



# COMMONWEALTH of VIRGINIA

## *Commonwealth Transportation Board*

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*Agenda item # 2*

### RESOLUTION OF THE COMMONWEALTH TRANSPORTATION BOARD

June 19, 2019

#### MOTION

**Made By: Mr. Kasprowicz, Seconded By: Mr. Johnsen**

**Action: Motion Carried, Unanimously**

**Title: Approval of Annual Safety Performance Targets for Calendar Year 2020**

**WHEREAS**, pursuant to §[2.2-229](#) of the *Code of Virginia*, as amended by Chapter 828 of the 2018 Acts of Assembly, it is the responsibility of the Office of Intermodal Planning and Investment (OIPI) to develop measures and targets related to the performance of the Commonwealth's surface transportation network for the Commonwealth Transportation Board's (Board) approval, *including any performance measurement required by Title 23 or 49 of the United States Code*; and

**WHEREAS**, Public Law 112-141, the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) amended 23 USC 150, providing that, “[p]erformance management will transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision-making through performance-based planning and programming.” Pursuant to 23 USC 150, the Federal-aid highway program is to be focused on national transportation goals in the areas of safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays; and

**WHEREAS**, MAP-21 also amended 23 USC 150 to direct the United States Secretary of Transportation, in consultation with State departments of transportation, metropolitan planning organizations, and other stakeholders, to promulgate a rulemaking that establishes performance measures and standards relating to the national transportation goals and for each state to set performance targets that reflect the performance measures established in said rule(s); and

**WHEREAS**, various federal regulations were promulgated to address and set forth the requirements for, among other things, safety performance measures and targets relating to the Highway Safety Improvement Program (Safety Performance Regulations), including 23 CFR §§490.207 and 490.209, which require State Department of Transportations and Metropolitan Planning Organizations to set targets for five safety related performance measures (Safety Performance Targets); and

**WHEREAS**, 23 CFR §§490.207 and 490.209 require the state to utilize data-driven methods to set Safety Performance Targets, which apply to all public roads, for the following five measures; number of fatalities, rate of fatalities per 100 million vehicle miles traveled (VMT), number of serious injuries, rate of serious injuries per 100 million VMT, and number of non-motorized fatalities and serious injuries; and

**WHEREAS**, 23 CFR §490.209(a)(1) requires the targets established by the state Department of Transportation to be identical to the targets established by the State Highway Safety Office (represented by the Department of Motor Vehicles) and reported in the State's Highway Safety Plan/State Strategic Highway Safety Plan for three common safety performance measures, namely number of fatalities, rate of fatalities per 100 million VMT, and number of serious injuries (common Safety Performance Targets); and

**WHEREAS**, in July 2018, finding deficiencies in using annual trend lines to project Safety Performance Targets, the Board directed the Office of Intermodal Planning (OIPI), in consultation with the Virginia Department of Transportation (VDOT) and Department of Motor Vehicles (DMV), to develop a more rigorous data-driven methodology to be used to establish targets for the Federal Safety Performance Measures; and

**WHEREAS**, OIPI working collaboratively with VDOT has for Calendar Year 2020 established proposed Safety Performance Targets using a data-driven methodology and, where applicable, has coordinated with DMV and agreed on target setting methodologies to establish the proposed common Safety Performance Targets set out in Table A below, having complied with the safety target setting and reporting requirements set forth in 23 CFR §§ 490.207, 490.209, 490.213 and 924.15; and

**WHEREAS**, the data-driven methodology, derived from a statistical model, and resulting Safety Performance Targets are intended to represent the best projections of safety outcomes based on socioeconomic and demographics trends, current policies and projects, investment strategies, infrastructure spending, and behavioral (NHTSA) grant programs; and

**WHEREAS**, the data-driven methodology and projected safety outcomes indicate a need for a shift in investment strategies and policy, recommendations for which are being developed for further Board consideration; and

**WHEREAS**, in accordance with 23 CFR §§ 490.207, 490.209, 490.213 and 924.15, targets for the MAP-21 performance measures relating to safety were to be established and first reported in August 2017 and must be established and reported by June 30 by DMV and August 31 by VDOT for each subsequent year; and

**WHEREAS**, OIPI in consultation with VDOT recommends adoption of the proposed Calendar Year 2020 Safety Performance Targets set forth in Table A below:

**Table A**

<b>Annual Safety Performance Measures</b>	<b>2020 Target</b>
Number of Fatalities	950
Rate of Fatalities per 100 million VMT	1.08
Number of Serious Injuries	7,473
Rate of Serious Injuries per 100 million VMT	8.47
Number of Non-Motorized Fatalities and Serious Injuries	711

**NOW THEREFORE, BE IT RESOLVED**, that the Commonwealth Transportation Board acknowledges that data-driven methods are required for setting Safety Performance Targets and hereby approves, for each of the safety performance measures referenced therein, the Safety Performance Targets set forth in Table A for calendar year 2020.

**BE IT FURTHER RESOLVED**, that the Commonwealth Transportation Board finds the anticipated safety outcomes associated with the Safety Performance Targets approved herein to be unacceptable and directs OIPI, working collaboratively with VDOT and DMV, to develop a plan resulting in a net reduction in fatal and serious injury crashes. Such plans shall consider administrative policy, legislative, and investment strategies.

**BE IT FURTHER RESOLVED**, that the Commonwealth Transportation Board directs OIPI working with VDOT and DMV to continue development and improvement of the data-driven and statistical modeling for establishing Safety Performance Targets.

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## CTB Decision Brief

### Approval of Annual Safety Performance Targets for Calendar Year 2020

**Issue:** In accordance with §2.2-229 of the *Code of Virginia*, the Commonwealth Transportation Board (CTB) must approve measures and targets related to the performance of the Commonwealth's surface transportation network, including any performance measurement required by Title 23 or 49 of the United States Code. In accordance with 23 CFR §§490.207, 490.209, 490.213 and 924.15, targets for five federally mandated safety performance measures (Safety Performance Targets) must be established annually and reported by August 31 of each year. CTB approval of the Office of Intermodal Planning and Investment (OIPI) and Virginia Department of Transportation (VDOT) proposed Safety Performance Targets is requested.

**Facts:** In 2012 Congress passed the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) and in 2015, the Fixing America's Surface Transportation (FAST) Act that mandated/continued the mandate for establishment of performance management to transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision-making through performance-based planning and programming. One such national transportation goal focuses on safety and seeks to achieve a significant reduction in traffic fatalities and serious injuries on all roads. The remaining national transportation goals focus on infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays.

Pursuant to MAP-21 and the FAST Act, various federal regulations were promulgated to address and set forth the requirements for, among other things, safety performance measures and targets relating to the Highway Safety Improvement Program (Safety Performance Regulations), including 23 CFR §§490.207 and 490.209, which require State Departments of Transportation and Metropolitan Planning Organizations to set Safety Performance Targets for five measures. Additionally, the Safety Performance Regulations require the State DOT and the State Highway Safety Office (represented by the Department of Motor Vehicles) to establish identical targets for three of the five measures. Safety Performance Targets were first established and reported in August 2017 for Calendar Year 2018 without CTB approval; however, with changes to §2.2-229 of the *Code of Virginia* that became effective on July 1, 2018, CTB approval is now required. DMV must establish and report its targets by June 30 of each year.

OIPI has coordinated and worked collaboratively with VDOT and DMV and agreed on target setting methodologies and proposed targets for Calendar Year 2020 in accordance with the reporting requirements and pursuant to development and publication of the 2017-2021 Virginia Strategic Highway Safety Plan. The proposed targets for the five safety performance measures (Proposed Safety Performance Targets) are set forth below:

Annual Safety Performance Measures	2020 Target
Number of Fatalities <sup>1</sup>	950
Rate of Fatalities per 100 million VMT <sup>1</sup>	1.08
Number of Serious Injuries <sup>1</sup>	7,473
Rate of Serious Injuries per 100 million VMT	8.47
Number of Non-Motorized Fatalities and Serious Injuries	711

The target setting methodology for Calendar Year 2020 meets the July 2018 CTB directive for OIPI, in consultation with VDOT and DMV, to develop a more rigorous data-driven methodology to establish targets for the Federal Safety Performance Measures. Statistical models were developed to project future performance based on a number of data variables, including socioeconomic and demographic trends, current policies, expected crash reductions from completed projects, infrastructure spending, and behavioral (NHTSA grant programs). The models were calibrated against past annual performance, or actual annual numbers of fatalities, serious injuries, and non-motorized fatalities and serious injuries. The proposed Safety Performance Targets represent the best projections of safety outcomes from the statistical model within a 90-percent confidence interval.

OIPI, VDOT, and DMV plan to identify changes in trends for predictive purposes, improve and evaluate new inputs and further develop the statistical model to improve the reliability and predictive capabilities of the model.

Development of the data-driven methodology and evaluation of expected crash reductions from completed projects have indicated a need to shift investment strategies and policy to achieve further reductions in fatal and serious injury crashes. Policy recommendations are being developed for future CTB consideration.

While the CTB recognizes the benefits of a data-driven process they have expressed concerns regarding the projected safety outcomes and have directed OIPI in collaboration with VDOT and DMV to develop a plan resulting in a net reduction in fatal and serious injury crashes. Such plans should consider administrative policy, legislative, and investment strategies that could be implemented.

**Recommendations:** OIPI in consultation with VDOT recommend the approval of the Proposed Safety Performance Targets.

**Action Required by CTB:** The CTB will be presented with a resolution for a formal vote to approve the Proposed Safety Performance Targets for Calendar Year 2020.

**Result, if Approved:** If approved, targets will be reported prior to the August 31 deadline.

**Options:** Approve, Deny, or Defer.

**Public Comments/Reactions:** None

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<sup>1</sup> Safety Performance Targets common to both VDOT and DMV