

Memorandum

To: MPO Committee Members
From: Sandy Shackelford, Director of Planning & Transportation
Date: February 21, 2024
Reference: Charlottesville-Albemarle MPO Safety 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 generally 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 engaged in identifying local strategies to support a more comprehensive approach in improving safety outcomes through such efforts as the development of a multi-jurisdictional Safety Action Plan through the Safe Streets and Roads for All Grant, coordination

with the state’s Highway Safety Improvement Program to better understand and respond to factors that contribute to unsafe outcomes, and consideration of SMART SCALE project applications that have significant safety benefits.

The workbook provided by VDOT provides regionally specific data to demonstrate what influences different potential targets. Using a long-term trendline over a thirteen year period yields a predicted positive change in the number of projected fatalities of 1.01%. However, looking at a more recent five-year trendline would demonstrate a lower number of projected fatalities based on the reduction in the number of fatalities observed in 2022, which would carry a greater weight in determining the trend over the shorter time span.

Table 2. Short-term and long-term trends for the Charlottesville-Albemarle MPO area.

Projected Five-Year Average Based on Historical Trendline	Description	RECENT TRENDLINE				LONG-TERM TRENDLINE			
		2022	2023	2024	Average Percent Change	2022	2023	2024	Average Percent Change
Notes: This table projects the five-year and thirteen-year average for future years based on the historical trendline.	Fatalities	13	14	10	-10.07%	10	10	10	1.01%
	Fatality Rate	1.118	1.211	0.839	-11.18%	0.837	0.838	0.839	0.13%
	Serious Injuries	143	159	173	8.78%	143	97	94	-3.00%
	Serious Injury Rate	12.524	14.019	15.228	8.63%	12.524	8.223	7.841	-4.65%

*A positive value represents an increase and a negative value represents a reduction in five-year averages from 2022 to 2024

In addition to safety performance targets that reflect the state-adopted targets, as well as the targets that would be established using the recent and long-term trendlines, MPO staff has prepared a fourth option based on aspirational targets that are reflective of the safety commitments that are being prepared in support of the TJPDC’s Safe Streets and Roads for All Comprehensive Safety Action Plan. The goals that have been approved by Albemarle County and are being prepared for consideration by the City of Charlottesville include a reduction of crash-related fatalities and serious injuries by 50% by the year 2045. This represents an annual reduction of approximately 2% to reach that goal. Table 3 summarizes the targets that would be established under each of those scenarios.

Table 3. Safety Performance Targets showing difference in expected outcomes between existing local trends and statewide trends.

Safety Performance Targets	CA-MPO 2024 Projections Based on Aspirational Targets	CA-MPO 2024 Projections Based on Long-term Trendline	CA-MPO 2024 Projections Based on Recent Trendline	CA-MPO 2024 Projections with State Targets
Percentage change fatalities	-2.00%	1.01%	-10.07%	4.01%
Number of fatalities	11	12	8	13
Fatality rate	0.962	1.054	0.744	1.151
Percentage change serious injuries	-2.00%	-3.00%	8.63%	-0.48%
Number of serious injuries	137	135	169	142
Serious injury rate	12.106	11.860	14.874	12.484
Percentage change non-motorized fatalities + serious injuries	-2.00%	-0.3%	7.3%	2.21%
Number of non-motorized fatalities + serious injuries	15	16	20	17
<p>Numbers in orange indicate the actual targets that would be adopted based on the MPO adopting safety performance targets that reflect aspirational safety performance targets.</p> <p>Numbers in green indicate the actual targets that would be adopted based on the MPO adopting safety performance targets that reflect more localized long-term trends.</p> <p>Numbers in blue indicate the actual targets that would be adopted based on the MPO adopting safety performance targets that reflect more localized recent trends.</p> <p>Numbers in red indicate the actual targets that would be adopted based on the MPO adopting the state's established safety performance targets.</p>				

Recommendation:

The MPO Technical Advisory Committee recommended adopting the aspirational targets as proposed in Table 3. Alternatively, the Policy Board may choose to adopt targets associated with one of the other three target scenarios presented in the table.

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