



Safety Performance Target Setting

December 17, 2020





Traffic Safety

Safety in the Baltimore Region

	2017	2018	2019	2017-2019 average
BRTB				
Crashes	61,602	62,387	60,648	61,546
Serious Injuries	1,678	1,566	1,509	1,584
All Injuries	26,374	26,014	25,289	25,892
Fatalities	238	222	207	222
State				
Crashes	115,429	118,026	115,917	116,457
Serious Injuries	3,347	3,233	3,122	3,234
All Injuries	51,391	50,003	48,656	50,017
Fatalities	558	512	534	535

2017-2019 Percent Change	BRTB State	
	BRTB	State
Crashes	-1.5	0.4
Serious Injuries	-10.1	-6.7
All Injuries	-4.1	-5.3
Fatalities	-13.0	-4.3

BRTB % of State	2017-2019 average			
	2017	2018	2019	2017-2019 average
Crashes	53.4%	52.9%	52.3%	52.8%
Serious Injuries	50.1%	48.4%	48.3%	49.0%
All Injuries	51.3%	52.0%	52.0%	51.8%
Fatalities	42.7%	43.4%	38.8%	41.6%



Baltimore Region Summary

<u>Total</u>	2019	% of Region
Fatal Crashes	195	
Injury Crashes	16,773	
Property Damage Crashes	43,680	
Total Crashes	60,648	
Total of All Fatalities	207	
Total Number Injured	25,289	

<u>Speed</u>		
Total Crashes	4,234	7.0%
Total of All Fatalities	39	18.8%
Total Number Injured	1,759	7.0%

<u>Distracted</u>		
Total Crashes	24,896	41.0%
Total of All Fatalities	65	31.4%
Total Number Injured	11,565	45.7%

<u>Impaired</u>	2019	% of Region
Total Crashes	3,016	5.0%
Total of All Fatalities	58	28.0%
Total Number Injured	1,470	5.8%

<u>Pedestrian</u>		
Total Crashes	1,838	3.0%
Total of All Fatalities	61	29.5%
Total Number Injured	1,835	7.3%

For 2021, BRTB Options

- Coordinate with MDOT (two options):
 1. Adopt state measures and targets OR
 2. Set regional measures and targets
- MDOT's performance measure website: <http://arcg.is/1r04uH>



FHWA – Performance Areas

1. Serious injuries per vehicle miles traveled (VMT)
 2. Fatalities per VMT
 3. Number of serious injuries
 4. Number of fatalities
 5. Number of non-motorized fatalities + serious injuries
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6. Pavement condition on the Interstate System (2)
 7. Pavement condition on the non-Interstate NHS (2)
 8. Bridge condition on the NHS (2)
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9. Performance of the Interstate System
 10. Performance of the non-Interstate NHS
 11. Freight movement on the Interstate System
 12. Traffic congestion
 13. On-road mobile source emissions
- System Safety (PM1)**
- System Condition (PM2)**
- System Performance (PM3)**

Terminology

- **Goal** – A broad aspiration or guiding principle (e.g., “Improve highway safety”)
- **Strategy** – An approach or policy to help implement a goal (e.g., “Eliminate hazardous or substandard conditions in high-crash locations and corridors”)
- **Performance Measure** – A specific metric used to assess progress toward achieving a goal (e.g., “Decrease number of highway fatalities in the region”)
- **Performance Target** – A specific level to be reached within a certain time frame (e.g., “Decrease number of highway fatalities in the region to 166 by 2020”)

Safety Performance Measures

- State Strategic Highway Safety Plan (SHSP) was written in 2015 and spans 2016-2020. It includes safety performance measures, targets, and goals.
- Those goals are incorporated into the Highway Safety Plan (HSP) and Highway Safety Improvement Program (HSIP).

Strategic Highway Safety Plan (SHSP)

Highway Safety Improvement Program (HSIP)

- Report submitted annually
- Infrastructure improvements
- FHWA approved

- Updated every five years
- Infrastructure and behavioral countermeasures
- SHSP process approved by FHWA
- Requirement of HSIP

Highway Safety Plan (HSP)

- Plan submitted annually
- Behavioral programs
- NHTSA approved

Source: Federal Safety Performance Management Webinar

Safety Performance Measures

- Federal regulations state that MPOs must set safety performance targets 180 days after the State HSIP Report is submitted.
- Initial BRTB safety targets set in January 2018 and updated in January 2019 and 2020.

BRTB Target-Setting Process



- **Follow Maryland's methodology - Toward Zero Deaths**
 - Reduce by 50% from 2008 → 2030
- **Set the five targets specific to the BRTB region**
- **Updated targets to be approved no later than February 28, 2021**
 - Incorporate new year of data into five-year rolling averages
 - Adjust exponential trend line with same fixed end point

For Upcoming Resolution

Attachment 1: Baltimore Region Yearly Highway Safety Targets

Performance Measure	2008 Baseline	2018 Actual	2019 Actual	Change 2018-2019	2017-2021 Target	2030 TZD Goal
Number of Fatalities	242	223	207	↓ 7.17%	179	121
Number of Serious Injuries	1,868	1,566	1,509	↓ 3.64%	1,203	934
Fatality Rate per 100 Million VMT	0.93	0.81	0.74	↓ 8.64%	0.68	0.47
Serious Injury Rate per 100 Million VMT	7.21	5.66	5.42	↓ 4.24%	4.55	3.60
Number of Non-motorized Fatalities & Serious Injuries	286	363	343	↓ 5.51%	227*	143

**Based on the methodology this target would be 227. However, the recommendation is to keep the lower target from Resolution #20-10 of 223.*

Sources: Maryland State Police crash database, MDOT MVA Highway Safety Office Benchmark Reports, MDOT SHA Mileage Reports

BRTB Strategies

- What have we done?
 - Have incorporated measures and targets into the Transportation Improvement Program (TIP) since May 2019
 - Complete Streets Policies in State and Jurisdictions
 - Congestion Management Process
 - Local Strategic Highway Safety Plans
 - Four to begin January 2021 (Baltimore, Carroll, Harford, Howard Counties)
 - Pedestrian/Bicycle Coordinators in Jurisdictions
 - Continuing Look Alive campaign
- New ideas?



Transit Safety

- Public Transportation Agency Safety Plan (PTASP)

Transit Safety Performance Measures

- Federal regulations state that MPOs must set safety performance measures within 180 days after the State/agency PTASP is submitted.
- Fatalities – total and per VRM
- Injuries – total and per VRM
- Safety Events – total and per VRM
- System Reliability

BRTB Process



- Collaborate with MDOT MTA and regional LOTS
- Include measures provided by all LOTS
- Some information has not been collected historically, so initial figures will include estimates
- Annual tracking of measures

For Upcoming Resolution

Performance Measure	Fatalities	Fatalities (per 1M VRM)	Injuries	Injuries (per 1M VRM)	Safety Events	Safety Events (per 1M VRM)	System Reliability (VRM/Failures)
Annapolis Transit							
Demand Response (Paratransit)	0	0	0	0	0	0	NA
Fixed Route	0	0	0	0	0.6	0.1	NA
Baltimore Co							
Demand Response (Paratransit)	0	0	0	0	0	0	39,614 miles between failures
Carroll Transit							
Demand Response	0	0	1	0.15	15	2.30	>265,000
Fixed Route	0	0	1	0.53	5	2.66	>82,000
Queen Anne's Co							
Demand Response	0	0	0	0	0	0	95%
Fixed Route	0	0	0	0	0	0	95%
Anne Arundel OOT							
Demand Response	0	2	2	0	0	0	25,000
Fixed Route	0	1	1	0	0	0	75,000
Harford Link							
Demand Response		0		0.25		<5	98%
Fixed Route		0		1		>10	98%
Deviated Fixed Route		0		0.5		0	98%
Charm City Circulator							
Fixed Route	0	0	0	0	4 or fewer	1.0	5,000 miles between breakdowns
RTA (Howard)							
Fixed Route	0	0	20	1.5	20	1.5	Miles by failures 6,000
Demand Response (Paratransit)	0	0	3	0.25	5	0.40	6,000
Demand Taxi	0	0	0	0	0	0	0

For More Information

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