

Memorandum

To: CA-MPO Committee Members
From: Gorjan Gjorgjievski, Regional Planner II
Date: December 18, 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 to 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, Metropolitan Planning Organizations (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 U.S. Department of Transportation's 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 the Virginia Department of Transportation (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. However, the MPO does have the discretion to adopt targets that are different from the state's. 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 (CTB) has adopted aspirational performance goals reflecting the stated goals of the 2022-2026 Strategic Highway Safety Plan to reduce fatalities and serious injuries by two percent (2%) per year and to direct the Office of Intermodal Planning and Investment (OIPI), VDOT, and the Department of Motor Vehicles (DMV) 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 to develop and establish 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 1.80%. The trendline shows that the fatality rates are unfortunately increasing in the five-year average, but serious injuries are predicted to go down. This indicates that while fewer crashes may result in serious injuries, the overall severity of incidents is increasing, likely due to factors such as vehicle speeds, increased vulnerability of road users, driver behavior, and evolving crash dynamics, all of which highlight the urgent need for targeted safety interventions.

Table 2. Short-term and long-term trends of motorized fatalities and serious injuries for the Charlottesville-Albemarle MPO area.

Projected Five-Year Average Based on Historical Trendline	Description	RECENT TRENDLINE				LONG-TERM TRENDLINE			
		2023	2024	2025	Average Percent Change	2023	2024	2025	Average Percent Change
Notes: This table projects the five-year average for future years based on the historical trendline.	Fatalities	14	15	16	8.20%	11	11	11	1.80%
	Fatality Rate	1.254	1.362	1.471	8.33%	0.934	0.858	0.957	1.69%
	Serious Injuries	149	163	174	6.87%	149	109	107	-1.30%
	Serious Injury Rate	12.730	14.158	15.046	6.27%	12.730	9.259	9.019	-2.59%

*A positive value represents an increase, and a negative value represents a reduction in five-year averages from 2023 to 2025

Table 3. Short-term and long-term trends of non-motorized fatalities and serious injuries for the Charlottesville-Albemarle MPO area.

Projected Five-Year Average Based on Historical Trendline	Description	RECENT TRENDLINE				LONG-TERM TRENDLINE			
		2023	2024	2025	Average Percent Change	2023	2024	2025	Average Percent Change
Notes: This table projects the five-year average for future years based on the historical trendline.	Non-Motorized Fatalities + Serious Injuries	19	21	22	7.3%	15	15	15	0.5%

*A positive value represents an increase, and a negative value represents a reduction in five-year averages from 2023 to 2025

Table 4. Safety Performance Targets showing the difference in expected outcomes between existing local trends and statewide trends.

Safety Performance Targets	CA-MPO 2025 Projections Based on Aspirational Targets	CA-MPO 2025 Projections Based on Long-term Trendline	CA-MPO 2025 Projections Based on Recent Trendline	CA-MPO 2025 Projections with State Targets
Percentage change fatalities	-2.00%	1.80%	8.20%	0.00%
Number of fatalities	12	13	16	12
Fatality rate	0.935	1.048	1.258	0.993
Percentage change serious injuries	-2.00%	-1.30%	6.87%	0.00%
Number of serious injuries	143	145	170	149
Serious injury rate	11.463	11.627	13.631	11.935
Percentage change non-motorized fatalities + serious injuries	-2.00%	0.5%	7.3%	0.00%
Number of non-motorized fatalities + serious injuries	17	18	22	18
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. 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. 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. Numbers in red indicate the actual targets that would be adopted based on the MPO adopting the state's established safety performance targets.				

Recommendation:

On December 10, 2024, the CA-MPO Tech Committee recommended that the CA-MPO Policy Board adopt the aspirational safety targets, reaffirming the CA-MPO's commitment to safety and pursuit of project funding.

Alternatively, the Policy Board may choose to adopt targets associated with either the regional long-term trendline, the recent trendlines, or the state's safety targets, as referenced in Table 4.

If there are any questions or comments, please contact Gorjan Gjorgjievski at gorjang@tjpd.org.