



Date: August 15, 2018  
To: High Performance Transportation Enterprise Board  
From: Nicholas Farber, HPTE Head of Innovative Project Delivery  
Subject: Overview of I-25 South Gap Segment Traffic and Revenue Study

#### Purpose

The purpose of this memo is to summarize the recently completed I-25 South Gap Segment Traffic and Revenue (T&R) Study.

#### Action

Informational only - no action requested.

#### Background

In the summer of 2017, HPTE (with assistance from Region 1) selected C&M Associates, Inc. (C&M) to conduct a T&R study on the I-25 South Corridor from C-470 to Colorado Springs. C&M was the Virginia Department of Transportation's T&R consultant on the I-66 Outside the Beltway Project and was TIFIA's T&R consultant on the C-470 Project.

Because the majority of funding was identified to construct the "Gap" Project (Monument to Castle Rock) earlier this year, the parameters of the T&R study were narrowed to just that 18-mile section of the interstate. Over the last 12 months, C&M conducted a stated preference survey on the corridor (to determine traveler's value of time and support for the Project), a socioeconomic analysis, a toll operations analysis, a toll rate schedule analysis, and a few sensitivity analyses (e.g. fluctuations in the economy, and the addition of a truck climbing lane), and developed a T&R forecast. Since the study is so voluminous, it was not attached to the Board packet; however, it can be found at [this link](#).

#### Overview of the T&R Study

The T&R study assumes two General Purpose Lanes and one Express Lane in either direction, HOV3+ free, tolls set by HPTE for throughput maximization (rather than revenue maximization), toll rates adjusted every year by inflation (CPI rate), a three year ramp-up period, the same truck and heavy vehicle policies HPTE has on our other facilities, and an opening date of January 1, 2022. The Project will be separated into two toll segments with toll gantries installed between Plum Creek Parkway and Tomah Road, and between Greenland Road and County Line Road.

#### Highlights of the T&R Study:

- This report is similar to the Level 1 study and to results of the Finding of No Significant Impact (FONSI); namely, the Express Lane will provide travel time reliability for both General Purpose Lane and Express Lane users;
- The Stated Preference Survey showed that a majority of the respondents support the Project and have a very similar value of time to users of both the C-470 Project and other Express Lane corridors in the Metro Area;
- There will be substantial growth in both Douglas and El Paso Counties over the next 25 years. Both counties are forecasted to experience a 48 percent increase in population from 2015 to 2040; as a result, traffic will continue to increase not only along the Gap but along the entire I-25 corridor from C-470 to Colorado Springs.
- When the Project opens, toll rates are expected to be set at approximately \$0.15 per mile or around \$2.25 per trip (2017 dollars). This will be the lowest per-mile rate in Colorado.



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# I-25 South Gap Segment T&R Results

EXIT 181  
Plum Creek  
Pkwy  
1/2 MILE

Douglas Co Fairgrounds  
Event Center  
1/2 Mile  
Exit 181



# T&R Contract Overview

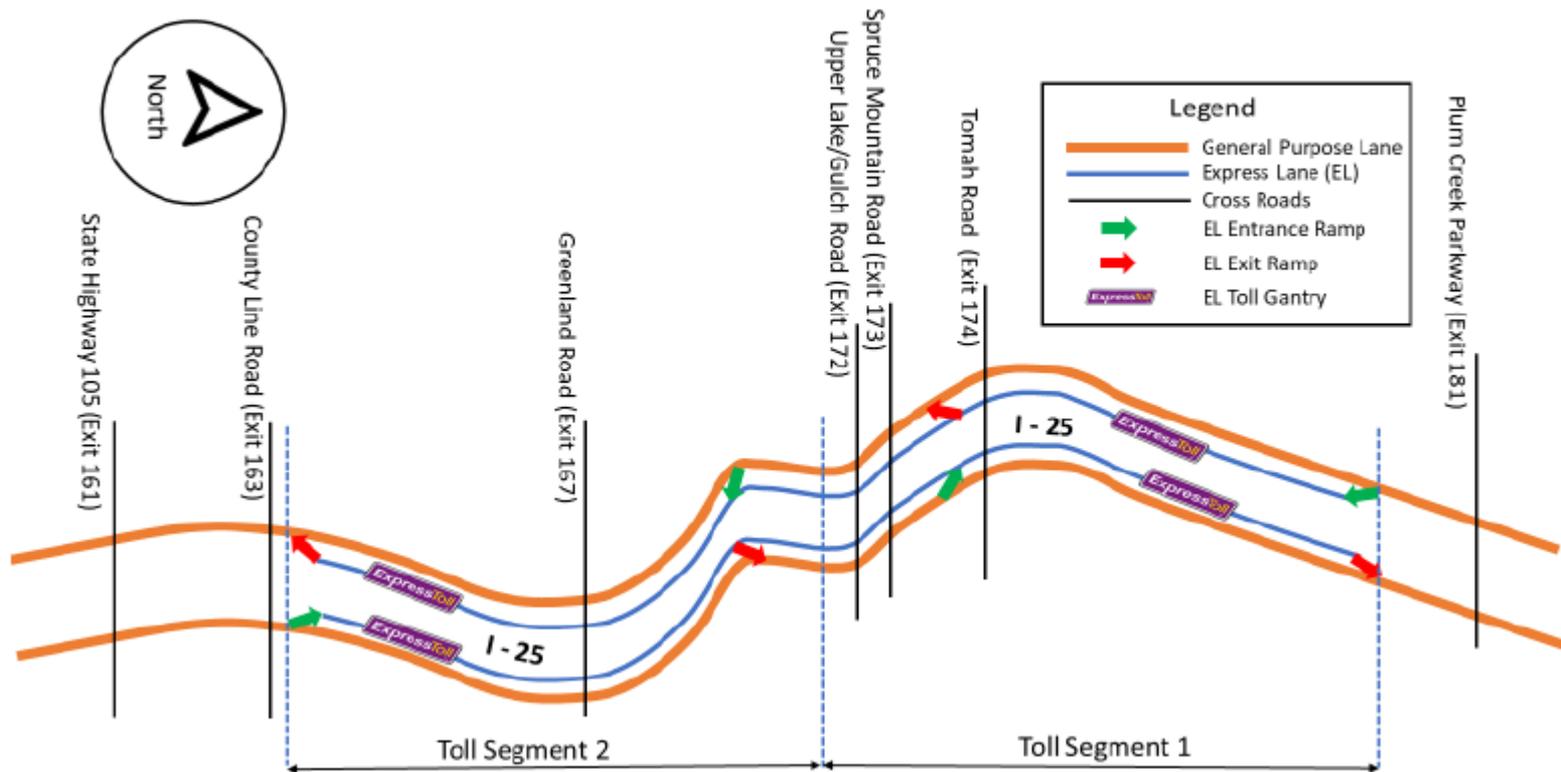
- Contractor: C&M Associates, Inc.
  - *Previous work:* VDOT's T&R Consultant on I-66 Outside the Beltway and TIFIA's T&R Consultant on C-470
- NTP: October 2017
- Scope of Work:
  - Study both Gap and entire corridor (C-470 to CO Springs) – Focus was later shifted to Gap only due to priority of Gap project construction
  - Stated Preference Survey
  - Socioeconomic Analysis
  - Toll Operation Analysis
  - Toll Rate Schedule Analysis
  - Estimate Traffic and Revenue
  - Sensitivity Analysis

# T&R Assumptions

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1. Project configuration: 2 GP + 1 TEL
2. Toll Free Vehicles: HOV3+
3. Tolling Strategy: Throughput maximization
4. Toll rate escalation: CPI of 2%
5. Heavy Vehicle Access: Similar to other HPTE corridors
6. Project Opens: January 1, 2022

# Toll Segmentation



# T&R Takeaways

1. Substantially similar to Level 1 Study and the FONSI
2. Over half of the Stated Preference Survey respondents support the Project
3. Stated Preference Survey: Commuter's VOT is substantially similar to other TEL corridors, e.g. C-470
4. Substantial growth in Douglas and El Paso Counties forecasted in the coming years (48% increase from 2015 – 2040 for both)
5. Toll rate (~\$0.15 per mile / ~\$2.25 for entire trip) expected to be lowest in Colorado

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# Questions?

