

Memorandum

To: MPO Committees
From: Sandy Shackelford, Director of Planning & Transportation
Date: November 29, 2023
Reference: Moving Toward 2050 Travel Demand Model Outputs

Purpose:

The travel demand model for the region is maintained by VDOT in collaboration with the MPO. Regions with an existing Travel Demand Model are required to reference their models in the development of their long range transportation plans.

The Travel Demand Model provides information on existing and projected network congestion based on estimated growth rates throughout the region. The growth projections for use in the Travel Demand Model were approved by the Policy Board at their meeting in October.

Discussion:

Using the baseline and future growth socio-economic data that was approved at the previously Policy Board meeting, VDOT modeling staff ran the baseline and future no-build scenarios to demonstrate estimated volume over capacity ratios throughout the network based on anticipated growth. The future no-build scenario incorporates committed transportation improvements that have been awarded funding but have not yet been built.

To ensure an accurate comparison of system conditions between the baseline conditions and the future conditions, staff used the ranges of volume over capacity ratios that correlated to established Level of Service summarized in the table below to develop the system maps:

Level of Service	V/C
A	0.35
B	0.55
C	0.77
D	0.92
E	1.0
F	>1.0

Once the MPO begins to narrow down potential projects to include in the fiscally-constrained priority list, the model will demonstrate how the potential projects may impact overall future system conditions.

The maps can be viewed here: [Travel Demand Model Outputs](#)

Actions: This information is being shared for discussion purposes. No action is requested at this time.