

2016 CLRP NETWORK REPORT

Meseret Seifu
COG/TPB Staff

TPB Travel Forecasting Subcommittee
March 17, 2017



Overview

- Staff has recently completed a draft report describing the currently **adopted** 2016 CLRP networks
- Purpose of this report:
 - Review the network development process
 - Explain network elements & coding conventions
 - Provide summary statistics
- 2016 CLRP Network Features
 - Years: 2016, 2017, 2020, 2025, 2030, and 2040
 - Travel Model: Version 2.3.66
- Last report: 2015 CLRP Network Report (3/18/16)

Report is intended to compliment current reports / documents

- Version 2.3.66 User's Guide (February 13, 2017)

<https://www.mwcog.org/transportation/data-and-tools/modeling/model-documentation/>

- Air Quality Conformity Analysis of the 2016 CLRP Report (November 16, 2016)

http://old.mwcog.org/clrp/resources/KeyDocs_2016.asp

- Travel model transmittal memorandum (February 16, 2017)

- <https://www.mwcog.org/transportation/data-and-tools/modeling/data-requests/>



Network report outline

Four chapters:

1. Introduction
 - Conformity schedule
 - Network development process
2. Network Elements and Conventions
 - Study area, zone system
 - Time periods, node numbering, network elements
3. Cube Voyager
 - Inputs
 - Procedures
4. TPB Multi-year, Multi-modal Geodatabase



What's New?

- Networks reflect the most recently adopted Plan (2016 CLRP)
- Transit line schedules have been updated
 - “Base year” transit updated to 2015 conditions
- Cost deflation factor was updated to reflect most recently published BLS CPI data
- Transit fare parameters reflect the most recent policy (WMATA Tariff #33v2, effective July 1, 2014). Non-WMATA service providers fares are updated
- Highway tolls/toll rates coded in the network have been updated to reflect most recent policy



Modified managed lane facility operations

- I-66 HOT lanes inside the Beltway
 - HOV lanes convert to HOT lanes in 2017
 - Extent: from US Route 29 near Rosslyn to I-495
 - **Managed express lane facility during the morning and evening peak periods in the peak direction ONLY**
 - **HOT 2+ until I-66 outside the Beltway Express lanes open (currently scheduled for 2021)**
 - In 2040 Facility will be HOT3+ during the morning and evening peak periods in **both** directions



New major Projects

- The I-395 HOV lanes from Turkeycock Run to Eads Street will convert to HOT lanes in 2019
- VA 28 (Sully Road) two lanes will convert to HOV lanes and auxiliary lanes will be added from I-66 to the Dulles Toll Road (8 miles)
- VRE extension from Manassas to Gainesville/Haymarket in 2022 (11 miles)



End-to-end tolls (\$) on Virginia managed lane facilities by year, time period and direction

Maximum value

Facility	Direction	Distance	2017			2030			2040		
			AM	PM	OP	AM	PM	OP	AM	PM	OP
I-495	North bound	12.49	\$3.14	\$2.05	\$1.55	\$5.89	\$3.83	\$1.88	\$7.22	\$4.33	\$1.88
	South bound	12.43	\$2.03	\$2.85	\$1.56	\$3.41	\$5.27	\$1.89	\$4.19	\$6.30	\$1.89
I-395/I-95	North bound	54.60	\$14.03	\$5.67	\$4.26	\$36.08	\$10.91	\$8.19	\$50.78	\$10.91	\$8.19
	South bound	54.64	\$5.75	\$7.84	\$4.31	\$10.91	\$21.71	\$8.21	\$10.91	\$34.01	\$8.21
I-66 Inside Beltway	East bound	9.33	\$10.09	\$1.86	\$1.41	\$7.37	\$1.86	\$1.41	\$9.02	\$1.86	\$1.40
	West bound	9.78	\$1.82	\$18.86	\$1.36	\$1.96	\$7.61	\$1.47	\$1.96	\$7.82	\$1.47
I-66 Outside Beltway	East bound	25.98	N/A	N/A	N/A	\$16.49	\$4.24	\$3.22	\$20.72	\$5.15	\$3.92
	West bound	25.53	N/A	N/A	N/A	\$4.19	\$9.07	\$3.11	\$5.11	\$14.17	\$3.80

Toll values in current-year dollars

Minimum value



End-to-end toll rates (\$ per-mile) on Virginia managed lane facilities by year, time period and direction

Facility	Direction	Distance	2017			2030			2040		
			AM	PM	OP	AM	PM	OP	AM	PM	OP
I-495	North bound	12.49	\$0.25	\$0.16	\$0.12	\$0.47	\$0.31	\$0.15	\$0.58	\$0.35	\$0.15
	South bound	12.43	\$0.16	\$0.23	\$0.13	\$0.27	\$0.42	\$0.15	\$0.34	\$0.51	\$0.15
I-395/I-95	North bound	54.60	\$0.26	\$0.10	\$0.08	\$0.66	\$0.20	\$0.15	\$0.93	\$0.20	\$0.15
	South bound	54.64	\$0.11	\$0.14	\$0.08	\$0.20	\$0.40	\$0.15	\$0.20	\$0.62	\$0.15
I-66 Inside Beltway	East bound	9.33	\$1.08	\$0.20	\$0.15	\$0.79	\$0.20	\$0.15	\$0.97	\$0.20	\$0.15
	West bound	9.78	\$0.19	\$1.93	\$0.14	\$0.20	\$0.78	\$0.15	\$0.20	\$0.80	\$0.15
I-66 Outside Beltway	East bound	25.98	N/A	N/A	N/A	\$0.63	\$0.16	\$0.12	\$0.80	\$0.20	\$0.15
	West bound	25.53	N/A	N/A	N/A	\$0.16	\$0.36	\$0.12	\$0.20	\$0.56	\$0.15

Toll values in current-year dollars: ranges from 8 cents to ~\$1.00 per mile



Final comments

- The goal is to provide travel model users with a better understanding of the TPB networks which are fundamental inputs to the travel model
- TPB staff welcomes feedback on the draft report (within 30 days)
- The report will be uploaded to the [TFS webpage](#) (under [Documents](#)) following this meeting

Acknowledgements

- Thanks to:
William Bacon, Joseph Davis, Wanda Hamlin, Ronald Milone, Mark Moran, Jane Posey, and Jim Yin

