

DRAFT 2017-2021 PBPP HIGHWAY SAFETY TARGETS

Jon Schermann
TPB Transportation Planner

Transportation Planning Board
November 18, 2020



Presentation Items

- Part I: Review of Safety Trends
- Part II: Progress Towards the 2015-2019 Safety Targets
- Part III: Staff Recommended 2017-2021 Regional Safety Targets
- Part IV: Next Steps



Part I

Review of Safety Trends



NCR Safety – With Final 2019 Annual Data

	2015	2016	2017	2018	2019	Change from 2018 to 2019
# of Fatalities	263	279	313	292	306 ¹	↑ 4.8 %
Fatality Rate (per 100 MVMT)	0.610	0.633	0.695	0.649	0.672 ¹	↑ 3.5 %
# of Serious Injuries	2,632	2,925	2,581	2,444	2,345	↓ 4.1 %
Serious Injury Rate (per 100 MVMT)	6.109	6.634	5.731	5.429	5.135	↓ 5.4 %
# Nonmotorist Fatalities & Serious Injuries	524	553	585	547	599	↑ 9.5 %

Note ¹: Figures listed are from state fatality data; 2019 FARS data not yet published



Part II

Progress Towards the 2015-2019 Safety Targets



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 ¹
Rate of Fatalities per 100 million VMT (5 year rolling average)	Ratio of total fatalities to VMT	FARS and HPMS ² (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
Rate of Serious Injuries per 100 million VMT (5 year rolling average)	Ratio of total serious injuries to VMT	State reported serious injury data ³ 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 ³

¹ FARS: Fatality Analysis Reporting System

² HPMS: Highway Performance Monitoring System

2015-2019 Actual vs. Targets - NCR

Performance Measure (5-year rolling average)	2015-2019 Actual	2015-2019 Target	Status
# of Fatalities	290.6 ¹	253.0	Not met
Fatality Rate (per 100 MVMT)	0.652 ¹	0.588	Not met
# of Serious Injuries	2,585.4	2,916.6	Met
Serious Injury Rate (per 100 MVMT)	6.519	6.564	Met
# Nonmotorist Fatalities & Serious Injuries	556.4	508.6	Not met

Note ¹: Figures listed are from state fatality data; 2019 FARS data not yet published



Part III

Staff Recommended 2017-2021 Regional Safety Targets



Background (or Why, What, and How)

- The TPB set regional targets in January 2018, January 2019, and December 2019
 - Federal regulations require State DOTs and MPOs to set highway safety targets on an annual basis
 - State DOTs approved their most recent set of targets in August 2020
- Data-driven and realistic highway safety targets are to be set for 5 performance measures
- These data-driven performance measures enable us to consistently track regional safety results
- Targets are averages for a given 5-year period (ex., 2016-2020, 2017-2021 etc.)



2017-2021 Target Setting Methodology

- Apply Maryland’s approach to identify a “sub-target” for the Maryland portion of the NCR
- Apply Virginia’s suggested approach for its MPOs 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
- *Note that this is the same methodology as was used for last year’s (2016-2020) targets*



Summary: NCR Highway Safety Targets: pre-cap

	2016-2020 Target	2017-2021 Target	Difference	Percent Difference
# of Fatalities	253.0	<u>269.5</u>	16.5	6.5%
Fatality Rate (per 100 MVMT)	0.588	<u>0.628</u>	0.049	6.8%
# of Serious Injuries	2,692.1	<u>2,435.8</u>	-256.3	-9.5%
Serious Injury Rate (per 100 MVMT)	6.157	<u>5.539</u>	-0.618	-10.0%
# Nonmotorist Fatalities & Serious Injuries	508.6	<u>529.9</u>	48.6	4.2%



Summary: NCR Highway Safety Targets: with cap

	2016-2020 Target	2017-2021 Target	Difference	Percent Difference
# of Fatalities	253.0	<u>253.0</u>	0.0	0.0%
Fatality Rate (per 100 MVMT)	0.588	<u>0.588</u>	0.000	0.0%
# of Serious Injuries	2,692.1	<u>2,435.8</u>	-256.3	-9.5%
Serious Injury Rate (per 100 MVMT)	6.157	<u>5.539</u>	-0.618	-10.0%
# Nonmotorist Fatalities & Serious Injuries	508.6	<u>508.6</u>	0.000	0.0%



Summary: NCR Highway Safety Targets

Performance Measure (5-year rolling average)	2015- 2019 Target	2016- 2020 Target	2017- 2021 Target	Difference	Percent Difference
# of Fatalities	253.0	253.0	<u>253.0</u>	0.0	0.0%
Fatality Rate (per 100 MVMT)	0.588	0.588	<u>0.588</u>	0.0	0.0%
# of Serious Injuries	2,919.6	2,692.1	<u>2,435.8</u>	-256.3	-9.5%
Serious Injury Rate (per 100 MVMT)	6.564	6.110	<u>5.539</u>	-0.618	-10.0%
# Nonmotorist Fatalities & Serious Injuries	508.6	508.6	<u>508.6</u>	0.0	0.0%



Part IV

Next Steps



Next Steps

- Finalize safety targets based on board feedback
- Request board approval of targets at the December TPB meeting



Jon Schermann

TPB Transportation Planner

(202) 962-3317

jschermann@mwkog.org

mwkog.org/tpb

Metropolitan Washington Council of Governments

777 North Capitol Street NE, Suite 300

Washington, DC 20002



National Capital Region
Transportation Planning Board