Agenda Item No. 9.0



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MEMORANDUM

To: CMAP Board

From: CMAP Staff

Date: January 3, 2019

Re: 2019 Regional Highway Safety Performance Targets

State departments of transportation (DOTs) and metropolitan planning organizations (MPOs) are required to establish quantitative highway safety performance targets on an annual basis and use a set of performance measures to track progress toward meeting long-term targets for traffic safety.¹

Each August, State DOTs must establish their highway safety targets in conjunction with submission of the Highway Safety Improvement Program report to Federal Highway Administration (FHWA). MPOs have 180 days, until the subsequent February, to set their targets. IDOT set its annual safety performance measure (Safety PM) in August 2018 and the MPO Policy Committee and CMAP Board must act by February 2019 to set the region's targets. In order to meet this requirement, the CMAP Board will need to affirm the safety targets at the January 2019 meeting.

This memorandum discusses why CMAP staff recommends that the Board and MPO support IDOT's 2019 safety targets and requests approval by the CMAP Board. By agreeing to support IDOT's safety targets, the MPO is not agreeing to any specific share of the decrease in fatalities and serious injuries. Instead it is agreeing to integrate the targets as goals in the metropolitan planning process and to plan and program projects that help meet the State's targets. The selection of the target does not directly affect the allocation of funding at either the state or MPO level. However, the targets selected for different measures should ultimately reflect funding allocation priorities among other factors.

The remainder of this memo provides background on the Highway Safety PM rule, reviews IDOTs 2019 statewide safety targets, the staff recommendation to support of the state's 2019 safety targets, and next steps.

¹ The safety performance measure (Safety PM) requirements are set out in the Federal Highway Administration's National Performance Management Measures: Highway Safety Improvement Program final rule.

Background on Highway Safety Performance Management Rule

The Highway Safety PM requires state DOTs and MPOs to establish safety targets on all public roads for: (1) the number of fatalities, (2) the rate of fatalities per 100 million vehicle miles traveled (VMT), (3) the number of serious injuries, (4) the rate of serious injuries per 100 million VMT, and (5) the number of non-motorized fatalities and non-motorized serious injuries. Injuries and fatalities from traffic crashes vary considerably from year to year due to numerous factors, to account for this the Safety PM requires the targets to be set as five-year rolling averages which smooths the data for large changes. The 2019 target is the desired value of the 2015-2019 rolling average for each of the measures.

The actual target should be set to what the state believes it can achieve;² the rule does not specify or provide guidance for how ambitious the targets should be. Each year the FHWA evaluates whether states have met, or made significant progress toward meeting, their targets. FHWA will consider states to be in compliance if they have met or improved from the baseline at least four of the five required performance targets.

MPOs have the option to support any or all of the state's safety targets, develop its own safety targets for any or all individual measures. The MPO is also required to integrate the Safety PM into its planning process by including it in the metropolitan transportation plan (MTP), in CMAP's case, ON TO 2050. In addition, the MPO must show how investments in the transportation improvement program (TIP) help achieve the Highway Safety PM targets.

IDOT 2019 safety performance targets

IDOT evaluated two methods to set the state's targets, a least squares trend line which approximates the actual trends, and a policy-based two percent annual reduction in the five-year average. IDOT selected the method that returns the greatest decrease in the five-year average for each measure. Because of a back log for processing crash data, IDOT had to estimate the 2013-2017 five-year average for serious injuries and non-motorized serious injuries. For 2019, all targets were set using the policy-based two percent annual reduction in the five-year average.

Table 1. 2019 IDOT Statewide Safet	v Performance Targets
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IDOT Safety Performance	2009-	2010-	2011-	2012-	2013-	2014-	2015-
Target	2013	2014	2015	2016	2017	2018 ²	2019 ²
Total Fatalities -Illinois	941.0	943.0	957.0	989.4	1,017.8	997.4	977.5
Fatality Rate VMT -Illinois	0.90	0.90	0.91	0.94	0.96	0.94	0.92
Total Serious Injuries -	12,454.8	12,203.2	12,245.8	12,168.6	12,210.9	11,966.7	11,727.4
Illinois ¹							

² The annual safety targets are designed to be interim targets that agencies should use to track their performance toward meeting long-term goals. According to FHWA guidance, state DOTs and MPOs are strongly discouraged from using aspirational goals, such as Towards Zero Deaths (TZD), when setting safety targets. While the FHWA agrees with a zero-fatality goal, and even supports the TZD initiative, the annual safety targets should enable agencies to tract progress towards their long-term goals. Setting reasonable targets allows agencies to see how changes in policy or funding have an effect on traffic safety, and if agencies are not meeting goals, allow them to alter how they approach safety.

IDOT Safety Performance	2009-	2010-	2011-	2012-	2013-	2014-	2015-
Target	2013	2014	2015	2016	2017	2018 ²	2019 ²
Serious Injury Rate per 100 million VMT -Illinois ¹	11.9	11.7	11.7	11.5	11.5	11.3	11.0
Non-Motorized Serious Injuries and Fatalities - Illinois ¹	1,496.2	1,468.4	1,515.8	1,499.4	1,490.7	1,460.9	1,431.7

¹⁻²⁰¹³⁻²⁰¹⁷ average estimated

Because of its outsized share of the state's population and multimodal transportation system, the CMAP region greatly influences the safety performance trends at the statewide level. The region accounts for a little over 40 percent and 50 percent of the state's five-year average for fatalities and serious injuries, respectively. When it comes to non-motorized fatalities and serious injuries, the CMAP region accounts for roughly 75 percent of the state's total. This is due to the high number of pedestrians and pedal-cyclists compared to the rest of the state.

Table 2. 2019 CMAP Share of IDOTs Safety Performance Targets

	2009-	2010-	2011-	2012-	2013-	2014-	2015-
	2013	2014	2015	2016	2017	2018 ²	2019 ²
Total Fatalities-CMAP	399.8	401.4	405.8	425.8	443.4	434.5	425.8
Fatality Rate VMT-CMAP	0.68	0.69	0.69	0.72	0.75	0.73	0.72
Total Serious Injuries- CMAP ¹	6,582.4	6,502.2	6,642.8	6,662.8	N/A	6,529.5	6,399.0
Serious Injury Rate per 100 million VMT-CMAP ¹	11.2	11.1	11.4	11.3	N/A	11.1	10.9
Non-Motorized Serious Injuries and Fatalities- CMAP ¹	1,139.4	1,115.0	1,158.8	1,149.0	N/A	1,126.0	1,103.5

¹⁻²⁰¹³⁻²⁰¹⁷ average not estimated

Recommendation for 2019 safety performance targets

Staff recommends that the MPO support IDOT's policy-driven 2019 safety targets. IDOT's aggressive safety targets reflect the need for, and a commitment to, reducing fatal and serious injury crashes. The region has made significant progress in reducing fatalities and serious injuries through engineering, education, and technology, but the region still faces significant safety challenges in light of recent increases in non-motorized serious injuries and fatalities, and overall traffic fatalities. By supporting IDOT's targets, the region will have a unified goal that supports making all roads in the region safer for all users. The CMAP Transportation Committee approved staff's recommendation to support the IDOT's 2019 safety targets and the Regional Transportation Operations Committee reviewed this position favorably. Given that the targets are set annually, CMAP can readily revisit target selection methodology each year.

²⁻Two percent reduction in five-year average

²⁻Two percent reduction in five-year average

Next steps

To facilitate progress on regional and state safety targets, CMAP has taken steps to incorporate highway safety into its programming decisions and work plan. The Congestion Mitigation and Air Quality and Surface Transportation Program-Local Shared Fund programs include a project location based safety score based on IDOT's safety road index (SRI). In addition, CMAP completed a traffic safety white paper that provided a number of recommendations on how CMAP can incorporate highway traffic safety into its work.

Following discussion and approval by the CMAP Board and MPO Policy Committee, staff will prepare a memo informing IDOT that the CMAP MPO agrees to support the 2019 statewide safety targets. CMAP is also required to indicate how the TIP makes progress toward achieving the safety performance targets, the technical approach of how to accomplish this requirement is currently under development.

ACTION REQUESTED: Approval

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