# REGIONAL HIGHWAY SAFETY TARGETS: UPDATE

## Performance Based Planning & Programming

Jon Schermann Transportation Planner

Transportation Safety Subcommittee December 18, 2018



#### **Presentation Items**

- Review of Highway Safety Performance Measures and Target Setting Requirements for MPOs
- Review of recent trends in safety data vs. the 2018 targets
- Approach for developing staff-recommended National Capital Region Safety Targets
- Proposed 2019 National Capital Region Safety Targets
- Next Steps



## **Highway Safety Performance Measures**

Performance Measure	Description	Data Source
Number of Fatalities (5 year rolling average)	Total number of fatalities during a calendar year	FARS <sup>1</sup>
Rate of Fatalities per 100 million VMT (5 year rolling average)	Ratio of total fatalities to VMT	FARS and HPMS <sup>2</sup> (or MPO estimate)
Number of Serious Injuries (5 year rolling average)	Total number of serious injuries during a calendar year	State reported serious injury data <sup>3</sup>
Rate of Serious Injuries per 100 million VMT (5 year rolling average)	Ratio of total serious injuries to VMT	State reported serious injury data <sup>3</sup> and HPMS
Number of Non-Motorized Fatalities and Serious Injuries (5 year rolling average)	Total number of fatalities and serious injuries during a calendar year	FARS and State serious injury data <sup>3</sup>

<sup>&</sup>lt;sup>1</sup> FARS: Fatality Analysis Reporting System



<sup>&</sup>lt;sup>2</sup> HPMS: Highway Performance Monitoring System

<sup>&</sup>lt;sup>3</sup> for the first 36 months – after that States must adopt the Model Minimum Uniform Crash Criteria (MMUCC) definition of serious injury

## **Highway Safety Target Setting**

- Annual requirement for state DOTs and MPOs to set 5-year rolling average targets for the five performance measures
- State DOTs set targets for the 2015-2019 period on August 31, 2018
- TPB has 180 days to set regional targets (February 27, 2019)
- For each performance measure (PM), the MPO will either:
  - 1) Agree to plan and program projects so they contribute toward accomplishing the state DOT safety target for that PM, or
  - 2) Commit to a quantifiable target for that PM for the metropolitan planning area
- FHWA does NOT evaluate MPO targets no regulatory consequences for MPOs that do not meet targets



### NCR Safety Trends – With Final 2017<sup>1</sup> Annual Data

Performance Measure	2013	2014	2015	2016	2017	Change from 2016 to 2017
# of Fatalities	261	263	263	275	313	<b>↑ 13.8</b> %
Fatality Rate (per 100 MVMT)	0.612	0.618	0.610	0.635	0.693	<b>↑</b> 9.2 %
# of Serious Injuries	3,040	2,856	2,642	2,946	2,632	<b>4</b> 10.7 %
Serious Injury Rate (per 100 MVMT)	7.078	6.666	6.112	6.749	5.826	<b>4</b> 13.7 %
# Nonmotorist Fatalities & Serious Injuries	514	549	526	565	556	<b>V</b> 1.6 %

Note <sup>1</sup>: 2017 FARS data was published in October 2018



#### Comparison of 2014-2017 Data with 2014-2018 Targets

Performance Measure (5-year rolling average)	2014-2017 Actual*	2014-2018 Target
# of Fatalities	278.5	253.0
Fatality Rate (per 100 MVMT)	0.640	0.588
# of Serious Injuries	2,769.0	3,007.3
Serious Injury Rate (per 100 MVMT)	6.332	6.791
# Nonmotorist Fatalities & Serious Injuries	549.0	528.8

<sup>\*</sup> Four year average data



#### **Proposed NCR Target Setting Methodology**

- MD, VA, and DC have used different approaches in developing targets
- Staff is proposing a target setting methodology that accounts for / incorporates each State's approach:
  - Apply Maryland's approach to identify a "sub-target" for the Maryland portion of the NCR
  - Apply Virginia's approach to identify a sub-target for the Virginia portion of the NCR
  - Incorporate the District of Columbia's target as a sub-target for the DC portion of the NCR
  - Combine the three sub-targets into a regional target for the NCR
  - If a calculated target is higher than the previous target, set the target equal to the previous target



#### Forecast Using State Methodologies

	2014-2018 Target	2015-2019 Forecast*	Difference	Percent Difference
# of Fatalities	253.0	<u>260.6</u>	7.6	3.0%
Fatality Rate (per 100 MVMT)	0.588	0.611	0.023	3.9%
# of Serious Injuries	3,007.3	<u>2,919.6</u>	-87.7	-2.9%
Serious Injury Rate (per 100 MVMT)	6.791	<u>6.564</u>	-0.217	-3.2%
# Nonmotorist Fatalities & Serious Injuries	528.8	<u>508.6</u>	-20.2	-3.8%



<sup>\*</sup> After application of state methodologies

#### **Draft 2019 Highway Safety Targets for the NCR**

	2014-2018 Target	2015-2019 <u>Target</u>	Difference	Percent Difference
# of Fatalities	253.0	<u>253.0*</u>	0.0	0.0%
Fatality Rate (per 100 MVMT)	0.588	0.588*	0.000	0.0%
# of Serious Injuries	3,007.3	<u>2,919.6</u>	-87.7	-2.9%
Serious Injury Rate (per 100 MVMT)	6.791	<u>6.564</u>	-0.217	-3.2%
# Nonmotorist Fatalities & Serious Injuries	528.8	<u>508.6</u>	-20.2	-3.8%



<sup>\*</sup> Proposed target set to the same value as 2014-2018 adopted target

#### **Draft 2019 Highway Safety Targets for the NCR**

Performance Measure	Proposed 2015-2019 Target	Adopted 2014-2018 Target	Compared to Previously Adopted Target
# of Fatalities	253.0	253.0	no change
Fatality Rate (per 100 MVMT)	0.588	0.588	no change
# of Serious Injuries	2,919.6	3,007.3	88 fewer serious injuries
Serious Injury Rate (per 100 MVMT)	6.564	6.791	3% lower
# Nonmotorist Fatalities & Serious Injuries	508.6	528.8	20 fewer

Note: These targets were set before 2017 and 2018 data were available.

<sup>\*</sup> TPB Resolution R10-2018 (Jan 17, 2018)



## Possible Resolution Clauses (1)

- WHEREAS, safety of all modes of travel is an important element of TPB's Vision, and a regional priority, with many its member jurisdictions having adopted aspirational safety goals associated with Vision Zero and Towards Zero Deaths; and
- WHEREAS, the TPB encourages every member jurisdiction in the region to adopt similar aspirational goals and calls on the transportation agencies of the region to redouble their efforts to develop projects, programs and policies to achieve dramatic reductions in fatalities and serious injuries; and



## Possible Resolution Clauses (2)

- WHEREAS, the TPB acknowledges that recent trends for both fatalities and the rate of fatalities per 100 million vehicle miles travelled are moving in the wrong direction, which does not match regional aspirations; and
- WHEREAS, the TPB remains focused on achieving its aspirational goals and will use the annual regional highway safety targets and the target setting process to evaluate the region's progress toward achieving its aspirational goals



### **Next Steps**

- Present draft 2019 highway safety targets to the board at the December 2018 TPB meeting
- Finalize highway safety targets based on board feedback
- Request board approval of highway safety targets at the January 2019 TPB meeting



#### Jon Schermann

TPB Transportation Planner (202) 962-3317 jschermann@mwcog.org

mwcog.org/tpb

Metropolitan Washington Council of Governments 777 North Capitol Street NE, Suite 300 Washington, DC 20002

