

Transportation Performance Management and Performance-Based Planning and Programming

Presentation to the Charlottesville-Albemarle Metropolitan Planning Organization's Technical Committee

Andrew Pike November 17, 2020

Agenda



- What/who is OIPI?
- What is performance-based planning and programming (PBPP)?
- What is transportation performance management (TPM)?
 - Details of federal TPM
 - State/CAMPO performance targets and actual performance 2017-2019
 - Next steps for federal TPM

What is OIPI?



- OIPI is Virginia's Office of Intermodal Planning and Investment.
 - Established in 2002; now with a staff of 12.
 - Responsible for the Commonwealth's long-range transportation plan, VTrans; project prioritization process, SMART SCALE; and performance management.
 - Work with VDOT and the Department of Rail and Public Transportation; MPOs and PDCs; FHWA; and the Department of Motor Vehicles, Dept. of Aviation, Port of Virginia, Space Port, and Motor Dealer Vehicle Board.

OIPI's role in performance management



- Team of three is focused on the following priorities:
 - Implementing the federal framework for transportation performance management (TPM) and performance-based planning and programming (PBPP).
 - Developing new performance measures and data-driven target-setting methodologies that build on the federal framework.
 - Using performance trends and data analysis to inform investment and policy decisions.
 - Building a data-sharing platform and reporting and analytical tools.

Performance-Based Planning and Programming



How Do We Plan? Statewide, Regional, Corridor, Local Planning efforts

How Are We Doing?
Performance
Monitoring,
Investment Evaluation



Monitor and evaluate performance of investments to ensure progress is being made and allow for course-corrections



Establish a sustainable, long-term vision for a safe and reliable multimodal surface transportation network



How Do We Invest? SMART SCALE, HSIP, MERIT, etc



Prioritize capacity, operations, and TDM investments to improve and strengthen the network

Performance-Based Planning and Programming



- FHWA and FTA establish performance measures
- States/MPOs establish targets and track performance
- States/MPOs incorporate performance targets and results into long-range plans and transportation improvement programs
- States/MPOs utilize performance data to inform planning and investment decisions
 - Federal TPM and PBPP set a foundation for utilizing data-driven approaches to planning and investing
 - States/MPOs not required to use federal performance measures to prioritize investments; however, States/MPOs must report out on these measures and results

Transportation Performance Management (TPM) Background



- MAP-21 Federal Law Established performance measures for:
 - Safety
 - Asset Condition
 - System Performance
 - Transit asset management
 - Public transit agency safety plans
- HB2241/SB1331 Commonwealth Transportation Board to establish performance targets for surface transportation

Transportation Performance Management - Where are we now



- States/MPOs establish 4-year targets (CY 2021) for all measures and 2-year targets (CY 2019) for some measures
 - Baseline Performance Period is CY 2017
 - First performance period runs 2018-2021
 - MPOs could adopt state targets or set own
 - State submitted a mid-term report in October
- States/MPOs now have the opportunity to adjust 4-year targets
 - Requires explanation for 2-year targets not achieved and what will be done to achieve the 4-year targets

Pavement Condition Performance 2017-2019



| Measure | State Target (percent) | CAMPO Target (percent) | Performance (percent) | | | Trend / Target Achievement |
|---|------------------------------|------------------------------|--------------------------|------|------|-------------------------------|
| | 4-yr | 4-yr | 2017 | 2018 | 2019 | |
| Pavement in Good Condition (Interstate) - State | 45 | | 57.8 | 57.5 | 57.9 | Improving/ Meeting Target |
| Pavement in Good Condition (Interstate) - CAMPO | | 45 | 58.9 | 72.8 | 69.7 | Improving/ Meeting Target |
| Pavement in Poor Condition (Interstate) - State | < 3 | | 0.6 | 0.3 | 0.3 | Improving/ Meeting target |
| Pavement in Poor Condition (Interstate) - CAMPO | | < 3 | 0.2 | 0.0 | 0.0 | Improving/ Meeting Target |

CAMPO supports the state targets for the pavement performance measures.

Pavement Condition Performance 2017-2019



| Measure | State Target (percent) | CAMPO Target (percent) | Performance (percent) | | | Trend / Target Achievement |
|---|------------------------------|------------------------------|--------------------------|------|------|-------------------------------|
| | 4-yr | 4-yr | 2017 | 2018 | 2019 | |
| Pavement in Good Condition (Non-interstate NHS) - State | 25 | | 33.5 | 34.8 | 36.7 | Improving/ Meeting target |
| Pavement in Good Condition (Non-interstate NHS) - CAMPO | | 25 | 14 | 28.9 | 26.3 | Improving/ Meeting target |
| Pavement in Poor Condition (Non-interstate NHS) - State | < 5 | | 0.9 | 0.9 | 0.9 | Meeting target |
| Pavement in Poor Condition (Non-interstate NHS) - CAMPO | | < 5 | 0.0 | 0.0 | 0.9 | Meeting target |

CAMPO supports the state targets for the pavement performance measures.

Bridge Condition Performance 2017-2019



| Measure | State Target (percent) | CAMPO Target (percent) | Performance (percent) | | | Trend / Target Achievement |
|--|------------------------------|------------------------------|--------------------------|------|------|----------------------------------|
| | 4-yr | 4-yr | 2017 | 2018 | 2019 | |
| Deck Area of NHS Bridges in Good Condition - State | 30.5* | | 34.3 | 32.6 | 32 | Declining/ Not meeting target |
| Deck Area of NHS Bridges in Good Condition - CAMPO | | 23 | 10.8 | 10.8 | 10.9 | Not meeting target |
| Deck Area of NHS Bridges in Poor Condition - State | 3 | | 3.4 | 3.7 | 3.1 | Improving/ Not meeting target |
| Deck Area of NHS Bridges in Poor Condition - CAMPO | | 2 | 8.8 | 7.6 | 7.7 | Improving/ Not meeting target |

CAMPO established its own targets for the bridge performance measures.

^{*}The State adjusted its 4-year target downward.

System Performance: Reliability Conditions 2017-2019



| Measure | State Target (percent) | CAMPO Target (percent) | Performance (percent) | | | Trend / Target Achievement |
|--|------------------------------|------------------------------|--------------------------|------|------|-------------------------------|
| | 4-yr | 4-yr | 2017 | 2018 | 2019 | |
| Person-Miles Traveled that are Reliable (Interstate) - State | 82 | | 82.2 | 82.4 | 83.5 | Improving/ Meeting target |
| Person-Miles Traveled that are Reliable (Interstate) - CAMPO | | 99 | 100 | 100 | 100 | Meeting target |
| Person-Miles Traveled that are Reliable (Non-interstate) - State | 82.5 | | 86.8 | 88 | 88.9 | Improving/ Meeting target |
| Person-Miles Traveled that are Reliable (Non-interstate) - CAMPO | | 80 | 84.8 | 88 | 93 | Improving/ Meeting target |

CAMPO established its own targets for these reliability performance measures.

System Performance: Freight Reliability Conditions 2017-2019



| Measure | State Target (percent) | CAMPO Target (percent) | Performance (percent) | | | Trend / Target Achievement |
|--|------------------------------|------------------------------|--------------------------|------|------|--------------------------------|
| | 4-yr | 4-yr | 2017 | 2018 | 2019 | |
| Truck Travel Time Reliability Index (Interstate) - State | 1.56 | | 1.48 | 1.58 | 1.53 | Challenging/ Meeting target |
| Truck Travel Time Reliability Index (Interstate) - CAMPO | | 1.2 | 1.13 | 1.15 | 1.15 | Improving/ Meeting target |

CAMPO established its own target for the freight reliability performance measure.

Current TPM Activities for MPOs



- Adjusting federal performance targets for bridge, pavement, and reliability measures
 - Resources available on Planning Connections team site
 - MPO Memo/Next Steps
 - MPO Performance Summary
 - Detailed data provided for pavement and bridge data
 - Any adjustments must be made by March 15, 2021 and documented to OIPI and VDOT
- Establishing CY 2021 safety targets

Other TPM Requirements for MPOs



Transportation improvement program (TIP)

- MPOs must describe in the TIP how the program of projects contributes to achieving the MPO's performance targets in the MTP, linking investment priorities to those targets.
- VDOT and DRPT have provided template language to MPOs

Metropolitan transportation plan (MTP)

- MPOs must include a description of the individual performance measures and targets
- In addition to including performance measures and targets, MPOs must include a system performance report at the time of adoption. That report must include an evaluation of system performance with respect to the performance targets.

Questions?

