

**BALTIMORE METROPOLITAN PLANNING ORGANIZATION**

**BALTIMORE REGIONAL TRANSPORTATION BOARD  
RESOLUTION #15-16**

**ENDORSE PERFORMANCE MEASURES TO ASSESS THE PROGRESS OF *MAXIMIZE2040* –  
THE 2015 BALTIMORE REGIONAL TRANSPORTATION PLAN**

**WHEREAS**, the Baltimore Regional Transportation Board is the designated Metropolitan Planning Organization for the Baltimore region, encompassing the Baltimore Urbanized Area, and includes official representatives of the cities of Annapolis and Baltimore, the counties of Anne Arundel, Baltimore, Carroll, Harford, and Howard, as well as representatives of the Maryland Department of Transportation, the Maryland Department of the Environment, the Maryland Department of Planning, and the Maryland Transit Administration; and

**WHEREAS**, the Baltimore Regional Transportation Board approved the current Baltimore regional transportation plan, *Plan it 2035*, on November 14, 2011; and

**WHEREAS**, the Baltimore Regional Transportation Board has developed a work scope and timeline to prepare the 2015 Baltimore regional transportation plan, termed *Maximize2040: A Performance-Based Transportation Plan*. The work scope reflects the intent of Federal Legislation contained in the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the current Metropolitan Planning Regulations; and

**WHEREAS**, the Baltimore Regional Transportation Board has requested that the Technical Committee evaluate and recommend a series of performance measures (see Attachment 1) for use in monitoring future transportation system performance related to the requirements of MAP-21 and the adopted goals and strategies of *Maximize2040*; and

**WHEREAS**, the Technical Committee has considered this task in consultation with the full range of Subcommittees advising the Baltimore Regional Transportation Board; and

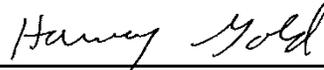
**WHEREAS**, the Technical Committee has also recommended that Baltimore Metropolitan Council staff report to the BRTB annually on progress the region is making relative to the performance measures, with the opportunity for the Technical Committee to review and comment on this report before it is presented to the BRTB;

**NOW, THEREFORE, BE IT RESOLVED** that the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, endorses the performance measures as recommended by the Technical Committee for use in monitoring transportation system performance and measuring progress under *Maximize2040*.

I **HEREBY CERTIFY** that the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, endorsed the aforementioned amended resolution at its December 16, 2014 meeting.

12-16-14

Date



George Cardwell, Chairman

Baltimore Regional Transportation Board



## Performance Measures/Targets

### MAP-21 Performance Measure Areas – Required for Long-Range Plan

<b>Highway Safety</b>	
1. Serious injuries per 100 million vehicle miles traveled (VMT)	Reduce serious injuries per 100 million VMT (all public roads) to 3.0 by 2040.
2. Fatalities per 100 million VMT	Reduce fatalities per 100 million VMT (all public roads) to zero for region by 2040.
3. Number of serious injuries	Reduce number of serious injuries (all public roads) to 676 for region by 2040.
4. Number of fatalities	Reduce number of fatalities (all public roads) to zero by 2040.
<b>Highway Conditions</b>	
5. Pavement condition	Maintain portion of state-owned roadway miles with acceptable ride quality at 82%. (Review and incorporate City of Baltimore target as appropriate).
6. Bridge condition	Maintain portion of structurally deficient bridges (state and local bridges) in region below 5.0%.
<b>System Performance</b>	
7. Traffic congestion	Maintain portion of VMT in congested conditions on arterials during PM peak hour below 25%.
8. On-road mobile source emissions	Maintain levels of VOC, NOx, PM2.5, and CO emissions at levels less than SIP motor vehicle emission budgets.
9. Freight – interstate system	Maintain average truck turnaround time (double moves) at Seagirt Marine Terminal below 58 minutes.
<b>Transit System Performance</b>	
10. Transit asset management	Maintain average age of MTA and LOTS local bus fleets below 7.0 years.
11. Transit safety	Reduce number of preventable accidents per 100,000 revenue vehicle miles to zero by 2040.

**Other Measures and Targets – Not Required by MAP-21**

<b>Accessibility</b>	
1. Sidewalks	Increase percentage of urban area state-owned urban area directional roadway miles that have sidewalks (both sides of the roadway) to 25% by 2040.
2. Non-auto mode share	Increase bike-pedestrian-to-work mode share to 5.0% by 2040.
3. Transit ridership	Increase average weekday MTA and LOTS agency transit ridership (all modes) to 500,000 by 2040.

**Other Measures and Targets – Not Required by MAP-21**

1. Transportation greenhouse gas reduction	To be determined following “How Far Can We Get” analysis.
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**Data Sources for Performance Measures Listed Above**

**For Highway Safety: (1-4)**

Data from Maryland Highway Safety Office; formulas (from draft federal regulations): Five-year rolling average of serious injuries and fatalities divided by 100 million VMT on all public roads for a calendar year. Five-year rolling average of serious injuries and fatalities on all public roads for a calendar year.

**For Highway Conditions: (5 - 6)**

Pavement condition: Data from MDOT Attainment Report (supplemented by City of Baltimore if needed) : Ride quality is represented by the International Roughness Index (IRI). The SHA inventory of mainline directional miles, which is a component of this measure, now include routes of less than one mile in length so that the SHA network is more accurately and completely represented.

Bridge condition: Data from MDOT Attainment Report: All State and Local owned bridges are inspected on a biennial basis. Bridges are classified by Federal Highway for functional and structural condition. Federal Highway identifies bridges eligible for federal funding as either functionally obsolete or structurally deficient.

**For System Performance: (7 - 9)**

Traffic congestion: Data from MDOT Attainment Report (supplemented by additional INRIX data): Percent of VMT in congested conditions on arterials during evening peak hour (5-6 p.m.), as measured using real-time vehicle probe data from INRIX. Per SHA's definition, a "congested condition" exists when the Travel Time Index (TTI) is greater than 1.3. TTI is the average travel

time of a trip during the peak period divided by the travel time of a trip during off peak (free-flow) conditions.

On-road mobile emissions: As defined by latest conformity report.

Freight – interstate system: Truck turn-around time is a gross measure of the efficiency and operations of the Seagirt Marine Terminal. Reductions in turn-around times improve throughput capacity and result in incremental environmental benefits. This measure is a corollary for ability to move freight through the region.

**For Transit System Performance: (10 - 11)**

Transit asset management: Fleet average age as reported by the MTA and LOTS local bus systems. MTA and LOTS agency local buses, not paratransit vehicles.

Transit safety: Preventable accidents are accidents in which drivers did not do everything they could to avoid an accident/100,000 vehicle miles as reported by MTA.

**For Accessibility: (1 - 3)**

Sidewalks: Data from MDOT Attainment Report: On SHA roads where pedestrian access is allowed within urban areas as defined by the U.S. Census Bureau.

Non-auto mode share: From American Community Survey (U.S. Census) data.

Transit ridership: As reported by MTA and LOTS agencies.

**For Other Measures: (1)**

Transportation greenhouse gas reduction: Reductions based upon projections from "How Far" study.