



MEMORANDUM

To: CMAP Board

From: CMAP Staff

Date: January 3, 2018

Re: 2018 regional safety performance targets

Established under MAP-21 and continued in the FAST Act, state departments of transportation (DOTs) and metropolitan planning organizations (MPOs) are given separate responsibility for establishing performance targets and using a set of performance measures to track progress toward meeting those targets for a variety of transportation areas including safety, bridge and pavement condition, air quality, freight movement, and system reliability. CMAP staff developed a [memo](#) outlining these requirements. 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.

To fulfill the requirements of the Safety PM, the MPO Policy Committee and CMAP Board must set 2018 safety targets by February 2018, no less than 180 days after IDOT set its targets (in August 2017). The Board and MPO have the option to set quantitative regional targets or support the statewide targets. CMAP staff recommends that the Board and MPO support the state's targets. Both the Transportation Committee and the Regional Transportation Operations Coalition (RTOC) have reviewed this position favorably, but because of timing, the Transportation Committee could not formally vote to recommend it to the Policy Committee.

The remainder of this memo provides background on the safety PM rule, surveys how other states and MPOs are approaching their requirements, and reviews the options considered before recommending support of the state's 2018 safety targets.

Background on Safety Performance Management Rule (Safety PM)

The Safety PM requires state DOTs and MPOs to establish safety targets as five-year rolling averages 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. Thus, the form of the 2018 target is the desired value of the 2014-2018 average

for each of the measures. Injuries and fatalities from traffic crashes vary considerably from year to year due to numerous factors, and the five-year average is meant to smooth large changes.

State DOTs and MPOs must adopt annual targets for each safety measure, with state DOTs required to establish quantitative targets. The actual target should be set to what the state believes it can achieve;¹ the rule does not specify or provide guidance for how ambitious the targets are to be. Each year the FHWA is to evaluate 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.

By contrast, MPOs can either choose to set quantitative targets or commit to help implement the state's target by planning for and programming safety projects. The MPO has the option to support any or all of the state's safety targets or develop its own safety targets for any or all individual measures. State DOTs are to establish their targets by the time the annual Highway Safety Improvement Program report is due to FHWA at the end of August 2017. MPOs have until the end of February 2018 to establish their targets. After that, MPOs are to update their safety targets each year in a report to the state DOT. The MPO will also need to integrate the Safety PM into its planning process by including it in the metropolitan transportation plan (MTP), that is, ON TO 2050. In addition, the MPO is required to show how investments in the transportation improvement program (TIP) help achieve the Safety PM targets.

How other states and MPOs are approaching safety targets

State DOTs were required to establish 2018 safety targets as part of their annual Highway Safety Improvement Program (HSIP) report to FHWA at the end of August 2017. States have adopted widely divergent targets, with some aiming for improvement and others expecting significant worsening of safety (Table 1). California DOT used a trend line to set its safety targets, which resulted in an increase in all five measures. Wisconsin DOT set its safety targets based on stipulating a percentage reduction. IDOT used two methods, a least squares trend line and a policy-based 2-percent annual reduction, to set the state's targets.

Table 1. 2018 safety performance targets for selected states (percent change in five-year rolling averages from baseline to the 2014 – 2018 safety target)

¹ 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 Towards Zero Deaths initiative, the annual safety targets are to be reasonable so agencies can track progress towards their long-term goals. Setting reasonable targets is expected to allow 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. The annual safety targets are designed to be interim targets that agencies should use to track their performance toward meeting long-term goals.

Performance Measure	New York	California	Texas	Iowa	Indiana	Missouri	Wisconsin	Illinois
Fatalities	-5.0%	12.0%	8.2%	6.5%	5.0%	2.9%	-2.0%	-4.0%
Serious Injuries	-6.0%	11.5%	6.7%	2.2%	4.1%	-6.2%	-5.0%	-4.7%
Non-Motorized	-1.0%	1.9%	14.2%	4.5%	0.6%	6.6%	-5.0%	-4.0%

A review of peer MPOs found similar variation. For instance, the staff of the Metropolitan Transportation Commission (MTC), the MPO for the San Francisco region, recommended supporting the state targets. At the Denver Regional Council of Governments (DRCOG), the Denver MPO, staff recommended establishing different targets. MPOs in the state of Illinois are likely to take different approaches as well. Staff at two downstate MPOs suggested they probably will vote to support IDOT’s targets, while staff at another indicated that the MPO is likely to choose more aggressive targets based on its current long-range transportation plan.

Regional safety performance target alternatives

As part of the committee process, staff developed a number of potential options CMAP can pursue for setting the Safety PM targets for the region. The original [memo](#) to the Transportation Committee describing these options includes charts corresponding to each.

1. **Agree to support IDOT’s targets.**
2. **Set targets based on regional annual trends.** This option would set the Safety PM targets as straight-line trends using annual regional crash and VMT data from the previous five years (2012-2016 for fatalities and 2011-2015 for serious injuries), similar to the method IDOT used for its targets, but using annual values rather than five-year averages.
3. **Achieve a 5-percent annual reduction.** This option assumes an annual five percent reduction for all five safety performance measures as a year-over-year reduction starting from the most recent data (2015 or 2016), rather than a reduction in the five-year rolling average.
4. **Seek to achieve Vision Zero targets in City of Chicago, and base remainder of region’s targets on IDOT reduction.** The Chicago Department of Transportation (CDOT) recently released a 2017 – 2019 action plan that aims to reduce fatalities and serious injuries from traffic crashes by 20 percent and 35 percent, respectively, by 2020 and eliminate both by 2026. This option supports the City’s Vision Zero Initiative by setting the targets based on the City achieving its goals and basing the remainder of the region’s targets on IDOT’s goals.

Recommendation for first-year 2018 safety performance targets

The Safety PM represents a major change in the way priorities are set and how progress is tracked in the federal transportation program. For CMAP and the state, the key value of the safety target-setting process is in demonstrating the appropriate commitment to improved safety for all road users. The region has made significant progress in decreasing the number of

traffic related fatalities in the region from 687 in 2000 to 470 in 2016. Yet the upward trend of both fatalities and serious injuries is worrisome.

Options 1 and 4 involve the MPO modeling its goals after two major stakeholders, IDOT and the City of Chicago. While it is not completely straightforward to compare the two approaches arithmetically, analysis suggest that regional targets based on either approach would be similar. Overall, options 1 and 4 are both aggressive in the face of trends. By contrast, option 2, the trend-based target, allows fatalities and serious injuries to increase. Given the importance of improving safety, it is not recommended that the region simply seek to maintain trends.

Staff recommends that the MPO support IDOT's 2018 safety targets. The IDOT safety targets are fairly aggressive due to the year-to-year fatality and serious injury reductions needed. Staff believes this is the best alternative for the first year of setting safety targets and shows a consistent approach to improving traffic safety. By supporting IDOT's targets the region will have a goal that supports the City of Chicago's Vision Zero Initiative as well. Given that the targets are to be set annually, CMAP can readily revisit target selection. Ideally IDOT and CMAP will coordinate more extensively on state target selection going forward.

Note that 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.

Next steps

Following discussion and approval by the CMAP Board and MPO Policy Committee in January, staff will inform IDOT that the CMAP MPO agrees to support the 2018 statewide safety targets. The MPO is required to set safety targets on annual basis and will return next year with another recommendation. CMAP is also required to indicate how the TIP makes progress toward achieving the safety performance targets, the technical approach to which CMAP will develop over the next few months.

It is worth noting that CMAP is preparing a regional safety paper that make recommendations for reducing fatalities and serious injuries through policy, infrastructure improvements, enforcement, and technology. Because behavioral change is the most important factor in safety improvement, greater emphasis will be needed on enforcement and education programs, as well as any supporting legislative or policy changes that are needed.

ACTION REQUESTED: Approval

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