#### **BALTIMORE METROPOLITAN PLANNING ORGANIZATION**

# BALTIMORE REGIONAL TRANSPORTATION BOARD RESOLUTION #17-9

# APPROVAL OF AN AMENDMENT TO THE 2015 BALTIMORE REGIONAL TRANSPORTATION PLAN (MAXIMIZE2040)

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 Anna Arundel, Baltimore, Carroll, Harford, Howard and Queen Anne's, 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, as the Metropolitan Planning Organization for the Baltimore region, is required under the Fixing America's Surface Transportation (FAST) Act to complete a long-range transportation plan every four years for the Baltimore region; and

WHEREAS, the U.S. Department of Transportation has just issued final Metropolitan Transportation Planning regulations for MAP-21 or the FAST Act. The BRTB, in developing *Maximize2040* followed guidance based on the 2005 legislation known as the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); and

**WHEREAS**, development of *Maximize2040* and subsequent amendments have followed a continuous, cooperative, and comprehensive planning process and consider and integrate as appropriate the federal planning factors documented in the Metropolitan Transportation Planning regulations (February 14, 2007 *Federal Register*); and

**WHEREAS**, the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, approved *Maximize2040* at its November 24, 2015 meeting, with federal approval on January 15, 2016; and

**WHEREAS**, the Maryland Department of Transportation on behalf of the Maryland Transportation Authority has requested approval of an amendment to *Maximize2040* through the approved long-range plan amendment process; and

WHEREAS, the Maryland Transportation Authority proposes to advance the implementation date from 2030 to 2018 for Section 00 of I-95 (Moravia Road to the Ft. McHenry Tunnel). The total cost of this I-95 project is \$51,102,000 (to be covered entirely by toll revenues). All of these funds will apply to the time frame covered by the FY 2017-2020 TIP. Within this context, the BRTB has found the proposed amendment to be in compliance with the fiscal constraint requirement for both *Maximize2040* and the FY 2017-2020 TIP (see Attachment for details); and

WHEREAS, this I-95 project would add capacity to the transportation network and thus was included in the regional emissions analysis of the conforming *Maximize2040* (with the assumption of a year of operation of 2030). The year of operation of this segment of the project has advanced to 2018, the project was included in the modeled transportation network within an earlier timeframe and 2025 horizon year modeling has been retested in the regional emissions analysis; and

WHEREAS, The Interagency Consultation Group (ICG) has determined that implementation of this I-95 project will not worsen the region's air quality or delay the timely attainment of national air quality standards or interfere with implementation of any transportation control measures (TCMs), consistent with the Conformity Rule (40 CFR Parts 51 and 93); and

**WHEREAS**, the proposed amendment to *Maximize2040* was publicized for public review from July 5, 2016 to August 5, 2016 with one public meeting, which included a presentation to the Public Advisory Committee.

**NOW, THEREFORE, BE IT RESOLVED** that the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, approves the attached amendment to *Maximize2040* and finds it to conform to the applicable Maryland State Implementation Plan and requirements of the 1990 Clean Air Act Amendments.

I HEREBY CERTIFY that the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, approved the aforementioned resolution at its August 23, 2016 meeting.

8-23-2016

Date

Clive Graham, Chairman

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**Baltimore Regional Transportation Board** 

# Amendment to *Maximize2040: A Performance-Based Transportation Plan*with an Air Quality Conformity Determination

I-95: Section 00 (Moravia Road to Ft. McHenry Tunnel)



## Amendment to Maximize2040 with an Air Quality Conformity Determination

This document describes a proposed amendment to *Maximize2040: A Performance-Based Transportation Plan*, approved in November 2015. The project covered by this amendment is to be amended into the *Amended 2016-2019 Transportation Improvement Program* (TIP).

#### AMEND MAXIMIZE2040 TO UPDATE YEAR OF OPERATION FOR I-95, SECTION 00, FROM 2030 TO 2018

The Maryland Transportation Authority (MDTA) proposes to advance the implementation date for one of the I-95 projects currently in the 2015 long-range transportation plan (known as *Maximize2040*), from 2030 to 2018.

The table below shows details about this project. "Year of expenditure" cost is an estimate that accounts for inflation from the current year (2016) to the expected year of operation. Following this table are the corresponding pages from the amended 2016-2019 TIP.

Project	I-95: Section 00
Project Sponsor	Maryland Transportation Authority
Jurisdiction	Baltimore City
Project Limits	Ft. McHenry Tunnel to Express Toll Lanes (3.7 miles in the northbound direction and 1.1 miles in the southbound direction)
Description	Reconfigure (restripe) northbound and southbound I-95 to provide four continuous mainline lanes in each direction. Will include reconstructing at-grade shoulders, replacing at-grade median concrete traffic barrier, and reconstructing portions of existing bridge decks and concrete bridge parapets. This will not require any additional widening of the highway. Construction will involve temporary lane closures and night work (to maintain traffic in all lanes during peak travel periods).
Expected Year of Operation	2018 (the year of operation in the November 2015 <i>Maximize2040</i> plan was 2030, and the project originally was tested in the air quality conformity model for 2030)
Projected Cost	\$51.102 million (year of expenditure) – covered entirely by toll revenues
Justification	MDTA is advancing construction work on the Canton Viaduct segment of I-895. MDTA expects that work on the Canton Viaduct will divert traffic from I-895 to I-95. Advancing this I-95 lane reconfiguration project will help to accommodate the diverted traffic. It also will improve safety by providing a higher roadside concrete traffic barrier and bridge parapets.





#### 2016 - 2019 Transportation Improvement Program

Highway Capacity

## I-95: Moravia Road to Fort McHenry Tunnel

TIP ID 22-1601-41 Year of Operation 2018

Agency Maryland Transportation Authority Project Type Roadway widening

Project Category Highway Capacity Functional Class Interstate

Conformity Status Not Exempt Physical Data 3.7 miles, 6 to 8 lanes

CIP or CTP ID(s) MDTA PIN# 2414 Est. Total Cost \$51,102,000

#### Description:

This project will reconfigure I-95 to provide four continuous mainline lanes in each direction. The specific limits are from north of the Fort McHenry Toll Plaza to the I-95 Express Toll Lanes (ETLs) in the northbound direction, and from north of the Fort McHenry Toll Plaza to north of O'Donnell Street in the southbound direction. The total work within the limits extends for 3.7 miles in the northbound direction and 1.1 miles in the southbound direction. The project involves restriping I-95 to provide one additional lane of traffic including reconstruction of at-grade shoulders, replacement of at-grade median concrete traffic barriers, and reconstruction of portions of existing bridge decks and all concrete bridge parapets.

This project is funded with MDTA toll revenues.

#### Justification:

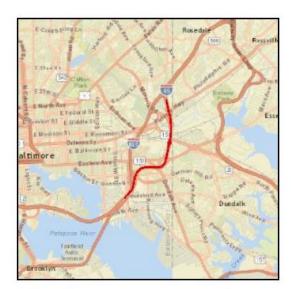
This project will provide lane continuity and additional capacity along I-95 between the Fort McHenry Tunnel and the I-95 ETLs. This is needed to address existing congestion and to accommodate diverted traffic from I-895 that will result from MDTA's Canton Viaduct Project.

The project will also improve safety by providing higher roadside concrete traffic barrier and bridge parapets.

Amendment: This amendment adds a new project to the 2016-2019 TIP utilizing Maryland Transportation Authority toll revenues. The amendment adds \$3.25 million in preliminary engineering funds and \$47.852 million in construction funds for a total of \$51.102 million.

#### Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 6.F Improve System Security -- Increase system redundancy.



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Maryland Transportation Authority

# 2016 - 2019 Transportation Improvement Program

Highway Capacity

# I-95: Moravia Road to Fort McHenry Tunnel

(Funding in Thousands)

#### Other

Phase	FY 2016 Federal Funds	FY 2016 Matching Funds	FY 2017 Federal Funds	FY 2017 Matching Funds	FY 2018 Federal Funds	FY 2018 Matching Funds	FY 2019 Federal Funds	FY 2019 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$2,041	\$0	\$27,214	\$0	\$18,597	\$47,852
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PE	\$0	\$1,388	\$0	\$1,625	\$0	\$237	\$0	\$0	\$3,250
PP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$1,388	\$0	\$3,666	\$0	\$27,451	\$0	\$18,597	\$51,102
Total	\$0	\$1,388	\$0	\$3,666	\$0	\$27,451	\$0	\$18,597	\$51,102

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# Amendment to Maximize2040 and the Amended 2016-2019 Transportation Improvement Program with an Air Quality Conformity Determination

#### PROCESS REQUIRED FOR AMENDING MAXIMIZE2040

In response to federal law and regulations, the Baltimore Metropolitan Planning Organization (MPO), known as the Baltimore Regional Transportation Board (BRTB), has developed a dynamic process for amending *Maximize2040* (the Regional Transportation Plan) that meets federal requirements and involves participation from BRTB members and from the public at large. The process also requires that nonexempt (and regionally significant for air quality purposes) proposed project(s) undergo a formal air quality conformity analysis to ensure the plan retains its conformity status under the Clean Air Act Amendments of 1990 (CAAA). In addition, the BRTB must demonstrate that the plan is fiscally constrained. This means that the plan must identify specific committed or reasonably anticipated sources of funding for all programs and projects in the document.

Federal regulations require that the BRTB consider this amendment because **the project sponsor proposes a major change in the project initiation date** that was included in the *Maximize2040* document the BRTB adopted on November 24, 2015.

#### ASSESSMENT OF FISCAL CONSTRAINT

Federal law requires that the BRTB analyze projects proposed for inclusion in plans and programs to ensure that the fiscal resources required to construct them are reasonably expected to be available within the specified time frame. MDTA will use toll revenues to cover the cost of this project. All of these funds will be applied within the time frame (2016-2019) covered by the amended TIP. Because this project will require no federal or state funds, the BRTB has determined that the **proposed amendment is in compliance with the fiscal constraint requirement for both** *Maximize2040* and the *2016-2019 TIP*.

#### **ANALYSIS OF AIR QUALITY CONFORMITY**

Under the Clean Air Act Amendments, areas designated as being in nonattainment or maintenance of air quality standards are required to review their current transportation plans and programs to ensure they are in conformity with the applicable State Air Quality Implementation Plan (SIP). The Baltimore region is a federally designated "nonattainment" area for ground-level ozone and is in a maintenance stage for fine particulate matter. It is the BRTB's understanding that the region is no longer required to address carbon monoxide in the conformity determination as it has been more than twenty years since the EPA determined the Baltimore City Central Business District (CBD) attained the CO NAAQS. This attainment determination occurred on December 15, 1995. The second maintenance plan for CO was in place until December 15, 2015.

Federal law requires that the MPO analyze projects proposed for amendment to ensure they do not



# Amendment to Maximize 2040 with an Air Quality Conformity Determination

jeopardize the conformity of the plan under federal rules and guidelines. A technical process estimates the mobile source emissions associated with projected travel demand considering the latest planning assumptions and the transportation network supply. The estimated mobile emissions are compared to the mobile source emission budgets contained in the State Implementation Plan (SIP) for the Baltimore region. The mobile source budgets contained in the SIP document, prepared by the Maryland Department of the Environment (MDE), are established through technical analysis with the goal of attaining and maintaining federal air quality standards.

The Interagency Consultation Group (ICG) has determined that the I-95 Section 00 project is not exempt from the requirement to determine conformity, through review of the Transportation Conformity Rule (§93.126 and §93.127). This project will provide additional capacity to the transportation network. While the I-95 project was included in the regional emissions analysis of the conforming 2015 Plan, the year of operation of this segment of the project is advancing from 2030 to 2018. As a result, the segment is now included in the modeled transportation network within an earlier timeframe, and the 2025 horizon year modeling must now be re-tested in the regional emissions analysis. The ICG, consisting of representation from the MPO and the Maryland departments of Transportation and the Environment, provided direction for how to move forward with the conformity determination. A conformity determination ensures that the implementation of the project in the *amended Maximize2040* and amended 2016-2019 Transportation Improvement Program does not worsen the region's air quality or delay the timely attainment of national ambient air quality standards.

To determine conformity to air quality improvement objectives delineated in the state air quality plan, a regional emissions analysis was performed using EPA's MOVES2014 model. The projected emissions from the regional transportation network, considering the combined effect of this project together with the conforming long range transportation plan (*Maximize2040*) and the amended 2016-2019 TIP, do not cause the Plan or TIP to exceed the SIP mobile source emission budgets. The results indicate that mobile source emissions associated with the implementation of projects contained in amended *Maximize2040* and the draft TIP are below established mobile source budgets for all affected horizon years. Tables 1 and 2 provide region-wide on-road emission estimates for four horizon years: 2017, 2025, 2035, and 2040. The estimates from 2017, 2035, and 2040 reflect the emission estimates from the November 2015 Conformity Determination of *Maximize2040* and the amended 2016-2019 TIP. These three years were not re-tested for this analysis, as no projects were changing status during these years, as compared to the November 2015 Plan. The 2025 horizon year, however, was re-tested as part of this analysis and emissions results and budgets are highlighted. Emissions resulting from the retested 2025 network are below SIP budgets for each pollutant.



# Amendment to Maximize 2040 with an Air Quality Conformity Determination

Emissions resulting from the 2017, 2035, and 2040 networks are also below SIP budgets for each pollutant.

Conformity Results: Implementation of this project will not worsen the region's air quality or delay the timely attainment of national air quality standards or interfere with implementation of any transportation control measures (TCMs).

Table 1
Regional Emissions Analysis Results for *Maximize2040 and Amended 2016-2019 TIP with I-95 Section 00 project in 2025* 

Network-Based Analysis Ozone Precursor Mobile Source Emissions (average summer weekday, tons/day)

	Impleme	ntation	Motor Vehicle Emissions Budgets <sup>1</sup>		
	VOC NO <sub>x</sub>		voc	NO <sub>x</sub>	
2017	26.6	66.9	40.2	93.5	
2025	16.7	31.9	40.2	93.5	
2035	10.5	19.1	40.2	93.5	
2040	9.9	18.6	40.2	93.5	

<sup>&</sup>lt;sup>1</sup> 2012 Reasonable Further Progress (RFP) Budgets, Baltimore Serious Area Nonattainment SIP for 8-hour Ozone (EPA Adequacy Determination Date TBD)

Table 2
Regional Emissions Analysis Results for *Maximize2040 and Amended 2016-2019 TIP with I-95 Section 00 project in 2025* 

Network-Based Analysis PM2.5 Precursor Mobile Source Emissions (tons/year)

	Impleme	ntation	Motor Vehicle		
			Emissions Budgets <sup>1</sup>		
	Direct NO <sub>x</sub>		Direct PM2.5	NO <sub>x</sub>	
2017	1,161.88	25,771.08	1,218.60	29,892.01	
2025	634.06	12,403.55	1,051.39	21,594.96	
2035	426.75	7,655.96	1,051.39	21,594.96	
2040	411.76	7,505.03	1,051.39	21,594.96	

<sup>&</sup>lt;sup>1</sup> Baltimore Nonattainment Area PM2.5 Maintenance State Implementation Plan (Approved December 2014.)



### Amendment to Maximize 2040 with an Air Quality Conformity Determination

#### **PUBLIC COMMENT OPPORTUNITIES**

As mandated by federal law, the BRTB is providing opportunities for public review and comment on the proposed *Maximize2040* amendment, the amended 2016-2019 TIP, and the related Conformity Determination. Information will be placed on the Baltimore Metropolitan Council website, provided to local planning agencies, and distributed to local media and interested parties.

#### **PUBLIC REVIEW / COMMENT PERIOD**

The BRTB will provide a 30-day review and comment period for the enclosed plan amendment, the amended 2016-2019 Transportation Improvement Program (TIP) amendment, and Conformity Determination (see information about open house public meetings below). See Appendix B for a summary of public comments and BRTB responses (when available).

The BRTB will meet on Tuesday, August 23 at 9 A.M. at the Baltimore Metropolitan Council (Offices @ McHenry Row, 1500 Whetstone Way, Suite 300, Baltimore, MD 21230) to consider approval of the associated amendment to *Maximize2040* and the amended *2016-2019 Transportation Improvement Program* (TIP), with an air quality Conformity Determination.

#### **OPEN HOUSE PUBLIC MEETING**

The BRTB invites the public to attend the following public meeting relative to the amendment to *Maximize2040* and the amended 2016-2019 TIP. This meeting location is ADA-accessible for people with disabilities.

Date and Time	Location	Access by Transit
Wednesday, August 3, 2016 4:30 to 5:30 p.m. with Public Advisory Committee (PAC) Policy Subcommittee	Baltimore Metropolitan Council 1500 Whetstone Way, Suite 300 Baltimore, MD 21230	MTA Route 1 Charm City Circulator

