ITEM 9-Information

June 19, 2019

Briefing on Inputs to the FY 2021-2024 Transportation Improvement Program & 2020 Amendment to the Visualize 2045 Plan And Air Quality Conformity Analysis Scope of Work

Background:

The biennial update of the Transportation Improvement Program (TIP) and Amendment of the Regional Transportation Plan is underway. Every time the Plan or the TIP is updated, an air quality conformity analysis is required. The board will be briefed on the process, schedule, and requirements for an air quality conformity analysis of the FY 2021-2024 TIP and 2020 Amendment to the Visualize 2045 Plan. The board will be asked to approve the project updates and the scope of work for the air quality conformity analysis at the July meeting.



MEMORANDUM

TO: Transportation Planning Board

FROM: Jane Posey, Transportation Engineer

SUBJECT: Development of FY 2021-2024 TIP, 2020 Amendment to the Visualize 2045 Plan, and Air

Quality Conformity Analysis

DATE: June 13, 2019

The biennial development of the Transportation Improvement Program (TIP) and amendment of the Regional Transportation Plan is underway. Every time the Plan or the TIP is updated, an air quality conformity analysis is required. TPB staff released the Technical Inputs Solicitation Submission Guide and asked for inputs to the FY 2021-2024 TIP and 2020 Amendment to the Visualize 2045 Plan.

Attachment A lists all of the proposed inputs to the FY 2021-2024 TIP and changes to the Visualize 2045 Plan for inclusion in the air quality conformity analysis. The major changes are summarized below.

Attachment B documents the air quality conformity analysis Scope of Work, which presents an outline of the work tasks required to address all regulations currently applicable.

The TPB will be asked to approve the proposed project additions and changes as well as the Scope of Work for the air quality conformity analysis at the July meeting. The proposed schedule of work activities (Attachment B) calls for review of the results of the air quality conformity analysis by the board in February, 2020 and adoption of the FY 2021-2024 TIP and amended Visualize 2045 Plan in March, 2020.

PROJECTS IN THE DISTRICT OF COLUMBIA

The District Department of Transportation (DDOT) has proposed **to add the following projects** to the conformity analysis of the FY 2021-2024 TIP and Visualize 2045 amendment:

- 1. Two Peak Period Bus-Only Lane Pilot Projects implemented in 2019:
 - a. **H St. NW from 14th St. to 19th St.**, reduce capacity from 5 to 4 lanes (CON IDs 582, 822)
 - b. **I St. NW from 13th St. to Pennsylvania Ave.**, reduce capacity from 4 to 3 lanes (CON IDs 583, 823)
- 2. Eight bicycle lane projects that would reduce capacity for vehicular traffic (CON IDs 1003-1013):
 - a. 9 St. NW from Florida Ave. to Massachusetts Ave. (4 to 2 lanes); from Massachusetts Ave. to Constitution Ave. (6/4 lanes to 4/2 lanes), complete 2019
 - b. **Dalecarlia Pkwy. NW from Loughboro Rd. to Westmoreland Circ.** (4 to 2 lanes), complete 2020

- c. Florida Ave. NE from 2nd St. to West Virginia Ave. (6 to 4 lanes) and from West Virginia Ave. to 14th St. (3 to 2 lanes), complete 2019
- d. K St. NE from 1st St. to 8th St. (3 to 2 lanes), complete 2019
- e. M St. SE from Half St. to 11th St. (6 to 5 lanes), complete 2020
- f. Mount Olivet Rd. NE from Brentwood Pkwy. to West Virginia Ave. (4 to 3 lanes), complete 2020
- g. Nebraska Ave. NW from New Mexico Ave. to Loughboro Rd. (4 to 3 lanes), complete 2020
- h. Pennsylvania Ave. SE from 2nd St. to 17th St. (8 to 6 lanes), complete 2020
- 3. Construct two segments of the **K St. NW Transitway from 9**th **St. to 12**th **St.**, reducing capacity from 4 lanes to 2 lanes **and from 12**th **St. to 21**st **St.**, reducing capacity from 6 lanes to 4 lanes allowing bus-only service on the transitway by 2021.

PROJECTS IN THE COMMONWEALTH OF VIRGINIA

The Virginia Department of Transportation (VDOT) has proposed to add the following projects:

- 1. Modifications to the I-495 Capital Beltway Express Lanes ramps around the Dulles Toll Road interchange, complete in 2025 and 2045 (CON IDs 999-1002)
- 2. Construct a reversible ramp from I-95 at Opitz Dr., complete in 2022 (CON ID 1011)
- 3. Construct VA 28 Manassas Bypass from VA 234 Sudley Rd. to VA 28 Centreville Rd., 4 lanes, complete in 2025 (CON ID 995)
- 4. Widen **VA 55 from US 29 to the Town of Haymarket**, 2 to 4 lanes, complete in 2028 (CON ID 997)
- 5. Widen VA 123 from VA 267 Dulles Access Rd. to VA 634 Great Falls St., 4 to 6 lanes, complete in 2030 (CON ID 1015)
- 6. Widen VA 286 Fairfax County Parkway from US 29 Lee Hwy. to Rolling Rd., 4 to 6 lanes, complete in 2030 (CON ID 728)
- 7. Construct West End Transitway Phase II (Southern Segment) from Van Dorn Street Metro to Landmark Mall, complete in 2026 (CON ID 1034)

ATTACHMENT A

Additions & Changes for the FY2021-2024 TIP & 2020 Amendment to the Visualize 2045 Plan

						Projected
ConID	Scenario	Improvement	Facility	From	То	Complete
			D	DOT		
822		Study Implement	H St. NW Peak Period Bus-Only Lanes Pilot Project	17th St. NW 19th St NW	New York Ave. NW 14th St NW	Not Coded 2019
823		Study Implement	I St. NW Peak Period Bus Only Lanes Pilot Project	13th St. NW	Pennsylvania Ave. NW	Not Coded 2019
610	DCSTGTWN	Construct	Union Station/Georgetown Streetcar	K Street/34th Street NW	3rd Street/H Street NE	2025 2030
			MDO	OT/MTA		
481	CCTBRT	Construct	Corridor Cities BRT	Shady Grove	Comsat	2022 2028
			V	Control Point RO (Arlington) Rosslyn	L'Enfant (LE) Interlocking near	
1028		Construct	Franconia to Occoquan 3rd Track Project	(RO) Interlocking near Long Bridge Park in Arlington, Virginia	10th Street SW in the District of Columbia	2028
1029		Construct	Alexandria 4th Track Project	Control Point Rosslyn (CFP RO) near milepost 110.1 south of the George Washington Memorial Parkway	Control Point Alexandria (CFP AF) near milepost 104.3 south of Telegraph Road	2025
1030		Study	Long Bridge (also in DDOT inputs)	One mile north of the Franconia- Springfield VRE station (CFP 99.0)	Approximately 400 feet north of Furnace Road, just north of the	Not Coded
	SILVER 2	Construct	Park-and-Ride Garage	Herndon-Monroe Station		2020
1019	SILVER 2	Construct	Park-and-Ride Garage	Innovation Station		2020
504	VREFREQ	Expand Implement	Park-and-Ride Lot VRE Service Improvements (Reduce Headways) - associated with 3rd and 4th Track Projects	Stringfellow Road Park-and-Ride Fredericksburg and Manassas lines		2020 2028
		Construct	West End Trasnsitway Phase II (Southern Segment	Van Dorn Street Metro	Landmark Mall	2026
806		Expand Construct	I-66 Corridor Park and Ride lot garage	Fairfax County Government Center/Monument Drive		2021

NOTE: Shaded areas represent changes from Visualize 2045

							Fac	cility	La	nes	
Con ID	Project ID	Agency ID	Improvement	Facility	From	То	Fr	То	Fr	То	Completion Date
					DDOT						
605	DI9		Reconstruct	I 295 Interchange at Malcolm X Blvd.	Add above grade ramp connection from NB I-295 off ramp to new St. Elizabeth's Access Road						2018 2020
584	DS3		Construct-	Southern Ave. SE	Branch Ave. SE	Naylor Rd. SE			θ	2	2019 withdrawn
582			Study Reduce Capacity	H St. NW Peak Period Bus-Only Lanes Pilot Project	17th St. NW 19th St NW	New York Ave. NW- 14th St NW			5	4	Not Coded 2019
583			Study Reduce Capacity	I St. NW Peak Period Bus Only Lanes Pilot Project	13th St. NW	Pennsylvania Ave. NW			4	3	Not Coded 2019
558	DP16	ED0C2A	Reduce Capacity	C Street/N. Carolina Avenue	Oklahoma Avenue	14th Street NE			5	3	2019 2020
567	DP16		Reduce Capacity	East Capitol Street	40th Street	Southern Ave			6	4	2019 2021
608			Reconstruct	New Jersey Avenue NW 1-way to 2-way	H Street NW	N Street NW					2019 2020
717	DS13		Reduce Capacity	Florida Avenue NE	3rd Street	West Virginia Avenue			6	4	2015 2019
710			Reduce Capacity	Florida Avenue NE	2nd Street	3rd Street			6	5	2017 2019
707	NRS		Reduce Capacity	New Jersey Avenue NW	H Street	Louisiana Ave			4	2	2016 2020
713	DS14		Reduce Capacity	Pennsylvania Avenue NW	18th Street	20th Street			5	4	2017 2020
712	DS15		Reduce Capacity	Pennsylvania Avenue NW	17th Street	18th Street			6	4	2017 2021
715	DS16		Reduce Capacity	Pennsylvania Avenue NW	26th Street	28th Street			5	4	2017 2021
716	DS17		Reduce Capacity	Pennsylvania Avenue NW	28th Street	29th Street			4	2	2017 2021
714	DS18		Reduce Capacity	Pennsylvania Avenue NW	20th Street	26th Street			6	4	2017 2021
709	DS19		Reduce Capacity	Wheeler Road SE	Alabama Avenue	Southern Avenue			4	2	2016 2020
837	DS20		Reduce Capacity - bike lanes	4th Street NE	Lincoln Rd. NE	Harewood Rd. NE			4	2	2016 Complete
832	in base		Reduce Capacity - bike lanes	Blair Road NW	Peabody St. NW	Aspen St. NW			3	2	2019 2021
833	DP21		Reduce Capacity – bike lanes	Constitution Avenue	1st Street NW	Pennsylvania Avenue NW			6	4	2016
860	DS23		Reduce Capacity - bike lanes	Harewood Road NW	Rock Creek Church Road NW	North Capitol Street			2	1	2016 2020
834	DS24		Reduce Capacity - bike lanes	Klingle Road NW	Adams Mill Road NW	Porter Street NW			4	2	2016 Complete
836	DS25		Reduce Capacity - bike lanes	Piney Branch Road NW	Georgia Avenue NW	Underwood Street NE			4	2	2018 Complete

		Facility Lanes									
Con ID	Project ID	Agency ID	Improvement	Facility	From	То	Fr	То	Fr	То	Completion Date
944	DP32		Reduce Capacity - bike lanes	17th Street NW	New Hampshire Avenue	Massachussetts Avenue NW	3	3	2	1	2018 2020
945	DP33		Reduce Capacity - bike lanes	17th Street	Massachusetts Avenue NW	K Street	3	3	6	4	2018 Complete
946	DP34		Reduce Capacity - bike lanes	K Street NW	3rd Street NW 7th Street NW	1st Street NE			6	4	2018 2020
947	DP35		Reduce Capacity - bike lanes	Pennsylvania Ave	2nd Street SE	14th Street SE	2	2	6	4	2019 2020
948	DP36		Reduce Capacity - bike lanes	Pennsylvania Ave SE	14th Street SE	Barney Circle			8	6	2019 2020
949	DP37		Reduce Capacity - bike lanes	Irving Street NE/NW	Michigan Avenue NE	Warder Street NW			6	4	2019 2020
1013			Reduce Capacity - bike lanes	9th St NW	Massachusetts Ave	Florida Ave			4	2	2019
1012			Reduce Capacity - bike lanes	9th St NW	Constitution Ave	Massachusetts Ave			6/4	4/2	2019
1010			Reduce Capacity - bike lanes	Nebraska Ave NW	New Mexico Ave	Loughboro Road			4	3	2020
1009			Reduce Capacity - bike lanes	Pennsylvania Ave SE	2nd St	17th St			8	6	2020
1008			Reduce Capacity - bike lanes	Dalecarlia Pkwy NW	Loughboro Road	Westmoreland Circle			4	2	2020
1007			Reduce Capacity - bike lanes	K St NE	1st St	8th St			3	2	2019
1006			Reduce Capacity - bike lanes	Mount Olivet Rd NE	Brentwood	West Virginia Ave			4	3	2020
1005			Reduce Capacity - bike lanes	M St SE	Half St	11th St			6	5	2020
1004			Reduce Capacity - bike lanes	Florida Ave NE	West Virginia Ave	14th St			3	2	2019
1003			Reduce Capacity - bike lanes	Florida Ave NE	2nd ST	West Virginia Ave			6	4	2019
839	DP23		Reduce Capacity - Bus Priority	16th Street NW	Arkansas Avenue NW	Columbia Road NW			6	4	2021 2020
840	DP24		Reduce Capacity - Bus Priority	16th Street NW	Columbia Road NW	W Street NW			5	4	2021 2020
841	DP25		Reduce Capacity - Streetcar	H Street NE/NW	3rd Street NE	New Jersey Ave NW			6	4	2022 2030

Facility Lanes Fr Completion Con ID Project ID Agency Improvement **Facility** From Tο To Fr To Date ID 842 **DS26** Reduce Capacity -New Jersey Avenue NW H St NW K Street NW 3 lanes 1 lane 2022 2030 Streetcar 1-way each 2way 2022 2030 844 DP26 K Street NW New Jersey Avenue NW 7th Street NW 3 2 Reduce Capacity -Streetcar 845 DP27 Reduce Capacity -K Street NW 9th Street NW 12th St NW 4 2022 2021 Streetcar DP28 Reduce Capacity -K Street NW 12th St NW 21st St NW 6 2022 2021 846 Streetcar 847 DP29 Reduce Capacity -K Street NW 21st St NW 25th Street NW 4 2 2022 2030 Streetcar 25th Street NW 6/4 2022 2030 848 DP30 Reduce Capacity -K Street NW 29th Street NW Streetcar 849 DP31 Reduce Capacity -K Street NW 29th Street NW Wisconsin Avenue NW 4 2 2022 2030 Streetcar **MDOT** Interstate 952 MI2TSB6 Construct 1270 southbound auxiliary lane South of Shady Grove Rd local slip ramp South of Shady Grove Rd express 1 1 2019 2020 (innovative congestion management) lanes slip ramp **Primary** PG2531 139 MP10A Reconstruct US₁ College Avenue MD 193 2 2 2021 2023 358 MP15 FR5711 Construct **US 15 Catoctin Mountain Highway** at Monocacy Blvd./Christophers 2 5 64 2018 2019 Interchange Crossing 391 FP2A FR3881 Widen-MD 85 Buckeystown Pike 2021 2022 6 2 2 Construct/Widen Crestwood Drive/Shockley Drive Spectrum Drive 4 6 2 5 5 353 NRS PG7001 Upgrade MD 210 at Kerby Hill Road/Livingston Road 6 2020 2021 Secondary 2030 924 Construct/Widen MD 180 70 (west junction) Greenfield Drive Greenfield Drive | I 70 (west junction) MS36A FR5491 4 2 857 600 ft north of 1-70 | 170 (west junction) Structure 10140 Ballenger Center 4 2 2/4 MS36B FR6781 Construct/Widen MD 180 2020 2021 **Frederick County** Secondary

							Fac	ility	Lai	nes	
Con ID	Project ID	Agency ID	Improvement	Facility	From	То	Fr	То	Fr	То	Completion Date
648	MS36C	FR5491	Widen/Upgrade	MD 180 Ballenger Creek Pike	Greenfield Drive Ballenger Center Drive	Corporate Drive	4 3	4 2	2	4	2030 2020
993			Widen/Upgrade	Christopher's Crossing	Whittier Drive	Poole Jones Road	3	2	2	4	2024
880	FS3		Expansion	Christopher's Crossing	Walter Martz Road	Thomas Johnson Drive	3	3	0 to 2	4	2021 2020
879	NRS		Construct	Christopher's Crossing	Shookstown Road	Rocky Springs Road	3	3	0	4	2020 2026
651	FS2a		Widen	Monocacy Boulevard	Schifferstadt Boulevard	Gas House Pike	3 2	3 2	2	4	2019
691		F3	Study Construct	Spectrum Drive	Technology Way	MD 85 Buckeystown Pike	0	4	0	2	Not Coded 2030
					VDOT						
					Federal Lands						
243	VP1A	VP1A - 103073	Widen	US 1 Jefferson Davis Highway	Telegraph Road	VA 235 South	2	2	4	6	2016- COMPLETE
					Interstate						
769	I66R17 I66R18		Revise Operations	I-66 Express Lanes Interchange Ramps	Existing reversible HOV ramp converted to HOT EB on ramp only, 24 hrs/day; Construct new flyover ramp for HOT WB off ramp from I 66 Express Lanes, operating 24 hrs/day The existing reversible HOV ramp at Stringfellow Road will be expanded and converted to Express Lanes ramps providing access to and from the east using the Express Lanes. The new ramps will allow two-way traffic to and from the Express Lanes toward the Beltway 24 hours a day.	@ Stringfellow Road	1	1	Bus / HOV-2 Reversibl e by time of day	Bus / HOV-3 / HOT both directio ns 24 hrs / day	2022
			Remove	I-395 HOV/HOT SB Slip Ramp to I-395 main lanes	Just south of Eads St		1	0	1	0	2019
	VI2AC		Reconstruct	I 95 Interchange	VA 613 Van Dorn Street		1	1			2015 2030
	VI2X		Construct	I-95 Auxiliary Lane SB	VA 123	VA 294	1	1	0	1	2028 2022
1011			Construct	I-95 Opitz Drive Reversible Ramp	I-95 Express Lanes at Opitz Drive	Optiz Drive	1	1	0	1	2022
999			Construct	I-495 Express Lanes On-Ramp	Dulles Connector Road WB	I-495 Express Lanes NB	0	1	0	1	2025
1000			Construct	I-495 Express Lanes (Shoulder Lane) – NB DIRECTION PEAK PERIODS ONLY	Dulles Connector WB On-Ramp	GW Parkway Off-Ramp	0	1	0	1	2025
						•					

							Facility		Lanes		
Con ID	Project ID	Agency ID	Improvement	Facility	From	То	Fr	То	Fr	То	Completion Date
1001			Construct	I-495 NB Exchange Ramp	Interstate Ramp	I-495 NB GP Lanes at Dulles Toll Road	0	1	0	1	2045
1002			Construct	I-495 SB Exchange Ramp	Interstate Ramp	I-495 SB Express Lanes at Dulles Toll Road	0	1	0	1	2045
					Primary						
633	NRS	100938	Reconstruct	US 1 Richmond Highway	at VA 123 Gordon Boulevard (Interchange)						2025 2028
626	NRS	82135	Construct	VA 7 Leesburg Pike	Bridge over Dulles Toll Road		2	2	4	6	2030 Complete
628	VP2Lb		Widen	VA 7 Leesburg Pike	VA 123 Chain Bridge Road	I 495 Capital Beltway	2	2	6	8	2021 2030
87	VP2N		Widen	VA 7 Leesburg Pike	I 495	I 66	2	2	4	6	2021 2030
347	VP2B	TBD	Widen	VA 7	Seven Corners	Bailey's Crossroads	2	2	4	6	2025 2030
1022			Study	VA 7 Interchange	VA 123 Dolly Madison Road						2030
1023			Construct	US 15 Bypass / Battlefield Parkway Interchange							
737	VP6N	108720	Widen	VA 28 Centreville Road	VA 898 Old Cntreville Road US 29	Prince William County Line	2	2	4	6	2025 2023
995			Construct	VA 28 Manassas Bypass	VA 234 Sudley Road	VA 28 Centreville Road			0	4	2025
622	VP7AG		Widen	US 29 (add NB lane)	Legato Road	Shirley Gate/Waples Mill Rd.	2	2	2	3	2017 Complete
997			Widen	VA 55	Route 29	Town of Haymarket			2	4	2028
235	VP10H		Widen	VA 123 Ox Road	Hooes Rd.	Fairfax Co. Parkway	2	2	4	6	2025 2030
337	VP10F	1784	Widen	VA 123 Ox Road	Fairfax Co. Parkway	Burke Center Parkway	2	2	4	6	2025 2030
300	VP10R		Widen	VA 123	Burke Center Parkway	Braddock Road	2	2	4	6	2025 2030
95	VP10S		Widen	VA 123	VA 677 Old Courthouse Road	VA 7 Leesburg Pike			4	6	2025 2030
595	VP10T		Widen	VA 123 Chain Bridge Road	VA 7 Leesburg Pike	I 495 Capital Beltway	2	2	6	8	2025 2030
1016			Upgrade	VA 123	I-495 Capital Beltway	VA 267 Dulles Access Road	3	3	6	6	2030
1015			Widen	VA 123	VA 267 Dulles Access Road	VA 634 Great Falls Street	2	2	4	6	2030
1024		111725	Widen/Construct	VA 286 Fairfax County Parkway Interchange	VA 654 Pope's Head Road		2	2	4	6	2025
728			Study Widen	VA 286 Fairfax County Parkway	US 29 Lee Highway	Rolling Road	2	2	4	6	2030
104	VSF26a		Construct	VA 289 Franconia-Springfield Parkway HOV Interchange	Neuman Street		1	1			2025- 2035
			Construct	VA 234 Bypass Interchange	Clover Hill Road						2026
1028			Construct	VA 294 Prince William Parkway Intersection Improvements	VA 641 Old Bridge Road						2028
1027			Construct	VA 294 Prince William Parkway Interchange	VA 640 Minnieville Road						2028
106	VP15CD		Construct	Collector-Distributor Rd Westbound (parallels Dulles Toll Rd.)	Spring Hill Rd. Route 7 Leesburg Pike	VA 828 Wiehle Avenue	0		0	1	2037 2035
107	VP15CD		Construct	Collector-Distributor Rd Eastbound (parallels Dulles Toll Rd.)	VA 828 Wiehle Avenue	Spring Hill Rd. Route 7 Leesburg Pike	0		0	1	2036 2035
			Construct	Collector-Distributor Rd Westbound (parallels Dulles Toll Rd.)	Route 7 Leesburg Pike	Spring Hill Rd.			0	1 2	2037 2035

NOTE: Shaded areas represent changes from Visualize 2045

							Fac	ility	La	nes	
Con ID	Project ID	Agency ID	Improvement	Facility	From	То	Fr	То	Fr	То	Completion Date
			Construct	Collector-Distributor Rd Eastbound (parallels Dulles Toll Rd.)	Spring Hill Rd.	Route 7 Leesburg Pike			0	1 2	2036 2035
Secon	dary										
Fairfax	County										
241	VSF4f	VSF4f	Widen	VA 611 Furnace Road	VA 123 Ox Road	VA 642 Lorton Road	3	3	2	4	2016 COMPLETE
586	VSF10E	102905	Widen	VA 638 Rolling Road	Rt 5297 DeLong Drive	Fullerton Drive	3	3	2	4	2022 2035
217	FFX11a		Widen	VA 645 Stringfellow Road	US 50	VA 286 Fairfax County Parkway	3	3	2	4	2020 2030
688	VSF17b		Construct	VA 655 Shirley Gate Road	VA 286 Fairfax County Parkway	VA 620 Braddock Road	0	3	0	4	2025 2030
724	VSF46		Construct	VA 2677 Frontier Drive	Franconia-Springfield Transportation Center	VA 789 Loisdale Road	0	4	0 4	2 4	2024
1017			Construct	Town Center Parkway Underpass of Dulles Toll Road	VA 5320 Sunrise Valley Dr.	VA 675 Sunset Hills Road	0	4	0	4	2030
Loudo	un Cou	nty									
330	VSL1B	97529, 105064	Widen/Upgrade	VA 606/607 Old Ox Rd/Loudoun County Parkway	VA 634 Moran Rd	VA 621 Evergreen Mills Rd	4	3	2	4	2017 2018
564			Construct	Glascock Road Dulles West Blvd. Phase I	Dulles Landing Drive	Hutcheson Farm Drive	0	4	0	4	2023 2022
565			Construct	Glascock Road Dulles West Blvd. Phase II	Hutcheson Farm Drive	Arcola Blvd	0	4	0	4	2023 2022
1031			Construct	Glascock Road Dulles West Blvd. Phase III	Arcola Blvd	Northstar Dr.	0	4	0	4	2023 2025
Prince	Williar	n Cou	nty		•	1			ı	ı	
996			Widen	VA 621 Devlin Road	Linton Hall Road	Wellington Road			2	4	2028
998			Widen	VA 674 Wellington Road	University Boulevard	VA 621 Devlin Road/Balls Ford Road			2	4	2028

ATTACHMENT B

Air Quality Conformity Scope of Work





June 19, 2019

AIR QUALITY CONFORMITY ANALYSIS: FY2021-2024 TIP & 2020 Amendment to the Visualize 2045 Plan DRAFT SCOPE OF WORK

I. INTRODUCTION

The FY2021-2024 Transportation Improvement Program (TIP) and 2020 Amendment to the Visualize 2045 Plan are scheduled to be finalized at the March 18, 2020 Transportation Planning Board (TPB) meeting. This work effort addresses requirements associated with attainment of the ozone standard (volatile organic compounds (VOC) and nitrogen oxides (NOx) as ozone precursor pollutants).

The amended plan must meet air quality conformity regulations: (1) as originally published by the Environmental Protection Agency (EPA) in the November 24, 1993 Federal Register, and (2) as subsequently amended, most recently on March 14, 2012, and (3) as detailed in periodic FHWA / FTA and EPA guidance. These regulations specify both technical criteria and consultation procedures to follow in performing the assessment.

This scope of work provides a context in which to perform the conformity analyses and presents an outline of the work tasks required to address all regulations currently applicable.

II. FEDERAL REQUIREMENTS

As described in the 1990 Clean Air Act Amendments, conformity is demonstrated if transportation plans and programs:

- 1. Are consistent with most recent estimates of mobile source emissions budgets
- 2. Provide expeditious implementation of Transportation Control Measures (TCMs)
- 3. Contribute to annual emissions reductions

The federal requirements governing air quality conformity compliance are contained in §93.110 through §93.119 of the Transportation Conformity Regulations (printed April 2012), as follows:

	CONFORMITY CRITERIA & PROCEDURES					
	All Actions at all times					
§93.110	Latest Planning Assumptions					
§93.111	Latest Emissions Model					
§93.112	Consultation					
§93.113	TCMs					
§93.114	Currently conforming Plan and TIP					
§93.115	Project from a conforming Plan and TIP					
§93.116	CO, PM10 and PM2.5 hot spots					
§93.117	PM10 and PM2.5 Control Measures					
§93.118 and/or	Emissions Budget and/or Interim Emissions					
§93.119						

- § 93.110 Criteria and procedures: Latest planning assumptions The conformity determination must be based upon the most recent planning assumptions in force at the time of the conformity determination.
- § 93.111 Criteria and procedures: Latest emissions model The conformity determination must be based on the latest emission estimation model available.
- § 93.112 Criteria and procedures: Consultation The Conformity must be determined according to the consultation procedures in this subpart and in the applicable implementation plan, and according to the public involvement procedures established in compliance with 23 CFR part 450.
- § 93.113 Criteria and procedures: Timely implementation of TCMs The transportation plan, TIP, or any FHWA/FTA project which is not from a conforming plan and TIP must provide for the timely implementation of TCMs from the applicable implementation plan.
- §93.114 Criteria and procedures: Currently conforming transportation plan and TIP There must be a currently conforming transportation plan and currently conforming TIP at the time of project approval.
- **§93.115 Criteria and procedures: Projects from a plan and TIP** The project must come from a conforming plan and program.
- §93.116 Criteria and procedures: Localized CO, PM10, and PM2.5 violations (hot spots) -The FHWA/FTA project must not cause or contribute to any new localized CO, PM10, and/or PM2.5 violations or increase the frequency or severity of any existing CO, PM10, and /or PM2.5 violations in CO, PM10, and PM2.5 nonattainment and maintenance areas.
- §93.117 Criteria and procedures: Compliance with PM10 and PM2.5 control measures -The FHWA/FTA project must comply with PM10 and PM2.5 control measures in the applicable Implementation Plan.
- **§93.118 Criteria and procedures: Motor vehicle emissions budget -** The transportation plan, TIP, and projects must be consistent with the motor vehicle emissions budget(s).
- **§93.119** Criteria and procedures: Interim emissions in areas without motor vehicle budgets The FHWA/FTA project must satisfy the interim emissions test(s).



Assessment Criteria:

Ozone season pollutants will be assessed by comparing the forecast year pollutant levels to the mobile budgets in the 2008 Ozone National Ambient Air Quality Standards (NAAQS) Maintenance Plan. In August 2018 EPA found these budgets adequate for use in conformity analyses, and the budgets were used in the Visualize 2045 conformity analysis. The 2008 Ozone NAAQS Maintenance Plan includes mobile budgets for 2014 (attainment year), 2025 (intermediate year), and 2030 (out year). The 2014 budgets will be used for any analysis year between 2014 and 2024, the 2025 budgets will be used for any analysis year between 2025 and 2029, and the 2030 budgets will be used for any analysis year beyond 2029.

III. POLICY AND TECHNICAL APPROACH

The table below summarizes the key elements of the Policy & Technical Approach:

Pollutants	Ozone Season VOC and NOx
Emissions Model	MOVES2014b
Conformity Test	Budget Test: Using mobile budgets most recently approved by EPA: 2008 Ozone NAAQS Maintenance Plan mobile budgets found adequate by EPA in August, 2018.
Vehicle Fleet Data	December 2016 vehicle registration data for all jurisdictions
Geography	8-hour ozone non-attainment area
Network Inputs	Regionally significant projects
Land Activity	Cooperative Forecasts Round 9.1 or latest
HOV/HOT	VA: All HOV 2+/HOT 2+ facilities become HOV 3+/HOT 3+
	in 2020 and beyond except I-66 inside the Beltway, which will convert to HOT3+ when I-66 outside the Beltway opens MD: All HOV facilities remain HOV2+ through 2045
Transit Constraint	NO Metrorail "capacity constraint" (removed with March 2018 passage of annual funding for WMATA agreement)
Analysis Years	2019, 2021, 2025, 2030, 2040, 2045
Modeled Area	3,722 TAZ System
Travel Demand Model	Version 2.3.75 or latest



IV. CONSULTATION

The TPB adheres to the specifications of the consultation procedures (as outlined in the consultation procedures report adopted by the TPB on May 20, 1998). The TPB will participate in meetings of MWAQC, its Technical Advisory Committee, and its Conformity Subcommittee to discuss the Scope of Work, project inputs, and other elements as needed.

V. WORK TASKS

The work tasks associated with the air quality conformity analysis are as follows:

- 1. Receive project inputs from programming agencies and organize into conformity documentation listings by:
 - Project type, limits, etc.
 - Phasing with respect to forecast years
 - Transit operating parameters, e.g., schedules, service
- 2. Update Travel Model Base Transit Service to reflect:
 - Service current to December 2018
 - Fares current to July 1, 2019
- 3. Update 2016 Vehicle Registration Data (VIN data)
 - Corrections to DC VIN data as provided by the DC Department of Energy and Environment on June 19, 2018
- 4. Review and Update Land Activity files to reflect Round 9.1 Cooperative Forecasts (or latest) with respect to:
 - Zonal data files
 - Employment Data Census Adjustment
 - Households by auto ownership, size and income
 - Coordination with agencies outside the MWCOG Cooperative Forecast area (Baltimore Metropolitan Council, Fredericksburg Area Metropolitan Planning Organization, Calvert-St. Mary's Metropolitan Planning Organization, etc.)
 - Exogenous Travel (external, through trips etc.)
- 5. Prepare forecast year highway, HOV, and transit networks including regionally significant projects, as follows:
 - 2019, 2021, 2025, 2030, 2040, and 2045 highway networks
 - 2019, 2021, 2025, 2030, 2040, and 2045 transit network input files
 - Update highway tolls, as necessary



- 6. Execute travel demand modeling for years 2019, 2021, 2025, 2030, 2040, and 2045
- 7. Derive Mobile Emissions Estimates for years 2019, 2021, 2025, 2030, 2040, and 2045 using inputs from the 2008 Ozone NAAQS Maintenance Plan mobile budgets
- 8. Summarize key inputs and outputs (VMT, mode share, emissions, etc.) of the conformity determination
- 9. Assess conformity and document results in a report
 - Document methods
 - Draft conformity report
 - Forward to technical committees, policy committees
 - Make available for public and interagency consultation
 - Receive comments
 - Respond to comments and present to TPB for action
 - Finalize report and forward to FHWA, FTA, and EPA



DRAFT

SCHEDULE FOR DEVELOPMENT & ADOPTION FY2021-2024 TIP & 2020 Amendment to the Visualize 2045 Plan

May 3, 2019	Technical Committee is briefed on request for TIP and Plan updates; solicitation opens
May 31, 2019	Solicitation closes; all air quality conformity project inputs are due
June 7, 2019	Technical Committee briefed on draft project inputs and draft air quality conformity Scope of Work
June 19, 2019	TPB briefed on draft project inputs and draft air quality conformity Scope of Work
June 2019	TPB staff briefs Metropolitan Washington Air Quality Committee Technical Advisory Committee (MWAQC TAC) on inputs and Scope of Work
July 17, 2019	TPB is asked to approve inputs and draft Scope of Work
December 20, 2019	Financial updates for the FY2021-2024 TIP are due
January 9, 2020	Public Forum on the FY2021-2024 TIP
January 31, 2020	Draft FY2021-2024 TIP, 2020 Amendment to the Visualize 2045 Plan, and air quality conformity analysis are released for 30-day comment period
February 7, 2020	Technical Committee reviews draft TIP, Plan, and conformity analysis
February 2020	TPB staff briefs MWAQC TAC on the draft TIP, Plan, and conformity analysis
February 19, 2020	TPB is briefed on TIP, Plan, and conformity analysis
March 1, 2020	Comment period ends
March 18, 2020	TPB reviews comments and responses to comments, and is presented with the FY2021-2024 TIP, the 2020 Amendment to the Visualize 2045 Plan, and the air quality conformity analysis for approval



FY 2021-2024 Transportation Improvement Program & 2020 Amendment to the Visualize 2045 Plan and Draft Scope of Work for the Air Quality Conformity Analysis

Jane Posey
TPB Transportation Engineer

Item #9 Transportation Planning Board June 19, 2019

Agenda Item #9



SCHEDULE

May 2019

- Request for TIP and Plan updates
- Air quality conformity project inputs due

July 2019

• TPB approval of project inputs and scope of work for air quality conformity analysis

December 2019

Financial updates for FY 2021-2024 TIP due

January 2020

Public forum on new TIP and results of air quality analysis (begin public comments)

February 2020

TPB briefed on draft new TIP and results of conformity analysis

March 2020

- Public comment period ends
- TPB approval of FY 2021-2024 TIP, 2020 Amendment to the Visualize 2045 Plan, and air quality conformity analysis



MAJOR PLAN AMENDMENTS - DISTRICT OF COLUMBIA

- Bicycle Lanes, Districtwide
 - 9th St. NW from Florida Ave. to Constitution Ave.
 - · Dalecarlia Pkwy. NW from Loughboro Rd. to Westmoreland Circle
 - Florida Ave. NE from 2nd St. to 14th St.
 - K St. NE from 1st St. to 8th St.
 - M St. SE from Half St. to 11th St.
 - Mount Olivet Rd. NE from Brentwood Pkwy. to West Virginia Ave.
 - · Nebraska Ave. NW from New Mexico Ave. to Loughboro Rd.
 - Pennsylvania Ave. SE from 2nd St. to 17th St.
- Peak Period Bus-Only Lanes
 - H St. NW from 14th St. to 19th St.
 - I St. NW from 13th St. to Pennsylvania Ave.
- K ST. NW Transitway
 - Construct two segments from 9th St. to 12th St. and from 12th St. to 21st St.



Agenda Item #9: Inputs and Scope of Work June 19, 2019

3

MAJOR PLAN AMENDMENTS - VIRGINIA

- Modify I-495 Capital Beltway Express Lanes
 - Construct 3 additional ramps near Dulles Toll Road interchange
 - Continuation of Peak Period NB Shoulder Lane
- Construct reversible ramp from I-95 at Opitz Dr.
- Construct VA 28 Manassas Bypass from VA 234 Sudley Rd. to VA 28 Centreville Rd.
- Widen VA 55 from US 29 to the Town of Haymarket
- Widen VA 123 from VA 267 Dulles Access Rd. to VA 634 Great Falls St.
- Widen VA 286 Fairfax County Parkway from US 29 Lee Hwy. to Rolling Rd.
- Construct West End Transitway Phase II (Southern Segment) from Van Dorn Street Metro to Landmark Mall



DRAFT SCOPE OF WORK

Pollutants	Ozone Season VOC and NOx
Emissions Model	MOVES2014b
Conformity Test	<u>Budget Test:</u> Using mobile budgets most recently approved by EPA. 2008 Ozone NAAQS Maintenance Plan mobile budgets found adequate by EPA in August, 2018.
Vehicle Fleet Data	December 2016 vehicle registration data for all jurisdictions
Geography	8-hour ozone non-attainment area
Network Inputs	Regionally significant projects
Land Activity	Cooperative Forecasts Round 9.1 or latest
ноv/нот	VA: All HOV 2+/hot 2+ facilities become HOV 3+/HOT 3+ in 2020 and beyond except I-66 inside the Beltway, which will convert to HOT3+ when I-66 outside the Beltway opens MD: All HOV facilities remain HOV2+ through 2045
Transit Constraint	NO Metrorail "capacity constraint" (removed with March 2018 passage of annual funding for WMATA agreement)
Analysis Years	2019, 2021, 2025, 2030, 2040, 2045
Modeled Area	3,722 TAZ System
Traveled Demand Model	Version 2.3.75 or latest



Agenda Item #9: Inputs and Scope of Work June 19, 2019 _

Lyn Erickson

TPB Plan Development and Coordination Program Director (202) 962-3319 lerickson@mwcog.org

Jane Posey

TPB Transportation Engineer (202) 962-3331 jposey@mwcog.org

mwcog.org/tpb

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

