

# Overview of Visualize 2045

## The New Transportation Plan for the Metropolitan Washington Region

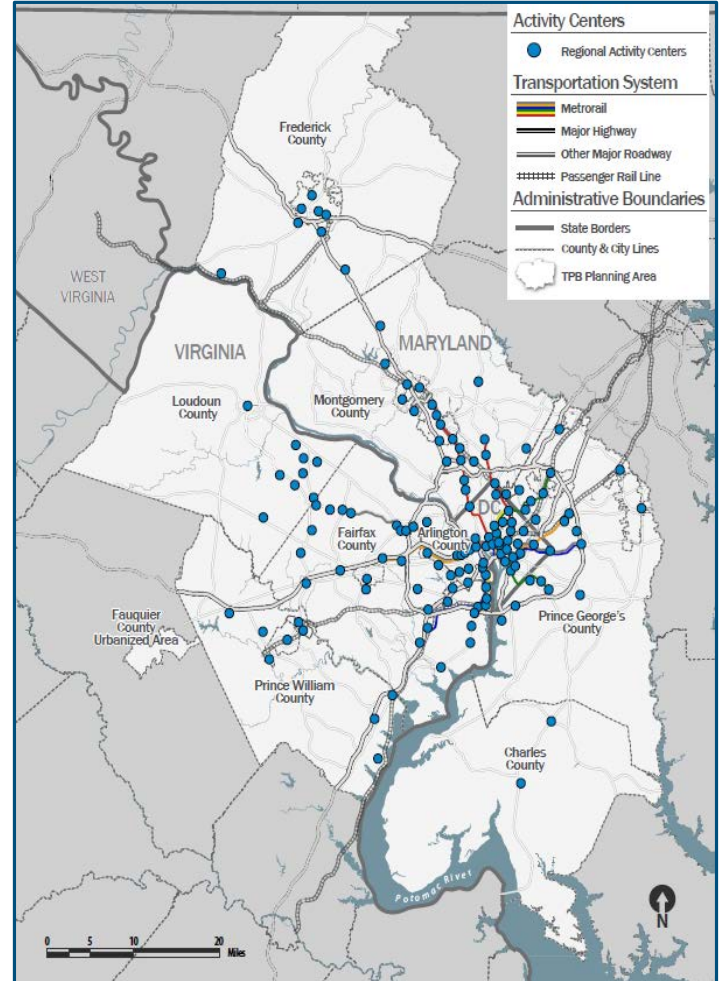
John Swanson, Transportation Planner

TPB Citizens Advisory Committee  
March 14, 2019



# Our Region

- 5.7 million people
- 3.3 million jobs
- 3,500 square miles
- 141 Activity Centers



# Transportation Planning Board

- The designated metropolitan planning organization (MPO) for the Washington region
- 24 local jurisdictions
- 45 members, 39 of which are voting members



# Framework for Visualize 2045

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The plan aims to help decision makers and the public “visualize” the region’s future by illustrating:

- What the region **must do** to meet federal requirements
- What the region **can do** with current levels of funding
- What the region **aspires to do** if more resources were available



# Regional Policy

A regional policy framework guides the plan

- TPB Vision
- COG Region Forward
- TPB's Regional Transportation Priorities Plan
- Seven aspirational initiatives

## Evolution Of The TPB Policy Framework

1998



2010



2014

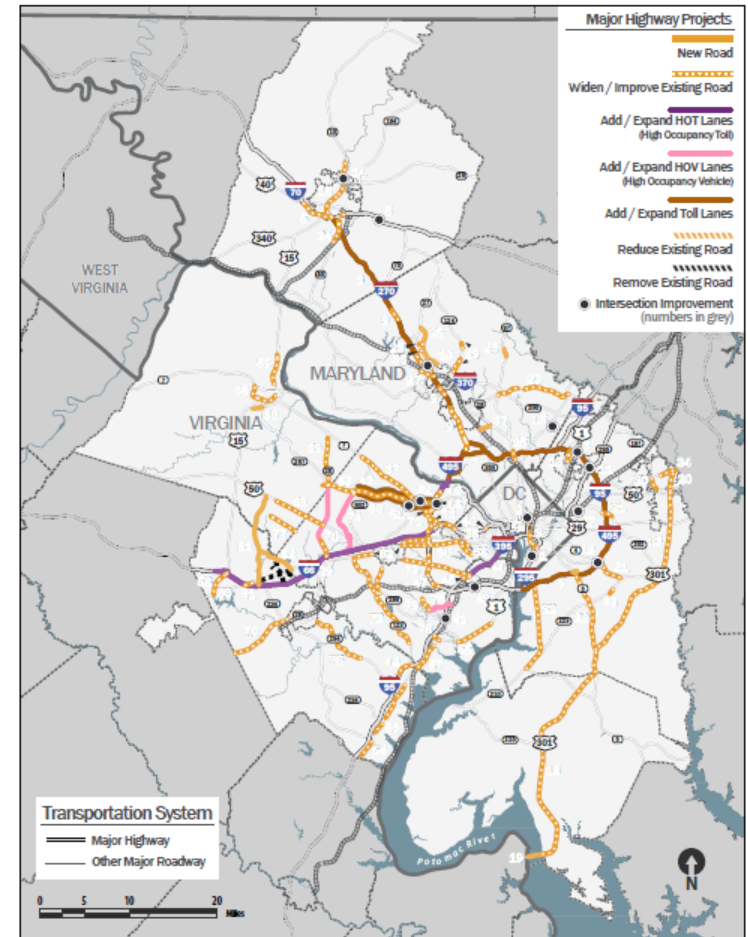


2017



# Financially Constrained Element

- Includes more than **100 major projects** that expand or change the region's highway or transit system capacity (see map, right)
- More than **600 projects in total**
- See Appendix B: Summary of Projects in the Financially Constrained Element for more details



# Projects in the Constrained Element

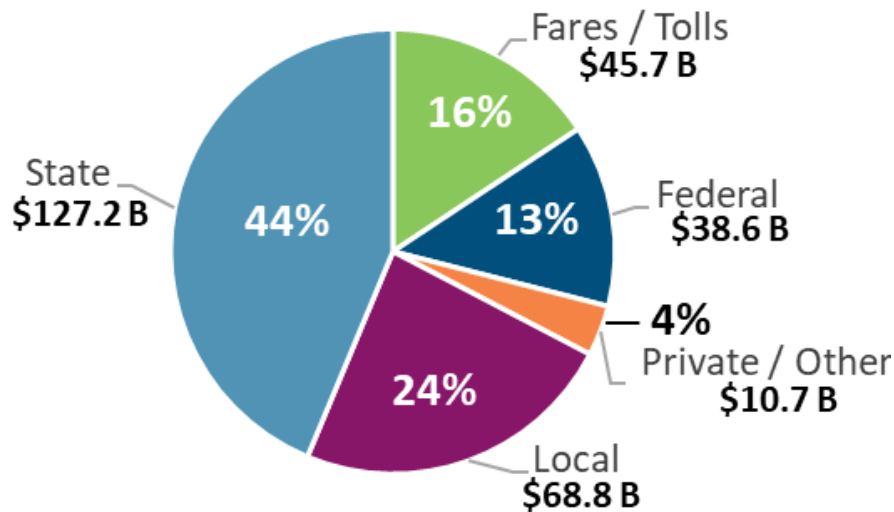
	Roadway	Managed Lanes (subset of roadway)	High-Capacity Transit
<b>Existing</b>	17,048 lane miles	436 lane miles	292 miles
<b>Added by Visualize 2045</b>	1,388 lane miles	461 lane miles	124 miles
<b>Total 2045</b>	18,436 lane miles	897 lane miles	416 miles



# Regional Revenues

## Visualize 2045 Revenues

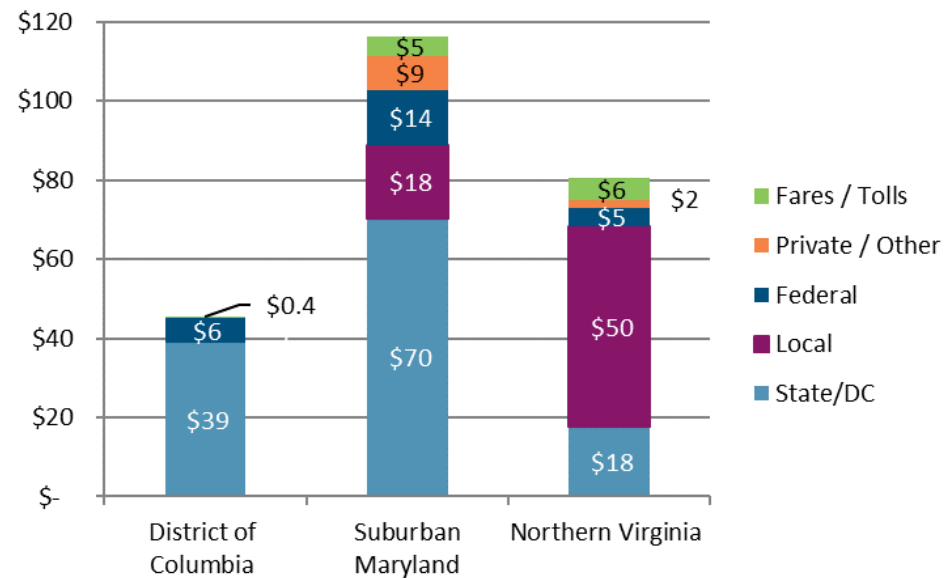
\$ Billions Year of Expenditure



**Total: \$291.1 Billion**

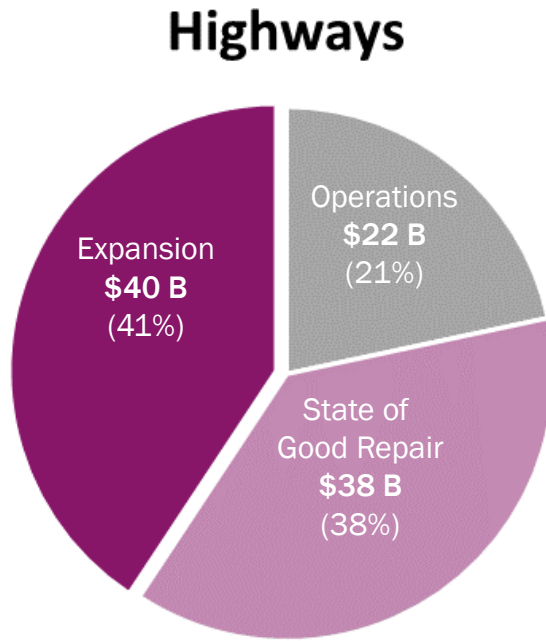
## Revenues by State (2019 – 2045)

(Does not include WMATA federal or fare revenues)

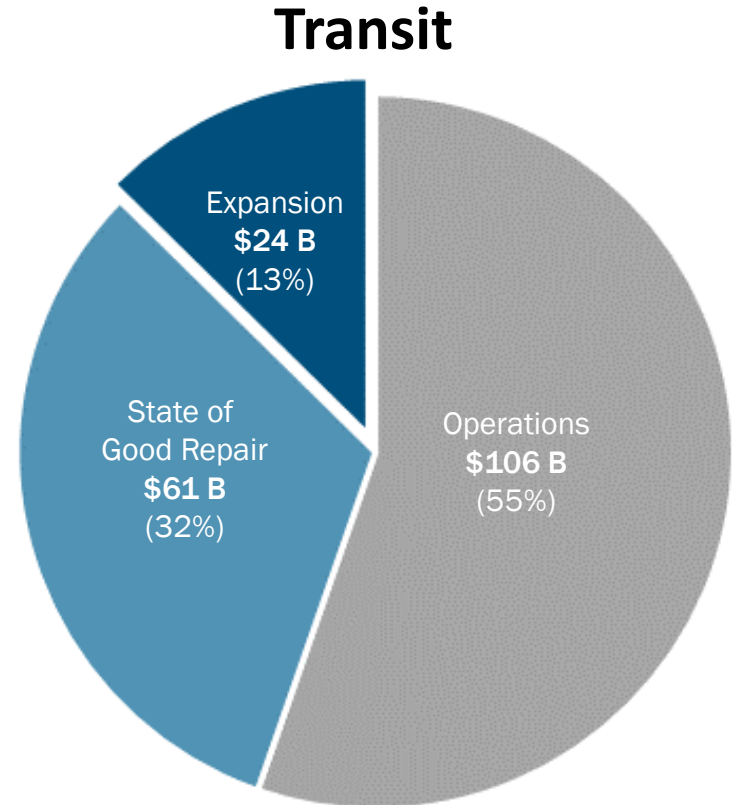




# Regional Expenditures



**\$99.5 Billion**  
(34% of total expenditures)

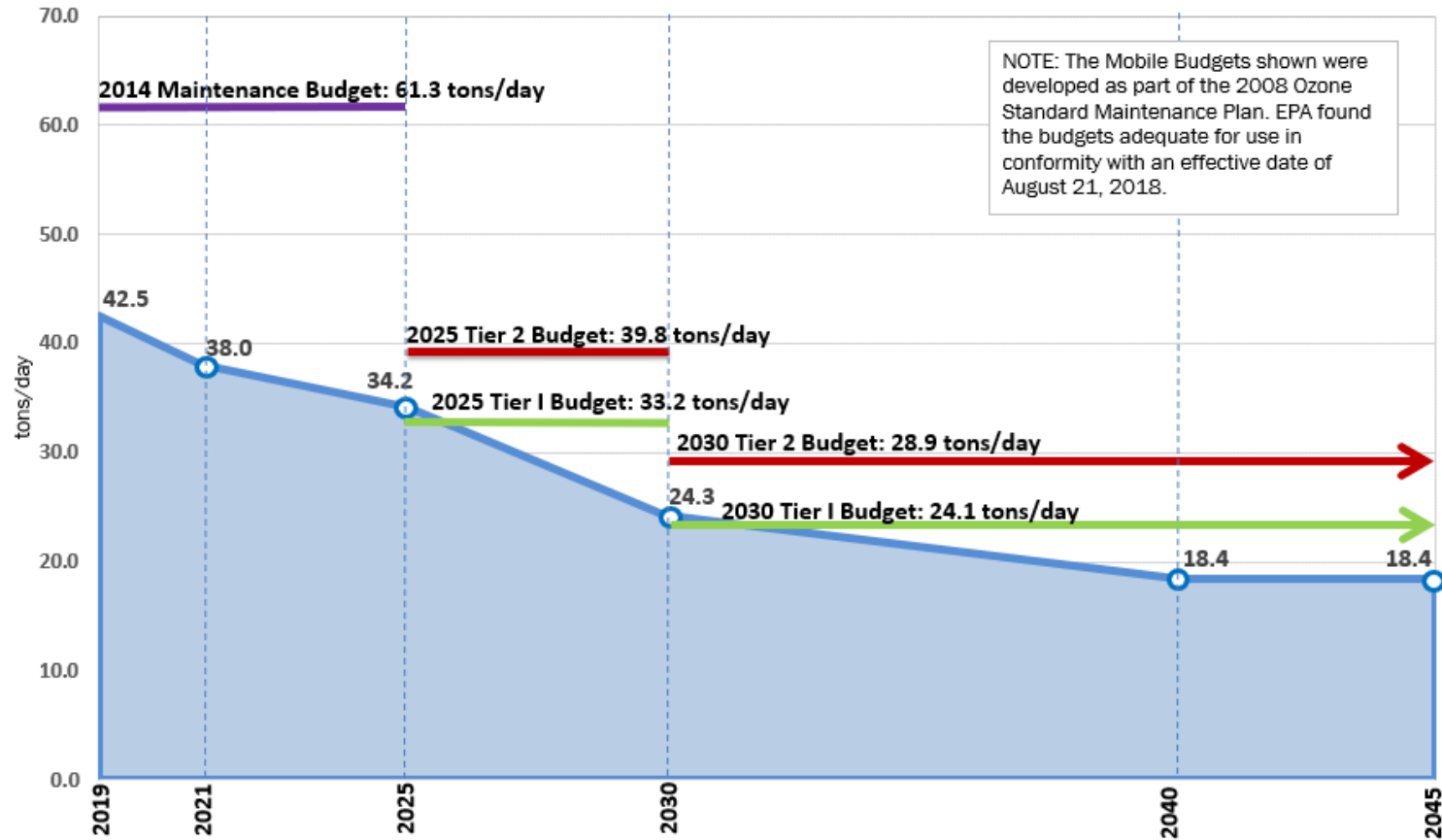


**\$191.6 Billion**  
(66% of total expenditures)



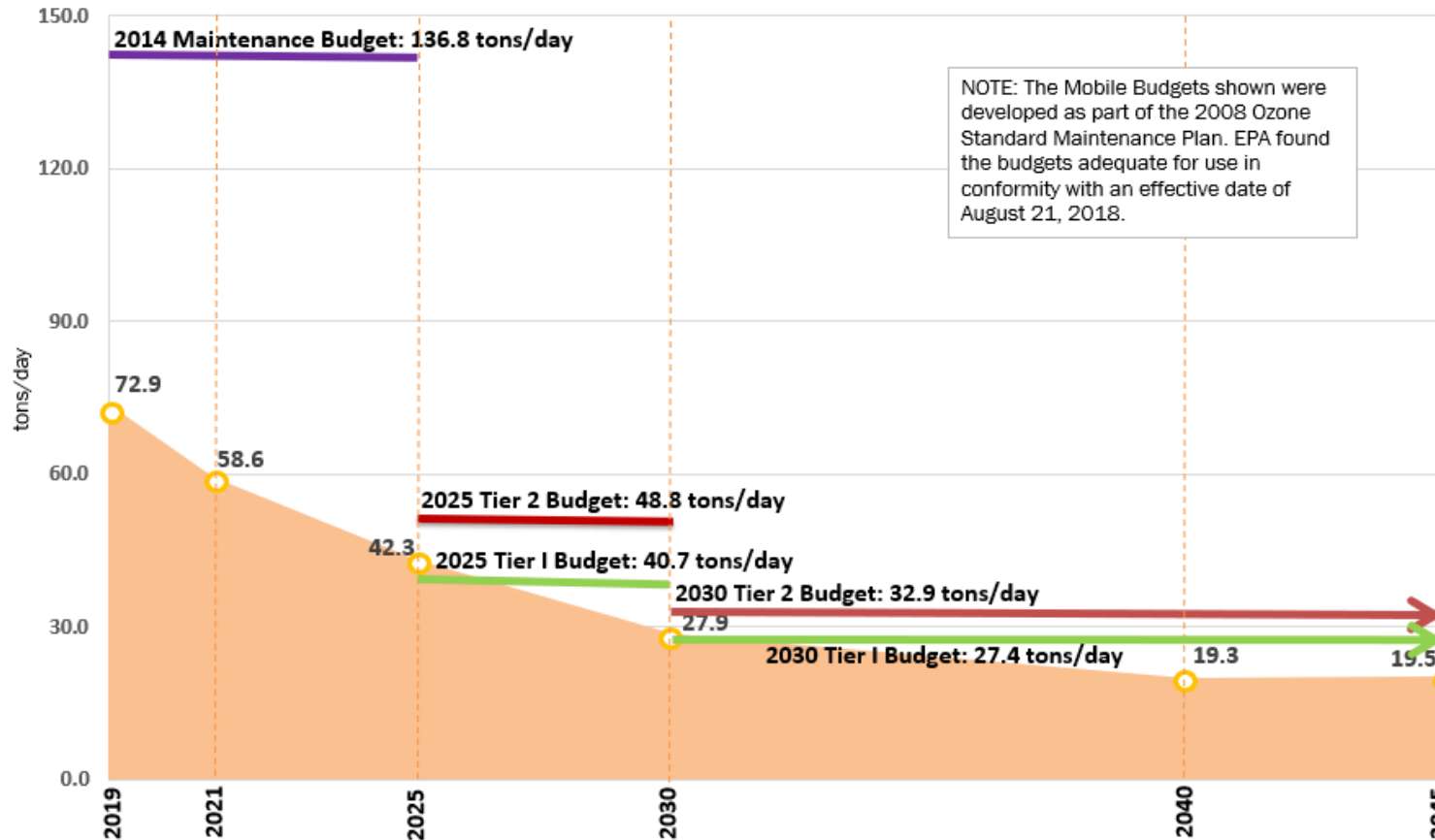
# Air Quality Conformity

## Mobile Source Emissions and Mobile Budgets Ozone Season VOC

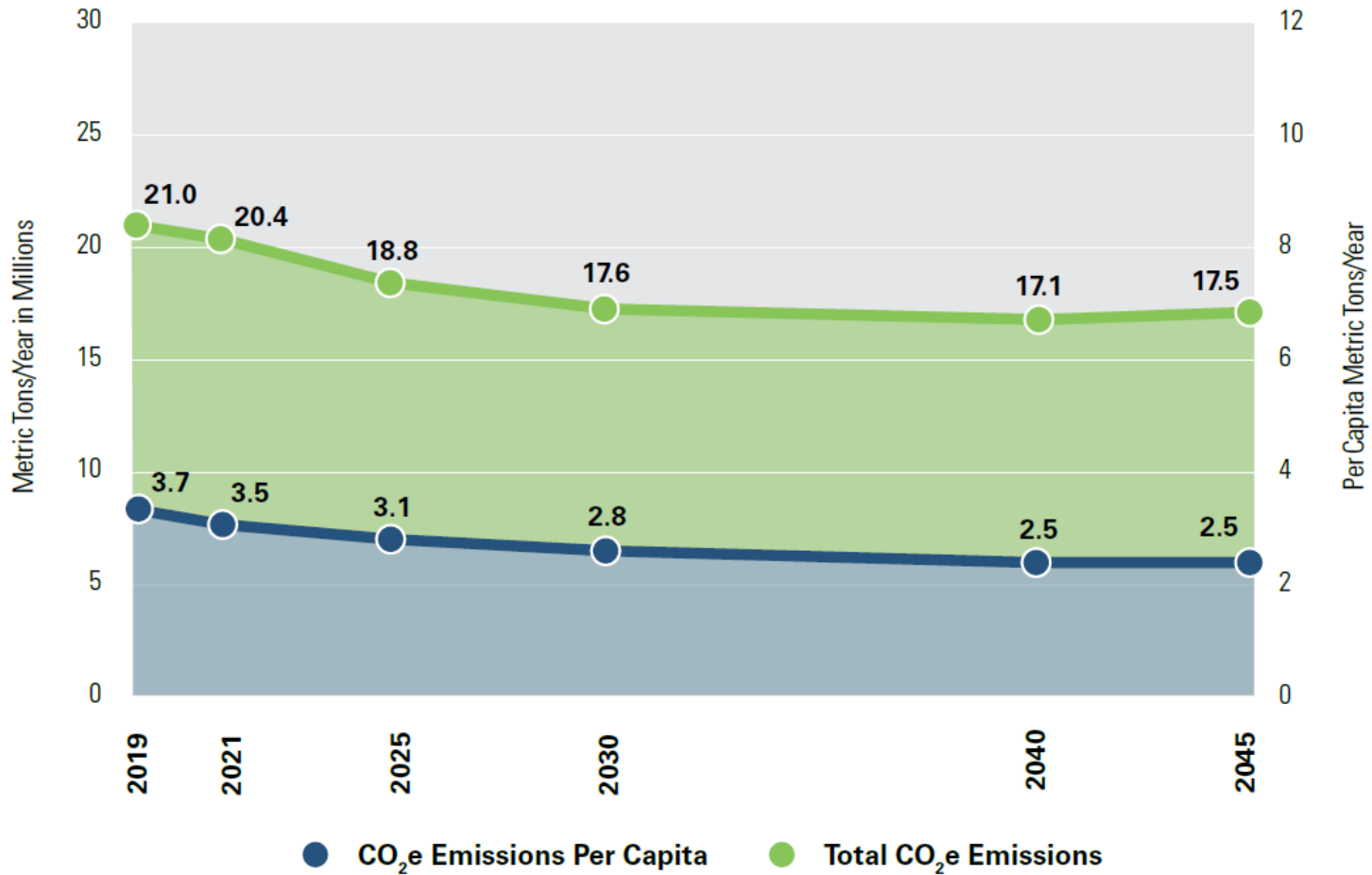


# Air Quality Conformity

## Mobile Source Emissions and Mobile Budgets Ozone Season NOx

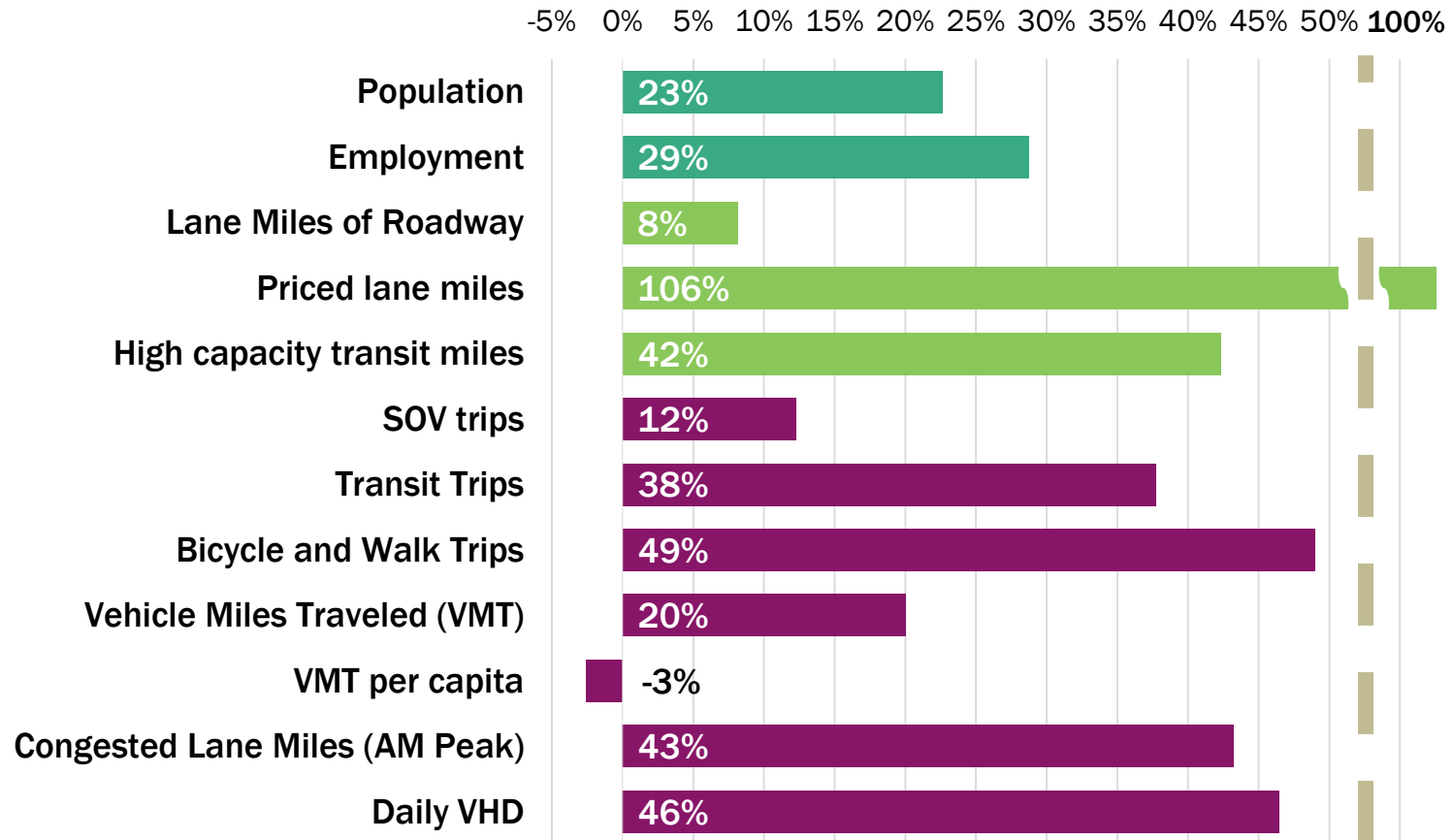


# Carbon Dioxide Equivalent (CO<sub>2</sub>e) Mobile Source Emissions



# Performance Overview

## % Change 2019 – 2045 Build



# Beyond the Constrained Element

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What we expect  
we can do



What we would  
like to do



**visualize2045**  
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION



# Our aspirations

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What we expect  
we can do



What we would  
like to do



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# Aspirational element

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## Why now?

- The previous long-range transportation plan was not anticipated to provide satisfactory future performance nor move us close enough to our regional goals

## Why these aspirational initiatives?

- TPB Consensus - Top performing, Regional, Multimodal, and Multidiscipline
- Two year systematic examination of local jurisdictions' plans
- Selected from 100+ ideas and an analysis of 10 “bundled” initiatives
- Includes mutually supportive projects, programs and policy strategies
- Informed by findings from many past scenarios studies
- Addresses identified challenges to achieving transportation goals





# Analysis of initiatives

	BASE	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10
	2040 CLRP	Express Travel Network Operational	Improvements & Hot Spot Relief	Add North Bridge	BRT and Transitways	Commuter Rail	Metrorail Core Capacity	Transit Rail Extensions	Regional Land-Use Balance	Transit Fare Policy Changes	Travel Demand Management
<b>QUANTITATIVE MOES</b>											
Travel Time (SOV)	50.7	-2%	-4%	0%	-1%	-1%	-2%	-1%	-5%	0%	-4%
Travel Time (HOV)	58.9	-5%	-4%	-1%	-1%	-1%	-1%	-1%	-6%	<1%	-6%
Travel Time (Transit)	53.9	-1%	-2%	<-1%	-1%	<1%	-6%	<-1%	-5%	1%	<1%
Daily Vehicle Hours of Delay	1.85 million	-11%	-8%	-3%	-2%	-2%	-9%	-3%	-19%	-3%	-24%
Jobs Accessible by Transit	523,000	2%	2%	<-1%	4%	1%	19%	10%	10%	0%	0%
Jobs Accessible by Auto	876,000	5%	8%	1%	1%	<1%	2%	1%	10%	<1%	10%
Mode Share: SOV	58.1%	<1%	3%	<1%	-1%	-1%	-4%	-1%	-2%	<1%	-8%*
Mode Share: HOV	11.6%	-1%	-7%	0%	-1%	-1%	-5%	-3%	-4%	-2%	24%*
Mode Share: Transit	24.6%	1%	-4%	<-1%	4%	2%	11%	5%	<1%	2%	6%*
Mode Share: Non-Motorized	5.6%	0%	0%	0%	<1%	<1%	<1%	<1%	29%	0%	16%*
Travel on Reliable Modes	11.5%	42%	-5%	-2%	6%	2%	9%	6%	0%	3%	-3%
VMT daily	141.91 million	<1%	2%	1%	<-1%	<1%	-1%	-1%	-3%	-1%	-6%
VMT daily per capita	21.17	<1%	2%	1%	<-1%	<1%	-1%	-1%	-6%	-1%	-6%
Share of Households in Zones with High-Capacity Transit	39.9%	0%	0%	<-1%	25%	<1%	<1%	17%	9%	0%	0%
Share of Jobs in Zones with High-Capacity Transit	57.7%	0%	0%	<-1%	15%	<1%	0%	13%	2%	0%	0%
VOC Emissions	18.9	0%	-3%	1%	-1%	0%	-2%	-1%	-4%	-1%	-8%
NOx Emissions	18.8	0%	0%	1%	0%	0%	-2%	-1%	-4%	-1%	-7%
CO <sub>2</sub> Emissions	47,082.3	0%	-1%	1%	-1%	0%	-2%	-1%	-4%	-1%	-7%

\*Mode shares reflect trips taken. Due to telework, actual number of transit trips declines; bicycle/pedestrian stays flat; HOV increases slightly.

# Approval of initiatives

TPB's December 2017 endorsement:

The TPB “endorses the attached list of five initiatives, found to have the most potential to significantly improve the performance of the region’s transportation system compared to current plans and programs, for future concerted TPB action, and directs staff to **include these initiatives in the aspirational element of the TPB’s long-range transportation plan, Visualize 2045.**”

\*Jan 2018 TPB passed two others



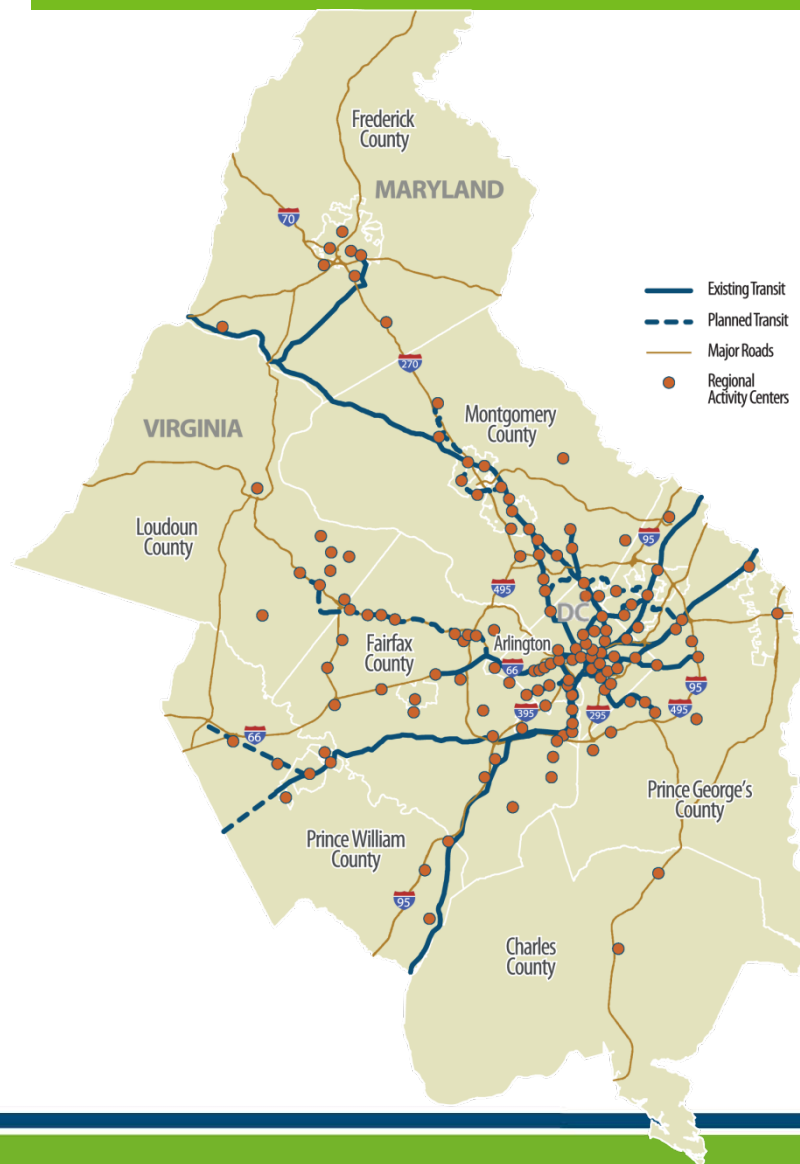
# Seven endorsed initiatives

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- Bring jobs and housing closer together
- Expand bus rapid transit (BRT) regionwide
- Move more people on Metrorail
- Provide more telecommuting and other options for commuting
- Expand the express highway network
- Improve walk and bike access to transit
- Complete the National Capital Trail



# Bring jobs & housing closer together



- Job/housing balance in each Activity Center
- Housing options for different populations:
  - Affordable
  - Attractive
- Support development on the eastern side of the region
- Tailored to each place's unique identity – *not* one-size-fits-all!



# Expand BRT & other cost-effective transit

## Bus Rapid Transit:

- Advantages: Extensive, quick, less money
- Possible on arterial roads or on limited-access highways

## Street-level transit, like light-rail:

- Opportunities for economic development and fast, efficient service



# Move more people on Metrorail

- Core capacity on the existing system
  - 8-car trains
  - Core station improvements
  - 2<sup>nd</sup> Rosslyn station
- New inner loop – Connecting Rosslyn to Georgetown, via a tunnel, and on to Union Station

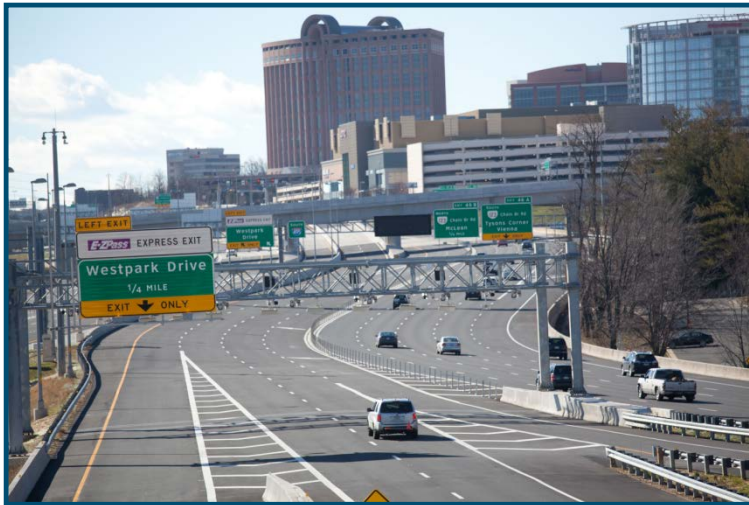


# Telecommuting & other commuting options

- Expand programs to support telework, carpooling, transit use, & biking/walking
- Reduce parking benefits



# Expand express toll lanes



Twin purpose:

- Manage Congestion
- Raise Revenue

Pricing should be considered:

- Particularly for new capacity
- On existing capacity when feasible

Essential:

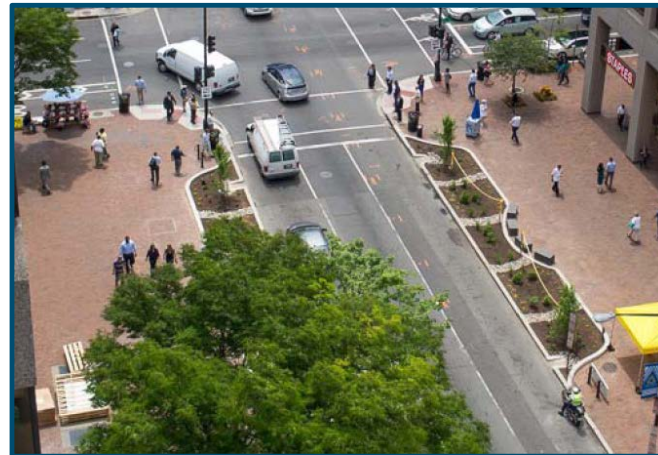
- Provide high-quality transit, particularly BRT





# Improve walk & bike access to transit

Increase access to transit stations through improved first- and last-mile connections on foot or by bike



# Complete the National Capital Trail



“The NCT is compelling because it is simple, understandable, and refrains from trying to be overly ambitious or inclusive of all trails in the National Capital Region or broader region.”

*-NPS Paved Trails Plan, 2016*



# Performance Planning

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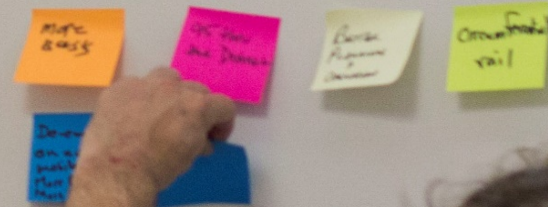
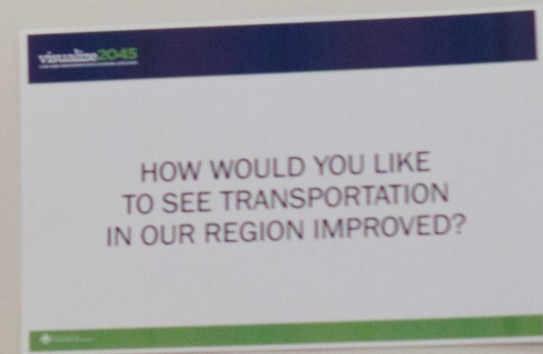
## Performance Based Planning and Programming, the Congestion Management Process, and Safety

- TPB champions improvements in the ways the transportation system is managed and operated
- Federal laws require target setting and progress reports through PBPP
- Visualize 2045 includes these elements of performance planning as drivers of decision making



# Public Participation

- Public Input Survey
  - Two groups of survey respondents
  - Outreach included 15 survey events, social media, and other promotion
- Public Forums across the region
  - Focus on the aspirational initiatives where input is most needed
- Open Houses
  - 3 Open Houses so people in the region can learn more about the plan



# visualize2045

A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

[visualize2045.org](http://visualize2045.org)



**You Could Win  
a \$50 Gift Card!**

Everyone who fills out a survey will be entered into a drawing for a \$50 Visa gift card. Ten winners will be drawn.

## Participate in Visualize 2045 Today!

What issues most affect your daily travel? What would make your experience better? Your answers will help inform discussions among elected leaders and regional planners about the planning and funding decisions we should be making to improve the region's transportation future. **Surveys must be completed by July 31, 2017.**

Take the Visualize 2045 Public Input Survey at [visualize2045.org](http://visualize2045.org)

With Simon, the architectural firm of Whittlesey & Conklin designed a "New Town." Construction of Lake Anne Village, its lake, central plaza, stores, and townhouses, began in 1963. With innovative zoning, Reston became one of the first master-planned communities in the United States, with residential clusters, mixed-use development, landscape conservation, ample recreational space, walking and biking trails, and public art. Reston received the American Institute of Certified Planners' National Landmark Award in 2002.

DEPARTMENT OF HISTORIC RESOURCES, 2014

Take the Visualize 2045 Survey Today!

What will our region's transportation FUTURE look like?

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GLUTEN-FREE  
PLANT-BASED  
LOCAL HEALTHY GOOD

MAIN STREET  
FARMER'S MARKET  
fresh local  
SPECIAL SELECTION



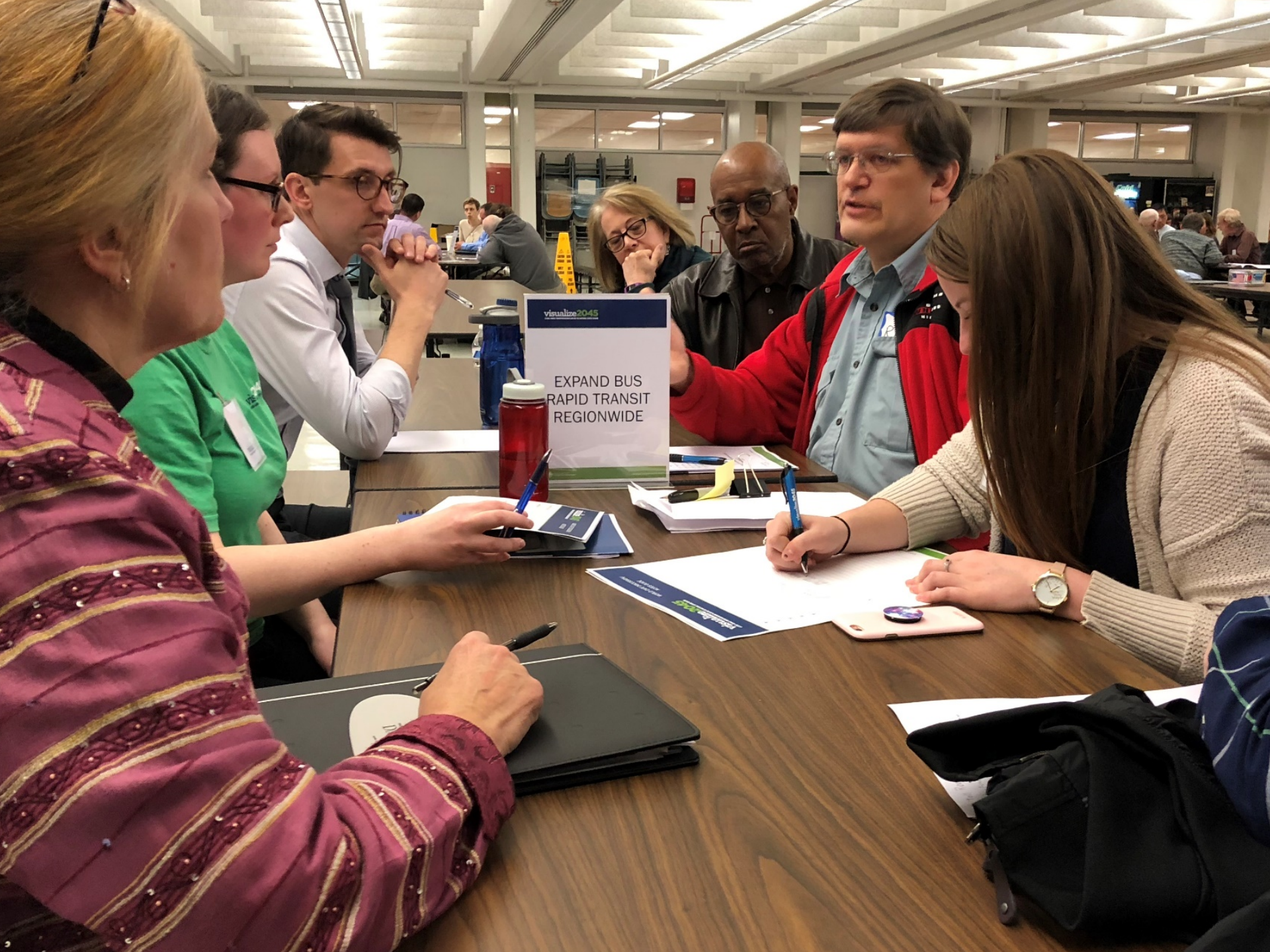
Visualize 2045  
What will your region's transportation future look like?  
Visualize 2045

FUTURE Look Diverse  
Visualize 2045

PARKING FOR THE CAR POOL ONLY BEFORE 11:00 AM

REDSKINS

LeGrand  
FRESH



visualize2045

## EXPAND BUS RAPID TRANSIT REGIONWIDE





visualize2045

COMPLETE  
THE NATIONAL  
CAPITAL TRAIL

# What people said:

- Frustrations with system reliability
- General familiarity with the aspirational initiatives
- Desire to move more quickly in implementing changes
- Concerns about equity and regional balance
- Calls for thinking “outside the box”



# Moving forward

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- October 16, 2018 – TPB approved Visualize 2045
- September-November - Subject-matter subcommittees developed 14 recommendations for implementation of the aspirational initiatives.
- December 19 - TPB resolution R10-2019 directed staff to take action to advance the initiatives



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[Visualize2045.org](http://Visualize2045.org)

