National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Transportation Planning Board
FROM: Kanti Srikanth, TPB Staff Director
SUBJECT: Steering Committee Actions and Report of the Director
DATE: February 9, 2017

The attached materials include:

- Steering Committee Actions
- Letters Sent/Received
- Announcements and Updates

National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Transportation Planning Board
FROM: Kanti Srikanth, TPB Staff Director
SUBJECT: Steering Committee Actions
DATE: February 9, 2017

At its meeting on February 3, the TPB Steering Committee approved the following resolutions to amend the FY 2017-2022 Transportation Improvement Program (TIP) that are exempt from the air quality conformity requirement:

- SR13-2017: To include $15 million in state advanced construction funding for the Transform I-66 Oversight project between the Capital Beltway and US 15 in Fairfax and Prince William counties; and to include $12 million in state advanced construction funding for the Fred Ex – I-95 Express Lanes Extension from Exit 160 to Exit 133 in Stafford County, as requested by the Virginia Department of Transportation (VDOT)
- SR14-2017: To include $19.85 million in federal and state funding for planning/design and construction to be included in the Areawide Congestion Management grouped project; and to change the project title from "MD 85 Buckeystown Pike" to "MD 85 Phase 1 Highway Reconstruction" and to include an additional $425,000 in federal funding, to change the funding source of $68.687 million from state to federal and to reduce the remaining state funding by $3.39 million for that project, as requested by the Maryland Department of Transportation (MDOT)
- SR15-2017: To remove $12 million in federal and state funding from the MARC Improvements project; and to remove $28.6 million in federal and state funding from the MARC Rolling Stock Overhauls and Replacements project, as requested by MDOT
- SR16-2017: To add $4.5 million in federal and District funding for the Anacostia Freeway Bridges over Nicholson Street SE project, as requested by the District Department of Transportation (DDOT)

The committee reviewed a draft amendment to the FY 2017-2022 Transportation Improvement Program (TIP) that has been requested by the Washington Metropolitan Area Transit Authority (WMATA) to update project and funding information for FY 2018 in order to match the proposed FY 2018 Capital Budget. The Steering Committee recommended that the TIP amendment be approved by the TPB with resolution R11-2017 under Item 8 of the February 15 meeting.

The committee approved a draft transmittal letter from TPB Chairman Bridget Newton to Jack Evans, the Chair of the Board of Directors for WMATA that would convey comments from the TPB's Access for All Advisory (AFA) Committee pertaining to WMATA's proposed FY 2018 budget and restrictions in Metrorail operating hours.

Attachments
- SR13-2017

- SR14-2017
- SR15-2017
- SR16-2017
- Draft Transmittal Letter to Jack Evans, and accompanying AFA Comment Letter

TPB SR13-2017
February 3, 2017

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 North Capitol Street, N.E.
Washington, D.C. 20002

RESOLUTION ON AN AMENDMENT TO THE FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM (TIP), THAT IS EXEMPT FROM THE AIR QUALITY CONFORMITY REQUIREMENT, TO INCLUDE FUNDING FOR THE TRANSFORM I-66 OVERSIGHT PROJECT AND THE FRED EX I-95 EXPRESS LANES EXTENSION STUDY, AS REQUESTED BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT)

WHEREAS, the National Capital Region Transportation Planning Board (TPB), which is the metropolitan planning organization (MPO) for the Washington Region, has the responsibility under the provisions of the Fixing America's Surface Transportation (FAST) Act for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area; and

WHEREAS, the TIP is required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) as a basis and condition for all federal funding assistance to state, local and regional agencies for transportation improvements within the Washington planning area; and

WHEREAS, on November 16, 2016 the TPB adopted the FY 2017-2022 TIP; and

WHEREAS, in the attached letter of January 25, 0217, VDOT has requested that the FY 2017-2022 TIP be amended to include funding for two new projects: add $15 million in advanced construction (AC) funding for preliminary engineering (PE) in FY 2017 for the Transform I-66 Oversight Project (TIP ID 6549), and add $12 million in AC funding in FY 2017 for the Fred Ex - I-95 Express Lanes Extension study (TIP ID 6562), as described in the attached materials, and

WHEREAS, these projects are either included in the Air Quality Conformity Analysis of the 2016 CLRP Amendment and the FY 2017-2022 TIP, or are exempt from the air quality conformity requirement, as defined in Environmental Protection Agency's (EPA) Transportation Conformity Regulations as of April 2012;

NOW, THEREFORE, BE IT RESOLVED THAT the Steering Committee of the National Capital Region Transportation Planning Board amends the FY 2017-2022 TIP to include funding for two new projects: add $15 million in AC funding for PE in FY 2017 for the Transform I-66 Oversight Project (TIP ID 6549), and add $12 million in AC funding in FY 2017 for the Fred Ex - I-95 Express Lanes Extension study (TIP ID 6562), as described in the attached materials.

Adopted by **the Transportation Planning Board Steering Committee at its regular meeting on February 3, 2017.**

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
4975 Alliance Drive
Fairfax, VA 22030

CHARLES A. KILPATRICK, P.E.
COMMISSIONER

January 25, 2017

The Honorable Bridget Newton, Chair
National Capital Region Transportation Planning Board
Metropolitan Washington Council of Governments
777 North Capitol Street, N.E., Suite 300
Washington, DC 20002-4201

RE: National Capital Region FY 2017-2022 Transportation Improvement Program Amendments for Transform I-66 Oversight Project (UPC 110496) and I-95 Express Lanes Extension. Exit 160 To Exit 133 (UPC 110527)

Dear Ms. Newton:

The Virginia Department of Transportation (VDOT) requests amendments to the FY 2017-2022 Transportation Improvement Program (TIP) to add funding for two projects:

1. **Transform I-66 Oversight Project (UPC 110496).** The amendment adds $15 million in Advance Construction funding to the TIP in FY 2017 for Preliminary Engineering. The funding will be used to provide engineering and administrative oversight of design, construction and inspection of the Transform 66 Outside the Beltway project.
2. **I-95 Express Lanes Extension (Study). Exit 160 to Exit 133 (UPC 110527).** As part of the Atlantic Gateway Project, VDOT plans to extend the I-95 Express Lanes from their current terminus at Garrisonville Road to Exit 133, near Fredericksburg. VDOT is also studying improvements to the existing I-95 Express Lane corridor in Prince William and Fairfax Counties between the Garrisonville and Route 123 exists. The amendment adds $12 million in Advance Construction funding to the P.E. phase in FY 2017 for the study.

The amendments reflect VDOT's latest cost estimates and planned obligations for these projects. The funding amounts and sources are included in the Six Year Improvement Program adopted by the Commonwealth Transportation Board. The projects have no impact on the most recently adopted CLRP and Air Quality Conformity Analysis or the financial constraint status of the TIP and CLRP.

VDOT requests that these amendments be placed on the agenda of the Transportation Planning Board's Steering Committee at its meeting on February 3, 2017. VDOT's representative will attend meetings and will be available to answer any questions about the amendments.

Thank you for your consideration of this request.

Sincerely,

Helen Cuervo

Helen Cuervo, P.E.
District Administrator
Northern Virginia District

cc:
Ms. Ms. Rene'e Hamilton, VDOT-NoVA
Ms. Marcy C. Parker, VDOT Fredericksburg
Ms. Maria Sinner, P.E., VDOT-NoVA
Mr. Norman Whitaker, AICP, VDOT-NoVA

NORTHERN VIRGINIA
TRANSPORTATION IMPROVEMENT PROGRAM
CAPITAL COSTS (in $1,000)

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
I-66 Corridor Improvements Project										
TIP ID: **6549** Agency ID: **110496** Title: **TRANSFORM I-66 OVERSIGHT PROJECT** Project Cost: **$100,000** Complete:										
Facility: I 66	AC	100/0/0		15,000 a						15,000
From: I 495 Beltway										
To: US 15									***Total Funds:***	***15,000***
Description: TIP AMD - add $15,000,000 (AC-Other Concession Funds) FFY17 PE Phase (SB 1/18/17)										
Amendment: Add New Project **Approved on:** 2/3/2017										
Amend this project into the FY 2017-2022 TIP with $15 million in advanced construction funding for PE in FY 2017.										
I-95 HOT/HOV Lanes Construction										
TIP ID: **6562** Agency ID: **110527** Title: **Fred Ex - I-95 Express Lanes Extension Exit 160 to Exit 133** Project Cost: **$12,000** Complete: **2019**										
Facility: I 95	AC	0/100/0		12,000 d						12,000
From: Exist 160										
To: Exit 133									***Total Funds:***	***12,000***
Description: P..E. to extend I-95 Express Lanes south to Exit 133 in the FAMPO planning area. Study ramp, lane and access point improvements needed for Express Lanes between Route 123 and Garrisonville exit in NCRTPB planning area..										
Amendment: Add New Project **Approved on:** 2/3/2017										
Amend project into the FY 17-22 TIP with $12 million in advanced construction funding for study in FY 2017.										

TPB SR14-2017
February 3, 2017

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 North Capitol Street, N.E.
Washington, D.C. 20002

RESOLUTION ON AN AMENDMENT TO THE FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM (TIP), THAT IS EXEMPT FROM THE AIR QUALITY CONFORMITY REQUIREMENT, TO INCLUDE FUNDING FOR THE AREAWIDE CONGESTION MANAGEMENT PROJECT GROUPING AND TO CHANGE PROJECT INFORMATION AND FUNDING SOURCES FOR THE MD 85 PHASE 1 HIGHWAY RECONSTRUCTION PROJECT, AS REQUESTED BY THE MARYLAND DEPARTMENT OF TRANSPORTATION (MDOT)

WHEREAS, the National Capital Region Transportation Planning Board (TPB), which is the metropolitan planning organization (MPO) for the Washington Region, has the responsibility under the provisions of the Fixing America's Surface Transportation (FAST) Act for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area; and

WHEREAS, the TIP is required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) as a basis and condition for all federal funding assistance to state, local and regional agencies for transportation improvements within the Washington planning area; and

WHEREAS, on November 16, 2016 the TPB adopted the FY 2017-2022 TIP; and

WHEREAS, in the attached letter of January 26, 0217, MDOT has requested that the FY 2017-2022 TIP be amended to include an additional $15.88 million in Surface Transportation Program (STP) funding and $3.97 million in state matching funds between FY 2017 and FY 2020 for the Areawide Congestion Management project grouping (TIP ID 3085); and to change the project title from "MD 85 Buckeystown Pike" to "MD 85 Phase 1 Highway Reconstruction" and to include an additional $425,000 in High Priority Project (HPP) funding in FY 2017 and FY 2018, to change the funding source of $68.687 million from state to National Highway Performance Program (NHPP) and to reduce the remaining state funding by $3.39 million for that project (TIP ID 6483), as described in the attached materials, and

WHEREAS, these projects are either included in the Air Quality Conformity Analysis of the 2016 CLRP Amendment and the FY 2017-2022 TIP, or are exempt from the air quality conformity requirement, as defined in Environmental Protection Agency's (EPA) Transportation Conformity Regulations as of April 2012;

NOW, THEREFORE, BE IT RESOLVED THAT the Steering Committee of the National Capital Region Transportation Planning Board amends the FY 2017-2022 TIP to include an additional $15.88 million in STP funding and $3.97 million in state matching funds between FY 2017 and FY 2020 for the Areawide Congestion Management project grouping (TIP ID 3085); and to change the project title from "MD 85 Buckeystown Pike" to "MD 85 Phase 1 Highway Reconstruction" and to include an additional $425,000 in HPP funding in FY 2017 and FY 2018, to change the funding source of $68.687 million from state to NHPP and to reduce the remaining state funding by $3.39 million for that project (TIP ID 6483), as described in the attached materials.

Adopted by **the Transportation Planning Board Steering Committee at its regular meeting on February 3, 2017.**

Maryland Department of Transportation
The Secretary's Office

Larry Hogan
Governor

Boyd K. Rutherford
Lt. Governor

Pete K. Rahn
Secretary

January 26, 2017

The Honorable Bridget Donnell Newton, Chair
National Capital Region Transportation Planning Board
Metropolitan Washington Council of Governments
777 North Capitol Street, N.E., Suite 300
Washington DC 20002

Dear Chairman Newton:

The Maryland Department of Transportation (MDOT) requests the following amendments to the State Highway Administration (SHA) portion of the National Capital Region Transportation Planning Board's (TPB) FY 2017-2022 Transportation Improvement Program (TIP) for two existing projects as described below and in the attached memo. The change for TIP #3085 reflects MDOT's updated programmed congestion management expenditures in FY 2017-2022. The change for TIP #6483 reflects MDOT's shifting of construction funding for this project from state to federal NHPP funding and adjusting cash flows for design. This action does not impact air quality conformity.

TIP ID#	Project	Phase	Amount of New Funding	Comment
3085	Areawide Congestion Management	PP/PE CO	$9,750,000 $10,100,000	Add funding for planning/design and construction.
6483	MD 85 Phase 1 Highway Reconstruction, Ballenger Creek	PP/PE ROW CO	$839,000 ($1,047,000) ($3,182,000)	Add funding for design and remove funding for right-of-way and construction.

MDOT requests that this amendment be approved by the Transportation Planning Board (TPB) Steering Committee at its February 3, 2017 meeting.

The revised funding status will not impact scheduling or funding availability for other projects in the current TIP, which continues to be fiscally constrained. The cost does not affect the portion of the federal funding which was programmed for transit, or any allocations of state aid in lieu of federal aid to local jurisdictions.

We appreciate your cooperation in this matter. Should you have additional questions or concerns, please contact Ms. Kari Snyder at 410-865-1305, toll free 888-713-1414 or via e-mail at ksnyder3@mdot.state.md.us. Of course, please feel free to contact me directly.

Sincerely,

Tyson Byrne
Manager, Regional Planning
Office of Planning and Capital Programming

Attachment

cc: Mr. Eric Beckett, Chief, Regional and Intermodal Planning Division (RIPD), SHA
Ms. Heather Murphy, Director, Office of Planning and Capital Programming, MDOT
Ms. Kari Snyder, Regional Planner, Office of Planning and Capital Programming, MDOT

Larry Hogan, *Governor*
Boyd K. Rutherford, *Lt. Governor*

State Highway Administration
Maryland Department of Transportation

Pete K. Rahn, *Secretary*
Gregory C. Johnson, P.E., *Administrator*

MEMORANDUM

TO: DIRECTOR HEATHER MURPHY
ATTN: REGIONAL PLANNING MANAGER TYSON BYRNE
REGIONAL PLANNER KARI SNYDER
FROM: CHIEF ERIC BECKETT
SUBJECT: REQUEST TO AMEND THE FY 2017-2022 NATIONAL CAPITAL REGION TRANSPORTATION PLANNIGN BOARD (TPB) TRANSPORTATION IMPROVEMENT PROGRAM (TIP)
DATE: January 24, 2017
RESPONSE REQUESTED BY: JANUARY 25, 2017

PURPOSE OF MEMORANDUM

To request the Maryland Department of Transportation (MDOT) Office of Planning and Capital Programming approve and forward to TPB for its approval the following TIP amendments.

SUMMARY

The Maryland Department of Transportation's State Highway Administration (SHA) hereby requests amendment of the FY 2017-2022 TPB TIP to reflect the following two actions.

TIP	Project	Phase	New Funding
3085	Areawide Congestion Management	PP/PE CO	$9,750,000 $10,100,000
6483	MD 85 Phase 1 Highway Reconstruction, Ballenger Creek	PP/PE RW CO	$839,000 ($1,047,000) ($3,182,000)

ANALYSIS

Areawide Congestion Management (TPB 3085) – This requested amendment reflects the addition of $9,750,000 to planning/design and the addition of $10,100,000 to construction funding in the FY 2017-2022 TPB TIP. MDOT requests this amendment in order that the FY 2017-2022 TPB TIP reflect MDOT's updated programmed congestion management expenditures in FY 2017-2022.

MD 85 Phase 1 Highway Reconstruction (TPB 6483) – This requested amendment reflects minor cash flow adjustments including the addition of $839,000 to design, the subtraction of $1,047,000 from right-

of-way acquisition, and the subtraction of $3,182,000 from construction funding in the FY 2017-2022 TPB TIP. MDOT also requests this amendment in order that the FY 2017-2022 TPB TIP reflect MDOT's shifting of construction funding for this project from State to federal NHPP funding. MDOT anticipates advertising this project for construction in the Spring of 2017 and opening improvements to traffic in the Summer of 2021.

The attached Statewide TIP (STIP) reports document MDOT's requested amendment with respect to funding shifts for the above projects. This requested action will not impact scheduling or funding availability for other projects in the current STIP, which remains fiscally constrained. The amended funding does not affect the portion of federal funding programmed for transit or allocations of state aid to local jurisdictions in lieu of federal aid.

In addition, the Maryland Transportation Trust Fund (TTF) remains fiscally constrained. The TTF supports State transportation system operation and maintenance, MDOT administration, debt service, and capital projects. Semiannually, MDOT updates revenues and expenditures using two national forecasting companies' latest economic estimates. MDOT published funding details in the FY 2017-2022 Consolidated Transportation Program (http://www.mdot.maryland.gov/Office_of_Planning_and_Capital_Programming/CTP/Index.html) and FY 2017-2020 Maryland STIP (http://www.mdot.maryland.gov/newMDOT/Planning/STIP_TIP/Documents/2017_STIP_Draft_053116.pdf).

Please amend the FY 2017-2022 TPB TIP and FY 2017-2020 Maryland STIP to reflect the funding information provided in the attachments. If you have any questions regarding Areawide Congestion Management (TPB 3085), please contact Mr. Matt Baker, SHA Regional Planner, at 410-545-5668 or via email at mbaker4@sha.state.md.us. If you have any questions regarding MD 85 Phase 1 Highway Reconstruction (TPB 6483), please contact Mr. Ted Yurek, SHA Regional Planner, at 410-545-5671 or via email at tyurek@sha.state.md.us.

ATTACHMENTS

- FY 2017-2022 TPB TIP project 3085 report
- FY 2017-2020 Maryland STIP project 3085 report
- FY 2017-2022 TPB TIP project 6483 report
- FY 2017-2020 Maryland STIP project 6483 report

cc: Mr. Matt Baker, Regional Planner, SHA
Ms. Samantha Biddle, Assistant Chief, Regional and Intermodal Planning Division, SHA
Nafiseh Bozorgi, P.E., Transportation Engineer, SHA
Mr. Mark Crampton, District 7 Engineer, SHA
Ms. Kandese Holford, Assistant Regional Planner, SHA
Mr. David Rodgers, Regional Planner, SHA
Mr. Jerry Smith, Assistant Regional Planner, SHA
Barb Solberg, P.E., Chief, Highway Design Division, SHA
Mr. John Thomas, Deputy Director, Office of Planning and Preliminary Engineering, SHA
Kimberly Tran, P.E., Assistant District 5 Engineer-Project Development, SHA
Mr. Brian Young, District 3 Engineer, SHA
Mr. Ted Yurek, Regional Planner, SHA

SUBURBAN MARYLAND
TRANSPORTATION IMPROVEMENT PROGRAM
CAPITAL COSTS (in $1,000)

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
Other										
System Preservation Projects										
TIP ID: **3085** Agency ID: **AWCM**	Title: **Areawide Congestion Management**						Complete:	Total Cost:		
Facility:	CMAQ	100/0/0		433 a	433 a	516 a	400 a	383 a	366 a	6,841
From:				12 b	12 b	14 b	11 b	10 b	10 b	
To:				725 c	725 c	865 c	670 c	642 c	614 c	
	NHPP	100/0/0		160 a	173 a	200 a	147 a	147 a	133 a	2,594
				4 b	5 b	5 b	4 b	4 b	4 b	
				268 c	290 c	335 c	246 c	246 c	223 c	
	State	0/100/0		680 a	690 a	713 a	420 a	113 a	107 a	6,059
				3 b	4 b	4 b	3 b	3 b	3 b	
				1,018 c	1,434 c	294 c	201 c	190 c	179 c	
	STBG	100/0/0		2,560 a	2,586 a	2,653 a	1,533 a	306 a	293 a	21,639
				10 b	10 b	12 b	9 b	8 b	8 b	
				3,803 c	5,447 c	839 c	558 c	513 c	491 c	
									Total Funds:	***37,133***

Description: Congestion management projects include traffic management, new and reconstructed signals, signage, lighting, signal systemization, design and construction of park-and-ride facilities, CHART, design and construction of ITS projects, and design and construction of intersection capacity improvements.

Amendment: Adding Planning/Design and Construction Funding **Requested on:** 2/3/2017

This requested amendment reflects the addition of $9,750,000 and $10,100,000 to FY 2017-2022 TPB TIP planning/design and construction funding, respectively, for Areawide Congestion Management (TPB 3085). MDOT requests this amendment in order that the FY 2017-2022 TPB TIP reflect MDOTs updated programmed congestion management expenditures in FY 2017-2022.

MDOT/State Highway Administration

Secondary

MD 85 Corridor

TIP ID: **6483** Agency ID: **FR3881** Title: **MD 85 Phase 1 Highway Reconstruction** Complete: **2021** Total Cost: **$103,600**

Facility: MD 85
From: Crestwood Boulevard/Shockley Drive
To: Spectrum Drive

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
HPP	100/0/0	1,826 a	684 a	92 a					776
Local	0/0/100	1,478 a							
NHPP	100/0/0			9,264 c	16,479 c	18,317 c	24,627 c		68,687
State	0/100/0	2,318 a 3,569 b	447 a 2,957 b	66 a 2,998 b 2,184 c	2,248 b 3,885 c	4,317 c	5,805 c		24,907
								Total Funds:	***94,370***

Description: Widen to a multilane divided highway from Crestwood Boulevard /Shockley Drive to Spectrum Drive, including MD 85 interchange reconstruction at I-270 and I-270 dual bridges replacement.

Amendment: Switching Construction Funding Source **Approved on:** 2/3/2017

This requested amendment reflects the addition of $839,000 to, the subtraction of $1,047,000, and the subtraction of $3,182,000 from FY 2017-2022 TPB TIP planning/design, right-of-way acquisition, and construction funding, respectively, for MD 85 Phase 1 Highway Reconstruction (TPB 6483). MDOT requests this amendment in order that the FY 2017-2022 TPB TIP reflect MDOT's shifting of construction funding for this project from State to federal NHPP funding and updated programmed funding for this project. MDOT anticipates advertising this project for construction in the Spring of 2017 and opening improvements to traffic in the Summer of 2021. The previous six-year program total was $97.76 million. The addition of $839,000, and the subtraction of $4.229 million brings the amended total to $94.37 million.

TPB SR15-2017
February 3, 2017

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 North Capitol Street, N.E.
Washington, D.C. 20002

RESOLUTION ON AN AMENDMENT TO THE FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM (TIP), THAT IS EXEMPT FROM THE AIR QUALITY CONFORMITY REQUIREMENT, TO REMOVE FUNDING FOR THE MARC IMPROVEMENT AND MARC ROLLING STOCK OVERHAULS AND REPLACEMENTS GROUPED PROJECTS, AS REQUESTED BY THE MARYLAND DEPARTMENT OF TRANSPORTATION (MDOT)

WHEREAS, the National Capital Region Transportation Planning Board (TPB), which is the metropolitan planning organization (MPO) for the Washington Region, has the responsibility under the provisions of the Fixing America's Surface Transportation (FAST) Act for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area; and

WHEREAS, the TIP is required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) as a basis and condition for all federal funding assistance to state, local and regional agencies for transportation improvements within the Washington planning area; and

WHEREAS, on November 16, 2016 the TPB adopted the FY 2017-2022 TIP; and

WHEREAS, in the attached letter of January 26, 0217, MDOT has requested that the FY 2017-2022 TIP be amended to remove $11.978 million in Section 5337 – State of Good Repair Grant (SGR) funding from FY 2017 for the MARC Improvements project (TIP ID 6400), and to remove $28.584 million in Section 5337 – SGR funding from FY 2017 for the MARC Rolling Stock Overhauls and Replacements project (TIP ID 6401), as described in the attached materials, and

WHEREAS, these projects are exempt from the air quality conformity requirement, as defined in Environmental Protection Agency's (EPA) Transportation Conformity Regulations as of April 2012;

NOW, THEREFORE, BE IT RESOLVED THAT the Steering Committee of the National Capital Region Transportation Planning Board amends the FY 2017-2022 TIP to remove $11.978 million in Section 5337 – SGR funding from FY 2017 for the MARC Improvements project (TIP ID 6400), and to remove $28.584 million in Section 5337 – SGR funding from FY 2017 for the MARC Rolling Stock Overhauls and Replacements project (TIP ID 6401), as described in the attached materials.

Adopted by the Transportation Planning Board Steering Committee at its regular meeting on February 3, 2017.

Maryland Department of Transportation
The Secretary's Office

Larry Hogan
Governor

Boyd K. Rutherford
Lt. Governor

Pete K. Rahn
Secretary

January 26, 2017

The Honorable Bridget Donnell Newton, Chair
National Capital Region Transportation Planning Board
Metropolitan Washington Council of Governments
777 North Capitol Street, N.E., Suite 300
Washington DC 20002

Dear Chairman Newton:

The Maryland Department of Transportation (MDOT) requests the following amendment to the Maryland Transit Administration (MTA) portion of the National Capital Region Transportation Planning Board's (TPB) FY 2017-2022 Transportation Improvement Program (TIP) for two existing projects as described below and in the attached memo. Section 5337 funds are decreasing in the Washington Region and being reallocated to the Baltimore Region. This action does not impact air quality conformity.

TIP ID#	Project	Amount of New Funding	Comment
6400	MARC Improvements Project	($11,978,000)	Deobligating section 5337 funds.
6401	MARC Rolling Stock Overhauls and Replacement Project	($28,584,000)	Deobligating section 5337 funds.

MDOT requests that this amendment be approved by the Transportation Planning Board (TPB) Steering Committee at its February 3, 2017 meeting.

The revised funding status will not impact scheduling or funding availability for other projects in the current TIP, which continues to be fiscally constrained. The cost does not affect the portion of the federal funding which was programmed for transit, or any allocations of state aid in lieu of federal aid to local jurisdictions.

We appreciate your cooperation in this matter. Should you have additional questions or concerns, please contact Ms. Kari Snyder at 410-865-1305, toll free 888-713-1414 or via e-mail at ksnyder3@mdot.state.md.us. Of course, please feel free to contact me directly.

Sincerely,

Tyson Byrne
Manager, Regional Planning
Office of Planning and Capital Programming

Attachment

cc: Ms. Heather Murphy, Director, Office of Planning and Capital Programming, MDOT
Mr. Kevin Quinn, Director, Office of Planning and Capital Programming, MTA
Ms. Kari Snyder, Regional Planner, Office of Planning and Capital Programming, MDOT

SUBURBAN MARYLAND
TRANSPORTATION IMPROVEMENT PROGRAM
CAPITAL COSTS (in $1,000)

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total

MDOT/Maryland Transit Administration

Maintenance

Marc Improvements

TIP ID: **6400** Agency ID: Title: **MARC Improvements** Complete: Total Cost:

Facility:
From:
To:

Sect. 5307	80/20/0	3,752 e		204 e	603 e	2,966 e	7,653 e	5,000 e	16,426
Sect. 5337-SGR	80/20/0	16,666 e	12,115 e	680 e	12,295 e	12,900 e	750 e	8,100 e	46,840

Total Funds: ***63,266***

Description: Ongoing improvement program of the MARC Camden, Brunswick, and Penn Lines to ensure safety and quality of service. This program is implemented through CSX and Amtrak construction agreements. CSX efforts include projects such as interlocking replacements and other track improvements. Amtrak efforts include projects such as passenger upgrades at Washington Union Station, interlocking work, and other track improvements.

Amendment: Amendment 12-30-16 **Approved on:** 2/3/2017

The TIP sheet shows an overall $11.978 million decrease in obligation to section 5337 funding for the FY 2017-2022 TIP. The changes reflect reallocation of funds into the MARC Improvements project in the Baltimore Region.

Transit

MARC Rolling Stock Overhauls and replacements

TIP ID: **6401** Agency ID: Title: **MARC Rolling Stock Overhauls and Replacements** Complete: Total Cost:

Facility:
From:
To:

Sect. 5307	80/20/0	2,786 e				4,024 e	188 e		4,212
Sect. 5337-SGR	80/20/0	28,439 e	98 e	23,373 e	2,484 e	3,505 e		3,900 e	33,360

Total Funds: ***37,572***

Description: This is an ongoing project for the overhaul and replacement of MARC rolling stock. Overhaul of MARC coaches and locomotives are performed in accordance with "10-year Minor" and "20-year Midlife" schedules, and/or the manufacturer's schedule. Upgrade MARC vehicles with federally-mandated Positive Train Control safety features. The project also includes funding for multi-level coaches that will be used to replace coaches that have reached the end of their useful life and provide additional capacity for the MARC system.

Amendment: Amendment 12-30-16 **Approved on:** 2/3/2017

The TIP sheet shows a $28.584 million decrease in obligation in FY 2017. The changes reflect reallocation of funds into the MARC Improvements project for the Washington Region and the MARC Rolling Stock Project for the Baltimore Region.

Maryland Transit Administration
6 St. Paul Street
Baltimore, MD 21202
410.539.5000 | TTY 410.539.3497 | Toll Free 1.866.743.3682

MEMORANDUM

TO: Ms. Heather Murphy, Director
MDOT Office of Planning and Capital Programming

ATTN: Mr. Tyson Byrne, Manager
MDOT Office of Planning and Capital Programming

FROM: Mr. Kevin Quinn, Director
MTA Office of Planning & Capital Programming

DATE: December 30, 2016

SUBJECT: Administrative Modification to the Washington Region FY 2017 - 2022 TIP to update the MARC Improvements Project

The Maryland Transit Administration (MTA) is requesting an administrative modification to the Washington Region FY 2017 - 2022 Transportation Improvement Program (TIP) to update funding to section 5337 within the MARC Improvements project, TIP ID no. 6400. The TIP sheet shows an overall $11.978 million decrease in obligation to Section 5337 funding for the FY 2017-2022 TIP. The changes reflect reallocation of funds into the MARC Improvements project in the Baltimore Region. These proposed actions will not impact scheduling or funding availability for other projects in the current TIP, which continues to be fiscally constrained.

After your review, please process the requested amendment with the Washington Metropolitan Council for inclusion in the FY 2017 - 2022 TIP. If you have any questions, please do not hesitate to contact Ms. Laurie Brown, MTA Office of Planning and Capital Programming, at 410-767-2535 or via email at lbrown9@mta.maryland.gov.

cc: Mr. Tyson Byrne, Regional Planner, Office of Planning and Capital Programming, MDOT

TIP ID: # 6400
MARC Improvements - WashCOG

BEFORE

Funding Category	Previous	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Section 5307	$ -	$ -	$ 204	$ 603	$ 2,966	$ 7,653	$ 5,000	$ 16,426
Section 5337	$ -	$ 24,093	$ 680	$ 12,295	$ 12,900	$ 750	$ 8,100	$ 58,818
								$ 75,244

ADJUSTMENT

Funding Category	Previous	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Section 5307	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Section 5337	$ -	$ (11,978)	$ -	$ -	$ -	$ -	$ -	$ (11,978)
								$ (11,978)

AFTER

Funding Category	Previous	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Section 5307	$ -	$ -	$ 204	$ 603	$ 2,966	$ 7,653	$ 5,000	$ 16,426
Section 5337	$ -	$ 12,115	$ 680	$ 12,295	$ 12,900	$ 750	$ 8,100	$ 46,840
								$ 63,266

% Change	-16%

Maryland Transit Administration
6 St. Paul Street
Baltimore, MD 21202
410.539.5000 | TTY 410.539.3497 | Toll Free 1.866.743.3682

MEMORANDUM

TO: Ms. Heather Murphy, Director
MDOT Office of Planning and Capital Programming

ATTN: Mr. Tyson Byrne, Manager
MDOT Office of Planning and Capital Programming

FROM: Mr. Kevin Quinn, Director
MTA Office of Planning & Capital Programming

DATE: December 30, 2016

SUBJECT: Amendment to the Washington Region FY 2017-2022 TIP to update the MARC Rolling Stock Overhauls and Replacement Project

The Maryland Transit Administration (MTA) is requesting an admendment to the Washington Region FY 2017-2022 Transportation Improvement Program (TIP) to update funding to section 5337 within the MARC Rolling Stock Overhauls and Replacement project, TIP ID no. 6401. The TIP sheet shows a $28.584 million decrease in obligation in FY 2017. The changes reflect reallocation of funds into the MARC Improvements project for the Washington Region and the MARC Rolling Stock project for the Baltimore Region. These proposed actions will not impact scheduling or funding availability for other projects in the current TIP, which continues to be fiscally constrained.

After your review, please process the requested administrative modification with the Washington Metropolitan Council for inclusion in the FY 2017-2022 TIP. If you have any questions, please do not hesitate to contact Ms. Laurie Brown, MTA Office of Planning and Capital Programming, at 410-767-2535 or via email at LBrown9@mta.maryland.gov.

cc: Mr. Tyson Byrne, Regional Planner, Office of Planning and Capital Programming, MDOT

TIP ID: # 6401
MARC Rolling Stock Overhauls and Replacements - WashCOG

BEFORE

Funding Category	Previous	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Section 5307	$ -	$ -	$ -	$ -	$ 4,024	$ 188	$ -	$ 4,212
Section 5337	$ -	$ 28,682	$ 23,373	$ 2,484	$ 3,505	$ -	$ 3,900	$ 61,944
								$ 66,156

ADJUSTMENT

Funding Category	Previous	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Section 5307	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Section 5337	$ -	$ (28,584)	$ -	$ -	$ -	$ -	$ -	$ (28,584)
								$ (28,584)

AFTER

Funding Category	Previous	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Section 5307	$ -	$ -	$ -	$ -	$ 4,024	$ 188	$ -	$ 4,212
Section 5337	$ -	$ 98	$ 23,373	$ 2,484	$ 3,505	$ -	$ 3,900	$ 33,360
								$ 37,572

% Change	-43%

TPB SR16-2017
February 3, 2017

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 North Capitol Street, N.E.
Washington, D.C. 20002

RESOLUTION ON AN AMENDMENT TO THE FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM (TIP), THAT IS EXEMPT FROM THE AIR QUALITY CONFORMITY REQUIREMENT, TO ADD FUNDING FOR THE ANACOSTIA FREEWAY BRIDGES OVER NICHOLSON STREET SE PROJECT, AS REQUESTED BY THE DISTRICT DEPARTMENT OF TRANSPORTATION (DDOT)

WHEREAS, the National Capital Region Transportation Planning Board (TPB), which is the metropolitan planning organization (MPO) for the Washington Region, has the responsibility under the provisions of the Fixing America's Surface Transportation (FAST) Act for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area; and

WHEREAS, the TIP is required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) as a basis and condition for all federal funding assistance to state, local and regional agencies for transportation improvements within the Washington planning area; and

WHEREAS, on November 16, 2016 the TPB adopted the FY 2017-2022 TIP; and

WHEREAS, in the attached letter of February 2, 2017, DDOT has requested that the FY 2017-2022 TIP be amended to add $4.5 million in National Highway Performance Program (NHPP) funding to FY 2017 for the Anacostia Freeway Bridges over Nicholson Street SE project (TIP ID 6082), as described in the attached materials, and

WHEREAS, this project is exempt from the air quality conformity requirement, as defined in Environmental Protection Agency's (EPA) Transportation Conformity Regulations as of April 2012;

NOW, THEREFORE, BE IT RESOLVED THAT the Steering Committee of the National Capital Region Transportation Planning Board amends the FY 2017-2022 TIP to add $4.5 million in NHPP funding to FY 2017 for the Anacostia Freeway Bridges over Nicholson Street SE project (TIP ID 6082), as described in the attached materials.

Adopted by **the Transportation Planning Board Steering Committee at its regular meeting on February 3, 2017.**

Government of the District of Columbia
Department of Transportation

d. Planning and Sustainability Division

February 1, 2017

The Honorable Bridget Newton, Chairperson
National Capital Region Transportation Planning Board
Metropolitan Washington Council of Governments
777 North Capitol Street N.E., Suite 300
Washington, DC 20002-4290

Dear Chairman Newton,

The District Department of Transportation (DDOT) requests that the FY 2017-2022 Transportation Improvement Program (TIP) be amended to increase funding amount for the Anacostia Freeway Bridges over Nicholson Street project. The TIP project listing for the project is attached.

The proposed amendment would add approximately $4.5 million in National Highway Performance Funds (NHPP) funds for the construction and construction management cost of the project in FY 2017. The previous estimate for construction was $9.5 million. The current estimate of the project is $14 million. The reason for the TIP amendment request is due to additional scope of work which was identified in the recent National Bridge Inventory (NBI) and the current design inspection reports. The additional work includes superstructure and deck replacement for Ramp 6 (Bridge No. 1001) and Ramp 4 (Bridge No. 1002) in addition to the main Line bridge (Bridge No. 1001).

The proposed amendment does not add additional capacity for motorized vehicles and does not require conformity analysis or public review and comment. The funding sources have been identified, and the TIP will remain fiscally constrained. Therefore, DDOT requests that the TPB Steering Committee approve this amendment at its February 3, 2017 meeting.

We appreciate your cooperation in this matter. Should you have questions regarding this amendment, please contact Mark Rawlings at (202) 671-2234 or by e-mail at mark.rawlings@dc.gov. Of course, feel free to contact me directly.

Sincerely,

James Sebastian
Acting Associate Director, Planning and Sustainability Division (PSD)

DISTRICT OF COLUMBIA
TRANSPORTATION IMPROVEMENT PROGRAM
CAPITAL COSTS (in $1,000)

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total

DDOT

Bridge

Anacostia Freeway Bridges over Nicholson Street SE

TIP ID: **6082** Agency ID: **MRR15A** Title: **Anacostia Freeway Bridges over Nicholson Street SE (Bridges #1001** Complete: Total Cost: **$15,000**

Facility: Anacostia Freeway Bridges at Nicholson
From:
To:

NHPP	80/20/0	1,000 a	14,000 c						14,000
								Total Funds:	***14,000***

Description: Rehabilitation of subject bridges to eliminate all deficiencies and to make the facility safe for the traveling public. Two bridges are structually deficient and must be rehabilitated under the requirements of MAP21.

Amendment: Amendment to increase construction to 14Mil **Approved on:** 2/3/2017

Amend Anacostia Freeway Bridges over Nicholson St SE to increase NHPP construction costs from 9.5 Mil to 14 Mil in FY 2017.

National Capital Region
Transportation Planning Board

February 3, 2017

The Honorable Jack Evans
Chair, Washington Metropolitan Area Transit Authority (WMATA)
Board of Directors
600 5th Street, NW
Washington, DC 20001

Re: TPB's Access for All Advisory Committee Comments on WMATA' s Proposed FY2018 Budget and Restrictions in Metrorail Operating Hours

Dear Chairman Evans:

The National Capital Region Transportation Planning Board (TPB), the Metropolitan Planning Organization (MPO) for the metropolitan Washington region, established the Access for All Advisory Committee (AFA) in 2001 to advise the TPB on issues and services important to traditionally-disadvantaged communities, including low-income communities, minority communities, people with limited English proficiency, people with disabilities, and older adults.

The TPB is transmitting the attached comments from the Access for All Advisory Committee on the Proposed FY2018 Budget (Public Hearing Docket B17-01) and the reduction of late-night service on Metrorail from its Access for All Advisory Committee.

Should you have any questions on the matter please feel free to contact to the AFA Chairman, Mr. Charles Allen, also the TPB's First Vice Chairman, at (202)724-8072, or Mr. Kanti Srikanth, the TPB Staff Director, at (202) 962-3257.

Sincerely,

Bridget Donnell Newton

Bridget Donnell Newton
TPB Chairman

Enclosure

National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Transportation Planning Board

FROM: Charles Allen, Chair, Access for All Advisory Committee
TPB First Vice Chair

SUBJECT: Comments from the Access for All (AFA) Advisory Committee on Proposals to Reduce Metro Service

DATE: February 3, 2017

The TPB's Access for All (AFA) Advisory committee met on December 15, 2016 and discussed WMATA's proposals for Metro's FY2018 budget. The Access for All Advisory Committee has advised the TPB since 2001 on issues and services important to traditionally-disadvantaged communities. In 2016, the committee was restructured and now represents not only low-income populations, minority communities, people with disabilities, but also those with limited-English skills and older adults. The AFA committee has a long-standing practice of commenting on major transit changes that would negatively affect the communities the committee represents, and it's for this reason that the AFA requested that the following comments be sent to WMATA as part of the public comment period which closes on February 6, 2017.

The AFA is concerned about the reductions in Metrorail, Metrobus and MetroAccess services being proposed by WMATA as part of the FY2018 budget discussions.

WMATA has proposed in its FY2018 budget significant service adjustments to address declining ridership and revenue, and the need for additional funding to operate and maintain the Metrorail and Metrobus system. The public docket materials describe WMATA' s proposed region-wide reductions in Metrobus, Metrorail and MetroAccess, and include the following:

- Over 25 bus routes would be eliminated;
- Service would be reduced on another 20 bus routes;
- Metrorail service be would be decreased with less frequent trains for both peak and off-peak service;
- MetroAccess service would be eliminated for some customers;
- Metrobus fares would increase by 25 cents, Metrorail fares would increase between 10 and 25 cents, and MetroAccess fares would increase by 50 cents.

The bus service reductions will cause service reductions in MetroAccess since the MetroAccess service area would decrease as a result., The Americans with Disabilities Act (ADA) requires that MetroAccess provide service to areas within a ¾ of a mile surrounding bus and rail lines. WMATA estimated 65 customers would lose service when only 14 bus lines were proposed to be eliminated, but that number would be greater if over 25 bus lines are eliminated.

Committee members recognize that low-income individuals rely heavily on bus services, and that these proposed reductions in "life line" bus service and higher bus fares, could have a compounding inequitable impact on low-income populations.

The AFA requests that WMATA consider the unique needs of low-income populations and those with disabilities when making service reductions; these groups are more dependent and transit than other groups and have the least ability to pay for alternatives.

AFA members were very disappointed with the decision to reduce Metrorail operating hours and questioned the data used to guide that decision.

The new operating hours for Metrorail to address the need for additional track maintenance time will not only reduce late-night service but also reduce early morning service on weekends. The AFA is deeply concerned about the impact these service reductions will have on low-wage shift workers who rely on Metrorail to get to and from employment sites at non-traditional hours. Non-profit organizations who support people with disabilities will also be impacted because their employees will have difficulty covering late-night and early-morning shifts. The people who can least afford alternatives, such as taxi or Transportation Network Companies (TNCs) Uber-or Lyft -type services, are the people who will bear the brunt of the service reduction. Furthermore, these alternatives may not be wheelchair-accessible. *The AFA wanted WMATA to commit to equity in terms of wheelchair-accessible vehicles as part of the AbilitiesRide program* that WMATA is starting in Maryland, utilizing Transportation Network Companies (TNCs) such as Uber or Lyft, as an alternative to MetroAccess.

The AFA also questioned the validity of a survey of 16,000 riders conducted by WMATA to inform the decision to reduce late-night operation hours because of concerns the survey did not include a representative sampling of customers who utilize late-night service. When WMATA re-examines the decision on Metrorail hours of operation in two years, *the AFA urges that WMATA's analysis include a representative sample of riders who use late-night service, and consider the disproportionate impacts of such service reductions for those with low-incomes, minority communities, limited English-speakers and persons with disabilities.*

The AFA stresses that the proposals would have wide- ranging negative impacts on transit-dependent populations.

In summary, the AFA is writing to bring awareness to its concerns that the proposed Metro service reductions would disproportionately impact the communities that the AFA represents: minority communities, low-income populations, persons with disabilities, older adults and people with limited English skills. *The AFA hopes that WMATA will have a continuing dialogue with these communities that will be the most affected.*

Recognizing that WMATA faces a severe funding shortfall, declining ridership and significant maintenance needs, t*he AFA also reiterates its support for a sustainable funding source for critical Metro services.*

National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Transportation Planning Board
FROM: Kanti Srikanth, TPB Staff Director
SUBJECT: Letters Sent/Received
DATE: February 9, 2017

The attached letters were sent/received since the last TPB meeting.

Maryland Department of Transportation
The Secretary's Office

Larry Hogan
Governor

Boyd K. Rutherford
Lt. Governor

Pete K. Rahn
Secretary

January 5, 2017

Kanti Srikanth
Director
National Capitol Region Transportation Planning Board MPO
777 North Capitol Street, NE, Suite 300
Washington, DC 20002

Dear Mr. Srikanth:

It has been a pleasure meeting and working with you and your staff over the last several months to discuss the National Capitol Region Transportation Planning Board Title VI Program.

The purpose of these meetings was to review and ensure that the National Capitol Region Transportation Planning Board's MPO (TPBMPO) Title VI Program pertaining to metropolitan planning is being conducted in accordance with federal law, regulations and guidance issued by the U. S. Department of Transportation, the Federal Transit Administration and the Federal Highway Administration: Title VI of the Civil Rights Act of 1964, 49 CFR Part 21, 23 CFR §200.9 and FTA Circular 4702.B. Since the Maryland Department of Transportation (MDOT) passes through federal planning funds to TPBMPO, TPBMPO is a subrecipient of MDOT. MDOT is required to monitor subrecipient compliance and TPBMPO is required to provide MDOT with information necessary to assist MDOT in demonstrating compliance with Title VI.

In our conference call with you and your staff on December 13, 2016 we discussed the results of our review. Based on our review, we have determined that the National Capitol Region Transportation Planning Board MPO is meeting the Title VI requirements. Your Title VI Plan contains the key elements required by 23 CFR §200.9 and FTA Circular 4702.B.

Thank you for your ongoing cooperation in meeting FTA and FHWA civil rights requirements. We look forward to working with you and your staff on your Title VI Program. If you have any questions, please do not hesitate to contact me at 410-865-1156, or Dr. Janet Moye Cornick, Title VI Program Manager at 410-865-1126 or electronically at jcornick@mdot.state.md.us.

Sincerely,

Louis W. Jones
Director
Office of Diversity & Equity

Maryland
Department of the Environment
Ben Grumbles Secretary

Maryland Department of Transportation
Pete K. Rahn Secretary

Larry Hogan
Governor

Boyd Rutherford
Lieutenant Governor

December 12, 2016

Dear Interested Stakeholders:

Enclosed please find a joint status report of the Maryland Departments of the Environment's and Transportation's progress toward reducing air pollution and greenhouse gas emissions in the state, entitled, "Charting the Path Forward: A Transportation Strategy for Meeting Long-Term Air Quality and Greenhouse Gas Emissions Goals and Enhancing Maryland's Economy and Quality of Life."

Maryland has made substantial progress in combating ozone pollution and greenhouse gas emissions, while supporting economic growth and job creation. The transportation sector has played a key role in this progress, and will be a critical component of strategies to address future challenges.

Even as the state has experienced growth in population and the economy, motor vehicle emissions of the pollutants that contribute to ozone have decreased significantly in the past fifteen years. Since 2008, Maryland has met the national air quality standards associated with extremely small particles, and is now meeting the national air quality standard set in 2008 for ground level ozone.

Looking to the future, Maryland has developed a strategic vision for transportation decisions to promote economic growth while focusing on environmental priorities. This strategy builds on the foundation of investments and policies in the Maryland Transportation Plan and Climate Action Plan, consisting of cleaner vehicles and fuels, increased travel choices, enhanced travel, spurred innovation, and enhanced strategic highway capacity. This strategy also supports thriving Maryland communities, creates jobs, and establishes Maryland as a national leader in clean transportation and technology.

If you have any questions, please contact George (Tad) Aburn at (410) 537-3255 or by email at george.aburn@maryland.gov, or Dorothy Morrison at (410) 865-1277 or by email at dmorrison@mdot.state.md.us.

Sincerely,

TAD ABURN

George (Tad) Aburn, Jr., Director, Air and Radiation Management Administration
Maryland Department of the Environment

Dorothy Morrison, Director, Office of Environment
Maryland Department of the Transportation

cc: Attachment: Charting the Path Forward: A Transportation Strategy for Meeting Long-Term Air Quality and Greenhouse Gas Emissions Goals and Enhancing Maryland's Economy and Quality of Life

Charting the Path Forward:
A Transportation Strategy for Meeting Long-term Air Quality and Greenhouse Gas Emissions Goals and Enhancing Maryland's Economy and Quality of Life

Developed by:
Maryland Department of Transportation
Maryland Department of the Environment

...

Executive Summary

Transportation is vital to growing Maryland's economy and positioning the State as a key location for businesses and tourism. Smart transportation policies and investments will simultaneously support economic development, enhance communities, and address environmental priorities for improving air quality, restoring the Chesapeake Bay, and addressing the threats of climate change.

The State of Maryland has made substantial progress in combating air pollution and greenhouse gas (GHG) emissions. Transportation policies and investments have played a key role in these improvements – supporting a vibrant economy, improving public health, and enhancing access to jobs, services, and recreational opportunities.

All of Maryland is now meeting the national air quality standard set in 2008 for ground level ozone. Even as the state has experienced growth in population and the economy, motor vehicle emissions of the pollutants that contribute to ozone have dropped by more than 35% since 2002. Since 2008, Maryland has met the national air quality standards associated with extremely small particles, and motor vehicle emissions associated with fine particles have dropped by more than 25% since 2002. Maryland is also on-track to meet the GHG emissions reduction targets set in the state's 2009 Greenhouse Gas Emissions Reduction Act (GGRA), which calls for a 25% reduction in GHGs from 2006 levels by 2020.

Despite this progress, further environmental challenges lie ahead:

- **Stricter Ozone Standards –** In October 2015, the U.S. Environmental Protection Agency (EPA) made the national standard for ground level ozone stricter (effective December 28, 2015), which will require continued reductions in emissions.
- **Chesapeake Bay Restoration –** The Chesapeake is vital to the state's economy and recreation. About one-quarter of the nitrogen pollution that enters the Bay comes from air pollution.
- **Climate Change** – The Chesapeake Bay region is the third most vulnerable area in the country to sea level rise, and climate change threatens more severe weather. Scientists believe GHG emissions reductions of up to 72% by 2050 are needed to minimize climate impacts, and transportation sources contribute about one-third of the GHGs emitted in Maryland.

Charting the Path Forward. Maryland has developed a strategic vision for transportation decisions that will drive economic growth and address environmental priorities into the future. This strategy builds on the foundation of investments and policies in the Maryland Transportation Plan and Climate Action Plan:

- **Cleaner Vehicles and Fuels** – Providing incentives, polices, and infrastructure support to expand the market for vehicles that produce low or zero emissions.
- **Increasing Travel Choices** – Supporting mobility improvements and livable communities that facilitate use of transit, bicycling, and walking options.
- **Enhancing Travel Efficiency** – Optimizing system operations to reduce traffic congestion, improve travel time reliability, and reduce fuel consumption.
- **Spurring Innovation** – Advancing clean energy technologies in transportation.
- **Strategic Highway Capacity Enhancements**- Reducing traffic congestion in critical transportation corridors to positively impact air quality.

This strategy will support thriving Maryland communities, create jobs, and establish Maryland as a national leader in clean transportation and technology.

1. Introduction

The State of Maryland has made significant progress in improving air quality, and 2015 marked the first-year that the entire state met the national air quality standards for ground level ozone set in 2008. However, in the face of new, stricter Federal air quality requirements and efforts to restore the Chesapeake Bay, Maryland will need to continue to make progress towards reducing mobile source pollutant emissions that contribute to ozone formation and deposition of nitrogen in the Bay. Additionally, the state is working to reduce greenhouse gas (GHG) emissions by 25% from 2006 levels by 2020, and recently extended this commitment to reduce GHG emissions to 40% below 2006 levels by 2030 to address climate change while continuing to strengthen and grow the state's economy.

Maryland has made substantial progress in combating ozone pollution and greenhouse gas emissions, while supporting economic growth and job creation. The transportation sector has played a key role in this progress, and will be a critical component of strategies to address future challenges.

Transportation is vital to the state's economy – connecting people to jobs and health care services, supporting recreational opportunities and tourism, and moving freight to support the economy. With an extensive highway, transit, and bicycling network, the Port of Baltimore, BWI Thurgood Marshall International Airport, and other aviation facilities, Maryland's transportation network is a critical element of the state's economic development and quality of life. Yet transportation sources continue to be major contributors to air pollutant emissions and GHG emissions.

This document provides a strategic roadmap for the transportation sector to further its contributions to support a clean and healthy environment by reducing mobile source emissions while supporting a strong Maryland economy and job growth. It is intended to be a living document that will be updated as the state continues to make progress toward air quality goals.

Maryland's Air Quality and Impacts

Maryland's ozone air pollution ("smog") is exacerbated by the state's geographic location and meteorological conditions. Like most states east of the Mississippi River, Maryland receives air pollution that blows in from other states. On many days, up to 70% of Maryland's ozone problem originates in upwind states. Pollution floating from power plants from areas west of Maryland combines with local pollution, and is then trapped along the western edge of the Chesapeake Bay by winds, contributing to high ozone levels in parts of the state.[1]

Air pollution is associated with adverse health effects. While ozone in the atmosphere blocks the sun's harmful rays, ozone at the ground level can be harmful to human health and may cause shortness of breath, coughing, wheezing, chest tightness, and throat irritation.[2] Particle pollution is a mixture of small particles and liquid droplets such as dust and organic chemicals, which can cause premature death in people with heart or lung disease, non-fatal heart attacks, increase respiratory symptoms, and worsen

[1] Maryland Department of the Environment. Clean Air Progress in Maryland: Accomplishments in 2015. Available at: http://www.mde.state.md.us/programs/Air/Documents/GoodNewsReport/GoodNewsReport2015Final.pdf.
[2] U.S. EPA. Patient Exposure and the Air Quality Index. Available at: http://www3.epa.gov/apti/ozonehealth/aqi.html.

asthma.[3] The smallest of these particles, less than 2.5 microns in diameter (called $PM_{2.5}$), are the most harmful since they can get deep into the lungs. Certain groups are more susceptible to the effects of ozone and particulate matter, including children, the elderly, and people with lung diseases such as asthma.[4] Additionally, particulate matter is a main cause of haze that limits visibility, reducing the ability to see distant views and scenic vistas.[5]

Air pollution also affects Maryland's waterways and the Chesapeake Bay. Through a process called atmospheric deposition, pollution released into the air eventually falls to the ground settling onto land or water. A significant source of pollution affecting the Bay is airborne nitrogen, specifically nitrogen oxides (NO_X) produced by equipment powered by gas, coal, oil, including motor vehicles. Excess nitrogen and other chemicals can lead to increased algae growth that blocks sunlight that other aquatic plants need.[6] As algae die, they deplete oxygen levels in the water, creating "dead zones" where fish, crabs, oysters and other aquatic organisms cannot survive.[7]

2. Cleaner Air, a Growing Economy, and Enhanced Mobility – The Good News about Air Quality and Transportation in Maryland

Thanks to the sustained efforts of government, businesses, environmental advocates, scientists, health professionals and many others, Maryland has seen dramatic improvements in air quality over the past 15 years – providing improvements to public health and quality of life.

Maryland Meets 75 parts per billion Ground Level Ozone Standards Statewide

The U.S. Environmental Protection Agency (EPA) establishes limits for air pollutants in the atmosphere to protect public health, and periodically reviews and updates the national air quality standards according to the latest science and available technology.[8] For the first time ever, all of Maryland is meeting the Federal 8-hour ozone concentration standard of 75 parts per billion (ppb) established in 2008. EPA determined in 2015 that the Baltimore metropolitan area (Baltimore City and Baltimore, Anne Arundel, Howard, Harford and Carroll counties) is meeting the ozone standard, based on air monitoring data from the past three years. This accomplishment demonstrates significant progress in reducing adverse impacts of air quality on health in Maryland.

In 2000, the entire state recorded pollution levels above the ozone standard, and by 2014 most of the state was meeting the standard (see Figure 1). Between 2003 and 2014, ozone standards were exceeded in Maryland on average about 29 days per year. However, over the past three years, ozone exceedance days have been reduced dramatically, with only 5 in 2014 and 8 days in 2015.[9]

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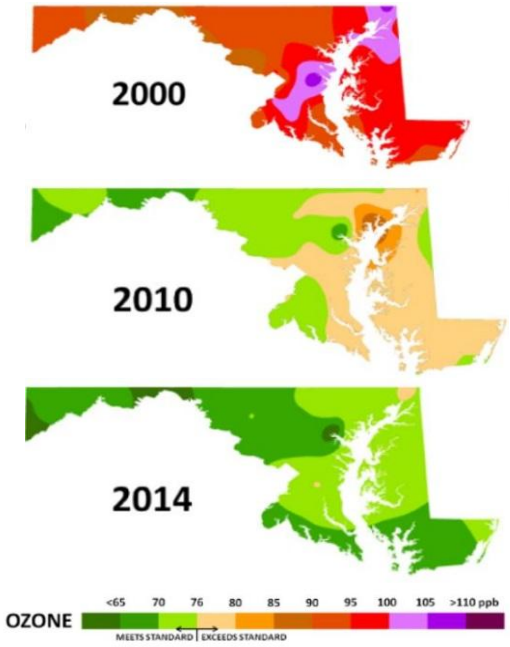
[3] U.S. EPA. Particulate Matter: Health. Available at: http://www3.epa.gov/pm/health.html.
[4] U.S. EPA. Patient Exposure and the Air Quality Index. Available at: http://www3.epa.gov/apti/ozonehealth/aqi.html.
[5] U.S. EPA. Particulate Matter: Health. Available at: http://www3.epa.gov/pm/health.html.
[6] Chesapeake Bay Foundation. Air Pollution. Available at: http://www.chesapeakebay.net/issues/issue/air_pollution#inline.
[7] Chesapeake Bay Foundation. Dead Zones. Available at: http://www.cbf.org/about-the-bay/issues/dead-zones.
[8] U.S. EPA. Ozone Standards. Available at: http://www3.epa.gov/ttn/naaqs/standards/ozone/s_o3_index.html.
[9] Maryland Department of the Environment. Historical Air Quality Data. Available at: http://www.mde.state.md.us/programs/Air/AirQualityMonitoring/Pages/HistoricalData.aspx

Figure 1. Maryland's Shrinking Ozone Problem, 2000- 2014

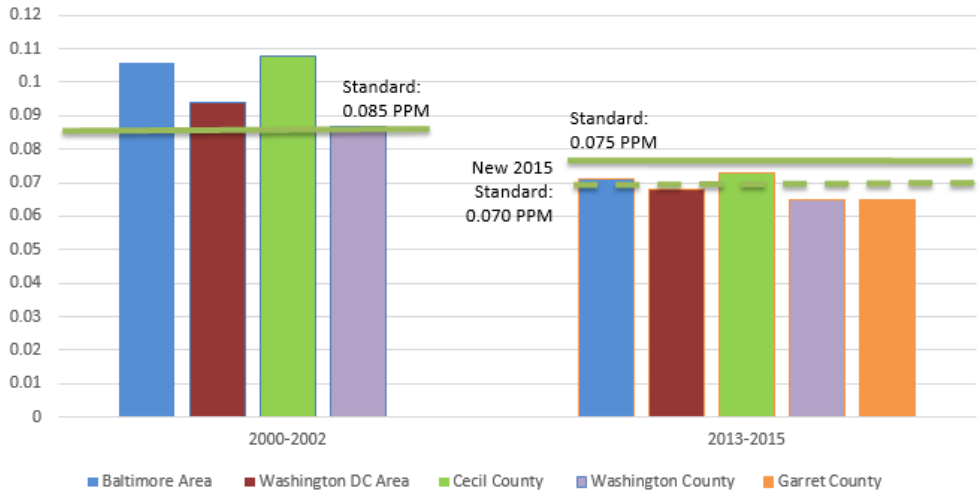


As national ozone standards became more stringent, Maryland rose to the challenge and statewide ozone levels dropped significantly (see Figure 2).

Ozone is created by chemical reactions between nitrogen oxides (NOx) and volatile organic compounds (VOC) in the presence of sunlight and heat. As a result, weather conditions and pollution levels together play a role in ozone formation, and will affect Maryland's ability to meet new more stringent standards.

Source: Maryland Department of the Environment.

Figure 2. Maryland Ozone Design Values, 2000-2002 and 2013-2015, Compared to National 8-Hour Ozone Standards

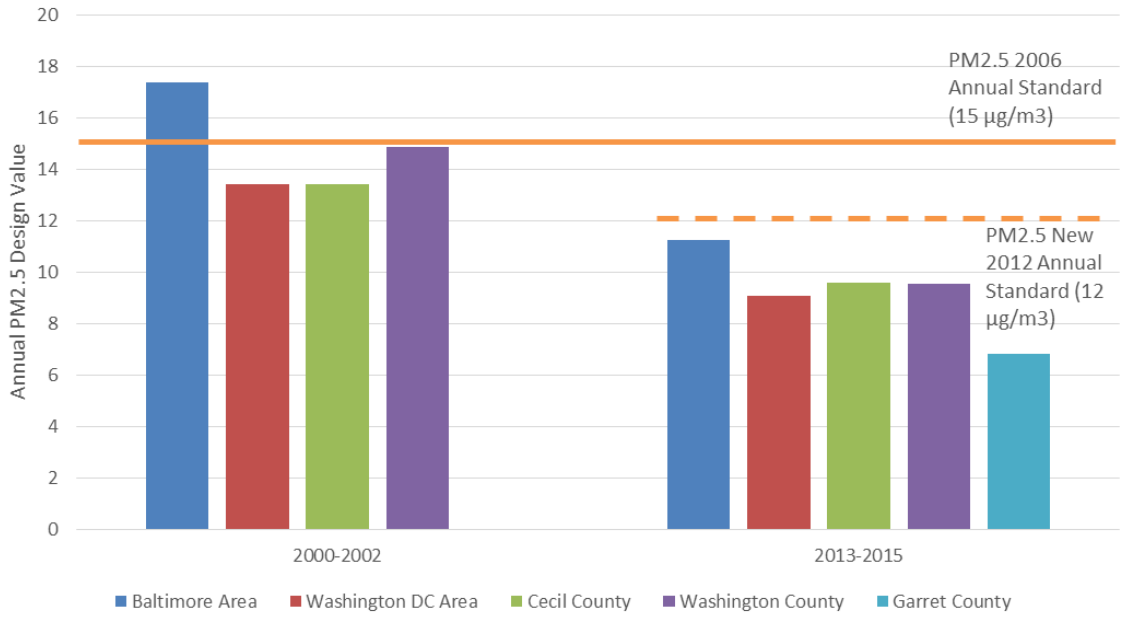


Note: A design value is a statistic that describes the air quality status of a given location relative to the level of the National Ambient Air Quality Standards (NAAQS) used to designate and classify nonattainment areas. Design Values were calculated based on the three year average of the fourth highest max value for the monitor with the highest reading in each area. Source: U.S. EPA, http://www3.epa.gov/airdata/ad_rep_mon.html. [Note: Data for 2015 are not final]

Maryland Meets Fine Particle Standards

The EPA has established two primary air quality standards for $PM_{2.5}$ -- annual and daily standards -- to provide public health protection from both long- and short-term effects of exposure to fine particle pollution. As with ozone, Maryland has seen substantial reductions in particulate matter in the atmosphere. Fine particulates are composed of nitrogen and/or sulfur compounds and other compounds. A variety of Federal and state controls, as well as other regulations aimed at reducing sulfur dioxide (SO_2) and nitrogen oxides (NOx), have reduced emissions from power plants. Within the transportation sector, the 2007 heavy duty highway rule reduced emissions from heavy duty diesel trucks and reduced levels of sulfur from diesel fuel, together with the Diesel Vehicle Inspection Program. Since 2008, Maryland overall has met the national standards for $PM_{2.5}$, including more stringent regulations set in 2012 (see Figure 3).[10]

Figure 3. Maryland $PM_{2.5}$ Design Values, 2000-2002 and 2013-2015, Compared to National Annual $PM_{2.5}$ Standard



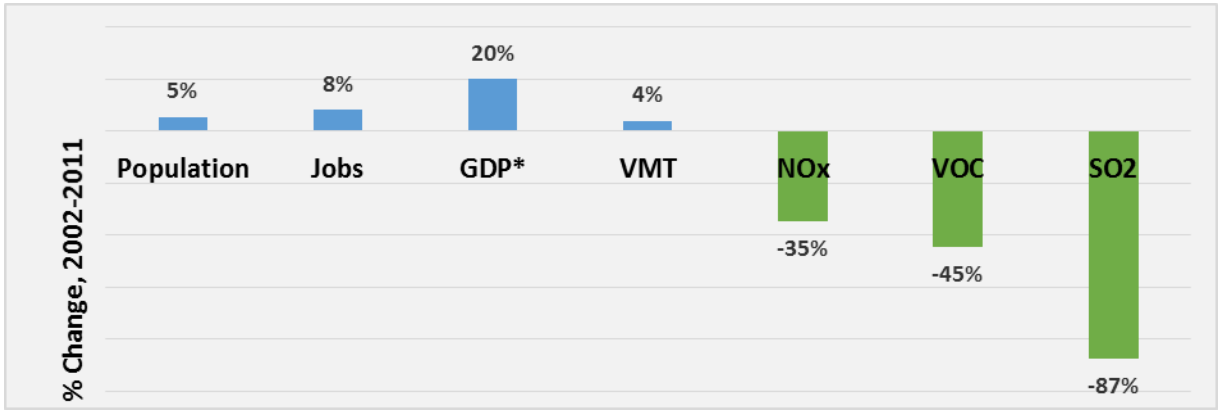
Note: Design Values calculated based on averaging the three years annual mean, for the monitor with the highest reading in each area. Source: U.S. EPA, http://www3.epa.gov/airdata/ad_rep_mon.html. [Note: Data for 2015 are not final]

Transportation Air Pollutant Emissions Have Dropped Significantly

Transportation emission reductions have played an important role in Maryland's air quality improvements. During a period when statewide population grew by 5% (from 5.44 to 5.74 million people) and total economic activity increased significantly, from 2002 to 2011, air pollution from motor vehicles decreased dramatically. Ozone precursors, NOx and VOC dropped by 35% and 45%, respectively, while SO_2 dropped by 87% (see Figure 4).

[1010] Clean Air Progress in Maryland: Accomplishments in 2015
http://www.mde.state.md.us/programs/Air/Documents/GoodNewsReport/GoodNewsReport2015Final.pdf

Figure 4. Percent Change in Demographics, Travel, the Economy, and Motor Vehicle Emissions, 2002-2011

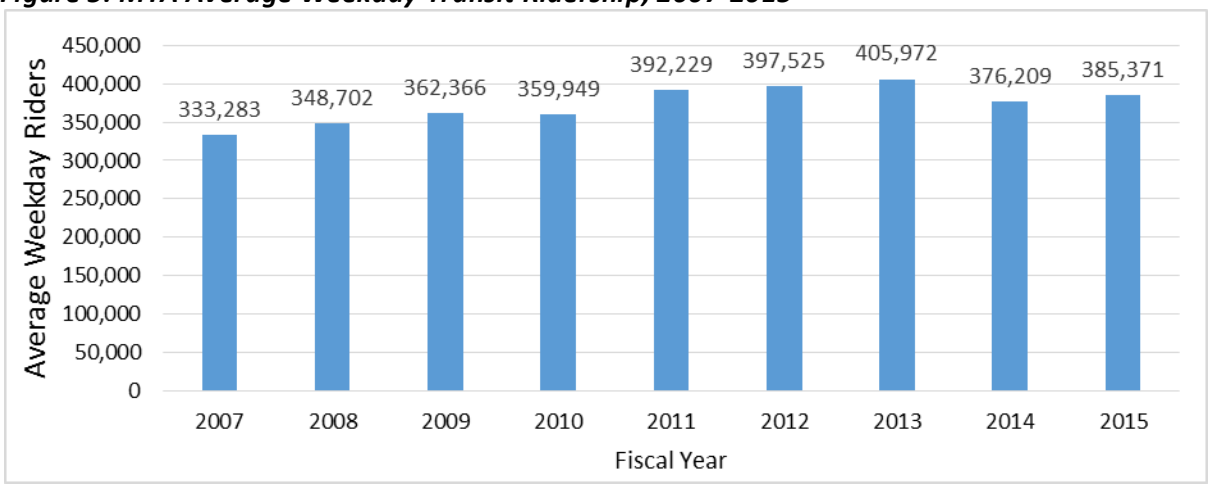


** GDP (gross domestic product) figures are inflation adjusted (in real dollars) and reflect the value added in production by the labor and capital of all industries located in a state. Sources: Maryland Department of Planning State Data Center (population and jobs), U.S Department of Commerce (State GDP), Maryland Department of Transportation (VMT), and Maryland Department of Environment (Motor vehicle emissions).*

These reductions in air pollution from transportation have occurred in large part due to tighter motor vehicle emissions standards, resulting in cleaner vehicles. The Maryland Department of Transportation's (MDOT's) programs supporting transit, ridesharing, bicycling and walking, as well as projects that reduce roadway congestion, also have supported these improvements. For instance, average weekday ridership on MTA services in Maryland increased from 333,283 riders in FY 2007 to 385,371 riders in FY 2015, an increase of more than 15% (see Figure 5).

From 2005 to 2015, total vehicle miles traveled (VMT) in Maryland has remained relatively steady (a 1% increase over the decade). Overall, VMT per person has declined over the past ten years (see Figure 6). While a combination of societal, technological, and economic factors have contributed to these trends, the state's investments in multimodal travel options, travel demand management, and transportation system management support these outcomes.

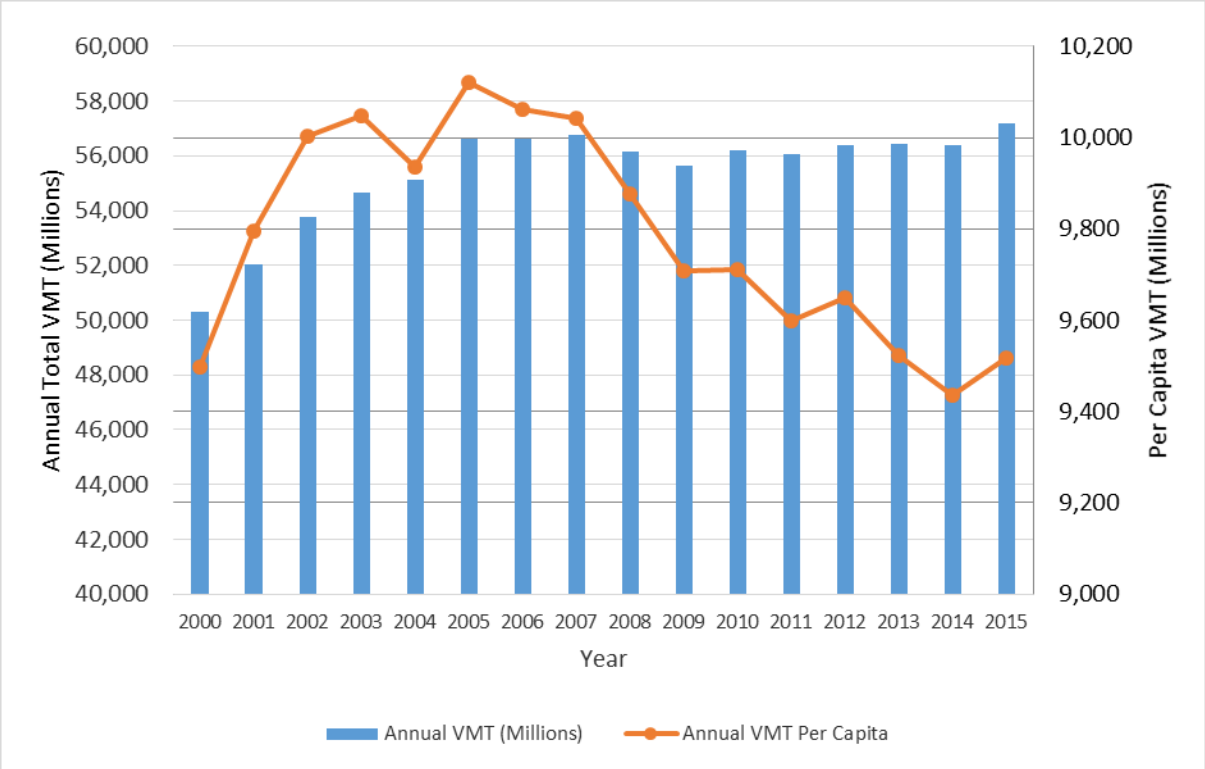
Figure 5. MTA Average Weekday Transit Ridership, 2007-2015



Source: Maryland Department of Transportation, 2016 Annual Attainment Report.

Note: MTA used ridership estimate differences between the new APC system and previous systems to adjust previous bus ridership figures to allow for comparable data.

Figure 6. Annual VMT and VMT per Capita in Maryland, 2000-2015



Sources: Maryland Department of Information Technology, Maryland Annual Vehicle Miles of Travel, October 2015, https://data.maryland.gov/Transportation/Maryland-Annual-Vehicle-Miles-of-Travel/exua-btti; Maryland State Data Center, Population Estimates, October 2015, http://planning.maryland.gov/msdc/S2_Estimate.shtml; Maryland Department of Transportation, 2016 Attainment Report.

Ensuring that Transportation Plans and Investments Support Air Quality Goals

The Clean Air Act requires transportation planning and air quality planning processes to be coordinated within a state. Transportation plans and Transportation Improvement Programs must show that they support (or "conform" to) the State Implementation Plan for air quality, using travel and emissions modeling (referred to as the transportation conformity process).

These analyses demonstrate continued reductions in emissions from motor vehicles. For instance, the Baltimore region's most recent draft Transportation Conformity Determination shows summer NOx reductions of 64% and VOC reductions of 56%, and direct $PM_{2.5}$ reductions of 50% from motor vehicles between 2017 and 2040.[11] These reductions come from new Federal vehicle emissions and fuel standards, as well as regional transportation investments and Transportation Emissions Reduction

[11] Baltimore Regional Transportation Board, Transportation Conformity Determination, Prepared for the FY 2014-2017 Transportation Improvement Program and the 2011 Long Range Transportation Plan.

Measures (TERMs). Similarly, the Washington, DC region's latest Transportation Conformity Determination also shows substantial emissions reductions from motor vehicles (see Figure 7).[12]

Figure 7. Regional Air Quality Conformity Documents Show Continued Reductions in Motor Vehicle Emissions

Pollutant	Region	Calendar Year				% Change
		2015	2017	2025	2040	2017-2040
NO_X, average summer day, tons per day	Baltimore	-	50.7	25.9	18.2	-64%
	Washington*	128.3	91.1	42.0	20.3	-78%
VOC, average summer day, tons per day	Baltimore	-	26.5	18.2	11.6	-56%
	Washington*	62.4	50.7	35.5	19.1	-62%
Fine Particulate Matter ($PM_{2.5}$) tons per year	Baltimore	-	887	538	441	-50%
	Washington*	1860	1523	926	720	-53%

**Washington figures represent the entire Washington, DC region, including parts of Maryland, Virginia, and the District of Columbia; the Washington figures, however, do not include the impacts of TERMs, which are less than 0.1 ton per day for each year.*

Sources: Baltimore Regional Transportation Board, Draft Conformity Determination of Maximize2040 and the Amended 2016-2019 Transportation Improvement Program, September 2015. National Capital Region Transportation Planning Board, 2015 Amendment, Financially Constrained Long Range Transportation Plan for the National Capital Region, Air Quality Conformity Analysis of the 2015 CLRP Amendment and FY2015-2020 TIP, October 21, 2015.

Working with Neighboring States to Address Interstate Pollution

In addition to addressing pollution generated within its boundaries, Maryland is also committed to working with neighboring states to address interstate pollution that is carried downwind. Maryland participates in EPA's Good Neighbor program to address pollution from its power plants that affects areas like Philadelphia and New York, and encourages other states to do so.[13] In regards to transportation, Maryland is involved in the Transportation and Climate Initiative of the Northeast and Mid-Atlantic States (TCI). TCI brings together top environment, transportation, and energy agency officials from eleven states and the District of Columbia to work together to reduce GHGs in the transportation sector and help build a clean energy economy.

3. Meeting Today's and Future Environmental Challenges – Ozone, Restoring the Bay, and Climate Change

Despite recent and expected progress in improving air quality and reducing GHG emissions, significant environmental challenges lie ahead over the next 20 years.

More Stringent Ground-Level Ozone Standard

In October 2015, EPA modified the national standard for ground level ozone, reducing it from 75 to 70 parts per billion. [14] There are regions of Maryland that are not likely to meet the 70 ppb standard when designations become final in October 2017. Additionally, temperature is a factor in the formation of

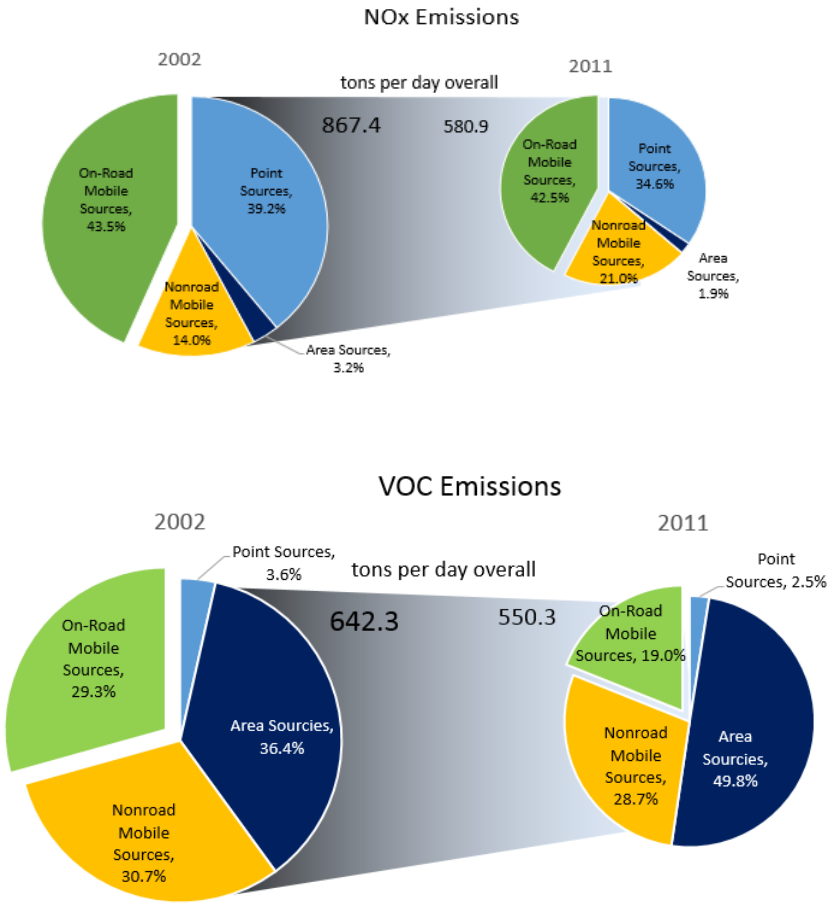
[12] These figures represent the entire Washington, DC region, including parts of Maryland, Virginia, and the District of Columbia. National Capital Region Transportation Planning Board, 2015 Amendment, Financially Constrained Long Range Transportation Plan for the National Capital Region, Air Quality Conformity Analysis of the 2015 CLRP Amendment and FY2015-2020 TIP, October 21, 2015.

[13] Maryland Department of the Environment. Clean Air Progress in Maryland: Accomplishments in 2015. Available at: http://www.mde.state.md.us/programs/Air/Documents/GoodNewsReport/GoodNewsReport2015Final.pdf.

[14] 80 FR 65292

ground-level ozone; a hot summer may put parts of Maryland in nonattainment. Despite significant progress in reducing emissions, motor vehicles (on-road mobile sources) continue to make up a large share of total NOx emissions in Maryland. Nonroad mobile sources, including airplanes, trains, and commercial marine vessels, as well as agricultural equipment, construction equipment, and lawnmowers, also are significant contributors. Together, these mobile sources make up over 63% of NOx emissions and nearly 48% of VOC emissions in 2011 (see Figure 8).

Figure 8. Contribution of Different Sources to NOx and VOC Emissions in Maryland, 2002 - 2011



Source: Maryland Department of the Environment.

The current emissions budgets used in transportation conformity analyses in Maryland are based on the 85 ppb ozone standard set in 1997. Based on relevant modeling forecasts, including sector-based analyses, emissions budgets may need to be considerably lower to meet the70 ppb standard.

Chesapeake Bay Restoration

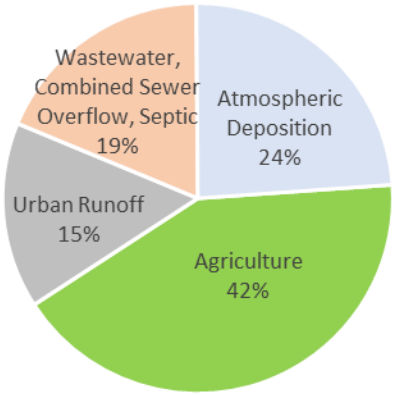
Maryland's quality of life is inextricably tied to the Chesapeake Bay watershed. Rivers, streams, and aquifers in the watershed supply drinking water; oyster, crab and other fisheries provide economic livelihood; natural areas buffer against storms and flooding and provide wildlife habitat; and beaches,

rivers and other waterfront attractions bolster the recreation and tourism industries in Maryland.[15] Roughly $2.03 billion and 32,025 jobs are generated each year in Maryland due to recreational boating, and the Bay's commercial seafood industry in Maryland and Virginia contributes nearly $3.4 billion in sales and 34,000 jobs to the local economy.[16]

In 2010 EPA established targets for the nutrients that can enter the Bay to achieve water quality standards, called Total Maximum Daily Load (TMDL) limits. Atmospheric deposition of NOx and reduced nitrogen (e.g., ammonia) contribute to a significant portion of the total nitrogen load delivered to the Bay. Primary sources of NOx emissions are electric power plants and mobile sources. Ammonia (NH_3) sources are predominately agricultural, with ammonia released from manure and emissions from ammonia-based fertilizers.

Air quality improvements have supported reductions of nitrogen from atmospheric deposition in the Bay and its watershed, with NOx from atmospheric deposition in the Chesapeake Bay watershed estimated to have decreased by about 60% between 1985 and 2015.[17] However, air pollution continues to be an important contributor to nitrogen in the Bay (see Figure 9), and mobile source emissions play an important role in the Bay's health.[18]

Figure 9. Nitrogen Loads to the Bay by Source, Estimated 2014



Note: Loads simulated using Watershed Model (Phase 5.3.2) and wastewater discharge data from watershed jurisdictions, Atmospheric deposition simulated using the Chesapeake Bay Airshed Model; documented March 31, 2015. Source: Chesapeake Bay Foundation, http://www.chesapeakebay.net/indicators/indicator/reducing_nitrogen_pollution

Climate Change Impacts and Reducing Greenhouse Gases

Climate change is one of the most daunting environmental threats facing the world, with potentially costly or catastrophic impacts on ecosystems, water supplies, urban development, and public health.

[15] Maryland Sea Grant, Chesapeake Bay Facts and Figures. Available at: http://www.mdsg.umd.edu/topics/ecosystems-restoration/chesapeake-bay-facts-and-figures

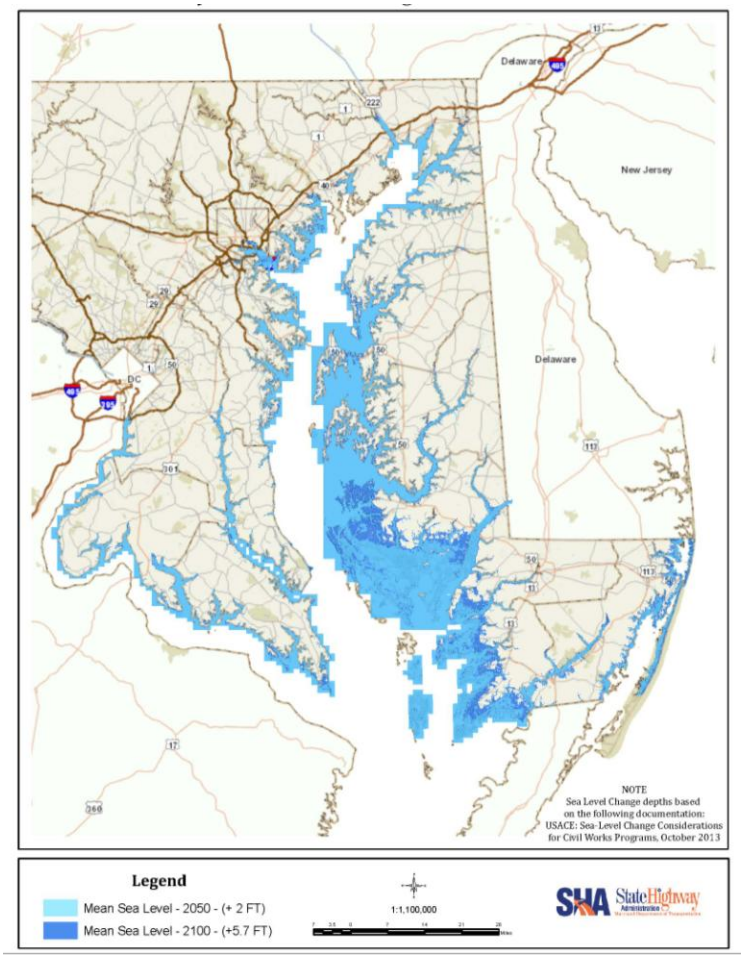
[16] Chesapeake Bay Foundation, The Economic Importance of the Bay, citing the Economic Impact of Maryland Boating in 2007 report and a study from the National Oceanic and Atmospheric Administration (NOAA). Available at: http://www.cbf.org/about-the-bay/issues/cost-of-clean-water/economic-importance-of-the-bay

[17] Chesapeake Bay Foundation, http://gis.chesapeakebay.net/air/.

[18] Urban runoff (water that washes pollutants from paved surfaces, including roads, into water bodies) is also impacted by transportation. Source: The Chesapeake Bay Program, Reducing Nitrogen Pollution. Available at: http://www.chesapeakebay.net/indicators/indicator/reducing_nitrogen_pollution

Maryland – with 3,100 miles of tidal shore along the Chesapeake Bay and Atlantic Ocean, and low-lying and rural and urban lands – is ranked the third most vulnerable state to sea level rise, behind Louisiana and southern Florida (see Figure 10).[19] Historic records show that sea level has been rising faster in the mid-Atlantic than the global average – with sea levels increasing by one foot within Maryland's coastal waters in the last 100 years, due to a combination of global sea level change, weakening of the Gulf Stream, and naturally occurring regional land subsidence.[20] Additionally, climate change is linked to severe weather like hurricanes, floods, and temperature fluctuations.

Figure 10. Maryland Projected Sea Level Change, 2050 and 2100



Source: Maryland State Highway Administration.

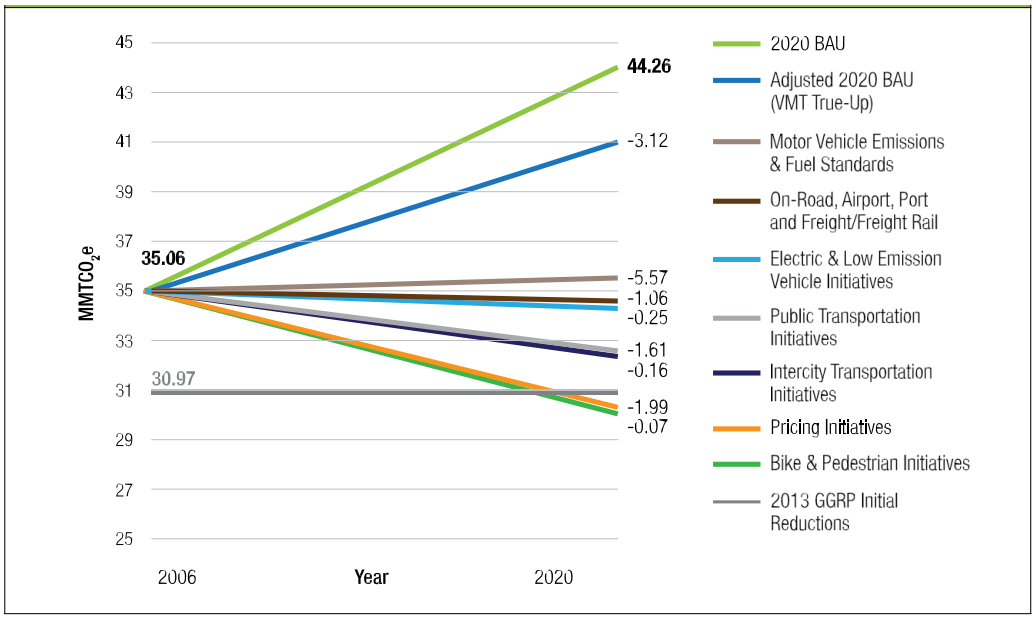
Maryland has moved ahead to combat climate change through passage of the Greenhouse Gas Reduction Act of 2009 (GGRA). The Act requires a 25% reduction in emissions from 2006 levels by 2020, through policies and programs that have a positive impact on the state's economy and job creation. The

[19]Maryland Department of Natural Resources. The impact of climate change. http://www.dnr.state.md.us/naturalresource/spring2011/7.asp

[20] "Maryland Department of Natural Resource, Maryland Department of Environment, and Maryland Department of Planning, "Comprehensive Strategy for Reducing Maryland's Vulnerability to Climate Change – Phase I: Sea-level rise and coastal storms." Report of the Maryland Commission on Climate Change Adaptation and Response Working Group, August 2008.

Maryland Department of the Environment (MDE) collaborated with MDOT and other agencies to develop the *Greenhouse Gas Reduction Act Plan.* The state is on track to meet and even exceed its 2020 emissions reduction goals, with emissions reductions coming from many sectors. Transportation is a key component of these reductions, falling from an estimated 35.06 million metric tons of carbon dioxide equivalent (MMTCO2e) in 2006 to 30.43 MMTCO2e in 2020; this is a projected 13% reduction in transportation emissions, but represents a 31% reduction from the business as usual (BAU) forecast of GHG emissions in 2020 (see Figure 11).

Figure 11. Maryland Transportation Sector GHG Emissions, 2006-2020 Forecast



Source: MDOT, Maryland 2015 Greenhouse Gas Reduction Act Plan.

Beyond the 2020 horizon of the GGRA, there is scientific consensus that global GHG emission reductions of 42-72% are needed by 2050 to minimize the worst climate impacts. In April 2016, Governor Hogan signed the Greenhouse Gas Reduction Act of 2016, requiring the state to cut emissions economy-wide by 40% below 2006 levels by 2030. The GHG reduction target is economy-wide (to be met through the most cost-effective and economically beneficial strategies across all sectors), and the transportation sector will be called upon as a key contributor to these reductions.

Metropolitan areas in Maryland have already initiated efforts to identify strategies that could yield significant reductions in GHG emissions by 2050. In 2008, the members of the Metropolitan Washington Council of Governments (MWCOG) adopted ambitious voluntary goals to reduce GHG emissions in the National Capital Region to 20% below 2005 levels by 2020 and to 80% below 2005 levels by 2050. MWCOG has since convened a Multi-Sector Working Group (MSWG) to identify and assess potentially viable and stretch GHG reduction strategies across all sectors of the economy, including Energy, the Built Environment, Land Use, and Transportation, and is now working on an action plan to identify the most viable strategies to move forward. The Baltimore Metropolitan Council (BMC) also has undertaken a focused effort to explore how to reduce GHGs from on-road transportation sources. BMC's "How Far Can We Get?" study evaluated how far different types of strategies could contribute to reducing motor

vehicle emissions. Both of these efforts have identified a range of promising strategies, but also highlight the challenges and need for aggressive strategies to achieve significant reductions in GHG emissions.

4. Charting a Path Forward: Transportation Solutions for a Healthy Environment, Economic Vitality, and Quality of Life

Moving forward, Maryland will address these environmental challenges through actions and policies that continue to strengthen access and mobility, the economy, and community livability. A key state priority is to improve Maryland's economic competitiveness. With the Maryland Transportation Plan, the GGRA Plan, the Maryland Climate Action Plan, and other policies, the state has already identified aggressive yet achievable goals and actions to reduce GHGs, improve air quality, and support the Chesapeake Bay while promoting economic vitality.

Building on the GGRA Plan, which sought to make "the smartest environmental and economic decisions possible," this section of the document describes transportation strategies that are designed to address environmental challenges while simultaneously supporting job creation and economic vitality in Maryland. Partnerships with local governments, metropolitan planning organizations responsible for regional transportation planning, as well as private sector businesses and other stakeholders, are critical to implementation of these strategies, which can help grow our economy and create vibrant communities that attract and retain businesses.

Meeting Environmental Goals while Growing Maryland's Economy

The GGRA required that the resulting Plan not only reduce GHG emissions but also have a positive impact on job growth and economic development in Maryland, by focusing on jobs and businesses that contribute to sustainable economic prosperity.

The Regional Economic Studies Institute of Towson University conducted a study to analyze the annual economic benefits of the GGRA Plan, once fully implemented. According to the study, implementing the Plan's set of transportation strategies (Maryland Clean Cars Subprogram, Bicycle and Pedestrian initiatives, Electric Vehicle initiatives, etc.), could result in the following annual economic impacts:

- 3,100 jobs
- $3,491,312,335 in output (total value of goods and services)
- $1,284,658,134 in total net benefit

Source: Maryland Department of the Environment. The 2015 Greenhouse Gas Emissions Reduction Act Plan Update, October 2015

Cleaner Transportation and Fuels - *Advancing adoption of vehicle technologies and fuels that reduce GHGs and air pollutant emissions.*

Vehicle technology enhancements are critical to achieving significant reductions in emissions from motor vehicles. Maryland understands the importance of advanced vehicle technologies – a primary focus of the state's climate action plan is further deployment of alternative fuel and advanced technology vehicles to offset petroleum use and reduce mobile source emissions.

Motor Vehicle Emissions and Fuel Standards. Maryland has been a leader in adopting strategies to advance cleaner vehicles and fuels, via the Maryland Clean Cars Program, which implemented California's low emissions vehicle (LEV) standards to vehicles purchased in Maryland starting with model year 2011. Since then, adopted and proposed enhancements in Federal motor vehicle emissions standards overlap with this program, and further improvements in vehicle technologies and fuels are anticipated to play a key role in significantly improving air quality and reducing GHG emissions. These include:

- **EPA Tier 3 motor vehicle emissions and fuel standards for model years 2017-2025** – Will reduce air pollutant emissions from motor vehicles, and will reduce the sulfur content of gasoline from current average level of 30 ppm to 10 ppm beginning in 2017.
- **EPA's heavy duty engine and fuel sulfur rule** – This rule significantly reduces NOx and particulate emissions from new heavy-duty diesel vehicles. By lowering the sulfur of diesel fuel, it allows the use of advanced emissions control technologies.
- **National light-duty GHG and fuel economy program** - These standards apply to passenger vehicles and light-duty trucks, and are projected to result in an average industry fleet level of 163 grams/mile of carbon dioxide in model year 2025, which is equivalent to 54.5 miles per gallon if achieved exclusively through fuel economy improvements – a more than doubling of fuel economy from 2010 model year vehicles.
- **National medium and heavy-duty vehicle GHG and fuel efficiency standards** - Adopted national standards for medium- and heavy-duty engines and vehicles, and proposed Phase 2 national standards for medium-and heavy-duty engines (through model year 2027) will result in reduced GHG emissions from trucks and other large vehicles traveling through Maryland.

Increasing Zero Emissions Vehicles (ZEVs) and Supporting Plug-In Electric Vehicle (PEV) Deployment. The transition to zero emissions vehicles (ZEVs and PEVs) is a key strategy for reducing emissions in Maryland since light-duty vehicles make up most of the vehicles on the road. ZEVs are vehicles that produce zero to near zero tailpipe emissions (i.e., plug-in electric vehicles and fuel cell electric vehicles). The Maryland Clean Cars Program contains a ZEV mandate which requires that manufacturers make an increasing percentage of the vehicles available for sale in Maryland be ZEVs. It is estimated that by 2025 this Program could result in approximately 300,000 PEVs in Maryland. In addition, Maryland and several other states (California, Connecticut, Massachusetts, New York, Oregon, Rhode Island, and Vermont) signed a

memorandum of understanding in 2013 to increase ZEV deployment, creating a ZEV Program Implementation Task Force which released its first action plan in 2014.

In line with its expansive ZEV policies, Maryland has implemented a number of programs to encourage the purchase of plug-in vehicles and the installation of electric vehicle supply equipment (EVSE). The Maryland Electric Vehicle Infrastructure Council (EVIC) currently operates to promote the use of PEVs in Maryland through the development of PEV and charging infrastructure action plans, permitting standards, and local and regional on-the-ground efforts. Beginning in 2014 Maryland has offered an excise tax credit of $125 per kilowatt-hours of battery capacity up to a maximum of $3,000 for the purchase of a qualifying plug-in electric vehicle. Together with the federal tax credit, this could account for up to a $10,000 tax break on the purchase price of a PEV in Maryland.

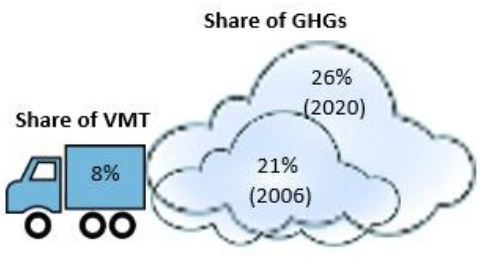
In addition to incentivizing the PEVs, Maryland has been active in ensuring that the needed charging infrastructure is in place to make the PEVs a success. Maryland offers a rebate for 50% of the purchase and installation cost of an EVSE, up to $900 for residential installations, $5,000 for commercial, and $7,500 for retail service stations. This program has been a great success, with the numbers of applicants increasing significantly each year. Maryland has used $1 million in settlement money to leverage an additional $1 million in private sector investment to develop an Electric Vehicle Infrastructure Program (EVIP). The goal of EVIP is to develop a Level 3 DC Fast Charger network that, when completed in 2016, will have over 40 Level 3 DC Fast Chargers set up throughout the State. Moreover, Maryland has worked to install Level 2 Chargers at commercial businesses, Park & Rides, and workplaces, resulting in a network of over 700 public, Level 2 chargers in the State.

While fuel economy standards will push manufacturers to offer more ZEVs, efforts to incentivize purchases of these vehicles and ensure consumers can plug in will help to more rapidly increase consumer adoption. Maryland is currently working on developing a State Action Plan for the upcoming fiscal year, with goals that include:

- Implement education and outreach to create general EV awareness beyond early adopters.
- Implement several WorkPlace Charging events throughout the State.
- Work with auto dealers to successfully address concerns they may have towards marketing and selling plug-in vehicles.
- Conduct outreach to both commercial and residential property owners.
- Extend and enhance incentives for plug-in vehicles and EVSE, which are due to sunset in 2017.
- Investigate options for lowering the higher initial purchase cost of plug-in vehicles to consumers.

Addressing the Diesel Legacy Fleet. Heavy-duty diesel vehicles (HDDVs) play an important role in Maryland's economy, but also are a significant source of NOx, $PM_{2.5}$, and GHG emissions; and as emissions from light-duty vehicles decline, HDDVs make up an increasingly large share of motor vehicle emissions. Older diesel vehicles emit 2 to 3 times as much NOx as post-2010 vehicles, and

Heavy-duty vehicles make up a disproportionately large share of on-road GHG emissions, compared to their mileage on the road, and that share is growing.



Source: MDOT, Maryland 2015 Greenhouse Gas Reduction Act Plan.

generally twice as much $PM_{2.5}$ as 2007 vehicles. Maryland can advance programs to address HDDVs from the legacy fleet, including vehicle replacements and retrofits, as well as efforts to reduce heavy-duty vehicle engine idling (discussed further below).

Port-Related Initiatives. The Port of Baltimore is an economic engine for the state, and Maryland is working to support its growth while reducing emissions. The Dray Truck Replacement Program is an example of a program to address the diesel legacy fleet by replacing older dray trucks – large diesel trucks used to haul freight from port facilities to local distribution points – at the Port of Baltimore with newer, cleaner trucks that meet or exceed MY 2010 EPA engine standards. To date, the Program has replaced approximately 130 dray trucks since the launch of the program, which is funded by federal and state grants and with a 50 percent match by truckers.[21] Additionally, through the Clean Diesel Program, the Maryland Port Authority (MPA) retrofit, repowered, or replaced a total of 79 port-related vehicles and pieces of equipment.

A Cleaner State Fleet / Multi-Modal Emissions Initiatives. MDOT is retrofitting and replacing aging fleet vehicles to reduce GHG emissions and improve air quality:

- **Transit** – MTA is replacing older diesel buses with hybrid or clean diesel vehicles, and is purchasing diesel MARC Train locomotives that meet stringent new EPA requirements for all types of pollutants.
- **Freight Rail** – Maryland is also looking to reduce emissions from rail freight shipments by reducing the footprint of goods movement through the state and by implementing diesel technology retrofits to comply with EPA regulations.[22] Moreover, Maryland is reducing the emissions impact of freight rail through installing auxiliary power units (APUs) on diesel locomotives to reduce the need for long idling periods.
- **Airports** – The Maryland Aviation Administration (MAA) reduces pollutants emitted by BWI Airport's ground support vehicle fleet through the implementation of alternative fuels and other strategies that reduce petroleum consumption. In fact, BWI Airport has used compressed natural gas (CNG) vehicles since the 1990s, and it has a CNG fueling station on-site. BWI also has 20 alternative fuel and bi-fuel vehicles in the state's airport maintenance fleet, and MAA now uses only CNG buses as shuttles for BWI's new Consolidated Rental Car Facility.
- **Construction and Maintenance Equipment** - SHA is retrofitting dump trucks used for maintenance activities with special filters designed to reduce diesel fuel emissions.

Additionally, Maryland has also instituted a requirement that at least 50% of state fleet vehicles blend a minimum of 5% biodiesel (or other biofuel approved by EPA) into their petroleum, with the exception of any vehicles where the manufacturer's engine warranty would be voided from such fuel use.

[21] Maryland Port Authority, 2014 Dray Truck Replacement Program. Available at: http://portofbaltimoredraytruckreplacementprogram.info/2010-epa-dtrp. Also, EPA, Funding for Projects to Improve Air Quality at Ports. Available at: http://www2.epa.gov/ports-initiative/funding-projects-improve-air-quality-ports#awarded2014. Also, MDE.

[22] Maryland Department of Transportation, Maryland Statewide Freight Plan. Available at: http://www.mdot.maryland.gov/Office_of_Planning_and_Capital_Programming/Freight/Documents/Freight_Plan_Final.pdf

Increasing Travel Choices - *Supporting livable, economically vibrant communities by facilitating use of transit, bicycling, and walking.*

Maryland is working to create economically vibrant communities and business locations where it is easy to walk, bike, and use public transit.

Transit-Oriented Development and Coordinated Land Use Planning. Transit-oriented development (TOD) involves development around transit stations to create communities where people live, work, and shop all in walking distance to transit. Increasingly, businesses are recognizing the value of being located in areas with access to transit and a range of travel options to improve access for employees and draw customers. Moreover, the benefits of transit-oriented development go beyond simply getting more people onto transit. Transit-oriented communities that contain mixed use development encourage more bicycle and pedestrian trips, shorten vehicle trip lengths, and enable people to own fewer vehicles – all of which contribute to reduced fuel consumption and emissions.

> Employers in urbanized areas increasingly want to be located in mixed use areas near transit to attract workers.

Progress continues to be made across the state's 16 designated TOD locations, with multiple sites undergoing active development. Maryland is also making targeted transportation infrastructure investments to support critical state and regional economic development needs, including the revitalization of designated Sustainable Community Areas.

Transit Improvements. Commuting by public transportation, rather than driving alone, allows an individual to reduce his or her annual CO_2 emissions by an estimated 4,800 pounds per year. Maryland has committed significant funding for new transit services and initiatives to increase transit ridership, including:

- The BaltimoreLink project, a $135 million investment to streamline existing bus and rail modes in the Baltimore area into a unified, interconnected transit system to improve access to jobs and the broader regional transportation network – The project will provide access to 130,000 more jobs than are accessible via the current network, and increase the service area by 18 square miles which will increase the number of people with access to transit by 30,000.[23]
- The Purple Line, a 16-mile light rail line that will have 21 stations between Bethesda in Montgomery County and New Carrollton in Prince George's County, and will connect to WMATA's Metrorail, MARC, Amtrak, and local bus services.

[23] Maryland Transit Administration, What is Baltimore Link? Available at: http://mta.maryland.gov/baltimorelink.

- High-capacity bus transit services in the 19-mile long US 301/MD 5 corridor from White Plains in Charles County to the Branch Avenue Metrorail Station in Prince George's County; also high-frequency bus rapid transit in the US 29, MD 355, and MD 586 corridors in Montgomery Counties.
- New transit centers to facilitate safe and convenient transfers between multiple transit providers and modes, as well as new park and ride lots to promote use of commuter bus services.
- Enhancements to MARC commuter rail stations.
- Planning for a high-speed Maglev rail corridor between Baltimore and Washington, DC, which would allow for a 15-minute train trip between the two cities, and could generate significant economic benefits by greatly improving accessibility.

Using public transportation can reduce personal transportation costs – freeing up income for spending on recreation, services, or goods that can support the local economy. An individual in a two-person household can save $9,621 annually ($802 monthly) by switching to public transportation to commute to work, which would allow the household to live with one less car.

Source: American Public Transportation Association, Transit Savings Report, October 2015.

Enhancing the Bicycle and Pedestrian Environment. Bicycling and walking are clean, nonpolluting forms of transportation and also provide opportunities for physical activity. Improving infrastructure for bicycles and pedestrians enhances safety, supports active business districts, and enhances communities and recreational opportunities. Improved bicycling options can also play an important role in supporting transit ridership by increasing access to transit stations from nearby homes, jobs, and other destinations. Maryland is supporting these enhancements through:

- Implementation of Maryland's Bicycle and Pedestrian Master Plan to bring to fruition a 20-year vision to improve and support cycling and walking infrastructure in the state.
- Implementing SHA's Complete Streets Policy, requiring that all SHA staff and partners consider and incorporate complete streets criteria for all modes and types of transportation when developing or redeveloping the transportation system.
- Implementing SHA's new bicycle design guidelines that require all projects, including resurfacing projects, to include bicycle lanes, or to demonstrate that bicycle accommodations are provided to the greatest extent possible.
- Identifying and eliminating short gaps in existing sidewalk and trail systems.
- Adding bike racks at MARC and light rail stations, as well as bike share facilities at targeted stations.

Enhancing Travel Efficiency – *Optimizing transportation system performance through enhanced traveler information, systems operations, managing travel demand, and reducing idling*

Traffic congestion results in delays for travelers and freight deliveries. Efforts to manage travel demand and optimize transportation system performance support economic growth while yielding time and cost savings for travelers, reduced air pollution, and reduced GHG emissions. Travelers increasingly expect up-to-date, reliable real-time information, and are seeking the most convenient ways to get around –whether by driving, sharing rides, biking, walking, or taking transit. As technology has advanced, real-time data on travel conditions are enabling more dynamic ways for Maryland transportation agencies to manage transportation systems and communicate with the traveling public. Freight efficiency improvements can also help support Maryland's economic competitiveness. In addition, although new vehicles standards have drastically reduced vehicle emissions rates, there are time lags before these standards reach their full effect, due to the pace of vehicle turnover. Reducing vehicle idling is a way to yield near-term emissions reductions while saving money on fuel. Maryland is advancing these strategies through:

Making Travel Times More Predictable and Reliable. Applying technology to support smart travel decisions and optimize system operations, these strategies improve the dependability and consistency of travel times:

> Nationally, it is estimated that over half of traffic congestion experienced by drivers is due to traffic incidents, weather conditions, work zones, and poor traffic signal timing. Strategies to improve transportation system operations not only save time stuck in traffic, they enhance quality of life, support freight efficiency, and reduce motor vehicle emissions.
>
> *Source: Federal Highway Administration.*

- Upgrading traffic signal systems statewide with real-time communication to maximize operations efficiency.
- Converting toll plazas to electronic tolls and investigating time of day pricing on tolled facilities to encourage shifts to off-peak periods.
- Operating Coordinated Highways Action Response Team (CHART) and 511 services to provide local traveler information and severe weather information.
- Focusing on transportation system management and operations strategies, including incident management, road weather management, work zone management, and others to improve reliability.
- Exploring Integrated Corridor Management to optimize performance along major corridors and utilize capacity on parallel routes, and evaluating managed lanes (such as high-occupancy vehicle or high-occupancy toll lanes), and related strategies for future transportation investment, as appropriate.

Supporting Ridesharing, Telecommuting, and Other Options to Reduce Vehicle Commuting. Managing travel demand offers potential to save travelers time and money. Through investments in statewide and regional commuter assistance programs, including Commuter Choice Maryland and Commuter Connections in the Maryland suburbs of the Washington, DC area, MDOT promotes

teleworking, ridesharing, transit use, flexible work hours, and other options to reduce single occupancy vehicle trips.

Enhancing Freight Efficiency and Intermodal Connections. Maryland is working to improve freight intermodal connections and increase options for increased freight rail capacity. The 2015 Strategic Goods Movement Plan addresses enhancements to the goods movement around the state – an essential component of Maryland's economy. Some of the plan's goals also support the broader environmental goals for the transportation network. Strategies such as improving rail infrastructure and better addressing the impacts of freight on traffic congestion (e.g., truck routing, delivery operations, reducing incidents, etc.), also result in reduced emissions and fuel consumption.[24]

Reducing Vehicle Idling. Reducing idling from the in-use vehicle fleet is an integral part of Maryland's strategy to achieve near-term emissions reductions. Maryland is currently reducing mobile source idling emissions through its state anti-idling law, which stipulates that motor vehicles in the state may not idle their engine more than five consecutive minutes when a vehicle is not in motion. In addition to this policy, Maryland developed a "Don't Idle" education program in the Washington D.C. and Baltimore metropolitan areas designed to increase owners and operators knowledge of the benefits of reduced idling. Expansion to the education and outreach may include:

- Increased public information: Strategies to increase awareness include signage as a reminder of anti-idling restrictions in common idling locations, pamphlets and posters, web sites, and social media to reach different segments of the population.
- School initiatives: A particularly vulnerable group of stakeholders in regards to pollution from unnecessary idling are school children. Education to inform students and their parents can help to reduce idling and prompt increased enforcement of reduced idling by parents and school buses.
- Truck stop initiatives: Recognizing the high emissions rates of heavy-duty vehicles, outreach can be targeted to truck drivers at locations such as rest stops to achieve the maximum affect.
- On-line courses: On-line training can be particularly useful to help fleet owners and operators understand the various exemptions and behaviors allowed in restrictions found in a specific jurisdiction.

More Efficient Driving Behavior (Ecodriving). In addition to reducing idling, Maryland can encourage more fuel-efficient driving behaviors, often called "ecodriving", through outreach and education campaigns. Studies demonstrate that ecodriving, which involves smoother driving by less aggressive acceleration and deceleration, and improved vehicle maintenance, can allow drivers to reduce their fuel consumption by 2% to 4%.[25] While small in scale for an individual driver, when applied across a large segment of vehicles, ecodriving can have notable effects.

[24] Maryland Department of Transportation, 2015 Maryland Strategic Goods Movement Plan. Available here: http://www.mdot.maryland.gov/Office%20of%20Freight%20and%20Multimodalism/Strategic%20Goods%20Movement%20Plan.pdf.

[25] ICF International, "Smart Driving White Paper," prepared for Metropolitan Transportation Commission, October 2014.

Spurring Innovation – *Advancing the State as a leader in adopting clean energy technologies that create jobs while improving the environment.*

By adopting clean energy technologies, Maryland will spur job creation while reducing emissions. Maryland has made several strides in this area already, and has opportunities to significantly expand these initiatives. Strategies that may be advanced include:

Energy-Efficient Lighting. Opportunities exist for reducing the amount of energy used to light highway signs, traffic signals, and other transportation infrastructure; for instance, by replacing traffic lights and message signs from incandescent light bulbs to more efficient LEDs. Not only do LEDs run more efficiently, they last longer, thus reducing the frequency they need to be changed.

Clean Energy Production. In 2012, BWI Marshall Airport worked with Pepco Energy Services to install a 505 kW solar photovoltaic system on the top level of the Daily Garage. The system is tied directly to the airports electrical system to produce over 600,000 kilowatt hours of electricity reliably each year for the next 20 years. Additional opportunities may be available at transit stations and other properties.

Also, in 2009, the FHWA issued new guidance that allowed renewable energy facilities to be located in the highway right-of-way. Use of solar panels and wind power can generate electricity, reduce GHG emissions, and spur local jobs in the manufacture of these equipment.

National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Transportation Planning Board
FROM: Kanti Srikanth, TPB Staff Director
SUBJECT: Announcements and Updates
DATE: February 9, 2017

The attached documents provide updates on activities that are not included as separate items on the TPB agenda.

National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Transportation Planning Board

FROM: Sergio Ritacco, TPB Transportation Planner

SUBJECT: Update on revising the Equity Emphasis Area Methodology for use in the TPB's Title VI / Environmental Justice (EJ) Analysis and Other Planning Efforts

DATE: February 9, 2017

At its January 18, 2017 meeting, the Board received a briefing on and was asked to endorse the Equity Emphasis Areas (EEA) identifying U.S. Census tracts with high concentrations of low-income and / or minority populations for analysis of the 2016 CLRP for disproportionately high and adverse impacts. At the request of member Danielle Glaros, the Board agreed to defer action to allow time for TPB staff to re-examine elements of the methodology to address an anomaly in the results identified by Ms. Glaros. This memo provides an update to this process and staff's plan to reintroduce the action item at the March 15, 2017 meeting after finalizing the methodology and gaining concurrence from stakeholders.

PROCESS FOR REVISING EQUITY EMPHASIS AREAS AND NEXT STEPS

Since the January 2017 meeting, TPB staff re-examined the results and the regional dataset to understand the anomalous results. This examination identified the limitations of the current methodology which needed to be addressed. Most notably, the methodology addressed included tracts with either high dual-minority concentrations or high low-income concentrations in determining if these could be identified as Equity Emphasis Areas (EEA) but excluded tracts with high single-minority population concentrations and above average low-income concentrations. This limitation was identified by Ms. Glaros and TBP staff agreed it was an important element needing reconsideration.

Recognizing this limitation, staff worked to refine the methodology. This refinement, while maintaining the earlier criteria of identifying EEAs (stated above), now provides a means to identify tracts with high single-minority population concentrations and above average low-income concentrations as EEAs.

TPB staff plans to engage stakeholder groups who had previously reviewed and concurred with the methodology presented in January. The stakeholder groups include the Council of Governments (COG) Planning Directors Technical Advisory Committee. Staff also plans to host a webinar on February 22, 2017, to present the revised methodology and results. Members of the Board, the TPB Technical Committee, and COG's Planning Directors Technical Advisory Committee are invited to the webinar. This will be followed by a briefing at the March 3, 2017 TPB Technical Committee meeting and Board being asked to endorse the Equity Emphasis Areas (EEA) at its March 15, 2017 meeting.

National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Transportation Planning Board

FROM: Eric Randall, TPB Transportation Engineer

SUBJECT: Federal Performance-Based Planning and Programming (PBPP) Requirements

DATE: February 9, 2017

This memorandum provides an update for the board on federal rulemaking and the performance-based planning and programming (PBPP) requirements under the federal surface transportation act Moving Ahead for Progress in the 21st Century (MAP-21) and continued in the Fixing America's Surface Transportation Act (FAST Act).

The first action of the board for PBPP will be to approve the region's transit asset management targets. A draft set of targets will be brought to the board for information in April with subsequent approval of the final targets in May.

PBPP RULEMAKING

The PBPP rulemaking is essentially complete. All performance measures have been finalized, with the following final rules recently published in support of the requirements. The 26 specific performance measures under seven performances areas for which performance targets are to be established are listed in Table 1 along with the dates for state and MPO actions.

- The final Highway Assets: Pavement and Bridge Condition rule was published on January 18.
    - https://www.gpo.gov/fdsys/pkg/FR-2017-01-18/pdf/2017-00550.pdf

- The final System Performance (Interstate and National Highway System, Freight Movement on the Interstate System, and the Congestion Mitigation and Air Quality Improvement Program) rule was published on January 18.
    - https://www.gpo.gov/fdsys/pkg/FR-2017-01-18/pdf/2017-00681.pdf

- The final National Public Transportation Safety Plan rule was published on January 18, finalizing the transit safety performance measures. https://www.gpo.gov/fdsys/pkg/FR-2017-01-18/pdf/2017-00678.pdf
    - The final Public Transportation Agency Safety Plan rule is still pending. (Draft 2/15/16).

TPB staff is continuing collaboration with DDOT, MDOT, and VDOT, as well as with WMATA and other providers of public transportation, for each PBPP performance area: Highway Safety, Highway and Bridge Condition, System Performance (Congestion, Freight, and CMAQ), Transit Safety and Transit Asset Management. Table 1 on the next page has the entire list of PBPP performance measures, including the responsible agencies and target setting deadlines.

In the next few months, TPB staff will be contacting the DOTs and the providers of public transportation to begin development of formal agreements on appropriate responsibilities for the PBPP data collection and target-setting process, as required under the new Statewide and Metropolitan Planning Rule.

TABLE 1: PERFORMANCE BASED PLANNING AND PROGRAMMING PERFORMANCE MEASURES

Table of entire list of final Performance Measures

PBPP Areas	Agencies	DOTs / NHS Owners / Transit Providers set Targets	MPO sets Targets
1. Planning Rules			
Agreement on sharing Data, selecting Targets, and Reporting Progress	DOTs, MPOs, Transit Providers	5/27/2018	5/27/2018
Date of conforming CLRP and TIP	MPOs	5/27/2018	5/27/2018
Date of implementation of MPO Coordination Rule	MPOs	2024	2024
2. Highway Safety (5 measures)			
Number of Fatalities	DOTs, MPOs	8/31/2017	2/27/2018
Rate of Fatalities per 100 million VMT	DOTs, MPOs	8/31/2017	2/27/2018
Number of Serious Injuries	DOTs, MPOs	8/31/2017	2/27/2018
Rate of Serious Injuries per 100 million VMT	DOTs, MPOs	8/31/2017	2/27/2018
Number of Non-Motorized Fatalities and Serious Injuries	DOTs, MPOs	8/31/2017	2/27/2018
3. Highway Asset Condition (6 measures)			
Interstate system: Percentage of pavement in Good condition	DOTs, MPOs	2/17/2018	8/16/2018
Interstate system: Percentage of pavement in Poor condition	DOTs, MPOs	2/17/2018	8/16/2018
NHS (non-Interstate): Percentage of pavement in Good condition	DOTs, MPOs, NHS Owners	2/17/2018	8/16/2018
NHS (non-Interstate): Percentage of pavement in Poor condition	DOTs, MPOs, NHS Owners	2/17/2018	8/16/2018
NHS: Percentage of Bridges in Good Condition	DOTs, MPOs, NHS Owners	2/17/2018	8/16/2018
NHS: Percentage of Bridges in Poor Condition	DOTs, MPOs, NHS Owners	2/17/2018	8/16/2018
4. System Performance Measures: Highway (3 measures)			
Interstate system: Percentage of Person-Miles Traveled that are Reliable	DOTs, MPOs	2/17/2018	8/16/2018
NHS (non-Interstate): Percentage of Person-Miles Traveled that are Reliable	DOTs, MPOs	2/17/2018	8/16/2018
NHS: Percent Change in Tailpipe CO2 Emissions	DOTs, MPOs	2/17/2018	8/16/2018
5. System Performance Measures: Freight Movement (1 measure)			
Interstate system: Percentage of Mileage providing for Reliable Truck Travel Times	DOTs, MPOs	2/17/2018	8/16/2018
6. System Performance Measures: Congestion Mitigation and Air Quality Program (3 measures)			
NHS: Annual Hours of Peak Hour Excessive Delay Per Capita	DOTs, MPOs	2/17/2018	8/16/2018
NHS: Percentage of Non- SOV Travel	DOTs, MPOs	2/17/2018	8/16/2018
CMAQ Program Emissions: Total Emission Reductions for each applicable criteria pollutant and precursor	DOTs, MPOs	2/17/2018	8/16/2018
7. Transit Asset Management (4 measures)			
Rolling stock (Age): Percentage of revenue vehicles that have met or exceeded useful life	Transit Providers, MPOs	1/1/2017	6/30/2017
Equipment (non-revenue) service vehicles (Age): Percentage of vehicles that have met or exceeded useful life	Transit Providers, MPOs	1/1/2017	6/30/2017
Rail fixed-guideway (Condition): percentage of track segments, signal, and systems with performance restrictions	Transit Providers, MPOs	1/1/2017	6/30/2017
Stations/ Facilities (Condition): The percentage rated below condition 3 on the TERM scale.	Transit Providers, MPOs	1/1/2017	6/30/2017
8. Transit Safety (4 measures)			
Fatalities: Total number and rate (per revenue vehicle mile) of reportable fatalities	Transit Providers, MPOs	TBD	TBD
Injuries: Total number and rate of reportable injuries	Transit Providers, MPOs	TBD	TBD
Safety Events: Total number and rate of reportable Derailments, Collisions, Fires, and Evacuations	Transit Providers, MPOs	TBD	TBD
System Reliability: Mean distance between Major and Other Mechanical System Failures	Transit Providers, MPOs	TBD	TBD

Metropolitan Washington Council of Governments

MEMORANDUM

TO: Transportation Planning Board

FROM: Nicholas Ramfos, Director, Transportation Operations Program

SUBJECT: Metro Rail Safety Commission Legislation Update

DATE: February 15, 2017

SUMMARY

This is an update to the information provided during the September 15, 2016 Board meeting.

Work activities to establish a Metrorail Safety Commission (MSC) consistent with the requirements of the FAST Act have continued to make steady and substantive progress. These works activities are being conducted by the administrative staffs of the District of Columbia, Maryland and Virginia with decision support assistance of COG and TPB staffs.

Most of the work activities can be sorted under two groups: legal and management. The legal work activities are associated with having laws enacted in the three states (and eventually ratified by the US Congress) that would provide the MSC with the legal authority it needs to conduct its work activities including having the authority to compel WMATA to take safety corrective actions developed by the MSC. Since the previous report to the Board hearings on the proposed MSC Compact legislation were held in the last quarter of 2016.

The DC City Council passed the MSC Compact on December 14th and has been sent to the Mayor for signature.

Vastly similar Compact legislation was introduced and have been passed, separately, by the Commonwealth of Virginia's House of Delegates (HB 2136) and Senate (SB 1251). The House version of the Bill contains the unanimously agreed to House Transportation Committee amendment requiring that the Secretary of Transportation in coordination with the Northern Virginia Transportation Commission engage with their District and Maryland counterparts for purposes of revising the WMATA Compact and implement WMATA reforms. This proposed amendment will be independent of the action to establish the MSC. The Senate Bill does not include this amendment language. The two Bills will be reconciled and a common Bill is anticipated to be enacted by the General Assembly before the end of its session on Feb. 25, 2017.

Vastly similar Compact legislation was introduced in the Maryland General Assembly (House Bill 2185 and Senate Bill 0265). A Senate public hearing was held on February 8th and the House Public Hearing is scheduled for Thursday, February. 16th at 1 p.m. The two Bills will be acted upon, reconciled as needed and a common Bill is anticipated to be enacted by the General Assembly before the end of its session on April 11, 2017.

The management work activities relate to all aspects of the MSC as an organization and includes tasks such as establishing a governance structure, operational by-laws, staffing plans, housing the entity, and an implementation schedule. The goal of these documents is to provide a basic framework that the eventual MSC Executive Director, staff and Board of Commissioners can use to fully implement the MSC.

Under the management work activities, a milestone timeline to stand-up the MSC has been developed and approved by the FTA. Some of the activities recently completed include: developing a Conflict of Interest Policy that centers on the policies and procedures for identifying, documenting, eliminating, or sufficiently mitigating instances where the MSC is not legally or financially independent from WMATA as required by law, and developing a Program Standard describing the Washington MSC's approach to implementing the requirements of its SSO program over the Metrorail system.

The completion of the legislative and management activities will enable the Metrorail Safety Commission to be up and running with its enhanced responsibilities and authority and replace the existing TOC.

National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Transportation Planning Board
FROM: Rich Roisman, TPB Planning Data Manager
SUBJECT: Regional Travel Survey Pre-Test
DATE: February 9, 2017

REGIONAL
TRAVEL SURVEY
Planning Our Future Together

SUMMARY

The TPB is currently in the process of conducting a region-wide household travel survey. The pre-test for this 2017-2018 Regional Travel Survey (RTS) begins on February 9. A random sample of households in the Washington region and adjacent areas are being invited to participate in this survey pre-test. Participation is completely voluntary and any personal data collected from survey respondents will be kept strictly confidential. We expect that approximately 800 of the 16,000 invited households will participate in this survey pre-test. This memorandum is intended to provide background information on the Regional Travel Survey for TPB members in case of constituent inquiries. For more information, please visit the survey website at https://regionaltravelsurvey.com.

BACKGROUND: SURVEY HISTORY AND PURPOSE

TPB has conducted a regional household travel survey approximately every ten years since 1968. The survey, which collects demographic and travel information from a randomly-selected representative sample of households in the TPB region and adjacent areas, is the primary source of observed data used to update, calibrate, and validate the regional travel demand model. This model in turn is used for the travel forecasting and air quality conformity analysis of the regional Constrained Long Range Plan (CLRP), and other key program activities. The survey data are also used by staff to analyze regional travel trends, and by TPB member jurisdictions and agencies to conduct their own analysis for their areas of interest. The purpose of the survey is to better understand daily travel and activities in the region: how we travel, where we go, how long it takes us, and what we do when we arrive. The survey seeks to obtain a complete picture of travel patterns in the region. Oversight of the survey program and activities is performed by the TPB Technical Committee and TPB Travel Forecasting Subcommittee.

SURVEY PRE-TEST

Resource Systems Group, Inc. (RSG) is the professional survey research firm that has been contracted to conduct the data collection for the 2017-2018 RTS pre-test and main survey. RSG's local office is located in Arlington, VA.

The survey pre-test will last for approximately six weeks and will test the efficacy of the survey methodology and materials, including two on-line web-based survey questionnaires, a pre-printed travel log to aid household members in recording their daily travel, and a smartphone survey app that will be used by a subset of the pre-test households instead of the printed travel logs to record

and track their daily trip-making. Upon completion of the pre-test data collection, a non-response follow-up analysis will be conducted, and staff will evaluate the survey results and work with RSG to make any adjustments to the materials and methodology prior to launching the main survey data collection.

SCHEDULE AND DURATION OF 2017-2018 RTS MAIN SURVEY

The launch of data collection for the 2017-2018 RTS main survey is expected to begin in July 2017, following the scheduled conclusion of the Metrorail SafeTrack surges. Data collection for the main survey will occur in continuous phases over a one-year (12 month) period. Following the conclusion of data collection, a non-response follow-up analysis will be conducted and the survey data files will be finalized and analyzed for a main survey report. All deliverables are expected to be completed by the end of 2018, after which staff will continue work with the Travel Forecasting and Emissions Analysis team to use the survey for travel demand model updates, and report on the survey findings to the TPB as part of periodic updates on regional travel trends.

From: "Richardson, Barbara" <brichardson@wmata.com>
Date: January 22, 2017 at 3:41:56 PM EST
To: "Richardson, Barbara" <brichardson@wmata.com>
Subject: Metro This Weekend

Friends:

Metro served a historic number of riders this past Friday and Saturday. In fact, yesterday was the second busiest day in our history. As you can imagine, it was "all hands on deck" for employees. I thought you might like to see the note of thanks below that General Manager Wiedefeld sent everyone this morning.

Barbara

Special Message to Employees from General Manager/CEO Paul J. Wiedefeld

I want to express my deep appreciation to every employee who made this weekend a terrific success for Metro and the national capital region.

Over the two days of Friday and Saturday, Metro trains, buses and paratransit served well over 2 million passenger trips. Metrorail alone provided nearly 1.6 million trips over the two-day period, and a record was set when January 21, 2017 became the second busiest day in Metro's history, with 1,001,613 entries into the rail system.

We can all feel proud of providing safe, reliable service for large numbers of riders over two consecutive days on a world stage. This success is especially impressive given the monumental challenge of sustaining such an operation over back-to-back days, along with the logistical challenges that come from national special security events. As most people returned home to their families, Metro employees continue working today and preparing for tomorrow's commute.

The effort that was required to accomplish this began many months ago with extensive internal planning and coordination with dozens of transportation, emergency management, and law enforcement agencies for Inaugural events. Our success reflects the work of employees who prepared tracks, trains, buses, escalators, and other facilities to support the passengers. It took the carefully coordinated efforts of our safety officers, as well as our control centers, fare collection, IT, communications and customer service personnel. It took the tireless work of bus and train operators, station managers, and the back office staff of volunteer MIPs, to ensure that crowds were moved safely on both days. And I want to recognize our custodial staff for the impressive job they did keeping stations clean.

My special thanks to MTPD - supported by nearly 150 police from sister agencies -- who helped record numbers of riders move safely and securely in stations, and onboard trains and buses.

I am so proud of what our team accomplished. We demonstrated to the region and riders from across the nation that we are capable of delivering world-class service.

Thank you.

Sincerely,

Paul J. Wiedefeld
General Manager/CEO
Metro's Top 3 Priorities: Safety, Service Reliability, and Fiscal Responsibility
For Metro customers and employees, one priority rises above all others - SAFETY.

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