

I. INTRODUCTION TO AMENDED 2016-2019 TIP

A. Summary

The Baltimore Region Transportation Improvement Program (TIP) documents the anticipated timing, cost, and rationale for federally-funded transportation improvements to be made in the Baltimore region¹ over the next four years. It is a program of specific projects, not a plan. In accordance with federal guidelines, the TIP is a translation of recommendations from the long-range transportation plan, *Maximize2040*, for the Baltimore region into a short-term program of improvements. This includes specific capacity improvements that have been identified in the long-range plan, as well as system preservation projects and operational initiatives that are supported in the plan but have not been previously detailed. As such, the TIP ensures consistency between plan recommendations and project implementation in the region.

¹. As shown in Exhibit I-1, the Baltimore region is composed of Baltimore City, Annapolis and Anne Arundel, Baltimore, Carroll, Harford and Howard counties. As a result of Census 2010, there are three federally recognized urbanized areas in the region. One includes the City of Baltimore and portions of Anne Arundel, Baltimore, Carroll, Howard and Queen Anne's County. The second includes Westminster in Carroll County. The third is Aberdeen – Havre de Grace – Bel Air in Harford County and portions of Cecil County.

The TIP also serves as a multi-modal listing of transportation projects in the region for which federal funding requests are anticipated between fiscal years 2016-2019.²

A summary of the key federal requirements is provided in Chapter II. The summary is followed by several sections that provide information for the requirements in key areas. The relationship between the TIP and other transportation plans and programs in the region, its fulfillment of federal requirements, its regional review function and the procedures for amending it are described in Chapter III. Chapter IV explains the terms and symbols used in the project listings. Chapter V presents the financial plan supporting the projects in the four-year program. It also details the amount and source of federal funds to be requested for the coming fiscal year, FY 2016.

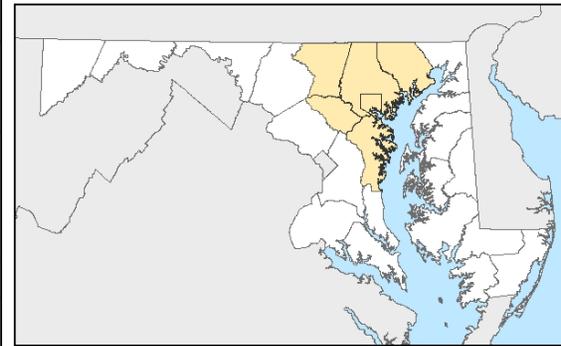
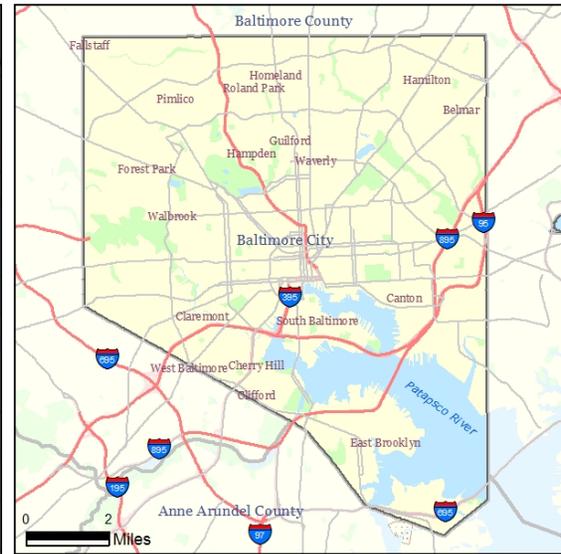
All federally funded projects in the TIP are listed in Chapter VI. The projects are grouped first according to the local jurisdiction or state agency responsible for their implementation. Within those sections they are then grouped by category in the following order: commuter rail, enhancement program,

². The Baltimore Region TIP follows the Maryland state fiscal year which is July 1 to June 30.

environmental/safety, emission reduction strategy, highway capacity, highway preservation, transit, ports, and miscellaneous. A timetable for anticipated federal funding requests is presented for each project. The estimated total cost of the projects in the 2016-2019 TIP is approximately \$3.33 billion. Of that amount, \$2.26 billion will be provided by federal funding authorities, while the local and state matching funds are \$1.07 billion.

Exhibit I-1: The Baltimore Region

Baltimore Metropolitan Region



Prepared by
Transportation Planning Division
Projected Coordinate System: NAD 1983 State Plane (ft)
Data Source: BMC, © NAVTEQ 2013, TIGER/Line®, MTA
Printed - July 2013



Exhibit I-2: The Baltimore Region Federal Highway Functional Classification

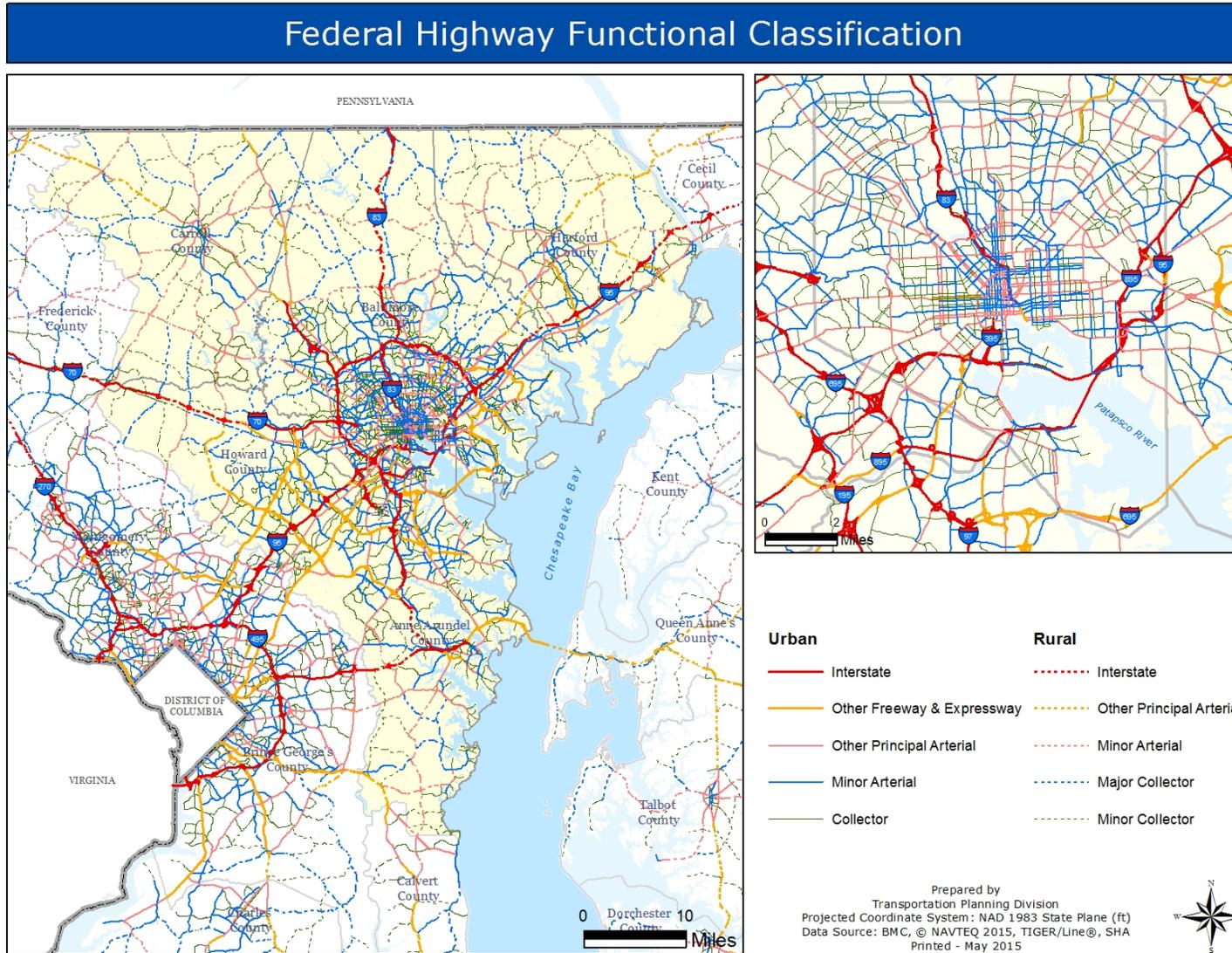
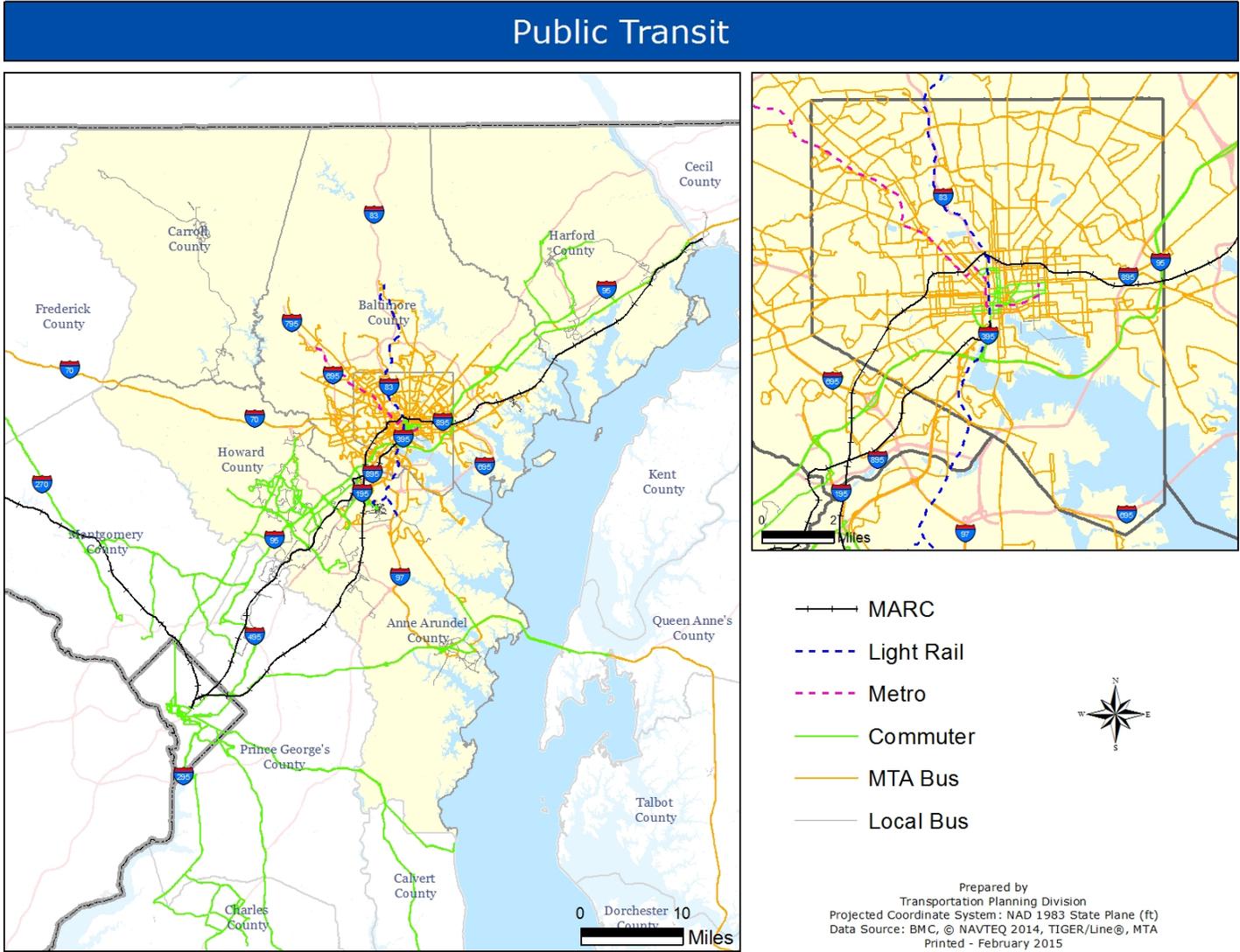


Exhibit I-3: The Baltimore Region – Transit



B. Metropolitan Planning Organization Self-Certification

At the time the metropolitan TIP, and the projects requesting funds in the coming fiscal year, are endorsed for funding out of the U. S. Department of Transportation (DOT), a Metropolitan Planning Organization (MPO) is required to certify that projects selected through the transportation planning process conform with all applicable federal laws and regulations. The Baltimore Regional Transportation Board (BRTB), in its capacity as the MPO for the Baltimore region, certifies via Resolution #16-2 that the transportation planning process is conducted in a manner that complies with the requirements of 23 USC 134, 49 USC 5303, 23 CFR Part 450 and 49 CFR Part 613, and Sections 174 and 176(c) and (d) of the Clean Air Act. The certification requirement directs members of the BRTB to review the planning process that has been under way and ascertain that the requirements are being met. The review serves to maintain focus on essential activities. Members of the BRTB are listed in Appendix A of this document.

The BRTB's commitment to comply with applicable federal transportation planning requirements is evidenced by the following: ❶ the BRTB has a continuing, cooperative and

comprehensive (3-C) transportation planning process that results in plans and programs consistent with the general land use and master plans of the local jurisdictions in the urbanized area; ❷ the BRTB has adopted a public participation process that fulfills the requirements and intent of public participation and outreach as defined in the Metropolitan Planning Regulations; ❸ the BRTB adopted a financially constrained long-range transportation plan, *Maximize2040*, for the Baltimore region consistent with the metropolitan planning factors in Moving Ahead for Progress in the 21st Century (MAP-21); ❹ the BRTB maintains a Congestion Management Process (CMP); ❺ the BRTB has determined that conformity (8-hour ozone, fine particulate matter and carbon monoxide) of *Maximize2040* and the amended 2016-2019 TIP for the Baltimore region has been conducted under the U.S. Environmental Protection Agency's (EPA's) final rule as amended; and ❻ the BRTB adheres to the federal Minority Business Enterprise/Women Business Enterprise (MBE/WBE) requirements set forth in 49 CFR Part 23.

C. Consistency with Maximize2040

In an effort to plan for future regional transportation needs and to comply with the intention of MAP-21 and the Clean Air Act Amendments of 1990 (CAAA), the BRTB endorsed *Maximize2040, A Performance-Based Transportation Plan*, the long-range transportation plan, in November 2015. The factors that guided development of *Maximize2040* are listed in the Metropolitan Planning Regulations effective March 16, 2007.

Maximize2040 reports on regional growth in population, households and employment to the year 2040 and the projected travel demand generated as a result of the demographic data. It demonstrates how the existing and committed transportation network will be inadequate to accommodate future travel demand in an acceptable manner to ensure regional mobility objectives. To address the projected demands on the transportation system, *Maximize2040* includes a range of projects through the year 2040.

A multi-modal array of transportation improvements are outlined in *Maximize2040* with the requisite funding scenario needed to support the program. Non-motorized transportation alternatives are included, as well as inter-modal and

transportation demand management strategies. The transportation demand management strategies are particularly important to complement the infrastructure improvements and ensure the region meets the conformity requirements for transportation plans and programs by way of national air quality goals and objectives.

The capacity projects in the amended 2016-2019 TIP "flow" from the conforming Plan, resulting in a prioritized subset of projects for implementation. In this way, long-range policy recommendations are translated into short-range transportation improvements.

II. FEDERAL REQUIREMENTS AND REGIONAL REVIEW FUNCTION

A. Requirements of Moving Ahead for Progress in the 21st Century (MAP-21)

Below is a discussion of key federal requirements that are in place regarding development of the TIP. These include a prioritized list of financially constrained improvements, a consideration of “flexing” funds between traditional highway and transit sources of money, completion of congestion management studies prior to inclusion of any project that contributes to an increase in single-occupant vehicles, and the role of public involvement throughout the process.

As a requirement of MAP-21, the BRTB, in cooperation with state and local agencies and transit operators, have developed a prioritized and financially reasonable TIP. Priority is reflected by the year in which a project is shown. Priorities and financial analysis are provided for all four years of the TIP. Financial reasonableness is evaluated on three fronts: ❶ MDOT ensures that federal funding requests during the TIP planning process are reasonable for our region; ❷ MDOT provides documentation of the state's capacity to meet the match

requirements associated with state-sponsored projects in the TIP; while ❸ Local governments also provide documentation of the same financial reasonableness requirements to match the federal funds requested for locally sponsored projects.

Federal law requires that projects proposed for inclusion in plans and programs be analyzed to ensure that the fiscal resources required to construct them are reasonably expected to be available within the timeframe specified. With the additional revenue projected as a result of passage of the Transportation Infrastructure Investment Act of 2013, the funding will be available to advance some projects. Within this context, the proposed projects have been assessed and found to meet the fiscal constraint requirement.

As a further requirement of MAP-21, the TIP is required to take full advantage of the increased flexibility of Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) capital funds. MDOT provides a "statement of concurrence" that consideration of this provision (flexing funds) has been utilized in the development of all state initiatives. Documentation of project prioritization, financial reasonableness and flexible funding is included in Appendix B.

Projects included in the amended 2016-2019 TIP have been cooperatively determined by members of the BRTB. The project selection process considered the air quality implications and regional mobility enhancement prior to inclusion in the final TIP document.

An additional requirement of MAP-21 is to include a financial plan that demonstrates that the projects proposed in the TIP can be funded. The TIP demonstrates that the region, through public and private funding, is reasonably able to generate the projected resources needed to carry out the projects in the TIP.

Another requirement of MAP-21 states that for “transportation management areas classified as nonattainment for ozone or carbon monoxide, Federal funds may not be advanced in such area for any highway project that will result in a significant increase in the carrying capacity for single-occupant vehicles unless the project is addressed through a congestion management process (CMP)”. CMP guidelines were adopted by the BRTB in October, 1997. As potential capacity projects enter the state planning process, the BRTB is invited to participate in interagency discussions. This process allows the BRTB to offer recommendations during the process to address congestion prior to building additional lane capacity. At three

stages in this interagency process the BRTB adopts a resolution approving the analysis to date. The BRTB also conducts ongoing data collection and monitoring to assess conditions and ascertain the effectiveness of a range of strategies to relieve congestion.

Also as a requirement of the regulations implementing MAP-21 and its predecessors, the public must have an opportunity to review and comment on the TIP in the early stages of preparation with at least one public meeting. Formal public participation procedures to govern metropolitan transportation planning activities were updated by the MPO in September 2014. These guidelines reaffirmed a framework for public participation and information dissemination.

The BRTB offered individuals, affected public agencies, private providers of transportation and other interested parties reasonable opportunities to comment on a draft list of projects. A schedule of key dates in the development of the TIP was provided to the members of the Public Advisory Committee (PAC) along with a description of the information available in the TIP. Opportunities to comment on the draft list were publicized primarily through electronic means (website and e-

newsletters) and PAC meetings, with outreach work undertaken by Public Involvement staff.

The amended TIP was made available online. For the draft TIP, flyers announcing public meetings were distributed online and to 77 public libraries in all jurisdictions in addition to advertising in local papers, the Baltimore Sun online and social media. The PAC members were asked to distribute the flyer to their constituencies as an additional way of disseminating the information. Public involvement activities were announced on the Internet via the Baltimore Metropolitan Council (BMC) website. One public meeting was held in each jurisdiction for the public to comment on the amended TIP in addition to a live webinar held in the evening. In addition to these public meetings, the public was able to address the BRTB at its October and November 2015 meetings. Written comments by mail, email or social media were accepted during the public review periods. A summary of all comments received, both verbal and written, BRTB responses to comments, and the public participation notices are included in Appendix G.

B. Environmental Justice

Environmental justice (EJ) considers whether low-income and minority populations bear disproportionate impacts resulting from governmental decisions. Historically, EJ was borne out of civil rights and environmental complaints from low-income and minority communities. Concerns were raised, showing that these communities may suffer disproportionately from exposure to toxic chemicals and the siting of industrial plants and waste facilities.

In 1997, the U.S. Department of Transportation (DOT) issued an “Order to Address Environmental Justice in Minority Populations and Low-income Populations.”

The DOT Order directs consideration of two groups. A person whose household income is at or below the U.S. Department of Health and Human Services poverty guidelines is considered low-income. A person belonging to any of the following groups is considered part of a minority population:

- Person of origin in any of the black racial groups of Africa;
- Person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin;

- Person having origins in way of the original peoples of the Far East, Southeast Asia, Indian subcontinent, or Pacific Islands; or
- Person having origins in way of the original people of North America (American Indian, Alaskan Native) and who maintains cultural identification through tribal affiliation or community recognition.

The DOT Order applies to all policies, programs and other activities undertaken, funded or approved by the DOT, including metropolitan planning. There are three fundamental DOT environmental justice principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Metropolitan planning organizations (MPOs) are responsible for assessing the benefits and burdens of transportation system investments for different socio-economic groups. This includes both a data collection effort and engagement of

minority, low-income, and disability populations in public involvement activities.

In *Maximize2040*, an analysis was done to measure the region's ability to improve access to jobs and other destinations. Included in this document is information about where upcoming transportation projects are located relative to concentrations of minority and low-income populations. Two maps (Exhibit II-1 and Exhibit II-2) show areas where the percentages of minority and low-income populations are higher than for the region. Data from the 2010 Census is used to calculate the regional information.

Minority Populations

From the 2009-2013 American Community Survey, the region's minority population is 41% of the total population, although the concentrations of such groups are not equally distributed throughout the region. For example, the number of African-Americans living in Baltimore City is significantly higher than in other jurisdictions. In order to show where large concentrations of minorities are living in the region, Census tract data (i.e. neighborhoods) was used with populations greater than 41%. Exhibit II-1 shows census tracts with minority populations greater than 41%.

Low-income Populations

Similarly, income is not distributed equally throughout any region. As a result, the 5-year estimate of the region's median household income from the 2009-2013 American Community Survey (\$69,367) was used to show the levels of income around this region. Low-income populations can be identified as earning 50% or less of the median household income. Therefore, a household at the 50% rate has a maximum income of \$34,684, while a household at the 80% rate has a maximum income of \$55,494. Exhibit II-2 shows census block groups that are below 50%, between 50% and 80%, and above 80% of the region's median household income.

When a transportation project enters project planning, consideration of EJ is undertaken. These studies are conducted by the appropriate state agency (e.g. Maryland State Highway Administration, Maryland Transit Administration, or Maryland Transportation Authority) or a local jurisdiction during the project planning phase. Opportunities for public participation are central to these efforts.

Additional EJ maps are available in Section VI: Individual Project Listings. These maps show the locations (by jurisdiction) of specific projects in relation to minority and low-income population concentrations.

Exhibit II-1: Minority Concentration, Baltimore Region

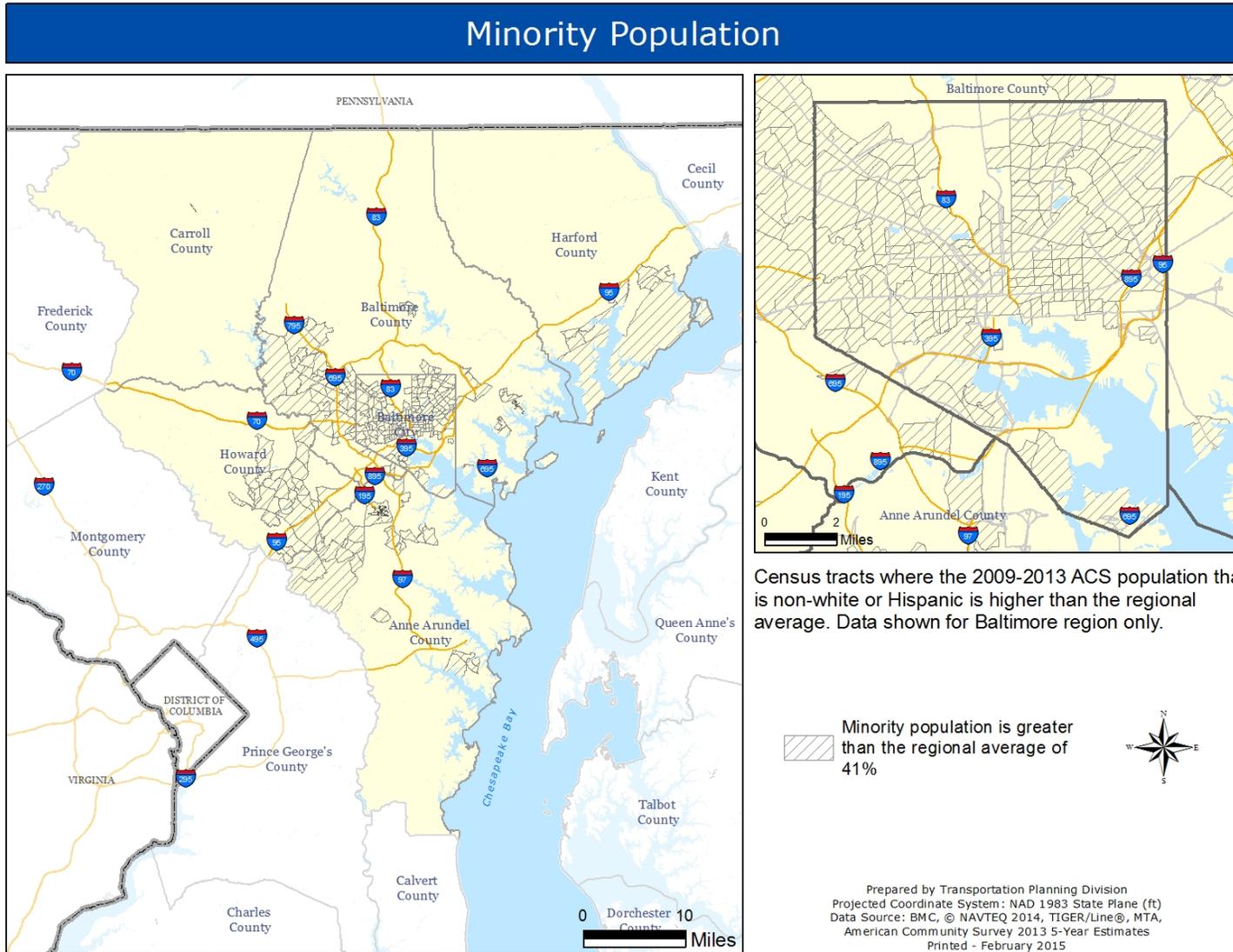
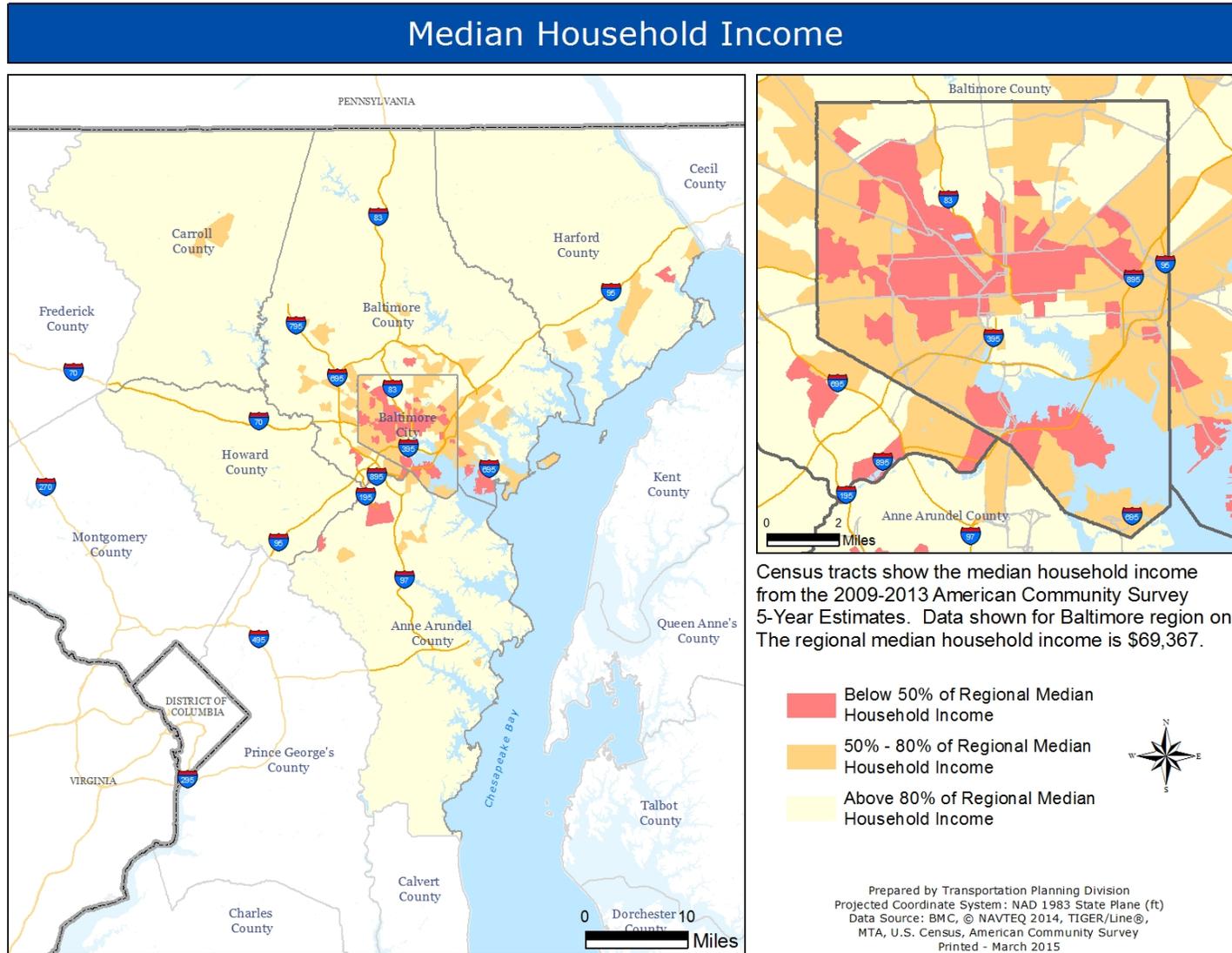


Exhibit II-2: Low Income Concentration, Baltimore Region



C. Coordinating Human Service Transportation

MAP-21 continues to support transportation initiatives for elderly and disabled populations through the FTA Section 5310 Capital Grant Program and low-income populations through the eligibility of job access and reverse commute projects under FTA Section 5307 Urbanized Area Formula Grants program. MAP-21 also continues the requirement that all of these programs be coordinated. The Maryland Transit Administration (MTA) is the administrator for all three programs and coordinates with the BRTB on the implementation of these programs.

The BRTB takes the lead, with assistance from MTA, for development of the Baltimore Region Coordinated Public Transit Human Services Transportation Plan. The coordination takes place in the form of a locally developed yet coordinated plan. For projects funded through these programs, recipients must certify that the projects “are included in locally developed, coordinated public transit-human services transportation plan”. This provision is aimed at improving transportation services for persons with disabilities, older adults and individuals with lower incomes, and ensuring that communities are coordinating

transportation resources provided through multiple federal programs. MTA and the BRTB updated the Baltimore Area Coordinated Transportation Plan in October 2015.

D. Additional Programs for Seniors and Persons with Disabilities

In addition to the FTA Section 5310 Program, MTA has been actively pursuing ways to assist the elderly and persons with disabilities. The MTA operates a fleet of buses that is fully accessible to the elderly and persons with disabilities. All new bus purchases are lift-equipped.

As part of their training program, bus operators receive disability awareness/passenger assistance technique training for the special needs of passengers. This training emphasizes Americans with Disabilities Act (ADA) service requirements and techniques for communicating with the elderly and people who are disabled. The needs of the elderly and disabled customers, those with hidden disabilities and blind, deaf and mentally disabled travelers are discussed. Operators are instructed in the operation of the lift-equipment and in providing assistance to riders from the disability community.

MTA operates a Mobility Program and Reduced Fare Program for the elderly and persons with disabilities. Mobility provides comparable ADA service for those who cannot use fixed-route service. The Reduced Fare Program provides a 66% discount for the elderly and persons with disabilities in accordance with

requirements for recipients of federal operating assistance from FTA (49 CFR 609.23).

In addition to these programs, MTA initiated two programs: MTA Taxi Access II Service and the Senior Ride Program.

MTA Taxi Access II Service

The MTA Taxi Access II Service is a program that is open to eligible MTA Mobility customers. This program offers program participants same day transportation options through a network of taxi and sedan providers. Participants in the program can use the service for any purpose and take it to anywhere within the service area of Mobility. There is a premium fare of \$3.00 that the participant pays for each ride and the participant is responsible for any portion of a fare that exceeds the \$20.00 limit. Participants may be accompanied by up to 3 people per trip if all passengers start and end the ride at the same location. A list of participating companies is available to users.

Senior Ride Program

Since FY 2006, MTA has awarded grants to qualified applicants to encourage and facilitate the development of volunteer transportation services for low-income and

moderate-income seniors. Each year, MTA has offered statewide approximately \$180,000 in State funds to be matched with a 25% local contribution. The projects must provide door-to-door transportation services, use primarily volunteer drivers, and have a dispatching system.

E. Status of Projects from the 2014-2017 TIP

As mandated by the federal regulations for metropolitan planning, major projects from the previous TIP that were implemented must be tracked and any significant delays in the planned implementation of these major projects must be explained. In order to meet this guideline, Table II-1 lists all projects by jurisdiction including the TIP number, year of operation and status of the project.

Key for Table II-1:

XX means the project is not in the new TIP either because funds have been received, the project is complete, the project is between funding stages, or it is not being pursued. The reason is noted in the project status. Ongoing means that this project continues year after year. NA means not applicable, usually used for a study where year of operation has yet to be determined.

Table II-1: Status of Projects in the 2014-2017 TIP

Project	Project TIP ID	Year of Operation		Project Status
		14-17 TIP	16-19 TIP	
<u>Baltimore Metropolitan Council</u>				
CMAQ Areawide	80-0801-09	Ongoing	XX	All funds were obligated in FY 2015 and years prior.
<u>Anne Arundel County</u>				
Chesterfield Road Bridge over Bacon Ridge Branch	11-1101-13	2016	2016	In the current TIP.
Furnace Avenue Bridge over Deep Run	11-1103-13	2018	2018	In the current TIP.
Sands Road Bridge over Wilson Owens Branch	11-1203-13	2016	2016	Assumed completion July 2016
Harwood Road Bridge over Stocketts Run	11-1208-13	2018	2018	Project to be completed
Magothy Bridge Road Bridge over Magothy River	11-1402-13	2017	2017	Project to be completed
O'Connor Road Bridge over Deep Run	11-1403-13	2018	2018	Project to be completed
<u>Baltimore City</u>				
Citywide Road Resurfacing- Federal Aid Program	12-0207-11	Ongoing	XX	Project on hold.
Edmondson Avenue Bridge over Gwynns Falls and CSX Railroad	12-1002-43	2015	XX	Not in 16-19 TIP. Plan, specification and estimate submitted. Funded for construction in FY 2015.
Citywide Bridge Preservation and Rehabilitation	12-1030-13	Ongoing	XX	Project on hold.
Boston Street Realignment and Reconstruction	12-1102-42	2014	2016	65 % review stage completed
Reconnecting West Baltimore	12-1122-03	2017	2017	95% submission
Key Highway and Light Street Roundabout	12-1123-12	2015	2016	95% design stage
Central Avenue - Phase II	12-1205-12	2017	2017	Plan specifications and estimates
Citywide Street and Urban Reconstruction	12-1213-11	Ongoing	XX	Project on hold.
Perring Parkway Ramp and Hillen Road Bridge	12-1215-13	2015	2019	Perring Parkway Ramp - design proposal stage
Sisson Street Bridge over CSX Railroad	12-1216-13	2017	2017	30% design stage
Citywide Bicycle and Pedestrian Improvements	12-1217-25	Ongoing	Ongoing	Various projects in design and construction
Citywide Safety and Intelligent Transportation System	12-1218-07	Ongoing	Ongoing	Various project elements in construction
Citywide Guide Sign Replacement	12-1222-19	Ongoing	2016	Various installations ongoing
Cherry Hill Light Rail Station - Area Improvement	12-1225-64	2014	XX	65% design stage
Harford Road Bridge over Herring Run	12-1402-13	2017	2017	95% design stage

Table II-1: Status of Projects in the 2014-2017 TIP

Project	Project TIP ID	Year of Operation		Project Status
		14-17 TIP	16-19 TIP	
Baltimore City (continued)				
Wilkens Avenue Bridge over Gwynns Falls	12-1403-13	2017	2017	60% design stage
Belair Road Complete Streets	12-1404-11	2016	2020	scoping/proposal
Waterview Avenue and Hollins Ferry Road Reconstruction	12-1406-12	2017	XX	Project on hold.
Red Line Development	12-1407-06	2021	XX	Project on hold
Greenmount Avenue Reconstruction: 43rd Street to 29th Street	12-1408-12	2017	2017	Processing for design notice to proceed
Seton Hill Complete Streets	12-1409-11	2017	XX	Project on hold.
I-83: Joint Repairs - Phase II	12-1411-13	2017	2018	95% design stage
Bayview MARC Intermodal Station	12-1413-56	2018	2018	Consultant selection in process
Citywide System Preservation Resurfacing	12-1414-11	2015	Ongoing	Consultant selection in process
Citywide Concrete Pavement Rehabilitation	12-1416-11	2015	XX	Project on hold
Citywide ADA Improvements	12-1417-39	2015	Ongoing	Improvements in construction
Hanover Street Bridge Multimodal Corridor	12-1419-13	NA	NA	MOU under review
Hawkins Point Bridge over CSX Railroad	12-9903-13	2017	2017	Plan specifications and estimates
Baltimore County				
Dogwood Road Bridge #72 Over Dogwood Run	13-0001-13	2015	2017	Design nearly complete, 6/2017 construction advertisement date planned, project in ROW acquisition but delayed by issues involving MD DNR property & unknown property-owner parcel.
Gwynnbrook Avenue Bridge #202 over Gwynns Falls	13-0411-13	2014	2017	Design complete, 11/2015 construction advertisement date planned, project in ROW acquisition but delayed by issues involving MD DNR property.
Mohrs Lane Bridge #143 over CSX Railroad	13-0803-13	2015	2018	Project in final design phase, 11/2015 construction advertisement date planned.
Ensor Road Bridge #158 over Third Mine Branch	13-1003-13	2014	XX	Design complete, 4/2015 construction advertisement date planned, project currently in ROW acquisition but delayed due to condemnation process on 1 property.
Gunpowder Road Bridge #409	13-1005-13	2016	2019	Design planned FY2017, construction FY2018. Project may be delayed due to other projects having higher priority.
Hammonds Ferry Road over CSX Railroad	13-1012-13	2015	2017	Design underway, 1/2016 advertisement date planned. Project may be delayed due to other projects having higher priority
Lansdowne Boulevard Bridge #113 over CSX Railroad	13-1105-13	2020	2021	Design planned FY2018, Construction FY2020.

Table II-1: Status of Projects in the 2014-2017 TIP

Project	Project TIP ID	Year of Operation		Project Status
		14-17 TIP	16-19 TIP	
Baltimore County (continued)				
Jericho Covered Bridge over Little Gunpowder Falls	13-1106-13	2014	XX	Design complete, summer 2015 construction scheduled.
Piney Grove Road Bridge #140 over CSX railroad	13-1107-13	2017	2021	Design planned FY2018, construction FY2020.
Peninsula Expressway Bridge #119 over CSX Railroad	13-1108-13	2018	2020	Design planned FY2016, construction FY2018. Project may be delayed due to other projects having higher priority.
Gores Mill Road Bridges #136, 138 and 346	13-1109-13	2015	2017	Preliminary design underway, 11/2015 construction advertisement date planned.
Dogwood Road Bridge #347 over Dogwood Run	13-1201-13	2016	2016	Design underway, 6/2015 construction advertisement date planned.
Old Ingleside Avenue Bridge #96 over Dead Run	13-1202-13	2020	2020	Design planned FY2016, construction FY2020.
Gorsuch Mill Road Bridge #71 over Blackrock Run	13-1203-13	2017	2019	Design planned FY2016, construction FY2020
Old Court Road Bridge #237 over Bens Run	13-1204-13	2014	2017	Design planned FY2014, construction FY2016
Sparks Road Bridge #18 over Gunpowder Falls	13-1206-13	2016	2017	Design planned FY2016, construction FY2017. Project may be delayed due to other projects having higher priority.
Golden Ring Road Bridge #110 over Stemmers Run	13-1208-13	2018	2020	Design planned FY2017, construction FY2020.
Rolling Road Bridge #358 over Branch of Dead Run	13-1209-13	2018	2021	Design planned FY2016, construction FY2018.
Ingleside Avenue Bridge #97 over Dead Run and Dogwood Road	13-1210-13	2020	2020	Design planned FY2016, construction FY2020.
Campbell Boulevard Extension - Phase II	13-1401-42	2015	XX	Construction ongoing and expected to be complete in 2015
Owings Mills Boulevard Extension - Phase II	13-1404-42	2016	XX	Construction ongoing and expected to be complete in 2016
Rolling Road Widening - Phase I	13-1405-41	2016	2018	Construction to start in FY 2016
Security Boulevard Extension	13-1406-42	2016	2018	Construction to start in FY 2017
Bridge Inspection Program	13-8901-14	Ongoing	Ongoing	Ongoing program
Carroll County				
Stone Chapel Road over Little Pipe Creek	14-1103-13	2015	2019	Preliminary engineering FY 2016
Governor Brown Trail	14-1401-25	2017	2017	In the current (FY 2016-2019) TIP
Countywide Bridge Maintenance, Repair, and Replacement	14-1402-13	2017	Ongoing	In the current (FY 2016-2019) TIP

Table II-1: Status of Projects in the 2014-2017 TIP

Project	Project TIP ID	Year of Operation		Project Status
		14-17 TIP	16-19 TIP	
<u>Carroll County</u> (continued)				
Boxwood Drive Extension	14-1403-42	2020	XX	No funds have been expended and project is not moving forward for foreseeable future.
Georgetown Boulevard Extension	14-1404-42	2020	XX	No funds have been expended and project is not moving forward for foreseeable future.
Bridge Inspection Program	14-9401-14	Ongoing	Ongoing	Ongoing
<u>Harford County</u>				
Watervale Road Bridge # 63 over Winters Run	15-0404-13	2015	2016	In the current TIP and expected to be in operation in FY 2016
Harford Creamery Road Bridge # 104 over Little Deer Creek	15-0405-13	2014	XX	Under construction and expected to be in operation in FY 2015
Carrs Mill Road Bridge #216 over Bear Cabin Branch	15-0701-13	2014	2016	In the current TIP and expected to be in operation in FY 2016
Abingdon Road Bridge #169 over CSX Railroad	15-1001-13	2015	2018	In the current TIP and expected to be in operation in FY 2018
Chestnut Hill Bridge #40	15-1101-13	2016	2018	In the current TIP and expected to be in operation in FY 2018
Phillips Mill Road Bridge #70 over an East Branch tributary	15-1102-13	2018	2019	In the current TIP and expected to be in operation in FY 2019
Prospect Road Bridge #217 over Deep Run	15-1104-13	2016	2020	In the current TIP and expected to be in operation in FY 2020
Robinson Mill Road Bridge #154 over Broad Creek	15-1401-13	2014	2016	In the current TIP and expected to be open to traffic in FY 2016
Bata Boulevard Access Road	15-1402-42	2016	2020	In the current TIP and funded for design in FY 2017
Tollgate Road	15-1404-42	2017	2018	In the current TIP and expected to be in operation in FY 2018
Stafford Road Bridge #24 over Deer Creek	15-1501-13	2017	2017	In the current TIP and expected to be open to traffic in FY 2017
Bridge Inspection Program	15-9411-14	Ongoing	Ongoing	Ongoing
<u>Howard County</u>				
Bridge Repairs and Deck Replacement	16-0436-13	Ongoing	Ongoing	In the current TIP - Bridge projects are being developed and implemented from year to year
Dorsey Run Road: MD 103 to Montevideo Road	16-1402-41	2015	XX	Phase B of construction underway in FY15. Project anticipated to be completed by FY17.
Dorsey Run Road: MD 175 to CSX Railroad Spur	16-1403-41	2015	2020	Design and land acquisition underway for Phase 1, Phase 2 design set for FY16. Project anticipated to be completed by FY20.
Dorsey Run Road: Guilford Road to CSX Railroad Spur	16-1404-42	2014	XX	Project is currently in phase 2. Project anticipated to be completed by FY17.

Table II-1: Status of Projects in the 2014-2017 TIP

Project	Project TIP ID	Year of Operation		Project Status
		14-17 TIP	16-19 TIP	
Howard County (continued)				
Guilford Road: US 1 to Dorsey Run Road	16-1405-41	2016	2020	Project design and land acquisition in process. Project anticipated to be completed by FY20.
MD 175 at Blandair Park	16-1407-46	2018	2019	Construction of phase 1 continues, design of phase 2 to begin in FY15. Project anticipated to be completed in FY19.
Skylark Boulevard extended to MD 216	16-1409-42	2017	2017	In the current TIP
Snowden River Parkway: Broken Land Pkwy to Oakland Mills Rd	16-1410-41	2016	2020	Project will be phased. Design and land acquisition is in progress. Project anticipated to be completed in FY20.
MDOT				
State Safety Oversight	90-1401-39	Ongoing	Ongoing	Ongoing project
MTA - Commuter Rail				
MARC BWI Garage Repairs	71-1401-55	2016	XX	Will be combined w/MARC Riverside Procurement to create a new project (MARC Facilities)
MARC Bayview Station	72-1202-56	2020	2020	Project is moving on with state funding only
MARC Halethorpe Station Parking Expansion	73-0204-55	2014	XX	Completed
MARC Aberdeen Station Parking Expansion D&E	75-1101-02	2018	XX	Project on hold
MARC Edgewood Station Improvements	75-1201-54	2013	XX	Completed
MARC Maintenance and Layover Facility	70-1201-56	2018	XX	No longer in Baltimore Region, now in Cecil County
MARC Riverside Facility Procurement	70-1202-56	2014	XX	Will be combined w/ MARC BWI Garage to create a new project (MARC Facilities)
MARC Rolling Stock Overhauls and Replacement	70-1501-53	Ongoing	Ongoing	Ongoing
MARC Improvements	70-1502-54	Ongoing	Ongoing	Ongoing
MARC Facilities	70-1503-55	Ongoing	Ongoing	Ongoing
MTA - Transit				
Central Maryland Transit Operations and Maintenance Facility	16-0201-66	2015	XX	Federal funding is provided through MTA but Howard County is managing construction of this project. Anticipate occupancy 5/20/2015.
Bus Replacement	40-0009-05	Ongoing	XX	Will now become MTA Core Bus and Paratransit Vehicle Replacement (40-1601-05) - a new project to the 16-19 TIP
Bus & Rail System Preservation and Improvement	40-0015-64	Ongoing	Ongoing	Project is ongoing and is on schedule

Table II-1: Status of Projects in the 2014-2017 TIP

Project	Project TIP ID	Year of Operation		Project Status
		14-17 TIP	16-19 TIP	
MTA Transit (continued)				
Small Urban Transit Systems - Operating Assistance	40-0104-61	Ongoing	Ongoing	Project is ongoing and is on schedule
Baltimore Red Line	40-0602-69	2022	2022	Project is in the Preliminary Engineering phase and is on schedule
Metro Station Fire Management Systems (SCADA)	40-0603-39	2013	XX	Completed
New Freedom Program	40-0801-69	Ongoing	XX	Section 5310 will be replacing Section 5317 (New Freedom)
Light Rail Mid-Life Overhaul	40-1001-64	2019	2019	Project is on schedule.
Closed Circuit Television Improvements	40-1002-69	Ongoing	XX	Anticipated completion of phase IV is 6/2015.
Metro Railcar Overhaul and Emergency Repairs	40-1003-64	Ongoing	XX	Project is now included in the Metro Railcar and Signaling Systems Replacement project (40-1403-64)
PA/LED Sign Replacement - LRT and Metro	40-1004-64	2014	XX	Completed
Bus New Main Shop	40-1103-66	2016	XX	TIP ID changed to 40-1401-66. Project completed
Metro Electrical Substation Improvements	40-1201-64	2013	XX	Completed
Kirk Bus Facility Replacement - Phase 1 & 2	40-1203-65	2015	2018	Project on schedule. Will be completed in 2018.
Bus and Rail Preventive Maintenance	40-1204-64	Ongoing	Ongoing	Will appear as an ongoing project in the 2016 TIP
Bus Hybrid Battery Replacement	40-1302-65	Ongoing	XX	Will be completed in 2015
Metro Railcar and Signaling Systems Replacement	40-1403-64	2016	2016	On Schedule
Bus Efficiency Enhancements Research and Demonstrations	40-1501-05	2015	XX	Should be completed in 2015
Seniors and Individuals with Disabilities	40-1502-69	Ongoing	Ongoing	Project is ongoing
Rural Transit Systems - Operating Assistance	40-9204-61	Ongoing	Ongoing	Project is ongoing and is on schedule
Rural Transit Systems - Capital	40-9501-05	Ongoing	XX	Project might get funds in FY 2016
Small Urban Transit Systems - Capital	40-9502-05	Ongoing	Ongoing	Project is ongoing and is on schedule
Ridesharing - Baltimore Region	40-9901-01	Ongoing	Ongoing	Project is ongoing and is on schedule
Job Access and Reverse Commute Program	40-9909-69	Ongoing	XX	Section 5310 will replace section 5316 (JARC)
Local Bus & Facilities - Annapolis	41-1101-63	Ongoing	XX	Project is not moving forward
Mobility Bus Implementation	42-1001-69	Ongoing	XX	Combined w/ Bus Replacement (40-0009-05)
Howard Street Revitalization	42-1004-39	2014	XX	Completed
Bus Wash Replacement	42-1101-64	2015	XX	Completed

Table II-1: Status of Projects in the 2014-2017 TIP

Project	Project TIP ID	Year of Operation		Project Status
		14-17 TIP	16-19 TIP	
Charm City Circulator Harbor Connector Electrification Project	42-1401-05	2016	XX	Funds might get pushed to FY 2016
Howard County Electric Bus Project	46-1101-05	2014	XX	Completed
State Highway Administration				
MD 175: MD 295 to MD 170	61-0605-41	2020	2020	Project ongoing. Only segment 1, MD175/MD295 interchange, is the phase moving forward under this TIP ID
MD 175: Rockenbach & Disney Rd. Intersection Reconstructions	61-1401-39	2014	XX	Project Completed
MD 175: Mapes and Reece Road Intersection Reconstructions	61-1402-39	2016	2017	Under Construction
MD 198: MD 295 to MD 32	61-1403-41	2020	2020	Preliminary Engineering ongoing
US 50: MD 70 to MD 2	61-1404-41	NA	NA	Project Planning ongoing
I-695: I-95 to MD 122 (Southwest Beltway)	63-0602-41	2018	2018	Mother project - all current construction projects have their own project sheets (to match the CTP)
MD 140: Garrison View Road to CSX Railroad Bridge	63-0802-41	2020	2020	Preliminary Engineering ongoing. The name had been for the whole corridor. Phase 1 & 2 now have their own TIP IDs and comprise the whole corridor, with this project now becoming phase 2. The limits are indicated on each project sheet.
I-795: Dolfield Road Interchange	63-0803-46	2026	2026	Preliminary Engineering ongoing
I-695: Bridge over MD 26 Reconstruction	63-0804-13	2014	XX	Completed
US 40: Bridge over Patapsco River Reconstruction	63-1104-13	2014	XX	Completed
US 40: Pulaski Highway Revitalization	63-1105-09	NA	XX	This project has been dropped from the SHA CTP and is not being pursued
US 40: Middle River Road to South of MD 43 Reconstruction	63-1106-11	2016	XX	Removed from CTP as a Major Project. It is included in the System Preservation Program and funding is on hold
I-695: MD 372 Bridge Reconstruction	63-1201-13	2013	XX	Completed
I-695: MD 144 Bridge Reconstruction	63-1202-13	2014	XX	Construction to be complete in FY 2015. No funding in the new TIP
MD 140: Painter's Mill Road Intersection Reconstruction	63-1203-19	2016	2017	Utility work underway. Title changed to "MD 140: Garrison View Road to Painters Mill Road - Phase 1" and TIP ID changed to 63-1203-41
I-695: Low-Cost Operational and Safety Improvements Study	63-1204-04	NA	NA	Preliminary Engineering ongoing

Table II-1: Status of Projects in the 2014-2017 TIP

Project	Project TIP ID	Year of Operation		Project Status
		14-17 TIP	16-19 TIP	
State Highway Administration (continued)				
I-695: Bridge Over Milford Mill Road Reconstruction	63-1205-43	2015	2016	Construction ongoing
I-695: MD 41 to MD 147 Auxiliary Lane and MD 147 Inner Loop Ramp Reconstruction	63-1206-41	2018	2018	Construction ongoing
MD 129: Bridge over I-695 Rehabilitation	63-1207-13	2016	XX	This project is now an SHA System Preservation project and is to be completed in 2015
I-83: Middletown Road Bridge Reconstruction	63-1401-13	2014	XX	Completed. Construction went into FY 2015 but was completed in CY 2014.
MD 295: I-895 to North of Daisy Avenue - Noise Wall	63-1405-31	2016	2017	Construction ongoing
MD 140: Bridge Over the North Branch of the Patapsco River	64-1201-13	2015	XX	Completed. This project had been moved to the System Preservation Program and was removed from the CTP.
MD 30 Business: North Woods Trail to CSX Railroad (Hampstead Streetscape)	64-1401-19	2019	2019	Funded for construction starting in Spring 2016
US 40: MD 715 Interchange Reconstruction	65-0803-46	2013	XX	Completed
BRAC Intersections near APG	65-0804-39	2016	XX	Completed
MD 24: South of Sharon Road to north of Stirrup Run Culvert	65-1101-12	2014	XX	Construction will be complete by the end of FY 2015.
MD 22: Old Post Road Intersection Reconstruction	65-1202-12	2015	2016	Construction ongoing
MD 22: Beards Hill Road Intersection Reconstruction	65-1205-41	2017	2016	Construction ongoing
US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 1	65-1401-12	2016	2014	Construction complete. Right-of-way funding extends into FY 2017
US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 2	65-1402-12	2018	2019	Preliminary Engineering ongoing. TIP ID changed to 65-1402-41.
MD 22: Paradise Road Intersection Reconstruction	65-1403-12	2018	2017	Construction ongoing. TIP ID changed to 65-1403-41
US 1: Baltimore County to Prince George's County Line Study	66-0501-19	NA	XX	Project on hold.
MD 32: Patuxent Freeway Access Management	66-0802-42	2014	XX	This project is now an SHA System Preservation project. This project is now just Wellworth Way Access Management. It is no longer a major project given the reduction in scope.
US 29: Seneca Drive to south MD 175 Reconstruction - Phase 1	66-1101-41	2016	2017	Construction ongoing. Phase 1A has been broken out and given its own TIP ID (66-1601-42). This matches the CTP, where phases 1A, 1B, and 2 are all major projects and have their own CTP sheets.

Table II-1: Status of Projects in the 2014-2017 TIP

Project	Project TIP ID	Year of Operation		Project Status
		14-17 TIP	16-19 TIP	
State Highway Administration (continued)				
MD 175 Snowden River Road Park-and-Ride Expansion	66-1201-02	2014	XX	This project is now an SHA System Preservation project and is to be completed in Spring 2015
I-95: Welcome Center Truck Parking Lot Expansion	66-1203-04	2014	2014	Construction complete. FY 2016 funding is for the maintenance period of landscape and storm water.
MD 32: Rosemary Lane Interchange	66-1402-46	2030	XX	This project is funded under 66-1405-41, the MD 32 corridor project, until funded for construction. It can be added as a stand alone project at that time.
I-70: MD 32 to US 29	66-1403-41	NA	XX	Project on hold in project planning phase
MD 32 at Linden Church Road	66-1404-46	2014	XX	Completed
MD 32: MD 108 to I-70	66-1405-41	2024	2024	Preliminary Engineering ongoing. Funding flows are for Rosemary Lane interchange
US 29: Middle Patuxent River to Seneca Drive	66-1406-41	2020	2020	Preliminary Engineering ongoing
Morgan State University Transportation Research Program	60-0702-99	Ongoing	Ongoing	Ongoing
Areawide Bridge Replacement And Rehabilitation	60-9310-13	Ongoing	Ongoing	Ongoing
Areawide Resurfacing And Rehabilitation	60-9501-11	Ongoing	Ongoing	Ongoing
Areawide Congestion Management	60-9504-04	Ongoing	Ongoing	Ongoing
Areawide Environmental Projects	60-9506-38	Ongoing	Ongoing	Ongoing
Areawide Safety And Spot Improvements	60-9508-19	Ongoing	Ongoing	Ongoing
Areawide Urban Reconstruction	60-9511-19	Ongoing	Ongoing	Ongoing
Areawide Transportation Alternatives Projects	60-9903-29	Ongoing	Ongoing	Ongoing

F. Conformity with Air Quality Planning

The Clean Air Act Amendments require careful evaluation of the conformity between transportation plans and programs against the applicable State Implementation Plan (SIP) for attaining air quality standards. The procedures for performing this evaluation have been documented and issued by the U.S. Environmental Protection Agency (EPA) in the final rule, "Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs and Projects Funded or Approved under Title 23 USC or the Federal Transit Act", hereafter termed Final Rule.

The Baltimore region is designated as a nonattainment area with regard to the 8-hour ozone National Ambient Air Quality Standard (NAAQS), and is in a "maintenance" phase for the annual fine particulate matter NAAQS and the carbon monoxide NAAQS. The BRTB has conducted a comprehensive analysis of conformity for the amended 2016-2019 TIP with air quality goals as a pre-condition of its acceptance by federal funding agencies. The results of this work, as summarized below and in an accompanying report entitled Conformity Determination of the amended 2016-2019

Transportation Improvement Program and *Maximize2040*, concluded that the region's transportation plan and program are in conformity with air quality goals.

The conformity determination referred to above is founded upon technical analyses of the impact on areawide emissions of air pollutants associated with building, or not building, projects contained in the TIP. These air quality analyses are based upon Round 8-A cooperative socio-economic forecasts, which were endorsed on June 24, 2014. All projects that serve as emission reduction strategies (ERS) in the TIP are identified as such by the ERS heading on the top right corner of the page. ERS-related projects are documented in the conformity determination report.

It should be noted that many of the projects contained in the TIP involve non-capacity improvements such as bridge replacement, bridge rehabilitation, streetscaping, road reconstruction, road resurfacing, road rehabilitation, traffic engineering, safety projects, and bicycle and pedestrian facilities. These improvements do not alter the functional traffic capacity of the facilities being improved and are "exempt" from the requirement to determine conformity according to the Final

Rule. Therefore they were not included in the travel demand model-based technical analysis.

Projects in the TIP that are not identified as exempt in the Final Rule are identified in the conformity document as “non-exempt.” They are not exempt from the requirement to determine conformity. These projects in the TIP typically involve capacity improvements. Non-exempt projects which are regionally significant were included in the travel demand model. Non-exempt, non-regionally significant projects were evaluated to determine whether they were suitable to be included in the travel demand model. Non-exempt, non-regionally significant projects which were not able to be evaluated in the travel demand model were reviewed through a manual quantitative analysis.

Upon completion of the travel demand forecasting task, the results were analyzed by the Maryland Department of Environment (MDE) to estimate the emission effects of the highway based transportation system. The results are portrayed in tons per day of NO_x, VOC, and CO, and tons per year of PM_{2.5} and the PM_{2.5} precursor NO_x, for future horizon years.

Documentation of local CO analyses is required for some “exempt” and all “non-exempt” projects that are located in the Central Business District of Baltimore City.

Conformity determinations by the BRTB were made with input from the local jurisdictions and modal administrations. All projects were assessed by the Interagency Consultation Group (ICG) to determine conformity status for testing. Through coordination with the submitting agencies, the BRTB made a determination of conformity by testing projects in the model or performing quantitative analyses.

III. PROGRAM DEVELOPMENT

A. Integration with Federal, State and Local Programs

The projects contained in the amended 2016-2019 TIP flow from *Maximize2040* with detailed information extracted from the capital programs of state and local agencies responsible for implementing transportation projects in the region. Project information was provided by these agencies from the 2016-2019 portions of their respective multi-year improvement programs.³ For a surface transportation project to be eligible for inclusion in the State TIP (STIP), and thus to receive federal aid, it must first be listed in the TIP.

Because the TIP must reflect regional priorities and be consistent with recommendations contained in the long-range transportation plan, it is important that a "regional voice" be expressed in the preparation of individual agencies' capital programs. Meetings that take place as part of the effort to produce a short-range element begin to accomplish this. The meetings foster a more fully coordinated project selection process for the TIP, providing for sound technical analysis early in the programming process, full discussion among local

and state agencies and avoidance of unrealistic over-programming.

³. A list of contributing agencies is attached.

B. Federal Fund Sources for Surface Transportation Projects

Federal regulations require that certain highway and transit projects inside or serving the urbanized area be included in the TIP to gain federal approval. Projects proposed to be funded through the following programs in the current or following fiscal year must be included in the TIP:

- 1702 High Priority Project
- Bridge Replacement and Rehabilitation
- Congestion Mitigation and Air Quality Improvement Program
- FTA Capital and Operating – Sections 5307, 5309, 5310, 5311, 5329, 5337, and 5339
- Highway Safety Improvement Program
- High-Speed Intercity Passenger Rail
- National Highway Performance Program
- National Highway System
- Surface Transportation Program
- Transportation Alternatives Program
- Transportation, Community and System Preservation Grant
- Transportation Investment Generating Economic Recovery

The BRTB endorsement of the TIP is a DOT requirement and is an opportunity for the BRTB to support or oppose proposed

projects in the above program categories.⁴ Inclusion of these projects in the TIP indicates endorsement by the BRTB for federal funding of the proposed project phase(s).

⁴. Endorsement of projects for planning/preliminary engineering does not imply any commitment of funds for later phases (right-of-way acquisition, construction).