# Slide 1:

# Presentation Title: 2022 Update to Visualize 2045, FY 2023-2026 TIP and the Air Quality Conformity Analysis

TPB Staff

Logo – Visualize 2045 A long-range transportation plan for the National Capital Region

Map of the planning area

Slide 2: Presentation Overview

1. Overview of the Visualize 2045 update and FY 2023-2026 TIP
2. Financial Plan
3. Air Quality Conformity
4. Performance Analysis – Regional Transportation System
5. Get the Word Out: Visualize 2045

Slide 3: Top 3 Things to Know about the Visualize 2045 Update

1. The plan meets all Federal requirements, including:
	* Technical inputs
	* Fiscal constraint
	* Air quality conformity
	* Implementation of TPB’s Public Participation Plan, Title VI (Environmental Justice will be conducted on the approved plan)
	* Performance based planning requirements
2. The plan includes $223.3 B projected for 2023-2045
	* 81%: devoted to the operations and maintenance
	* Modal Breakdown:
		+ WMATA: 45%
		+ Other public transportation:22%
		+ Highways: 32%
		+ Stand-alone bicycle and pedestrian: 0.4%.
3. We make progress on our goals but also face challenges
	* Growth will increase demand, increasing delay and congestion
	* Access to transit will increase
	* More people, businesses and visitors will have increased travel options

Slide 4: Transportation Planning Board

* The designated metropolitan planning organization (MPO) for the Washington region
* 24 local jurisdictions
* 44 members, 39 of which are voting members, and 5 non-voting

Map of the planning area

Slide 5: TPB Region

* Our region is about 3,500 square miles
* Population increase of 23%, from 5.7 to 7.0 million
* Jobs growth of 26% from 3.4 million today to 4.3 million by 2045

Map of the planning region with transportation systems, roadways, airports, Equity Emphasis Areas, County & City lines, state boundaries shown

Slide 6:

1. Visualize 2045 and the TIP

Slide 7: Draft FY 2023-2026 Transportation Improvement Program (TIP) Summary

The FY 2023-2026 Transportation Improvement Program (TIP) features more than 300 funding records for projects, programs, and project groupings throughout the region, totaling approximately $10.7 Billion

Pie graph of Funding Programmed by Jurisdiction – $10.7 billion

* District of Columbia - $1.46 billion
* Suburban Maryland - $5.16 billion
* Northern Virginia - $1.47 billion
* WMATA - $2.6 billion

Slide 8: Draft FY 2023-2026 Transportation Improvement Program (TIP) Summary

Bar graph of Funding Programmed by Project Type

New/Widened Roads, Bridges, Interchanges - $.51 billion

Road & Bridge Maintenance - Rehab/Replace - $2.26 billion

HOV/HOT/Managed Lanes - $3.06 billion

BRT, Bus, Metrorail/Heavy Rail, Streetcar & Passenger Facilities - $.54 billion

Transit Maintenance, Operations & Safety - $3.17 billion

Bike/Ped (Stand-alone) - $.19 billion

Other - $.97 billion

Slide 9: Plan Emphases: Safety, Equity, Climate

Applying an equity lens and an integrated planning approach as we work toward shared regional goals, with a renewed emphasis on safety and climate mitigation and resilience.

Venn diagram with Transportation in the center circle

Next layer going outward is Climate, Equity, Safety

Next layer is individual circles named:

* Land Use/Housing/Economy
* Environmental Health
* Application of Best Technologies
* Mobility, Accessibility, Reliability
* Public Health Impacts
* Maintenance
* Transportation Options, Affordability and Connectivity
* Management of Operational Efficiency

Slide 10: Plan Organization: Nine Chapters (includes climate change mitigation)

1. About the plan
2. Where are we today?
3. Visualizing our future together
4. What factors affect our future?
5. How do we engage the public?
6. Strategies for a brighter future
7. Funding the transportation system
8. Planning for performance
9. Where do we go next?

Slide 11: Plan appendices

1. Financial Plan
2. Summary of Projects in the Fiscally Constrained Element
3. Air Quality Conformity Analysis
4. Systems Performance Report
5. Congestion Management Process – impact on plan development
6. Safety Plan
7. Environmental Consultation and Mitigation
8. Public Participation Summary
9. Summary of Public Comments
10. Summary of Transit Plans (TDP/TSP) in Region
11. Federal Compliance Checklist
12. TPB Resiliency Study Whitepaper
13. TPB Climate Change Mitigation Study

Slide 12: Highlights of What’s New

* Applies an “equity lens” to plan content
* More information on the planning process:
	+ How does regional planning work?
* Public Engagement:
	+ Integrates Voices of the Region findings
* Planning Areas:
	+ Aspirational Initiatives
	+ transportation mode​s
	+ future /fed planning factors ​including climate (CCMS)/resiliency
* Projects:
	+ Integrates project sponsor responses to regional policy questions.
* Federal Compliance:
	+ Progress discussions for the PBPP
* The plan maintains a continued focus on demonstrating federal compliance

Slide 13:

1. Financial Plan

*The 2022 Update to Visualize 2045 long-range transportation plan meets the federal requirements for fiscal constraint.*

Slide 14: How Does the Region Pay for Transportation?

* Funding is provided by the federal, state, and local governments.
* Generally, revenues are generated through a "user pay" system.
* Typical revenue sources: fuel taxes, vehicle registration fees, transit fares, tolls, and other mechanisms, and some general taxes.
* State and local funding allocation to projects varies across jurisdictions.
* Federal funds are available through grants and specific funding programs

WHAT ARE“FUNDING SILOS?

”Transportation funding is not one “pot” of money that can be spent on any transportation project, program, or service. Federal and state laws and policies dictate where and how transportation funds can be applied, which separates the funding available into “silos.”

Slide 15: Does the Region Have Enough Funding for Transportation?

* Most of the increased travel demand will fall upon the existing highway and transit systems
* Even with planned investments in transportation capacity, long-term performance analyses of past plans have predicted that travel congestion will increase significantly
* Even with technological improvements and changes in trip demand (e.g., increased telework, home delivery, etc.), increases in travel congestion are predicted

Photo of a section of highway with a section of DC in the background, including the National Monument

Slide 16: What Are Federal Requirements to Fund Visualize 2045?

* 20+ year horizon
* For purposes of transportation system operations and maintenance: system-level estimates of costs and revenue sources
* Estimates of funds that will be available to support metropolitan transportation plan implementation
* All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.

Photo of a bus on a multi-lane, two-way roadway

Photo of traffic on a freeway next to a Metrorail car on a track

Slide 17: Financial Plan

* Federal regulations require a financial plan that demonstrates how the adopted long-range transportation plan can be implemented
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Slide 18: Financial Plan Methodology

For the near-term years, agencies used revenue and expenditure budgets from the approved TIP and Capital Improvement Programs (CIPs)

For long-term years:

* Revenues are estimated from extrapolation of past trends as well as assumptions about future increases (beyond current legislation and appropriations)
* Expenditures are developed from project costs in the Project InfoTrack project database as well as extrapolated costs for maintenance and operations

Estimated inflation rates are applied to convert estimates of revenues and expenditures to year of expenditure (YOE) dollars

Slide 19: Financial Plan Key Assumptions (States)

District of Columbia

* Used 2021 budget and 2021-2026 Capital Improvement Plan
* Revenue growth rate of 2.4% after 2027
* Most revenue come from general tax revenues

Suburban Maryland

* State growth rate of 5.3%, federal growth rate of 3.0%
* Private funding to build toll roads

Northern Virginia

* State growth rate of 2.2%, federal growth rate of 1.7%
* Several sources of regional and local funds

Slide 20: Financial Plan Key Assumptions (WMATA)

WMATA inputs

* Operating revenues and costs based on extrapolation of pre-pandemic trends
* Capital costs based on FY 2021 Budget and FY2021 – FY2026 Capital Improvement Program (CIP)

Assumption that PRIIA funding ($150M/year federal, matched by DC-MD-VA) would be extended through 2045

* Extended through 2030 in recent BIL/IIJA federal surface transportation act

Slide 21: Regional Revenues: Visualize 2045 (2023-2045; Billions, in Year of Expenditure)

Pie Graph

* Fares/Tolls – 13.6%, 30.5 billion
* Federal – 14.3%, 31.9 billion
* Private/Other- 3.4%, 7.6 billion
* Local - 13.3%, 29.8 billion
* State – 55.3%, 123.5 billion

Total = $223.3 billion

Slide 22: Regional Revenues Breakdown: Visualize 2045 (2023-2045; Billions, in Year of Expenditure)

Bar chart showing expenditures by type and region

DC

* $30 billion state/DC
* $6 billion Federal
* $.3 billion fares/tolls

Suburban Maryland

* $56 billion state/DC
* $8 billion local
* $9 billion Federal
* $6 billion private/Other
* $4 billion fares/tolls

Northern Virginia

* $38 billion state/DC
* $22 billion local
* $4 billion Federal
* $2 billion private/Other
* $5 billion fares/tolls

WMATA

* $53 billion state/DC
* $14 billion local
* $12 billion Federal
* $22 billion fares/tolls

Slide 23: Regional Expenditures: Visualize 2045 (2023-2045; Billions, in Year of Expenditure)

SGR = State of Good Repair

* Transit Expansion – 6%, $13.8 billion
* Transit SGR - 19%, $42.8 billion
* Transit Operations - 42%, $93.3 billion
* Bike & Ped - .4%, $.8 billion
* Highway Expansion - 13%, $28.2 billion
* Highway SGR - 8%, $18.9 billion
* Highway Operations - 11%, $25.6 billion

Total - $223.3 billion

Slide 24: Financial Plan Summary

The Financial Analysis demonstrates that the forecast revenues are reasonably expected to be available to implement Visualize 2045

* Demonstrates the region’s commitment to maintaining a State of Good Repair for highways and public transportation systems
* Provides for operations and maintenance of the existing transportation system
* Provides for capacity expansion to address forecasted growth in the region’s population and economy

The Financial Plan is Appendix A of the Visualize 2045 plan

Slide 25:

3. Air Quality Conformity

The 2022 Update to Visualize meets the federal Air Quality Conformity requirements—mobile source VOC and NOx emissions associated with the plan/TIP are below EPA approved motor vehicle emissions budgets.

Slide 26: Air Quality Conformity

2022 Update to Visualize 2045 Air Quality Conformity Mobile Source Emissions and Mobile Emissions Budgets Ozone Season VOC

2014 Maintenance Budget – 61.3 tons/day

Line graph showing Mobile Emissions for VOC by tons/day from 2021 to 2045:

* 2021 – 42.3
* 2023 – 37.7
* 2025 - 34.2
	+ 2025 Tier 1 budget – 39.8 tons/day
	+ 2025 Tier 2 budget – 33.2 tons/day
* 2030 – 25.6
	+ 2030 Tier 1 budget – 28.9 tons/day
	+ 2030 Tier 2 budget – 24.1 tons/day
* 2040 – 19.6
* 2045 – 19.1

NOTE: The Mobile Emissions Budgets shown were developed as part of the 2008 Ozone Standard Maintenance Plan. EPA found the budgets adequate for use in conformity with an effective date of 8/21/2018.

Slide 27: Air Quality Conformity

2022 Update to Visualize 2045 Air Quality Conformity Mobile Source Emissions and Mobile Emissions Budgets Ozone Season NOx

2014 Maintenance Budget – 136.8 tons/day

Line graph showing Mobile Emissions for NOx by tons/day from 2021 to 2045:

* 2021 – 66.8
* 2023 – 54
* 2025 – 42.6
	+ 2025 Tier 1 budget – 40.7 tons/day
	+ 2025 Tier 2 budget – 48.8 tons/day
* 2030 – 27.5
	+ 2030 Tier 1 budget – 27.4 tons/day
	+ 2030 Tier 2 budget – 32.9 tons/day
* 2040 – 19.1
* 2045 – 19.1

Slide 28: Air Quality Conformity

Table comparing Mobile Budget to the Visualize 2045 Plan by categories:

* Cooperative Forecasts
	+ Mobile Budget – Round 9.0
	+ Visualize 2045 – Round 9.2
* Vehicle Fleet
	+ Mobile Budget – 2014 VIN
	+ Visualize 2045 – 2020 VIN
* Travel Demand Model
	+ Mobile Budget – version 2.3.66
	+ Visualize 2045 – version 2.4
* Project Inputs
	+ Mobile Budget – 2016 CLRP
	+ Visualize 2045 – 2022 Update to Visualize2045
* Metrorail Constraint
	+ Mobile Budget – yes
	+ Visualize 2045 – no

Slide 29:

4. Performance Analysis - Regional Transportation System

Slide 30: Key Takeaways

* Expected growth will likely increase demand, increasing delay and congestion and reducing job access for some parts of the region.
* Financial obligations to maintain and operate the existing system limits expansions and enhancements.
* Future uncertainties will impact the region between now and 2045.
* Access to transit will continue to grow, providing an important alternative.
* The region is forecast to make progress towards its goals -- despite demand from growth, and limited funds for transportation enhancements.
* More people, businesses and visitors will have more travel options which is reflected in forecast mode share.

Slide 31: Regional Growth and Policy Context

Slide 32: The Region Will Continue to Grow

Bar graph showing job growth and population growth

* About 80% of 2045 land-use is already in place.
* With more people and jobs, the transportation systems will need to continue handling its current and forecasted demand. Activity Centers will contain 67% of jobs (up from 66%) and 35% of the population (up from 29%)

Slide 33: The Region Will Increase in Density

Bar graphs comparing People Per Square Mile in 2010, 2020, and 2045

Region

* 9,229 in 2010
* 10,769 in 2020
* 14,246 in 2045

Activity Centers

* 12,138 in 2010
* 14,642 in 2020
* 26,637 in 2045

Non Activity Center

* 6,194 in 2010
* 6,750 in 2020
* 7,646 in 2045

High-capacity Transit areas

* 16,099 in 2010
* 21,001 in 2020
* 38,292 in 2045

 Non High-capacity Transit areas

* 7,407 in 2010
* 8,050 in 2020
* 9,913 in 2045

Evidence suggests the region is making progress towards goal to concentrate land-use in the right areas, like Activity Centers and High-Capacity Transit areas

Slide 34: Funding for Expansion is Limited

Bar graph showing percentage of Maintenance and Operation compared to System Expansion/Enhancement both existing and added by Visualize 2045

Of the $223.3 Billion Year of Expenditure dollars in Visualize 2045, only 19% is available for
the type of system expansion and enhancement projects that advance our shared goals. Resulting in an additional 5% of roadways and 27% of High-Capacity Transit.

Slide 35: Why the TPB Measures Performance

The TPB measures performance as one way of tracking progress on the goals and priorities presented in the TPB Policy Framework

The Evolution of TPB Policy Framework showing screenshots of publication covers from 1998, 2010, 2014, 2018

Planning Policy Focus Areas

Slide 36: Planning Policy Focus Area Universe

* Equity
* Affordability
* Environmental/ Sustainability/Climate Change
* Air Quality Conformity
* Connectivity
* Comprehensive Multimodal System
* Operations Efficiency
* Accessibility
* Mobility
* Reliability
* Emerging Mobility and Tech
* Land Use
* Public Health
* State of Good Repair
* Safety
* Economy

Slide 37: LRTP System Performance Measures

* EJ Analysis and other EEA Insights
* GHG
* NOx, VOC
* VMT Per Capita
* Mode Share and Geographic Variance
* Trips on “Reliability-Enhanced” Modes
* Number of People Living Near HCT
* Multimodal Accessibility
* Daily Hours of Vehicle Delay
* Average Delay Per Trip
* Congested Lane Miles
* Population Density, Location of Growth
* Traffic Proximity
* Job Access by Driving
* Transit Ridership
* Job Access by Transit

Slide 38: The TPB Uses Performance Measures (PMs) for Many Planning Activities

* Regional Air Quality Conformity Analysis
(2 PMs)
* Environmental Justice Analysis
(10 PMs)
* Performance-Based Planning and Programming
(26 PMs)
* Long-Range Plan Task Force
(18 PMs)
* LRTP Performance Analysis
(>20 PMs)
* And…more

Slide 39: Travel Demand Model Forecasts the Impact of Changes to Land-use and Transportation

Pictograph showing :

Today – 2045 Pop/Emp Forecasts and Today – 2045 Constrained Element Transportation Projects lead to the Travel Demand Model which leads to Today – 2045 Emissions and Performance Data

* Round 9.2 Cooperative Forecasts
* Gen2/Version 2.4 Travel Demand Model
* Analysis of TPB Planning Area
* 2020 Vehicle Registration Data
* EPA’s MOVES 2014b Mobile Emissions Model
* Other source noted on corresponding slide

Slide 40: Travel Demand Modal

* Validated and reflective of pre-COVID conditions
* Transit
	+ The base transit reflects December 2019 schedules with transit service projects built upon it
	+ Transit fares are current to June 2021
* Highway tolls in the travel model are current to January 2021
* Vehicle fleet data are current to December 2020

Slide 41: Three Scenarios

Scenarios enable us to isolate for the impact of the new set of transportation projects, programs, and policies.

1. Today 2023 – Today’s households and jobs, transportation projects on the ground in 2023
2. 2045 No Build – Forecast growth for 2045 households and jobs, no new transportation projects beyond 2030
3. 2045 Planned Build - Forecast growth for 2045 households and jobs, all transportation projects build by 2045

Slide 42: Planning Uncertainties that Will Likely Impact the Future of Travel

* Where will the people and jobs be?
* How will people travel?
* What funding will we have to invest in, maintain and operate the system?

Funnel chart on its side, showing today (the new normal) on one end and to 2045 at the other with impacts of Climate Change, Global Economy, Increased Urbanization, New Technologies in between

Slide 43: Performance Overview Percent Change 2023-2045

Bar graph showing percentage change in the following categories:

* Single driver trips – 10%
* Transit trips – 28%
* Bicycle and Walk Trips – 39%
* Vehicle Miles Traveled (VMT) – 15%
* VMT Per Capita – -3%
* Congested Lane Miles (AM peak) – 45%
* Daily Vehicle Hours of Delay – 48%

Slide 44: How is travel expected to change in the region over time?

Slide 45: Region Continues to be Auto Dependent

Line graph showing trips from today (2023) to 2045 by mode:

Single Occupancy Vehicle (SOV)

* Today – 7,403
* 2045 Build – 8,172
* 38% of mode share

High Occupancy Vehicle (HOV) and Carpool

* Today – 7,258
* 2045 Build – 8,470
* 40% of mode share

Transit

* Today – 1,241
* 2045 Build – 1,591
* 7% of mode share

Walk and Bike

* Today – 2,285
* 2045 Build – 3,172
* 15% of mode share

Looking at All Trips, HOV and carpool expected to be more common than driving alone.
Percent increase in Walk and Bicycle is greater than any other Mode.

Slide 46: Geographic Differences, All Trips (2045)

Bar graph showing the modes above by number of trips and percentage of mode by location:

Regional Core - District of Columbia, Arlington Co., City of Alexandria

* Walk and Bike – 1,368 trips or 33%
* Transit – 749 trips or 18%
* HOV and Carpool– 972 trips or 24%
* SOV– 1,023 trips or 25%

Inner Suburbs - Montgomery Co., Prince George’s Co., Fairfax Co., City of Fairfax, City of Falls Church

* Walk and Bike – 1,368 trips or 12%
* Transit – 763 trips or 7%
* HOV and Carpool– 4,922 trips or 42%
* SOV– 4,558 trips or 39%

Outer Suburbs - Charles Co., Frederick Co., City of Frederick, Prince William Co., Loudoun Co., City of Manassas, City of Manassas Park, Fauquier Co. (Urbanized Area

* Walk and Bike – 435 trips or 8%
* Transit – 79 trips or 1%
* HOV and Carpool– 2,576 trips or 45%
* SOV– 2,592 trips or 46%

HOV and carpool will be as common as driving alone. Where Transit is available, Transit and Walk and Bike trips are more common

Slide 47: Avoiding Congestion and Delay: More Travel on Reliable Modes

Bar graph showing Percent of Daily Person Miles Traveled on “Reliability-Enhanced Modes”

* Today 11.1%
* 2045 Build 15.4%

Reliable modes:

* Express toll lanes with dynamic toll rates
* HOV lanes
* Inter-County Connector
* Dulles Airport Access Road
* Metrorail, Commuter Rail, Light Rail, Streetcar
* Bus Rapid Transit
* Long-haul express buses
* Bike/Ped travel

A greater percent of travel in the region will be taken on reliable highway, transit, and walk/bike facilities/modes that are less impacted by congestion and delay.

Slide 48: Driving in the Region to Decline Per Capita

Bar graph showing Total Roadway VMT:

* Percent Change in Population – 18.9%
* Percent Change in VMT – 15.4%
* Percent Change in VMT Per Capita = -2.9%

Bar graph showing Resident VMT:

* Percent Change in Population – 18.9%
* Percent Change in VMT – 12.3%
* Percent Change in VMT Per Capita = -5.6%

VMT per capita of region residents declines by more than 5%. Residential vehicle use has the most potential for change compared to other uses, such as commercial.

Slide 49: How does the plan support traveling to work?

Slide 50: Most of Work Trips will be Driving Alone, ¼ of Work Trips on Transit

Line graph showing work trips by mode for today vs. 2045 Build

SOV

* Today – 2,137
* 2045 Build – 2,419

HOV and Carpool

* Today – 409
* 2045 Build – 511

Transit

* Today – 842
* 2045 Build – 1,093

Walk and Bike

* Today – 177
* 2045 Build – 269

Pie chart showing percentages of Mode Share for 2045 Build

* SOV – 56%
* HOV and Carpool – 12%
* Transit – 25%
* Walk and Bike – 6%

Slide 51: Taking Transit to Work Increases When Readily Available

Bar graph showing work trips by mode, using the same geographies as defined in Slide 46

Region’s Core

* SOV – 24%, 215
* HOV and Carpool - 6%, 57
* Transit – 53%, 481
* Walk and Bike – 18%, 162

Inner Suburbs

* SOV – 61%, 1,377
* HOV and Carpool - 11%, 251
* Transit – 24%, 543
* Walk and Bike – 4%, 88

Outer Suburbs

* SOV – 74%, 827
* HOV and Carpool - 18%, 206
* Transit – 6%, 70
* Walk and Bike – 2%, 19

By 2045, in the Region’s Core, majority of work trips will be on transit and nearly a quarter in the Inner Suburban jurisdictions.

Slide 52: How are new transit projects forecast to impact the region?

Slide 53: By 2045, More than ¼ of People and ½ of Jobs will be Close to High-Capacity Transit

Bar graph showing Percentage of Population and Jobs in Proximity to High-Capacity Transit in 2023 and 2045

Proximity: 0.5-mile radius from High-Capacity Transit

High-Capacity Transit:

* Metrorail
* Commuter Rail
* Streetcar
* Light Rail
* Bus Rapid Transit

Population

* 2023 – 18%
* 2045 – 27%

Jobs

* 2023 - 41%
* 2045 – 49%

Slide 54: Core and Inner Suburbs: a Large Share of Jobs and People Close to HCT

Bar graph showing Percentage of Population in Proximity to High-Capacity transit, using the same geographies as defined in slide 46 for 2023 and 2045

Regional Core

* 2023 – 49%
* 2045 - 57%

Inner Suburbs

* 2023 – 14%
* 2045 – 26%

Outer Suburbs

* 2023 – 3.0%
* 2045 – 3.5%

Bar graph showing Percentage of Employment in Proximity to High-Capacity transit, using the same geographies as defined in slide 46 for 2023 and 2045

Regional Core

* 2023 – 77%
* 2045 - 81%

Inner Suburbs

* 2023 – 26%
* 2045 – 41%

Outer Suburbs

* 2023 – 10.1%
* 2045 – 11.4%

Slide 55: Change in Access to Jobs, Transit

Bar graph showing change in number of jobs accessible within 45 minutes at AM Peak from home to work for Today and 2045, Build vs. No-Build

Build

* Today - 414
* 2045 - 553
* An increase of 33.6%

No-Build

* Today - 414
* 2045 - 474
* An increase of 14.5%

Map showing change in number of jobs accessible within 45 minutes at AM Peak from home to work by gain or loss. Please see a staff member for a more precise description of this map.

Slide 56: Change in Access to Jobs, Transit Geographic Difference

Bar graph showing the change in access to jobs by transit, using the same geographies as defined in slide 46 for today, 2045 No Build and 2045 Build

Regional Core

* Today – 880
* 2045 No Build – 1,033
* 2045 Build – 1,113

Inner Suburbs

* Today – 414
* 2045 No Build – 446
* 2045 Build – 543

Outer Suburbs

* Today – 26
* 2045 No Build – 29
* 2045 Build – 36

Across the region, access to jobs by transit during the AM Peak commute increases, particularly in the Core and Inner Suburbs.

Slide 57: How will the highway network serve the region?

Slide 58: Delay and Congestion Continue Impacting the Region

Bar graph showing Total Daily Vehicle Hours of Delay for today and 2045, No Build vs. Build

No Build

* Today - 897
* 2045 – 1,614
* An increase of 79.9%

Build

* Today - 897
* 2045 – 1,327
* An increase of 47.9%

Bar graph showing Average Minutes of Delay per Trip for today and 2045, No Build vs. Build

No Build

* Today - 3.96%
* 2045 – 6.25%
* An increase of 57.8%

Build

* Today - 3.96%
* 2045 – 5.17%
* An increase of 30.6%

New roadway projects will make a difference, but delay and congestion will continue to be a part of life in this region.

Slide 59: Congested Lane Miles, AM Peak

Bar graph showing Today, 2045 No Build, 2045 build, Congested vs. Non-congested in thousands of lane miles

Congested

* Today – 10%
* 2045 No Build – 16%
* 2045 – 13%

New roadway projects will make a difference, but delay and congestion will continue to be a part of life in this region.

Slide 60: Change in Access to Jobs, Auto

Graph showing number of jobs accessible within 45 minutes, Today and 2045, Build vs. No Build

Build

* Today 1,146
* 2045 – 1,156
* An increase of 1.2%

No Build

* Today 1,159
* 2045 1,035
* A decrease of 9.7%

AM Peak – 45 minutes from home to work

Map showing Change of Jobs Accessible within 45 Minutes by location and amount of loss. Please see a staff member for a more precise description of this map.

Slide 61: Change in Access to Jobs, Auto Geographic Difference

Bar graph showing the change in access to jobs by auto, using same the geographies as defined in slide 46

Regional Core

* Today – 2,120
* 2045 No Build – 2,052
* 2045 – 2,176

Inner Suburbs

* Today – 1,156
* 2045 No Build – 990
* 2045 – 1,131

Outer Suburbs

* Today – 278
* 2045 No Build – 222
* 2045 – 288

Across the region, the projects in Visualize 2045 help maintain access to jobs by auto.
If no projects are built, access declines due to impacts of congestion and delay.

Slide 62: Forecast Greenhouse Gases

Line graph showing Greenhouse Gas Mobile Source Emissions CO2e and CO2e Per Capita from 2005 – 2045 in per capita metric tons per year

Total CO2e Emissions

* 2005 – 20.9
* 2012 – 22.1
* 2021 – 20.0
* 2023 – 19.4
* 2025 – 18.8
* 2030 – 17.4
* 2040 – 16.9
* 2045 – 17.2

Total CO2e Emissions Per Capita

* 2005 – 4.4
* 2012 – 4.2
* 2021 – 3.5
* 2023 – 3.3
* 2025 – 3.1
* 2030 – 2.8
* 2040 – 2.5
* 2045 – 2.5

Note: 2005 and 2012 are historical estimates

Slide 63: Proximity to Traffic, Today

Bar graph showing Average Traffic Proximity and Volume – count of vehicles per day at major roads within 500 meters divided by distance

* Equity Emphasis Areas – 1,821
* Non-Equity Emphasis Areas – 1,169
* Activity Centers – 2,355
* Non-Activity Centers – 947

Note: Sub-areas listed may overlap and are not mutually exclusive.

Map of Traffic Proximity and Volume from EPA EJ Screen Count

Slide 64: Proximity to Traffic, Today

* Proximity to congested roadways and high levels of vehicle volume in the National Capital Region are not felt equally.
* Communities closer to the region’s core, interstates, or major highways experience greater exposure than in outer suburban or rural parts.
* In Activity Centers, proximity and level of traffic is 150 percent higher than in non-Activity Centers. This is likely reflective of high traffic counts on highways and major roads near Activity Centers.

From an equity perspective, EEAs in the region experience 57 percent greater traffic volume than non-EEAs. The proximity of many EEAs near the region’s core and along major roadways leads to the uneven experience

Slide 65:

1. Getting the Word Out

Materials to View and Share:

* visualize2045.org
* The Voices of the Region Story Map

<https://www.mwcog.org/maps/map-listing/voices-of-the-region/>

* The Visualize 2045 Interactive Project Map

<https://www.mwcog.org/maps/map-listing/visualize-2045-project-map/>

* Ambassador Kit includes:
	+ talking points
	+ sample email/web posts
	+ sample social media posts

Fact Sheet: Board members have also received a fact sheet with key information about the plan

Slide 66: Background picture of DC skyline during sunset, with Capital building, Washington monument, etc.

The Washington region’s transportation system has come a long way in 20 years,

now we look ahead. We visualize our future by planning how we get there, together.

Slide 67:

Visualize2045.org

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