VISUALIZE 2045: AIR QUALITY CONFORMITY ANALYSIS

Status Report

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Travel Forecasting Subcommittee March 23, 2018

Visualize 2045

Quadrennial Update of the Region's Long Range Transportation Plan

Components Include:

- Constrained Element
- Aspirational/Unconstrained Element
- Public Participation
- Financial Element



Visualize 2045



UNFUNDED CAPITAL NEEDS, ADDITIONAL ELEMENTS, ADDITONAL ANALYSIS







Pollutants

- Volatile Organic Compounds (VOC)
- Nitrogen Oxides (NOx)
- Greenhouse Gases (not officially for conformity)



Analysis Years

2019, 2020, 2025, 2030, 2040, 2045



NEW for Visualize 2045

- Round 9.1 Cooperative Forecasts
- Updated Transportation Projects
- New Travel Demand Model Version
- Updated Vehicle Registration Data (VIN)
- ❖ Out Year: 2045



Round 9.1 Cooperative Forecasts

COG/TPB Planning Area (thousands)

			2015 to 2045	
	2015	2045	Number	Percent
Employment	3,160.8	4,273.8	1,113.0	35%
Population	5,390.6	6,925.7	1,535.1	28%
Households	2,011.7	2,659.9	648.2	32%

Employment	Round 9.0 4,291.2	Round 9.1 4,273.8	Number -17.4	Percent -0.4%
Population	6,876.0	6,925.7	49.7	0.7%
Households	2,651.3	2,659.9	8.6	0.3%



Updated Transportation Projects: DC

DISTRICT OF COLUMBIA



Major Additions and Changes to Existing Projects

Major New Projects

- Bicycle Lanes, Districtwide
 - 17th St. NW from New Hampshire Ave. to K St.
 - · Irving St. NE/NW from Warder St. NW to Michigan Ave. NE
 - K St. NE/NW from 7th St. NW to Florida Ave. NE
 - New York Ave. NE from Florida Ave. to Bladensburg Rd.
 - Pennsylvania Ave. SE from 2nd St./Independence Ave. to Barney Circle

Changes to Existing Projects

- Remove three segments of the planned streetcar network:
 - Anacostia Initial Line from Defense Blvd./S. Capitol St. SE to Howard Rd. SE/Firth Sterling
 - Anacostia Extension from Howard Rd./Firth Sterling to Good Hope Rd. SE
 - M St. SE/SW from Good Hope Rd. SE to Maine Ave. SW





Updated Transportation Projects: VA

NORTHERN VIRGINIA



Major Additions and Changes to Existing Projects

Major New Projects

- I-95 Southbound Auxiliary Lane
- US 15 Widening

Changes to Existing Projects

- I-495 Capital Beltway HOT Lanes Northern Extension
 - Advance from 2030 to 2025
 - Construct two HOT lanes in each direction up to American Legion Bridge to coordinate with Maryland's Traffic Relief Plan
- Remove the planned extension of VRE to Gainesville-Haymarket

Non-Major New Projects

 28 new roadway, transit, and bicycle/pedestrian improvements





Updated Transportation Projects: WMATA

WMATA



Major Additions and Changes to Existing Projects

Major New Projects

- Implement 100% 8-car trains
- · Core station capacity improvements
- Supporting infrastructure and facilities



Updated Transportation Projects: MD

SUBURBAN MARYLAND



Major Additions and Changes to Existing Projects

Major New Projects

- I-270 Toll Lanes (Traffic Relief Plan)
- I-495 Toll Lanes (Traffic Relief Plan)
- US 301 Widening
- · MD 201 Widening
- MD 97 Reconstruction
- Randolph Road BRT
- North Bethesda Transitway BRT
- MD 355 BRT
- Veirs Mill Road BRT

Changes to Existing Projects

- Widen MD 29 from MD 97 to MD 182 (Reduce Project Scope)
 - Eastern limit changed from I-95 to MD 182 approx. 8.5 miles shorter
- Remove the planned widening of MD 27 from MD 355 to Snowden Farm Parkway



Agenda Items #8 and 9: Visualize 2045 Update January 17, 2018

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Travel Demand Modeling Methods and Other Inputs

- Version 2.3.?? Model
 - Includes elimination of HOV skim replacement process and other possible updates
- Updated External, Miscellaneous, and Airport Trip Forecasts
- Updated Consumer Price Index Information
 - Based on 2017 data
- Updated Transit Fares
 - WMATA Tariff #37 (effective June 25, 2017)
 - VRE, MARC, bus fares current to March 2018
- Updated Highway Tolls (on fixed-rate facilities)
 - Current to March 2018



Updated Vehicle Registration Data

Historical changes in average vehicle age

- Between 2008 and 2014, vehicle age increased across all vehicle types
- Between 2014 and 2016, vehicle age decreased for all vehicle types

Average Age of Regional Vehicle Fleet by Year

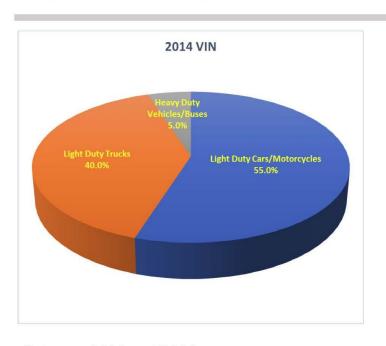
Year	Light Duty Cars* (LDC)	Light Duty Trucks (LDT)	Heavy Duty Vehicles (HDV)	All Vehicle Types
2008	8.51	7.53	9.21	8.18
2011	9.25	8.55	10.56	9.05
2014	9.62	9.09	11.30	9.49
2016	9.33	8.69	11.29	9.17

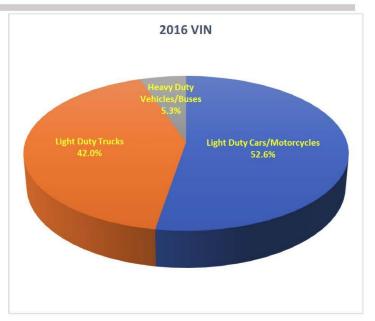
^{*}Motorcycles are included



Updated Vehicle Registration Data

Changes in regional vehicle composition: 2014 vs. 2016





Between 2014 and 2016:

- Share of light duty trucks (including SUVs) increased by 2%; share of heavy duty vehicles increased by 0.3%
- Share of light duty cars decreased by 2.4%



SCHEDULE FOR DEVELOPMENT & ADOPTION OF VISUALIZE 2045

	September 20*	TPB is briefed on the draft Solicitation of Technical Inputs document.
2017		
	October 18*	TPB releases final Solicitation Document. Transportation agencies begin submitting project information through online database.
	November 17	DEADLINE: Transportation agencies complete online submission of draft inputs.
	December 1	Technical Committee reviews draft Visualize 2045 inputs and draft Scope of Work for the Air Quality Conformity Analysis.
	December 14	Visualize 2045 inputs and draft Scope of Work released for 30-day comment period .
	December 20*	TPB is briefed on inputs and draft Scope of Work.
	January (TBD)	TPB staff briefs Metropolitan Washington Air Quality Committee Technical Advisory Committee (MWAQC TAC) on inputs and Scope of Work.
	January 13	Comment period ends.
	January 17*	TPB reviews comments and is asked to approve inputs and draft Scope of Work.
	March 2	DEADLINE: Transportation agencies finalize forms (including Congestion Management Documentation forms where needed) and inputs to the FY 2019-2024 TIP. Submissions must not impact conformity inputs. Note that the deadline for changes affecting conformity inputs was December 14, 2017.
2018	May 10	Public Forum on the development of the FY 2019-2024TIP.
20	September 7	Technical Committee reviews draft Visualize 2045 and Conformity Analysis.
	September 13	Draft Visualize 2045 Plan, TIP, and Conformity Analysis are released for 30-day comment period at Citizens Advisory Committee (CAC) meeting.
	September 19*	TPB is briefed on the draft Visualize 2045 Plan, TIP, and Conformity Analysis.
	October (TBD)	TPB staff briefs MWAQC TAC on the draft Visualize 2045 Plan, TIP, and Conformity Analysis.
	October 13	Comment period ends.
	October 17*	TPB reviews comments and responses to comments, and is presentedwith the draft Visualize 2045 Plan, TIP, and Conformity Analysis for approval.

^{*} Regularly scheduled TPB meeting.



Key Dates

- Inputs Approved by TPB: January 2018
- Technical Analysis: Spring and Summer 2018
- TPB / Tech. Committee Briefings and Beginning of Public Comment Period: September 2018
- Proposed for TPB Approval: October 2018
- Model Transmittal Package Available: December 2018



QUESTIONS?



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