

Maximize2045 – Status / Due Dates

Bicycle-Pedestrian Advisory Group
April 18, 2018



Maximize2045 – Major Milestones

- Nov 2016 to Feb 2017 – Develop/Adopt Regional Goals and Strategies – **Done (Resolution #17-18)**
- Feb 2017 to Nov 2018 – Develop/Adopt Regional Performance Measures and Targets – **In Process**
9 down (TAM and highway safety) – 16 to go
- Sept 2017 to June 2018 – Develop/Adopt Financial Forecast – **In Process**
- Oct 2017 to July 2018 – Develop/Adopt Population and Employment Forecasts – **In Process**
- Dec 2017 to May 2018 – Develop/Adopt Project Evaluation Criteria – **In Process**



Maximize2045 – Major Milestones

- June to Aug 2018 – Call for Candidate Projects
- Aug to Nov 2018 – Evaluate Candidate Projects / Select Tentative Set of Major Programs and Projects
- Nov 2018 to Feb 2019 – Model and Analyze Tentative Set of Major Programs and Projects
- Feb to May 2019 – Develop Draft Plan
- June to July 2019 – Develop and Adopt Final Plan



For 2019 Plan, BRTB Needs To:

- **Set measures and targets** for *Maximize2045: A Performance-Based Transportation Plan*
- **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>
- Consider how to incorporate measures and targets into the Transportation Improvement Program (TIP) – will apply to all TIPs and TIP amendments adopted after May 20, 2019



FTA – TAM Measures

BRTB adopted these targets (Resolution 17-27) in June 2017

- Four measures to assess condition:

1. % of non-revenue service vehicles that have met or exceeded Useful Life Benchmarks (ULBs)
2. % of revenue vehicles within an asset class that have met or exceeded their ULBs
3. Infrastructure (rail fixed-guideway, track, signals, systems): % of track segments with performance restrictions
4. % of facilities within an asset class rated below condition 3 on the TERM scale *

Transit Asset Management – final rules released October 1, 2016; January 1, 2017 deadline for transit operators to set targets – MPO targets 180 days later

* – FTA uses the Transit Economic Requirements Model (TERM) to develop values to determine its transit state of good repair (SGR) backlog.



FTA – Transit Safety Measures

- Four safety measures (reported by mode):

1. Number of reportable fatalities and rate per total vehicle revenue miles
2. Number of reportable injuries and rate per total vehicle revenue miles
3. Number of reportable safety events and rate per total vehicle revenue miles
4. Mean distance between major mechanical failures

Transit Safety –
final rule not yet
published

Once the final rule has been published, transit agencies will have 1 year to set transit safety performance targets; MPOs will have 1 year + 180 days



FHWA – Performance Areas

1. Serious injuries per vehicle miles traveled (VMT)
2. Fatalities per VMT
3. Number of serious injuries
4. Number of fatalities

System Safety (PM1) –
final rules released
March 15, 2016

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5. Pavement condition on the Interstate System
 6. Pavement condition on the non-Interstate NHS
 7. Bridge condition on the NHS

System Condition (PM2) – final rules released May 20, 2017

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8. Performance of the Interstate System
 9. Performance of the non-Interstate NHS
 10. Freight movement on the Interstate System
 11. Traffic congestion
 12. On-road mobile source emissions

System Performance (PM3) – final rules released May 20, 2017



System Safety Measures (PM1)

- Five measures to assess highway safety performance:
 1. Number of fatalities
 2. Rate of fatalities per 100 million VMT
 3. Number of serious injuries
 4. Rate of serious injuries per 100 million VMT
 5. Number of non-motorized fatalities + non-motorized serious injuries – pedestrian and bicycle – **NEW**



System Safety Targets – Due Dates

- MDOT Due Dates
 - Set targets for Highway Safety Improvement Plan
 - **August 31, 2017**: Due date to submit to FHWA
- BRTB Due Dates
 - Set targets (either adopt state targets or set regional targets)
 - **February 27, 2018**: Due date for targets
- Repeat process each year



System Safety Data

- Maintain commitment to “Toward Zero Deaths”
- Baltimore Region – 5-Year Rolling Averages

Performance Measure	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Number of Fatalities	225	216	202	204	210
Number of Serious Injuries	1,508	1,358	1,284	1,236	1,235
Fatality Rate per 100 Million VMT	0.87	0.83	0.77	0.78	0.79
Serious Injury Rate per 100 Million VMT	5.82	5.23	4.93	4.73	4.66
Number of Non-motorized Fatalities & Serious Injuries	254	245	248	243	259

System Safety Targets

BRTB adopted these targets (Resolution 18-8) in January 2018

- Baltimore Region Targets

Performance Measure	2016	2017	2018	2019	2020
Number of Fatalities	188	182	176	171	166
Number of Serious Injuries	1,224	1,200	1,176	1,153	1,130
Fatality Rate per 100 Million VMT	0.72	0.70	0.68	0.66	0.64
Serious Injury Rate per 100 Million VMT	4.46	4.31	4.18	4.05	3.92
Number of Non-motorized Fatalities & Serious Injuries	216	209	202	195	188



System Condition Measures (PM2)

- Four measures to assess pavement condition:
 1. % of pavement on Interstate System in Good condition
 2. % of pavement on Interstate System in Poor condition
 3. % of pavement on NHS (excluding the Interstate System) in Good condition – state/local
 4. % of pavement on NHS (excluding the Interstate System) in Poor condition – state/local
- Two measures to assess bridge condition:
 1. % of NHS bridges by deck area classified as in Good condition
 2. % of NHS bridges by deck area classified as in Poor condition



System Condition Targets – Due Dates

- MDOT Due Dates
 - Set 2-year and 4-year targets
 - **May 20, 2018**: Due date for first set of targets
 - **October 1, 2018**: Due date to report targets to FHWA
- BRTB Due Dates
 - Set 4-year targets (either adopt MDOT targets or set regional targets)
 - **November 16, 2018**: Due date for targets



System Performance Measures (PM3) – Reliability

- Two measures to assess performance of the NHS under the National Highway Performance Program
- Level of Travel Time Reliability (LOTTR)*:
 1. % of Person-Miles Traveled on Interstate System that are reliable (Interstate Travel Time Reliability measure)
 2. % of Person-Miles Traveled on Non-Interstate NHS that are reliable (Non-Interstate NHS Travel Time Reliability measure)

* – Defined as the ratio of the 80th percentile travel time to a “normal” travel time (50th percentile).



System Performance Measures (PM3) – Freight Movement

- One measure to assess freight movement on the Interstate System:
 1. % of Interstate System Mileage providing for Reliable Truck Travel Times (Truck Travel Time Reliability Index – TTTR)

System Performance Measures (PM3) – Traffic Congestion

- For all projects funded by CMAQ funds
- Two measures to assess traffic congestion:
 1. Annual Hours of Peak-Hour Excessive Delay Per Capita (PHED measure)*
 2. % of Non-SOV (single-occupancy vehicle) Travel

* – Excessive delay based on whichever is greater: 20 mph or 60% of posted speed.



System Performance Measures (PM3) –Emissions Reduction

- For all projects funded by CMAQ funds
- One measure to assess on-road mobile source emissions:
 1. Total Emissions Reduction: 2-year and 4-year cumulative reported emission reductions of each criteria pollutant and applicable precursors (PM_{2.5}, PM₁₀, CO, VOC, and NO_x) for which the area is designated nonattainment or maintenance – **BRTB region: nonattainment only for ozone**

System Performance Measures – CO₂ Emissions

- Delayed – FHWA has proposed repealing measure
- One measure for Total Emissions Reduction of CO₂:
 1. Percent Change in Tailpipe CO₂ Emissions on NHS from CY 2017

System Performance – Due Dates

- MDOT Due Dates
 - For Travel Time Reliability and Freight Reliability measures: Set 2- and 4-year statewide targets
 - For CMAQ measures (PHED, non-SOV travel, emissions reduction): Work with BRTB to set unified targets for urbanized area
 - **May 20, 2018**: Due date for first set of targets
 - **October 1, 2018**: Due date to report targets to FHWA
 - **October 1, 2018**: Due date for CMAQ Performance Plan

System Performance – Due Dates

- BRTB Due Dates
 - For Travel Time Reliability and Freight Reliability measures: Set 4-year targets (either adopt MDOT targets or set regional targets)
 - For CMAQ measures (PHED, non-SOV travel, emissions reduction): Work with MDOT to set unified targets for urbanized area
 - **November 16, 2018**: Due date for targets

Measures/Targets – What's Next?

- MDOT will present statewide targets for performance measures to Technical Committee as targets are set
 - May 20, 2018 due date for CMAQ-related PM3 (system performance) targets – Baltimore urbanized area
- BRTB will set measures/targets for *Maximize2045*
 - November 16, 2018 due date for PM2 (system condition) and for PM3 (system performance) targets
- BRTB must incorporate measures/targets into any long-range plan and TIP adopted after May 2019

