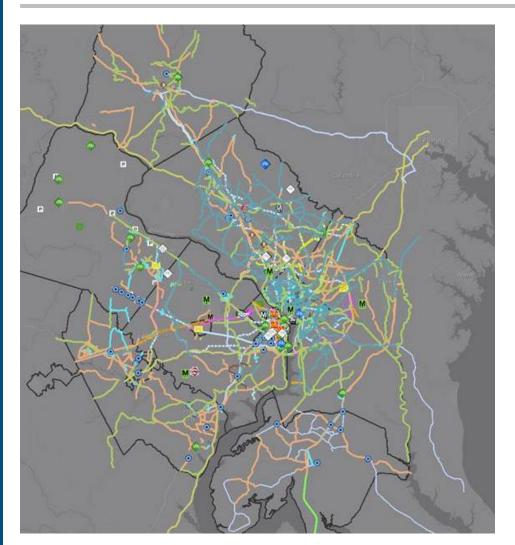
Phase I: Scenarios

2015-2040	No-Build	Planned-Build	All-Build
Population growth	24%	(2015 CLRP) 24%	24%
Employment growth	36%	36%	36%
New transportation projects	0	372	550 additional
Capital funding for new projects	\$O	 \$42 billion \$27 billion - highway \$15 billion - transit 	 \$70-100 billion additional \$25-55 billion highway \$45 billion - transit



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All-Build Project Inventory



Approximately 550 projects that are included in state, local and regionally approved plans, but are not currently included in the CLRP.

- Master list of projects: <u>https://www.mwcog.org/ass</u> <u>ets/1/28/09212016_-</u> <u>AB_Project_List.pdf</u>
- GIS map of projects: <u>https://gis.mwcog.org/web</u> <u>maps/tpb/Irptf/allbuild/</u>



Transit Improvements

System	No-Build (existing miles)	Planned Build (additional miles)	All-Build (additional miles)
Metro Rail	119 mi	+12 mi	+33 mi
Light Rail	0	+16 mi	+66 mi
BRT / Street Cars	5 mi	+36 mi	+259 mi
Commuter Rail	167 mi	+0	+10 mi
TOTAL	291 mi	+64 mi	+368 mi

High Capacity Transit (HCT)

- Existing Transit Network/No-Build
- Additions to Transit Network in Planned Build
- Additions to Transit Network in All-Build



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Roadway Improvements

System	No-Build (Existing lane miles)		Planned- Build (additional lane miles)		All-Build (addition lane mile	al
Freeways / Expressways	3,549 mi		+444 mi		+453 mi	
Arterials	13,396 mi		+686 mi		+722 mi	
TOTAL	16,945 mi		+1,130 mi		+1,175 mi	
System	No-Build (Existing lane miles)	В (а	lanned uild udditional ine miles)	(ac	Build Iditional ne miles)	\leq
Tolled Lane Miles	394 mi	+194 mi		+4	⊦419 mi	
Cordon Charge	\$0	\$	0	\$6	6	

New Tolled Facilities in All-Build

New Tolled Facilities

Existing Roadways

Interstates and other highways



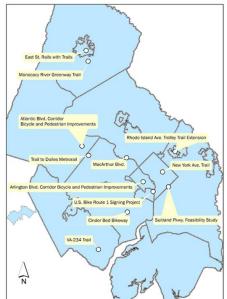
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Arterial roadways

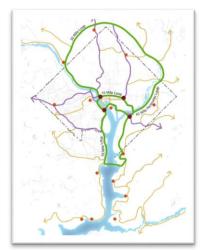
Unfunded Ped/Bike Improvements

- Inputs from TPB's Regional Bicycle & Pedestrian Plan and other jurisdictional submissions for multiuse paths:
 - Existing: 645 miles
 - All Build: 1,340 additional miles
- WMATA's Metrorail Station Investment Strategy has 900 additional miles of ped/bike projects

Highlighted Examples



TPB Bike/Ped Subcommittee Top Priority Projects



National Capital Trail (Bicycle Beltway)

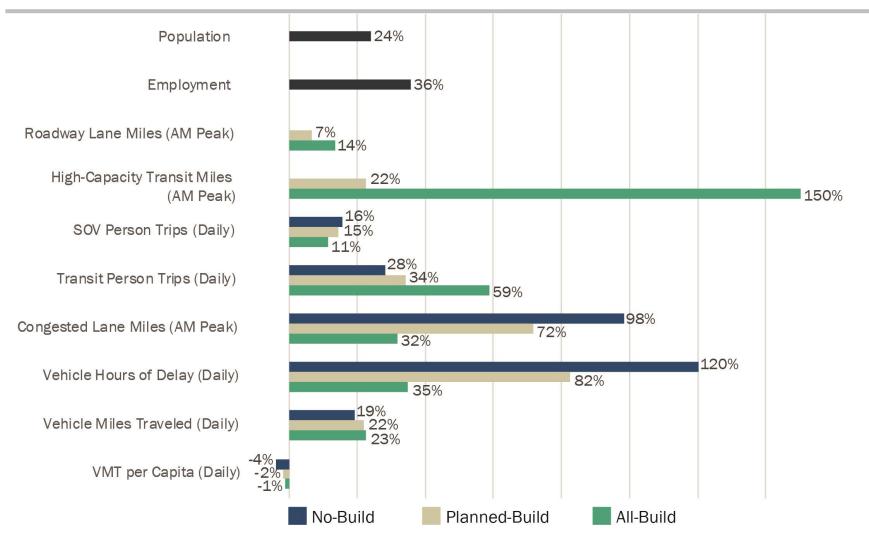


WMATA's Metrorail Station Investment Strategy

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Impacts of Scenarios





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Agenda Item #13: Report on Phase I of the Long-Range Plan Task Force November 16, 2016

Summary of Findings

- Major capital investments would make a difference in mobility For example:
 - All-Build compared to the CLRP (relative to today):
 - Greater increase in transit ridership (59% vs 34%)
 - More jobs close to transit (70% vs 57%)
 - Smaller increase in SOV trips (11% vs 15%)
- But new capacity alone won't solve our problems
 - All-Build compared to today:
 - Peak hour will still have more congested lane miles
 - Daily vehicle hours of delay will still increase
- Forecast land use (same for all 3 scenarios) significantly impacts travel
- Even more aggressive land-use and pricing assumptions to support capital investments could make a difference



John Swanson

Transportation Planner (202) 962-3295 jswanson@mwcog.org

mwcog.org/tpb

Metropolitan Washington Council of Governments 777 North Capitol Street NE, Suite 300 Washington, DC 20002



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