



MEMORANDUM

To: CMAP Board

From: CMAP Staff

Date: January 2, 2020

Re: 2020 Regional Traffic Safety Performance Targets

Under the federal Safety Performance Management (Safety PM) Rule, state departments of transportation (DOTs) and metropolitan planning organizations (MPOs) have responsibilities to set performance targets for a variety of transportation performance measures. For traffic safety, DOTs are required to establish quantitative highway safety performance targets on an annual basis and track progress toward meeting their targets for traffic safety.¹ MPOs have the choice to affirm the state's targets or to set their own quantitative targets.

Each year, the process begins with State DOTs establishing their highway safety targets as part of their Highway Safety Improvement Program report to Federal Highway Administration (FHWA). MPOs have 180 days, from the date the State DOT submits its targets to FHWA, to set their own regional targets or agree to support the State DOT targets. The Illinois Department of Transportation (IDOT) set its annual safety performance targets in July 2019; as a result the MPO Policy Committee and CMAP Board must act by January 2020.

This memorandum discusses why CMAP staff recommends that the Board and MPO support IDOT's 2020 safety targets. 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 should ultimately reflect funding allocation priorities among other factors.

The remainder of this memo provides background on the Safety PM rule, reviews IDOT's 2020 statewide safety targets, the staff recommendation to support of the state's 2020 safety targets, and next steps.

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

Background on the Safety Performance Management Rule

The Safety PM rule is part of the overall federal Transportation Performance Management (TPM) program and 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 2020 target is the desired value of the 2016-2020 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, in CMAP's case, ON TO 2050. In addition, the MPO must show how investments in the transportation improvement program (TIP) help achieve the Safety PM targets.

IDOT 2020 traffic 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 backlog for processing crash data, IDOT had to estimate the 2014-2018 five-year average for serious injuries and non-motorized serious injuries. For 2020, all targets were set using the policy-based two percent annual reduction in the five-year average.

Table 1. 2020 IDOT Statewide Traffic Safety Performance Targets

	Actual					Proposed 2020 target
	2010- 2014	2011- 2015	2012- 2016	2013- 2017	2014- 2018	2016-2020 ²
IDOT Safety Performance Target						
Total Fatalities -Illinois	943.0	957.0	989.4	1,017.6	1,025.6	985.0
Fatality Rate VMT -Illinois	0.90	0.91	0.94	0.96	0.95	0.91

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 track 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.

	Actual					Proposed 2020 target
Total Serious Injuries - Illinois ¹	12,203.2	12,245.8	12,168.6	12,111.8	12,149.8	11,668.7
Serious Injury Rate per 100 mil. VMT -Illinois ¹	11.7	11.7	11.5	11.4	11.2	10.8
Non-Motorized Serious Injuries and Fatalities - Illinois ¹	1,468.4	1,515.8	1,498.8	1,526.8	1,516.2	1,456.2

1 – 2014-2018 average estimated for serious injuries and non-motorized serious injuries and fatalities.

2 - 2% annual reduction in 5-year average.

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. 2020 CMAP Share of IDOTs Traffic Safety Performance Targets

	Actual					Proposed 2020 target
	2010- 2014	2011- 2015	2012- 2016	2013- 2017	2014- 2018	2016-2020 ²
Total Fatalities -CMAP	401.4	405.8	425.8	443.8	452.6	434.7
Fatality Rate VMT -CMAP	0.69	0.69	0.72	0.75	0.76	0.72
Total Serious Injuries - CMAP ¹	6,502.2	6,642.8	6,662.8	6,720.8	6,733.0	6,466.3
Serious Injury Rate per 100 mil. VMT -CMAP ¹	11.1	11.4	11.3	11.3	11.2	10.8
Non-Motorized Serious Injuries and Fatalities - CMAP ¹	1,115.0	1,158.8	1,149.0	1,182.0	1,181.3	1,134.5

1 - 2014-2018 average estimated for serious injuries and non-motorized serious injuries and fatalities.

2 - 2% annual reduction in 5-year average.

Recommendation for 2020 traffic safety performance targets

Staff recommends that the Board and MPO support IDOT’s policy-driven 2020 traffic 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 Chicago area 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. In November 2019, the CMAP Transportation Committee approved staff’s recommendation to support the IDOT’s 2020 safety targets. The Transportation Committee discussed how the region’s transportation

system operators are addressing safety and requested CMAP staff to develop a longer term strategy to help achieve the traffic safety targets. Given that the targets are set annually, CMAP can readily revisit target selection methodology each year.

CMAP local safety analysis and implementation

To facilitate progress on regional and state highway safety targets, CMAP has incorporated highway safety into its programming decisions and work plan. The CMAQ and STP-L Shared Fund programs had safety incorporated into project evaluations and CMAP staff encouraged the eleven Council of Mayors STP project evaluation systems to include safety as a measure. In addition to programming activities, CMAP staff are engaged in many safety initiatives, such as IDOT's Traffic Records Coordinating Committee and the City of Chicago's Vision Zero committees. CMAP recently completed a project to help IDOT catch up on processing crash records to address a multi-year backlog. CMAP is also exploring the usRAP software that identifies safety deficiencies in roadway characteristics. CMAP has also completed an analysis of safety related questions in the CMAP municipal survey and is seeking additional ways to encourage safety program implementation.

Next steps

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 2020 statewide safety targets. CMAP is also required to indicate how the Transportation Improvement Program (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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