

Memorandum

To: MPO Committee Members
From: Sandy Shackelford, Director of Planning & Transportation
Date: January 10, 2023
Reference: Charlottesville-Albemarle MPO Performance Targets

Purpose:

The Moving Ahead for Progress in the 21st Century Act, MAP-21, signed into law in 2012, established requirements for states to develop performance measures that would align with nationally established performance goals and be used to direct resources in projects that support the achievement of the national goals, which are listed below.

Table 1. National Performance Goals

| Goal area | National Goal |
|--|--|
| Safety | To achieve a significant reduction in traffic fatalities and serious injuries on all public roads |
| Infrastructure condition | To maintain the highway infrastructure asset system in a state of good repair |
| Congestion reduction | To achieve a significant reduction in congestion on the National Highway System |
| System reliability | To improve the efficiency of the surface transportation system |
| Freight movement and economic vitality | To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development |
| Environmental sustainability | To enhance the performance of the transportation system while protecting and enhancing the natural environment |
| Reduced project delivery delays | To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices |

The U.S. Secretary of Transportation, in consultation with States, MPOs and other stakeholders, establishes performance measures in the following areas:

- Pavement condition on the Interstate System and on remainder of the National Highway System (NHS)
- Performance of the Interstate System and the remainder of the NHS
- Bridge condition on the NHS

- Fatalities and serious injuries—both number and rate per vehicle mile traveled--on all public roads
- Traffic congestion
- On-road mobile source emissions
- Freight movement on the Interstate System

Within one year of the DOT final rule on the established performance measures, States must establish their performance targets in support of those measures. Within 180 days of the States' establishment of their targets, MPOs are required to also establish performance targets that support the State and National targets where applicable.

Background:

In establishing the MPO's performance targets, the MPO is committing to pursuing projects and objectives that support the adopted targets. Because VDOT maintains the majority of the transportation infrastructure and sets priorities for ongoing infrastructure maintenance and repair and establishes the prioritization process for approving new transportation infrastructure, the MPO has historically adopted the state's targets. The targets are developed using a data-driven process.

Safety Performance Targets

The safety targets are established annually. Based on the projected safety outcomes developed using the state's model-based approach, the targets that the state has set indicate that the number of fatalities will continue to increase and that the number of serious injuries will show a very minor decline, reflecting almost stagnant change from previous years.

In response to these anticipated outcomes, the Commonwealth Transportation Board has adopted aspirational performance goals reflecting the stated goals of the 2022-2026 Strategic Highway Safety Plan of reducing fatalities and serious injuries by two percent per year and directing the Office of Intermodal Planning & Investment, VDOT, and the Department of Motor Vehicles to evaluate and identify actionable strategies to improve safety performance and evaluate how such strategies will help to achieve the aspirational safety performance goals.

VDOT has provided a workbook to assist the MPOs in understanding the local trends in developing and establishing safety targets. Regardless of the safety target that is adopted for the Charlottesville-Albemarle MPO area, prioritizing projects that promote safe travel has been and will continue to be of the utmost importance. The MPO continues to pursue projects that will promote safe travel through our regional network, and is actively seeking resources to establish local strategies to establish a more comprehensive approach in improving safety outcomes such as the submission of a Safe Streets and

Roads for All Grant and through coordination with the state’s Highway Safety Improvement Program to better understand and respond to factors that contribute to unsafe outcomes.

Table 2. Safety Performance Targets showing difference in expected outcomes between existing local trends and statewide trends.

| Safety Performance Targets | Adopted 2-year State Targets (2023) | CA-MPO 2023 Projections Based on Trends | CA-MPO 2023 Projections with State Targets |
|---|-------------------------------------|---|--|
| Percentage change fatalities | 3.69% | -0.30% | 3.69% |
| Number of fatalities | 1012 | 9 | 10 |
| Fatality rate | 1.216 | 0.76 | 0.854 |
| Percentage change serious injuries | -0.52% | -5.80% | -0.52% |
| Number of serious injuries | 7465 | 108 | 121 |
| Serious injury rate | 8.971 | 9.204 | 10.265 |
| Percentage change non-motorized fatalities + serious injuries | | -1.20% | -0.86% |
| Number of non-motorized fatalities + serious injuries | | 13 | 13 |
| Numbers in red indicate the actual targets that would be adopted based on the MPO adopting the state’s established safety performance targets. Numbers in green indicate the actual targets that would be adopted based on the MPO adopting safety performance targets that reflect more localized trends. | | | |

Infrastructure Condition and System Performance Targets

The Infrastructure Condition and System Performance targets are established for a four-year performance period and includes bridge and pavement condition, as well as highway and freight reliability. Because the Charlottesville-Albemarle MPO is not in a non-containment area, the air quality and traffic congestion measures are not currently applicable to us.

Table 3. Asset and System Condition Targets

| Asset and System Conditions Targets | CA-MPO 2021 Actual | Adopted 4-year State Targets (2025) | Proposed CA-MPO Targets |
|---|--------------------|-------------------------------------|-------------------------|
| Percentage of deck area of bridges in good condition (NBI on NHS) | 10.8 | 25.1 | 25.1 |
| Percentage of deck area of bridges in poor condition (NBI on NHS) | 7.8 | 3.6 | 3.6 |
| Percentage of pavement in good condition (Interstate) | 73.5 | 45 | 45 |
| Percentage of pavement in poor condition (Interstate) | 0 | 3 | 3 |

| | | | |
|--|------|------|------|
| Percentage of pavement in good condition (NHS) | 28.7 | 25 | 25 |
| Percentage of pavement in poor condition (NHS) | 0.1 | 5 | 5 |
| Percentage of person-miles traveled that are reliable (Interstate) | 100 | 85 | 85 |
| Percentage of person-miles traveled that are reliable (Non-Interstate NHS) | 90.7 | 88 | 88 |
| Truck travel time reliability index (Interstate) | 1.15 | 1.64 | 1.64 |

Transit Asset Management Targets

The Department of Rail and Public Transportation (DRPT) has provided guidance on the establishment of Transit Asset Management performance targets, and you can refer to the background information included in your packet for additional information. For smaller transit agencies such as the ones operating in the CA-MPO area, DRPT sponsors a Tier II Asset Management Plan that establishes statewide performance measures in the required categories explained in Table 4.

Table 4. TAM Performance Measures by Asset Category

| Asset Category | Relevant Assets | Measure | Measure Type | Desired Direction |
|-----------------------|---|---|---------------------|--------------------------|
| Equipment | Service support, maintenance, and other non-revenue vehicles | Percentage of vehicles that have met or exceeded their ULB | Age-based | Minimize percentage |
| Rolling Stock | Buses, vans, and sedans; light and heavy rail cars; commuter rail cars and locomotives; ferry boats | Percentage of revenue vehicles that have met or exceeded their ULB | Age-based | Minimize percentage |
| Infrastructure | Fixed guideway track | Percentage of track segments with performance (speed) restrictions, by mode | Performance-based | Minimize percentage |
| Facilities | Passenger stations, parking facilities, administration and maintenance facilities | Percentage of assets with condition rating lower than 3.0 on FTA TERM Scale | Condition-based | Minimize percentage |

The Tier II Group Plan targets are listed in Table 5.

Table 5. TAM Targets for rolling stock and facilities: Percentage of Revenue Vehicles that have met or exceeded their ULB by Asset Type

| Asset Category - Performance Measure | Asset Class | FFY2022 |
|---|---------------------------------------|---------|
| Revenue Vehicles | | |
| Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB) | AB - Articulated Bus | 5% |
| | BU - Bus | 15% |
| | CU - Cutaway | 10% |
| | MV-Minivan | 20% |
| | BR - Over-the-Road Bus | 15% |
| | VN - Van | 20% |
| Equipment | | |
| Age - % of vehicles that have met or exceeded their Useful Life Benchmark (ULB) | Non-Revenue/Service Automobile | 30% |
| | Trucks and other Rubber Tire Vehicles | 30% |
| Facilities | | |
| Condition - % of facilities with a condition rating below 3.0 on the FTA TERM Scale | Administrative Facilities | 10% |
| | Maintenance Facility | 10% |
| | Passenger Facilities | 15% |
| | Parking Facilities | 10% |

Recommendation:

The MPO Technical Committee needs to make a recommendation on the Performance Targets to be adopted to the Policy Board.

It is the staff recommendation that the CA-MPO Policy Board adopts the state performance targets in all categories to include Safety, Infrastructure Condition and System Performance, and Transit Asset Management.

Alternatively, the Policy Board could adopt the Safety Performance Targets based on the more regionally identified trends, understanding that the regional initiatives are still largely driven by the statewide approach to addressing safety factors.

If there are any questions or comments, please contact Sandy Shackelford at sshackelford@tjpd.org.