DCHC MPO Safety PM Target Setting

As DCHC MPO considers approaches to setting Safety Performance Management (PM) targets, the first step is to decide whether to continue to adopt the Safety PM targets set by NCDOT, or create and adopt Safety PM targets specific to DCHC MPO while maintaining support for statewide safety goals.

The MPO's consultants assisting with its Safety Action Plan developed three potential approaches to target setting. The section below summarizes those approaches.

Approaches to Safety PM Target Setting

Goal-Driven

A goal-driven approach bases Safety PM targets on future goals, which often align with Vision Zero and Strategic Highway Safety Plan goals. States and MPOs will choose a goal-driven approach when they believe zero is the only acceptable safety performance target. **This approach is the least common of the three on a national scale.**

Data-Driven

A data-driven approach sets targets using model projections, programmed projects, recent data trends, and other safety efforts and their predicted outcomes. States and MPOs will use a data-driven approach when they want to set achievable targets. Data-driven approaches typically focus on crash and traffic trends, but will sometimes consider multiple data sources including behavioral, economic, travel demand, weather, and demographic data.

Hybrid

A hybrid approach considers both future goals and recent data trends to set Safety PM targets. This approach is data-driven and achievable, and inclusive of the overarching goal of zero fatalities and serious injuries. States and MPOs that may lack the data and resources to base their targets solely on data may choose a hybrid approach. **This approach is the most common of the three.**

Summary Matrix

To help summarize the differences between the methods, Table 1 provides a side-by-side comparison of the methods. The table includes data related to:

- Potential benefits
- Potential consequences
- Data needs
- Data needs source
- <u>Satisfy SS4A Requirements</u>: An official public commitment to an eventual goal of zero roadway fatalities and serious injuries. The commitment must include a goal and timeline for eliminating roadway fatalities and serious injuries achieved through one, or both, of the following:
 - The target date for achieving zero roadway fatalities and serious injuries, OR
 - An ambitious percentage reduction of roadway fatalities and serious injuries by a specific data with an eventual goal of eliminating roadway fatalities and serious injuries.
- Level of effort (LOE): A rough estimate of the resources required for the analysis. Low is 8-16 hours versus high is 80+ hours.
- Ranking in order of complexity: A 1-5 scale of how complex it would be to implement and communicate the approach considering staff time, data availability, and maintenance.

Table 1. Target Setting Methods Matrix

Approaches	Potential Benefits	Potential Consequences	Data Needs	Data Needs Source	Satisfy SS4A Requirements	LOE	Rank Order for Complexity
Data-Driven Approach	Target can be justified using trend analysis.	Targets may indicate no change in safety or an increase in fatalities or serious injuries, which can be politically and philosophically challenging.	At least 10 years of fatal and serious injury data. Exposure and other data as desired to inform trend analysis.	NCDOT (or other crash data source). Census data.	No	Medium	3
Goal-Driven Approach	Target is reflective of the MPO's philosophy.	Target may disregard recent trends and thus not reflect reality.	At least 10 years of fatal and serious injury data.	NCDOT (or other crash data source).	Yes (if significant reduction or zero-based)	Low	2
Hybrid Approach	Target incorporates recent data trends while also reflecting the MPO's philosophy.	Targets may not be realistic based on recent trends. Additionally, target may be politically or philosophically challenging.	At least 10 years of fatal and serious injury data. Exposure and other data as desired to inform trend analysis.	NCDOT (or other crash data source). Census data.	Yes (if significant reduction or zero-based)	Medium	4
NCDOT Approach	Target aligns with State target- setting efforts.	The target does not necessarily reflect the expectations of the MPO.	At least 10 years of fatal and serious injury data. NCDOT Targets	NCDOT (or other crash data source).	Yes	Low	1

Project Team Recommendations

Selecting an approach that differs from NCDOT will require more time for DCHC MPO to develop, maintain, and report its targets. However, if DCHC MPO would like to set targets that are unique to their organization and are aligned with its goals, the project team recommends that DCHC MPO consider adopting a **hybrid approach**.

The hybrid approach will allow DCHC MPO to select a targeted reduction rate based on expected safety performance driven by recent trends, grounding the targets in reality while establishing motivation to drive fatalities and serious injuries down to meet a goal. Additionally, while the technical aspects of the methodology may be challenging to communicate to other stakeholders, it is easy to explain the bigger picture of the approach.