Slide 1: Draft Technical Inputs for The Air Quality Conformity Analysis, Visualize 2050 & FY 2026-2029 TIP

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TPB’s Access for All Advisory Committee

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Slide 2: Overview

* Background
* Current Transportation System
* Focus on Air Quality
* Comment Period Materials
* Financial Considerations
* Implementing TPB Priority Strategies
* Project Alignment with TPB Goals
* Comparison with the Visualize 2045 Plan
* Acknowledgements
* Next Steps

Slide 3: Background

* Via Resolution R19-2021, the TPB directed its staff to initiate an update of the Visualize 2045 plan and said that the updated plan “will be based on the concept of ‘zero-based budgeting’ where all projects, including those currently included in the Plan, must be resubmitted for consideration in such Plan.”
* June 2022: Visualize 2045 plan approved
* February 2023: TPB approved the Technical Inputs Solicitation
* March 2023: Listening sessions
* Feb. - Dec. 2023: Re-examination of projects by sponsor agencies, public comment opportunity, project inputs Q&A sessions & submittals
* Jan. - Feb. 2024: Project inputs preparation for March 2024 comment period

Slide 4: Project Inputs Schedule

* Projects in Visualize 2050 Financial Plan
  + Regionally Significant for Air Quality
    - Currently Programmed through Fiscal Year 2029
      * Highway or Transit Projects Project Details & Total Cost Estimate due 12/29/23
      * Financial Details due 1/26/25
    - For Future Programming in Fiscal Year 2030 through 2050
      * Highway or Transit Projects Project Details & Total Cost Estimate due 12/29/23
      * Financial Details due 12/29/23
  + Not Regionally Significant for Air Quality
    - Currently Programmed through Fiscal Year 2029
      * Highway, Transit, Bike, Pedestrian, etc. Projects, Phases, or Project Grouping Categories Project Details & Total Cost Estimate due 6/28/24
      * Financial Details due 1/26/25
    - For Future Programming in Fiscal Year 2030 through 2050
      * Highway, Transit, Bike, Pedestrian, etc. Projects, Phases, or Project Grouping Categories Project Details & Total Cost Estimate due 6/28/24
      * Financial Details due 6/28/24

Slide 5: Where we are in the Plan Development Process

* Graphical image representing the timeline of activities. Illustrates that we hare a little less than half way through the development process beginning the first public comment period. Second public comment period to begin in April 2025

Slide 6: Current Transportation System

* Roadways & Tolled Lanes
  + Freeways/Expressways
  + Arterials
* Non-Motorized Facilities
* High-Capacity Transit
* Metrorail
  + Light Rail/Streetcar
  + Bus Rapid Transit
  + Commuter/Regional Rail

Slide 7: Making Our Region Better

* Many multimodal transportation options
* Travelling has its challenges
* Always try to make it better
* Serve residents, employees, visitors 25 years from now

Slide 8: Transportation & Air Quality

* Forecast changes in population, employment and land use affect travel demand and patterns
* Roadway/transit capacity changes impacts travel behavior and vehicle use
* Fossil fueled motor vehicle emissions impact air quality
* TPB measures attainment of future air quality goals via air quality conformity analysis
* Robust modelling effort to conduct the analysis
* Determine if Visualize 2050 & FY 2026-2029 TIP are consistent with EPA approved mobile source emissions budgets, contribute to annual emissions reductions

Slide 9: Comment Period Outreach Methods

* Ambassadors – Sample web, news, social content, and graphics
* Email announcements (TPB News subscription list, committee mailings)
* News ads – The Washington Post, AFRO News, Washington Hispanic
* News release – shared through COG/TPB e-news and website
* Social media (Twitter, Facebook, LinkedIn)
* Web - Visualize2050.org and mwcog.org\tpbcomment
* PDF flyer with comment period description, call to action, key dates, contact info
* Comment by Visualize 2050 MetroQuest form
* Other ways to comment: email, phone, letter, March TPB meeting

Slide 10: Comment Period Materials

* Visualize 2050 Website
  + Air Quality Conformity Project Input Table
  + Air Quality Conformity Scope of Work
  + Metroquest Comment Form (English and Spanish)
    - Other Methods to Provide Input (email, phone, writing, in-person at TPB meeting)
  + Project Summary Table
    - Detailed Project Information Packets
  + State Responses to Last Comment Period
* COG Website

Slide 11: Air Quality Conformity Project Inputs Table

* 600+ segments of highway/transit regionally significant projects for coding in the travel demand model
* Used for air quality conformity analysis of Visualize 2050 & FY 2026-2029 TIP
* Highlighting indicates changes from the current Visualize 2045 plan
  + Blue – strikethrough, not continuing
  + Yellow – updates, new projects/segments
* To be approved by TPB in May 2024

Slide 12: Air Quality Conformity Scope of WOrk

* Visualize 2050 & FY 2026-2029 TIP air quality analysis must comply with Air Quality Conformity (AQC) regulations

Slide 13: AQC Scope of Work – Policy & Technical Approach

* Summary of Key Elements
  + Network Inputs
  + Land Activity
  + HOV/HOT

Slide 14: Air Quality Conformity Analysis Diagram

* Graphical diagram summarizing process for conducting air quality conformity analysis.
  + Inputs
    - Demographic data
    - Roadways
    - Transit System
    - Vehicle Fleet Information
    - Travel Statistics
  + Analysis question: Are the total ozone emissions from Visualize 2050 below EPA-approved levels
  + Analysis using Travel Demand Forecasting Model and Motor Vehicle Emissions Model
  + Test: Pass or Fail

Slide 15: Metroquest Comment Form

* Available at visualize2050.org
* Consists of five screens:
  + Introduction
  + Transportation & Air Quality
  + Two project screens
  + Wrap-Up

Slide 16: Regionally Significant for Air Quality Projects

* Many transportation projects in the region will be included in the final plan
* Smaller-scale roadway, bike, pedestrian, and transit projects; maintenance & operations projects not included
* Focus for this comment period is capacity-impacting projects – adding or removing vehicle capacity, representing ~20% of regional expenditures in the financial plan
* Only focusing on a piece of the pie for this comment period

Slide 17: Regionally Significant for Air Quality Project Types

* Two charts representing the various types of regionally significant project. Includes infrastructure, programs, services, studies, administrative, and other for Roadway, Bike and Pedestrian, and Transit

Slide 18: Multimodal Access and Capacity Reduction Projects

* Roadway Extension
* Transit
* HOV/HOT/Express Lanes
* Capacity Reduction

Slide 19: General Purpose Roadway Projects

* Roadway Widening/Grade Separation
* Intersection/Interchange/Ramp Improvement
* New/Widened Bridge
* Relocation/Reconstruction

Slide 20: Project Summary Table

* Supplementary material to better understand the projects
* Project information packets with data received from agencies linked by project name

Slide 21: Financial Considerations

* Some projects have programmed funding
* Other projects are reasonably anticipated to receive necessary funding
* All projects have been screened and are presented in this comment period because funding expectations are reasonable for inclusion in Visualize 2050
* Regionally significant projects without reasonably anticipated funding
* will not be included in the conformity analysis,
  + will not be included in the financial plan,
  + will not be included in the Visualize 2050 plan for construction or implementation,
  + may be listed as a “study” and “not coded” in the conformity table
* Non-regionally significant projects (e.g., trails, intersections), state of good repair projects, and operations costs will be part of the overall financial plan required as part of the Visualize 2050 plan

Slide 22: Implementation of TPB Priority Strategies

* Apply best practices to maintain the transportation system
* Apply the endorsed safety strategies
* Increase frequency & capacity of transit by expanding BRT/Transitways
* Reduce travel times on all public transportation bus services
* Move more people on Metrorail and commuter rail
* Bring jobs/housing closer by focusing growth & adding housing in ACs & HCTs
* Provide more telecommuting and other options for commuting
* Expand express lanes, with rapid transit, & allow carpool/vanpool ride free
* Improve walk/bike access to transit, especially within HCTs
* Complete the National Capital Trail Network
* Implement Transportation Systems Management & Operations measures
* Apply effective technologies that advance the TPB’s goals
* Convert vehicles to clean fuels
* Develop and implement an electric vehicle charging network

Slide 23: TPB Priority Strategy: Expand Express Lanes

* Express Toll Lanes exist already on I-95, I-495, I-66
* Additional Express Toll Lanes proposed
  + MD I-495/ I-270 Y/I-270: ALB - I-370
  + VA I-495 S. of Old Dominion Dr. - ALB
  + VA I-95/495 Springfield Int. - MD 210
  + VA I-95 Turkeycock Run to Opitz Blvd.
  + VA I-495 & I-95 Truck Access
  + VA I-495 Toll Lane Ramps – Dulles Connector Rd. and Dulles Toll Rd.

Slide 24: TPB Priority Strategy: Expand BRT/Transitways

* 37 current miles of BRT and streetcars
* Existing Bus Rapid Transit/Transitways:
  + Metroway on US 1 in Arlington/Alexandria
  + Flash on US 29 in Montgomery County
* Additional proposed BRT/Transitways:
  + MD - MD 355, North Bethesda Transitway, Randolph Road, Viers Mill Road
  + DC - Georgia Ave. and Southern Ave. Bus Lanes
  + VA - Crystal City Transitway Expansion, Duke Street, Landmark Transit Center, US 1 - Richmond Hwy BRT, West End Transitway, Potomac Ave. Bus Lane
* Plus, proposed rail projects:
  + MD - Purple Line
  + DC - Benning Road Streetcar Ext.

Slide 25: Federal Planning Factors Alignment w/TPB Goals

* Federal Planning Factors
  + Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
    - TPB Goals: Livable and Prosperous Communities
  + Increase the safety of the transportation system for motorized and nonmotorized users
    - TPB Goals: Safety
  + Increase the security of the transportation system for motorized and nonmotorized users
    - TPB Goals: Safety
  + Increase the accessibility and mobility of people and for freight
    - TPB Goals: Affordable and Convenient Reliability
  + Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth, housing, and economic development patterns
    - TPB Goals: Environmental Protection
  + Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
    - TPB Goals: Affordable and Convenient Reliability
  + Promote efficient system management and operation
    - TPB Goals: Efficient System Operations
  + Emphasize the preservation of the existing transportation system
    - TPB Goals: Maintenance
  + Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation
    - TPB Goals: Resilient Region
  + Enhance travel and tourism
    - TPB Goals: Livable and Prosperous Communities

Slide 26: Projects Alignment with TPB Goals

* More than 75% of projects support TPB’s reliability, affordability & convenience goals
* Transit projects often noted support for TPB’s livable & prosperous communities goal
* Road projects – improving safety nearly always noted
* See the Project Summary Table for individual project alignment with TPB goals as indicated by TPB member agencies for projects to be completed in 2026 or later

Slide 27: Additional Information on Visualize 2050 Projects

* Agencies have undertaken a thorough review of their local and TPB priorities
* States have responded to 2023 public comments via letters to the TPB
* Some Visualize 2045 projects are no longer priorities and have not been resubmitted for Visualize 2050
* Some new projects not in Visualize 2045
  + DC 17 new projects
  + MD 0 new projects
  + VA 19 new projects
* Implementing agencies report that most air quality conformity-impacting projects include bicycle/pedestrian accommodations

Slide 28: Visualize 2045 Projects Continuing

* Visualize 2045 Major Highway Projects 65 continuing
* Visualize 2045 Major HOT/HOV/Toll Lane Projects 10 continuing
* Visualize 2045 Major Transit Projects 22 continuing

Slide 29 through 31: Acknowledgements

* DC and MD
  + District Department of Transportation – Mark Rawlings, Samuel Brooks, Madeline Hairfield, Aaron Goldbeck, Megan Kanagy, Jennifer Klein
  + Maryland Department of Transportation – Kari Snyder
  + Maryland Transit Administration – Stephen Miller
  + State Highway Administration – David Rodgers, Darren Bean, David Schlie
  + Frederick County – Mark Mishler
  + Montgomery County – Gary Erenrich
  + Prince George’s County – Victor Weissberg, Erv Beckert, Noah Donoghue, Aisha Khan, James Hairston, Natalie Roach
* Virginia
  + Virginia Department of Transportation – Amir Shahpar, Regina Moore, Dale Castellow
  + Virginia Department of Rail & Public Transportation – Amy Garbarini
  + Potomac & Rappahannock Transportation Commission – Cynthia Porter-Johnson
  + Virginia Passenger Rail Authority – Naomi Klein, Christine Fix
  + Virginia Railway Express – Christine Hoeffner, Nick Ruiz
  + Arlington County – Dan Malouff
  + Fairfax County – Malcolm Watson, Brent Riddle, Calvin Lam, Christina Cain, Paul Doku, Ray Johnson, Smitha Chellappa
  + Loudoun County – Lou Mosurak, Rob Donaldson, Robert S Brown
  + Prince William County – Ben Carbajal, Meagan Landis
  + City of Alexandria – Philippe Simon, Jennifer Monaco, Silas Sullivan
  + City of Fairfax – Chloe Ritter
  + City of Falls Church – Kerri Oddenino
  + City of Manassas – Brian Leckie, Chloe Del Homme
  + City of Manassas Park – Steven Hall
  + Town of Leesburg – Christine Roe, Renee Lafollete

Slide 32: Next Steps

* March Spread the Word! Public Comment Period from March 1-30, 2024
  + visualize2050.org
  + Agencies also review the information and provide TPB staff any corrections
  + Upcoming TPB Work Session and Meeting
    - Thursday, March 21, 2024 – TPB Work Session at 10:30 a.m.
    - Thursday, March 21, 2024 – TPB Meeting at noon
* April Comment Period Results
* May TPB action on Air Quality Conformity Scope of Work and Project Inputs
* TPB staff begin performance and air quality analysis of Visualize 2050 and the FY 2026-2029 TIP

Slide 33: Close

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