visualize2045

A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

APPENDIX A

Financial Plan

October 2018

National Capital Region
Transportation Planning Board

FINANCIAL PLAN FOR THE VISUALIZE 2045
LONG-RANGE TRANSPORTATION PLAN
FOR THE NATIONAL CAPITAL REGION
October 17, 2018

ABOUT VISUALIZE 2045 & THE TPB

Visualize 2045 is the federally required long-range transportation plan for the National Capital Region. It identifies and analyzes all regionally significant transportation investments planned through 2045 to help decision makers and the public "visualize" the region's future.

Visualize 2045 is developed by the National Capital Region Transportation Planning Board (TPB), the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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Section 1: Introduction and Summary

INTRODUCTION

The National Capital Region Transportation Planning Board (TPB) is the federally designated Metropolitan Planning Organization (MPO) for the National Capital Region as per 23 USC Part 450 and 49 USC Part 613 and plays an important role as the regional forum for transportation planning. The TPB prepares plans and programs that the federal government must approve in order for federal-aid transportation funds to flow to the Washington region.

Members of the TPB include representatives of local governments; state transportation agencies; the Maryland and Virginia General Assemblies; the Washington Metropolitan Area Transit Authority; and non-voting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB has an extensive public involvement process, and provides a 30-day public comment period before taking action on plans and programs. The TPB's planning area covers the District of Columbia and surrounding jurisdictions. In Maryland these jurisdictions include Charles County, Frederick County, Montgomery County, and Prince George's County, plus the cities of Bowie, College Park, Frederick, Gaithersburg, Greenbelt, Laurel, Rockville, and Takoma Park. In Virginia, the planning area includes Alexandria, Arlington County, the City of Fairfax, Fairfax County, Falls Church, Loudoun County, the Cities of Manassas and Manassas Park, Prince William County and a portion of Fauquier County.

The TPB is responsible for conducting the 3C planning process as outlined in 23 USC 450 and 49 USC 613. The primary products of the 3C planning process the TPB is required to develop are the metropolitan transportation plan and the transportation improvement program (TIP). The metropolitan transportation plan documents the MPO's transportation planning policy together with the planned transportation projects intended to be implemented over a no less than 20-year planning horizon. Per federal regulation 23 USC 450.324, the metropolitan transportation plan shall include a financial plan that demonstrates how the adopted transportation plan can be implemented, by estimating costs and revenue sources that are reasonably expected to be available to adequately operate and maintain the highway and public transportation system. In this manner the scope and contents of the metropolitan transportation plan are financially constrained.

The previous quadrennial update to the TPB's metropolitan transportation plan, the 2014 Constrained Long-Range Plan (CLRP), and its financial plan element were adopted by the TPB on October 15, 2014. The TPB's new metropolitan transportation plan, the Visualize 2045 long-range plan, covers a period of 27 years, between 2019 and 2045 and represents a quadrennial update to the 2014 CLRP. The update of the long-range plan has been developed over the past year collectively by the representatives of the TPB's member jurisdictions and agencies. Throughout the process the TPB has engaged and received comments and input from the region's citizens and interest groups via its Citizens Advisory Committee process, two 30-day open public comment periods preceding updates to the projects and the TIP, and on-line publications and outreach activities.

The update to the projects in Visualize 2045 was done as part of the TPB's Technical Inputs Solicitation for the Air Quality Conformity Analysis of the Constrained Element of Visualize 2045 and the FY 2019-2024 Transportation Improvement Program (TIP) that started in October of 2017 and ended with the TPB's approval, after a 30 day public comment period, of the project updates for use

in regional air quality conformity analysis on January 17, 2018. The updates to the projects were provided by the TPB member jurisdictions and agencies working with the TPB staff. The TPB Policy element: the Vision, federal planning factors, and the TPB's Regional Transportation Priorities Plan (RTPP) informed the development of the inputs. Additionally, submitting agencies were encouraged to consider the work of the Long-Range Planning Task Force then concluding, which endorsed seven aspirational initiatives for the region.

The Visualize 2045 financial plan includes estimates of the project costs and the revenue amounts reasonably expected to be available to implement the projects as well as operate and maintain the existing transportation system, and was prepared by the TPB member jurisdiction and agency staffs, working with the TPB staff. The forecasts and the assumptions were reviewed by a working committee and subsequently reported to and reviewed by the TPB Technical Committee. The financial plan includes revenue and expenditure estimates for the regional rail and bus transit system operated by WMATA and funded by member jurisdictions. The expenditure and revenue estimates for the WMATA transit system were developed with inputs from both WMATA and its members, and revised by TPB staff following the approval of new dedicated funding for WMATA's state of good repair needs by the District of Columbia, Maryland, and Virginia this year. Similarly the financial plan includes expenditure and revenue estimates that were developed and reviewed for the commuter rail services – MARC and VRE – and the local transit services, including planned light rail and streetcar projects.

EXECUTIVE SUMMARY

This analysis demonstrates that the Visualize 2045 long-range plan, covering the period 2019 through 2045, is financially constrained. The plan is financially realistic, balancing all proposed new project investments and system maintenance and operating costs with reasonable revenue expectations, as agreed upon by the MPO and its implementation agency partners in the metropolitan transportation planning process. The plan demonstrates that the forecast revenues reasonably expected to be available cover the estimated costs of expanding and adequately maintaining and operating the highway and public transportation system in the region.

Because federal planning regulations require that the financial analysis show reasonably anticipated revenues and expenditures in year of expenditure (YOE) dollars, this report provides estimates in year of expenditure dollars. Year of expenditure dollars include inflation rates in the future years.

A total of $291.1 billion in transportation expenditures is projected for the Washington Metropolitan Region for the 27-year period of 2019 to 2045. The majority of future transportation revenues will be devoted to the operations and maintenance of the current public transportation and highway systems. WMATA expenditures constitute 48 percent and local public transportation 18 percent of the total through 2045 and highways constitute 34 percent.

Funding is identified for significant capital projects, including the South Capitol Street Corridor project and the DC Streetcar East-West line in the District of Columbia; the I-270 and I-495 Traffic Relief Plan, the replacement of the Nice Bridge and construction of the Purple Line, and implementation of the MARC Growth and Investment Plan for commuter rail in Maryland; and the I-66 HOT Lanes, completion of phase two of the Silver Line, and implementation of the VRE System Expansion Plan in Virginia. Most importantly, the plan also demonstrates full funding for WMATA's forecast needs for both operations and state of good repair through 2045.

Contents of the analysis report include:

- Section 2 summarizes the results of the regional forecasts for revenues and expenditures. Observations are made about the forecasts for both and the new revenue sources since 2014 are described.
- Section 3 provides information on the methodologies used in developing the forecast of revenues and expenditures for each state, including local jurisdictions and WMATA.
- Section 4 provides a comparison of the Visualize 2045 financial analysis results to those of previous long-range plans.
- Section 5 provides an overview of recent trends and future options for additional transportation revenues for the region. Recent projects and proposals that make use of innovative financing are also discussed. In regard to additional potential finance resources and innovative financing techniques, an extensive review was conducted for the 2010 CLRP financial analysis, which includes information still applicable.

Section 2: Summary of the Results of the Regional Forecasts

This analysis demonstrates that the projects and programs contained in the long-range plan for the years 2019-2045 can be funded with the reasonably expected revenues and that the financial plan for the Visualize 2045 long-range plan conforms to Federal guidelines requiring metropolitan planning organizations to develop a financially constrained long-range transportation plan. The revenue and expenditure estimates were developed cooperatively by the states, local jurisdictions, and transit agencies of the Washington Metropolitan Region with TPB staff assistance. Revenue projections do not include projections of new sources that are not yet legislatively enabled, but assume a continuation of current sources including some that were recently established.

As per federal regulations, the revenue and expenditure estimates are shown in year of expenditure dollars. Year of expenditure dollars were arrived at by applying an inflation factor to estimates in 2019 dollars. However, these future year dollars are not the same as current year dollars in terms of their buying power. For the near-term years, agencies already have estimated inflation rates and have converted their estimates of revenues and expenditures to year of expenditure dollars, as part of their work to update their respective capital improvements programs. For the longer term, the conversions between year of expenditure dollars and constant dollars in this analysis typically use a long-term inflation rate of 2.4 percent, which is the current long-term inflation rate predicted in the forecast of the Congressional Budget Office.[1]

FORECAST REVENUES

The anticipated revenues for the Visualize 2045 long-range plan are shown in Table 1. Revenues are broken down into five source categories (Federal, state, local, private/other, and fares/tolls) and grouped under the three "state" level jurisdictions (District of Columbia, Suburban Maryland, and Northern Virginia) and a fourth "non-jurisdictional regional" level. The overall category of private/other is comprised of a variety of sources, including local jurisdiction general funds, anticipated private sector contributions, and general bonds issued by WMATA.

The regional "non-jurisdictional" revenues listed in the table for WMATA include transit fares, federal grants, the construction of the Silver Line phase two by the Metropolitan Washington Airports Authority (MWAA), and other non-jurisdictional sources such as advertising and special event service revenues. Transit fare revenues for WMATA and the local transit systems include revenues from planned services. To clarify WMATA's information, a sub-table summarizing the total aggregate revenues by combining the non-jurisdictional funds with the jurisdictional funding is provided in Table 1 (which already are included in prior rows of the table) categorized by the five funding source columns.

[1] Congressional Budget Office, 2017 Long Term Budget Outlook (Table A-1, page 30). https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/52480-ltbo.pdf

Table 1 – Revenues: Visualize 2045 long-range plan (2019 to 2045)

Millions of Year of Expenditure Dollars

	Federal	State/DC	Local	Private / Other	Fares / Tolls	TOTAL
District of Columbia						
Highway	$6,067	$4,010				$10,076
Local Transit	$100	$3,033			$436	$3,569
Commuter Rail						$0
WMATA Support		$31,965				$31,965
Sub-Total	***$6,167***	***$39,008***	***$0***	***$0***	***$436***	***$45,610***
Suburban Maryland						
Highway	$10,112	$27,008	$7,135	$8,635	$769	$53,659
Local Transit	$2,446	$3,401	$11,313	$0	$3,053	$20,213
Commuter Rail	$1,293	$8,566		$0	$1,032	$10,891
WMATA Support		$31,458				$31,458
Sub-Total	***$13,851***	***$70,433***	***$18,448***	***$8,635***	***$4,855***	***$116,222***
Northern Virginia						
Highway	$3,975	$13,116	$15,820	$1,343	$1,501	$35,755
Local Transit		$2,231	$7,024		$2,219	$11,473
Commuter Rail	$963	$1,104	$1,627	$544	$1,872	$6,110
WMATA Support		$1,341	$25,898			$27,239
Sub-Total	***$4,938***	***$17,792***	***$50,369***	***$1,887***	***$5,592***	***$80,577***
WMATA[1]						
Sub-Total	$13,622			$219	$34,840	$48,681
GRAND TOTAL	**$38,578**	**$127,233**	**$68,817**	**$10,741**	**$45,722**	**$291,090**

Sub-Table - WMATA Summary

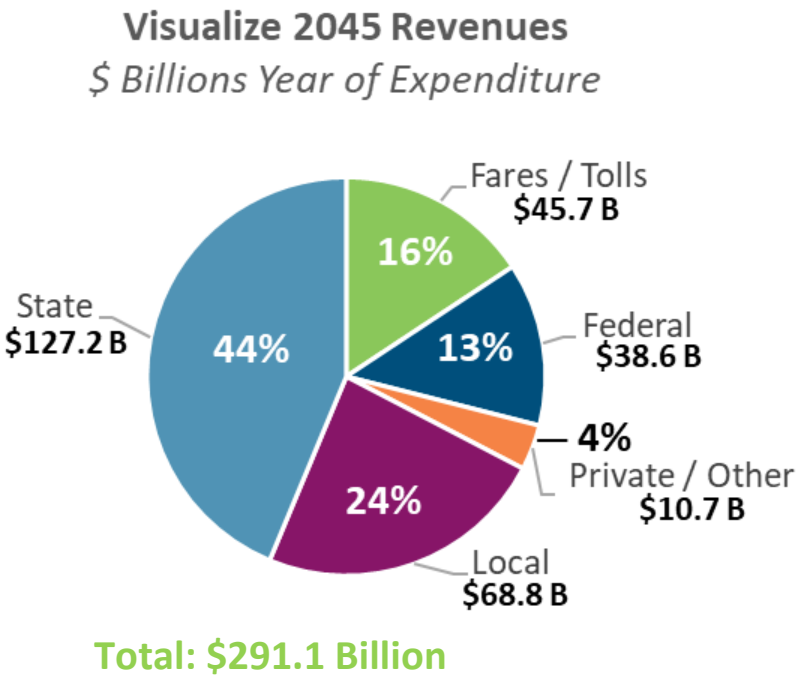
	Federal	State/DC	Local	Private / Other	Fares / Tolls	TOTAL
Capital	$13,622	$30,682	$12,463	$219	$2,937	$59,924
Operating		$34,082	$13,434		$31,903	$79,419
Subtotal WMATA	***$13,622***	***$64,764***	***$25,897***	***$219***	***$34,840***	***$139,343***

1. Fares, Grants and Other Nonjurisdictional (Regional) Funds. Includes MWAA Silver Line phase 2.

Observations about Forecasted Revenues

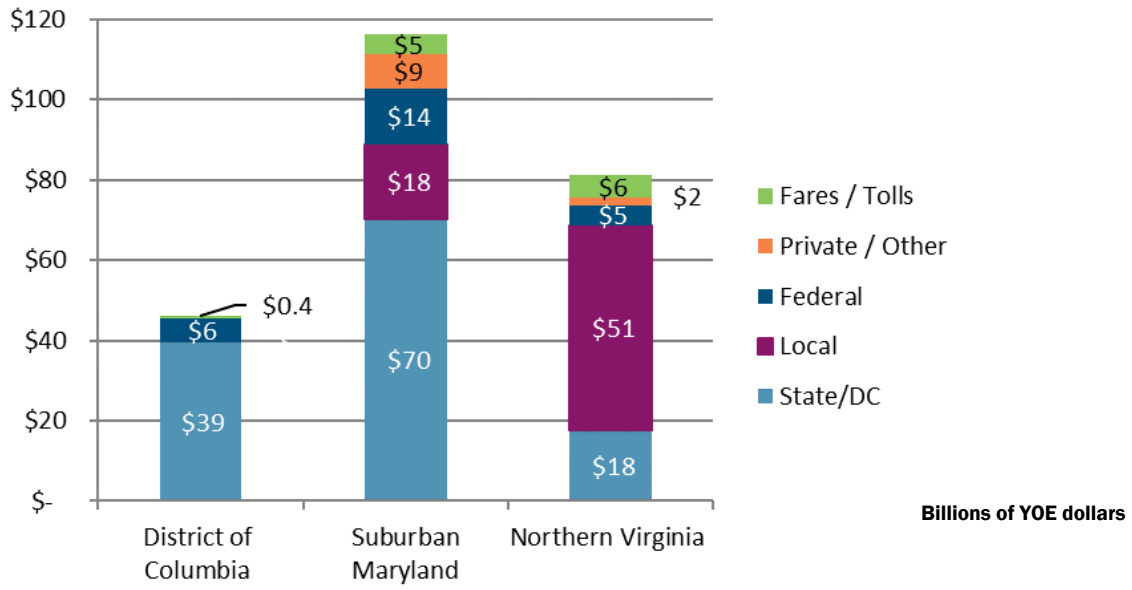
The revenues shown in Table 1 are portrayed graphically in Figure 1 below by funding source. Overall, Federal revenue as a proportion of total revenue is 13 percent, while State (including the District of Columbia) sources are the largest single source at 44 percent. Local funds, which include funds collected across Northern Virginia, represent 24 percent of revenue. User fees of fares and tolls are 15 percent of the total revenues, while bonds and private or other sources account for 4 percent of total revenues. Section 3 of the report provides more detail on the revenue types and forecasting methodology used to develop the long-term projections for each funding source.

Figure 1 – Revenues by Funding Source



Regarding revenue projections for each major jurisdiction, the summary presented in Figure 2 shows that in D.C., federal revenues constitute 13 percent of its revenues with D.C. contributing 86 percent and fares making up 1 percent. For Suburban Maryland the revenue contributions are federal – 12 percent, state – 61 percent, local – 16 percent, private/other – 7 percent and tolls/fares – 4 percent. In Virginia, the contributions are federal – 6 percent, state – 22 percent, local – 63 percent (which includes regional taxes), private/other – 2 percent and tolls/fares – 7 percent.

Figure 2 – Revenues by Funding Sources by State



New Revenue Sources Since 2014

The most significant development for the region has been the approval for new, long-term dedicated funding for WMATA's state of good repair needs by the District of Columbia, Maryland, and Virginia. In addition to continued support for the current capital subsidy, the three jurisdictions will provide an additional $500 million annually in funding. The funding allocation was arrived at through WMATA's capital costs formula: the District to provide $178 million, Maryland $167 million, and Virginia $154 million per year. Virginia's share will be provided starting in fiscal year 2019, with the District and Maryland's contributions a year later.

To raise additional revenues for WMATA, the District has increased taxes on Transportation Network Company trips, and increased sales, hotel, meal and, and commercial property taxes. Maryland is funding their additional contribution to WMATA out of general funds. In Virginia, a portion of the funding was re-allocated from funds collected by the Northern Virginia Transportation Authority (NVTA). Other Virginia funding came through a new floor on the regional gas tax and reapportionment of the regional grantor's tax, lodging tax, and motor vehicle taxes.

The new dedicated funding for WMATA comes with various requirements and restrictions. The most important of these financially is a restriction limiting increases in the WMATA operating subsidy to 3 percent per year, or some portion of funds would be withheld. In this financial analysis, TPB staff have assumed that WMATA will adhere to this annual subsidy increase limit indefinitely.

In regard to Federal revenues, no significant increases are expected, though program funds are anticipated to increase with inflation in the long-term. One exception is that an extension is assumed of the federal Passenger Rail Investment and Improvement Act of 2008 (PRIIA) funding for WMATA rehabilitation beyond 2019. Per this assumption, $150 million of federal funds from PRIIA matched by $150 million in state funds ($50 million each from DC, MD, and VA) annually is assumed for the period 2020 through 2045. The revenues shown in Table 1 include this anticipated revenue for WMATA's State of Good Repair needs.

The current PRIIA legislation expires at the conclusion of federal fiscal year 2019 (September 30, 2019). The region and local jurisdictions; the District of Columbia, Maryland, and Virginia; WMATA; and the business community are committed to working to extend this federal legislation. It is reasonable to assume that the current commitment by the states to match the federal funds will be continued when PRIIA is extended by Congress.

FORECAST EXPENDITURES

The forecast expenditures for the Visualize 2045 long-range plan are shown in Table 2. The total estimated expenditures are summarized in year of expenditure dollars for the 27-year period from 2019 through 2045. The totals can be compared with those in Table 1 to show that expenditures and revenues match for each major jurisdiction, mode, and the region overall, and thus the Visualize 2045 long-range plan is financially constrained as required.

Public transportation is expected to comprise 66 percent of the expenditures and highways comprise 34 percent. Of the total expenditures, operations and capital projects for WMATA will represent about 48 percent of the region's expenditures for transportation.

Expenditures are separated into three major categories: operations, state of good repair, and system expansion. Expenditures are further divided among four modal categories: highway, local transit, commuter rail, and WMATA support. The rows in the table show expenditures by the three jurisdictions (the District of Columbia, Suburban Maryland, Northern Virginia), the regional nonjurisdictional expenditures, and the aggregate total. The regional "nonjurisdictional" expenditures are those covered by WMATA fares, grants, and other non-jurisdictional funds for regional services, including MWAA construction of the Silver Line phase two. Within each jurisdictional category, Table 2 shows the expenditure breakdown by the principal modes (highway, local transit, commuter rail, and WMATA). Table 2 also shows a summary of total aggregate revenues for WMATA (already included in prior rows of the table) categorized by the two expenditure columns. The total expenditures shown in Table 2 are $291.1 billion and match the revenues shown in Table 1.

Section 3 of the report provides more detail on the revenue types and forecasting methodology used to develop the long-term projections for each funding source.

OBSERVATIONS ABOUT FORECASTED EXPENDITURES

As in previous financial analyses, the majority of future transportation revenues will be devoted to the operations and state of good repair of the current transit and highway systems. Beginning with the 2014 CLRP financial analysis, agencies have worked to discretely identify state of good repair expenditures for highway and transit systems, previously included with operational system preservation costs or included in the total capital expenditures for system expansion (i.e., investment). The proportion of revenues identified for Visualize 2045 and devoted to operations and annual maintenance is forecast to be about 44 percent; the expenditures for capital projects to maintain the highway and transit systems in a state of good repair are forecasted at about 34

Table 2 – Expenditures: Visualize 2045 Long-Range Plan (2019 to 2045)

Millions of Year of Expenditure Dollars

	Operations	State of Good Repair	Expansion	TOTAL
District of Columbia				
Highway	$6,324	$3,274	$478	$10,076
Local Transit	$2,662	$559	$348	$3,569
Commuter Rail				$0
WMATA Support	$17,011	$13,099	$1,855	$31,965
Sub-Total	***$25,997***	***$16,932***	***$2,681***	***$45,610***
Suburban Maryland				
Highway	$8,227	$25,046	$20,386	$53,659
Local Transit	$10,121	$1,108	$8,985	$20,214
Commuter Rail	$2,365	$6,102	$2,424	$10,891
WMATA Support	$17,071	$12,601	$1,786	$31,458
Sub-Total	***$37,784***	***$44,857***	***$33,581***	***$116,222***
Northern Virginia				
Highway	$7,134	$9,400	$19,221	$35,755
Local Transit	$8,059	$1,739	$1,675	$11,473
Commuter Rail	$3,395	$683	$2,032	$6,110
WMATA Support	$13,434	$11,866	$1,939	$27,239
Sub-Total	***$32,022***	***$23,688***	***$24,867***	***$80,577***
WMATA[1]				
Sub-Total	$31,903	$13,622	$3,156	***$48,681***
GRAND TOTAL	***$127,706***	***$99,099***	***$64,285***	***$291,090***

Sub-Table - WMATA Summary

	Operations	State of Good Repair	Expansion	TOTAL
DC	$17,011	$13,099	$1,855	$31,965
Maryland	$17,071	$12,601	$1,786	$31,458
Virginia	$13,434	$11,866	$1,939	$27,239
WMATA	$31,903	$13,622	$3,156	$48,681
Subtotal WMATA	***$79,419***	***$51,188***	***$8,736***	***$139,343***

Sub-Table - Modal Summary

Highways	$21,685	$37,720	$40,085	$99,490
Transit	$106,021	$61,379	$24,200	$191,600

1. Fares, Grants and Other Nonjurisdictional (Regional) Funds. Includes MWAA Silver Line phase 2.

percent while the expenditures devoted to system expansion are around 22 percent. For highways, 60 percent of expenditures are anticipated on operations and state of good repair projects.

Under local transit, commuter rail, and WMATA, operations is 55 percent of the forecast expenditures, with another 32 percent devoted to state of good repair. Together for all modes, the capital state of good repair and expansion investments are about 56 percent of total expenditures for the region.

The expenditures shown in Table 2 include the new dedicated funding for WMATA from the District of Columbia, Maryland, and Virginia through 2045 as well as their match for an extension of the federal PRIIA funds for WMATA rehabilitation through 2045. Each of the three jurisdictions contributes $50 million annually, to match $150 million of annual federal funds, all of which is expended on state of good repair capital projects.

Figure 3 shows total expenditures, separated by mode and type. Transit expenditures include those for WMATA, local transit, and commuter rail. Over the 27-year period of Visualize 2045, public transportation is projected to absorb 66 percent of the total expenditures of $291.1 billion. WMATA expenditures are forecast at $139.3 billion (48 percent of the total) and match the available revenues. Highway expenditures and revenues total $99.5 billion (34 percent).

Figure 3 – Expenditures by Type and Mode

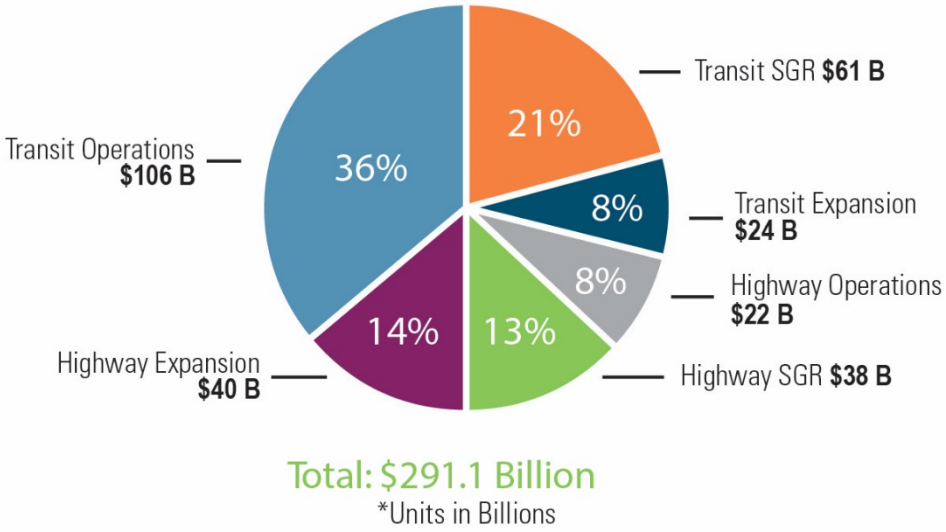
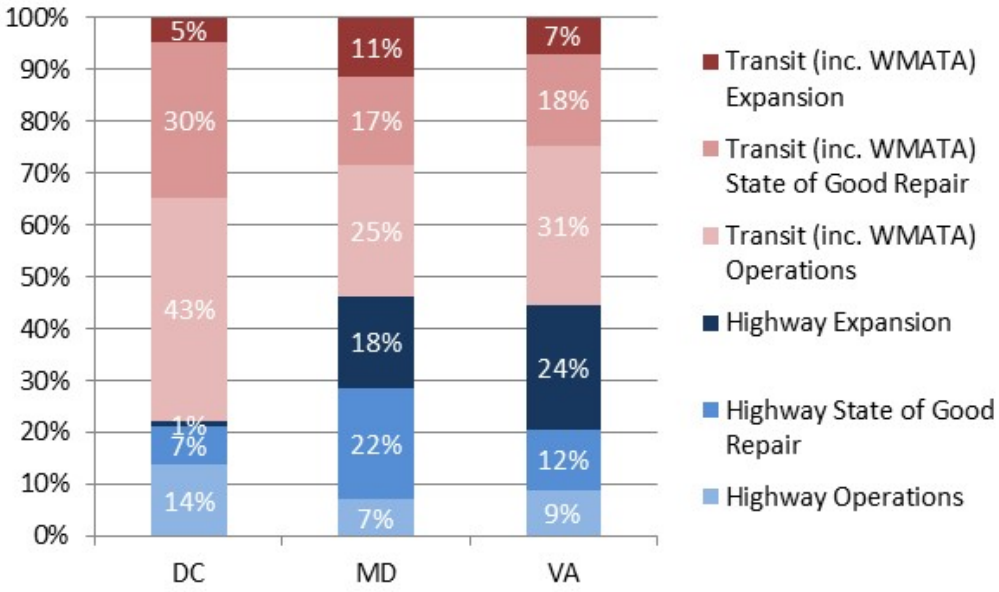


Figure 4 (on the next page) shows expenditures by mode and type for each state sub-region shown as percentile out of 100% (WMATA's expenditures using revenues received directly from federal sources and collected from passenger fares are excluded). In the District of Colombia, transit state of good repair and operations expenditures are a much higher proportion of total expenditures, given the significant transportation role of Metrorail and Metrobus.

Suburban Maryland and Northern Virginia have comparable proportions of expenditures allocated to highway and to transit: 46% and 54% respectively for Maryland, 44% and 56% for Virginia. Suburban

Maryland has a smaller proportion of funds going to expansion projects, but in dollar terms forecasts spending considerably more than Northern Virginia on expansion ($33.6 billion for Maryland vs. $24.8 billion for Virginia).

Figure 4 – Expenditures by Mode and Type by State



WMATA'S EXPENDITURES

WMATA's forecast needs for both Operations and State of Good Repair through 2045 were fully met by the funding agencies for the Visualize 2045 financial analysis. About a third of the expansion funding is for the completion of the construction of Silver Line Phase 2 (to Dulles Airport and Loudoun County) due to open in 2020, a project being carried out the Metropolitan Washington Airports Authority. The other expansion amount will provide for 100% 8-car trains, core station capacity improvements, and other capital project improvements to meet growth, as identified in WMATA's 2017 Capital Needs Inventory.

Beginning with the 2000 CLRP, the TPB imposed a transit core capacity constraint when using its travel demand model for air quality conformity determination. Ridership on Metrorail in the downtown was constrained at 2020 levels for further out-years of the analysis. This was to reflect that funding had not been identified to accommodate all of the projected Metrorail ridership growth after 2020. However, with the provision of dedicated funding for WMATA, it is anticipated that Metrorail will receive the all 8-car trains and the downtown station core capacity improvements needed to meet increasing demand. Accordingly, the transit core capacity constraint has been removed from the travel demand model and the air quality conformity determination for Visualize 2045.

Section 3: How Revenues and Expenditures are Forecast

PERIOD OF ANALYSIS AND SUMMARY OF APPROACH

The Visualize 2045 long-range plan financial analysis covers both expenditures and revenues for a 27-year period for 2019 to 2045. Agencies used the current long-range plan, the current TIP, and their latest capital investment programs and six-year improvement proposals as a starting point for expenditures and made appropriate adjustments to extend their forecasts for the 27-year period. Revenues were forecast based on historic funding trends and anticipated changes in federal. state, and local revenues. Template spreadsheets were distributed to each agency and jurisdiction for their use in preparing the estimates of revenues and expenditures. Agencies that wished to utilize their own existing spreadsheets or models could do so and reported the information back using the common spreadsheet format.

METHODOLOGIES

Revenue and expenditure data were developed and synthesized by the departments of transportation (DOTs) of the District of Columbia, Maryland and Virginia, by WMATA and other transit agencies, and by the local jurisdictions. The District DOT provided all District of Columbia estimates. MDOT coordinated all of the local jurisdiction and state inputs in Maryland and VDOT coordinated all the local jurisdiction and transit agency inputs in Virginia. WMATA provided forecasts of capital and operating expenditures for its regional Metrobus, Metrorail, and MetroAccess services, which were coordinated with the jurisdictions and agencies that fund those services.

Highway expenditures in Maryland are made by both MDOT and by the local jurisdictions. Transit in Maryland is funded and operated either directly by MDOT (which includes the Maryland Transit Administration), which provides WMATA's funding and which operates the commuter rail and commuter bus service, or by the local jurisdictions themselves. Charles, Frederick, Montgomery and Prince George's Counties each fund and operate their own local transit services, with some state assistance.

Most of the funding to construct, operate and maintain highways in Virginia is provided by the state, with significant funding for highway and transit also provided through regional revenues allocated by the Northern Virginia Transportation Authority (NVTA) and by the Northern Virginia Transportation Commission (NVTC), as well as local jurisdiction and private funding. Cities and towns as well as Arlington County have the responsibility to maintain and operate the roadway system with funding allocated to them by the state as well as local funding. Transit in Virginia is provided by WMATA, by the local jurisdictions, and by the Potomac and Rappahannock Transportation Commission (PRTC) and Virginia Railway Express providers, with the Virginia Department of Rail and Public Transportation (DRPT) providing state funding support.

A methodology consistent with that used to forecast revenues and expenditures in previous financial analyses was employed. Each agency and jurisdiction was requested to provide year-by-year forecasts of their transportation revenues and expenditures through 2045. TPB staff converted between constant and future year of expenditure dollar estimates as necessary for all forecasts that were not converted by the agencies themselves.

DISTRICT OF COLUMBIA FORECAST

Over the near term, D.C.'s revenues forecasts rely on budget projections. For this financial analysis, the FY 2018 proposed budget, which includes a capital program for fiscal years 2018 through 2023 was used. For the revenue forecast beyond 2023, the District assumes future escalations at the rate of general inflation.

The revenue numbers for highways ($10.1 billion in year of expenditure dollars) in the summary tables (Table 1) has been derived from yearly revenue projections provided by the District Department of Transportation (DDOT) in spreadsheet format. The District forecasts that $6.3 billion of this would be covered by Federal aid and $3.8 billion from various local D.C. sources used to fund highways.

Projected revenues were developed for highway, local transit, and WMATA needs, both capital and operating. The District's Highway Trust Fund revenue projections are anticipated to remain available to match available federal funds; these projected revenues to match federal funds represent 17 percent of federal highway funds.

DC revenues for WMATA and local transit – DC Streetcar, DC Circulator, and paratransit programs – include funds programmed for WMATA State of Good Repair capital investments. Revenues are projected into the future with a 2.4 percent annual growth rate due to the costs of upgrading aging systems and District policy statements that commit to funding transit capital projects and transit State of Good Repair.

For user fee revenues from fares and tolls, revenues from transit fares are assumed in keeping with planned transit expansions. These are anticipated to increase at a 3.0 percent rate through 2045 due to the anticipated growth in ridership. For private and other revenues, there are assumptions of private spending for several projects in the long-range plan that will result in improved regional transportation infrastructure.

For expenditures, DDOT projects highway spending on significant capital projects from planned spending on major projects in the FY 2018-2024 budget with ongoing expenditures projected for significant projects based on past trends. These expenditures also include the District's planned GARVEE Bond repayments for significant projects.

Tables 1 and 2 include $3.6 billion in revenue and expenditures for local transit that mainly consists of the D.C. Streetcar and the D.C. Circulator Bus as well as paratransit programs. Operating and capital costs for local transit (DC Circulator and DC Streetcar) are taken from existing financial plans for both systems, with a long-term operating cost increase assumed of 3 percent past 2023. The District's forecasts for WMATA transit expenditures are based on estimates provided by WMATA through the financial plan process and by assumptions made for WMATA operating subsidies and capital needs by the region. This includes new dedicated funding of $178 million a year and also $50 million a year in match from District for the presumed extension of PRIIA through 2045.

SUBURBAN MARYLAND FORECAST

The revenue numbers in Table 1 for Suburban Maryland reflects estimates for MDOT funding, including by the State Highway Administration, the Maryland Transportation Authority and the

Maryland Transit Administration, and from the four counties: Charles County, Frederick County, Montgomery County, and Prince George's County.

MDOT bases its overall revenue projections on the state's Consolidated Transportation Plan (CTP) budget for the next few years, extrapolation of past trends, and assumptions about future increases for out years (approximately 2023-2045). For years 2019-2045, the numbers from MDOT imply an annual increase of approximately 5.3 percent in real terms for state funds, while federal fund projections are based on an average growth rate of 3.0 percent for both highway and transit program funds. Long-term federal contributions continue to decrease from past financial assumptions. MDOT projections commit matching funds $50 million a year for continuation of funding for PRIIA through 2045.

Maryland jurisdictions also base their overall revenue projections on the budget estimates over the next few years, extrapolation of past trends, and assumptions about future increases for more distant years (approximately 2023-2045). For years 2019-2045, while each jurisdiction made slightly different assumptions about future escalations, the aggregate numbers imply an overall annual increase of approximately 2.2 percent in funding for highway and transit by the Maryland jurisdictions. The Table 1 revenue breakdown in year of expenditure dollars by source for Maryland forecasts $13.9 billion from federal sources, $70.4 billion from state, $18.4 billion from local, $8.6 billion from private and other, and $4.9 billion from tolls and non-WMATA transit fares.

On the expenditure side (Table 2), the figures again include MDOT data and data from the four suburban Maryland jurisdictions. MDOT and jurisdictions typically match their expenditures to the forecasted revenues available for each year. Table 2 includes $37.8 billion for operations and annual system preservation, $44.9 billion for capital state of good repair projects and $33.6 billion for expansion projects, including the I-270 and I-495 Traffic Relief Plan, the replacement of the Nice Bridge and construction of the Purple Line, implementation of the MARC Growth and Investment Plan for commuter rail, and the construction of several BRT lines in Montgomery County.

NORTHERN VIRGINIA FORECAST

Northern Virginia estimates of revenues and expenditures were developed cooperatively by VDOT, DRPT, NVTA, NVTC, local jurisdictions, and transit agencies. VDOT and DRPT developed estimates of federal and state revenues that would be available both statewide and to the Northern Virginia region. VDOT worked with local jurisdictions to identify their additional highway and transit funding needs, taking into account the state revenues available for highways and transit. VDOT and the jurisdictions reviewed the WMATA financial projections.

VDOT coordinated the effort and provided revenue and expenditure information for the state, federal, and local jurisdiction data. Four different categories of projects and programs were evaluated: Highways, Local Transit, Commuter Rail (Virginia Railway Express), and WMATA Virginia Allocations, both operating and capital. For each, the revenues by source (federal, state, regional/local, tolls/fares, private/other) and expenditures by category (operations, state of good repair, and expansion) were identified. These data were used to complete the summary table.

Northern Virginia revenues are derived from multiple federal, state, local, toll, private and transit sources, and future forecasts are based on a complex set of assumptions regarding expected escalations of each source. The six-year estimate of state revenues used for the fiscal annual Budget and the Six-Year Program is extracted the official forecast of state revenues prepared by the

Department of Taxation. The state revenues include: Motor Vehicle Sales and Use Tax, Motor Vehicle Fuels Tax, Licenses Fees, International Registration Plan, and State Sales and Use Tax. In the long-term, state revenues are expected to grow long-term by 2.4 percent annually, with a 1.9 percent annual growth in federal revenues.

The total federal, state, and local funding figures that are shown in Table 1 include both highway and transit funding – $4.9 billion, $17.8 billion, and $50.4 billion, respectively. User charge revenues of $1.5 billion from tolls on state toll roads and $4.1 billion from local transit and commuter rail fares are shown combined. Private/other funds are $1.9 billion, including a one-time concession payment funding from the I-66 Outside the Beltway Express Lanes private consortium.

Regional and local revenues include the dedicated NVTA funds. The NVTA funds are made up of a portion of the sales tax in Northern Virginia, a transit occupancy tax, and a grantors tax. A portion of the NVTA funds will go directly to WMATA under the newly passed legislation, while the major portion of the NVTA funds is allocated by the NVTA through a competitive process; both are treated as local revenues in the financial analysis.

Expenditures (Table 2) include data from VDOT and the Northern Virginia agencies and jurisdictions. The expenditure data for the near term are derived from the latest annual budget and the six-year program data along with estimates in the TIP. Table 2 shows $32.0 billion for operations, $23.7 billion for state of good repair projects, and $24.9 billion for expansion, including both highways and transit.

VRE costs are based on the approved state improvement program through 2020, with assumed growth of 2.5 percent growth in later years, while fares are expected to grow by 3 percent annually. WMATA revenue and expenditure entries include match from Northern Virginia for the extension of PRIIA through 2045.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY FORECAST

WMATA's financial estimates were prepared based on anticipated growth in the operating costs and revenues for the three modes: Metrobus, Metrorail, and MetroAccess, and on the capital needs identified in WMATA's 10 year *Capital Needs Inventory and Prioritization* report, released in November 2016, and GM/CEO Wiedefeld's plan to "Keep Metro Safe, Reliable, and Affordable," released on April 19, 2017.

WMATA's revenue and expenditure forecasts were prepared in June 2017, prior to the dedicated funding legislation being taken up and approved by the District of Columbia, Maryland, and Virginia in 2018. Subsequently, adjustments were made to the forecast by TPB staff in keeping with the projected impacts of the legislation on both revenues and expenditures.

WMATA Operations Revenues and Expenditures

The initial WMATA operations forecast was for a 3.5 percent annual increase in bus and rail expense growth, combined with a 1 to 2 percent annual ridership and revenue growth, resulting in annual subsidy growth of about 4 to 6 percent throughout most of the years of the analysis period. Subsequently, adjustments were made to the forecast by TPB staff in keeping with the new dedicated funding legislation, limiting the annual increase in operating subsidy for Metrorail and Metrobus to 3 percent and setting fare revenue growth at 2.4 percent annually.

Metrorail service and fleet assumptions include operating support and fares for the Silver Line Phase 2 to Dulles Airport and Loudoun County, with the expectation that costs for the service will begin in FY 2020 as operators, mechanics, police, and other staff are hired and trained so that revenue service can begin in FY 2021.

Metrobus service growth is expected to grow at a modest rate, just a few tenths of a percent per year. Metrobus subsidies are allocated to the local jurisdictions based on policies adopted by the WMATA Board of Directors.

MetroAccess, WMATA's paratransit operation, is anticipated to continue growing at 4 to 6 percent per year for operating costs and revenues due to increasing demand for this type of service, driving by an expanding eligible population. Costs for MetroAccess are assigned based on the rider's jurisdiction of residence.

WMATA Capital Revenues and Expenditures

The initial WMATA capital revenues forecast projected anticipated funding sources from the federal, state and local governments including an extension of PRIIA and federal formula funds with matches at current funding levels, along with then uncommitted additional revenues from the funding jurisdictions. Subsequently, adjustments were made to the forecast by TPB staff, in keeping with the restrictions included in the new dedicated funding legislation, to use a growth rate for the base or existing capital subsidy of 3 percent per year through 2045, along with a contribution of new, dedicated funding of $500 million annually assumed to begin in FY 2020.

Capital expenditures were based on 'steady-state' state of good repair needs of $1.07 billion ($YOE), from WMATA's Capital Needs Inventory (CNI), and an estimated $6.66 billion in backlog needs. In the initial ten-year period, expenditures total $15.5 billion, consistent with the GM/CEO's plan.

The construction of the Silver Line Phase 2 is being managed by the Metropolitan Washington Airports Authority (MWAA), not WMATA, however the remaining construction costs are included with the WMATA figures for expansion. After the Silver Line Phase 2 and construction of a new in-fill station at Potomac Yard, no further expansion of the rail system network is included.

WMATA regional operating and capital numbers (covered by operating revenues, grants, and other non-jurisdictional funds) are shown in a separate section below the rows summarizing the three jurisdictions in summary Tables 1 and 2. WMATA's support from each jurisdiction is shown under each jurisdiction summary section as well as separately at the end of expenditure Table 2.

Section 4: Comparison to Previous Financial Analyses

This section assesses the changes in total revenues and the purpose of revenues over the past long-range transportation plan financial analyses. the revenues and expenditures for the financial plans are developed using the same general methods, though over different periods of time (i.e., number of years). However, comparisons should take into account that figures are in year of expenditure dollars, so amounts will grow over time in line with general regional growth and with inflation.

The most important development in the region has been the advocacy and legislation that led to a successful regional effort to agree on new dedicated funding to meet WMATA's state of good repair needs. This has led to a significant increase in the revenues and expenditures for public transportation in the financial analysis, even as highway revenues and expenditures are stable. The required use of year of expenditure dollars in the analysis also increases financial figures over time. I addition, the Visualize 2045 analysis covers a period of twenty-seven years, one year more than the twenty-six years of the 2014 CLRP analysis but less than the thirty years of the 2010 CLRP analysis.

Key observations on changes in revenues and expenditures for the Visualize 2045 Financial Analysis include:

Total Expenditures in Billions of YOE Dollars are increasing over time:

	D.C.	Suburban Maryland	Northern Virginia	WMATA (Nonjurisdictional)	Total
2010 CLRP	$ 28.0	$ 74.5	$ 58.0	$ 62.0	$ 222.8
2014 CLRP	$ 33.1	$ 87.3	$ 68.5	$ 55.2	$ 244.1
Visualize 2045	$ 45.6	$ 116.2	$ 80.6	$ 48.7	$ 291.1
% Change (Visualize 2045 vs. 2014 CLRP)	+38%	+33%	+19%	-12%	+20%

Forecast total revenues and expenditures increased by 20 percent between the 2014 CLRP and Visualize 2045. Aside from inflation and the one-year longer period of analysis, one factor is the substantial increase in WMATA's state of good repair needs, which will be funded through the new dedicated funding for WMATA passed by all three major jurisdictions. Another factor is the addition of new toll road projects in Maryland and Virginia which will be funded through private revenues and recouped through tolls. There are also increases in expenditures that will be funded locally, including projects to be funded by the NVTA in Northern Virginia and by Montgomery County for its BRT projects.

The Percentage of Total Expenditures in Billions of YOE Dollars by Mode

	Highway	WMATA	Other Transit	Total
2006 CLRP	$ 68 (43%)	$ 69 (43%)	$ 22 (14%)	$ 159
2010 CLRP	$ 81 (36%)	$ 114 (51%)	$ 28 (13%)	$ 222.8
2014 CLRP	$ 99 (41%)	$ 101 (41%)	$ 43 (18%)	$ 244.1
Visualize 2045	$ 99 (34%)	$ 139 (48%)	$ 52 (18%)	$ 291.1

The proportion of revenues and expenditures devoted to public transportation in Visualize 2045 has increased since 2014 to 66 percent, similar to the 64 percent in the 2010 CLRP. This is largely due to the increased need for investment in WMATA's state of good repair needs, but also the transit projects added to the Visualize 2045 long-range plan, including commuter rail investments in both Maryland and Virginia and the Montgomery County BRT projects. Expenditures for WMATA constitute 48 percent of the total expenditures, in line with previous forecasts.

Federal revenues as a proportion of the total has decreased to 13 percent, down from 16 percent in past analyses. State and local revenues are up proportionately. Other sources of revenue, including private and other sources and user fees from tolls and fares, are down to 19 percent from 24 percent in 2014 and 32 percent in 2010. In part, this is due to the increase in state and local revenues, making up a larger piece of the growing total. In addition, some major toll projects, including I-95 and I-495 in Northern Virginia, have been completed; future toll revenues being collected on these roads are no longer included in the financial analysis as they are paying off issued bonds and private investments. In addition predicted transit fare revenues have shrunk, based on recently observed trends in ridership and more conservative forecasts of future transit ridership.

With respect to the forecast for individual modes, for highways, the Federal government and the states provide 65 percent of the revenues, similar to the 63 percent in 2014 but down from 74 percent contribution in 2010. Over time, the local share as a proportion of highway revenues has increased, largely due to the changes in Virginia funding with more local funds coming from the NVTA. Local transit and commuter rail are largely funded from state and local revenue sources, 73 percent (up from 52 percent in 2014), with fares contributing 17 percent (down sharply from the 2014 forecast of 35 percent) and Federal aid 9 percent (down from 12 percent in 2014).

Section 5: Transportation Revenues: Recent Trends and Future Options

There have been positive actions taken by agencies since 2010 in terms of seeking adequate revenues to maintain the existing highway and transit systems in a state of good repair. However, major challenges remain if surface transportation capacity is to grow to meet forecast population and economic growth, or if congestion on the entire transportation system leads to costly delay and a negatively impacted quality of life. The region should examine new sources of possible future funding and must identify the critical steps needed to achieve more adequate funding for the unfunded expansion needs of the transportation system. In addition, the region is still recovering from the economic recession. It is important that long-term forecasts be understood in terms of long-term trends, so information is presented here about trends prior to the recession.

While the recent increases in state funding in Maryland, Virginia, and the District of Columbia have been significant, the long-term forecast for federal revenues is of gradual decline. Absent an increase in federal transportation programs to keep up with the population and economy, states and local jurisdictions will have to find more sources of transportation funding, even while under immense pressure to constrain their own revenue exaction. About 43 percent of recent national highway capital and just a slightly smaller percentage of recent national transit capital funding have come from the Federal government, yet as the financial analysis shows, the region forecasts only 13 percent of overall revenues will come from federal programs through 2045.

The shift to user fees for highway expansion, particularly for specific project-based funding agreements such as for HOT lanes and toll lanes, has been an important step in the direction of increased revenues as well as project implementation. The 2010 opening of the tolled Inter-County Connector in Maryland, built by the State Highway Administration and operated by the Maryland Transportation Authority was the first example in the region. More innovatively, nationally recognized public-private partnerships in Virginia have funded the construction of additional capacity in the shape of tolled lanes added to congested highways. The Capital Beltway I-495 Express Lanes opened in 2012 and the I-95 Express Lanes opened in 2015. More recently, Virginia imposed a toll on I-66 inside the Beltway, which is paying for improvements and transit alternatives projects in the corridor. Meanwhile I-66 outside the Beltway is adding Express Lanes constructed by a private partner, due to open in 2022. Maryland is considering similar projects in the Traffic Relief Plan proposal, which may add managed toll lanes along the I-495 Capital Beltway, I-270, and the Baltimore-Washington Parkway.

There may be opportunities for future capacity expansion through tolling, including a role for public-private partnerships. In addition, the State of Maryland is constructing the light rail Purple Line system using a public-private partnership in which the private partner has financed a considerable portion of the costs of construction. However, these limited opportunities are not substitutes for enhanced broad-based funding sources such as fuel taxes, vehicle fees, sales taxes, or other major dedicated sources that can support the operation, preservation, maintenance, and long-term state of good repair replacement and rehabilitation needs for major components of the surface the transportation system. Also, although increases to traditional motor fuel taxes and other current user fees are feasible short- and mid-term sources of revenue, they may not necessarily be the best long-term solution given improved vehicle fuel efficiency and alternative fueled vehicles.

Other options for new transportation revenue include: special tax districts, economic development corridors, and innovative infrastructure development. One regional example is the Union Station

Redevelopment Corporation, established to leverage the redevelopment potential of the historic downtown train station and air-rights on the railroad lines to raise revenues for upkeep and investment in the station. Another strategy, action to promote transit oriented development (TOD) projects around current and future Metrorail stations, not only provides direct revenues for transportation, but also leads to more transit ridership and revenues.

In support of the 2010 CLRP financial analysis, an exhaustive review of potential revenue sources, innovative financing techniques, and relevant factors was conducted and is still very relevant. This report is available at: http://www1.mwcog.org/store/item.asp?PUBLICATION_ID=391

ACTIONS NEEDED TO ACHIEVE NEW OR ENHANCED REVENUE SOURCES

The National Capital Region still needs additional revenues and new revenue sources in order to support critical needs for expansion of the surface transportation network. As in previous financial analyses, the vast majority of available future transportation revenues are already dedicated to the maintenance and operations of the current transit and highway systems. Many unfunded but desirable projects are proposed that cannot be included in the long-range plan under the funding constraints.

One of the more significant challenges to the region is the existence of multiple jurisdictions at several levels, each with its own tax base, tax structure, and tax policy. This leads to varying priorities and funding for regional or inter-jurisdictional coordination, connections, and interoperability, particularly for public transportation services and bicycle/pedestrian facilities. There are opportunities in each jurisdiction to develop new or enhanced revenue sources that can be part of an overall regional solution. There also is the potential for developing metropolitan-level funding sources for planning and implementing regional transportation projects.

Recent analyses have indicated that fuel taxes will remain a viable base for funding in the near term, both for the region and the nation. The recent indexing of state motor fuels taxes to inflation, and the automatic adjustment of dedicated sales taxes, is the most promising development in ensuring that at least a basic level of funding continues to flow to the region's highway and transit systems in the future. The next step would be for federal motor fuel taxes to also be indexed to inflation, along with a rise to incorporate inflation since last adjusted in 1993. In addition to the indexing of revenue sources, recent developments in the region with regard to tolling and pricing mechanisms suggest that their application could be expanded in the shorter term.

PUBLIC SUPPORT FOR ADDITIONAL TRANSPORTATION REVENUES

In the region and across the nation, there is considerable political and popular resistance to increased tolling and to the introduction of additional pricing mechanisms. What Do People Think About Congestion Pricing? A Study of the Public Acceptability of Congestion Pricing Through a Deliberative Dialogue with Residents of Metropolitan Washington[2] was completed by the TPB in 2013. The study found that participants agreed that congestion resonates as a critical problem facing the region, with significant personal impacts. However, participants who said they wanted more transportation alternatives rarely connected the lack of those options to the lack of funding. Some expressed doubts about the reality or extent of funding problems while many lacked confidence in the government's ability to solve transportation problems even if enough funding were

[2] http://www1.mwcog.org/store/item.asp?PUBLICATION_ID=470

available. An additional finding was that participants were generally unaware of the details of how transportation is currently funded, including the fact that the federal gas tax has not been raised in nearly two decades and is not indexed to inflation. Participants seemed to doubt inherently that congestion pricing would be effective in improving the region's transportation system. Therefore, framing pricing as an effective tool for addressing congestion problems and funding shortfalls does not seem to resonate with the public, despite the opportunity for facility tolling and congestion pricing in cordon or area-specific settings, including the use of variable and dynamic schemes.

However, if congestion pricing can effectively create specific and useful transportation alternatives, people showed more interest during the study discussion. Participants suggested that congestion pricing could play a role in the future, but proposals would need to clearly indicate how revenues raised through congestion pricing will be used, and ensure transparency and accountability in the allocation of these funds.

PRIVATE SECTOR FUNDING OPTIONS

The Express Lanes projects in Virginia have received national recognition for their innovative use of private-public partnerships. There has been both strongly negative and strongly positive reactions to the role of private firms in building and managing tolled highway networks, even if only new capacity is provided. Even when tolling is done by the public sector, as in the case of the Inter County Connector, the Dulles Toll Road, and I-66 inside the Beltway, there is opposition to tolling. This is additionally the case where highway toll revenues are being used to invest in transit capacity expansion, as is the case for the Silver Line. The conversion of free lanes to toll lanes would likely face much greater public opposition, and be much more difficult than the leasing of current toll facilities or the implementation of new toll facilities on HOV lanes.

Implications from these current experiences suggest that pricing and PPPs (those that involve tolling) will not be enough to fund significant surface transportation capacity, and that other sources of revenue will be needed. However, managed lanes with tolling may create an opportunity for private sector involvement in providing some financing of any potential project. In addition, the State of Maryland reached a public-private partnership agreement with a private partner to construct and finance a considerable portion of the Purple Line light rail system.

In the long term, new financing mechanisms are important in view of the anticipated shift away from petroleum-based fuels toward new, broad-based user fees that are not dependent on fuel consumption but on the use of the system, e.g., mileage-based or VMT fees. For both political and technological reasons, their actual implementation lies well into the future although significant efforts already are underway to develop technological solutions.

Phasing in of new transportation revenue exaction will be dependent on a variety of factors, including the needs for revenues, and the availability and attributes of the various revenue options, including the roles and required actions of various levels of government. However, if new revenues are ever to be developed, progress will need to be made in developing public and political support for such strategies.

visualize2045

A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

APPENDIX B

Summary of Projects in the Financially Constrained Element

October 2018

SUMMARY OF PROJECTS IN THE FINANCIALLY-CONSTRAINED ELEMENT OF THE VISUALIZE 2045 LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION
October 17, 2018

ABOUT VISUALIZE 2045 & THE TPB

Visualize 2045 is the federally required long-range transportation plan for the National Capital Region. It identifies and analyzes all regionally significant transportation investments planned through 2045 to help decision makers and the public "visualize" the region's future.

Visualize 2045 is developed by the National Capital Region Transportation Planning Board (TPB), the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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INTRODUCTION

The financially constrained element of Visualize 2045 contains more than 600 projects. These projects cover all modes, ranging from multi-billion-dollar highway and transit projects to local bridge replacements to bicycle and pedestrian facilities. Of these projects, the 123 listed and mapped in Chapter 5 of the plan are significant enough in scope or cost to be considered a "major" project on the regional scale.

At the outset of the development of Visualize 2045, the region's transportation agencies submitted 60 new projects and made updates to more than 300 projects already included in the long-range plan – either changing completion dates, scopes, or the costs of projects. Fifteen of those new or updated projects are included in the lists and maps of major projects and have been highlighted in the Project Profiles on pages 3–32 of this document and Tables 1 and 2 (pages 35 and 36) that were prepared for public comment at the beginning of the development of Visualize 2045.

The information in this document is presented as released for public comment in December 2017 and updated for the final public comment period from September 7 – October 7, 2018. There are four sections in this appendix: Project Profiles; Table 1 - and Table 2; detailed Project Submission Forms; and a complete listing of projects included in the financially constrained element of Visualize 2045.

The Project Profiles provide easy-to-read project descriptions and maps with a focus on how each project supports the goals outlined in the TPB's Regional Transportation Priorities Plan (RTPP) and the federal planning factors set forth in the FAST Act. Tables 1 and 2 provide visual comparisons of how the implementing agencies believe that these 15 new and updated projects support the RTPP and the federal planning factors. The Project Submission Forms provide greater detail about these projects, as provided by the implementing agencies. The complete listing of projects in the constrained element of Visualize 2045 is divided up by the submitting agencies and then by project or facility type. Each of those groups are also sorted as to whether the project expands the capacity of our region's transportation system, provides maintenance and a state of good repair, or is an ongoing operational program. The constrained element ID (CEID) for each project listed provides a link to the full project description.

PROJECT PROFILES

DC BICYCLE LANES

MAJOR ADDITION
VISUALIZE 2045

Various Locations Districtwide

Basic Project Information

Project Length.....6 Miles

Anticipated Completion.....2018, 2023

Estimated Cost of Construction.....$28 million

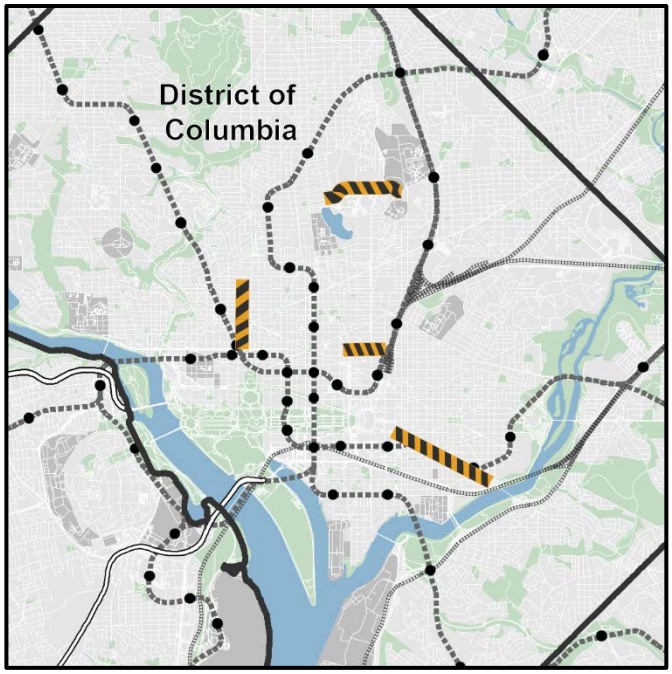
Submitting Agency.....District DOT

Anticipated Funding Sources.....

☐ Federal ☐ State ☒ Local ☐ Private ☐ Bonds ☐ Other

CEID.....multiple

HIGHWAY TRANSIT BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

DDOT is proposing adding six new segments to its existing bicycle path network. The following projects will remove one or more traffic lanes to allow for separated bicycle lanes.

- Pennsylvania Ave. SE from 2nd St./Independence Ave. to Barney Circle (1.3 miles)
- 17th St. NW from New Hampshire Ave. to K St. (<1 mile)
- K St. from 7th St. NW to 1st St. NE (<1 mile)
- K St. from 1st St. NE to Florida Ave. NE (<1 mile)
- Irving St. from Warder St. NW to Michigan Ave. NE (1 mile)
- New York Ave. NE from Florida Ave. to Bladensburg Rd. (2.3 miles)

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ Move DC

See official Visualize 2045 Project Description Forms for more information about these projects.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

DC BIKE LANES

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

Making bicycling safer and easier represents an expansion of transportation options (Goal 1). This will be advanced by implementing six bike-lane projects in the District. These projects are particularly supportive of the Priorities Plan's call for improved non-motorized circulation within Activity Centers (Goal 2) to make bicycle travel more efficient and safer (Goals 3 and 4). The project further supports emissions reductions (Goal 5).

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☐ Single Driver (SOV) ☐ Carpool/HOV ☐ Metrorail ☒ Commuter Rail
☐ Streetcar/Light Rail ☐ BRT ☐ Express/Commuter Bus ☐ Metrobus ☐ Local Bus
☒ Bicycling ☒ Walking ☐ Other
☐ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☒ Connects two or more Activity Centers
☒ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☒ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☐ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☒ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:
☒ Criteria Pollutants (NOx, VOCs, PM2.5) ☒ Greenhouse Gases

Goal 6: Support Interregional and International Travel & Commerce

Enhances, supports, or promotes the following freight carrier modes:
☐ Long-haul Truck ☐ Local Delivery ☐ Rail ☐ Air
Enhances, supports, or promotes the following passenger carrier modes:
☐ Air ☐ Amtrak Intercity Passenger Rail ☐ Intercity Bus

Comment on this project or on Visualize 2045

September 7-October 7, 2018 Comment on projects and any other aspect of the draft Visualize 2045 plan before final TPB adoption.

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777 North Capitol St. NE, Suite 300, Washington, DC 20002

Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of Visualize 2045:

☐ Support Economic Vitality
☒ Increase Safety for All Users
☐ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☒ Protect and Enhance the Environment
☐ Enhance Integration and Connectivity
☒ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☒ Improve Resiliency or Mitigate Stormwater
☒ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐ Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☐ Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies
☒ **Not applicable** – This project does not increase SOV capacity or is exempt from consideration of alternatives.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 12, 2017.

I-270 MANAGED LANES

PROPOSED MAJOR ADDITION
VISUALIZE 2045

From I-495, Capital Beltway to I-70/US 40

Basic Project Information

Project Length.....34 Miles

Anticipated Completion.....2020-2025*

Estimated Cost of Construction.....$4 billion

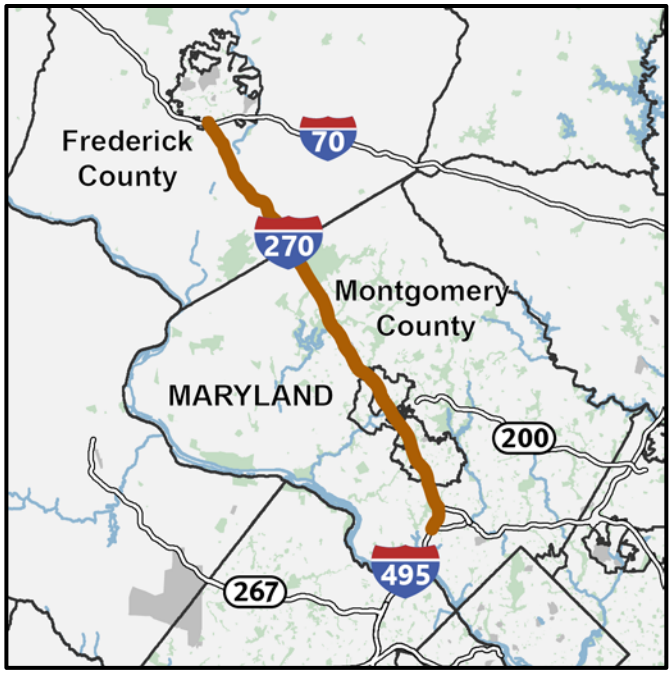
Submitting Agency.....Maryland DOT

Anticipated Funding Sources.....

☐ Federal ☐ State ☐ Local ☒ Private ☐ Bonds ☐ Other

CEID.....1186

HIGHWAY TRANSIT BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

The I-270 component of MDOT's "Traffic Relief Plan" project will add two new managed lanes in each direction along I-270 between the Capital Beltway (I-495) and I-70/US 40.

*Actual completion year will depend on awarded contract. For air quality conformity modeling purposes, the completion date is presumed to be 2025.

Existing Support for this Project

This project has undergone review at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ Montgomery County 2017 Transportation Priority Letter

☒ MDOT/SHA Traffic Relief Plan

See official Visualize 2045 Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

I-270 MANAGED LANES

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

The Priorities Plan called upon the region to use tolling and pricing mechanisms to manage road congestion and raise revenue. This project adds a key corridor to the region's express lane network and will expand transportation choices (Goal 1) by adding lanes that will be dynamically managed to ensure free-flowing travel for drivers and express bus services. The 34-mile project connects numerous Activity Centers, which are the region's primary engines for economic growth and opportunity (Goal 2).

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☒ Single Driver (SOV) ☒ Carpool/HOV ☐ Metrorail ☐ Commuter Rail
☐ Streetcar/Light Rail ☐ BRT ☒ Express/Commuter Bus ☒ Metrobus ☒ Local Bus
☐ Bicycling ☐ Walking ☐ Other

☒ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☒ Connects two or more Activity Centers
☐ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☒ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☐ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☒ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:

☒ Criteria Pollutants (NOx, VOCs, PM2.5) ☒ Greenhouse Gases

Goal 6: Support Interregional and International Travel & Commerce

Enhances, supports, or promotes the following freight carrier modes:

☒ Long-haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Enhances, supports, or promotes the following passenger carrier modes:

☐ Air ☐ Amtrak Intercity Passenger Rail ☒ Intercity Bus

Comment on this project or on Visualize 2045

December 14, 2017-January 13, 2018 Comment on the projects before they are included in the federally required Air Quality Conformity Analysis

September 13-October 13, 2018 Comment on projects and any other aspect of the draft Visualize 2045 plan before final TPB adoption.

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777 North Capitol St. NE, Suite 300, Washington, DC 20002

Addressing Federal Planning Factors

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☒ Support Economic Vitality
☒ Increase Safety for All Users
☒ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☒ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☒ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☐ Improve Resiliency or Mitigate Stormwater
☐ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☒Transportation demand management measures (including growth management and congestion pricing)
☒ Traffic operational improvements
☒ Public transportation improvements
☒Intelligent Transportation Systems (ITS) technologies
☒ Other congestion management strategies
☐ Not applicable – This project does not increase SOV capacity or is exempt from consideration of alternatives.

See the Congestion Management Documentation form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 14, 2017.

I-495 MANAGED LANES

PROPOSED MAJOR ADDITION
VISUALIZE 2045

From the American Legion Bridge to the Woodrow Wilson Bridge

Basic Project Information

Project Length.....22 Miles

Anticipated Completion.....2020-2025*

Estimated Cost of Construction.....$4.3 billion

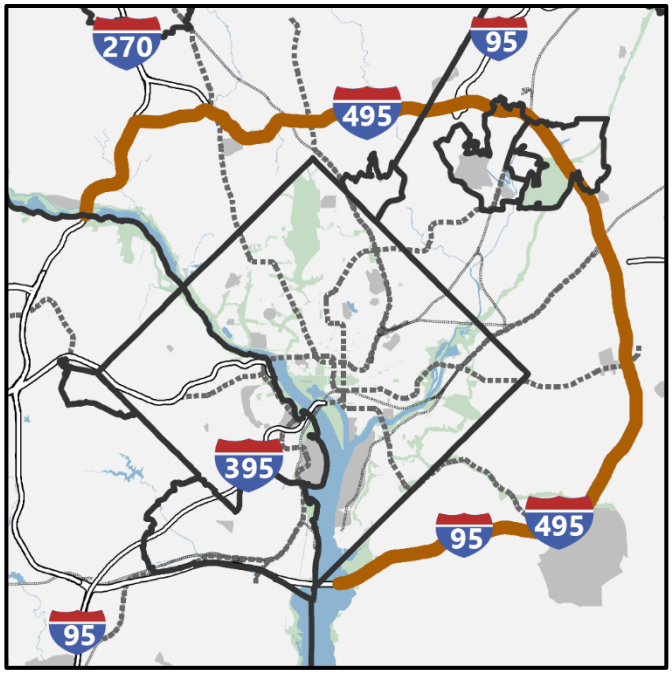
Submitting Agency.....Maryland DOT

Anticipated Funding Sources.....

☐ Federal ☐ State ☐ Local ☒ Private ☐ Bonds ☐ Other

CEID.....1182, 3281

HIGHWAY TRANSIT BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

The I-495 component of MDOT's "Traffic Relief Plan" project will add two new managed lanes in each direction along the Capital Beltway between the Virginia end of the American Legion Bridge to the Maryland end of the Woodrow Wilson Bridge.

*Actual completion year will depend on awarded contract. For air quality conformity modeling purposes, the completion date is presumed to be 2025.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ Montgomery County 2017 Transportation Priority Letter

☒ 2009 Prince George's County Master Plan of Transportation (MPO

☒ 1990 Heights Sector Plan

See official Visualize 2045 Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

I-495 MANAGED LANES

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

New managed lanes on the entire 42-mile length of Maryland's Capital Beltway will dramatically expand transportation choices (Goal 1) in the region by adding dynamically managed lanes to ensure free-flowing travel for drivers and for express bus services. Along with the I-270 Managed Lanes, this project significantly expands the region's network of recent and forthcoming priced-lane projects. The project will connect numerous Activity Centers (Goal 2), the region's focal points for economic growth.

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☒ Single Driver (SOV) ☒ Carpool/HOV ☐ Metrorail ☐ Commuter Rail
☐ Streetcar/Light Rail ☐ BRT ☒ Express/Commuter Bus ☒ Metrobus ☒ Local Bus
☐ Bicycling ☐ Walking ☐ Other

☒ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☒ Connects two or more Activity Centers
☐ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☒ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☐ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☒ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:

☒ Criteria Pollutants (NOx, VOCs, PM2.5) ☒ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce

Enhances, supports, or promotes the following freight carrier modes:

☒ Long-haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Enhances, supports, or promotes the following passenger carrier modes:

☐ Air ☐ Amtrak Intercity Passenger Rail ☒ Intercity Bus

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Addressing Federal Planning Factors

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☒ Increase Safety for All Users
☒ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☒ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☒ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☐ Improve Resiliency or Mitigate Stormwater
☐ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☒Transportation demand management measures (including growth management and congestion pricing)
☒ Traffic operational improvements
☒ Public transportation improvements
☒Intelligent Transportation Systems (ITS) technologies
☒ Other congestion management strategies
☐ Not applicable – This project does not increase SOV capacity or is exempt from consideration of alternatives.

See the Congestion Management Documentation form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 14, 2017.

US 301 WIDENING

PROPOSED MAJOR ADDITION
VISUALIZE 2045

From the Governor Harry Nice Bridge to US 50/I-595

Basic Project Information

Project Length.....48 Miles

Anticipated Completion.....2045

Estimated Cost of Construction.....$4.6 billion

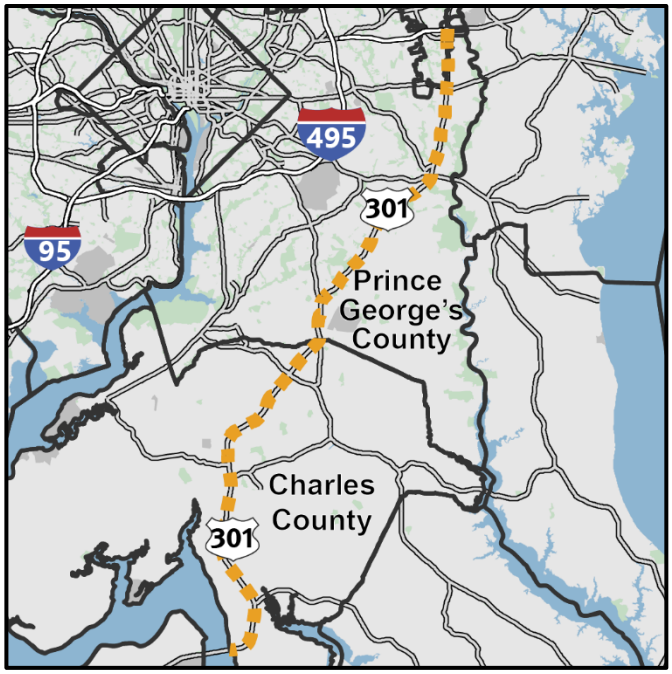
Submitting Agency.....Maryland DOT

Anticipated Funding Sources.....

☒ Federal ☒ State ☐ Local ☒ Private ☐ Bonds ☐ Other

CE ID.....1004

HIGHWAY TRANSIT BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

Widen Crain Highway, US 301 from 4 to 6 lanes between the Governor Harry Nice Bridge at the Potomac River to the John Hanson Highway, US 50/I-595.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ Pending

See official CLRP Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

US 301 WIDENING

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

This 48-mile road widening project will expand transportation options for drivers, carpoolers and transit riders (Goal 1). The project will connect three Activity Centers (Bowie, Waldorf, and La Plata) (Goal 2) and will enhance freight movement (Goal 6).

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☒ Single Driver (SOV) ☒ Carpool/HOV ☐ Metrorail ☐ Commuter Rail
☐ Streetcar/Light Rail ☐ BRT ☒ Express/Commuter Bus ☐ Metrobus ☒ Local Bus
☐ Bicycling ☐ Walking ☐ Other
☐ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☒ Connects two or more Activity Centers
☐ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☐ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☐ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☐ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:
☒ Criteria Pollutants (NOx, VOCs, PM2.5) ☒ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce

Enhances, supports, or promotes the following freight carrier modes:
☒ Long-haul Truck ☒ Local Delivery ☐ Rail ☐ Air
Enhances, supports, or promotes the following passenger carrier modes:
☐ Air ☐ Amtrak Intercity Passenger Rail ☒ Intercity Bus

Comment on this project or on Visualize 2045

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Addressing Federal Planning Factors

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☒ Support Economic Vitality
☐ Increase Safety for All Users
☒ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☐ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☒ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☐ Improve Resiliency or Mitigate Stormwater
☐ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐ Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☐ Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies

See the Congestion Management Documentation form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 5, 2017.

MD 201 WIDENING

PROPOSED MAJOR ADDITION
VISUALIZE 2045

From I-495, Capital Beltway to US 1 North of Muirkirk Road

Basic Project Information

Project Length.....4.5 Miles

Anticipated Completion.....2045

Estimated Cost of Construction.....$1 billion

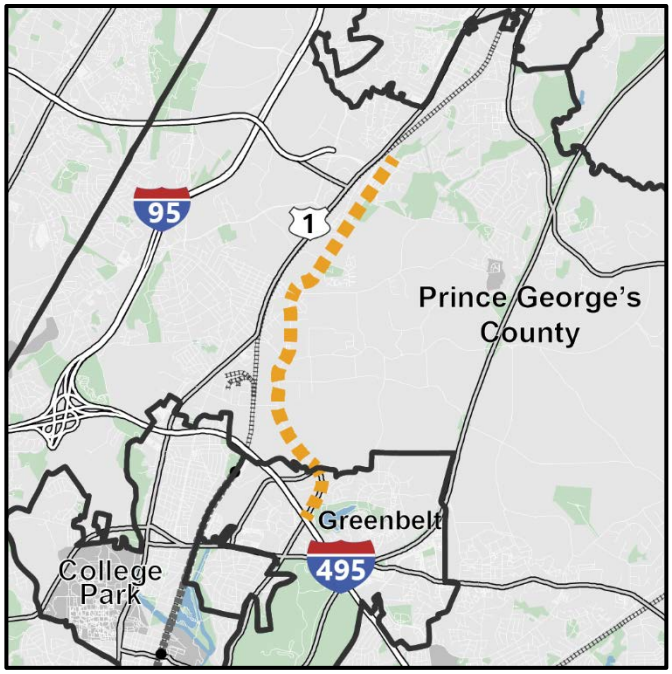
Submitting Agency.....Maryland DOT

Anticipated Funding Sources.....

☐ Federal ☒ State ☐ Local ☒ Private ☐ Bonds ☐ Other

CEID.....1204

HIGHWAY TRANSIT BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

This project will widen MD 201 to four lanes between north of I-495, Capital Beltway to Ammendale Way. It will also extend the Maryland Route 201 designation from its current end-point at Powder Mill Road to continue along Edmonston Road and Old Baltimore Pike. Additionally, it will construct a four-lane extension from Muirkirk Road to US 1. Bicycle and pedestrian access will be considered as part of this project.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ 2017 Prince George's County Priority Letter

☒ 2009 Prince George's County Master Plan of Transportation

☒ 1993 Subregion I Sector Plan

See official Visualize 2045 Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

MD 201 WIDENING

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

This four-mile road widening of Edmonston Road/Old Baltimore Pike will expand travel options (Goal 1) by enhancing the facility for drivers and buses, while expanding options for walking and biking. It will connect the Greenbelt Activity Center to the Konterra Activity Center (Goal 2) and will promote local freight movement (Goal 6).

Goal 1: Provide a Range of Transportation Options
Provides, enhances, supports, or promotes the following travel mode options:
☒ Single Driver (SOV) ☐ Carpool/HOV ☒ Metrorail ☐ Commuter Rail
☐ Streetcar/Light Rail ☐ BRT ☒ Express/Commuter Bus ☒ Metrobus ☒ Local Bus
☒ Bicycling ☒ Walking ☐ Other
☐ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers
☒ Begins or ends in an Activity Center
☒ Connects two or more Activity Centers
☐ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety
☐ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety
☐ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☐ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment
Expected to contribute to reductions in emissions of:
☐ Criteria Pollutants (NOx, VOCs, PM2.5) ☐ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce
Enhances, supports, or promotes the following freight carrier modes:
☐ Long-haul Truck ☒ Local Delivery ☐ Rail ☐ Air
Enhances, supports, or promotes the following passenger carrier modes:
☐ Air ☐ Amtrak Intercity Passenger Rail ☐ Intercity Bus

Comment on this project or on Visualize 2045

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Addressing Federal Planning Factors

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☒ Support Economic Vitality
☐ Increase Safety for All Users
☒ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☒ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☐ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☐ Improve Resiliency or Mitigate Stormwater
☐ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☒Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies

See the Congestion Management Documentation form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 14, 2017.

MD 97 RECONSTRUCTION

PROPOSED MAJOR ADDITION
VISUALIZE 2045

From 16th Street to Forest Glen Road

Basic Project Information

Project Length.....<1 Mile

Anticipated Completion.....2025

Estimated Cost of Construction.....$52 million

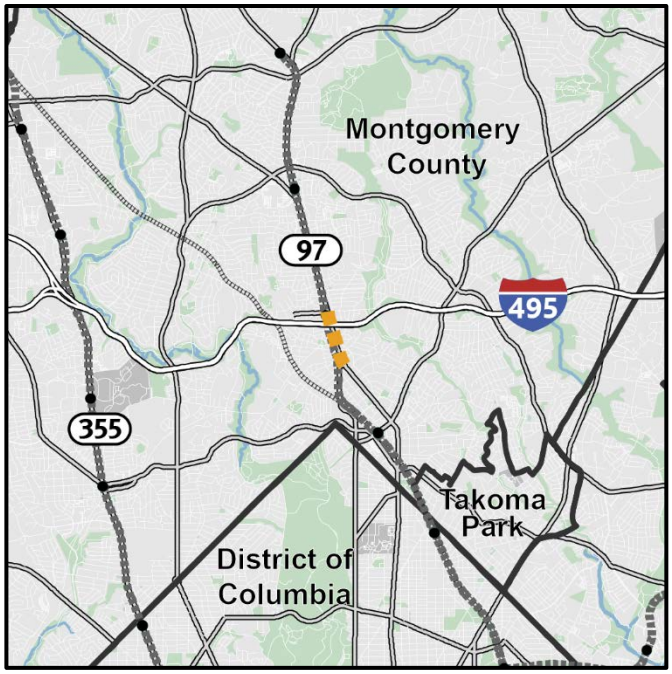
Submitting Agency.....Maryland DOT

Anticipated Funding Sources.....

☐ Federal ☒ State ☒ Local ☒ Private ☐ Bonds ☐ Other

CLRP ID.....2618

HIGHWAY TRANSIT BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

This project will reconstruct and widen MD 97, Georgia Avenue from six or seven lanes to seven or eight lanes on either side of I-495, Capital Beltway between 16th Street and Forest Glen Road. Sidewalks and accommodations for bicycles will be included where appropriate.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ Montgomery County 2017 Transportation Priority Letter

See official CLRP Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

MD 97 WIDENING

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

Motivated by safety considerations (Goal 3), this project will widen approximately one mile of this heavily trafficked portion of Georgia Avenue crossing under the Beltway. It will provide pedestrian accommodations where feasible to promote access for all transportation modes (Goal 1), promote better circulation in the Silver Spring Activity Center (Goal 2), and facilitate local goods movement (Goal 6).

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☒ Single Driver (SOV) ☒ Carpool/HOV ☒ Metrorail ☐ Commuter Rail
☐ Streetcar/Light Rail ☐ BRT ☐ Express/Commuter Bus ☒ Metrobus ☒ Local Bus
☒ Bicycling ☒ Walking ☐ Other
☐ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☒ Connects two or more Activity Centers
☐ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☐ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☐ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☒ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:

☒ Criteria Pollutants (NOx, VOCs, PM2.5) ☒ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce

Enhances, supports, or promotes the following freight carrier modes:

☐ Long-haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Enhances, supports, or promotes the following passenger carrier modes:

☐ Air ☐ Amtrak Intercity Passenger Rail ☐ Intercity Bus

Comment on this project or on Visualize 2045

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☒ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☐ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☐ Improve Resiliency or Mitigate Stormwater
☐ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐ Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☐ Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies

See the Congestion Management Documentation form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 8, 2017.

RANDOLPH ROAD BRT

From US 29 to MD 355

PROPOSED MAJOR ADDITION
VISUALIZE 2045

Basic Project Information

Project Length.....10 Miles

Anticipated Completion.....2040

Estimated Cost of Construction.....$102 million

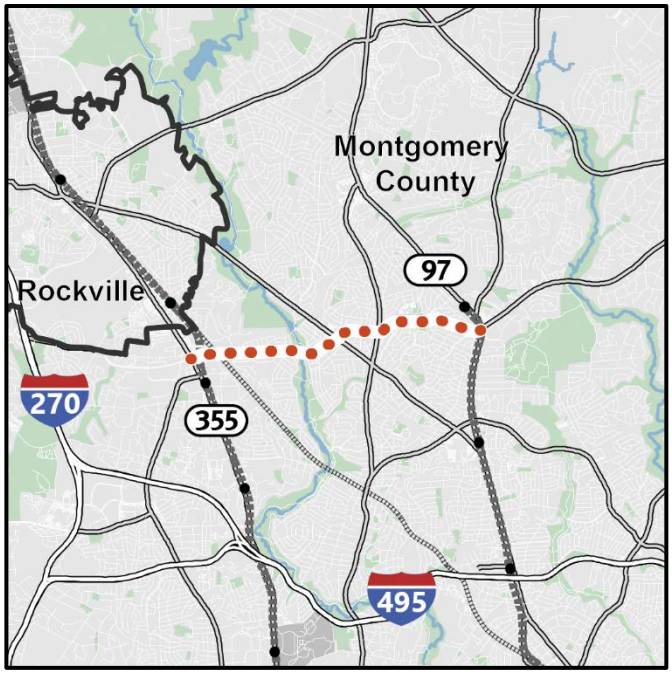
Submitting Agency.....Montgomery County

Anticipated Funding Sources.....

☒ Federal ☐ State ☒ Local ☒ Private ☐ Bonds ☐ Other

CEID.....3662

HIGHWAY **TRANSIT** BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

This project will implement a Bus Rapid Transit (BRT) route on Randolph Road between the White Flint Metro Station to US 29, Columbia Pike. The buses will run in mixed-traffic.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ Countywide Transit Corridors Functional Master Plan

See official Visualize 2045 Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

Randolph Road BRT

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

The Priorities Plan specifically called for cost-effective transit alternatives, like bus rapid transit (BRT), that approach the speed, frequency and reliability of heavy rail but at a fraction of the cost. This project is a component of a wider BRT network planned for Montgomery County that will expand travel options (Goal 1), connect Activity Centers (Goal 2), maximize the use of existing infrastructure without adding new capacity (Goal 4), and reduce emissions (Goal 5).

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☐ Single Driver (SOV) ☐ Carpool/HOV ☒ Metrorail ☐ Commuter Rail
☐ Streetcar/Light Rail ☒ BRT ☐ Express/Commuter Bus ☒ Metrobus ☒ Local Bus
☒ Bicycling ☒ Walking ☐ Other
☒ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☒ Connects two or more Activity Centers
☒ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☒ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☒ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☒ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:

☒ Criteria Pollutants (NOx, VOCs, PM2.5) ☒ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce

Enhances, supports, or promotes the following freight carrier modes:

☐ Long-haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Enhances, supports, or promotes the following passenger carrier modes:

☐ Air ☐ Amtrak Intercity Passenger Rail ☐ Intercity Bus

Comment on this project or on Visualize 2045

September 7-October 7, 2018 Comment on projects and any other aspect of the draft Visualize 2045 plan before final TPB adoption.

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Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of Visualize 2045:

☒ Support Economic Vitality
☒ Increase Safety for All Users
☐ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☒ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☒ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☒ Improve Resiliency or Mitigate Stormwater
☐ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐ Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☒ Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies
☒ Not applicable – This project does not increase SOV capacity or is exempt from consideration of alternatives.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 8, 2017.

NORTH BETHESDA BRT

PROPOSED MAJOR ADDITION
VISUALIZE 2045

Montgomery Mall Transit Center to White Flint Metrorail Station

Basic Project Information

Project Length.....3.5 Miles

Anticipated Completion.....2035

Estimated Cost of Construction.....$115 million

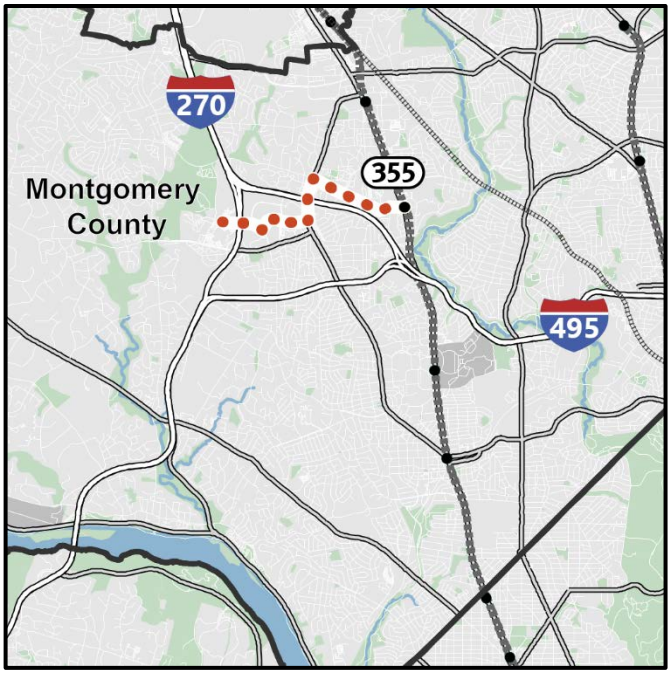
Submitting Agency.....Montgomery County

Anticipated Funding Sources.....

☒ Federal ☐ State ☒ Local ☒ Private ☐ Bonds ☐ Other

CEID.....3663

HIGHWAY TRANSIT BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

This project will implement a Bus Rapid Transit (BRT) route on Rock Spring Drive and Old Georgetown Road connecting the White Flint Metro Station with the Montgomery Mall Transit Center and the Rock Spring office park area. The buses will run on a dedicated transitway.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ Countywide Transit Corridors Functional Master Plan

See official Visualize 2045 Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

North Bethesda BRT

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

The Priorities Plan specifically called for cost-effective transit alternatives, like bus rapid transit (BRT), that approach the speed, frequency and reliability of heavy rail but at a fraction of the cost. This project is a component of a wider BRT network planned for Montgomery County that will expand travel options (Goal 1), connect Activity Centers (Goal 2), maximize the use of existing infrastructure without adding new capacity (Goal 4), and reduce emissions (Goal 5).

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☐ Single Driver (SOV) ☐ Carpool/HOV ☒ Metrorail ☐ Commuter Rail
☐ Streetcar/Light Rail ☒ BRT ☐ Express/Commuter Bus ☒ Metrobus ☒ Local Bus
☒ Bicycling ☒ Walking ☐ Other
☒ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☐ Connects two or more Activity Centers
☒ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☒ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☒ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☒ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:

☒ Criteria Pollutants (NOx, VOCs, PM2.5) ☒ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce

Enhances, supports, or promotes the following freight carrier modes:

☐ Long-haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Enhances, supports, or promotes the following passenger carrier modes:

☐ Air ☐ Amtrak Intercity Passenger Rail ☐ Intercity Bus

Comment on this project or on Visualize 2045

September 7-October 7, 2018 Comment on projects and any other aspect of the draft Visualize 2045 plan before final TPB adoption.

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Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of Visualize 2045:

☒ Support Economic Vitality
☒ Increase Safety for All Users
☐ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☒ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☒ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☒ Improve Resiliency or Mitigate Stormwater
☐ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐ Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☒ Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies
☒ **Not applicable** – This project does not increase SOV capacity or is exempt from consideration of alternatives.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 8, 2017.

MD 355 BRT

From Bethesda to Clarksburg

PROPOSED MAJOR ADDITION
VISUALIZE 2045

Basic Project Information

Project Length.....22 Miles

Anticipated Completion.....2045

Estimated Cost of Construction.....$1.08 billion

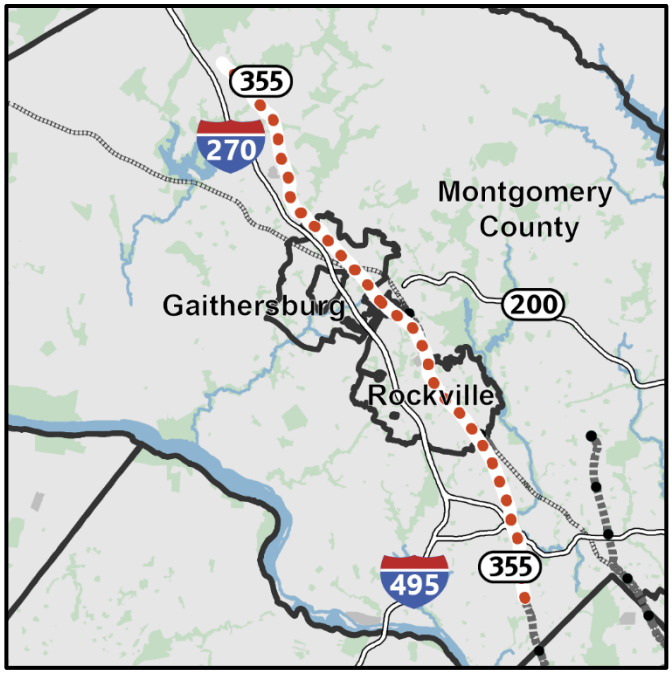
Submitting Agency.....Montgomery County

Anticipated Funding Sources.....

☒ Federal ☐ State ☒ Local ☒ Private ☐ Bonds ☐ Other

CEID.....3424

HIGHWAY **TRANSIT** BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

This project will implement a Bus Rapid Transit (BRT) route on MD 355 between Bethesda and Clarksburg. The buses will run in a combination of dedicated transitway and mixed traffic.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ MD 355 BRT Corridor Planning Study

See official Visualize 2045 Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

MD 355 BRT

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

The Priorities Plan specifically called for cost-effective transit alternatives, like bus rapid transit (BRT), that approach the speed, frequency and reliability of heavy rail but at a fraction of the cost. This project is a component of a wider BRT network planned for Montgomery County that will expand travel options (Goal 1), connect Activity Centers (Goal 2), maximize the use of existing infrastructure without adding new capacity (Goal 4), and reduce emissions (Goal 5).

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☐ Single Driver (SOV) ☐ Carpool/HOV ☒ Metrorail ☒ Commuter Rail
☐ Streetcar/Light Rail ☒ BRT ☐ Express/Commuter Bus ☒ Metrobus ☒ Local Bus
☒ Bicycling ☒ Walking ☐ Other
☒ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☒ Connects two or more Activity Centers
☒ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☒ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☒ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☒ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:

☒ Criteria Pollutants (NOx, VOCs, PM2.5) ☒ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce

Enhances, supports, or promotes the following freight carrier modes:

☐ Long-haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Enhances, supports, or promotes the following passenger carrier modes:

☐ Air ☐ Amtrak Intercity Passenger Rail ☒ Intercity Bus

Comment on this project or on Visualize 2045

September 7-October 7, 2018 Comment on projects and any other aspect of the draft Visualize 2045 plan before final TPB adoption.

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Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of Visualize 2045:

☒ Support Economic Vitality
☒ Increase Safety for All Users
☐ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☒ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☒ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☐ Improve Resiliency or Mitigate Stormwater
☐ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐ Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☒ Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies
☒ **Not applicable** – This project does not increase SOV capacity or is exempt from consideration of alternatives.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 8, 2017.

MD 650 BRT

PROPOSED MAJOR ADDITION
VISUALIZE 2045

From Colesville Park-and-Ride to Eastern Avenue

Basic Project Information

Project Length.....8.4 Miles

Anticipated Completion.....2045

Estimated Cost of Construction.....$285 million

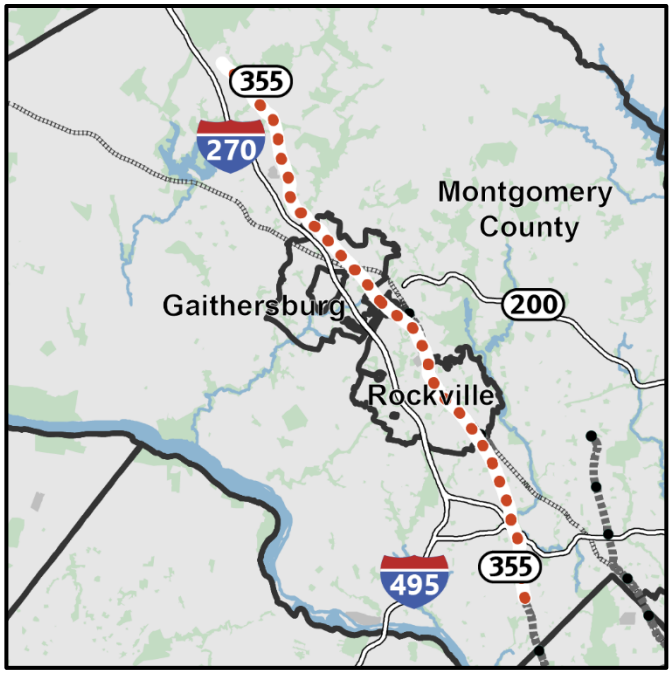
Submitting Agency.....Montgomery County

Anticipated Funding Sources.....

☒ Federal ☐ State ☒ Local ☒ Private ☐ Bonds ☐ Other

CEID.....3672

HIGHWAY TRANSIT BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

This project will implement a Bus Rapid Transit (BRT) route on MD 650 between the Colesville Park-and-Ride lot and Eastern Avenue. The buses will run in a combination of dedicated transitway and mixed traffic.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ White Oak and Silver Spring Master Plans

See official Visualize 2045 Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: Support Interregional and International Travel and

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

MD 650 BRT

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

The Priorities Plan specifically called for cost-effective transit alternatives, like bus rapid transit (BRT), that approach the speed, frequency and reliability of heavy rail but at a fraction of the cost. This project is a component of a wider BRT network planned for Montgomery County that will expand travel options (Goal 1), connect Activity Centers (Goal 2), maximize the use of existing infrastructure without adding new capacity (Goal 4), and reduce emissions (Goal 5).

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☐ Single Driver (SOV) ☐ Carpool/HOV ☒ Metrorail ☒ Commuter Rail
☐ Streetcar/Light Rail ☒ BRT ☐ Express/Commuter Bus ☒ Metrobus ☒ Local Bus
☒ Bicycling ☒ Walking ☐ Other
☒ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☒ Connects two or more Activity Centers
☒ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☒ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☒ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☒ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:

☒ Criteria Pollutants (NOx, VOCs, PM2.5) ☒ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce

Enhances, supports, or promotes the following freight carrier modes:

☐ Long-haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Enhances, supports, or promotes the following passenger carrier modes:

☐ Air ☐ Amtrak Intercity Passenger Rail ☐ Intercity Bus

Comment on this project or on Visualize 2045

December 14, 2017-January 13, 2018 Comment on the projects before they are included in the federally required Air Quality Conformity Analysis

September 13-October 13, 2018 Comment on projects and any other aspect of the draft Visualize 2045 plan before final TPB adoption.

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Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of Visualize 2045:

☒ Support Economic Vitality
☒ Increase Safety for All Users
☐ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☒ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☒ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☐ Improve Resiliency or Mitigate Stormwater
☐ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐ Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☒ Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies
☒ **Not applicable –** This project does not increase SOV capacity or is exempt from consideration of alternatives.
☐ Not yet Available – Agencies have until March 2, 2018 to complete the required Congestion Management Documentation.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on January 15, 2018..

VEIRS MILL ROAD BRT

PROPOSED MAJOR ADDITION
VISUALIZE 2045

From MD 355, Rockville Pike to MD 97, Georgia Avenue

Basic Project Information

Project Length.....6 Miles

Anticipated Completion.....2030

Estimated Cost of Construction.....$80 million

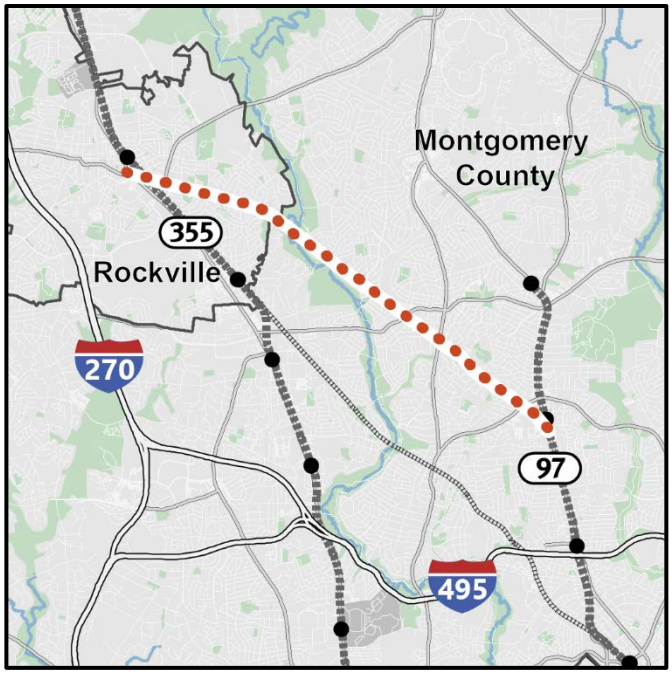
Submitting Agency.....Montgomery County

Anticipated Funding Sources.....

☒ Federal ☐ State ☒ Local ☒ Private ☐ Bonds ☐ Other

CEID.....3103

HIGHWAY **TRANSIT** BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

This project will implement a Bus Rapid Transit (BRT) line on Veirs Mill Road between the Rockville and Wheaton Metrorail stations. The project includes constructing queue jumps and installing transit signal priority at key intersections. The project also adds new transit service using articulated BRT vehicles, BRT stations with level boarding and off-board fare collection, and pedestrian and bike improvements.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ Corridor Study Report, October 2017

See official Visualize 2045 Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

VEIRS MILL ROAD BRT

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

The Priorities Plan specifically called for cost-effective transit alternatives, like bus rapid transit (BRT), that approach the speed, frequency and reliability of heavy rail but at a fraction of the cost. This project is a component of a wider BRT network planned for Montgomery County that will expand travel options (Goal 1), connect Activity Centers (Goal 2), maximize the use of existing infrastructure without adding new capacity (Goal 4), and reduce emissions (Goal 5).

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☐ Single Driver (SOV) ☐ Carpool/HOV ☒ Metrorail ☒ Commuter Rail
☐ Streetcar/Light Rail ☒ BRT ☐ Express/Commuter Bus ☒ Metrobus ☒ Local Bus
☐ Bicycling ☒ Walking ☐ Other

☒ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☒ Connects two or more Activity Centers
☒ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☒ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☒ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☒ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:

☒ Criteria Pollutants (NOx, VOCs, PM2.5) ☒ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce

Enhances, supports, or promotes the following freight carrier modes:

☐ Long-haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Enhances, supports, or promotes the following passenger carrier modes:

☐ Air ☐ Amtrak Intercity Passenger Rail ☐ Intercity Bus

Comment on this project or on Visualize 2045

September 7-October 7, 2018 Comment on projects and any other aspect of the draft Visualize 2045 plan before final TPB adoption.

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Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of Visualize 2045:

☒ Support Economic Vitality
☒ Increase Safety for All Users
☐ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☒ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☐ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☐ Improve Resiliency or Mitigate Stormwater
☐ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐ Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☒ Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies
☒ Not applicable – This project does not increase SOV capacity or is exempt from consideration of alternatives.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 8, 2017.

I-495 HOT LANES

PROPOSED MAJOR CHANGE
VISUALIZE 2045

From Old Dominion Drive to the American Legion Bridge

Basic Project Information

Project Length.....2 Miles

Anticipated Completion.....2025

Estimated Cost of Construction.....$500 million

Submitting Agency.....Virginia DOT

Anticipated Funding Sources.....

☒ Federal ☒ State ☐ Local ☒ Private ☐ Bonds ☐ Other

CEID.....2069

HIGHWAY TRANSIT BICYCLE OR PEDESTRIAN

FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

The I-495 HOT Lanes project has been included in the long-range transportation plan since 2005, and improvements between Old Dominion Drive and the Springfield Interchange were completed in 2012. The existing project includes extension of two HOT lanes in each direction from Old Dominion Drive to George Washington Parkway by 2025, and extension of one HOT Lane in each direction from George Washington Parkway to the American Legion Bridge by 2030. This proposed change would extend two HOT lanes in each direction from the George Washington Parkway to the American Legion Bridge by 2025. As a result of the collaboration between VDOT and MDOT, Maryland's toll lanes project, which includes improving the capacity of the American Legion Bridge, will connect to an equivalent managed lane system at the Virginia state line.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ Pending

See official Visualize 2045 Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

I-495 HOT LANES

PROPOSED MAJOR CHANGE
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

This two-mile link connecting Virginia's existing Capital Beltway HOT lanes and the forthcoming managed lanes on Maryland's Capital Beltway will help to create a seamless regional network of express toll lanes, which was a key objective of the TPB's Priorities Plan. The project will expand travel options in the region (Goal 1) for vehicles and for express bus services.

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☒ Single Driver (SOV) ☒ Carpool/HOV ☒ Metrorail ☐ Commuter Rail
☐ Streetcar/Light Rail ☐ BRT ☒ Express/Commuter Bus ☒ Metrobus ☒ Local Bus
☒ Bicycling ☒ Walking ☐ Other
☐ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☒ Connects two or more Activity Centers
☐ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☐ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☐ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☐ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:
☐ Criteria Pollutants (NOx, VOCs, PM2.5) ☐ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce

Enhances, supports, or promotes the following freight carrier modes:
☒ Long-haul Truck ☒ Local Delivery ☐ Rail ☐ Air
Enhances, supports, or promotes the following passenger carrier modes:
☐ Air ☐ Amtrak Intercity Passenger Rail ☐ Intercity Bus

Comment on this project or on Visualize 2045

September 7-October 7, 2018 Comment on projects and any other aspect of the draft Visualize 2045 plan before final TPB adoption.

Visualize2045.org | tpbcomment@mwcog.org | (202) 962-3262
777 North Capitol St. NE, Suite 300, Washington, DC 20002

Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of Visualize 2045:

☒ Support Economic Vitality
☐ Increase Safety for All Users
☒ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☒ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☒ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☒ Improve Resiliency or Mitigate Stormwater
☐ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐ Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☐ Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies

See the Congestion Management Documentation form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 13, 2017.

I-95 SB AUXILIARY LANE

From VA 123 to VA 294

PROPOSED MAJOR ADDITION
VISUALIZE 2045

Basic Project Information

Project Length.....1.5 Miles

Anticipated Completion.....2028

Estimated Cost of Construction.....$27.5 million

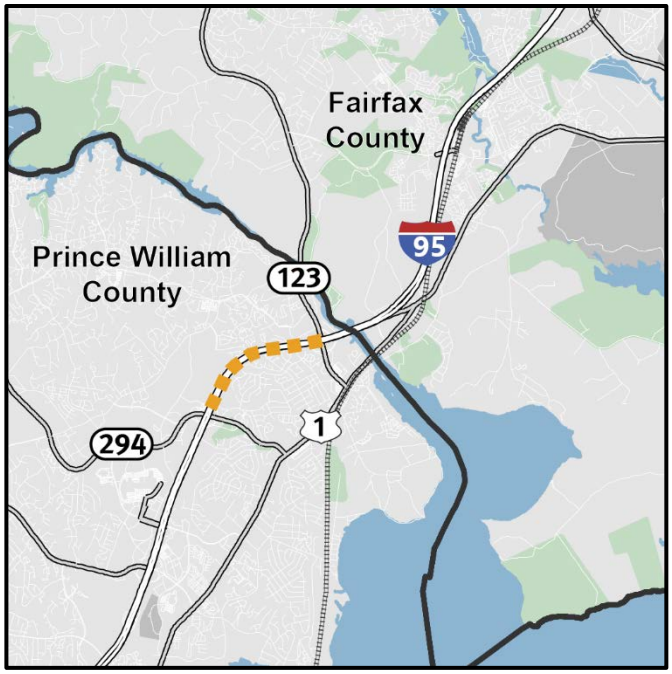
Submitting Agency.....Virginia DOT

Anticipated Funding Sources.....

☒ Federal ☒ State ☐ Local ☐ Private ☐ Bonds ☐ Other

CEID.....3664

HIGHWAY TRANSIT BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

This project will add one auxiliary lane to southbound I-95 between the Route 123 on-ramp and the Route 294 exit ramp.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ Pending

See official Visualize 2045 Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

I-95 SB AUXILIARY LANE

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

Enhancing safety (Goal 3) is the primary motivation for the addition of a southbound auxiliary lane on I-95 in Prince William County. The project will expand travel options (Goal 1) for drivers and bus riders, support freight movement (Goal 6), and enhance a connection to Woodbridge, which is an Activity Center (Goal 2).

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☒ Single Driver (SOV) ☐ Carpool/HOV ☐ Metrorail ☐ Commuter Rail
☐ Streetcar/Light Rail ☐ BRT ☒ Express/Commuter Bus ☒ Metrobus ☒ Local Bus
☐ Bicycling ☐ Walking ☐ Other
☐ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☐ Connects two or more Activity Centers
☐ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☐ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☐ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☒ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:
☐ Criteria Pollutants (NOx, VOCs, PM2.5) ☐ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce

Enhances, supports, or promotes the following freight carrier modes:
☒ Long-haul Truck ☒ Local Delivery ☐ Rail ☐ Air
Enhances, supports, or promotes the following passenger carrier modes:
☐ Air ☐ Amtrak Intercity Passenger Rail ☒ Intercity Bus

Comment on this project or on Visualize 2045

September 7-October 7, 2018 Comment on projects and any other aspect of the draft Visualize 2045 plan before final TPB adoption.

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777 North Capitol St. NE, Suite 300, Washington, DC 20002

Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of Visualize 2045:

☒ Support Economic Vitality
☒ Increase Safety for All Users
☐ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☐ Protect and Enhance the Environment
☐ Enhance Integration and Connectivity
☐ Promote Efficient System Management and Operation
☐ Emphasize System Preservation
☐ Improve Resiliency or Mitigate Stormwater
☐ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐ Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☐ Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies

See the Congestion Management Documentation form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 13, 2017.

US 15 WIDENING

PROPOSED MAJOR ADDITION
VISUALIZE 2045

From Battlefield Parkway to VA 661 Montresor Road

Basic Project Information

Project Length.....3.6 Miles

Anticipated Completion.....2025

Estimated Cost of Construction.....$33 million

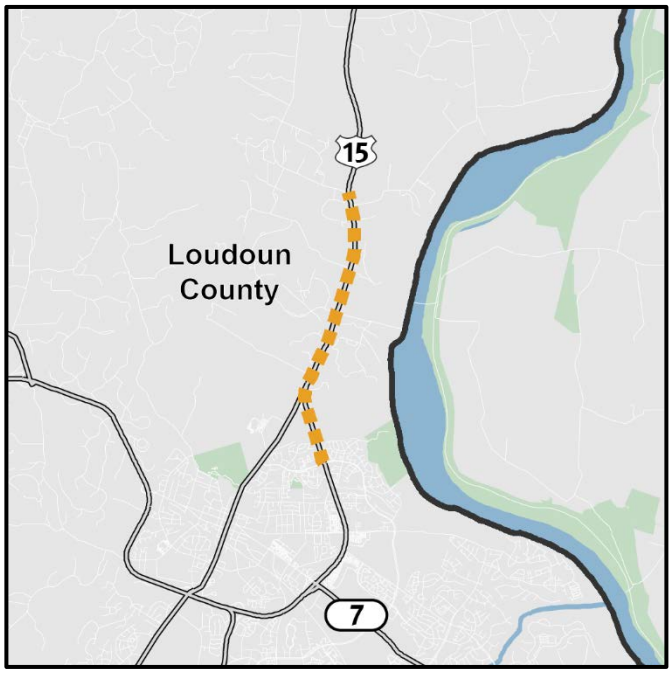
Submitting Agency.....Virginia DOT

Anticipated Funding Sources.....

☒ Federal ☒ State ☒ Local ☐ Private ☐ Bonds ☐ Other

CEID.....3608

HIGHWAY TRANSIT BICYCLE OR PEDESTRIAN



FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

This project will widen US Route 15, James Madison Highway from two to four lanes between the northern interchange with Battlefield Parkway and VA 661, Montresor Road.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ Pending

See official CLRP Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

US 15 WIDENING

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

The James Madison Highway widening north of Leesburg will accommodate a variety of users (Goal 1) including drivers, bus riders, and bicyclists. The project will enhance safety (Goal 3) and support freight movement (Goal 6).

Goal 1: Provide a Range of Transportation Options
Provides, enhances, supports, or promotes the following travel mode options:
☒ Single Driver (SOV) ☐ Carpool/HOV ☐ Metrorail ☒ Commuter Rail
☐ Streetcar/Light Rail ☐ BRT ☐ Express/Commuter Bus ☐ Metrobus ☐ Local Bus
☒ Bicycling ☐ Walking ☐ Other
☐ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers
☐ Begins or ends in an Activity Center
☐ Connects two or more Activity Centers
☐ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety
☒ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety
☐ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☐ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment
Expected to contribute to reductions in emissions of:
☒ Criteria Pollutants (NOx, VOCs, PM2.5) ☒ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce
Enhances, supports, or promotes the following freight carrier modes:
☒ Long-haul Truck ☒ Local Delivery ☐ Rail ☐ Air
Enhances, supports, or promotes the following passenger carrier modes:
☐ Air ☐ Amtrak Intercity Passenger Rail ☐ Intercity Bus

Comment on this project or on Visualize 2045

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Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of Visualize 2045:

☒ Support Economic Vitality
☐ Increase Safety for All Users
☒ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☒ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☒ Promote Efficient System Management and Operation
☒ Emphasize System Preservation
☐ Improve Resiliency or Mitigate Stormwater
☒ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐ Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☐ Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies

See the Congestion Management Documentation form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 13, 2017.

METRORAIL CAPACITY

PROPOSED MAJOR ADDITION
VISUALIZE 2045

8-Car Trains and Core Station Improvements

Basic Project Information

Project Length.....Entire System

Anticipated Completion.....2045

Estimated Cost of Construction.....$5.4 billion

Submitting Agency.....WMATA

Anticipated Funding Sources.....

☒ Federal ☒ State ☒ Local ☐ Private ☐ Bonds ☐ Other

HIGHWAY TRANSIT BICYCLE OR PEDESTRIAN

FINAL COMMENT PERIOD
September 7 – October 7, 2018
See reverse for details, or visit www.mwcog.org/TPBcomment.

Project Description

This project will implement all 8-car trains running on the system during peak periods. Capacity improvements will be made to stations in the core to accommodate the trains. Supporting power infrastructure will be added to support the expansion.

Existing Support for this Project

This project has been reviewed at the local, state, and/or sub-regional levels and is included in the following approved plans:

☒ Momentum

See official Visualize 2045 Project Description Form for more information about this project.

Goal 1: *Provide a Range of Transportation Options*

Goal 2: *Promote Dynamic Activity Centers*

Goal 3: *Ensure System Maintenance, Preservation, and Safety*

Goal 4: *Maximize Operational Effectiveness and Safety*

Goal 5: *Protect and Enhance the Natural Environment*

Goal 6: *Support Interregional and International Travel and Commerce*

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

METRORAIL CAPACITY

PROPOSED MAJOR ADDITION
VISUALIZE 2045

How this project supports or advances goals in the Regional Transportation Priorities Plan

The Priorities Plan urged the region to expand capacity on the existing transit system, and eight-car trains and core capacity improvements for Metrorail were among the few projects that the plan specifically identified. This project will help fulfill Metro's pivotal role in providing transportation options in our region (Goal 1). It will help ensure Activity Centers are connected, the system is safe and maintained (Goal 3), existing infrastructure is effectively used (Goal 4), and our environment is protected (Goal 5).

Goal 1: Provide a Range of Transportation Options

Provides, enhances, supports, or promotes the following travel mode options:

☐ Single Driver (SOV) ☐ Carpool/HOV ☒ Metrorail ☐ Commuter Rail
☐ Streetcar/Light Rail ☒ BRT ☐ Express/Commuter Bus ☒ Metrobus ☒ Local Bus
☐ Bicycling ☐ Walking ☐ Other
☒ Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

Goal 2: Promote Dynamic Activity Centers

☒ Begins or ends in an Activity Center
☒ Connects two or more Activity Centers
☒ Promotes non-auto travel within one or more Activity Centers

Goal 3: Ensure System Maintenance, Preservation, and Safety

☒ Contributes to enhanced system maintenance, preservation, or safety

Goal 4: Maximize Operational Effectiveness and Safety

☒ Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
☒ Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

Goal 5: Protect and Enhance the Natural Environment

Expected to contribute to reductions in emissions of:
☒ Criteria Pollutants (NOx, VOCs, PM2.5) ☒ Greenhouse Gases

Goal 6: Support Interregional and International Travel and Commerce

Enhances, supports, or promotes the following freight carrier modes:
☐ Long-haul Truck ☐ Local Delivery ☐ Rail ☐ Air
Enhances, supports, or promotes the following passenger carrier modes:
☐ Air ☐ Amtrak Intercity Passenger Rail ☐ Intercity Bus

Comment on this project or on Visualize 2045

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☒ Increase Safety for All Users
☒ Support Homeland and Personal Security
☒ Increase Accessibility and Mobility of People and/or Freight
☒ Protect and Enhance the Environment
☒ Enhance Integration and Connectivity
☒ Promote Efficient System Management and Operation
☒ Emphasize System Preservation
☐ Improve Resiliency or Mitigate Stormwater
☒ Enhance Travel and Tourism

Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

☐ Transportation demand management measures (including growth management and congestion pricing)
☐ Traffic operational improvements
☐ Public transportation improvements
☒ Intelligent Transportation Systems (ITS) technologies
☐ Other congestion management strategies
☒ Not applicable – This project does not increase SOV capacity or is exempt from consideration of alternatives.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in Visualize 2045.

The information on this form was last updated on December 8, 2017.

PROJECT SUBMISSIONS, THE RTPP, AND FEDERAL PLANNING FACTORS

Assessing CLRP Project Submissions against the Regional Transportation Priorities Plan and FAST Act

The CLRP Project Description form includes a set of questions under the Regional Policy Framework section. These questions are intended to examine how projects support the goals set forth in the Regional Transportation Priorities Plan (RTPP). The six RTPP goals are described here and are matched up with the corresponding questions from the CLRP Project Description form. The responses provided by the submitting agencies for all new projects proposed for amendment to the CLRP this year have been summarized in the attached table, along with their responses as to how the projects support the federal planning factors prescribed under MAP-21.

Goal 1

Provide a Comprehensive Range of Transportation Options

Question **22**

- Please identify all travel mode options that this project provides, enhances, supports, or promotes.
- Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?

Goal 2

Promote a Strong Regional Economy, Including a Healthy Regional Core and Dynamic Activity Centers

Question **23**

- Does this project begin or end in an Activity Center?
- Does this project connect two or more Activity Centers?
- Does this project promote non-auto travel within one or more Activity Centers?

Goal 3

Ensure Adequate System Maintenance, Preservation, and Safety

Question **24**

- Does this project contribute to enhanced system maintenance, preservation, or safety?

Goal 4

Maximize Operational Effectiveness and Safety of the Transportation System

Question **25**

- Does this project reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?
- Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

Goal 5

Enhance Environmental Quality, and Protect Natural and Cultural Resources

Question **26**

- Is this project expected to contribute to reductions in emissions of criteria pollutants?
- Is this project expected to contribute to reductions in emissions of greenhouse gases?

Goal 6

Support Inter-Regional and International Travel and Commerce

Question **27**

- Please identify all freight carrier modes that this project enhances, supports, or promotes.
- Please identify all passenger carrier modes that this project enhances, supports, or promotes.

TABLE 1
VISUALIZE 2045 TECHNICAL INPUTS AND THE REGIONAL TRANSPORTATION PRIORITIES PLAN GOALS

This matrix provides a visual summary of the responses provided by the relevant implementing agencies as to how their proposed projects support the goals identified in the RTPP.

MAJOR PROJECTS*	Estimated Cost	Projected Completion	Goal 1: SOV	HOV	MetroRail	Commuter Rail	Streetcar/Lt. Rail	BRT	Exp. Bus	Metrobus	Local Bus	Bicycling	Walking	Other	Disadvantaged Groups	Goal 2: Begin/End in AC	Connect ACs	Non-Auto w/in AC	Goal 3: Maintenance	Reduce Time w/o Capacity	Enhance Safety	Goal 4: Criteria Pollutants	Greenhouse Gases	Goal 5: Long Haul Truck	Local Delivery	Freight Rail	Freight Air	Air Passenger	Amtrak	Intercity Bus	Goal 6:
1. Dedicated Bike Lanes	$28 million	2018, 2023									✓	✓				✓	✓	✓	✓			✓	✓	✓								
2. I-270 Toll Lanes	$350 million	2030	✓	✓					✓	✓	✓					✓	✓		✓			✓	✓	✓	✓	✓					✓	
3. I-95/I-495 Toll Lanes	$4.3 billion	2025	✓	✓					✓	✓	✓				✓	✓	✓		✓			✓	✓	✓	✓	✓					✓	
4. US 301	$4.6 billion	2045	✓	✓					✓		✓					✓	✓					✓	✓	✓	✓	✓					✓	
5. MD 201	$1 billion	2045	✓		✓				✓	✓	✓	✓	✓			✓	✓								✓							
6.MD 97	$52 million	2025	✓	✓	✓					✓	✓	✓	✓			✓	✓				✓	✓	✓		✓							
7. Randolph Road BRT	$102 million	2040			✓			✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
8.North Bethesda BRT	$115 million	2035			✓			✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
9. MD 355 BRT	$1.08 billion	2045			✓			✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
10. Veirs Mill Road BRT	$80 million	2030			✓	✓		✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
11. I-495 HOT Lanes (North)	$500 million	2025	✓	✓	✓			✓	✓	✓	✓	✓			✓	✓	✓								✓	✓						
12. I-95 Southbound	$33 million	2025	✓					✓	✓	✓						✓					✓				✓	✓					✓	
13. US 15	$33 million	2025	✓								✓										✓	✓	✓	✓	✓	✓						

* Major projects are defined as changes to interstates, major arterials, and expressways or freeways with at-grade intersections, as well as dedicated transit facilities.

TABLE 2
VISUALIZE 2045 PROJECT SUBMISSIONS AND THE FEDERAL PLANNING FACTORS

This matrix provides a visual summary of the responses provided by the relevant implementing agencies as to how their proposed projects support the planning factors set forth in the FAST Act

MAJOR PROJECTS*	Estimated Cost	Projected Completion	Economic Vitality	Safety	Homeland Security	Accessibility/Mobility People	Accessibility/Mobility Freight	Environment	Integration/Connectivity	Management & Operation	Preservation
1. Dedicated Bike Lanes	$28 million	2018, 2023	✓	✓	✓	✓	✓	✓	✓	✓	
2. I-270 Toll Lanes	$3.4 billion	2030	✓	✓	✓	✓	✓	✓	✓	✓	
3. I-495 Toll Lanes	$4.2 billion	2025	✓	✓	✓	✓	✓	✓	✓	✓	
4. US 301	$4.6 billion	2045	✓		✓	✓	✓		✓	✓	
5. MD 201	$1 billion	2045	✓		✓	✓	✓	✓	✓		
6. MD 97	$52 million	2025	✓	✓	✓	✓	✓	✓	✓		
7. Randolph Road BRT	$102 million	2040	✓	✓		✓	✓	✓	✓		
8.North Bethesda BRT	$115 million	2035	✓	✓		✓	✓	✓	✓		
9. MD 355 BRT	$1.08 billion	2045	✓	✓		✓	✓	✓	✓		
10. Veirs Mill Road BRT	$80 million	2030	✓	✓		✓	✓	✓	✓		
11. I-495 HOT Lanes (North)	$500 million	2025	✓		✓	✓	✓	✓	✓	✓	
12. I-95	$27.5 million	2025	✓	✓	✓	✓	✓	✓	✓	✓	✓
13. US 15	$33 million	2025	✓	✓	✓	✓	✓	✓	✓	✓	✓

Federal Planning Factors

- Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficienc .
- Increase the **safety** of the transportation system for all motorized and non-motorized users.
- Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.
- Increase accessibility and mobility of **people**.
- Increase accessibility and mobility of **freight**.
- Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
- Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.
- Promote efficien system **management and operation**.
- Emphasize the **preservation** of the existing transportation system.

*** Major projects are defined as changes to interstates, major arterials, and expressways or freeways with at-grade intersections, as well as dedicated transit facilities.**

PROJECT DESCRIPTION FORMS

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 3651

1. **Submitting Agency: DDOT**
2. **Secondary Agency:**
3. **Agency Project ID:**
4. **Project Type:** ☐ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☒ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **17th Street NW Protected Bike Lane**

	Prefix	Route	Name	Modifier
7. Facility:			17th St. NW	
			New Hampshire Ave. NW	
8. From (☐ at):			K St. NW	
9. To:				

10. **Description:** **Install two-way protected bike lane on 17th Street NW. This would replace the existing southbound-only conventional bike lane currently in place between New Hampshire Avenue NW and Massachusetts Avenue NW, and continue south to K Street NW. This project is intended to increase bicycle accessibility on a busy corridor for bicycling, and to provide an alternative facility to the congested 15th Street NW protected bike lane.**
11. **Projected Completion Year: 2018**
12. **Project Manager: Darren Buck**
13. **Project Manager E-Mail: darren.buck@dc.gov**
14. **Project Information URL:**
15. **Total Miles: 0.84 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $150** cost estimate as of 11/9/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☐ Federal ☐ State ☒ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☐ Single Driver	☐ Carpool/HOV		
☐ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☐ Express/Commuter bus	☐ Metrobus	☐ Local Bus
☒ Bicycling	☒ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☒ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☐ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☒ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☐ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☐ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☐ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☐ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☐ Yes; ☒ No

b. If so, is the congestion recurring or non-recurring? ☐ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☐ Yes; ☒ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator: **Mark Rawlings**

37. Created On: **11/17/2017**

38. Last Updated by:

39. Last Updated On:

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 3653

1. **Submitting Agency: DDOT**
2. **Secondary Agency:**
3. **Agency Project ID:**
4. **Project Type:** ☐ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☒ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **Irving Street NE/NW Protected Bike Lane**

	Prefix	Route	Name	Modifier
7. **Facility:**			Irving St. NE/NW	
			Warder St. NW	
8. **From (☐ at):**			Michigan Ave. NE	
9. **To:**				

10. **Description:** **Install protected bike lanes on Irving Street NE/NW. This bikeway would connect through McMillan-Old Soldier's Home to Brookland. This project is intended to increase bicycle accessibility across a large crosstown area without any safe facilities for bicycling.**
11. **Projected Completion Year: 2018**
12. **Project Manager: Darren Buck**
13. **Project Manager E-Mail: darren.buck@dc.gov**
14. **Project Information URL:**
15. **Total Miles: 1 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $250** cost estimate as of 11/9/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☐ Federal ☐ State ☒ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☐ Single Driver	☐ Carpool/HOV		
☐ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☐ Express/Commuter bus	☐ Metrobus	☐ Local Bus
☒ Bicycling	☒ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☒ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☐ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☒ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☐ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☐ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☐ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☐ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☐ Yes; ☒ No

b. If so, is the congestion recurring or non-recurring? ☐ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☐ Yes; ☒ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator: **Mark Rawlings**

37. Created On: **11/17/2017**

38. Last Updated by:

39. Last Updated On:

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 3652

1. **Submitting Agency: DDOT**
2. **Secondary Agency:**
3. **Agency Project ID:**
4. **Project Type:** ☐ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☒ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **K Street NW Bikeway**

	Prefix	Route	Name	Modifier
7. Facility:			K St. NW	
8. From (☐ at):			1st St. NE	
9. To:			7th St. NW	

10. **Description:** **Install bike lanes (protected in places) along K Street NW/NE. This bikeway would connect Downtown, NoMa, and the Mt Vernon Triangle. This project is intended to increase bicycle accessibility on a busy corridor for bicycling.**
11. **Projected Completion Year: 2018**
12. **Project Manager: Darren Buck**
13. **Project Manager E-Mail: darren.buck@dc.gov**
14. **Project Information URL:**
15. **Total Miles: <1 mile**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $150** cost estimate as of 11/9/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☐ Federal ☐ State ☒ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☐ Single Driver	☐ Carpool/HOV		
☐ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☐ Express/Commuter bus	☐ Metrobus	☐ Local Bus
☒ Bicycling	☒ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☒ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☐ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☒ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☐ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☐ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☐ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☐ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☐ Yes; ☒ No

b. If so, is the congestion recurring or non-recurring? ☐ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☐ Yes; ☒ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator: **Mark Rawlings**

37. Created On: **11/17/2017**

38. Last Updated by:

39. Last Updated On:

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 3646

1. **Submitting Agency: DDOT**
2. **Secondary Agency:**
3. **Agency Project ID:**
4. **Project Type:** ☐ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☒ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **K Street NE Road Diet with Bike Lanes**

	Prefix	Route	Name	Modifier
7. Facility:			K St. NE	
			1st St. NE	
8. From (☐ at):			Florida Ave. NE	
9. To:				

10. **Description:** **Road diet to remove peak hour parking restrictions and provide full time parking along project limits. Peak hour restrictions are directional, 3 to 2 lane. Bicycle lanes will be provided between 1st St NE and 6th St NE. Reduction of one eastbound portal under rail (between 1st and 2nd Sts) to a provide two-way cycle track is currently under consideration with some opposition.**
11. **Projected Completion Year: 2018**
12. **Project Manager: Darren Buck**
13. **Project Manager E-Mail: darren.buck@dc.gov**
14. **Project Information URL:**
15. **Total Miles: <1 mile**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $30** cost estimate as of 11/9/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☐ Federal ☐ State ☒ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☐ Single Driver	☐ Carpool/HOV		
☐ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☐ Express/Commuter bus	☐ Metrobus	☐ Local Bus
☒ Bicycling	☒ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☒ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☐ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☒ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☐ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☐ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☐ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☐ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☐ Yes; ☒ No

b. If so, is the congestion recurring or non-recurring? ☐ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☐ Yes; ☒ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator: **Mark Rawlings**

37. Created On: **11/17/2017**

38. Last Updated by:

39. Last Updated On:

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 3655

1. **Submitting Agency: DDOT**
2. **Secondary Agency:**
3. **Agency Project ID:**
4. **Project Type:** ☐ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☒ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **New York Avenue Streetscape & Trail Project**

	Prefix	Route	Name	Modifier
7. Facility:			New York Ave. NE	
			Florida Ave. NE	
8. From (☐ at):			Bladensburg Ave. NE	
9. To:				

10. **Description:** **The New York Avenue Streetscape and Trail Project is a 30% design plan to install streetscape improvements including lighting, new sidewalk connections, landscaping, traffic signals and signage and a raised cycletrack along New York Avenue NE from Florida Avenue NE to Bladensburg Road NE.**
11. **Projected Completion Year: 2023**
12. **Project Manager: Katherine Youngbluth**
13. **Project Manager E-Mail: katherine.youngbluth@dc.gov**
14. **Project Information URL: www.newyorkavenuestudy.com**
15. **Total Miles: 2.3 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $27,200** cost estimate as of 11/9/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☐ Federal ☐ State ☒ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☐ Single Driver	☐ Carpool/HOV		
☒ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☐ Express/Commuter bus	☐ Metrobus	☐ Local Bus
☒ Bicycling	☒ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☒ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☐ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☒ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☐ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☐ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☐ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☐ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☒ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☒ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☐ Yes; ☒ No

b. If so, is the congestion recurring or non-recurring? ☐ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☐ Yes; ☒ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator: **Mark Rawlings**

37. Created On: **11/17/2017**

38. Last Updated by:

39. Last Updated On:

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 3655

1. **Submitting Agency: DDOT**
2. **Secondary Agency:**
3. **Agency Project ID:**
4. **Project Type:** ☐ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☒ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **Pennsylvania Avenue SE**

	Prefix	Route	Name	Modifier
7. **Facility:**			Pennsylvania Avenue SE	
8. **From (☐ at):**			2nd Street, Independence Avenue	
9. **To:**			Barney Circle	

10. **Description:** **This project will connect the Anacostia River Trail with bicycle lanes through Capitol Hill to the downtown core. In addition, it will provide cyclist access to bike lanes on Pennsylvania Ave west of the Capitol, and to the Metropolitan Branch Trail. It will reduce off-peak lane capacity from 6 to 4 lanes between 2nd and 14th Streets. During peak hours the existing 6 lanes will be utilized. Between 14th Street and Barney Circle, rush hour lane capacity will be reduced from 8 lanes to 6 lanes; the 6 lane off-peak capacity would be unchanged.**
11. **Projected Completion Year: 2018**
12. **Project Manager: Mike Goodno**
13. **Project Manager E-Mail: mike.goodno@dc.gov**
14. **Project Information URL:**
15. **Total Miles: 1.3 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $250** cost estimate as of 11/9/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☐ Federal ☐ State ☒ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☐ Single Driver	☐ Carpool/HOV		
☐ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☐ Express/Commuter bus	☐ Metrobus	☐ Local Bus
☒ Bicycling	☐ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals

(i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☒ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☒ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☐ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☐ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☐ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☒ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☐ Yes; ☒ No

b. If so, is the congestion recurring or non-recurring? ☐ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☐ Yes; ☒ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator: **Mark Rawlings**

37. Created On: **11/17/2017**

38. Last Updated by:

39. Last Updated On:

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

1. **Submitting Agency: MDOT/State Highway Administration**
2. **Secondary Agency:**
3. **Agency Project ID:**
4. **Project Type:** ☒ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **I-270 Corridor**
7. **Facility:**
8. **From (☐ at):**
9. **To:**

Prefix	Route	Name	Modifier
I	270		
I	495	Capital Beltway	
I	70	/US 40	

10. **Description:** **I-270 component of Traffic Relief Plan, to include two managed lanes in each direction, between I-495 and I-70/US 40. Does not include I-270 Innovative Congestion Management improvements (CLRP 3564).**
11. **Projected Completion Year: 2020-2025**
12. **Project Manager:**
13. **Project Manager E-Mail:**
14. **Project Information URL:** **http://www.mdtrafficreliefp3.com/**
15. **Total Miles:** **34 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $3,400,000** cost estimate as of 08/01/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☐ Federal ☐ State ☐ Local ☒ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☒ Single Driver	☒ Carpool/HOV		
☐ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☒ Express/Commuter bus	☒ Metrobus	☒ Local Bus
☐ Bicycling	☐ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☐ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☒ Long-Haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☒ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☐ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☒ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☒ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☒ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☒ Yes; ☐ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☒ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☒ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator:

37. Created On: **5/8/2006**

38. Last Updated by: **Matt Baker**

39. Last Updated On: **11/21/2016**

40. Comments:

Project: MDOT I-495 and I-270 Traffic Relief Plan

1. Indicate whether the proposed project's location is subject to or benefits significantly from any of the following in-place congestion management strategies:

a) X Metropolitan Washington Commuter Connections program (ridesharing, telecommuting, guaranteed ride home, employer programs)

b) X A Transportation Management Association is in the vicinity

c) X Channelized or grade-separated intersection(s) or roundabouts

d) X Reversible, turning, acceleration/deceleration, or bypass lanes

e) X High occupancy vehicle facilities or systems

f) X Transit stop (rail or bus) within a 1/2 mile radius of the project location

g) X Park-and-ride lot within a one-mile radius of the project location

h) X Real-time surveillance/traffic device controlled by a traffic operations center

i) X Motorist assistance/hazard clearance patrols

j) X Interconnected/coordinated traffic signal system *(along intersecting arterials)*

k) _ Other in-place congestion management strategy or strategies (briefly describe below:)

2. List and briefly describe how the following categories of (additional) strategies were considered as full or partial alternatives to single-occupant vehicle capacity expansion in the study or proposal for the project.

a. Transportation demand management measures, including growth management and congestion pricing

Several transportation demand management measures are currently in place in the I-495 and I-270 corridors. Each local jurisdiction maintains growth management strategies in accordance with Maryland law. In addition to the congestion management strategies currently in place in these corridors (see Question 1 above), public transportation improvements are also underway including the Purple Line light rail construction.

b. Traffic operational improvements

MDOT SHA has evaluated numerous operational improvements in these corridors to address localized traffic and safety issues. These include extension of merge areas, auxiliary lanes, lighting and signing improvements.

c. Public transportation improvements

Several public transportation improvements have been implemented and are currently underway in these corridors, including upgrades to MARC commuter rail service, local and commuter bus service improvements, and the ongoing implementation of the Purple Line light rail.

d. Intelligent Transportation Systems technologies

MDOT SHA's Coordinated Highways Action Response Team (CHART) is a multi-jurisdictional, multidisciplinary ITS program that supports freeways throughout Maryland. The comprehensive and advanced traffic management system includes a state of the art command and control center and satellite operations centers that function 24 hours-a-day, seven days a week. ITS technologies in place throughout these corridors include real-time traffic surveillance, traffic incident management, work zone management, traveler information services, road weather information, and emergency response.

e. Other congestion management strategies

MDOT continues to support a comprehensive range of transportation strategies in these corridors

which have the highest levels of traffic demand in the State.

f. Combinations of the above strategies

3. Could congestion management alternatives fully eliminate or partially offset the need for the proposed increase in single-occupant vehicle capacity? Explain why or why not.

I-495 and I-270 experience some of the worst congestion in the State. The demand is so great that the facilities are congested not just during traditional rush hours, but for up to 10 hours daily and periodically during weekends. Both state and local governments have developed and continue to support a broad range of congestion management strategies in the project area; however, additional roadway capacity is needed to provide congestion relief. Managed lanes, as proposed in this project, will provide travelers with a reliable option for a faster trip, using pricing to manage the congestion in the added lanes.

4. Describe all congestion management strategies that are going to be incorporated into the proposed highway project.

MDOT expects to deliver these projects through public-private-partnerships (P3). Project goals of the P3 agreements will be to provide solutions to reduce delay and improve predictability for vehicular trips, provide improvements faster to the users, and encourage innovation to minimize impacts. Specific elements of the project design, including congestion management strategies are not known at this time; however, this document will be updates once the contracts are awarded.

5. Describe the proposed funding and implementation schedule for the congestion management strategies to be incorporated into the proposed highway project. Also describe how the effectiveness of strategies implemented will be monitored and assessed after implementation.

MDOT plans to initiate environmental review and seek Board of Public Works concurrence on the P3 procurement process in 2018. Selection of private partner(s) and environmental approvals are anticipated in 2020, with construction beginning soon thereafter. MDOT expects that P3 delivery approach will allow the projects to be implemented with no net State contribution over the totality of P3 agreements. Once operational, the developer will be responsible for maintaining operations, safety and maintenance conditions that will be established in the contract documents. MDOT will monitor compliance with these commitments.

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 1182

1. **Submitting Agency: MDOT/State Highway Administration**
2. **Secondary Agency:**
3. **Agency Project ID:**
4. **Project Type:** ☒ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **I-95/I-495 Corridor (South and East)**

	Prefix	Route	Name	Modifier
7. **Facility:**	I	495		
			Baltimore-Washington Parkway	
8. **From (☐ at):**			VA State Line/Potomac River (Woodrow Wilson Bridge)	
9. **To:**				

10. **Description:** **I-95/I-495 component of Traffic Relief Plan, to include two managed lanes in each direction, between Baltimore Washington Parkway and Virginia State line/Potomac River (Woodrow Wilson Bridge).**
11. **Projected Completion Year: 2020-2025**
12. **Project Manager:**
13. **Project Manager E-Mail:**
14. **Project Information URL:** **http://www.mdtrafficreliefp3.com/**
15. **Total Miles:** **22 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $2,200,000** cost estimate as of 08/01/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☐ Federal ☐ State ☐ Local ☒ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☒ Single Driver	☒ Carpool/HOV		
☐ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☒ Express/Commuter bus	☒ Metrobus	☒ Local Bus
☐ Bicycling	☐ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☐ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☒ Long-Haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☒ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☐ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☒ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☒ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☒ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☐ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☒ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator:

37. Created On: **5/8/2006**

38. Last Updated by: **Matt Baker**

39. Last Updated On: **11/21/2016**

40. Comments:

Project: MDOT I-495 and I-270 Traffic Relief Plan

1. Indicate whether the proposed project's location is subject to or benefits significantly from any of the following in-place congestion management strategies:

a) X Metropolitan Washington Commuter Connections program (ridesharing, telecommuting, guaranteed ride home, employer programs)

b) X A Transportation Management Association is in the vicinity

c) X Channelized or grade-separated intersection(s) or roundabouts

d) X Reversible, turning, acceleration/deceleration, or bypass lanes

e) X High occupancy vehicle facilities or systems

f) X Transit stop (rail or bus) within a 1/2 mile radius of the project location

g) X Park-and-ride lot within a one-mile radius of the project location

h) X Real-time surveillance/traffic device controlled by a traffic operations center

i) X Motorist assistance/hazard clearance patrols

j) X Interconnected/coordinated traffic signal system *(along intersecting arterials)*

k) _ Other in-place congestion management strategy or strategies (briefly describe below:)

2. List and briefly describe how the following categories of (additional) strategies were considered as full or partial alternatives to single-occupant vehicle capacity expansion in the study or proposal for the project.

a. Transportation demand management measures, including growth management and congestion pricing

Several transportation demand management measures are currently in place in the I-495 and I-270 corridors. Each local jurisdiction maintains growth management strategies in accordance with Maryland law. In addition to the congestion management strategies currently in place in these corridors (see Question 1 above), public transportation improvements are also underway including the Purple Line light rail construction.

b. Traffic operational improvements

MDOT SHA has evaluated numerous operational improvements in these corridors to address localized traffic and safety issues. These include extension of merge areas, auxiliary lanes, lighting and signing improvements.

c. Public transportation improvements

Several public transportation improvements have been implemented and are currently underway in these corridors, including upgrades to MARC commuter rail service, local and commuter bus service improvements, and the ongoing implementation of the Purple Line light rail.

d. Intelligent Transportation Systems technologies

MDOT SHA's Coordinated Highways Action Response Team (CHART) is a multi-jurisdictional, multidisciplinary ITS program that supports freeways throughout Maryland. The comprehensive and advanced traffic management system includes a state of the art command and control center and satellite operations centers that function 24 hours-a-day, seven days a week. ITS technologies in place throughout these corridors include real-time traffic surveillance, traffic incident management, work zone management, traveler information services, road weather information, and emergency response.

e. Other congestion management strategies

MDOT continues to support a comprehensive range of transportation strategies in these corridors

which have the highest levels of traffic demand in the State.

f. Combinations of the above strategies

3. Could congestion management alternatives fully eliminate or partially offset the need for the proposed increase in single-occupant vehicle capacity? Explain why or why not.

I-495 and I-270 experience some of the worst congestion in the State. The demand is so great that the facilities are congested not just during traditional rush hours, but for up to 10 hours daily and periodically during weekends. Both state and local governments have developed and continue to support a broad range of congestion management strategies in the project area; however, additional roadway capacity is needed to provide congestion relief. Managed lanes, as proposed in this project, will provide travelers with a reliable option for a faster trip, using pricing to manage the congestion in the added lanes.

4. Describe all congestion management strategies that are going to be incorporated into the proposed highway project.

MDOT expects to deliver these projects through public-private-partnerships (P3). Project goals of the P3 agreements will be to provide solutions to reduce delay and improve predictability for vehicular trips, provide improvements faster to the users, and encourage innovation to minimize impacts. Specific elements of the project design, including congestion management strategies are not known at this time; however, this document will be updates once the contracts are awarded.

5. Describe the proposed funding and implementation schedule for the congestion management strategies to be incorporated into the proposed highway project. Also describe how the effectiveness of strategies implemented will be monitored and assessed after implementation.

MDOT plans to initiate environmental review and seek Board of Public Works concurrence on the P3 procurement process in 2018. Selection of private partner(s) and environmental approvals are anticipated in 2020, with construction beginning soon thereafter. MDOT expects that P3 delivery approach will allow the projects to be implemented with no net State contribution over the totality of P3 agreements. Once operational, the developer will be responsible for maintaining operations, safety and maintenance conditions that will be established in the contract documents. MDOT will monitor compliance with these commitments.

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 3281

1. **Submitting Agency: MDOT/State Highway Administration**
2. **Secondary Agency:**
3. **Agency Project ID:**
4. **Project Type:** ☒ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **I-95/I-495 Corridor (North and West)**

	Prefix	Route	Name	Modifier
7. **Facility:**	I	495		
8. **From (☐ at):**			VA State Line/Potomac River (American Legion Bridge)	
9. **To:**			Baltimore-Washington Parkway	

10. **Description:** **I-95/I-495 component of Traffic Relief Plan, to include two managed lanes in each direction, between the Virginia State line/Potomac River (American Legion Bridge) and Baltimore Washington Parkway.**
11. **Projected Completion Year: 2025**
12. **Project Manager:**
13. **Project Manager E-Mail:**
14. **Project Information URL:** **http://www.mdtrafficreliefp3.com/**
15. **Total Miles:** **20 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $2,092,000** cost estimate as of 08/01/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☐ Federal ☐ State ☐ Local ☒ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☒ Single Driver	☒ Carpool/HOV		
☐ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☒ Express/Commuter bus	☒ Metrobus	☒ Local Bus
☐ Bicycling	☐ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☐ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☒ Long-Haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☒ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☐ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☒ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☒ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☒ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☐ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☒ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator:

37. Created On: **5/8/2006**

38. Last Updated by: **Matt Baker**

39. Last Updated On: **11/21/2016**

40. Comments:

Project: MDOT I-495 and I-270 Traffic Relief Plan

1. Indicate whether the proposed project's location is subject to or benefits significantly from any of the following in-place congestion management strategies:

a) X Metropolitan Washington Commuter Connections program (ridesharing, telecommuting, guaranteed ride home, employer programs)

b) X A Transportation Management Association is in the vicinity

c) X Channelized or grade-separated intersection(s) or roundabouts

d) X Reversible, turning, acceleration/deceleration, or bypass lanes

e) X High occupancy vehicle facilities or systems

f) X Transit stop (rail or bus) within a 1/2 mile radius of the project location

g) X Park-and-ride lot within a one-mile radius of the project location

h) X Real-time surveillance/traffic device controlled by a traffic operations center

i) X Motorist assistance/hazard clearance patrols

j) X Interconnected/coordinated traffic signal system *(along intersecting arterials)*

k) _ Other in-place congestion management strategy or strategies (briefly describe below:)

2. List and briefly describe how the following categories of (additional) strategies were considered as full or partial alternatives to single-occupant vehicle capacity expansion in the study or proposal for the project.

a. Transportation demand management measures, including growth management and congestion pricing

Several transportation demand management measures are currently in place in the I-495 and I-270 corridors. Each local jurisdiction maintains growth management strategies in accordance with Maryland law. In addition to the congestion management strategies currently in place in these corridors (see Question 1 above), public transportation improvements are also underway including the Purple Line light rail construction.

b. Traffic operational improvements

MDOT SHA has evaluated numerous operational improvements in these corridors to address localized traffic and safety issues. These include extension of merge areas, auxiliary lanes, lighting and signing improvements.

c. Public transportation improvements

Several public transportation improvements have been implemented and are currently underway in these corridors, including upgrades to MARC commuter rail service, local and commuter bus service improvements, and the ongoing implementation of the Purple Line light rail.

d. Intelligent Transportation Systems technologies

MDOT SHA's Coordinated Highways Action Response Team (CHART) is a multi-jurisdictional, multidisciplinary ITS program that supports freeways throughout Maryland. The comprehensive and advanced traffic management system includes a state of the art command and control center and satellite operations centers that function 24 hours-a-day, seven days a week. ITS technologies in place throughout these corridors include real-time traffic surveillance, traffic incident management, work zone management, traveler information services, road weather information, and emergency response.

e. Other congestion management strategies

MDOT continues to support a comprehensive range of transportation strategies in these corridors

which have the highest levels of traffic demand in the State.

f. Combinations of the above strategies

3. Could congestion management alternatives fully eliminate or partially offset the need for the proposed increase in single-occupant vehicle capacity? Explain why or why not.

I-495 and I-270 experience some of the worst congestion in the State. The demand is so great that the facilities are congested not just during traditional rush hours, but for up to 10 hours daily and periodically during weekends. Both state and local governments have developed and continue to support a broad range of congestion management strategies in the project area; however, additional roadway capacity is needed to provide congestion relief. Managed lanes, as proposed in this project, will provide travelers with a reliable option for a faster trip, using pricing to manage the congestion in the added lanes.

4. Describe all congestion management strategies that are going to be incorporated into the proposed highway project.

MDOT expects to deliver these projects through public-private-partnerships (P3). Project goals of the P3 agreements will be to provide solutions to reduce delay and improve predictability for vehicular trips, provide improvements faster to the users, and encourage innovation to minimize impacts. Specific elements of the project design, including congestion management strategies are not known at this time; however, this document will be updates once the contracts are awarded.

5. Describe the proposed funding and implementation schedule for the congestion management strategies to be incorporated into the proposed highway project. Also describe how the effectiveness of strategies implemented will be monitored and assessed after implementation.

MDOT plans to initiate environmental review and seek Board of Public Works concurrence on the P3 procurement process in 2018. Selection of private partner(s) and environmental approvals are anticipated in 2020, with construction beginning soon thereafter. MDOT expects that P3 delivery approach will allow the projects to be implemented with no net State contribution over the totality of P3 agreements. Once operational, the developer will be responsible for maintaining operations, safety and maintenance conditions that will be established in the contract documents. MDOT will monitor compliance with these commitments.

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 1004

1. **Submitting Agency: MDOT/State Highway Administration**
2. **Secondary Agency: MDOT/Maryland Transit Administration**
3. **Agency Project ID:**
4. **Project Type:** ☐ Interstate ☒ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **US 301 South Corridor Transportation Study**
7. **Facility:**
8. **From (☐ at):**
9. **To:**

Prefix	Route	Name	Modifier
US	301		
		Virginia State line/Potomac River (Harry Nice Bridge)	
I	595	/US 50	

10. **Description:** **Multi-modal corridor study to consider highway/transit improvements from the Potomac River to Mount Oak Road (US 50/US 301 interchange). Includes preparing appropriate environmental approvals for the recommended alternates. Project planning study and right-of-way preservation along US 301, from south of La Plata to Mount Oak Road.**
11. **Projected Completion Year: 2045**
12. **Project Manager:**
13. **Project Manager E-Mail:**
14. **Project Information URL:**
15. **Total Miles:** **48 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $4.644,000** cost estimate as of 08/01/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☒ Federal ☒ State ☐ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☒ Single Driver	☒ Carpool/HOV		
☐ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☒ Express/Commuter bus	☐ Metrobus	☒ Local Bus
☐ Bicycling	☐ Walking	☐ Other	

☒ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☐ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☐ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☒ Long-Haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☒ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☐ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☐ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☒ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☒ Increase accessibility and mobility of **freight.**

f. ☐ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☒ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☐ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator:

37. Created On: **5/8/2006**

38. Last Updated by: **Matt Baker**

39. Last Updated On: **11/21/2016**

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 1204

1. **Submitting Agency: MDOT/State Highway Administration**
2. **Secondary Agency:**
3. **Agency Project ID:**
4. **Project Type:** ☐ Interstate ☐ Primary ☒ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **MD 201 Widening**
7. **Facility:**
8. **From (☐ at):**
9. **To:**

Prefix	Route	Name	Modifier
MD	201	Edmonston Road, Old Baltimore Pike	
I	95	/I-495	
US	1	North of Murkirk Road	

10. **Description:** **This project consists of the widening of MD 201 from north of I-95/I-495 at Cherrywood Lane to Ammendale Way from 2 or 3 lanes to 4 lanes. This project will also extend the designation of Maryland Route 201 from its current terminus at Powder Mill Road to continue along Edmonston Road and Old Baltimore Pike to US 1 north of Muirkirk Road, including the widening of Cedarhurst Drive from 2 to 4 lanes.**
11. **Projected Completion Year: 2045**
12. **Project Manager:**
13. **Project Manager E-Mail:**
14. **Project Information URL:**
15. **Total Miles:** **4.5 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $1,034,000** cost estimate as of 08/01/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☐ Federal ☒ State ☐ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☒ Single Driver	☐ Carpool/HOV		
☒ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☒ Express/Commuter bus	☒ Metrobus	☒ Local Bus
☒ Bicycling	☒ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☐ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☐ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☐ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☐ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☐ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☐ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☐ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☒ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☒ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☐ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☒ Yes; ☐ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☒ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☒ Surface Water; ☐ Hazardous and Contaminated Materials; ☒ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☐ Yes; ☒ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator:

37. Created On: **5/8/2006**

38. Last Updated by: **Andrew Austin**

39. Last Updated On: **11/30/2016**

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 2618

1. **Submitting Agency: MDOT/State Highway Administration**
2. **Secondary Agency: Montgomery County**
3. **Agency Project ID:**
4. **Project Type:** ☐ Interstate ☐ Primary ☒ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **MD 97 Corridor**
7. **Facility:**
8. **From (☐ at):**
9. **To:**

Prefix	Route	Name	Modifier
MD	97	Georgia Avenue	
MD	390	16th Street	
MD	192	Forest Glen Road	

10. **Description:** **The MD 97 Montgomery Hills project will evaluate safety and accessibility issues on MD 97. Widen from 6/7 to 7/8 lanes. Sidewalks and wide curb lanes to accommodate bicycles will be included where appropriate.**
11. **Projected Completion Year: 2025**
12. **Project Manager:**
13. **Project Manager E-Mail:**
14. **Project Information URL:**
15. **Total Miles:** **1 mile**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $52,000** cost estimate as of 08/01/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☐ Federal ☒ State ☒ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☒ Single Driver	☒ Carpool/HOV		
☒ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☐ Express/Commuter bus	☒ Metrobus	☒ Local Bus
☒ Bicycling	☒ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☐ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☐ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☐ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☒ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☐ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☐ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☐ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☐ Yes; ☒ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator:

37. Created On: **1/7/2008**

38. Last Updated by: **Matt Baker**

39. Last Updated On: **11/21/2016**

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

1. Submitting Agency: **Montgomery County Department of Transportation**
2. Secondary Agency:
3. Agency Project ID: **CIP 501318**
4. Project Type: ☐ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☒ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. Category: ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. Project Name: **Randolph Road Corridor Bus Rapid Transit (BRT) Project**

	Prefix		Route Name	Modifier
7. Facility:			**Randolph Road**	
8. From (☐ at):	**US**	**29**		
9. To:	**MD**	**355**		

10. Description: **This project provides for the detailed studies and construction related to a Bus Rapid Transit (BRT) line on Randolph Road from the White Flint Metro Station on MD 355 to at Tech Road at US 29. Randolph Road is a commuter corridor with traffic and congestion in the westbound direction in the morning and the eastbound direction in the evening. Major activity centers include White Flint, Glenmont, and the emerging mixed-use center at White Oak. Randolph Road provides important linkages to other BRT corridors and is important for the integrity of the BRT network. A mixed traffic transitway is recommended for this corridor. The County Council approved the Countywide Transit Corridors Functional Master Plan, an amendment to the Master Plan of Highways and Transportation, on November 26, 2013. The amendment authorizes the Department of Transportation to study enhanced transit options and Bus Rapid Transit for 10 transit corridors, including: Georgia Avenue North, Georgia Avenue South, MD 355 North, MD 355 South, New Hampshire Avenue, North Bethesda Transitway, Randolph Road, University Boulevard, US 29, Veirs Mill Road and Corridor Cities Transitway.**
11. Projected Completion Year: **2040**
12. Project Manager: **Joana Conklin**
13. Project Manager E-Mail: **Joana.Conklin@montgomerycountymd,gov**
14. Project Information URL: **http://montgomeryplanning.org/transportation/highways/brt.shtm**
15. Total Miles: **10 miles**
16. Schematic (file upload):
17. State/Local Project Standing (file upload):
18. Jurisdictions: Montgomery County
19. 2018 Baseline Cost (in Thousands): **102,000** cost estimate as of **10/25/2017**
20. Amended Cost (in Thousands): cost estimate as of MM/DD/YYYY
21. Funding Sources: ☒ Federal ☐ State ☒Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to

provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. Provide a Comprehensive Range of Transportation Options

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☐ Single Driver ☐ Carpool/HOV

☒ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☒ BRT	☐ Express/Commuter bus	☒ Metrobus	☒ Local Bus
☒ Bicycling	☒ Walking	☐ Other	

☒ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☒ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☒ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Advances goals of Master Plans in White Flint and White Oak.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the safety of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☒ No ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☐ Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase accessibility and mobility of people.

e. ☐ Increase accessibility and mobility of freight.

f. ☒Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

h. ☒ Promote efficient system management and operation.

i. ☐ Emphasize the preservation of the existing transportation system.

j. ☒ Improve resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and tourism.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☒ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes
35. Withdrawn Date: MM/DD/YYYY
36. Record Creator:
37. Created On:
38. Last Updated by:
39. Last Updated On:
40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

1. Submitting Agency: **Montgomery County Department of Transp**ortation
2. Secondary Agency:
3. Agency Project ID: **CIP 501318**
4. Project Type: ☐ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☒ Transit ☐ CMAQ
   ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program
   ☐ Human Service Transportation Coordination ☐ TERMs
5. Category: ☒ System Expansion ☐ System Maintenance ☐Operational Program ☐ Study ☐ Other
6. Project Name: **North Bethesda Transitway Bus Rapid Transit (BRT) Project**

	Prefix		Route Name	Modifier
7. Facility:			**Rock Spring Drive / Old Georgetown Road**	
8. From (☐ at):			**Montgomery Mall Transit Center**	
9. To:			**White Flint Metrorail Station or Grosvenor Metrorail Station**	

10. Description: **This project provides for detailed studies and construction related to the North Bethesda Transitway Bus Rapid Transit (BRT) line. The North Bethesda Transitway connects the Rock Spring office park area and the Montgomery Mall Transit Center to the Metrorail Red Line. Much of the right-of-way along Rock Spring Drive, Fernwood Road, and Tuckerman Lane is currently available through easements and dedications provided through the development review process. There are two alternative routes in the easternmost portion of the corridor. One alternative is in dedicated lanes following Tuckerman Lane to the Grosvenor Metro Station. The other alternative would proceed north on Old Georgetown Road in a dedicated lane to the western leg of Executive Boulevard, and then east on Old Georgetown Road in mixed traffic to Rockville Pike and the White Flint Metro Station.**

11. Projected Completion Year: **2035**
12. Project Manager: **Joana Conklin**
13. Project Manager E-Mail: **Joana.Conklin@montgomerycountymd,gov**
14. Project Information URL: **http://montgomeryplanning.org/transportation/highways/brt.shtm**
15. Total Miles: **3.5 miles**
16. Schematic (file upload):
17. State/Local Project Standing (file upload):
18. Jurisdictions: Montgomery County
19. 2018 Baseline Cost (in Thousands): **115,150** cost estimate as of **10/25/2017**
20. Amended Cost (in Thousands): cost estimate as of MM/DD/YYYY
21. Funding Sources: ☒ Federal ☐ State ☒Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. Provide a Comprehensive Range of Transportation Options

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☐ Single Driver	☐ Carpool/HOV	☒ Local Bus
☒ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail
☒ BRT	☐ Express/Commuter bus	☒ Metrobus
☒Bicycling	☒ Walking	☐ Other

☒ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☐ Does this project connect two or more Activity Centers?
☒ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☒ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Advances goals of Master Plans in White Flint and Rock Spring.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the safety of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☒ No ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☐ Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase accessibility and mobility of people.

e. ☐ Increase accessibility and mobility of freight.

f. ☒Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

h. ☒ Promote efficient system management and operation.

i. ☒ Emphasize the preservation of the existing transportation system.

j. ☒ Improve resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and tourism.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was “yes”, are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☒ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction ☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:
34. Project is being withdrawn from the CLRP: ☐ Yes
35. Withdrawn Date: MM/DD/YYYY
36. Record Creator:
37. Created On:
38. Last Updated by:
39. Last Updated On:
40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 3424

1. **Submitting Agency: Montgomery County Department of Transportation**
2. **Secondary Agency:**
3. **Agency Project ID:**
4. **Project Type:** ☐ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☒ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **MD 355 Bus Rapid Transit**
7. **Facility:**
8. **From (☐ at):**
9. **To:**

Prefix	Route	Name	Modifier
MD	355		
MD	410	East-West Highway	
		Clarksburg Road	

10. **Description:** **MD 355 includes numerous activity centers along the corridor planned for a high level of development that will support all-day travel throughout the corridor. It is also characterized by heavy congestion and high transit ridership potential. The corridor has several major existing and planned activity nodes, including Gaithersburg, Rockville, Twinbrook, White Flint, National Institutes of Health/Walter Reed National Medical Center, and the Bethesda CBD. This project will plan, design, and construct bus rapid transit service from Clarksburg to Bethesda. Project will be broken up into three phases with project completion in 2045: Phase 1 completion in 2025, Phase 2 in 2035 and Phase 3 in 2045.**
11. **Projected Completion Year: 2045**
12. **Project Manager: Corey Pitts**
13. **Project Manager E-Mail: corey.pitts@montgomerycountymd.gov**
14. **Project Information URL: https://www.montgomerycountymd.gov/BRT/md355project.html**
15. **Total Miles: 22 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $1,080,000** cost estimate as of 10/31/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☒ Federal ☐ State ☒ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☐ Single Driver	☐ Carpool/HOV		
☒ Metrorail	☒ Commuter Rail	☐ Streetcar/Light Rail	
☒ BRT	☐ Express/Commuter bus	☒ Metrobus	☒ Local Bus
☒ Bicycling	☒ Walking	☐ Other	

☒ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☒ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☒ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☒ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

This project supports the transportation element of various community master plans along the MD 355 corridor.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☒ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☐ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☐ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☐ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☒ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator:

37. Created On:

38. Last Updated by:

39. Last Updated On:

40. Comments:

Basic Project Information

CEID 3672

1. **Submitting Agency: Montgomery County Department of Transportation**
2. **Secondary Agency:**
3. **Agency Project ID: CIP 501318**
4. **Project Type:** ☐ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☒ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **New Hampshire Avenue Corridor Bus Rapid Transit (BRT)**

	Prefix	Route	Name	Modifier
7. **Facility:**	MD	650	New Hampshire Avenue	
8. **From (☐ at):**			Colesville Park-and-Ride Lot	
9. **To:**			Eastern Avenue	

10. **Description: This project provides for the design and construction related to a Bus Rapid Transit (BRT) line on New Hampshire Avenue from the Colesville park-and-ride lot to Eastern Avenue. New Hampshire Avenue is a commuter corridor, with most traffic flowing southbound in the morning and northbound in the evening. Activity centers are located at Takoma/Langley Crossroads and the emerging mixed-use center at White Oak. Corridor recommendations, from north to south, include a mixed traffic transitway from Colesville park-and-ride to Lockwood Drive, and dedicated lane(s) from Lockwood Drive to the District line. The County Council approved the Countywide Transit Corridors Functional Master Plan, an amendment to the Master Plan of Highways and Transportation, on November 26, 2013.**
11. **Projected Completion Year: 2045**
12. **Project Manager: Joana Conklin**
13. **Project Manager E-Mail: Joana.Conklin@montgomerycountymd.gov**
14. **Project Information URL: http://montgomeryplanning.org/transportation/highways/brt.shtm**
15. **Total Miles: 8.4 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions: Montgomery County**
19. **2018 Baseline Cost (in Thousands): $285,000** cost estimate as of 10/25/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☒ Federal ☐ State ☒ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☐ Single Driver	☐ Carpool/HOV		
☒ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☒ BRT	☐ Express/Commuter bus	☒ Metrobus	☒ Local Bus
☒ Bicycling	☒ Walking	☐ Other	

☒ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☒ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☒ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Advances goals of Master Plans in White Oak and Silver Spring.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☐ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☐ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☐ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☒ Promote efficient system **management and operation**.

i. ☒ Emphasize the **preservation** of the existing transportation system.

j. ☒ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☒ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator:

37. Created On:

38. Last Updated by:

39. Last Updated On:

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 3424

1. **Submitting Agency: Montgomery County Department of Transportation**
2. **Secondary Agency:**
3. **Agency Project ID: CIP 501318**
4. **Project Type:** ☐ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☒ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name: Veirs Mill Road (MD 586) Bus Rapid Transit Project**
7. **Facility:**
8. **From (☐ at):**
9. **To:**

Prefix	Route	Name	Modifier
MD	586	Veirs Mill Road	
MD	355	Rockville Pike	
MD	97	Georgia Avenue	

10. **Description:** **This project will implement a Bus Rapid Transit (BRT) line on Veirs Mill Road between Rockville and Wheaton Metrorail stations. The project consists of construction of queue jumps and installation of transit signal priority at key intersections, new transit service using articulated BRT vehicles, BRT stations with level boarding and off-board fare collection, and pedestrian/bike improvements.**
11. **Projected Completion Year: 2030**
12. **Project Manager: Joana Conklin**
13. **Project Manager E-Mail: Joana.Conklin@montgomerycountymd.gov**
14. **Project Information URL: https://www.montgomerycountymd.gov/BRT**
15. **Total Miles: 6.1 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload): Corridor Study Report, October 2017 (selection of Recommended Alternative)**
18. **Jurisdictions: Montgomery County**
19. **2018 Baseline Cost (in Thousands): $80,000** cost estimate as of 10/31/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☒ Federal ☐ State ☒ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☐ Single Driver	☐ Carpool/HOV		
☒ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☒ BRT	☐ Express/Commuter bus	☒ Metrobus	☒ Local Bus
☐ Bicycling	☒ Walking	☐ Other	

☒ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. **Promote Regional Activity Centers**

☒ Does this project begin or end in an Activity Center?

☒ Does this project connect two or more Activity Centers?
☒ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☒ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☒ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☐ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

This project supports the transportation element of various community master plans along the MD 586 corridor.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☒ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☐ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☐ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☐ Promote efficient system **management and operation**.

i. ☒ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☐ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☒ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator:

37. Created On:

38. Last Updated by:

39. Last Updated On:

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 2069

1. **Submitting Agency:** VDOT
2. **Secondary Agency:**
3. **Agency Project ID:**
4. **Project Type:** ☒ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** I-495 HOT/HOV Lanes

	Prefix	Route	Name	Modifier
7. Facility:	I	495	Capital Beltway	
	I	95/	395/495 – Springfield Interchange	
8. From (☐ at):			American Legion Bridge	
9. To:				

10. **Description:** The northern extension of VDOT's I-495 High Occupancy/Toll (HOT) lanes has been in the long range transportation plan since 2005, as part of the larger project that resulted in creation of HOT lanes from the Springfield Interchange to Old Dominion Drive near Tysons. The plan is being amended to better coordinate with the I-495 HOT lanes project in Maryland. VDOT will extend the I-495 HOT Lanes from Old Dominion Drive north to the American Legion Bridge. The project will include two HOT lanes in each direction. VDOT anticipates this will be funded primarily by toll revenues, possibly through a pubic private partnership.

    The existing CLRP includes extension of two HOT lanes in each direction from Old Dominion Drive to George Washington Parkway by 2025, and extension of one HOT Lane in each direction from George Washington Parkway to the American Legion Bridge by 2030. The plan is being amended to extend two HOT lanes in each direction from George Washington Parkway to the American Legion Bridge by 2025.

    As a result of the collaboration between VDOT and MDOT, Maryland's HOT lanes project, which includes improving the capacity of the American Legion Bridge, will connect to an equivalent managed lane system at the Virginia state line.

11. **Projected Completion Year:** 2025
12. **Project Manager:** Theresa DeFore
13. **Project Manager E-Mail:** Theresa.Defore@VDOT.Virginia.gov
14. **Project Information URL:**
15. **Total Miles:** 12 miles
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands):** $500,000 cost estimate as of 12/11/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☒ Federal ☒ State ☐ Local ☒ Private ☒ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. Provide a Comprehensive Range of Transportation Options

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☒ Single Driver	☒ Carpool/HOV		
☒ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☒ Express/Commuter bus	☒ Metrobus	☒ Local Bus
☒ Bicycling	☒ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. Promote Regional Activity Centers

☒ Does this project begin or end in an Activity Center?
☒ Does this project connect two or more Activity Centers?
☐ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☐ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☐ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☐ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☐ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☐ Long-Haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☒ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☐ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☐ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☒ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☒ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☐ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☒ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☒ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator:

37. Created On: 12/13/2006

38. Last Updated by: Norman Whitaker

39. Last Updated On: 12/12/2017

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 3667

1. **Submitting Agency: VDOT**
2. **Secondary Agency: Prince William County DPW**
3. **Agency Project ID:**
4. **Project Type:** ☒ Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **I-95 Auxiliary Lane, between Route 123, Exit 160 and Route 294, Exit 158**
7. **Facility:**
8. **From (☐ at):**
9. **To:**

	Prefix	Route	Name	Modifier
7. Facility:	I	95		
8. From (☐ at):	VA	123		
9. To:	VA	294		

10. **Description:** **This project includes adding an auxiliary lane on southbound Interstate 95, from the Route 123 entrance ramp, which will merge into an existing lane before the Route 294 exit ramp. The length of the project is approximately 1.4 miles.**
11. **Projected Completion Year: 2028**
12. **Project Manager: Ricardo Canizales**
13. **Project Manager E-Mail: rcanizales@pwcgov.org**
14. **Project Information URL:**
15. **Total Miles: 1.4 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:**
19. **2018 Baseline Cost (in Thousands): $27,500** cost estimate as of 10/26/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☒ Federal ☒ State ☐ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☒ Single Driver	☐ Carpool/HOV		
☐ Metrorail	☐ Commuter Rail	☐ Streetcar/Light Rail	
☐ BRT	☒ Express/Commuter bus	☒ Metrobus	☒ Local Bus
☐ Bicycling	☐ Walking	☐ Other	

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. **Promote Regional Activity Centers**

☒ Does this project begin or end in an Activity Center?

☐ Does this project connect two or more Activity Centers?
☐ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☐ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☒ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☐ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☐ Is this project expected to contribute to reductions in emissions of criteria pollutants?
☐ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☒ Long-Haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☒ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

The construction of an auxiliary lane on Interstate 95 between Route 123, Exit 160 and Route 294, Exit 158 will improve operations between two major interstate interchanges. This project will address congestion and improve access to both the Route 123 and Route 294 exits. The project is in line with NVTA's Regional TransAction Goal by investing in transportation improvements that reduces congestion and crowding experienced by travelers in the region.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☒ Yes; ☐ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem: **Vehicles are forced to merge in a short distance.**

c. ☐ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☒ Increase accessibility and mobility of **freight.**

f. ☐ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☐ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☐ Promote efficient system **management and operation**.

i. ☐ Emphasize the **preservation** of the existing transportation system.

j. ☐ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☐ Yes; ☒ No

a. If yes, what types of mitigation activities have been identified?

☐ Air Quality; ☐ Floodplains; ☐ Socioeconomics; ☐ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☐ Noise; ☐ Surface Water; ☐ Hazardous and Contaminated Materials; ☐ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☒ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator: **Elizabeth Scullin**

37. Created On: **12/11/2017**

38. Last Updated by: **Cina Dabestani**

39. Last Updated On: **12/12/2017**

40. Comments:

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 3608

1. **Submitting Agency: VDOT**
2. **Secondary Agency: Loudoun County**
3. **Agency Project ID:**
4. **Project Type:** ☐ Interstate ☒ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **Route 15 Widening**
7. **Facility:**
8. **From (☐ at):**
9. **To:**

Prefix	Route	Name	Modifier
US	15	James Madison Highway	
		Battlefield Parkway	
VA	661	Montresor Road	

10. **Description:** **Reconstruction with added capacity. This two lane road will be widened to four lanes.**
11. **Projected Completion Year:** **2025**
12. **Project Manager:** **James Zeller**
13. **Project Manager E-Mail:** **James.Zeller@VDOT.virginia.gov**
14. **Project Information URL:** **www.loudoun.gov/Route15**
15. **Total Miles:** **3.6 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions:** **Loudoun County**
19. **2018 Baseline Cost (in Thousands): $33 million** cost estimate as of 10/17/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☒ Federal ☒ State ☒ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☒ Single Driver ☐ Carpool/HOV
☐ Metrorail ☐ Commuter Rail ☐ Streetcar/Light Rail
☐ BRT ☐ Express/Commuter bus ☐ Metrobus ☐ Local Bus
☒ Bicycling ☐ Walking ☐ Other

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

23. **Promote Regional Activity Centers**

☐ Does this project begin or end in an Activity Center?
☐ Does this project connect two or more Activity Centers?

☐ Does this project promote non-auto travel within one or more Activity Centers?

24. Ensure System Maintenance, Preservation, and Safety

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

25. Maximize Operational Effectiveness and Safety

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☐ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

26. Protect and Enhance the Natural Environment

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?

☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☒ Long-Haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

The project will improve regional north-south mobility between Virginia and Maryland.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☐ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. ☒ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d. ☒ Increase **accessibility and mobility** of people.

e. ☒ Increase accessibility and mobility of **freight.**

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h. ☒ Promote efficient system **management and operation**.

i. ☒ Emphasize the **preservation** of the existing transportation system.

j. ☒ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

k. ☐ Enhance travel and **tourism**.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☒ Yes; ☐ No

a. If yes, what types of mitigation activities have been identified?

☒ Air Quality; ☒ Floodplains; ☐ Socioeconomics; ☒ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☒ Noise; ☒ Surface Water; ☐ Hazardous and Contaminated Materials; ☒ Wetlands

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☒ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator: **Cina Dabestani**

37. Created On: **10/30/2017**

38. Last Updated by: **Regina Moore**

39. Last Updated On: **12/12/2017**

40. Comments:

ALL PROJECTS IN THE CONSTRAINED ELEMENT OF VISUALIZE 2045

District of Columbia

DDOT

Interstate Projects — System Maintenance

Rehabilitation of I-395 HOV Bridge over Potomac River — CEID: 3305

Facility:	I 395 HOV	Agency Proj. ID:	
From:	East Potomac Bank	Complete In:	2022
To:	West Potomac Bank	Cost:	$39,250

Rehabilitation of I-66 Ramp to Whitehurst Freeway over Potomac Pkwy and Rock Creek (Bridge No.1303) — CEID: 3457

Facility:	I-66 Ramp	Agency Proj. ID:	
From:		Complete In:	2019
To:	Whitehurst Freeway over Potomac Pkwy and Rock Creek Bridge	Cost:	$6,000

Interstate Projects — Other

Return to L'Enfant — CEID: 2813

Facility:	I 395 Center Leg Freeway	Agency Proj. ID:	
From:	Massachusetts Avenue, NW	Complete In:	2019
To:	E St., NW (Between 2nd & 3rd)	Cost:	$27,000

Primary Projects — System Expansion

Anacostia Waterfront Initiative — CEID: 1589

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$65,100

South Capitol Street — CEID: 1570

Facility:		Agency Proj. ID:	
From:	Independence Avenue	Complete In:	2024
To:	Martin Luther King Jr., Boulevard	Cost:	$822,500

St. Elizabeth Access — CEID: 2860

Facility:	Several locations	Agency Proj. ID:	
From:		Complete In:	2020
To:		Cost:	$200,200

Primary Projects — Study

Bus Only Lane (Planning and Implementation) — CEID: 3196

Facility:	H & I Street Bus only Lanes	Agency Proj. ID:	
From:		Complete In:	2020
To:		Cost:	$5,000

Primary Projects — Operational Program

Audit and Compliance — CEID: 3195

Facility:		Agency Proj. ID:	
From:		Complete In:	2018
To:		Cost:	$0

Primary Projects — Other

Reconstruct New Jersey Avenue NW from H Street to N Street — **CEID: 3399**

Facility:	New Jersey Avenue NW	Agency Proj. ID:	SR055A
From:	H Street NW	Complete In:	2018
To:	N Street NW	Cost:	$15,500

Secondary Projects — System Expansion

Southern Avenue — **CEID: 2867**

Facility:	Southern Avenue	Agency Proj. ID:	
From:	Branch Avenue	Complete In:	2025
To:	Naylor Road, S.E.	Cost:	$4,000

Secondary Projects — System Maintenance

Mid City East — **CEID: 3297**

Facility:	Bates- Hanover, Bloomingdale, Eckington, Edgewood, LeDroit Park, Sursum Corda, and T	Agency Proj. ID:	
From:	Bates- Hanover	Complete In:	2017
To:	Truxton Circle	Cost:	$3,000

Neighborhood Roadside Improvements — **CEID: 3397**

Facility:		Agency Proj. ID:	ED019A, SR
From:		Complete In:	2019
To:		Cost:	$3,900

Reconstruction of 18th Street, NW from Virginia Ave to Connecticut Ave/M Street — **CEID: 3452**

Facility:	18th Street NW	Agency Proj. ID:	
From:	Virginia Ave NW	Complete In:	2025
To:	Connecticut Ave NW / M Street NW	Cost:	$20,000

Reconstruction of Harvard Street NW from 16th Street NW to Georgia Ave NW — **CEID: 3488**

Facility:	Harvard Street NW	Agency Proj. ID:	
From:	16th Street NW	Complete In:	2020
To:	Georgia Avenue NW	Cost:	$1,000

Reconstruction of Kenyon Street NW from Park Place to 13th Street — **CEID: 3455**

Facility:	Kenyon Street NW	Agency Proj. ID:	
From:	Park Place NW	Complete In:	2021
To:	13th Street NW	Cost:	$6,500

Reconstruction of Ward II — **CEID: 3454**

Facility:	Ward II- 4 Locations	Agency Proj. ID:	
From:		Complete In:	2020
To:	Ward II	Cost:	$1,000

Rehabilitation of Eastern Avenue NE from New Hamphire Ave, NE to Whitter Street NW — **CEID: 3462**

Facility:	Eastern Avenue NE	Agency Proj. ID:	
From:	New Hampshire Ave NE	Complete In:	2021
To:	Whitter Street NW	Cost:	$4,324

Safety Improvements of 22nd and I NW — **CEID: 3505**

Facility:	Pennsylvania Ave. NW	Agency Proj. ID:	
From:	22nd Street NW	Complete In:	2018
To:	I Street	Cost:	$400

Secondary Projects — Study

C Street NE Implementation — **CEID: 3077**

Facility:	C St NE/North Carolina Ave NE	Agency Proj. ID:	
From:	Oklahoma Avenue	Complete In:	2020
To:	14th Street NE	Cost:	$14,500

Florida Avenue Transportation Study — **CEID: 3382**

Facility:	Florida Avenue, NE	Agency Proj. ID:	ZU033A
From:	1St Street, NE	Complete In:	2022
To:	H Street, NE	Cost:	$12,000

Secondary Projects — Operational Program

Livability Program — **CEID: 2888**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

Secondary Projects — Other

Maryland Avenue Pedestrian Safety Project — **CEID: 3075**

Facility:	Maryland Ave. NE	Agency Proj. ID:	
From:	Constitution Avenue	Complete In:	2020
To:	15th Street	Cost:	$18,000

Southeast Boulevard/Barney Circle Environmental Assessment — **CEID: 3511**

Facility:	Southeast Boulevard	Agency Proj. ID:	
From:	Barney Circle	Complete In:	2017
To:	11th St SE	Cost:	$2,000

Bike/Ped Projects — System Expansion

Lincoln Connector Trail — **CEID: 3510**

Facility:	Bladensburg RD SE on west	Agency Proj. ID:	
From:	Via Lincoln to New York Ave	Complete In:	2018
To:		Cost:	$200

Metropolitan Branch Trail — **CEID: 1166**

Facility:		Agency Proj. ID:	
From:		Complete In:	2021
To:		Cost:	$12,500

National Recreational Trails — **CEID: 1170**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$180

Rock Creek Park Trail — **CEID: 1168**

Facility:		Agency Proj. ID:	
From:		Complete In:	2018
To:		Cost:	$10,000

Bike/Ped Projects — System Maintenance

New York Avenue Streetscape & Trail Project — CEID: 3655

Facility:	50 New York Avenue NE	Agency Proj. ID:	
From:	Florida Avenue NE	Complete In:	2023
To:	Bladensburg Avenue NE	Cost:	$27,200

Oxon Run Trail Restoration — CEID: 1465

Facility:		Agency Proj. ID:	
From:		Complete In:	2017
To:		Cost:	$14,000

Reconstruction/Rehabilitation of Superstructure and Substructure Arizona Ave NW — CEID: 3539

Facility:	Pedestrian Bridge and Trail at Arizona Ave NW	Agency Proj. ID:	
From:	Nebraska Ave NW	Complete In:	2018
To:	Galena Ave NW	Cost:	$5,000

Bike/Ped Projects — Operational Program

District-wide Bicycle and Pedestrian Management Program — CEID: 1171

Facility:		Agency Proj. ID:	
From:	Bicycle racks, lanes and bicycle signs	Complete In:	2024
To:		Cost:	$800

Safe Routes to School — CEID: 1352

Facility:	Safe Routes to School	Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$6,000

Bike/Ped Projects — Other

17th Street NW Protected Bike Lane — CEID: 3651

Facility:	17th Street	Agency Proj. ID:	
From:	New Hampshire Avenue	Complete In:	2018
To:	K Street	Cost:	$150

Irving Street NE/NW Protected Bike Lane — CEID: 3653

Facility:	Irving Street	Agency Proj. ID:	
From:	Warder Street	Complete In:	2018
To:	Michigan Avenue	Cost:	$250

K Street NW Bikeway — CEID: 3652

Facility:	K Street	Agency Proj. ID:	
From:	7th Street	Complete In:	2018
To:	1st Street	Cost:	$150

Klingle Trail — CEID: 1122

Facility:	Klingle Road	Agency Proj. ID:	
From:	Woodley Road	Complete In:	2017
To:	Porter Street	Cost:	$11,500

Pennsylvania Avenue SE — CEID: 3654

Facility:	Pennsylvania Avenue SE	Agency Proj. ID:	
From:	2nd Street, Independence Avenue	Complete In:	2018
To:	Barney Circle	Cost:	$250

South Capitol Street Trail — **CEID: 3241**

Facility:	South Capitol Street	Agency Proj. ID:	
From:	Firth Sterling Avenue SE	Complete In:	2019
To:	Southern Avenue Maryland state line	Cost:	$10,000

Bridge Projects — System Expansion

Anacostia Freeway Bridges over Nicholson Street SE — **CEID: 3191**

Facility:	Anacostia Freeway Bridge at Nicholson Street SE	Agency Proj. ID:	
From:		Complete In:	2018
To:		Cost:	$16,500

Bridge Projects — System Maintenance

Monroe Street, NE Bridge over CSX & WMATA — **CEID: 3294**

Facility:	Monroe St.	Agency Proj. ID:	
From:		Complete In:	2019
To:		Cost:	$15,000

Rehabilitation of 14th Street, SW Bridge over Streetcar Terminal — **CEID: 3489**

Facility:	14th Street SW Bridge	Agency Proj. ID:	
From:		Complete In:	2024
To:		Cost:	$6,000

Rehabilitation of 16th St Bridge over Piney Branch Rd, NW (Bridge No. 0022) — **CEID: 3459**

Facility:	16th St Bridge NW	Agency Proj. ID:	
From:		Complete In:	2021
To:	over Piney Branch Rd, NW.	Cost:	$15,000

Rehabilitation of K Street NW Bridge, over Whitehurst Freeway Ramp (Bridge No. 1304) — **CEID: 3458**

Facility:		Agency Proj. ID:	
From:		Complete In:	2026
To:	over Whitehurst Freeway Ramp	Cost:	$7,000

Roadway and Bridge Improvement on Southern Avenue and Winkle Doodle Branch Bridge — **CEID: 2943**

Facility:	Southern Avenue	Agency Proj. ID:	
From:	South Capitol Street	Complete In:	2022
To:	23rd Street	Cost:	$15,000

Tunnel Asset Management — **CEID: 2890**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

Bridge Projects — Study

H Street Bridge over Amtrak — **CEID: 2925**

Facility:		Agency Proj. ID:	
From:	3rd Street NE	Complete In:	2022
To:	North Capitol NE	Cost:	$230,000

Long Bridge Study — **CEID: 2807**

Facility:	Long Bridge	Agency Proj. ID:	
From:	Virginia Interface	Complete In:	2019
To:	12th Street, SW	Cost:	$4,000

Enhancement Projects	Operational Program	
Transportation Alternatives Program		**CEID: 1144**
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$11,200

ITS Projects	System Maintenance	
Traffic Signal LED Replacement		**CEID: 3242**
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$0

ITS Projects	Operational Program	
Traffic Control Center		**CEID: 2555**
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$0
Traffic Operations Improvements Citywide		**CEID: 1151**
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$126,532

ITS Projects	Other	
Construction of DDOT 511 System		**CEID: 3518**
Facility: Citywide	Agency Proj. ID:	
From:	Complete In:	
To:	Cost:	$500

Other Projects	System Expansion	
Arboretum Bridge and Trail		**CEID: 3509**
Facility: Anacostia River Walk Trail east side over river to west side of river ar the Arboretum	Agency Proj. ID:	
From:	Complete In:	2020
To:	Cost:	$1,000

Other Projects	System Maintenance	
Asset Condition Assessment		**CEID: 2549**
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To: District Wide	Cost:	$3,000
Local Sidewalk and Street Improvements Citywide		**CEID: 1158**
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$60,000
Rehabilitation of Anacostia Freeway Bridges over South Capitol Street (Bridge No. 1016 & 1017)		**CEID: 3211**
Facility: Anacostia Freeway over South Capitol Street	Agency Proj. ID:	
From:	Complete In:	2018
To:	Cost:	$18,000

Roadside Improvements Citywide — **CEID: 1157**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$37,955

Roadway Reconstruction Citywide — **CEID: 1150**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

Streetscape — **CEID: 1519**

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:		Cost:	$12,000

Traffic Signal Maintenance — **CEID: 2553**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:	Citywide	Cost:	$0

Other Projects — Study

Cleveland Park Study — **CEID: 3380**

Facility:	Connecticut Ave. NW	Agency Proj. ID:	PM0D7A
From:	Porter Street NW	Complete In:	2019
To:	Macomb Street NW	Cost:	$1,000

Metro Station Walkshed Connections Study — **CEID: 3506**

Facility:	Metro Stations Citywide	Agency Proj. ID:	
From:		Complete In:	2017
To:		Cost:	$200

South Dakota Ave NE and New York Ave NE Interchange Improvement Study — **CEID: 3508**

Facility:	South Dakota Ave.	Agency Proj. ID:	
From:	New York Ave NE	Complete In:	2018
To:	33rd PL NE	Cost:	$400

Walter Reed Campus — **CEID: 3078**

Facility:	Main Drive NW	Agency Proj. ID:	
From:	Georgia Avenue	Complete In:	2020
To:	16th Street NW	Cost:	$6,600

Other Projects — Operational Program

Performance-Based Parking Pricing — **CEID: 1002**

Facility:		Agency Proj. ID:	
From:	Citywide	Complete In:	2018
To:		Cost:	$400

Planning and Management Systems — **CEID: 1155**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$19,900

Safety Improvements — CEID: 1148

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$101,822

Traffic Congestion Mitigation — CEID: 1470

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$1,500

Other Projects — Other

Streetscape of Connecticut Ave. NW from Dupont Circle to California Street — CEID: 3504

Facility:		Agency Proj. ID:	New
From:		Complete In:	2018
To:		Cost:	$1,000

Urban Forestry Program — CEID: 2548

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$60,000

TERMs Projects — Operational Program

Transportation Emissions Reduction Measures — CEID: 1153

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$2,328

Maintenance Projects — System Maintenance

Bloomingdale/LeDroit Park Medium Term Flood Mitigation Project — CEID: 3298

Facility:	Bloomingdale/LeDroit Park	Agency Proj. ID:	
From:		Complete In:	2018
To:		Cost:	$7,500

Bridge Replacement/Rehabilitation Program — CEID: 1143

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$633,739

Citywide Pump Stations Rehab — CEID: 3198

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$1,500

Construction of Fiber Communication Network on Freeways — CEID: 3517

Facility:	Citywide	Agency Proj. ID:	
From:		Complete In:	2019
To:		Cost:	$3,500

Maintenance of Stormwater management / Best Management Ponds — CEID: 2905

Facility:	New York Ave. at South Dakota Ave. & Anacostia Freeway near mile marker 1	Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$750

Normanstone/Fulton Street Culvert & LID — CEID: 3299

Facility:	Normanstone Drive	Agency Proj. ID:	
From:	Fulton STreet	Complete In:	2018
To:	34th Street	Cost:	$2,200

Reconstruction of Kennedy Street NW from 16th St NW to Georgia Ave NW — CEID: 3513

Facility:	Kennedy St NW	Agency Proj. ID:	
From:	16th NW	Complete In:	2017
To:	Georgia Ave	Cost:	$800

Resurfacing Streets and Freeways Citywide — CEID: 1149

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$85,150

Southwest Freeway Bridgeover South Capitol Street — CEID: 3503

Facility:		Agency Proj. ID:	New
From:		Complete In:	2017
To:		Cost:	$2,000

Streetlight Asset Mgmt & Streetlight Construction - Local — CEID: 2557

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$52,000

Streetlight Upgrade — CEID: 3464

Facility:	Citywide	Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$5,000

Systems Maintenance — CEID: 3268

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

Upgrade and Replacement of Overhead Freeway Signs — CEID: 3519

Facility:	Citywide	Agency Proj. ID:	
From:		Complete In:	2018
To:		Cost:	$4,700

Maintenance Projects — Other

Streetlight Asset Mgmt & Streetlight Construction - Federal — CEID: 2589

Facility:		Agency Proj. ID:	
From:	Districtwide	Complete In:	2045
To:	Districtwide	Cost:	$60,000

Transit Projects — System Expansion

16th Street NW Transit Priority Implementation — CEID: 3522

Facility:	16th Street NW	Agency Proj. ID:	
From:	H Street NW	Complete In:	2021
To:	Arkansas Avenue NW	Cost:	$15,000

5303/5304 FTA Program — CEID: 3230

Facility:	Citywide	Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$2,870

DC Circulator New Buses for Replacement and Expansion — CEID: 3233

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

Farragut Station Pedestrian Tunnel — CEID: 1175

Facility:		Agency Proj. ID:	
From:		Complete In:	2030
To:		Cost:	$500

Union Station to Georgetown Streetcar Line — CEID: 3081

Facility:		Agency Proj. ID:	
From:	H Street NE at 3rd St. NE	Complete In:	2026
To:	Wisconsin Avenue under Whitehurst Fwy	Cost:	$348,000

Transit Projects — Operational Program

DC Circulator System Operations — CEID: 3234

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

School Transit Subsidy (District Wide) — CEID: 3236

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

Specialized Transportation Services for the Elderly & Persons with Disabilities — CEID: 1172

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$1,280

Freight Projects — Study

District Freight Plan — CEID: 3005

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

Virginia Avenue Tunnel Project — CEID: 3079

Facility:		Agency Proj. ID:	
From:		Complete In:	2019
To:		Cost:	$0

Freight Projects — Operational Program

Diesel Idle Reduction Program — CEID: 3465

Facility:	Citywide	Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$1,200

Off-Hours Freight Delivery Pilot Project — CEID: 3431

Facility:		Agency Proj. ID:	
From:		Complete In:	2017
To:		Cost:	$300

Planning and Systems Enhancement for Weight Stations — CEID: 3265

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

Safety Projects | **System Maintenance**

On-Call Subsurface Pavement Investigation,Engineering — CEID: 3514

Facility:	Citywide	Agency Proj. ID:	
From:		Complete In:	2017
To:		Cost:	$425

Suburban Maryland

Charles County

Bridge Projects | **System Maintenance**

Poplar Hill Road Bridge over Zekiah Swamp Run — CEID: 3555

Facility:	Poplar Hill Road Bridge	Agency Proj. ID:	
From:	Zekiah Swamp Run	Complete In:	2018
To:		Cost:	$742

Frederick County

Secondary Projects | **System Expansion**

Christopher's Crossing — CEID: 3593

Facility:	Christopher's Crossing	Agency Proj. ID:	
From:	Shookstown Road	Complete In:	2020
To:	Rocky Springs Road	Cost:	$15,000

Christopher's Crossing — CEID: 3594

Facility:	Christopher's Crossing	Agency Proj. ID:	
From:	Walter Martz Road	Complete In:	2021
To:	Thomas Johnson Drive	Cost:	$6,310

Monocacy Blvd & Gashouse Pike - City of Frederick — CEID: 1181

Facility:	Monocacy Blvd	Agency Proj. ID:	
From:	Schifferstadt	Complete In:	2019
To:	Gas House Pike	Cost:	$15,000

Secondary Projects | **System Maintenance**

Various Roads - County Capital Improvement Program — CEID: 2691

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:		Cost:	$26,311

Secondary Projects | **Study**

Shockley Drive/Spectrum Drive Connector — CEID: 3038

Facility:	Shockley Drive/Spectrum Drive Connector	Agency Proj. ID:	
From:	MD 85 Buckeystown Pike	Complete In:	2025
To:	Existing Spectrum Drive	Cost:	$15,000

Bike/Ped Projects — System Expansion

Bikeways & Trails Program - County Capital Improvement Program — CEID: 2692

Facility:		Agency Proj. ID:	
From:		Complete In:	2021
To:		Cost:	$2,512

Bridge Projects — System Maintenance

Various Bridges - County Capital Improvement Program — CEID: 1180

Facility:	Blacks Mill; Lewistown; Ball; Pete Wiles; Hessong Bridge; Reels Mill; Dixon Roads & Gas	Agency Proj. ID:	
From:		Complete In:	2016
To:		Cost:	$10,718

MDOT/Maryland Transit Administration

Enhancement Projects — System Expansion

Camden New Stations — CEID: 3582

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

Penn New Stations — CEID: 3576

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$626,706

Maintenance Projects — System Maintenance

Camden Stations and Parking — CEID: 3581

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$199,260

Camden Train Storage and Maintenance Facilities — CEID: 3584

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$40,173

Penn Stations and Parking — CEID: 3575

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$930,417

Penn Train Storage and Maintenance Facilities — CEID: 3578

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$453,157

Transit Projects — System Expansion

All costs shown in $1,000s

Brunswick Line Extensions — **CEID: 3592**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

Brunswick New Stations — **CEID: 3588**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

Camden Line Extensions — **CEID: 3586**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

Corridor Cities Transitway (CCT) — **CEID: 1649**

Facility:		Agency Proj. ID:	1108
From:	Shady Grove	Complete In:	2021
To:	Metropolitan Grove	Cost:	$545,000

Penn Line Extensions — **CEID: 3580**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$120,520

Purple Line — **CEID: 1133**

Facility:	Purple Line	Agency Proj. ID:	1042
From:	Bethesda	Complete In:	2020
To:	New Carrollton	Cost:	$2,410,000

Silver Spring Transit Center Phase II — **CEID: 1563**

Facility:		Agency Proj. ID:	254
From:		Complete In:	2015
To:		Cost:	$122,211

US 29 Bus Rapid Transit Improvements Project — **CEID: 3423**

Facility:	US 29 BRT	Agency Proj. ID:	
From:	Burtonsville Park and Ride Lot	Complete In:	2020
To:	Silver Spring Transit Center	Cost:	$39,104

Transit Projects — System Maintenance

Brunswick Rail Infrastructure — **CEID: 3589**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$228,185

Brunswick Rolling Stock — **CEID: 3591**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$0

All costs shown in $1,000s

Brunswick Stations and Parking		CEID: 3587
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$348,706

Brunswick Train Storage and Maintenance Facilities		CEID: 3590
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$51,422

Camden Rail Infrastructure		CEID: 3583
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$297,284

Camden Rolling Stock		CEID: 3585
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$0

Large Urban Systems- Capital		CEID: 1267
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$98,195

MARC Locomotive Replacement		CEID: 3573
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$340,690

MARC Northeast Corridor Commission Contribution		CEID: 3570
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$172,204

MARC Railcar Fleet Replacement		CEID: 3574
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$469,904

MARC Rolling Stock Preservation		CEID: 3572
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$31,690

MARC System Preservation		CEID: 3571
Facility:	Agency Proj. ID:	
From:	Complete In:	2045
To:	Cost:	$172,123

Penn Rail Infrastructure — CEID: 3577

Facility:
From:
To:
Agency Proj. ID:
Complete In: 2045
Cost: $2,278,638

Penn Rolling Stock — CEID: 3579

Facility:
From:
To:
Agency Proj. ID:
Complete In: 2045
Cost: $0

Transit Projects — Operational Program

Large Urban Operating — CEID: 3270

Facility:
From:
To:
Agency Proj. ID:
Complete In: 2045
Cost: $155,540

Ridesharing — CEID: 1265

Facility:
From:
To:
Agency Proj. ID: 45
Complete In: 2045
Cost: $24,500

Rural Transit - Operating Assistance — CEID: =867

Facility:
From:
To:
Agency Proj. ID:
Complete In: 2045
Cost: $38,472

Seniors and Individuals with Disabilities — CEID: 3493

Facility:
From:
To: Various
Agency Proj. ID: 0210
Complete In: 2045
Cost: $22,310

Small Urban Systems - Operating Assistance — CEID: 1540

Facility:
From:
To:
Agency Proj. ID:
Complete In: 2045
Cost: $242,256

Transit Projects — Other

Small Urban Systems - Capital — CEID: 1264

Facility:
From:
To:
Agency Proj. ID:
Complete In: 2045
Cost: $128,517

MDOT/Maryland Transportation Authority

Primary Projects — System Expansion

Governor Harry W. Nice Bridge Improvement Project — CEID: 2617

Facility: US 301 Bridge over the Potomac River
From: US 301 Charles County, MD
To: US King George County, VA
Agency Proj. ID:
Complete In: 2023
Cost: $768,600

MDOT/State Highway Administration

Interstate Projects — System Expansion

I-270 at Watkins Mill Road Interchange — **CEID: 1188**

Facility:	I 270	Agency Proj. ID:	
From:	Watkins Mill Road	Complete In:	2021
To:		Cost:	$120,000

I-270 Corridor — **CEID: 1186**

Facility:	I 270	Agency Proj. ID:	
From:	I 495	Complete In:	2025
To:	I 70 /US 40	Cost:	$3,428,000

I-270 Innovative Congestion Management — **CEID: 3564**

Facility:	I 270 /I-270Y	Agency Proj. ID:	
From:	I 70	Complete In:	2019
To:	I 495	Cost:	$113,000

I-70/US 40 at MD 144FA, Meadow Road, and Old National Pike Interchange — **CEID: 2250**

Facility:	I 70 /US 40	Agency Proj. ID:	
From:	MD 144FA /Meadow Road /Old National Pike	Complete In:	2025
To:		Cost:	$33,000

I-70/US 40 Corridor — **CEID: 1187**

Facility:	I 70	Agency Proj. ID:	
From:	Mount Phillip Road	Complete In:	2035
To:	East of MD 144FA	Cost:	$143,000

I-95/I-495 at Greenbelt Metro Station Interchange — **CEID: 1479**

Facility:	I 95 /I 495	Agency Proj. ID:	
From:	Greenbelt Metro Station	Complete In:	2030
To:		Cost:	$196,000

I-95/I-495 Corridor (North and West) — **CEID: 3281**

Facility:	I 95 /I 495	Agency Proj. ID:	
From:	Virginia State line/Potomac River (American Legion Bridge)	Complete In:	2025
To:	Baltimore Washington Parkway	Cost:	$2,011,000

I-95/I-495 Corridor (South and East) — **CEID: 1182**

Facility:	I 95 /I 495	Agency Proj. ID:	
From:	Baltimore Washington Parkway	Complete In:	2025
To:	Virginia State line/Potomac River (Woodrow Wilson Bridge)	Cost:	$2,161,000

Interstate Projects — Operational Program

Transportation Systems Management and Operations (TSM&O) Corridors — **CEID: 3637**

Facility:		Agency Proj. ID:	
From:		Complete In:	2030
To:		Cost:	$350,000

Primary Projects — System Expansion

MD 2/MD 4 Corridor (Calvert County) — **CEID: 1200**

Facility:	MD 2 /MD 4	Agency Proj. ID:	
From:	North of Stoakley Road /Hospital Drive	Complete In:	2040
To:	South of MD 765A	Cost:	$228,000

All costs shown in $1,000s

MD 210 Corridor — **CEID: 1199**

Facility:	MD 210	Agency Proj. ID:	
From:	I 95 /I 495	Complete In:	2040
To:	MD 228	Cost:	$754,000

MD 3 Corridor — **CEID: 1195**

Facility:	MD 3	Agency Proj. ID:	
From:	I 595 /US 50 /US 301	Complete In:	2035
To:	I 97 /MD 32	Cost:	$1,797,000

MD 4 at Suitland Parkway Interchange — **CEID: 3446**

Facility:	MD 4	Agency Proj. ID:	
From:	Suitland Parkway	Complete In:	2020
To:		Cost:	$131,000

MD 4 Corridor (Calvert County/Saint Mary's County) — **CEID: 2246**

Facility:	MD 4	Agency Proj. ID:	
From:	MD 2	Complete In:	2031
To:	MD 235	Cost:	$861,000

MD 4 Corridor (Prince George's County) — **CEID: 1194**

Facility:	MD 4	Agency Proj. ID:	
From:	I 95 /I 495	Complete In:	2040
To:	MD 223	Cost:	$533,000

MD 5 Corridor — **CEID: 1196**

Facility:	MD 5	Agency Proj. ID:	
From:	I 95 /I 495	Complete In:	2030
To:	US 301 (North Junction)	Cost:	$790,000

US 15 at Monocacy Boulevard Interchange — **CEID: =913**

Facility:	US 15	Agency Proj. ID:	
From:	Monocacy Boulevard	Complete In:	2018
To:		Cost:	$61,000

US 15 Corridor (North of Frederick City) — **CEID: 3567**

Facility:	US 15	Agency Proj. ID:	
From:	MD 26	Complete In:	2045
To:	North of Biggs Ford Road	Cost:	$213,000

US 15/US 40 Corridor (Frederick City) — **CEID: 3566**

Facility:	US 15 /US 40	Agency Proj. ID:	
From:	I 70	Complete In:	2030
To:	MD 26	Cost:	$207,000

US 29 Corridor — **CEID: 1197**

Facility:	US 29	Agency Proj. ID:	
From:	Sligo Creek Parkway	Complete In:	2045
To:	Howard County line/Patuxent River	Cost:	$646,000

US 301 Corridor (Bowie) — **CEID: 1619**

Facility:	US 301	Agency Proj. ID:	
From:	I 595 /US 50	Complete In:	2030
To:	North of Mount Oak Road	Cost:	$449,000

US 301 Corridor (Waldorf) — **CEID: 2239**

Facility:	US 301	Agency Proj. ID:	
From:	MD 5 (north junction)	Complete In:	2030
To:	Smallwood Road	Cost:	$199,000

US 301 South Corridor Transportation Study — **CEID: 1004**

Facility:	US 301	Agency Proj. ID:	
From:	Virginia State line/Potomac River (Harry Nice Bridge)	Complete In:	2045
To:	I 595 /US 50	Cost:	$4,644,000

US 50 Corridor — **CEID: 3425**

Facility:	US 50	Agency Proj. ID:	
From:	District of Columbia line	Complete In:	2035
To:	I 95 /I 495	Cost:	$29,000

Secondary Projects — System Expansion

MD 117 Corridor — **CEID: 1203**

Facility:	MD 117	Agency Proj. ID:	
From:	I 270	Complete In:	2030
To:	West of Game Preserve Road	Cost:	$69,000

MD 124 Corridor — **CEID: 1206**

Facility:	MD 124	Agency Proj. ID:	
From:	Midcounty Highway	Complete In:	2035
To:	Warfield Road	Cost:	$129,000

MD 180/Ballenger Creek Pike Corridor — **CEID: 2261**

Facility:	MD 180 /Ballenger Creek Pike	Agency Proj. ID:	
From:	Greenfield Drive	Complete In:	2030
To:	Corporate Drive	Cost:	$170,000

MD 197 Corridor — **CEID: 2253**

Facility:	MD 197	Agency Proj. ID:	
From:	Kenhill Drive	Complete In:	2025
To:	MD 450	Cost:	$94,000

MD 202 Corridor — **CEID: 1190**

Facility:	MD 202	Agency Proj. ID:	
From:	Brightseat Road	Complete In:	2045
To:		Cost:	$24,000

MD 223 Corridor — **CEID: 2248**

Facility:	MD 223	Agency Proj. ID:	
From:	MD 4	Complete In:	2045
To:	Steed Road	Cost:	$120,000

All costs shown in $1,000s

MD 28/MD 198 Corridor — **CEID: 1462**

Facility:	MD 28 Norbeck Road /MD 198	Agency Proj. ID:	
From:	MD 97	Complete In:	2045
To:	I 95	Cost:	$413,000

MD 450 Corridor — **CEID: 1207**

Facility:	MD 450	Agency Proj. ID:	
From:	Stonybrook Drive	Complete In:	2030
To:	MD 3	Cost:	$67,000

MD 85 Corridor — **CEID: 1210**

Facility:	MD 85	Agency Proj. ID:	
From:	English Muffin Way	Complete In:	2035
To:	North of Grove Road	Cost:	$220,000

MD 97 at Brookeville — **CEID: 1213**

Facility:	MD 97	Agency Proj. ID:	
From:	Gold Mine Road	Complete In:	2020
To:	North of Brookeville	Cost:	$52,000

MD 97 at MD 28 Interchange — **CEID: 1211**

Facility:	MD 97	Agency Proj. ID:	
From:	MD 28	Complete In:	2035
To:		Cost:	$155,000

MD 97 at Randolph Road Interchange — **CEID: 1212**

Facility:	MD 97	Agency Proj. ID:	
From:	Randolph Road	Complete In:	2018
To:		Cost:	$76,000

MD 97 Corridor — **CEID: 2618**

Facility:	MD 97	Agency Proj. ID:	
From:	MD 390	Complete In:	2025
To:	MD 192	Cost:	$52,000

Naval Support Activity Bethesda BRAC Improvements — **CEID: 2620**

Facility:	Intersections near Naval Support Activity Bethesda	Agency Proj. ID:	
From:		Complete In:	2022
To:		Cost:	$77,000

US 1 Corridor — **CEID: 1202**

Facility:	US 1	Agency Proj. ID:	
From:	College Avenue	Complete In:	2030
To:	I 95 /I 495	Cost:	$116,000

US 1/MD 201 Corridor — **CEID: 1204**

Facility:	US 1	Agency Proj. ID:	
From:	I 95 /I 495	Complete In:	2045
To:	North of Muirkirk Road	Cost:	$1,034,000

TERMs Projects — Operational Program

Transportation Emissions Reduction Measures — CEID: 1221

Facility:
From:
To:
Agency Proj. ID:
Complete In: 2045
Cost: $108,000

Maintenance Projects — System Maintenance

System Preservation Projects — CEID: 1193

Facility:
From:
To:
Agency Proj. ID:
Complete In: 2045
Cost: $17,273,000

Montgomery County

Secondary Projects — System Expansion

Burtonsville Access Road — CEID: =995

Facility: Burtonsville Access Road
From: MD 198
To: entrance to Burtonsville Shopping Center
Agency Proj. ID: 500500
Complete In: 2025
Cost: $6,900

Century Boulevard — CEID: 3045

Facility: Century Boulevard
From: Current terminus south of Oxbridge Tract
To: Intersection with future Dorsey Mill Road
Agency Proj. ID: 501115
Complete In: 2020
Cost: $15,837

Chapman Avenue Extended — CEID: =947

Facility: Chapman Avenue Extended
From: Randolph Road
To: Old Georgetown Road
Agency Proj. ID: 500719
Complete In: 2016
Cost: $21,363

Clarksburg Transportation Connections — CEID: 3130

Facility: Clarksburg Transportation Connections
From: Snowden Farm Parkway / Little Seneca Parkway/ Brink Rd
To: Ridge Road/Frederick Road/MD 355
Agency Proj. ID: 501315
Complete In: 2020
Cost: $15,000

Dorsey Mill Road Bridge over I-270 — CEID: 1577

Facility: I 270
From: Century Boulevard
To: Milestone Center Drive
Agency Proj. ID:
Complete In: 2020
Cost: $9,100

Middlebrook Road Extended Widening — CEID: 1229

Facility: Middlebrook Road Ext.
From: MD 355
To: M Midcounty Highway
Agency Proj. ID:
Complete In: 2025
Cost: $16,200

Montrose Parkway East — CEID: 1492

Facility: Montrose Parkway East
From: Easter limits of MD 355/ Montrose Interchange
To: MD Veirs Mill Road / Parklawn Drive
Agency Proj. ID: 500717
Complete In: 2025
Cost: $139,900

Platt Ridge Drive Extended — CEID: 2912

Facility: Platt Ridge Drive
From: terminus at Jones Bridge Road
To: Montrose Driveway
Agency Proj. ID: 501200
Complete In: 2018
Cost: $4,300

Secondary Projects — System Maintenance

MD 355 at Randolph Road/Montrose Parkway (Montrose Parkway East) — **CEID: 1217**

Facility:	Montrose Parkway	Agency Proj. ID:	
From:	MD 355	Complete In:	2024
To:	MD 586	Cost:	$140,000

Secondary Projects — Study

Goshen Road South — **CEID: 1226**

Facility:	Goshen Road South	Agency Proj. ID:	501107
From:	South of Girard Street	Complete In:	2025
To:	North of Warfield Road	Cost:	$128,630

Secondary Projects — Operational Program

MidCounty Highway: MD 27 to MIddlebrook Road — **CEID: 1245**

Facility:	Midcounty Highway Extended	Agency Proj. ID:	
From:	MD 27 Ridge Road	Complete In:	2025
To:	Middlebrook Road	Cost:	$202,600

Snouffer School Road North — **CEID: 1236**

Facility:	Snouffer School Road	Agency Proj. ID:	
From:	MD 124 Centerway Road	Complete In:	2016
To:	Alliston Hollow Way	Cost:	$12,099

Snouffer School Road: Sweet Autumn Dr. to Centerway Road — **CEID: 3141**

Facility:	Snouffer School Road: Sweet Autumn Drive to Centerway Rd	Agency Proj. ID:	
From:	Sweet Autumn Drive	Complete In:	2018
To:	Centerway Road	Cost:	$23,710

Bike/Ped Projects — System Expansion

Bethesda CBD Streetscape — **CEID: 3043**

Facility:	Bethesda CBD Streetscape	Agency Proj. ID:	500102
From:		Complete In:	2019
To:	Bethesda CBD	Cost:	$8,214

Capital Crescent Trail — **CEID: 3122**

Facility:	Capital Crescent Trail	Agency Proj. ID:	501316
From:	Elm Street Park in Bethesda	Complete In:	2022
To:	Silver Spring	Cost:	$81,200

Falls Road East Side Hiker/Biker Path — **CEID: 1586**

Facility:	Falls Road Bikeway - East Side	Agency Proj. ID:	500905
From:	River Road	Complete In:	2020
To:	Dunster Road	Cost:	$22,340

Frederick Road Bike Path: Stringtown to Milestone Manor — **CEID: 3102**

Facility:	Frederick Road (MD 355)	Agency Proj. ID:	501118
From:	Stringtown Road	Complete In:	2019
To:	Milestone Manor Lane	Cost:	$7,193

MacArthur Boulevard Bikeway Improvements — **CEID: 2827**

Facility:	MacArthur Boulevard	Agency Proj. ID:	500718
From:	Oberlin Avenue	Complete In:	2027
To:	DC Line	Cost:	$17,500

MD 355 Multimodal Crossing — **CEID: 2817**

Facility:	MD 355 Medical Center Metrorail Station/NIH	Agency Proj. ID:	501209
From:	MD 355 Medical Center Metrorail Station/NIH	Complete In:	2019
To:	Walter Reed National Military Medical Center (WRNMMC)	Cost:	$73,000

Metropolitan Branch Trail — **CEID: 3042**

Facility:	Metropolitan Branch Trail	Agency Proj. ID:	501110
From:	Existing trail end in Takoma Park	Complete In:	2018
To:	Silver Spring Transit Center	Cost:	$12,147

Needwood Road Bikepath — **CEID: 3125**

Facility:	Needwood Road Bikepath	Agency Proj. ID:	501304
From:	Deer Lake Road	Complete In:	2018
To:	MD Muncaster Mill Road	Cost:	$4,200

Seven Locks Bikeway & Safety Improvements — **CEID: 3126**

Facility:	Seven Locks BIkeway & Safety Improvements	Agency Proj. ID:	501303
From:	Montrose Road	Complete In:	2025
To:	Bradley Boulevard	Cost:	$27,000

Bike/Ped Projects — System Maintenance

Sidewalk & Infrastructure Revitalization — **CEID: 3100**

Facility:		Agency Proj. ID:	508182
From:		Complete In:	2022
To:	Countywide	Cost:	$53,400

Bike/Ped Projects — Operational Program

Bikeway Program - Minor Projects — **CEID: 1239**

Facility:	Bikeway Program - Minor Projects	Agency Proj. ID:	507596
From:	countywide	Complete In:	2025
To:		Cost:	$5,100

Sidewalk Program - Minor Projects — **CEID: 1240**

Facility:	Sidewalk Program - Minor Projects	Agency Proj. ID:	506747
From:	countywide	Complete In:	
To:		Cost:	$17,775

Transportation Improvements for Schools — **CEID: 3407**

Facility:	Various	Agency Proj. ID:	P509036
From:		Complete In:	2020
To:	Various	Cost:	$1,775

Bike/Ped Projects — Other

Bicycle Pedestrian Priority Area Improvements — **CEID: 3408**

Facility:		Agency Proj. ID:	P501532
From:		Complete In:	2020
To:		Cost:	$5,375

Flower Avenue Sidewalk — **CEID: 3047**

Facility:	Flower Avenue	Agency Proj. ID:	501206
From:	Piney Branch Road	Complete In:	2018
To:	Carroll Avenue	Cost:	$200

MD 355 Sidewalk (Hyattstown) — **CEID: 3041**

Facility:	MD 355	Agency Proj. ID:	501104
From:	Hyattstown Mill Road	Complete In:	2017
To:	Montgomery County / Frederick County Line	Cost:	$2,180

Pedestrian Safety Program — **CEID: 1444**

Facility:	Pedestrian Safety Program	Agency Proj. ID:	500333
From:		Complete In:	
To:	Countywide	Cost:	$16,312

Bridge Projects — System Maintenance

Beach Drive Bridge M-PK-24001 — **CEID: 2994**

Facility:	Beach Drive Bridge	Agency Proj. ID:	509132
From:	Over Silver Creek	Complete In:	
To:		Cost:	$2,000

Bridge Renovation — **CEID: 3097**

Facility:	County-wide	Agency Proj. ID:	509753
From:	County-wide	Complete In:	2025
To:	County-wide	Cost:	$19,000

Brink Road Bridge M-0064001 — **CEID: 2995**

Facility:	Brink Road Bridge	Agency Proj. ID:	509132
From:	Over Great Seneca Creek	Complete In:	2014
To:	Over Great Seneca Creek	Cost:	$1,500

Dennis Avenue Bridge Replacement M-0194 — **CEID: 3569**

Facility:	Dennis Avenue Bridge	Agency Proj. ID:	501701
From:	Tributary to Sligo Creek	Complete In:	2024
To:		Cost:	$5,610

Elmhirst Parkway Bridge M-PK-13001 — **CEID: 2997**

Facility:	Elmhirst Parkway Bridge	Agency Proj. ID:	509132
From:		Complete In:	2015
To:	Over tributary to Rock Creek	Cost:	$1,965

Garrett Park Road Bridge M-PK-04001 — **CEID: 2998**

Facility:	Garrett Park Road Bridge M-PK-04001	Agency Proj. ID:	509132
From:		Complete In:	
To:	Over Rock Creek	Cost:	$2,000

Gold Mine Road Bridge M-0096001 — **CEID: 2999**

Facility:	Gold Mine Road Bridge M-0096001	Agency Proj. ID:	509132
From:		Complete In:	2018
To:	Over Hawlings River	Cost:	$4,433

Lyttonsville Bridge — **CEID: 3406**

Facility:	Bridge over Georgetown Branch / Interim Capital Crescent Trail	Agency Proj. ID:	P501421
From:		Complete In:	2017
To:		Cost:	$2,500

Park Valley Road Bridge M-PK-03001 — **CEID: 3000**

Facility:		Agency Proj. ID:	509132
From:		Complete In:	2018
To:	Over Sligo Creek	Cost:	$3,950

Piney Meetinghouse Road Bridge M-0021001 — **CEID: 3001**

Facility:	Piney Meetinghouse Road Bridge M-0021001	Agency Proj. ID:	509132
From:		Complete In:	2018
To:	Over Watts Branch	Cost:	$4,025

Valley Road Bridge M-0111001 — **CEID: 3002**

Facility:	Valley Road Bridge M-0111001	Agency Proj. ID:	509132
From:		Complete In:	2017
To:	Over Booze Creek	Cost:	$3,375

Enhancement Projects — System Expansion

Silver Spring Green Trail — **CEID: 1242**

Facility:	Silver Spring Green Trail	Agency Proj. ID:	509975
From:	Silver Spring Metro Station	Complete In:	2022
To:	Sligo Creek Hiker-Biker Trail	Cost:	$2,000

ITS Projects — System Maintenance

Traffic Signal System Modernization — **CEID: 1620**

Facility:	Traffic Signal System Modernization	Agency Proj. ID:	500704
From:		Complete In:	2016
To:		Cost:	$35,897

ITS Projects — Operational Program

Advanced Transportation Management System — **CEID: 1237**

Facility:	Advanced Transportation Management System	Agency Proj. ID:	509399
From:	Countywide	Complete In:	2022
To:	Countywide	Cost:	$60,700

Other Projects — System Expansion

East Gude Drive Roadway Improvements — **CEID: 3128**

Facility:	East Gude Drive Roadway Improvements	Agency Proj. ID:	501309
From:	Crabbs Branch Way	Complete In:	2021
To:	Southlawn Drive	Cost:	$6,027

White Flint District East - Transportation — **CEID: 3049**

Facility:		Agency Proj. ID:	501204
From:		Complete In:	2020
To:	White Flint East	Cost:	$29,400

White Flint District West: Transportation & Workaround — **CEID: 3050**

Facility:		Agency Proj. ID:	501116
From:		Complete In:	2025
To:	White Flint	Cost:	$71,100

Other Projects — Study

White Flint Traffic Analysis and Mitigation — **CEID: 3051**

Facility:	White Flint Sector Plan Area & Surrounding Area	Agency Proj. ID:	501202
From:		Complete In:	2022
To:	White Flint Sector Plan Area & Surrounding Area	Cost:	$1,949

Other Projects — Operational Program

Traffic Signals — **CEID: 3143**

Facility:	Countywide	Agency Proj. ID:	507154
From:		Complete In:	
To:	Countywide	Cost:	$35,106

Other Projects — Other

Colesville Depot — **CEID: 3098**

Facility:		Agency Proj. ID:	500709
From:		Complete In:	2017
To:	Cape May Road	Cost:	$10,414

Intersection & Spot Improvements — **CEID: 3105**

Facility:	Intersection and Spot Improvements	Agency Proj. ID:	507017
From:		Complete In:	
To:	Countywide	Cost:	$8,904

Neighborhood Traffic Calming — **CEID: 3106**

Facility:	Residential neighborhoods County-wide	Agency Proj. ID:	509523
From:		Complete In:	2022
To:	Residential Neighborhoods County-wide	Cost:	$2,631

Seminary Road Intersection Improvement — **CEID: 3129**

Facility:	Seminary Road Intersection Improvement	Agency Proj. ID:	501307
From:	Brookeville Road/Seminary Place Intersection	Complete In:	2020
To:	LInden Lane/Second Avenue Intersection	Cost:	$7,300

Streetlight Enhancements - CBD /Town Center — **CEID: 3107**

Facility:	Streetlight Enhancements - CBD / Town Center	Agency Proj. ID:	500512
From:		Complete In:	2022
To:	CBDs and Town Centers	Cost:	$4,400

Maintenance Projects — System Maintenance

Bridge Preservation Program — **CEID: 3096**

Facility:	County-wide	Agency Proj. ID:	500313
From:		Complete In:	
To:	County-wide	Cost:	$8,779

Resurfacing: Primary/Arterial — **CEID: 3099**

Facility:	County-wide	Agency Proj. ID:	508527
From:		Complete In:	2022
To:	County-wide	Cost:	$50,800

Transit Park and Ride Lot Renovations — **CEID: 3101**

Facility:		Agency Proj. ID:	500534
From:		Complete In:	2019
To:	Transit Park and Ride Lot Renovations	Cost:	$3,000

Transit Projects — System Expansion

MD 650 New Hampshire Avenue BRT — **CEID: 3672**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$285,000

North Bethesda Transitway Bus Rapid Transit (BRT) Project — **CEID: 3663**

Facility:	Rock Spring Drive/Old Georgetown Road	Agency Proj. ID:	CIP 501318
From:	Montgomery Mall Transit Center	Complete In:	2035
To:	White Flint Metrorail Station or Grosvenor Metrorail Station	Cost:	$115,150

Olney Transit Center — **CEID: 1249**

Facility:		Agency Proj. ID:	
From:	MD 108 adjacent to or north of MD 108	Complete In:	2020
To:		Cost:	$1,000

Randolph Road Corridor Bus Rapid Transit (BRT) Project — **CEID: 3662**

Facility:	Randolph Road BRT	Agency Proj. ID:	CIP 501318
From:	US 29	Complete In:	2040
To:	MD 355	Cost:	$102,000

Veirs Mill Bus Rapid Transit — **CEID: 3103**

Facility:	Veirs Mill Road	Agency Proj. ID:	
From:	Wheaton Metrorail Station	Complete In:	2017
To:	Rockville Metrorail Station	Cost:	$6,000

Transit Projects — System Maintenance

ADA Compliance Transportation Access — **CEID: 1252**

Facility:	ADA Compliance Transportation Access	Agency Proj. ID:	509325
From:	Countywide	Complete In:	
To:		Cost:	$9,150

Bus Stop Improvement Program — **CEID: 1255**

Facility:	Bus Stop Improvement Program	Agency Proj. ID:	507658
From:	countywide	Complete In:	2023
To:		Cost:	$5,100

Low or No Emissions FTA Electric Bus grant — **CEID: 3595**

Facility:	Silver Spring Depot Charging Stations	Agency Proj. ID:	
From:		Complete In:	2020
To:		Cost:	$4,395

RideOn Bus Fleet — **CEID: 1257**

Facility:		Agency Proj. ID:	500821
From:	Countywide	Complete In:	2025
To:	County-wide	Cost:	$149,500

Transit Projects — Study

Countywide BRT Study — **CEID: 3053**

Facility:		Agency Proj. ID:	
From:		Complete In:	2025
To:	Countywide	Cost:	$1,000

MD 355 Bus Rapid Transit Study — **CEID: 3424**

Facility:	MD 355	Agency Proj. ID:	
From:	MD 410	Complete In:	2040
To:	Redgrave Place	Cost:	$1,080,000

Transit Projects — Operational Program

Bethesda Bikeway and Pedestrian Facilities — **CEID: 1553**

Facility:	Bethesda Bikeway and Pedestrian Facilities	Agency Proj. ID:	500119
From:	Bethesda CBD	Complete In:	2018
To:		Cost:	$5,200

Veirs Mill Road Bus Enhancement — **CEID: 1253**

Facility:	Veirs Mill Road	Agency Proj. ID:	
From:	Rockville	Complete In:	2015
To:	Wheaton	Cost:	$15,000

Transit Projects — Other

Bethesda Metro South Entrance — **CEID: 2726**

Facility:	Bethesda Metro	Agency Proj. ID:	500929
From:		Complete In:	2022
To:	Bethesda Metro	Cost:	$110,200

Montgomery Mall Transit Center — **CEID: 1529**

Facility:	Montgomery Mall Transit Center	Agency Proj. ID:	500714
From:	Montgomery Mall	Complete In:	2016
To:		Cost:	$1,342

Prince George's County

Primary Projects — System Expansion

Contee Road Reconstruction — **CEID: 2619**

Facility:	Contee Road	Agency Proj. ID:	
From:	US 1	Complete In:	
To:	Old Gunpowder Road	Cost:	$18,835

Secondary Projects — System Expansion

Addison Road — **CEID: 1268**

Facility:	Addison Road	Agency Proj. ID:	
From:	MD 214	Complete In:	2024
To:	Walker Mill Road	Cost:	$20,981

All costs shown in $1,000s

Brandywine Road — **CEID: 1273**

Facility:	Brandywine Road	Agency Proj. ID:	
From:	MD 223 Piscataway Road north of	Complete In:	2015
To:	Thrift Road	Cost:	$960

Brinkley Road — **CEID: 1274**

Facility:	Brinkley Road	Agency Proj. ID:	
From:	MD 414 St. Barnabas Road	Complete In:	2030
To:	MD Allentown Road	Cost:	$14,200

Brooks Drive — **CEID: 1275**

Facility:	Brooks Drive Extended	Agency Proj. ID:	
From:	Marlboro Pike	Complete In:	2020
To:	Rollins Avenue	Cost:	$3,140

Campus Way North — **CEID: 1277**

Facility:	Campus Way North	Agency Proj. ID:	
From:	Lake Arbor Way	Complete In:	2020
To:	Evarts Drive	Cost:	$3,780

Cherry Hill Road — **CEID: 1278**

Facility:	Cherry Hill Road	Agency Proj. ID:	
From:	Montgomery County line	Complete In:	2024
To:	US 1 Baltimore Avenue	Cost:	$13,322

Church Road — **CEID: 1279**

Facility:	Church Road	Agency Proj. ID:	
From:	Woodmore Road	Complete In:	2024
To:	MD 214 Central Avenue	Cost:	$9,448

Columbia Park Road — **CEID: 1280**

Facility:	Columbia Park Road	Agency Proj. ID:	
From:	US 50	Complete In:	2020
To:	Columbia Terrace	Cost:	$1,370

Columbia Park Road — **CEID: 1313**

Facility:	US 50 Columbia Park Road Ramps	Agency Proj. ID:	
From:	WB ramp to Columbia Park Rd	Complete In:	2025
To:		Cost:	$64,200

Contee Road — **CEID: 1281**

Facility:	Contee Road	Agency Proj. ID:	
From:	US 1 Baltimore Avenue	Complete In:	2019
To:	Old Gunpowder Road	Cost:	$24,512

Dangerfield Road — **CEID: 1282**

Facility:	Dangerfield Road	Agency Proj. ID:	
From:	Cheltenham Avenue	Complete In:	2020
To:	MD Woodyard Road	Cost:	$3,700

Dower House Road — **CEID: 1283**

Facility:	Dower House Road	Agency Proj. ID:	
From:	MD 223 Woodyard Road	Complete In:	2020
To:	MD Pennsylvania Avenue	Cost:	$40,900

Fisher road — **CEID: 1284**

Facility:	Fisher road	Agency Proj. ID:	
From:	Brinkley Road	Complete In:	2025
To:	Holton Lane	Cost:	$2,300

Forbes Boulevard — **CEID: 1285**

Facility:	Forbes Boulevard Extended	Agency Proj. ID:	
From:	south of Amtrak	Complete In:	2020
To:	MD Greenbelt Road	Cost:	$2,770

Forestville Road — **CEID: 1286**

Facility:	Forestville Road	Agency Proj. ID:	
From:	Rena Road	Complete In:	2014
To:	I Ramps @ Forestville Road	Cost:	$2,000

Fort Washington Road — **CEID: 1287**

Facility:	Fort Washington Road	Agency Proj. ID:	
From:	Riverview road	Complete In:	2025
To:	MD Indian Head Highway	Cost:	$3,500

Good Luck Road — **CEID: 1288**

Facility:	Good Luck Road	Agency Proj. ID:	
From:	MD 201 Kenliworth Avenue east of	Complete In:	2020
To:	MD Greenbelt Road	Cost:	$9,760

Hill Road — **CEID: 1290**

Facility:	Hill Road	Agency Proj. ID:	
From:	MD 214 Central Avenue	Complete In:	2018
To:	Sheriff Road	Cost:	$7,134

Iverson St. — **CEID: 1015**

Facility:	Iverson St. Extended	Agency Proj. ID:	
From:	Wheeler Road	Complete In:	2018
To:	19th Avenue	Cost:	

Livingston Road and Bridge — **CEID: 1291**

Facility:	Livingston Road	Agency Proj. ID:	
From:	MD 210 Indian Head Highway at Eastover	Complete In:	2024
To:	MD Indian Head Highway at Kerby Hill Road	Cost:	$3,350

Lottsford Vista Road — **CEID: 1292**

Facility:	Lottsford Vista Road	Agency Proj. ID:	
From:	MD 704 ML King Jr Highway	Complete In:	2015
To:	Lottsford Road	Cost:	$10,150

Metzerott Road			CEID: 1295
Facility:	Metzerott Road	Agency Proj. ID:	
From:	MD 650 New Hampshire Avenue	Complete In:	2020
To:	MD University Boulevard	Cost:	$8,520

Murkirk Road			CEID: 1296
Facility:	Muirkirk Road	Agency Proj. ID:	
From:	US 1 Baltimore Avenue west of	Complete In:	2020
To:	Odell Road	Cost:	$6,440

Oak Grove and Leeland Roads			CEID: 1297
Facility:	Oak Grove and Leeland Roads	Agency Proj. ID:	
From:	MD 193 Watkins Park Road	Complete In:	2020
To:	US Robert Crain Highway	Cost:	$6,450

Old Alexandria Ferry Road			CEID: 1298
Facility:	Old Alexandria Ferry Road	Agency Proj. ID:	
From:	MD 223 Woodyard Road	Complete In:	2020
To:	MD Branch Avenue	Cost:	$3,080

Old Branch Avenue			CEID: 1299
Facility:	Old Branch Avenue	Agency Proj. ID:	
From:	MD 223 Piscataway Road north of	Complete In:	2020
To:	Allentown Road	Cost:	$5,240

Old Fort Road			CEID: 1533
Facility:	Old Fort Road Extended	Agency Proj. ID:	
From:	MD 223 Piscataway Road	Complete In:	2020
To:	Old Fort Road	Cost:	$6,500

Old Gunpowder Road			CEID: 1300
Facility:	Old Gunpowder Road	Agency Proj. ID:	
From:	Powder Mill Road	Complete In:	2018
To:	MD Sandy Springs Road	Cost:	$17,764

Presidential Parkway			CEID: 1324
Facility:	Presidential Parkway	Agency Proj. ID:	
From:	Suitland Parkway	Complete In:	2025
To:	Melwood Road	Cost:	$12,000

Ritchie Road/Forestville Road			CEID: 1302
Facility:	Ritchie Road/Forestville Road	Agency Proj. ID:	
From:	Ritchie Marlboro Rd	Complete In:	2020
To:	MD Pennsylvania Avenue	Cost:	$22,500

Ritchie-Marlboro Road			CEID: 2623
Facility:	Ritchie Marlboro Road	Agency Proj. ID:	
From:	White House Road	Complete In:	2025
To:	Old Marlboro Pike	Cost:	$28,974

All costs shown in $1,000s

Rollins Avenue			CEID: 1303
Facility:	Rollins Avenue	Agency Proj. ID:	
From:	MD 214 Central Avenue	Complete In:	2020
To:	Walker Mill Road	Cost:	$7,380

Rosaryville Road			CEID: 1304
Facility:	Rosaryville Road	Agency Proj. ID:	
From:	US 301 Robert Crain Highway	Complete In:	2020
To:	MD Woodyard Road	Cost:	$5,090

Spine Road			CEID: 1305
Facility:	Spine Road	Agency Proj. ID:	
From:	MD/US Branch Avenue	Complete In:	2020
To:	MD Brandywine Road	Cost:	$11,000

Springfield Road			CEID: 1306
Facility:	Springfield Road	Agency Proj. ID:	
From:	MD 546 Lanham-Severn Road	Complete In:	2020
To:	Good Luck Road	Cost:	$1,460

Suitland Parkway			CEID: 1307
Facility:	Suitland Parkway	Agency Proj. ID:	
From:	interchange at Rena/Forestville Roads	Complete In:	2025
To:		Cost:	$2,830

Suitland Road			CEID: 1308
Facility:	Suitland Road	Agency Proj. ID:	
From:	MD 337 Allentown Road	Complete In:	2018
To:	MD Silver Hill Road	Cost:	$13,587

Sunnyside Avenue			CEID: 1309
Facility:	Sunnyside Avenue	Agency Proj. ID:	
From:	US 1 Baltimore Avenue	Complete In:	2020
To:	MD Kenliworth Avenue	Cost:	$2,500

Surratts Road			CEID: 1310
Facility:	Surratts Road	Agency Proj. ID:	
From:	Beverly Avenue	Complete In:	2012
To:	Brandywine Road	Cost:	$15,470

Temple Hill Road			CEID: 1311
Facility:	Temple Hill Road	Agency Proj. ID:	
From:	MD 223 Piscataway Road	Complete In:	2020
To:	MD St. Barnabas Road	Cost:	$10,310

Van Dusen Road			CEID: 1314
Facility:	Van Dusen Road	Agency Proj. ID:	
From:	Contee Road	Complete In:	2015
To:	MD Sandy Springs Road	Cost:	$21,200

Walker Mill Road — **CEID: 1316**

Facility:	Walker Mill Road Extended	Agency Proj. ID:	
From:	Silver Hill Road Extended	Complete In:	2020
To:	I	Cost:	$20,100

Wheeler Road — **CEID: 1317**

Facility:	Wheeler Road	Agency Proj. ID:	
From:	MD 414 St. Barnabas Road	Complete In:	2020
To:	District of Columbia limits	Cost:	$3,460

White House Road — **CEID: 1318**

Facility:	White House Road	Agency Proj. ID:	
From:	Ritchie-Marlboro Road	Complete In:	2020
To:	MD Largo-Landover Road	Cost:	$14,200

Whitfield Chapel Road — **CEID: 1319**

Facility:	Whitfield Chapel Road	Agency Proj. ID:	
From:	MD 450 Annapolis Road	Complete In:	2020
To:	Ardwick-Ardmore Road	Cost:	$3,334

Widen Karen Boulevard from Walker Mill Road to Central Avenue (MD 214) — **CEID: 3438**

Facility:	Karen Boulevard	Agency Proj. ID:	
From:	Walker Mill Road	Complete In:	2020
To:	MD 214 Central Avenue	Cost:	$0

Widen Westphalia Road — **CEID: 2624**

Facility:	Westphalia Road	Agency Proj. ID:	
From:	MD 4 Pennsylvania Avenue	Complete In:	
To:	Ritchie Malboro Road	Cost:	$16,607

Woodyard Road — **CEID: 1294**

Facility:	MD 223 Woodyard Road	Agency Proj. ID:	
From:	Rosaryville Road	Complete In:	2020
To:	Dower House Road	Cost:	$2,800

Secondary Projects — System Maintenance

Auth Road — **CEID: 2736**

Facility:	Auth Road	Agency Proj. ID:	
From:	Henderson Way	Complete In:	2024
To:	MD Allentown Road	Cost:	$16,950

Montgomery Road Improvments — **CEID: 2734**

Facility:	Montgomery Road	Agency Proj. ID:	
From:	Powder Mill Road	Complete In:	
To:	US 1	Cost:	

Oxon Hill Road — **CEID: 2257**

Facility:	Oxon Hill Road	Agency Proj. ID:	
From:	National Harbor Ent.	Complete In:	2014
To:	MD At the Livingston Sq.Shopping Center	Cost:	$20,944

Rhode Island Avenue — **CEID: 1301**

Facility:	Rhode Island Avenue	Agency Proj. ID:	
From:	MD 193 University Boulevard	Complete In:	2024
To:	US 1 Baltimore Avenue	Cost:	$11,327

Traffic Congestion Improvemets — **CEID: 2745**

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:	various locations	Cost:	$19,000

Secondary Projects — Operational Program

Allentown Road Relocated — **CEID: 1270**

Facility:	Allentown Road Relocated	Agency Proj. ID:	
From:	MD 210 Indian Head Highway	Complete In:	2025
To:	Brinkley Road	Cost:	$9,090

Ardwick-Ardmore Road — **CEID: 1320**

Facility:	Ardwick-Ardmore Road	Agency Proj. ID:	
From:	MD 704	Complete In:	2015
To:	St. Josephs Drive	Cost:	$10,400

Bowie Race Track Road — **CEID: 1272**

Facility:	Bowie Race Track Road	Agency Proj. ID:	
From:	MD 450 Annapolis Road	Complete In:	2015
To:	Old Chapel Road	Cost:	$5,670

Urban Projects — System Maintenance

NEw Carrollton Transit Oriented Development Infrastrucure — **CEID: 3415**

Facility:	Various locations County-wide	Agency Proj. ID:	
From:		Complete In:	2020
To:	various locations	Cost:	$36,700

Bike/Ped Projects — System Maintenance

School access project — **CEID: 3058**

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:	various locations	Cost:	$6,184

Bike/Ped Projects — Operational Program

Pedestrian Safety Improvements — **CEID: 3410**

Facility:	Various locations County-wide	Agency Proj. ID:	
From:		Complete In:	
To:	various locations	Cost:	$43,609

Bridge Projects — System Expansion

Governor Bridge Road — **CEID: 1425**

Facility:	Governor Bridge Road	Agency Proj. ID:	
From:	US 301	Complete In:	2021
To:	Anne Arundel County	Cost:	$5,890

Bridge Projects — System Maintenance

All costs shown in $1,000s

Brandywine Road Bridge Replacement — CEID: 2605

Facility:	Brandywine Road Bridge	Agency Proj. ID:	
From:	North side of Piscataway Creek	Complete In:	2020
To:	South side of Piscataway Creek	Cost:	$5,907

Bridge Rehabilitation, Federal Aid — CEID: 2600

Facility:		Agency Proj. ID:	
From:		Complete In:	2023
To:	various locations	Cost:	$10,000

Bridge Replacement - Governor Bridge Road — CEID: 3638

Facility:	Over Patuxant River	Agency Proj. ID:	
From:	East bank of river	Complete In:	
To:	West bank of river	Cost:	$5,890

Bridge Replacement - Oxon Hill Road — CEID: 2866

Facility:		Agency Proj. ID:	
From:		Complete In:	2021
To:	Over Henson Creek	Cost:	$5,524

Bridge Replacement - Temple Hill Road — CEID: 3116

Facility:		Agency Proj. ID:	
From:		Complete In:	2019
To:	Over Pea HIll Branch	Cost:	$6,280

Bridge Replacement -Cherry Hill Road — CEID: 3639

Facility:	Over Paint Branch	Agency Proj. ID:	
From:		Complete In:	2021
To:	Over Paint Branch	Cost:	$9,550

Commo Road Bridge Replacement — CEID: 3056

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:	Over Piscataway Creek	Cost:	$2,693

Sunnyside Avenue Bridge Replacement — CEID: 2608

Facility:	Sunnyside Avenue Bridge	Agency Proj. ID:	
From:	west side of Indian Creek	Complete In:	2019
To:	east side of Indian Creek	Cost:	$12,382

Enhancement Projects — System Maintenance

County Revitalization & Restoration 2 — CEID: 3133

Facility:	Various locations County-wide	Agency Proj. ID:	
From:		Complete In:	2021
To:	various locations county-wide	Cost:	$9,470

Enhancement Projects — Operational Program

Green Street Improvements — CEID: 3057

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:	various locations	Cost:	$11,810

Planning and site Acquisition 2 — **CEID: 3411**

Facility:	various locations	Agency Proj. ID:	
From:		Complete In:	2020
To:	various locations	Cost:	$2,800

Transportation Enhancements 2 — **CEID: 3414**

Facility:	Various locations County-wide	Agency Proj. ID:	
From:		Complete In:	2020
To:	various locations	Cost:	$13,176

Other Projects — Study

Standard Details/Drawings for Low-Cost Bridge/Culvert Structures — **CEID: 3495**

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:	Prince George's County	Cost:	$100

Other Projects — Other

Developer Contribution Projects — **CEID: 2738**

Facility:		Agency Proj. ID:	
From:		Complete In:	2024
To:	various locations	Cost:	$23,144

Maintenance Projects — System Maintenance

Curb and Road Rehabilitation I & II — **CEID: 2737**

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:	varoius locations	Cost:	$115,761

Maintenance Projects — Operational Program

ADA Right of Way Modifications — **CEID: 3115**

Facility:		Agency Proj. ID:	
From:		Complete In:	2024
To:	various locations	Cost:	$5,325

Transit Projects — Operational Program

Bus Mass Transit/Metro Access 2 — **CEID: 2891**

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:	County wide	Cost:	$8,247

Safety Projects — System Maintenance

Street Lights and Traffic Signals 2 — **CEID: 3413**

Facility:	Various locations County-wide	Agency Proj. ID:	
From:		Complete In:	
To:	various locations	Cost:	$29,295

Northern Virginia

VDOT

Interstate Projects — System Expansion

All costs shown in $1,000s

395 Express Lanes Project in Northern Virginia			CEID: 3525
Facility:	I 395 HOV Lanes	Agency Proj. ID:	
From:	Turkeycock Run near Duke Street	Complete In:	2019
To:	vicinity of Eads Street, Arlington County	Cost:	$220,000

Boundary Chanel Drive Modifications			CEID: 3093
Facility:	Boundary Channel Drive	Agency Proj. ID:	
From:	I 395 Shirley Highway	Complete In:	2020
To:	Old Jefferson Davis Hwy & N. Jefferson Davis	Cost:	$8,000

DAAH/I-495 Interchange Flyover Ramp Relocation (Phase IV DAAH)			CEID: 3186
Facility:	I 495	Agency Proj. ID:	
From:	EB Dulles Airport Access Highway (DAAH) - Inner Lanes	Complete In:	2030
To:	I NB GP Lanes	Cost:	$28,000

Dulles Airport Access Road			CEID: 1965
Facility:		Agency Proj. ID:	
From:	Dulles Airport	Complete In:	2030
To:	VA	Cost:	$40,000

Dulles Greenway EB Transition			CEID: 3671
Facility:	267 Dulles Toll Road	Agency Proj. ID:	
From:	Dulles Greenway/Dulles Toll Road Merge	Complete In:	2019
To:	Centreville Road	Cost:	$25,000

Dulles Toll Road Ramp to Greensboro Drive Extension			CEID: 3153
Facility:		Agency Proj. ID:	
From:	VA 267 Dulles Toll Road	Complete In:	2036
To:	Greensboro Drive to Tyco Road	Cost:	$28,000

EPG Access to I-95			CEID: 2668
Facility:	I 95 I-95 Reversible Ramp	Agency Proj. ID:	
From:	EPG Southern Loop Road	Complete In:	2025
To:	I HOV/BUS/HOT Lanes	Cost:	$57,000

I-395 Construct 4th Southbound Lane			CEID: 3179
Facility:	I 395 Henry G. Shirley Memorial Highway	Agency Proj. ID:	103316
From:	VA 236 North of Duke Street	Complete In:	2020
To:	South of Edsall Road	Cost:	$58,500

I-495 Capital Beltway Auxiliary Lanes			CEID: 3272
Facility:	I 495 Capital Beltway NB and SB	Agency Proj. ID:	
From:	Hemming Avenue Underpass	Complete In:	2030
To:	VA Georgetown Pike	Cost:	$3,235

I-495 HOT/HOV Lanes			CEID: 2069
Facility:	I 495 Capital Beltway HOT Lanes	Agency Proj. ID:	
From:	I 95/ 395/495 - Springfield Interchange	Complete In:	2025
To:	American Legion Bridge	Cost:	$500,000

All costs shown in $1,000s

I-495 Interchange Ramp Phase II, Ramp 3 DAAH — **CEID: 3208**

Facility:	I 495	Agency Proj. ID:	
From:	SB I-495	Complete In:	2030
To:	WB Dulles Airport Access Highway (DAAH)	Cost:	$42,000

I-66 @ Route 28 Interchange Improvements — **CEID: 3264**

Facility:	I 66 I-66 @Rte 28	Agency Proj. ID:	103317
From:	1.0mi west of Rte 28	Complete In:	2019
To:	1.0 mi east of Rte 28	Cost:	$50,000

I-66 Corridor Improvements Project — **CEID: 3448**

Facility:	I 66 Outrside of the Beltway	Agency Proj. ID:	0066-96A-4
From:	I 495 Fairfax	Complete In:	2040
To:	US 15 PWC	Cost:	$4,400,000

I-66 Spot Improvements Inside the Beltway — **CEID: 2096**

Facility:	I 66	Agency Proj. ID:	78826
From:	Fairfax Dr to Sycamore St; Washington Blvd to Dulles Airport Access Road; & Lee Hwy/S	Complete In:	2020
To:		Cost:	$59,000

I-95 Auxiliary Lane, between Route 123, Exit 160 and Route 294, Exit 158 — **CEID: 3667**

Facility:	I 95	Agency Proj. ID:	
From:	Rt 123	Complete In:	2028
To:	Rt 294	Cost:	$27,500

I-95 Express Lane Extension to Fredericksburg — **CEID: 3556**

Facility:	I 95	Agency Proj. ID:	110527
From:	Russell Road (exit 148)	Complete In:	2022
To:	0.25 miles south of Exit 148	Cost:	$16,500

I-95 NB DIRECTIONAL OFF RAMP TO NB FAIRFAX COUNTY PARKWAY — **CEID: 2854**

Facility:	I 95	Agency Proj. ID:	93033
From:	VA 7100 Fairfax County Parkway Exit 166	Complete In:	2020
To:	0.6 mi west of Exit 166	Cost:	$3,000

I-95 Reconstruct Interchange — **CEID: 2147**

Facility:	I 95 Capital Beltway Interchange	Agency Proj. ID:	
From:	VA 613	Complete In:	2030
To:		Cost:	$40,000

SB I-95 Ramp — **CEID: 2667**

Facility:	I 95 I-95 Ramp	Agency Proj. ID:	
From:	I 95 SB I-95	Complete In:	2020
To:	NB Fairfax County Parkway/EPG Southern Loop Road	Cost:	$5,581

Transit Service Improvements — **CEID: 1759**

Facility:	I 66	Agency Proj. ID:	81009
From:	Fauquier County Line	Complete In:	2021
To:	Rosslyn	Cost:	$3,205

Widen Dulles Greenway - Eastbound Only — CEID: 3680

Facility:	Dulles Greenway - eastbound only	Agency Proj. ID:	
From:	Toll Plaza	Complete In:	2019
To:	Dulles Toll Road	Cost:	$0

Interstate Projects — System Maintenance

Construct noise barrier to fulfill environmental commitments from the I395 Auxiliary Lane project. N — CEID: 3562

Facility:	I 395	Agency Proj. ID:	110729
From:	0.280 mi. north of Duke Street	Complete In:	2020
To:	0.048 mi. south of Sanger Avenue	Cost:	$7,000

I-395 NORTHERN EXTENSION MULTI-MODAL ACCESS TO PENTAGON (2B) — CEID: 3561

Facility:	I 395	Agency Proj. ID:	110728
From:	Edsall Road	Complete In:	2020
To:	Washington D.C.	Cost:	$10,000

Interstate Projects — Study

I-66 Study / Access Improvements(Outside the Beltway) — CEID: 1853

Facility:	I 66	Agency Proj. ID:	
From:	US 15 @ Haymarket	Complete In:	2021
To:	I- Capital Beltway	Cost:	$73,823

Interstate Projects — Operational Program

Congestion Management Plan - GEC Mega Proj. Admin. — CEID: 2270

Facility:		Agency Proj. ID:	86527
From:		Complete In:	2020
To:		Cost:	$15,000

I-66 Multimodal Improvement Project, inside the Beltway — CEID: 3484

Facility:	I 66 Inside the Beltway	Agency Proj. ID:	107371
From:	I 495 Fairfax County	Complete In:	2040
To:	RT 29 Near Roslyn, Arlington County	Cost:	$375,000

Interstate 395 - Study for Safety & Traffic on NB Lanes - PE Only — CEID: 2291

Facility:	I 395	Agency Proj. ID:	
From:	Boundary Drive	Complete In:	2019
To:	Washington D.C. Line	Cost:	$19,173

Interstate Projects — Other

I-395 NORTHERN EXTENSION PROJECT OWNER COSTS (2A) — CEID: 3560

Facility:	I 395	Agency Proj. ID:	108361
From:	Edsall Road	Complete In:	2019
To:	Washington D.C. Line	Cost:	$34,000

Primary Projects — System Expansion

Boundary Channel Drive Interchange — CEID: 3658

Facility:	Boundary Channel Drive	Agency Proj. ID:	
From:	I-395	Complete In:	2021
To:		Cost:	$19,300

All costs shown in $1,000s

Construct Interchange at Prince William Pkwy and Clover Hill Road — **CEID: 3665**

Facility:	VA 234 Prince William Parkway	Agency Proj. ID:	
From:	Clover Hill Road	Complete In:	2026
To:		Cost:	$14,500

Construct Interchange at Rte. 7 and Rte 659 - Belmont Ridge Road — **CEID: 3010**

Facility:	VA 7	Agency Proj. ID:	99481
From:	1.0 mi. west of Rte 659	Complete In:	2020
To:	0.5 east of Rte 659	Cost:	$72,000

Construct VA 234 Bypass Interchange @ Balls Ford Road — **CEID: 3177**

Facility:	VA 234 Bypass	Agency Proj. ID:	105420 , T
From:	Va Balls Ford Road Relocated	Complete In:	2020
To:		Cost:	$145,000

Dulles Toll Road Eastbound Collector/Distributor/Additional Lane — **CEID: 3151**

Facility:	VA 267 Dulles Toll Road	Agency Proj. ID:	
From:	VA 684 Spring Hill Road	Complete In:	2036
To:	VA Wiehle Ave.	Cost:	$62,000

Dulles Toll Road Ramp to Boone Blvd Extension — **CEID: 3152**

Facility:		Agency Proj. ID:	
From:	VA 267 Dulles Toll Road	Complete In:	2037
To:	Boone Boulevard @ Ashgrove Lane	Cost:	$79,000

Dulles Toll Road Westbound Collector/Distributor/Additional Lane — **CEID: 3154**

Facility:	VA 267 Dulles Toll Road	Agency Proj. ID:	
From:	VA 684 Spring Hill Road	Complete In:	2037
To:	VA Wiehle Ave.	Cost:	$124,000

I-495 Overpass at Tysons Corner Center — **CEID: 3157**

Facility:	New Bridge/Road	Agency Proj. ID:	
From:	Tysons Corner Center RIng Road	Complete In:	2035
To:	Old Meadow Road	Cost:	$18,000

Lee Highway Widening — **CEID: 3474**

Facility:	US 29 Lee Highway	Agency Proj. ID:	110329
From:	VA 659 Union Mill Road	Complete In:	2025
To:	Buckleys Gate Drive	Cost:	$32,700

Manassas National Battlefield Park Bypass — **CEID: 3061**

Facility:	Manassas National Battlefield Park Bypass	Agency Proj. ID:	
From:	US 29 Intersection with Rte. 705 (Pageland Lane) & Rt 29	Complete In:	2035
To:	US West of intersection of Bull Run Post Office Rd & Rt 29	Cost:	$28,509

Nokesville Road Widening — **CEID: 3163**

Facility:	VA 28 Nokesville Road	Agency Proj. ID:	
From:	VA 619 Linton Hall Road	Complete In:	2021
To:	City of Manassas SW Corporate limit	Cost:	$34,000

All costs shown in $1,000s

Prince William Parkway / University Boulevard Interchange — **CEID: 3471**

Facility:	VA 294 Prince William Parkway	Agency Proj. ID:	
From:	VA 840 University Boulevard	Complete In:	2030
To:		Cost:	$70,000

Route 1 Improvements — **CEID: 3173**

Facility:	US 1 Jefferson Davis Highway	Agency Proj. ID:	104303
From:	Mary's Way	Complete In:	2021
To:	VA Featherstone Drive	Cost:	$107,000

Route 1 Widening — **CEID: 3291**

Facility:	US 1 Jefferson Davis Highway	Agency Proj. ID:	
From:	Fuller Road	Complete In:	2040
To:	Stafford County Line	Cost:	$58,000

Route 123 (Chain Bridge Road) Widening (Old Courthouse Road to Rt 7) — **CEID: 3159**

Facility:	VA 123 Chain Bridge Road	Agency Proj. ID:	
From:	VA 677 Old Courthouse Road	Complete In:	2025
To:	VA Leesburg Pike	Cost:	$8,000

Route 15 Widening — **CEID: 3608**

Facility:	US 15 James Madison Highway	Agency Proj. ID:	
From:	Battlefield Parkway	Complete In:	2025
To:	VA 661 Montresor Road	Cost:	$33,000

Route 7 (Leesburg Pike) Widening (I-495-I-66) — **CEID: 3161**

Facility:	VA 7 Leesburg Pike	Agency Proj. ID:	
From:	I 495 Capital Beltway	Complete In:	2021
To:	US Curtis Memorial Parkway	Cost:	$71,000

Route 7 (Leesburg Pike) Widening (VA 267 to Reston Ave.) — **CEID: 3160**

Facility:	VA 7 Leesburg Pike	Agency Proj. ID:	
From:	VA 267 Dulles TollRoad	Complete In:	2025
To:	VA Reston Avenue	Cost:	$300,000

Rt 1 Widen to 6 lanes (Phase I of Rt 1/123 Interchange (CN Only) — **CEID: 2959**

Facility:		Agency Proj. ID:	94102
From:	.50 miles south of existing Rte 123	Complete In:	2019
To:	.40 miles North of existing Rte 123	Cost:	$35,015

Rte 123 Widen Roadway to 4 Lanes — **CEID: 1784**

Facility:	VA 123 Ox Road	Agency Proj. ID:	16622
From:	Southward from Burke Center Parkway	Complete In:	2020
To:	Prince William County Line	Cost:	$59,412

Rte. 28 Widening — **CEID: 2956**

Facility:	VA 28	Agency Proj. ID:	96721
From:	Godwin Drive	Complete In:	2019
To:	South CIty Limits	Cost:	$13,700

All costs shown in $1,000s

Shirley Gate Road Extension & Intyerchange with Fairfax County Parkway with NO connections withPopes — **CEID: 3472**

Facility:	VA 286 Fairfax County Parkway	Agency Proj. ID:	
From:	US 29 Lee Highway	Complete In:	2025
To:	Rolling Road	Cost:	$269,300

Shirley Gate Road Extension & Intyerchange with Fairfax County Parkway with NO connections withPopes — **CEID: 3473**

Facility:	VA 286 Fairfax County Parkway	Agency Proj. ID:	#52 - #53
From:	VA 267 Dulles Toll Road	Complete In:	2025
To:	Rugby Road	Cost:	$126,800

Sudley Manor Drive/Prince William Parkway Interchange — **CEID: 3467**

Facility:	VA 234 Prince William Parkway	Agency Proj. ID:	
From:	VA 1566 Sudley Manor Drive	Complete In:	2025
To:		Cost:	$80,600

Sudley Road Third Lane — **CEID: 3641**

Facility:	VA 234 Suddley Road	Agency Proj. ID:	109293
From:	Grant Avenue	Complete In:	2021
To:	Godwin Drive	Cost:	$7,400

US 1 Construct 6-Lane divided roadway — **CEID: 2685**

Facility:	US 1	Agency Proj. ID:	
From:	VA 638 Neabsco Mills Road	Complete In:	2025
To:	VA Featherstone Road	Cost:	$22,982

US 1 Construct 6-Lane Divided Roadway — **CEID: 2594**

Facility:	US 1	Agency Proj. ID:	90339
From:	VA 1109 Brady's Hill Road	Complete In:	2024
To:	VA Neabsco Mills	Cost:	$127,000

US 1, Widen, Reconstruct Interchange, Study — **CEID: 1942**

Facility:	US 1	Agency Proj. ID:	107187
From:	Stafford County Line	Complete In:	2035
To:	I Capital Beltway SCL Alexandria	Cost:	$37,481

US 1/ VA 123 Interchange, Widen — **CEID: 2161**

Facility:	US 1 Interchange	Agency Proj. ID:	100938, 14
From:	VA 123	Complete In:	2018
To:		Cost:	$110,100

US 15 South King Street Widening — **CEID: 2102**

Facility:	US 15 South King Street	Agency Proj. ID:	17687
From:	Evergreen Mill Road	Complete In:	2013
To:	SCL of Leesburg	Cost:	$9,365

US 15, Widen — **CEID: 1803**

Facility:	US 15 James Madison Highway	Agency Proj. ID:	
From:	US 29 Lee Highway	Complete In:	2030
To:	VA 55	Cost:	$54,000

US 29, Construct, Widen — **CEID: 1933**

Facility:	US 29	Agency Proj. ID:	
From:	ECL City of Fairfax (vic. Nutley St.)	Complete In:	2025
To:	I Capital Beltway	Cost:	$130,453

US 50 Improvements, Fairfax — **CEID: 2182**

Facility:	US 50	Agency Proj. ID:	
From:	ECL City of Fairfax	Complete In:	2025
To:	Arlington County Line	Cost:	$249,287

US 50 Interchange at Loudoun County Parkway — **CEID: 2875**

Facility:	US 50 Lee Jackson Memorial Highway	Agency Proj. ID:	
From:	VA 606 Loudoun County Parkway	Complete In:	2030
To:		Cost:	$60,000

US 50 Interchanges (3 locations) — **CEID: 3354**

Facility:	US 50 US 50	Agency Proj. ID:	
From:	West Spine (Gum Srprings Rd);South Riding Blvd.;Tall Cedars Pkwy	Complete In:	2040
To:		Cost:	$150,000

VA 123 Widen — **CEID: 1723**

Facility:	VA 123 Chain Bridge Road	Agency Proj. ID:	
From:	VA 639 Horner	Complete In:	2022
To:	Devil's Reach Road	Cost:	$2,950

VA 123, Widen — **CEID: 1856**

Facility:	VA 123 Chain Bridge Road	Agency Proj. ID:	
From:	Burke Center Parkway	Complete In:	2025
To:	Braddock Road	Cost:	$10,962

VA 234 Bypass Interchange @ Dumfries Road/Brentsville — **CEID: 3178**

Facility:	VA 234 Bypass	Agency Proj. ID:	
From:		Complete In:	2025
To:		Cost:	$74,000

VA 234 Dumfries Road Widening — **CEID: 2020**

Facility:	VA 234 Dumfries Road	Agency Proj. ID:	
From:	South Corporate Limits	Complete In:	2040
To:	Hastings Drive	Cost:	$4,353

VA 234, Widen/Construct with Interchange at US 1 — **CEID: 2114**

Facility:	VA 234 Dumfries Road	Agency Proj. ID:	205
From:	US 1	Complete In:	2040
To:	VA Bypass at Limstrong, VA 649	Cost:	$96,380

VA 236, Reconstruct, Widen — **CEID: 1760**

Facility:	VA 236	Agency Proj. ID:	108685
From:	Pickett Road	Complete In:	2030
To:	I	Cost:	$58,206

VA 27, Reconstruct Interchange at VA 244 — **CEID: 2117**

Facility:	VA 27	Agency Proj. ID:	13528
From:	VA 244 Columbia Pike	Complete In:	2013
To:		Cost:	$51,516

VA 28 PPTA, Upgrade, Construct — **CEID: 1734**

Facility:	VA 28	Agency Proj. ID:	
From:	I 66	Complete In:	2040
To:	Loudoun County Line	Cost:	$100,000

VA 28 widen — **CEID: 3219**

Facility:	VA 28 Nokesville Road	Agency Proj. ID:	96721
From:	Godwin Drive	Complete In:	2020
To:	Manassas City Limits - west	Cost:	$13,778

VA 28- widening project — **CEID: 3217**

Facility:	VA 28	Agency Proj. ID:	
From:	VA 652 (Fitzwater Dr)	Complete In:	2019
To:	S. Infantry Lane	Cost:	$25,400

VA 28, Widen — **CEID: 2045**

Facility:	VA 28	Agency Proj. ID:	
From:	Fauquier County Line	Complete In:	2025
To:	Pennsylvania Avenue	Cost:	$70,900

VA 7, Widen — **CEID: 1870**

Facility:	VA 7 Bypass	Agency Proj. ID:	
From:	VA 7 Leesburg Pike West	Complete In:	2035
To:	US 15 South King Street (South)	Cost:	$54,711

VA 7, Widen — **CEID: 2175**

Facility:	VA 7 Leesburg Pike	Agency Proj. ID:	3164
From:	Seven Corners	Complete In:	2025
To:	Bailey's Crossroads	Cost:	$34,318

VA 7, Widen, Upgrade — **CEID: 2105**

Facility:	VA 7 Leesburg Pike	Agency Proj. ID:	
From:	VA 7 Leesburg Bypass /US 15 East	Complete In:	2030
To:	I 495 Capital Beltway	Cost:	$49,319

VA Route 7/VA Route 659 Interchange — **CEID: 2664**

Facility:	VA 7 Interchange	Agency Proj. ID:	
From:	VA 659 Belmont Ridge Road	Complete In:	2018
To:		Cost:	$65,000

Vint Hill Road widening to 4 lanes☐ — **CEID: 3551**

Facility:	VA 215 Vint Hill Road	Agency Proj. ID:	104554
From:	VA 1566 Sudley Manor Drive	Complete In:	2022
To:	Kettle Run	Cost:	$16,000

Widen Rte 1 from Telegraph Rd (Fairfax County) to Annapolis Way (Prince William Cnty) — CEID: 3180

Facility:	US 1 Jefferson Davis Highway	Agency Proj. ID:	
From:	Lorton Road (fairfax County)	Complete In:	2035
To:	Annapolis Way (Prince William Country)	Cost:	$125,000

Widen VA 123, Chain Bridge Road from VA 7 to I-495 — CEID: 3376

Facility:	VA 123 Chain Bridge Road	Agency Proj. ID:	
From:	7 Leesburg Pike	Complete In:	2021
To:	495 Capital Beltway	Cost:	$22,000

Widening of Rte 15 (James Madison Highway) — CEID: 3162

Facility:	US 15 James Madison Highway	Agency Proj. ID:	T17496
From:	Thoroughfare Road	Complete In:	2024
To:	1200' South of RR Tracks	Cost:	$45,000

Primary Projects — Study

US 50 (Seven Corners Interchange) — CEID: 3477

Facility:	US 50 Arlington Boulevard	Agency Proj. ID:	
From:	Patrick Henry Drive	Complete In:	2020
To:	South Street	Cost:	$3,000

VA 28 Centreville Road (widen from 4-6 lanes divided) — CEID: 3479

Facility:	VA 28 Centreville Road	Agency Proj. ID:	108720
From:	VA 898 Old Centreville Road	Complete In:	2025
To:	Prince William County Line	Cost:	$68,829

VA Route 28 Study — CEID: 3383

Facility:	VA 28	Agency Proj. ID:	
From:	VA 234 Sudley Road	Complete In:	2020
To:	I 66	Cost:	$2,501

Primary Projects — Operational Program

Centreville Road Imrovements — CEID: 3635

Facility:	US 28 Centreville Road	Agency Proj. ID:	
From:	Liberia Road	Complete In:	2019
To:	Phoenix Dr.	Cost:	$300

Roundabout Sudley/Centreville — CEID: 3629

Facility:	VA 28 Centreville Street	Agency Proj. ID:	
From:	VA 234 Sudley Road	Complete In:	2024
To:		Cost:	$7,000

Rt. 28 Manasssas Bypass — CEID: 1865

Facility:	Manassas Bypass	Agency Proj. ID:	
From:	VA 234 Sudley Road	Complete In:	2025
To:	VA 28 Centreville Road	Cost:	$228,000

Primary Projects — Other

Intersection Improvements RTE 15/29/Arrow Leaf Turn Lee Hwy RSFY15 — CEID: 3491

Facility:	US 29 Lee Highway	Agency Proj. ID:	105807
From:	400' East of the intersection with Arrow Leaf Turn	Complete In:	2018
To:	400' West of the intersection with Arrow Leaf Turn	Cost:	$1,189

Secondary Projects — System Expansion

Arcola Boulevard (Center Segment) — CEID: 3308

Facility:	Arcola Boulevard	Agency Proj. ID:	
From:	Dulles West Boulevard	Complete In:	2022
To:	Evergreen Mills Road	Cost:	$9,526

Arcola Boulevard (Northern Segment) — CEID: 3307

Facility:	VA 606 Arcola Boulevard	Agency Proj. ID:	
From:	Evergreen Mills Road	Complete In:	2022
To:	Loudoun County Parkway	Cost:	$3,546

Arcola Boulevard (Southern Segment) — CEID: 3306

Facility:	VA 606 Arcola Boulevard	Agency Proj. ID:	
From:	Dulles West Boulevard	Complete In:	2022
To:	U.S. 50	Cost:	$54,928

Balls Ford Road- Widening from 2 to 4 lanes — CEID: 3377

Facility:	VA 621 Balls Ford Road	Agency Proj. ID:	T20903
From:	VA Sudley Road	Complete In:	2030
To:	VA 622 Groveton Drive	Cost:	$67,405

Boone Boulevard Extension (Rt 123 t Ashgrove) — CEID: 3150

Facility:	Boone Boulevard	Agency Proj. ID:	
From:	VA 123 Chain Bridge Road	Complete In:	2036
To:	Ashgrove Lane	Cost:	$126,000

Braddock Rd — CEID: 2158

Facility:	VA 620 Braddock Rd	Agency Proj. ID:	
From:	VA 7100 Fairfax County Parkway	Complete In:	2020
To:	VA Ox Road	Cost:	$16,710

Braddock Road – Route 659 to Fairfax County Line — CEID: 3604

Facility:	VA 620 Braddock Road	Agency Proj. ID:	
From:	VA 659 Gum Spring Road	Complete In:	2025
To:	Fairfax County Line	Cost:	$154,760

Braddock Road – Route 659 to Royal Hunter Drive — CEID: 3605

Facility:	VA 620 Braddock Road	Agency Proj. ID:	
From:	VA 659 Gun Spring Road	Complete In:	2027
To:	Royal Hunter Drive	Cost:	$6,095

Braddock/ Summerall/ Supreme Intersection Improvements — CEID: 3606

Facility:	VA 620 Braddock Road	Agency Proj. ID:	
From:	Summerall Drive (VA 1257) / Supreme Road (VA 1258)	Complete In:	2022
To:		Cost:	$4,421

Catharpin Road, Widen — CEID: 1754

Facility:	VA 676 Catharpin Road	Agency Proj. ID:	
From:	VA 55 John Marshall Highway	Complete In:	2030
To:	Heathcote Boulevard	Cost:	$9,150

All costs shown in $1,000s

Claiborne Parkway Extension			CEID: 3067
Facility:	Claiborne Parkway	Agency Proj. ID:	102858
From:	Croson Road	Complete In:	2019
To:	Ryan Road	Cost:	$7,000

Croson Lane – Claiborne Parkway to Old Ryan Road			CEID: 3607
Facility:	VA 645 Croson Lane	Agency Proj. ID:	
From:	VA 901 Claiborne Parkway	Complete In:	2025
To:	VA 772 Old Ryan Road	Cost:	$21,270

Crosstrail Boulevard			CEID: 3310
Facility:	VA 653 Crosstrail Boulevard	Agency Proj. ID:	
From:	Sycolin Road	Complete In:	2019
To:	eastern boundary of county-owned property	Cost:	$70,300

Dulles West Blvd. Phase I			CEID: 3313
Facility:	Dulles West Blvd	Agency Proj. ID:	
From:	Dulles Landing Drive	Complete In:	2022
To:	Hutchinson Farm Drive	Cost:	$14,700

Dulles West Blvd.Phase II			CEID: 3314
Facility:	Dulles West Blvd.	Agency Proj. ID:	
From:	Hutchinson Drive	Complete In:	2022
To:	Arcola Blvd.	Cost:	$43,700

Evergreen Mills Road (Western Segment)			CEID: 3312
Facility:	Evergreen Mills Road	Agency Proj. ID:	
From:	Arcola Boulevard	Complete In:	2025
To:	Shreveport Drive	Cost:	$10,355

Fairfax County Parkway Improvements			CEID: 2106
Facility:	VA 286 Fairfax County Parkway	Agency Proj. ID:	
From:	VA 123 Ox Road	Complete In:	2035
To:	VA Dulles Toll Road)	Cost:	$295,888

Franconia-Springfield Parkway (and SOV)			CEID: 1833
Facility:	VA 289 Franconia-Springfield Parkway	Agency Proj. ID:	
From:	VA 7100 Fairfax County Parkway	Complete In:	2025
To:	VA 2677 Frontier Drive	Cost:	$16,000

Gallows Road Widening (Rt 7 to Prosperity Avenue			CEID: 3156
Facility:	VA 650 Gallows Road	Agency Proj. ID:	
From:	VA 7 Leesburg Pike	Complete In:	2038
To:	VA Prosperity Avenue	Cost:	$94,000

Greensboro Drive Extension (Spring Hill to Tyco)			CEID: 3155
Facility:	VA Greensboro Drive	Agency Proj. ID:	
From:	VA Spring Hill Road	Complete In:	2034
To:	VA Tyco Road	Cost:	$58,000

Gum Spring Rd. — **CEID: 1818**

Facility:	VA 659 Gum Spring Rd.	Agency Proj. ID:	
From:	Prince William County Line	Complete In:	2035
To:	US	Cost:	$17,500

Jones Branch Dr. Connector — **CEID: 3060**

Facility:	VA 3102 Scotts Crossing Rd	Agency Proj. ID:	103907
From:	123 Dolley Madison Blvd	Complete In:	2019
To:	Jones Branch Dr	Cost:	$58,840

Joplin Rd/Fuller Rd Quantico base access improvements — **CEID: 3187**

Facility:	VA 619 FUller Road/Joplin Road	Agency Proj. ID:	92999
From:	I-95 Ramp	Complete In:	2020
To:	Fuller Heights Rd	Cost:	$8,043

Loudoun County Parkway Widening — **CEID: 3315**

Facility:	VA 607 Loudoun County Parkway	Agency Proj. ID:	
From:	US 50	Complete In:	2030
To:	Route 606	Cost:	$10,828

Loudoun County Pkwy — **CEID: 1878**

Facility:	VA 607 Loudoun County Pkwy	Agency Proj. ID:	107953
From:	VA 620 Braddock Road @ VA 613	Complete In:	2025
To:	VA Harry Byrd Highway	Cost:	$11,470

Magarity Road Widening from Rt 7 (Leesburg Pike) to Great Falls Street — **CEID: 3158**

Facility:	Magarity Road	Agency Proj. ID:	
From:	VA 7 Leesburg Pike	Complete In:	2037
To:	VA Great Falls Street	Cost:	$63,000

McGraws Corner Drive — **CEID: 1985**

Facility:	McGraws Corner Drive Parallel	Agency Proj. ID:	
From:	US 29 Lee Highway	Complete In:	2040
To:	US 15 James Madison Highway	Cost:	$208,800

Moorefield Boulevard – Mooreview Parkway to Moorefield Station — **CEID: 3602**

Facility:	Moorefield Boulevard	Agency Proj. ID:	
From:	VA 2298 Mooreview Parkway	Complete In:	2020
To:	Moorefield Boulevard	Cost:	$4,600

Neabsco Mills Road widen to 4 lanes — **CEID: 3374**

Facility:	VA 638 Neabsco Mills Road	Agency Proj. ID:	107947
From:	1 Jefferson Davis Highway	Complete In:	2023
To:	Smoke Court	Cost:	$35,000

New Braddock Rd. — **CEID: 2206**

Facility:	VA 620 New Braddock Rd.	Agency Proj. ID:	
From:	VA 28	Complete In:	2025
To:	US @VA 622 (Stone Rd.) @ VA 662 (Stone Rd.)	Cost:	$0

All costs shown in $1,000s

New Guinea Road, Construct			CEID: 1748
Facility:	VA 651 New Guinea Road	Agency Proj. ID:	15132
From:	VA 123 Ox Road	Complete In:	2020
To:	Roberts Road	Cost:	$20,677

NewTelegraph Rd/Summit School Road			CEID: 1921
Facility:	VA 1781 NewTelegraph Rd/Summit School Road	Agency Proj. ID:	
From:	VA 849 Caton Hill	Complete In:	2040
To:	VA Minnieville Rd.	Cost:	$35,962

Northstar Boulevard (Missing Link #79)			CEID: 3318
Facility:	VA 659 Northstar Boulevard Relocated	Agency Proj. ID:	106994
From:	Shreveport Drive	Complete In:	2022
To:	U.S. 50	Cost:	$12,000

Potomac Shores			CEID: 3480
Facility:	VA 234 Potomac Shores Parkway	Agency Proj. ID:	
From:	US 1 Jefferson Davis Highway	Complete In:	2020
To:	Potomac Shores Parkway	Cost:	$10,941

Prentice Drive (EasternSegment)			CEID: 3321
Facility:	VA 1071 Prentice Drive	Agency Proj. ID:	
From:	Lockridge	Complete In:	2019
To:	Loudoun County Parkway	Cost:	$26,300

Prentice Drive (Western Segment)			CEID: 3320
Facility:	VA 1071 Prentice Drive	Agency Proj. ID:	
From:	Loudoun County Parkway	Complete In:	2019
To:	Loudoun Station Drive	Cost:	$36,700

Reconstruct and widen Rte. 659 - Belmont Ridge Road			CEID: 2938
Facility:	VA 659 Belmont Ridge Rd.	Agency Proj. ID:	76243, 762
From:	267 Croson Ln	Complete In:	2018
To:	Harry Byrd Highway	Cost:	$80,000

Rippon Boulevard Extension			CEID: 2008
Facility:	VA 1392 Rippon Boulevard Extension	Agency Proj. ID:	
From:	US 1 Jefferson Davis Highway	Complete In:	2040
To:	Rippon VRE Station	Cost:	$28,600

River Heritage Boulevard			CEID: 3481
Facility:	VA 4700 River Heritage Boulevard	Agency Proj. ID:	
From:	Dominica Drive	Complete In:	2020
To:	Potomac Shores Parkway	Cost:	$5,357

River Heritage Boulevard widening			CEID: 3482
Facility:	VA 4700 River Heritage Boulevard	Agency Proj. ID:	
From:	Potomac Shores Parkway	Complete In:	2020
To:	Dominica Drive	Cost:	$3,209

All costs shown in $1,000s

Riverside Parkway (VA Route 7 North Collector Road) Extension — **CEID: 3501**

Facility:	VA 2401 Riverside Parkway	Agency Proj. ID:	
From:	VA 607 Loudoun County Parkway	Complete In:	2018
To:	VA 2020 Ashburn Village Boulevard Extension	Cost:	$15,000

Rolling Road Widening — **CEID: 3301**

Facility:	Rolling Road	Agency Proj. ID:	102905
From:	Rt 5297 DeLong Road	Complete In:	2022
To:	Rt 4502 .01mi. N. of Fullerton Rd.	Cost:	$25,500

Rollins Ford Road Extension — **CEID: 3293**

Facility:	Rollins Ford Road	Agency Proj. ID:	
From:	Linton Hall Road	Complete In:	2040
To:	Wellington Road	Cost:	$44,231

Route 7 George Washington Boulevard Overpass — **CEID: 3327**

Facility:	VA 1050 George Washington Boulevard Overpass	Agency Proj. ID:	105584
From:	George Washington Boulevard	Complete In:	2023
To:	Richfield Street	Cost:	$28,000

Route 772 Transit Station Connector Bridge — **CEID: 3323**

Facility:	VA 772 Transit Station Bridge	Agency Proj. ID:	
From:	Dulles Greenway	Complete In:	2019
To:	Route 772 Transit Station	Cost:	$16,900

Rte 638 - Widen to 4 Lanes — **CEID: 2645**

Facility:	VA 638 Pohick Road	Agency Proj. ID:	16505
From:	US 1	Complete In:	2020
To:	I	Cost:	$12,456

Rte 659 - Belmont Ridge Road Reconstruction to four lanes — **CEID: 3034**

Facility:	VA 659 Belmont Ridge Road - Loudoun County	Agency Proj. ID:	76244
From:	Hay Road	Complete In:	2018
To:	0.23MI N. Gloucester Parkway	Cost:	$61,000

Russell Branch Parkway (Western Segment) — **CEID: 3324**

Facility:	VA 1061 Russell Branch Parkway	Agency Proj. ID:	
From:	Belmont Bridge Road	Complete In:	2022
To:	Tournament Drive	Cost:	$16,400

Shirley Gate Road Extension & Intyerchange with Fairfax County Parkway with NO connections withPopes — **CEID: 3468**

Facility:	VA 655 Shirley Gate Road Extension (on new alignment)	Agency Proj. ID:	#1 & #18
From:	VA 620 Braddock Road	Complete In:	2025
To:	VA 286 Fairfax County Parkway	Cost:	$129,650

Shreveport Drive (Western Segment) — **CEID: 3326**

Facility:	VA 621 Shreveport Drive	Agency Proj. ID:	
From:	Evergreen Mills Road	Complete In:	2018
To:	Belmont Ridge Road	Cost:	$12,400

All costs shown in $1,000s

Soapstone Drive 4-Lane Overpass			CEID: 3450
Facility:	VA 4720 Soapstone Drive	Agency Proj. ID:	
From:	VA 5320 Sunrise Valley Drive	Complete In:	2027
To:	VA 675 Sunset Hills Drive	Cost:	$2,500

South 12th Street Extension			CEID: 3657
Facility:	S 12th Street	Agency Proj. ID:	
From:	S Glebe Road	Complete In:	2019
To:	S Monroe Street	Cost:	$1,200

Sterling Boulevard Extension			CEID: 3329
Facility:	VA 846 Sterling Boulevard Extension	Agency Proj. ID:	
From:	Pacific Boulevard	Complete In:	2018
To:	Moran Road	Cost:	$12,400

Stringfellow Rd.			CEID: 1859
Facility:	VA 645 Stringfellow Rd.	Agency Proj. ID:	
From:	VA 7100 Fairfax County Parkway	Complete In:	2020
To:	US 50	Cost:	$25,800

Telegraph Road widen			CEID: 1837
Facility:	VA 1781 Telegraph Road	Agency Proj. ID:	104802
From:	VA 294 Prince William Parkway	Complete In:	2024
To:	VA Caton Hill Road	Cost:	$11,200

University Boulevard Extension			CEID: 3292
Facility:	VA 840 University Boulevard	Agency Proj. ID:	
From:	Sudley Manor Drive	Complete In:	2025
To:	Devlin	Cost:	$33,000

University Boulevard Extension 2			CEID: 3470
Facility:	VA 840 University Blvd	Agency Proj. ID:	
From:	Devlin Road	Complete In:	2025
To:	Progress Court	Cost:	$100,000

VA 2190 Summit School Road Extension			CEID: 3227
Facility:	VA 2190 Summit School Road Extension	Agency Proj. ID:	
From:	Telegraph Road	Complete In:	2020
To:	VA 2190 Summit School Road (south end of existing)	Cost:	$11,400

VA 294 Prince William Parkway Improvements			CEID: 2718
Facility:	VA 294 Prince William Parkway	Agency Proj. ID:	
From:	VA 642 Hoadly Road	Complete In:	2040
To:	Liberia Avenue	Cost:	$263,000

VA 602 Reston Parkway Improvements			CEID: 1849
Facility:	VA 602 Reston Pkwy.	Agency Proj. ID:	
From:	VA 5320 Sunrise Valley Drive	Complete In:	2020
To:	VA Baron Cameron Avenue	Cost:	$52,000

All costs shown in $1,000s

VA 608, Frying Pan Road Widening — **CEID: 3475**

Facility:	va 608 Frying Pan Road	Agency Proj. ID:	
From:	VA 28 Sully Road	Complete In:	2025
To:	VA 657 Centreville Road	Cost:	$54,350

VA 611 Telegraph Road Widening — **CEID: 2186**

Facility:	VA 611 Telegraph Road	Agency Proj. ID:	
From:	US 1	Complete In:	2030
To:	VA Franconia Road	Cost:	$24,868

VA 613 Van Dorn Interchange at VA 644 Franconia Road PE COMPLETE — **CEID: 3275**

Facility:		Agency Proj. ID:	
From:		Complete In:	2025
To:		Cost:	$2,196

VA 636 Hooes Road — **CEID: 3478**

Facility:	VA 636 Hooes Road	Agency Proj. ID:	
From:	VA 286 Fairfax County Parkway	Complete In:	2025
To:	VA 600 Silverbrook Road	Cost:	$20,550

VA 638 Rolling Road Widening — **CEID: 1936**

Facility:	VA 638 Rolling Road	Agency Proj. ID:	5559
From:	VA 6945 Hunter Village Drive	Complete In:	2025
To:	VA Old Keene Mill Road	Cost:	$31,139

VA 643 Sycolin Road Paving/Widening — **CEID: 2209**

Facility:	VA 643 Sycolin Road	Agency Proj. ID:	
From:	Leesburg Town Limits	Complete In:	2035
To:	VA Belmont Ridge Road	Cost:	$50,000

VA 659 Belmont Ridge Road, Reconstruct — **CEID: 1897**

Facility:	VA 659 Belmont Ridge Road Relocated	Agency Proj. ID:	
From:	Prince William County Line	Complete In:	2025
To:	VA	Cost:	$34,000

VA Route 606 Ramp — **CEID: 3355**

Facility:	VA 606 Ramp	Agency Proj. ID:	
From:	VA 606 Eastbound	Complete In:	2030
To:	Lockridge Road northbound	Cost:	$10,000

VA Route 643 Extended - Shellhorn Road — **CEID: 3502**

Facility:	VA 643 Shellhorn Road Extension	Agency Proj. ID:	
From:	VA 606 Loudoun County Parkway	Complete In:	2024
To:	VA 634 Moran Road	Cost:	$127,000

VA Route 645 Extended - Westwind Drive — **CEID: 3499**

Facility:	VA 645 Westwind Drive Extended	Agency Proj. ID:	
From:	VA 607 Loudoun County Parkway (opposite Moorefield Boulevard)	Complete In:	2020
To:	VA 606 Old Ox Road	Cost:	$44,000

VA Route 7 Interchange at VA Route 690 — **CEID: 3331**

Facility:	VA 7 Interchange	Agency Proj. ID:	111666
From:	VA 690	Complete In:	2022
To:		Cost:	$35,700

Van Buren Road - construct a four lane facility — **CEID: 3372**

Facility:	VA 627 Van Buren Road	Agency Proj. ID:	
From:	234 Dumfries Road	Complete In:	2035
To:	610 Cardinal Drive	Cost:	$93,000

Washington Boulevard Widening — **CEID: 2830**

Facility:	Washington Boulevard	Agency Proj. ID:	
From:	Wilson	Complete In:	2020
To:	Kirkwood	Cost:	$3,800

Waxpool Road/ Loudoun County Parkway Intersection Improvements — **CEID: 3333**

Facility:	Waxpool Road	Agency Proj. ID:	111674
From:	Loudoun County Parkway	Complete In:	2019
To:		Cost:	$5,147

Wellington Road — **CEID: 2145**

Facility:	VA 674 Wellington Road	Agency Proj. ID:	
From:	VA 619 Linton Hall Road Relocated	Complete In:	2025
To:	VA Rixlew Lane	Cost:	$20,556

Widen Balls Ford Rd — **CEID: 2357**

Facility:	VA 621 Balls Ford Road	Agency Proj. ID:	80347
From:	Devlin Road	Complete In:	2035
To:	234 Sudley Road	Cost:	$53,564

Widen Farmwell Road between Smith Switch and Ashburn Road — **CEID: 3443**

Facility:	Farmwell Road	Agency Proj. ID:	106996
From:	Smith Switch	Complete In:	2022
To:	Ashburn Road	Cost:	$7,000

Williamson Boulevard — **CEID: 2176**

Facility:	Williamson Boulevard	Agency Proj. ID:	
From:	VA 1566 Sudley Manor Drive	Complete In:	2030
To:	VA Portsmouth Road)	Cost:	$3,000

Secondary Projects — **System Maintenance**

Evergreen Mills Road (Eastern Segment) — **CEID: 3311**

Facility:	VA 621 Evergreen Mills Road	Agency Proj. ID:	
From:	Loudoun County Parkway	Complete In:	2022
To:	Arcola Boulevard	Cost:	$19,000

Rogues Road Reconstruction — **CEID: 3487**

Facility:		Agency Proj. ID:	104300
From:	Prince William County Line	Complete In:	2020
To:	RT 605	Cost:	$9,390

Secondary Projects — **Study**

Braddock Road — **CEID: 1857**

Facility:	VA 620 Braddock Road	Agency Proj. ID:	
From:	I 495 I-495	Complete In:	2025
To:	VA Burke Lake Road	Cost:	$800

Town Center Parkway Underpass Study — **CEID: 3476**

Facility:	Town Center Parkway	Agency Proj. ID:	
From:	Sunrise Valley Drive	Complete In:	2020
To:	Sunset Hills Road	Cost:	$500

Secondary Projects — Operational Program

Route 287 / Route 9 Intersection Improvements — **CEID: 3486**

Facility:	VA 9 Charles Town Parkway	Agency Proj. ID:	
From:	VA 287 Berlin Turnpike	Complete In:	2020
To:		Cost:	$12,000

Secondary Projects — Other

Crystal City Streets Program — **CEID: 3656**

Facility:	Multiple local streets	Agency Proj. ID:	
From:	Crystal City	Complete In:	2026
To:		Cost:	$87,601

EDSALL ROAD WALKWAY — **CEID: 3563**

Facility:	VA 648 EDSALL ROAD	Agency Proj. ID:	110740
From:	Cherokee Avenue	Complete In:	2020
To:	200 feet N of Beryl Road (0.5000 MI)	Cost:	$4,000

Mooreview Parkway (Missing Link) — **CEID: 3316**

Facility:	VA 2298 Mooreview Parkway	Agency Proj. ID:	
From:	Amberleigh Farm Drive	Complete In:	2019
To:	Old Ryan Road	Cost:	$6,300

Urban Projects — System Expansion

Battlefield Parkway, Construct — **CEID: 2139**

Facility:	Battlefield Parkway	Agency Proj. ID:	18992
From:	US 15 South of Leesburg	Complete In:	2016
To:	US Bypass north	Cost:	$45,000

East Elden Street (widening) — **CEID: 3222**

Facility:	East Elden Street	Agency Proj. ID:	50100
From:	Monroe Street	Complete In:	2022
To:	Herndon Parkway onto Fairfax County Parkway	Cost:	$43,995

Edwards Ferry Road at Route 15 Bypass Interchange — **CEID: 2671**

Facility:	US 15 Rt 15 Bypass	Agency Proj. ID:	89890
From:		Complete In:	2020
To:	VA Edwards Ferry Road	Cost:	$27,000

Eisenhower Valley Access and Circulation Improvements — **CEID: 1783**

Facility:	Eisenhower Valley Access and Circulation Improvements	Agency Proj. ID:	
From:	City of Alexandria	Complete In:	2020
To:		Cost:	$70,046

Evergreen Mill Road Widening — **CEID: 3300**

Facility:	Evergreen Mill Road	Agency Proj. ID:	104830
From:	Rt 15 S. King Street	Complete In:	2022
To:	South City Limits	Cost:	$11,300

Grant Avenue Road Diet — **CEID: 3375**

Facility:	VA 234 Grant Avenue	Agency Proj. ID:	
From:	Lee AVenue	Complete In:	2020
To:	Wellington Road	Cost:	$11,000

Herndon Parkway Intersection at Van Buren Street Improvements (to include ped/bike connectivity) — **CEID: 3469**

Facility:	Herndon Parkway	Agency Proj. ID:	89889
From:	Van Buren	Complete In:	2019
To:		Cost:	$3,000

King and Beauregard Intersection Improvements, Phases 1 and 2 — **CEID: 3174**

Facility:	VA 7 King/Bearegard Intersection Improvements	Agency Proj. ID:	8645 107
From:	0.05 mi N of Beauregard St	Complete In:	2020
To:	0.19 mi S of Beauregard St.	Cost:	$17,900

Spring Street Widen 4 to 6 lanes, intersection & ramp impv., sidewalks — **CEID: 1952**

Facility:	Spring Street	Agency Proj. ID:	105521
From:	Herndon Parkway East	Complete In:	2020
To:	Fairfax County Parkway	Cost:	$10,500

Sycolin Road — **CEID: 2073**

Facility:	Sycolin Road	Agency Proj. ID:	78853
From:	VA/US 7/15 Leesburg Bypass	Complete In:	2015
To:	SCL of Leesburg	Cost:	$13,500

Widen Liberia Avenue — **CEID: 2876**

Facility:	Liberia Avenue	Agency Proj. ID:	102903
From:	VA 28	Complete In:	2025
To:	PW Parkway Rt 294	Cost:	$63,000

Urban Projects — System Maintenance

VA 17 Intersection Improvements in Warrenton — **CEID: 3441**

Facility:	VA 17	Agency Proj. ID:	76408
From:	Frost Avenue south of	Complete In:	2021
To:	Winchester Street south of	Cost:	$668

Urban Projects — Operational Program

Seminary Road & Beauregard Street Ellipse — **CEID: 3175**

Facility:	Seminary Road/ Beauregard St. Intersection	Agency Proj. ID:	
From:		Complete In:	2028
To:		Cost:	$35,000

Urban Projects — Other

Convert 27th Street South to 2-way — **CEID: 3677**

Facility:	27th Street South	Agency Proj. ID:	
From:	US 1	Complete In:	2019
To:	Crystal Drive	Cost:	$1

All costs shown in $1,000s

Farrington Aveneue — CEID: 3286

Facility:	New road	Agency Proj. ID:	
From:	Van Dorn Street at Eisenhower Avenue	Complete In:	2035
To:	Edsall Road	Cost:	$30,000

Remove South Clark Street — CEID: 3678

Facility:	South Clark Street	Agency Proj. ID:	
From:	12th Street South	Complete In:	2019
To:	18th Street South	Cost:	$1

Wellington Rd. Overpass Phase III — CEID: 3402

Facility:	Wellington Road	Agency Proj. ID:	104374
From:	Dean Drive	Complete In:	2040
To:	Dean Park Lane	Cost:	$60,000

Bike/Ped Projects — System Expansion

Backlick Run Multi-use trail Phase 1 — CEID: 3612

Facility:	Backlick Run Multi-use trail	Agency Proj. ID:	111469
From:	From Booth Park Base Ball field	Complete In:	2023
To:	Van Dorn St.	Cost:	$7,163

Capital Bikeshare — CEID: 3614

Facility:	Citywide	Agency Proj. ID:	106958
From:		Complete In:	2024
To:		Cost:	$750

Four Mile Run Trail expansion — CEID: 3616

Facility:		Agency Proj. ID:	103595
From:	Route 1	Complete In:	2040
To:	Mt Vernon Trail	Cost:	$750

Holmes Run Trail Connector — CEID: 3617

Facility:	Holmes Run Trail	Agency Proj. ID:	111401
From:	N. Ripley St.	Complete In:	2022
To:	S. Pickett St.	Cost:	$1,286

HOT Lanes Bicycle/Pedestrians Facilities Phase II — CEID: 3259

Facility:	I 495	Agency Proj. ID:	104005
From:	Springfield Interchange	Complete In:	2022
To:	Old Dominion Drive	Cost:	$1,775

Old Cameron Run Trail Construction — CEID: 3618

Facility:	Old Cameron Run Trail	Agency Proj. ID:	855755
From:	Mt. Vernon Trail	Complete In:	2021
To:	Eisenhower Ave Trail	Cost:	$54

Potomac Yard Trail Expansion — CEID: 3624

Facility:	Potomac Yard Trail	Agency Proj. ID:	80434
From:	E. Glebe Road	Complete In:	2021
To:	Four Mile Run	Cost:	$736

Bike/Ped Projects — Other

Mt. Vernon Trail at East Abingdon Dr. — **CEID: 3623**

Facility:	Mt. Vernon Trail at East Abingdon Dr.	Agency Proj. ID:	105300
From:	Between end of Mt. Vernon trail north of Slaters Ln.	Complete In:	2024
To:	Norfolk Southern Tracks south of Slaters Ln.	Cost:	$540

Project Grouping for Construction: Recreational Trails — **CEID: 3498**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$6,712

Bridge Projects — System Expansion

Frontier Drive Extension plus Braided Ramps — **CEID: 3460**

Facility:	VA 2677 Frontier Drive	Agency Proj. ID:	106742
From:	Franconia -Springfield Transportation Center	Complete In:	2024
To:	VA 789 Loisdale Road	Cost:	$84,500

Rock Hill Road Overpass — **CEID: 3609**

Facility:		Agency Proj. ID:	
From:	5320 Sunrise Valley Drive	Complete In:	2030
To:	209 Innovation Avenue	Cost:	$82,696

South Lakes Drive 4-Lane Overpass — **CEID: 3451**

Facility:	VA 5329 South Lakes Drive	Agency Proj. ID:	
From:	VA 5320 Sunrise Valley Drive	Complete In:	2020
To:	VA 675 Sunset Hills Road	Cost:	$500

Bridge Projects — System Maintenance

Project Grouping: Construction: Bridge Rehabilitation/Replacement/Reconstruction — **CEID: 2693**

Facility:	NoVA District Bridges	Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$116,483

TIP Grouping for Preventive Maintenance for Bridges — **CEID: 2699**

Facility:	Bridges	Agency Proj. ID:	
From:	NoVA District	Complete In:	2045
To:		Cost:	$148,783

Bridge Projects — Study

Rockhills 4-lane Overpass — **CEID: 3449**

Facility:		Agency Proj. ID:	
From:	VA 605 Sunrise Valley Drive	Complete In:	2020
To:	VA 868 Davis Drive Extension	Cost:	$500

Bridge Projects — Other

Multimodal Bridge to Van Dorn Metro Station — **CEID: 3284**

Facility:		Agency Proj. ID:	
From:	Eisenhower Avenue	Complete In:	2030
To:	S. Pickett Street	Cost:	$40,000

Enhancement Projects — System Expansion

VA 294 Prince William Pkwy Interchange at Smoketown Road — CEID: 3670

Facility:	VA 294 Prince William Parkway	Agency Proj. ID:	
From:		Complete In:	2040
To:		Cost:	$100,000

Enhancement Projects — System Maintenance

Colechester Road (paving dirt road) — CEID: 3385

Facility:	VA 612 Colchester Road	Agency Proj. ID:	76256
From:	VA 641 Chapel Road	Complete In:	2020
To:	VA 641 0.24 mile northwest of VA 641	Cost:	$445

Enhancement Projects — Other

TIP Grouping project for Construction: Transportation Enhancement Byway Non-Traditional — CEID: 2697

Facility:	Enhancement projects	Agency Proj. ID:	
From:	NoVA District	Complete In:	2045
To:		Cost:	$667,918

ITS Projects — Operational Program

ITS Integration Phase IV — CEID: 3610

Facility:	City-wide	Agency Proj. ID:	
From:		Complete In:	2022
To:		Cost:	$1,918

TIP Grouping project for Maintenance: Traffic and Safety Operations — CEID: 2700

Facility:	Traffic and Safety Operations	Agency Proj. ID:	
From:	NoVA District	Complete In:	2045
To:		Cost:	$460,491

Traffic Adaptive Signal Control Fiber Optic — CEID: 3611

Facility:	City-wide	Agency Proj. ID:	
From:		Complete In:	2024
To:		Cost:	$7,676

Other Projects — Study

Embark Richmond Highway (Study) — CEID: 3541

Facility:	US 1 Richmond Highway	Agency Proj. ID:	
From:		Complete In:	2020
To:		Cost:	$800

Evaluation of Significant Projects that can ease Congestion — CEID: 3148

Facility:		Agency Proj. ID:	
From:		Complete In:	2020
To:		Cost:	$600

Washington, D.C. to Richmond Southeast High Speed Rail (DC2RVA) Project — CEID: 3628

Facility:	RF&P Subdivision, CSX Transportation System	Agency Proj. ID:	
From:	CF 110 CSX Long Bridge, Arlington County	Complete In:	2025
To:	CF Junction of North End and Bellwood Subdivisions, CSX Transportation System (Centr	Cost:	$55,000

Other Projects — Operational Program

BRAC/Economic Development — CEID: 2431

Facility:
From:
To:
Agency Proj. ID: 81738
Complete In: 2018
Cost: $3,316

Next Generation Fare Collection & Technology — CEID: 3622

Facility: City-wide
From:
To:
Agency Proj. ID:
Complete In: 2025
Cost: $1,200

TIP Grouping project for Construction: Safety/ITS/Operational Improvements — CEID: 2695

Facility: Safety/ITS/Operational Facilities
From: District-wide
To:
Agency Proj. ID:
Complete In: 2045
Cost: $2,478,654

Other Projects — Other

Virginia Statewide Vehicle Fuel Conversion Program — CEID: 3139

Facility: Statewide
From:
To:
Agency Proj. ID:
Complete In: 2018
Cost: $25,740

CMAQ Projects — Other

BUS REPLACEMENT (OMNIRIDE EXPRESS COMMUTER BUSES) — CEID: 3685

Facility:
From:
To:
Agency Proj. ID: T21459
Complete In: 2025
Cost: $11,978

COMMUTER ASSISTANCE PROGRAM — CEID: 3682

Facility:
From:
To:
Agency Proj. ID: T21240
Complete In: 2025
Cost: $34,533

FAIRFAX COUNTYWIDE TRANSIT STORES — CEID: 3683

Facility:
From:
To:
Agency Proj. ID: T21448
Complete In: 2025
Cost: $3,760

PRTC COMMUTER ASSISTANCE PROGRAM — CEID: 3684

Facility:
From:
To:
Agency Proj. ID: T21457
Complete In: 2025
Cost: $2,050

TRANSIT STORE FUNDING - Alexandria — CEID: 3681

Facility:
From:
To:
Agency Proj. ID: T21453
Complete In: 2025
Cost: $1

WMATA REPLACEMENT BUSES — CEID: 3686

Facility:
From:
To:
Agency Proj. ID: T21033
Complete In: 2025
Cost: $3,700

Federal Lands Highway Pro — Other

Project Grouping:Construction : Federal Lands Highway — **CEID: 3494**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$250

Maintenance Projects — System Maintenance

TIP Grouping project for Preventive Maintenance and System Preservation — **CEID: 2698**

Facility:	Preventive Maintenance and System Preservation Facilities	Agency Proj. ID:	
From:	NoVA District	Complete In:	2045
To:		Cost:	$1,006,098

Transit Projects — System Expansion

Arkendale to Powell's Creek Third Track Project and Potomac Shores Station — **CEID: 2831**

Facility:	Third Track	Agency Proj. ID:	
From:	CFP 72 Arkendale, Stafford County VA	Complete In:	2019
To:	CFP 83.4 Powell's Creek, Prince William VA	Cost:	$26,559

Ballston Multimodal Improvements — **CEID: 3660**

Facility:	Ballston Metro Station	Agency Proj. ID:	
From:	Fairfax Drive at Stuart Street	Complete In:	2018
To:		Cost:	$4,843

Ballston-MU Metro Station West Entrance — **CEID: 3633**

Facility:	Ballston Metro station	Agency Proj. ID:	
From:		Complete In:	2022
To:	Fairfax Drive at N Vermont Street	Cost:	$104,000

Citywide Bus Shelters — **CEID: 3613**

Facility:	Citywide	Agency Proj. ID:	
From:		Complete In:	2024
To:		Cost:	$2,200

Crystal City Potomac Yard BRT Expansion — **CEID: 3615**

Facility:	Portion of Route 1, Evans Lane, and Potomac Avenue	Agency Proj. ID:	T1117
From:	E. Glebe Road	Complete In:	2040
To:	S. Glebe Road (Arlington)	Cost:	$1,205

Crystal City Potomac Yard Transitway Northern Extension — **CEID: 3521**

Facility:	Crystal City Transitway	Agency Proj. ID:	
From:	Crystal City Metro Station	Complete In:	2023
To:	Pentagon City Metro Station	Cost:	$24,000

DASH Facility & Fleet Expansion Project — **CEID: 3620**

Facility:		Agency Proj. ID:	
From:		Complete In:	2022
To:		Cost:	$11,134

Dulles Corridor Metrorail Project — **CEID: 1981**

Facility:		Agency Proj. ID:	
From:	East Falls Church Metrorail Station	Complete In:	2020
To:	VA Loudoun County)	Cost:	$2,937,421

Dulles Corridor Metrorail Project Phase II			CEID: 2982
Facility:	VA 267 Dulles Toll Road	Agency Proj. ID:	97226
From:		Complete In:	2020
To:		Cost:	$20,160

Fairfax Connector Bus Service Expansion			CEID: 2673
Facility:	Fairfax Connector Bus Service Expansion	Agency Proj. ID:	
From:	Countywide	Complete In:	2021
To:		Cost:	$0

Herndon Metrorail Intermodal Access Improvements			CEID: 3166
Facility:	VA Herndon Parkway	Agency Proj. ID:	104328 or
From:	VA 666 Van Buren Street (East of)	Complete In:	2021
To:	VA Spring Street (West of)	Cost:	$1,600

Landmark Transit Center			CEID: 3071
Facility:	Landmark Transit Center	Agency Proj. ID:	
From:	Van Dorn St.	Complete In:	2032
To:	DUke Street	Cost:	$25,000

PRTC - Bus Acquisition / Replacement Program			CEID: 2172
Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$126,583

TIP Grouping project for Construction: Rail			CEID: 2694
Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$7,707

US 1 Bus Rapid Transit			CEID: 3496
Facility:	US 1 Richmond Highway BRT	Agency Proj. ID:	
From:	N. Kings Highway at Huntington Metro	Complete In:	2030
To:	Fort Belvoir	Cost:	$504,900

VRE - Rolling Stock Acquisition			CEID: 2163
Facility:	VRE Systemwide	Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$662,155

VRE Service Improvements (Reduce Headways)			CEID: 2832
Facility:	Fredericksburg and Manassas lines	Agency Proj. ID:	113526
From:		Complete In:	2025
To:		Cost:	$105,013

West End Transitway			CEID: 2930
Facility:	Van Dorn Metrorail Station	Agency Proj. ID:	
From:	Van Dorn Metrorail Station	Complete In:	2024
To:	Pentagon Metrorail Station	Cost:	$140,000

Transit Projects — System Maintenance

Eisenhower Metrorail Station — CEID: 3134

Facility:	Eisenhower Ave. and Swamp Fox Rd	Agency Proj. ID:	
From:		Complete In:	2022
To:		Cost:	$8,500

PRTC - Captial Cost of Contracting — CEID: 2747

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$87,912

PRTC - Rehabilitate / Rebuild OmniRide Buses — CEID: 2714

Facility:	OmniRide Buses	Agency Proj. ID:	
From:	Prince William County	Complete In:	2045
To:		Cost:	$106,985

VRE - Stations and Facilities — CEID: 2164

Facility:		Agency Proj. ID:	
From:	Systemwide	Complete In:	2045
To:		Cost:	$650,002

VRE - Tracks and Storage Yards — CEID: 1996

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$1,324,447

VRE Track Lease Improvements — CEID: 2684

Facility:	VRE Tracks	Agency Proj. ID:	
From:	Systemwide	Complete In:	2045
To:		Cost:	$685,430

Transit Projects — Study

Duke Street BRT Design & Construction — CEID: 2932

Facility:	Duke Street BRT	Agency Proj. ID:	
From:	King Street Metro Station	Complete In:	2027
To:	Landmark (Possibly Clty of Fairfax)	Cost:	$19,000

VRE Grant and Project Management — CEID: 1908

Facility:		Agency Proj. ID:	
From:	Systemwide	Complete In:	2045
To:		Cost:	$17,550

Transit Projects — Operational Program

CSX RF &P Rail Corridor Third Track — CEID: 3016

Facility:		Agency Proj. ID:	
From:	CF 577 Hamilton Interlocking (HA), Spotsylvania	Complete In:	2025
To:	CF 1063 Slaters Lane Interlocking, Alexandria	Cost:	$104,160

DASH Real-Time Information Enhancement Project — CEID: 3619

Facility:		Agency Proj. ID:	
From:		Complete In:	2019
To:		Cost:	$610

Dulles Town Center Park and Ride Lot — **CEID: 3361**

Facility:		Agency Proj. ID:	
From:		Complete In:	2018
To:		Cost:	$5,250

Franconia-Springfield Parkway Park-and-Ride Lots — **CEID: 1977**

Facility:		Agency Proj. ID:	
From:	Franconia-Springfield Pkwy, west of I-95	Complete In:	2019
To:		Cost:	$8,875

Loudoun County Park and Ride Lots, Construct — **CEID: 1960**

Facility:	Lowes Island	Agency Proj. ID:	79679
From:		Complete In:	2025
To:		Cost:	$280

One Loudoun Park and Ride Lot — **CEID: 3358**

Facility:		Agency Proj. ID:	111470
From:		Complete In:	2022
To:		Cost:	$3,500

Park and Ride Lot at Arcola Center — **CEID: 2874**

Facility:	Park and Ride Lot	Agency Proj. ID:	
From:	Arcola Center	Complete In:	2025
To:		Cost:	$5,000

Project Grouping :Transit: Ridesharing — **CEID: 2944**

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$1,000

PRTC Western Facility — **CEID: 2320**

Facility:	Western PWC	Agency Proj. ID:	T20924
From:		Complete In:	2020
To:		Cost:	$47,667

Sterling Park and Ride Lot — **CEID: 3357**

Facility:		Agency Proj. ID:	
From:		Complete In:	2014
To:		Cost:	$100

Transit Signal Priority on Route 7 and Route 236 — **CEID: 3621**

Facility:	Rt King Street/Duke Street	Agency Proj. ID:	
From:	City Line	Complete In:	2020
To:	Quaker Ln/Diagonal Rd	Cost:	$1,505

Western Loudoun Park and Ride Lot — **CEID: 3359**

Facility:		Agency Proj. ID:	111470
From:		Complete In:	2022
To:		Cost:	$3,575

Transit Projects — Other

All costs shown in $1,000s

Columbia Pike Transit Stations — CEID: 3659

Facility:	Columbia Pike	Agency Proj. ID:	
From:		Complete In:	2021
To:		Cost:	$13,323

East Falls Church Metro Station Bus Bay Expansion — CEID: 3650

Facility:	East Falls Church Metro station	Agency Proj. ID:	
From:		Complete In:	2018
To:	North side bus bays	Cost:	$6,328

Mark Center — CEID: 3625

Facility:	Mark Center	Agency Proj. ID:	
From:	Mark Center Drive	Complete In:	2022
To:		Cost:	$4,000

PRTC Bus Shelter Programs — CEID: 1932

Facility:		Agency Proj. ID:	PRTC0001
From:		Complete In:	2019
To:		Cost:	$54

PRTC Security Enhancements — CEID: 2805

Facility:	PRTC Transit Center	Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$623

Springfield Commuter Parking Garage — CEID: 2188

Facility:		Agency Proj. ID:	106274
From:	Springfield CBD &	Complete In:	2020
To:	Engineering Proving Grounds (EPG)	Cost:	$63,800

TIP Grouping for Transit Vehicles — CEID: 2900

Facility:	TIP Grouping project for Transit Vehicles	Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$300,007

TIP Grouping project for Transit Access — CEID: 2711

Facility:	TIP Grouping project for Transit Access	Agency Proj. ID:	
From:	District-wide	Complete In:	2045
To:		Cost:	$308,438

TIP Grouping project for Transit Amenities — CEID: 2712

Facility:	TIP Grouping project for Transit Amenities	Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$20,593

Safety Projects — System Expansion

Army Navy Country Club Emergency Access Drive — CEID: 3649

Facility:	new access drive	Agency Proj. ID:	
From:	Memorial Drive at Army Navy Drive	Complete In:	2023
To:	South Queen Street	Cost:	$5,150

Safety Projects — Operational Program

Elk Lick Road Intersection Improvements — CEID: 3600

Facility:	VA 621 Elk Lick Drive	Agency Proj. ID:	
From:	US 50 John Mosby Highway	Complete In:	2023
To:	VA 2200 Tall Cedars Parkway	Cost:	$1,654

Evergreen Mills Road Realignments - Reservoir Road & Watson Road — CEID: 3601

Facility:	VA 621 Evergreen Mills Road	Agency Proj. ID:	
From:	VA 860 Watson Road	Complete In:	2022
To:	VA 861 Reservoir Road	Cost:	$3,815

Route 50/ Everfield Drive Roundabout — CEID: 3603

Facility:	US 50 John Mosby Highway	Agency Proj. ID:	
From:	Everfield Drive	Complete In:	2022
To:		Cost:	$7,975

Region-wide

TPB

Bike/Ped Projects — Study

Transportation, Community, and System Preservation (TCSP) Program — CEID: 3138

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:		Cost:	

Human Service Transportat — Operational Program

Enhanced Mobility of Seniors and Individuals with Disabilities — CEID: 3409

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:		Cost:	$0

JARC and New Freedom Programs — CEID: 2612

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:		Cost:	

Transit Projects — Other

TIGER – Priority Bus Transit in the National Capital Region — CEID: 2882

Facility:		Agency Proj. ID:	
From:		Complete In:	
To:		Cost:	$10,062

Washington Metropolitan Area Transit Authority

Transit Projects — System Maintenance

Maintenance Equipment — CEID: 2896

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$128,329

Maintenance Facilities — CEID: 2779

Facility:		Agency Proj. ID:	
From:		Complete In:	2045
To:		Cost:	$5,738,260

All costs shown in $1,000s

Other Facilities	CEID: 2781
Facility:	Agency Proj. ID:
From:	Complete In: 2045
To:	Cost: $1,401,401

Passenger Facilities	CEID: 2782
Facility:	Agency Proj. ID:
From:	Complete In: 2045
To:	Cost: $10,923,385

Project Management and Support	CEID: =874
Facility:	Agency Proj. ID:
From:	Complete In: 2045
To:	Cost: $691,628

Rail System Infrastructure Rehabilitation	CEID: 2881
Facility:	Agency Proj. ID:
From:	Complete In: 2045
To:	Cost: $7,995,712

Systems and Technology	CEID: 2897
Facility:	Agency Proj. ID:
From:	Complete In: 2045
To:	Cost: $4,341,798

Track & Structures	CEID: 2787
Facility:	Agency Proj. ID:
From:	Complete In: 2045
To:	Cost: $8,788,070

Vehicles/ Vehicle Parts	CEID: 2894
Facility:	Agency Proj. ID:
From:	Complete In: 2045
To:	Cost: $17,667,659

Technical Inputs Solicitation

for the Constrained Element and Air Quality Conformity Analysis
of the Visualize 2045 Long-Range Transportation Plan
for the National Capital Region

Submission Guide
for Implementing Agencies

Inputs are due November 15, 2017

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

VISUALIZE 2045 TECHNICAL INPUTS SOLICITATION

Submission Guide for Implementing Agencies

Approved October 18, 2017

ABOUT THE TPB

The National Capital Region Transportation Planning Board (TPB) is the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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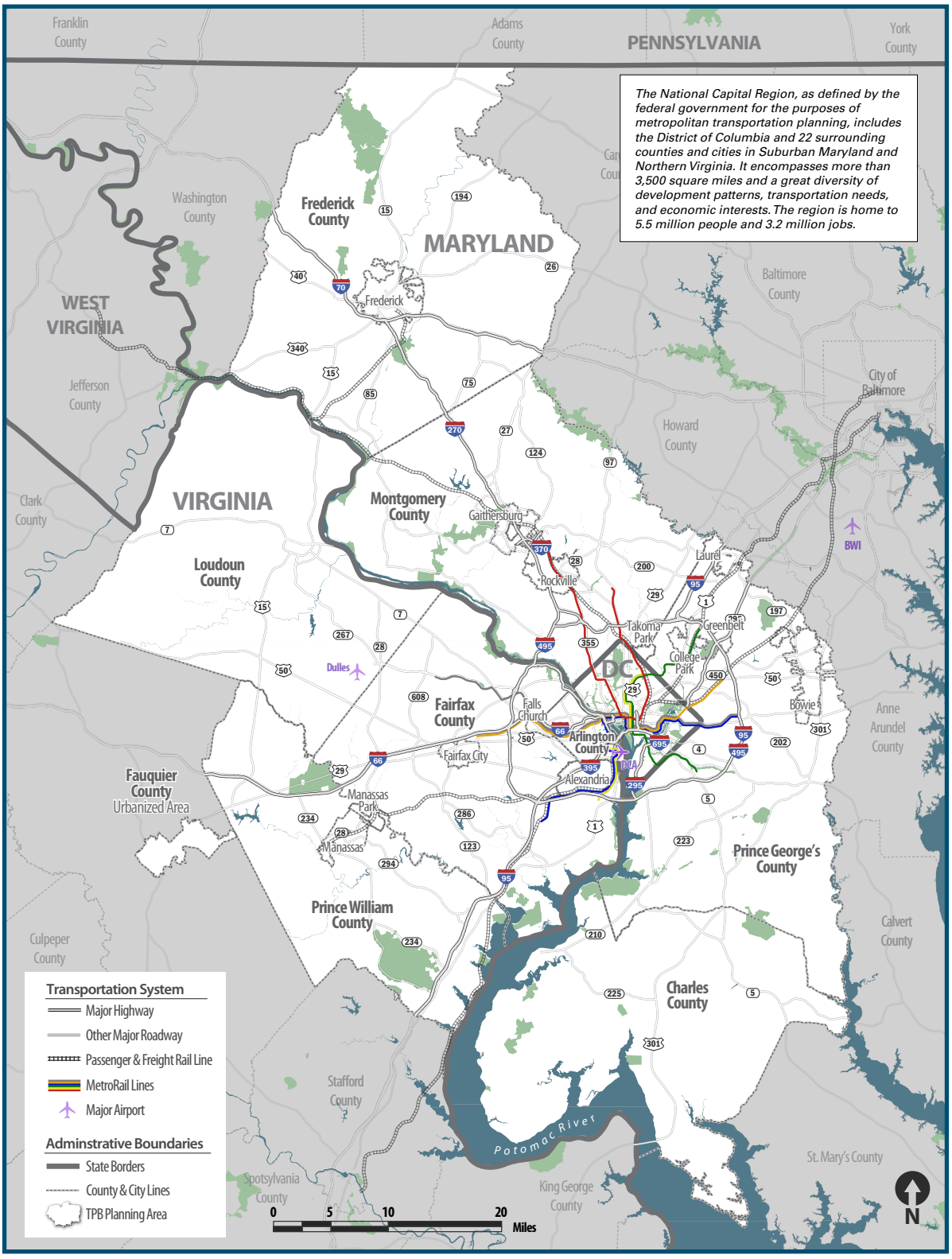
National Capital Region



INTRODUCTION

About Visualize 2045

Visualize 2045 is the federally required four-year update of the National Capital Region's long-range transportation plan. It will identify all regionally significant transportation investments planned through 2045 and provide detailed analyses to help decision makers and the public "visualize" the region's future under current plans.

Visualize 2045 will include both a "Constrained Element" and an "Unconstrained Element." The Constrained Element will identify the investments agencies expect to be able to afford between now and 2045, while the Unconstrained Element will identify projects that appear in local, state, and regional plans but for which funding has not yet been identified. The Constrained Element is the portion of the plan that was previously known as the Constrained Long-Range Transportation Plan (CLRP). The most recent CLRP was adopted by the TPB in 2014 and amended in 2016.

Like the CLRP had in the past, the Constrained Element of Visualize 2045 will undergo federally required analyses to ensure that it supports the region's air-quality improvement goals (this is known as Air Quality Conformity) and that sufficient financial resources will be available to implement the projects and programs in it (this is known as Constraint). The TPB will also analyze the future performance of the planned system and assess how well it supports or advances regional goals and priorities.

Technical Inputs Solicitation

The Technical Inputs Solicitation is a formal call for area transportation agencies to submit many of the technical elements that will make up Visualize 2045, including those necessary to perform the required air quality and financial analyses of the Constrained Element. The inputs will also be used to assess the future performance of the planned transportation system.

These analyses take several months to complete. **Therefore, the technical inputs must be submitted by November 15, 2017 to ensure that the analyses can be completed and the plan adopted by October 2018.**

What's Required

To properly analyze the Constrained Element of Visualize 2045, the TPB must know what regionally significant projects, programs, and policies agencies are planning to implement between now and 2045. Agencies must undertake the following as part of the Technical Inputs Solicitation:

1. **Review and update existing projects, programs, and policies**
2. **Add new projects, programs, and policies**
3. **Submit updated revenue and expenditure estimates**

The following broad categories of inputs are anticipated as part of this Technical Inputs Solicitation:

- **Capacity expansion projects**
- **Operations and maintenance programs**
- **Transit service and fare assumptions**

For each submission, agencies must provide certain project details, including project descriptions, cost and revenue estimates in year of expenditure dollars, and completion dates. Agencies must also identify and describe what federal and regional policy considerations the investments address.

In addition to the transportation projects, programs, and policies called for in this solicitation, the TPB will also be gathering other technical inputs necessary for the analyses, such as updated population, household, and job growth forecasts, and information about the region's fleet of passenger and commercial vehicles. These inputs are also essential to forecast future travel patterns and vehicle-based emissions under the plan.

SOLICITATION SCHEDULE

The technical analyses of Visualize 2045 will take several months to complete. To ensure that the analyses are finished in time for the full plan to be adopted by the TPB in October 2018, agencies must submit these technical inputs by November 15, 2017.

A 30-day comment period will provide an opportunity for TPB members, stakeholders, and the public to comment on the projects, programs, policies, and technical assumptions submitted for use in the technical analyses of the plan.

Summer 2017	Staff development of solicitation; initial request for project/program and financial information underway
September 2017	Committee and board review of draft solicitation
October 18, 2017	Solicitation opens, pending board approval
November 15, 2017	**Solicitation closes; all inputs are due**
December 2017	Committee and board review of draft technical inputs
December 14, 2017 - January 13, 2018	30-day comment period on draft technical inputs
January 17, 2018	Board approval of technical inputs
March 2, 2018	Congestion Management Documentation and FY 2019-2024 TIP Inputs are due
May 10, 2018	Public Forum on the FY 2019-2024 TIP
June/July	Staff completes draft Visualize 2045 plan, containing all elements for committee review
September 2018	Committee and board review of Visualize 2045 plan, TIP, and analyses
September 13 - October 13, 2018	30 day comment period on projects, Visualize 2045 plan, TIP, and analyses
October 17, 2018	TPB reviews comments and responses, presented with draft Visualize 2045 plan, Conformity Analysis, and TIP for approval.

RESPONSIBLE AGENCIES

Any municipal, county, state, regional, or federal agency with the fiscal authority to fund transportation projects is responsible for providing required project, program, and policy inputs for the Constrained Element of Visualize 2045. Inputs must be submitted by one of the TPB member jurisdictions or agencies listed below.

District of Columbia

District Department of Transportation (DDOT)

Suburban Maryland

Maryland Department of Transportation (MDOT)

- *State Highway Administration (MDOT SHA)*
- *Maryland Transit Administration (MTA)*
- *Maryland Transportation Authority (MDTA)*

Charles County Department of Public Works

Frederick County Department of Public Works

Montgomery County Department of Transportation

Prince George's County Department of Public Works and Transportation

Maryland-National Capital Park and Planning Commission (M-NNCPPC)

City of Frederick Planning Department

Gaithersburg Public Works Department

Rockville Public Works Department

Takoma Park Public Works Department

Northern Virginia

Virginia Department of Transportation (VDOT)

Virginia Department of Rail and Public Transportation (VDRPT)

Virginia Railway Express (VRE)

Potomac and Rappahannock Transportation Commission (PRTC)

Northern Virginia Transportation Authority (NVTA)

Northern Virginia Transportation Commission (NVTC)

Arlington County Department of Environmental Services*

Fairfax County Department of Transportation*

Fauquier County Department of Community Development*

Loudoun County Department of Transportation and Capital Infrastructure*

Prince William County Department of Transportation*

City of Alexandria Department of Transportation and Environmental Services*

City of Fairfax Department of Public Works*

City of Falls Church Department of Public Works*

City of Manassas Public Works Department*

City of Manassas Park Public Works Department*

**Virginia local jurisdictions submit through VDOT but are still responsible for providing required information*

Regional

Washington Metropolitan Area Transit Authority (WMATA)

Eastern Federal Lands Highway Division

Metropolitan Washington Airports Authority (MWAA)

PROJECT, PROGRAM, AND POLICY INPUTS

To properly analyze the Constrained Element of Visualize 2045, the TPB must know what projects, programs, and policies agencies are planning to implement between now and 2045. Agencies must undertake the following activities as part of the Technical Inputs Solicitation:

- **Review and update existing projects, programs, and policies:**

  Agencies must review all projects, programs, and policies in the most recently adopted CLRP and update all project information, including project costs.

- **Add new projects, programs, and policies:**

  Agencies must submit any project, program, or policy not already in the plan that is deemed "regionally significant" as outlined below.

- **Submit updated revenue and expenditure estimates:**

  Agencies must submit updated revenue forecasts and estimated expenditure information for the years 2019-2045 to enable the fiscal constraint analysis to be performed.

The following broad categories of inputs are required as part of this Technical Inputs Solicitation:

- **Capacity expansion projects:** Projects that add or remove capacity on the existing highway or transit system
- **Operations and maintenance programs:** New or updated operations and maintenance programs or updated cost figures for such programs
- **Transit service and fare assumptions:** New or updated route, frequency, and fare information for existing or planned transit services

For each submission, agencies must provide certain project details, including project descriptions, cost and revenue estimates in year of expenditure dollars, and completion dates. Agencies must also identify and describe what federal and regional policy considerations the investments address.

FINANCIAL INPUTS

Federal metropolitan planning regulations require MPOs to develop a financial plan that demonstrates how the adopted long-range transportation plan could be implemented given revenues that are "reasonably expected to be available." "Financial constraint" or "fiscal constraint" is the analysis performed to demonstrate that the forecast revenues which are reasonably expected to be available through 2045 are able to cover the estimated costs of adequately maintaining, operating, and expanding the highway and transit system in the region through that same timeframe. This analysis will be included in the Financial Element of Visualize 2045.

Currently, an interim financial analysis is being prepared to provide a baseline of anticipated revenues and existing planned expenditures. That analysis is based on projects and programs in the adopted FY2017-2022 Transportation Improvement Program (TIP), the 2016 Constrained Long-Range Transportation Plan (CLRP), and the existing Air Quality Conformity Inputs table for both the CLRP and TIP. The inputs provided by the implementing agencies in response to this Technical Inputs Solicitation and for conformity should start from this baseline and adjust their revenues and expenditures to then enable staff to determine financial constraint. The Financial Element will then be finalized as part of the Visualize 2045 long-range plan when submitted for approval by the TPB in October 2018.

Technical Conformity Input Categories

Visualize 2045 can include any kind of project or program. However, some projects and programs must be included. Per federal requirements, any project that adds roadway or transit capacity—and could therefore affect air quality—must be included, as must any project or program slated to receive federal funding. The plan must also identify the maintenance and operations programs and funding required to keep the system in a state of good repair. Plan inputs typically fall into one of the following categories:

Roadway Projects

- **System Expansion:** Increasing system capacity by increasing the number of lane-miles of roadway
- **System Preservation/State of Good Repair:** Major rehabilitation or complete replacement of aging roadways, bridges, technology and communications systems, and other infrastructure as it nears the end of its useful lifespan
- **Study:** Any project that does not have funding identified for right-of-way acquisition or construction. The study may include multiple design alternatives. Funding in the TIP is permitted for project planning or preliminary engineering only

Transit Projects

- **System Expansion:** Increasing system capacity by building new transit lines or adding service to existing lines
- **System Preservation/State of Good Repair:** Major rehabilitation or complete replacement of aging railcars, buses, rail track, stops and stations, and other infrastructure as it nears the end of its useful lifespan
- **Study:** Any project that does not have funding identified for right-of-way acquisition or construction. The study may include multiple design alternatives. Funding in the TIP is permitted for project planning or preliminary engineering only

Bicycle or Pedestrian Projects

- **Local Circulation:** Projects that support local circulation within Activity Centers. These can include streetscaping, traffic calming, bikeshare, bicycle lanes, sidewalks, and multi-use paths
- **Regional Facilities:** Multi-jurisdictional projects, projects that improve transit station access, and/or projects that are part of the National Capital Trail network

Operations and Maintenance Programs

- **Day-to-Day Operations and Maintenance:** This can include activities like repaving roadways, inspecting and maintaining bridges, clearing snow and debris, servicing transit vehicles, maintaining and operating traffic signals, and paying train and bus operators
- **Regional programs:** This can include programs like regional ridesharing and traveler information programs

Transit Service and Fare Assumptions

- **Bus transit:** New or updated routes, frequencies, and/or fare policies
- **Rail transit:** New or updated routes, frequencies, and/or fare policies
- **HOV/HOT:** New or updated lane restrictions and/or hours of operation

ADDITIONAL INPUTS

Other inputs that are required in order to perform the Air Quality Conformity Analysis include the following, which are gathered by staff with help from local, state, and other agencies and are not directly required as part of this solicitation:

- **Baltimore area project inputs:** Projects in the Baltimore Regional Transportation Board (BRTB) long-range transportation plan that are in jurisdictions in the TPB Modeled Area.
- **Fredericksburg area project inputs:** Projects in the Fredericksburg Area Metropolitan Planning Organization (FAMPO) long-range transportation plan that are in jurisdictions in the TPB Modeled Area.
- **Calvert-St. Mary's area project inputs:** Projects in the Calvert-St. Mary's Metropolitan Planning Organization (C-SMMPO) long-range transportation plan that are in jurisdictions in the TPB Modeled Area.
- **Land-use forecasts for neighboring areas:** Population and employment forecasts for jurisdictions outside the TPB Planning Area but within the TPB Modeled Area, including the Baltimore, Fredericksburg, and Calvert-St. Mary's metropolitan areas and Charles County (MD), Clark and Fauquier counties (VA), and Jefferson County (WV).
- **Census-adjusted employment forecasts:** Employment forecasts provided by COG are modified to reflect the latest Census estimates.
- **Other specialized trips:** Estimates of external trips, through trips, and specialty-generator trips (e.g., for major sporting events).
- **Vehicle registration information:** Make, model, and year of all registered vehicles, used to calculate the average fuel efficiency of the region's vehicle fleet.
- **Non-travel related emissions model inputs:** Air temperature and humidity, fuel formulation, and inspection and maintenance program and requirement information.
- **Base-year transit assumptions:** Route and schedule information for existing train and bus systems.
- **Toll and fare updates:** Existing toll and fare policies and usage, including toll collection methods, facility use by vehicle type, and hours of operation and enforcement.

REGIONAL POLICY CONSIDERATIONS AND EVALUATION

Visualize 2045 should strive and aspire to meet the goals and reflect the priorities developed and agreed to by the TPB and its member jurisdictions. To that end, the TPB asks agencies and jurisdictions to "think regionally" as they "act locally" to develop transportation projects, programs, and policies for implementation. This means considering the needs of neighboring jurisdictions and the region as a whole when identifying investment priorities—recognizing that decisions made in one jurisdiction can affect travelers and transportation systems and services elsewhere in the region.

The region's leaders have come together around a shared vision for the region's transportation future. That vision focuses on multimodal transportation solutions that give people greater choice in finding the travel mode that works best for them. It also emphasizes the important role of land-use, especially strengthening the region's Activity Centers by providing high-quality connections between centers and improving non-auto travel options within them. System maintenance is also paramount, recognizing that our existing roadways and transit systems must be in a state of good repair to be safe, efficient, and reliable.

When agencies submit new projects or programs for inclusion in Visualize 2045, they will be asked to document how the initiative supports or advances regional goals and priorities. This information will be shared with the TPB, its committees and subcommittees, and the general public for review and discussion at key points in the plan development process.

Note for agencies: *The Visualize 2045 Project Description Form asks for information about how project submissions support or advance regional goals and priorities. These questions must be completed for all new submissions.*

Shared Regional Goals and Priorities

The six goals below were outlined in the Regional Transportation Priorities Plan, adopted by the TPB in 2014. The goals are rooted in the TPB Vision, which was adopted by the TPB in 1998 and serves as the official policy element of Visualize 2045. When agencies submit new projects or programs for inclusion in Visualize 2045, they will be asked to document how the initiatives support or advance these regional goals.

Provide a Comprehensive Range of Travel Options	• Identify all travel mode options that this project provides, enhances, supports or promotes • Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)?
Promote Regional Activity Centers	• Does this project begin or end in an Activity Center? • Does this project connect two or more Activity Centers? • Does this project promote non-auto travel within one or more Activity Centers?
Ensure System Maintenance, Preservation, and Safety	• Does this project contribute to enhanced system maintenance, preservation, or safety?
Maximize Operational Effectiveness and Safety	• Is this project primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)? • Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?
Protect and Enhance the Natural Environment	• Is this project expected to contribute to reductions in emissions of criteria pollutants? • Is this project expected to contribute to reductions in emissions of greenhouse gases?
Support Interregional and International Travel and Commerce	• Does this project enhance, support, or promote the following freight carrier modes: long-haul truck, local delivery, rail, or air freight carrier modes? • Does this project enhance, support, or promote the following passenger carrier modes: air, Amtrak intercity passenger rail, intercity bus?

Note: *Several TPB and COG policy documents together articulate the region's shared vision for the future. Refer to the* ***Resources and Maps*** *section for links to these resources online.*

FEDERAL REQUIREMENTS AND POLICY CONSIDERATIONS

Visualize 2045 must satisfy a number of federal requirements in order to receive federal approval and for federal funding to flow to transportation projects in our region. The two main requirements are that the plan must:

- **Identify all regionally significant projects and programs for which funding is reasonably expected to be available between now and 2045.** Regionally significant projects and programs are those that add or remove capacity on the existing transportation system.
- **Demonstrate that these projects and programs together support regional air-quality improvement goals.** An official Air Quality Conformity Analysis carried out by the TPB must show that forecast vehicle-related emissions under the plan will not exceed approved regional limits.

Under federal law, the plan must also address eight federal planning factors, as identified by the U.S. Department of Transportation (USDOT). (See sidebar) *The Constrained Element of Visualize 2045 must meet a number of other federal requirements as well, including non-discrimination and equity, congestion management documentation, public participation, and others. For a full listing of these requirements, refer to the* ***Resources and Maps*** *section of this document.*

Performance-Based Planning and Programming

The Fixing America's Surface Transportation (FAST) Act put forth seven National Goals for Performance-Based Planning and Programming:

1. Safety
2. Infrastructure Condition
3. Congestion Reduction
4. System Reliability
5. Freight Movement and Economic Vitality
6. Environmental Sustainability
7. Reduced Project Delivery Delays

These goals mirror the goals in the TPB Vision and other regional policy documents. The FY 2019-2024 TIP will be used as a tool to monitor and review the region's performance relative to these goals.

Project and program submissions must:

- **Include sufficient detail to be analyzed for air quality impacts and fiscal constraint:** The Project Description Form notes all required project details and descriptions.
- **Address one or more federal planning factors:** Agencies will be asked in the Project Submission Form to note which federal planning factors the project or program addresses.

Federal Planning Factors

Federal law also identifies a list of planning factors meant to guide metropolitan transportation planning. Collectively, the projects, programs, and policies in Visualize 2045 must address these factors. Agencies will therefore be asked to identify which of the federal planning factors their submissions address.

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for all motorized and non-motorized users;
3. Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users;
4. Increase accessibility and mobility of people and freight;
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7. Promote efficient system management and operation;
8. Emphasize the preservation of the existing transportation system;
9. Improve resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation (New under the FAST Act); and
10. Enhance travel and tourism. (New under the FAST Act)

REVIEW, COMMENT, AND APPROVAL PROCESS

The draft technical inputs will undergo a process of review, comment, and approval before they are used in the federally required Air Quality Conformity Analysis and other analyses of the plan. The steps of this process are outlined below.

Staff Review November 2017	Staff will review the draft inputs and work with submitting agencies to ensure that all provided information is complete and accurate.
Committee and Board Review December 2017	The TPB and the TPB Technical Committee will review the draft inputs at their December meetings. Other committees and sub-committees may request a briefing on the draft inputs.
Comment Period December 2017 - January 2018	A 30-day comment period will provide an official opportunity for TPB members, stakeholders, and the public to comment on the draft inputs. Comments must be provided through official channels described at mwcog.org/TPBcomment.
Review of Comments and Board Approval January 2018	The TPB and TPB Technical Committee will review comments on the draft inputs. The board will vote at its January meeting to approve the inputs for use in the federally required Air Quality Conformity and other analyses of the plan.

Purpose of Committee and Board Review

It is TPB's responsibility to approve project, program, and policy submissions for inclusion in the long-range plan. These initiatives have typically undergone extensive local development and review, however, the TPB and its committees play an important review role. Their tasks are to:

- Become acquainted with project and program details
- Ensure key questions are answered and details are provided
- Ensure consistency with locally adopted plans and priorities
- Ensure that sufficient local input from the public and local officials has been provided
- Discuss whether and how submissions support regional policy goals and priorities

The TPB will vote on aspects of Visualize 2045 at two key points in the plan development process. The first will come in January 2018, when the board will be asked to approve the technical inputs. The board will vote again in October 2018 on final adoption of the full plan.

BASIC SUBMISSION INSTRUCTIONS FOR CONFORMITY INPUTS

An online database application is used to gather project and program information from each agency. Staff from implementing agencies will be assigned an account with a user name and password. There are two levels of access to the database: editors and reviewers. Each agency should decide which person on their staff should assume these roles. Once logged into the application users will have access to the most recent version of the plan and TIP information that was approved by the TPB. TPB staff will offer training sessions to assist staff with the application as needed.

Appendix A provides details instructions for project and program submissions.

RESOURCES AND MAPS

The following resources and maps may be helpful for agencies and jurisdictions as they report on how their technical submissions support or advance regional goals and priorities.

TPB Vision
www.mwcog.org/TPBvision

Regional Transportation Priorities Plan
www.mwcog.org/RTPP

Activity Centers map and list
www.mwcog.org/ActivityCenters

Equity Emphasis Areas map
www.mwcog.org/EquityEmphasisAreas

Region Forward
www.mwcog.org/RegionForward

Financial Analysis (2014 CLRP)
www1.mwcog.org/clrp/elements/financial/default.asp

Federal requirements
www1.mwcog.org/clrp/process/federalrequirements.asp

CONTACT INFORMATION

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Questions about transit assumptions and air quality conformity:	Jane Posey | jposey@mwcog.org | (202) 962-3331
All other questions about Visualize 2045:	Lyn Erickson | lerickson@mwcog.org | (202) 962-3319

visualize2045

A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

APPENDIX C

Air Quality Conformity Analysis Summary

October 2018

National Capital Region
Transportation Planning Board

VISUALIZE 2045 AIR QUALITY CONFORMITY ANALYSIS SUMMARY
October 17, 2018

ABOUT VISUALIZE 2045 & THE TPB
Visualize 2045 is the federally required long-range transportation plan for the National Capital Region. It identifies and analyzes all regionally significant transportation investments planned through 2045 to help decision makers and the public "visualize" the region's future.

Visualize 2045 is developed by the National Capital Region Transportation Planning Board (TPB), the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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ACCOMMODATIONS POLICY
Alternative formats of this document are available upon request. Visit **www.mwcog.org/accommodations** or call (202) 962-3300 or (202) 962-3213 (TDD).

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National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Transportation Planning Board

FROM: Jane Posey, TPB Transportation Engineer

SUBJECT: Draft Visualize 2045 Air Quality Conformity Analysis Summary

DATE: October 17, 2018

INTRODUCTION

This memorandum documents summary results of the air quality conformity analysis of the Visualize 2045 Long Range Transportation Plan (Plan) and FY2019-2024 Transportation Improvement Program (TIP) with respect to ozone season pollutants, Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx). TPB staff has found that **the estimated emissions from the Plan and TIP adhere to the motor vehicle emissions budgets (MVEBs) for the pollutants analyzed, VOC and NOx**. The results and findings of the analysis have been reviewed by the Transportation Planning Board (TPB) Technical Committee and the Metropolitan Washington Air Quality Committee Technical Advisory Committee (MWAQC TAC). The findings were released for a 30-day public comment and interagency consultation period on September 7, 2018 which ended on October 7, 2018.

OZONE STANDARD & MOBILE BUDGETS

2015 Ozone Standard

Effective August 3, 2018 EPA designated the Metropolitan Washington, DC, (DC-MD-VA) region as 'marginal' nonattainment for the 2015 Ozone Standard. Under a 'marginal' designation, it is not necessary to develop MVEBs, consequently there are no MVEBs specific to the 2015 Ozone Standard. Provisions of the conformity regulations however require that emissions from the Plan and TIP conform to previously approved (or "found adequate for conformity purposes") MVEBs. The current MVEBs for the DC-MD-VA nonattainment area are specified in the Maintenance Plan for the 2008 Ozone Standard and have been found "adequate for conformity purposes" by the US Environmental Protection Agency (EPA). The emissions from the Visualize 2045 Plan and FY2019-2024 TIP adhere to these MVEBs.

Marginal nonattainment areas have three years, from the date of designation, to achieve the 2015 Ozone Standard. Accordingly, the DC-MD-VA area would have an attainment year of 2021 (i.e., three years following the August 3, 2018 designation). Furthermore, nonattainment regions are required to conduct a conformity analysis of their Plan and TIP for specific years, including the attainment year, within one year of the effective date of designations (in our case by August 3, 2019). The conformity analysis for the Visualize 2045 Plan and FY2019-2024 TIP includes the 2021 attainment year and thus meets the conformity deadline for the 2015 Ozone Standard.

2008 Ozone Standard Maintenance Plan Budgets

In 2012, EPA designated the Metropolitan Washington, DC, (DC-MD-VA) region as 'marginal' nonattainment for the 2008 Ozone Standard. With this designation EPA regulations do not require the development of MVEBs. Instead, as per EPA regulations, conformity analyses for the region's Plan and TIP were being demonstrated to previously approved MVEBs from the older 1997 Ozone Standard.

In 2015, the region attained the 2008 Ozone Standard, based on the readings from ambient air quality monitors. The Metropolitan Washington Air Quality Committee (MWAQC) developed a Redesignation

Request and Maintenance Plan, which the State Air Agencies submitted to the EPA in early 2018. The 2008 Ozone Maintenance Plan included MVEBs for VOC and NOx. In August 2018, EPA found these mobile emissions budgets adequate for use in the region's conformity analyses.

The 2008 Ozone Maintenance Plan established VOC and NOx emissions budgets for three specific periods: the attainment year (2014), an intermediate year (2025), and for the final year (2030) of the Maintenance Plan. The plan includes two sets of mobile budgets for each pollutant. The first set of budgets, referred to as "Tier 1 budgets", were based on projected emissions developed as part of the Maintenance Plan, and were set at the inventory level for each year. The second set of budgets, referred to as "Tier 2 budgets", were developed by adding a 20% transportation buffer to the mobile emissions inventories for VOC and NOx in 2025 and 2030. Tier 1 and Tier 2 mobile budgets for VOC and NOx are shown in Exhibit 1 and Exhibit 2, below.

The maintenance plan provides for using the Tier 2 budgets in situations "where the conformity analysis must be based on different data, models, or planning assumptions, including but not limited to updates to demographic, land use, or project-related assumptions, than were used to create the [mobile budgets] in the Maintenance Plan"[1].

Exhibit 1: Tier 1 Mobile Budgets[1]

Year	NO_X On-Road Emissions (tpd)	VOC On-Road Emissions (tpd)
Attainment Year 2014 Emission & Budget	136.8	61.3
Intermediate Year 2025 Emission & Budget	40.7	33.2
Final Year 2030 Emission & Budget	27.4	24.1

Exhibit 2: Tier 2 Mobile Budgets[1]

Year	NO_X On-Road Emissions (tpd)	VOC On-Road Emissions (tpd)
Attainment Year 2014 Emission & Budget	**136.8**	**61.3**
Predicted 2025 Emission	40.7	33.2
Transportation Buffer	8.1	6.6
Intermediate Year 2025 Budget	**48.8**	**39.8**
Predicted 2030 Emission	27.4	24.1
Transportation Buffer	5.5	4.8
Final Year 2030 Budget	**32.9**	**28.9**

Note:
[1]The MVEBs with transportation buffers will be used only as needed in situations where the conformity analysis must be based on different data, models, or planning assumptions, including but not limited to updates to demographic, land use, or project-related assumptions, than were used to create the first set of MVEBs in the maintenance plan.

[1] *Maintenance Plan for the Washington DC-MD-VA 2008 Ozone NAAQS Nonattainment Area*. Prepared by the Metropolitan Washington Council of Governments for the District Department of the Environment, the Maryland Department of the Environment, and the Virginia Department of Environmental Quality on behalf of the Metropolitan Washington Air Quality Committee. December 20, 2017. https://www.mwcog.org/documents/2017/09/18/washington-dc-md-va-2008-ozone-naaqs-marginal-nonattainment-area--redesignation-request-and-maintenance-plan-air-quality-air-quality-conformity-ozone/

Budget Setting vs. Conformity

An air quality conformity analysis is conducted to formally demonstrate that projected motor vehicle emissions associated with the regional transportation plan and TIP are less than or equal to the mobile budgets for each analysis year. The conformity regulations require the use of the "latest planning assumptions", which means that each conformity analysis must incorporate the most up-to-date planning inputs and technical methods available at the beginning of the process. Therefore, the inputs used in regional air quality conformity analyses change with time. Mobile budgets in air quality plans are established based on analyses that incorporate the "latest planning assumptions" when the air quality plan is developed, and do not change with time.

Changes to inputs used in air quality conformity analysis are not limited to transportation projects. They include other assumptions such as vehicle fleet mix and demographics. Such changes to inputs in conformity analysis relative to inputs used to establish mobile emissions will inevitably yield mobile emissions differences that are not strictly attributable to the transportation plan itself.

Anticipating such situations, federal air quality conformity regulations allow air quality (Attainment and Maintenance) plans to provide a "conformity buffer" while establishing MVEBs. Accordingly, the DC-MD-VA 2008 Ozone Maintenance Plan established the Tier 2 mobile emissions budgets with a 20% buffer to address uncertainty that is introduced when inconsistent assumptions are used between budget-setting and the conformity analysis.

Exhibit 3 below lists the contrasting assumptions used in the mobile budgets development and in the more recent air quality conformity analysis of the Visualize 2045 plan and FY2019-2024 TIP. Details related to these inputs are discussed later in this report.

EXHIBIT 3
INPUT ASSUMPTIONS

	Maintenance SIP Mobile Budgets	Visualize 2045 Conformity Emissions
Cooperative Forecasts	Round 9.0	**Round 9.1**
Vehicle Fleet	2014 VIN	**2016 VIN**
Travel Demand Model	Version 2.3.66	**Version 2.3.75**
Project Inputs	2016 CLRP	**Visualize 2045**
Metrorail Constraint	Yes	**No**

WORK ACTIVITIES

The TPB approved the Scope of Work and project submissions for the Visualize 2045 transportation plan and the FY2019-2024 TIP air quality conformity analysis on January 17, 2018. The Scope of Work is included as Attachment A.

Key technical planning assumptions and methods include:

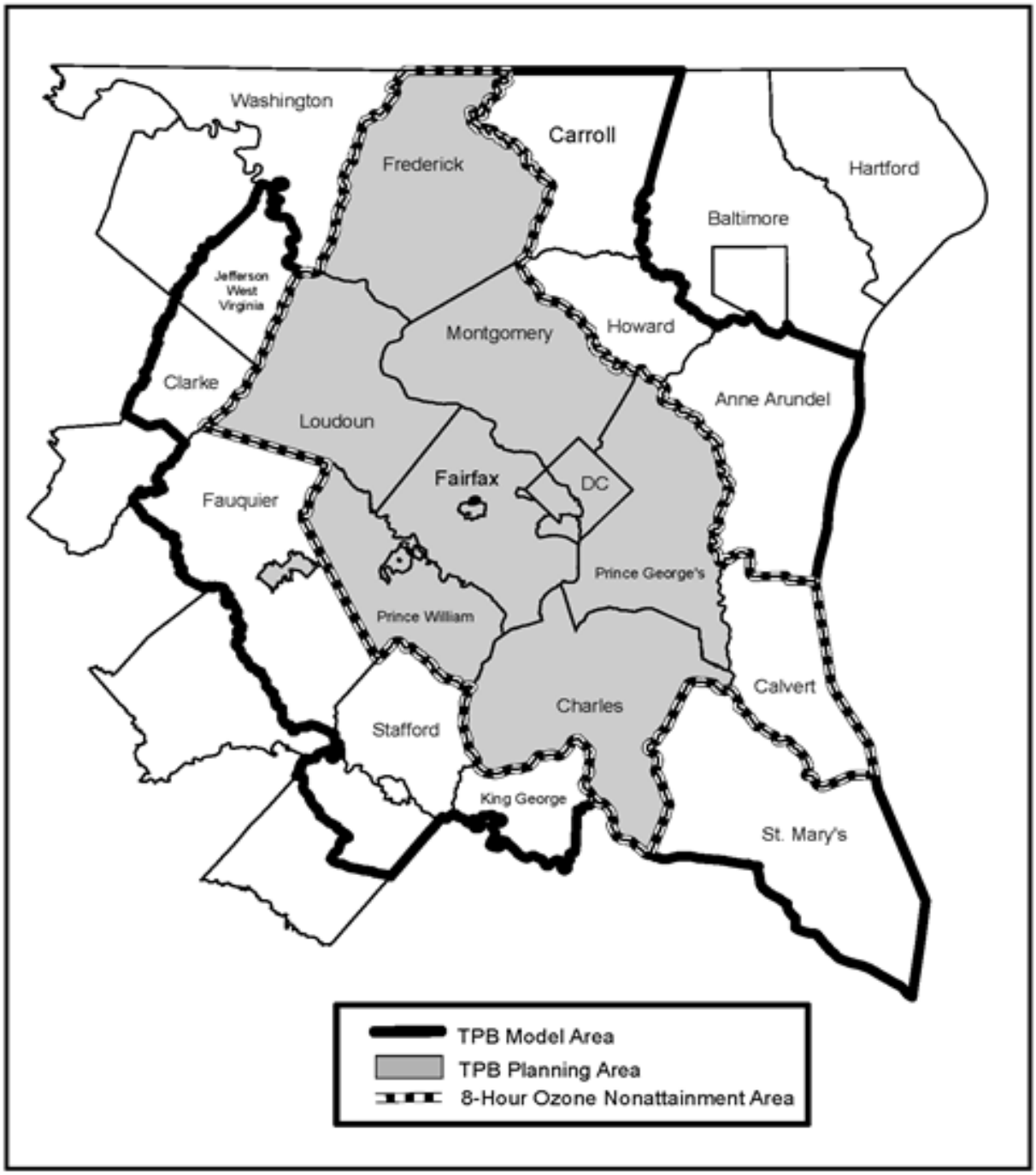
- New Cooperative Land Activity Forecasts- Round 9.1
- New December 2016 Vehicle Registration Data
- New Project and Updates to Existing Project Submissions
- Removal of the "core" Metrorail capacity constraint assumption within the travel demand model
- EPA's MOVES 2014a Mobile Emissions Model

- Version 2.3.75 Travel Demand Model, including a 3,722 Transportation Analysis Zones (TAZ) area system

Mobile emissions inventories were developed for ozone season VOC and NOx for six forecast years (2019, 2021, 2025, 2030, 2040 and 2045). These inventories address a primary conformity requirement to demonstrate that emissions associated with the plan and TIP do not exceed the EPA-approved mobile budgets.

Exhibit 4 depicts the geographic areas for travel demand modeling and for emissions reporting.

EXHIBIT 4
Planning Areas

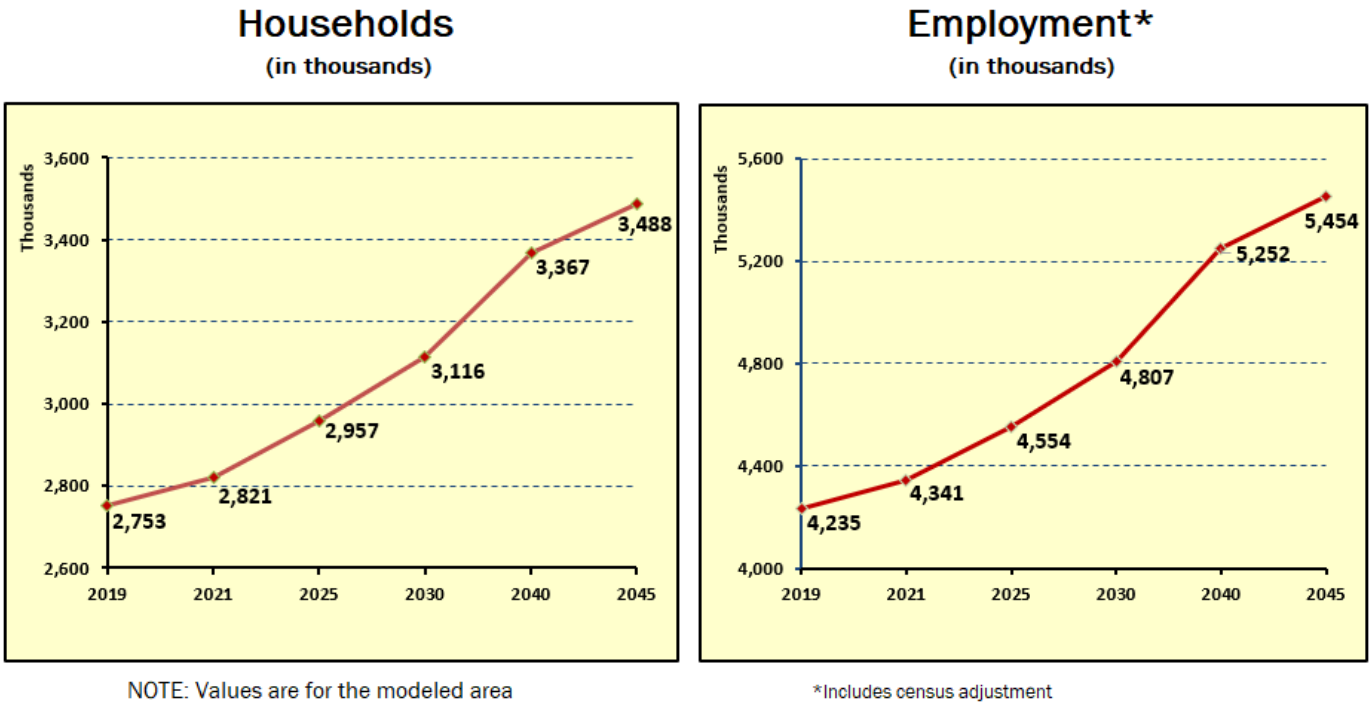


Cooperative Forecasts

The COG Board approved the draft Round 9.1 Cooperative Forecasts for use in the air quality conformity analysis of the Visualize 2045 Plan and FY2019-2024 TIP in January 2018. The Round 9.1 projections, summarized in Exhibit 5, reflect not only the forecast small area land use distributions throughout the Washington area, but also the latest planning assumptions for areas outside the Washington region. For example, the Baltimore land use input to Round 9.1 reflects the Baltimore Metropolitan Council's current 'Round 8B' adopted figures.

Round 9.1 shows a steady growth in households and jobs through the 2045 out-year of the Plan. When comparing Round 9.1 to the previous Round 9.0, Round 9.1 includes more population for all forecast years, and more jobs for all years through 2030.

EXHIBIT 5
Round 9.1 Cooperative Forecasts



NOTE: Values are for the modeled area

*Includes census adjustment

Vehicle Registration Data

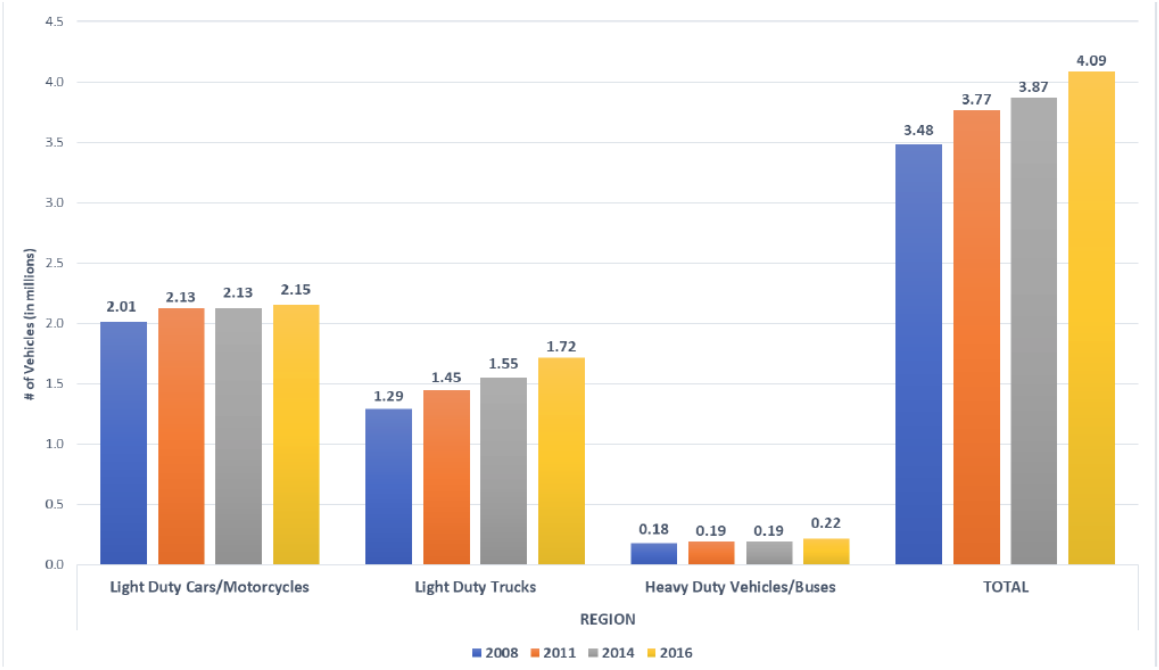
TPB staff has analyzed vehicle fleet inventory information on a regular basis since 2005. This information is used to understand the vehicle type composition and vehicle age distributions, which are important determinants of mobile emissions. Periodic inventory reviews enable staff to refresh mobile emissions modeling inputs with the most currently available information. The current data are from December 2016 (January 2017 for DC). TPB staff analyzed the December 2016 VIN data and the analysis was reviewed by the MWCOG/TPB technical oversight committees prior to being approved for use in transportation planning applications.

Exhibits 6 and 7 show characteristics of the region's vehicle fleet through time. The exhibits indicate that the fleet is continuing to grow, and that light duty trucks (SUVs) are growing at the fastest rate, relative to other vehicle types. Light duty trucks have a higher emissions rate than light duty cars. Also, for the first time since the TPB has collected fleet data, the average vehicle fleet age has decreased, as seen when

comparing 2014 to 2016 statistics in Exhibit 7. Typically, such a trend favors reduced emissions because of better emissions controls on newer vehicles.

EXHIBIT 6

Historical growth in vehicles by type



* Based on Decoded Records

EXHIBIT 7

Average Age of Regional Vehicle Fleet by Year

Year	Light Duty Cars* (LDC)	Light Duty Trucks (LDT)	Heavy Duty Vehicles (HDV)	All Vehicle Types
2008	8.51	7.53	9.21	8.18
2011	9.25	8.55	10.56	9.05
2014	9.62	9.09	11.30	9.49
2016	**9.33**	**8.69**	**11.29**	**9.17**

*Motorcycles are included

CLRP Projects

Attachment B lists the major highway and transit project inputs for the conformity analysis. A complete list of highway and transit projects, as approved by the TPB on January 17, 2018 is shown in Attachment B of the full technical report. Significant changes to the project list since the last update to the regional transportation plan (the 2016 Constrained Long Range Plan) include: managed lanes on I-270 and on the Beltway in Maryland, the widening of US 301 in Maryland, additional Express Lanes on the Beltway in Virginia (for better connectivity with Maryland's managed lanes), the construction of a southbound I-95

auxiliary lane in Virginia, five new Bus Rapid Transit corridors in Montgomery County, five new bike lane corridors in the District, and $5.4 billion worth of Metro core capacity improvements. Relative to the 2016 CLRP, the projects in Visualize 2045 result in a greater reduction in the vehicle miles traveled per capita.

Metrorail Capacity Constraint

In March 2018, lawmakers from the District of Columbia, Maryland, and Virginia agreed to jointly provide an additional $500 million annually for regional transit under the Washington Metropolitan Area Transit Authority (WMATA). All three governments passed legislation to provide dedicated funding sources to support the transit agency. This money will fund WMATA's capital improvements to ensure the system is in a state of good repair, which will include investments such as the infrastructure and equipment needed to support a 100% 8-car train system.

Since 2000, due to the lack of such a funding commitment for WMATA's capital needs, the TPB's air quality conformity analysis has included a technical adjustment to travel forecasts to account for the expectation that future peak period Metrorail ridership in the region's "core" downtown area will be subject to capacity limitations of the Metrorail system. This so-called "Metrorail transit constraint" was used to account for WMATA's expressed concern that the Metrorail ridership would exceed peak period capacity in the regional core unless the rail fleet and station infrastructure were expanded to allow for 8-car trains. The recent legislation establishing stable long-term funding will now support WMATA's plans to implement all 8-car trains during peak periods in the Visualize 2045 Plan. Consequently, the transit constraint was removed from the travel model process.

TRAVEL MODELING

Travel demand forecasts were developed for each of the analysis years using the Version 2.3.75 travel demand model. Changes between the version of the model used to set the mobile budgets (Version 2.3.66) and the version of the model used for conformity (Version 2.3.75) include: updates to airport trips to more accurately reflect travel to and from the region's three major airports and enhancement of managed lanes modeling to account for the operational nature of facilities in MDOT's Traffic Relief Plan (TRP). Exhibit 8 presents the resulting average weekday vehicle and transit trips through time for each conformity analysis year, for the full modeled area.

EXHIBIT 8
Modeled Area Trips

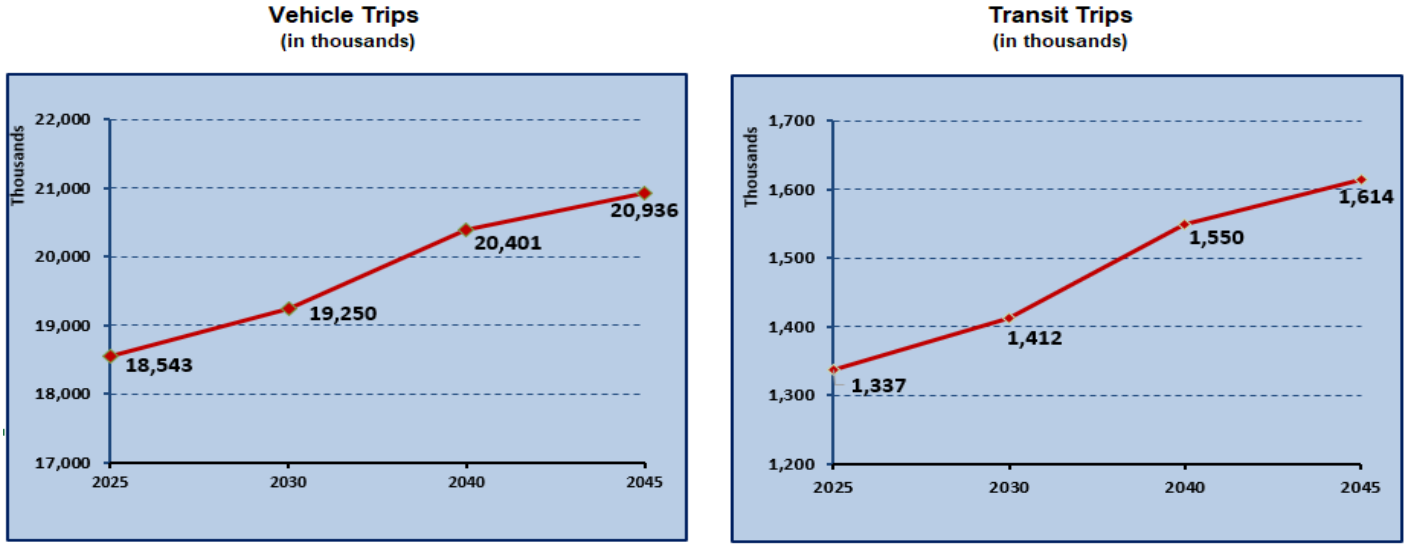
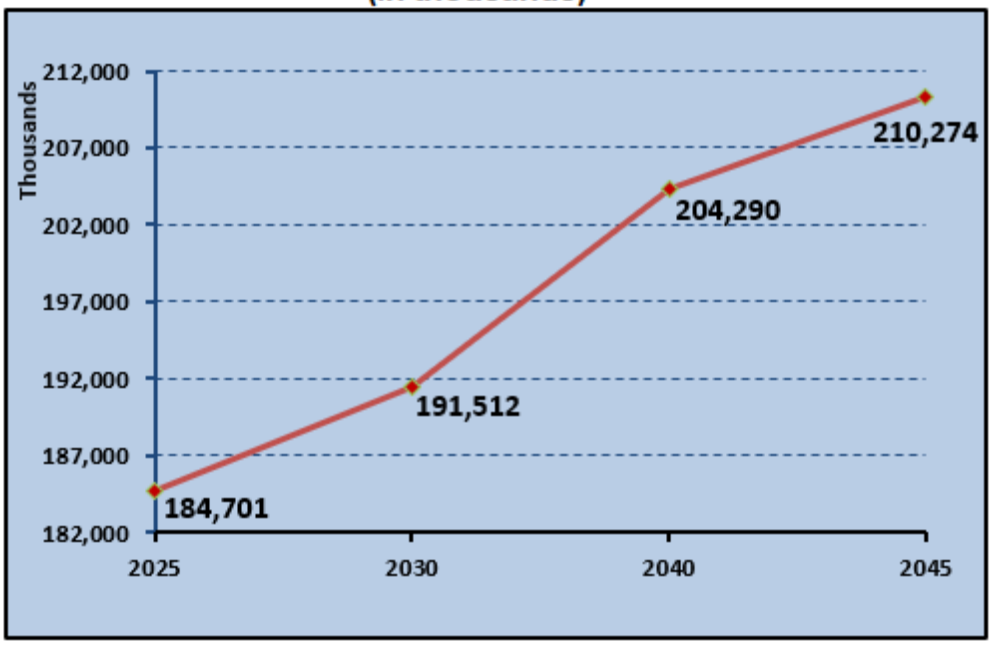


Exhibit 9 shows Vehicle Miles Traveled (VMT) results through time for each conformity analysis year, for the full modeled area.

EXHIBIT 9
Modeled Area Vehicle Miles Traveled
(in thousands)



EMISSIONS

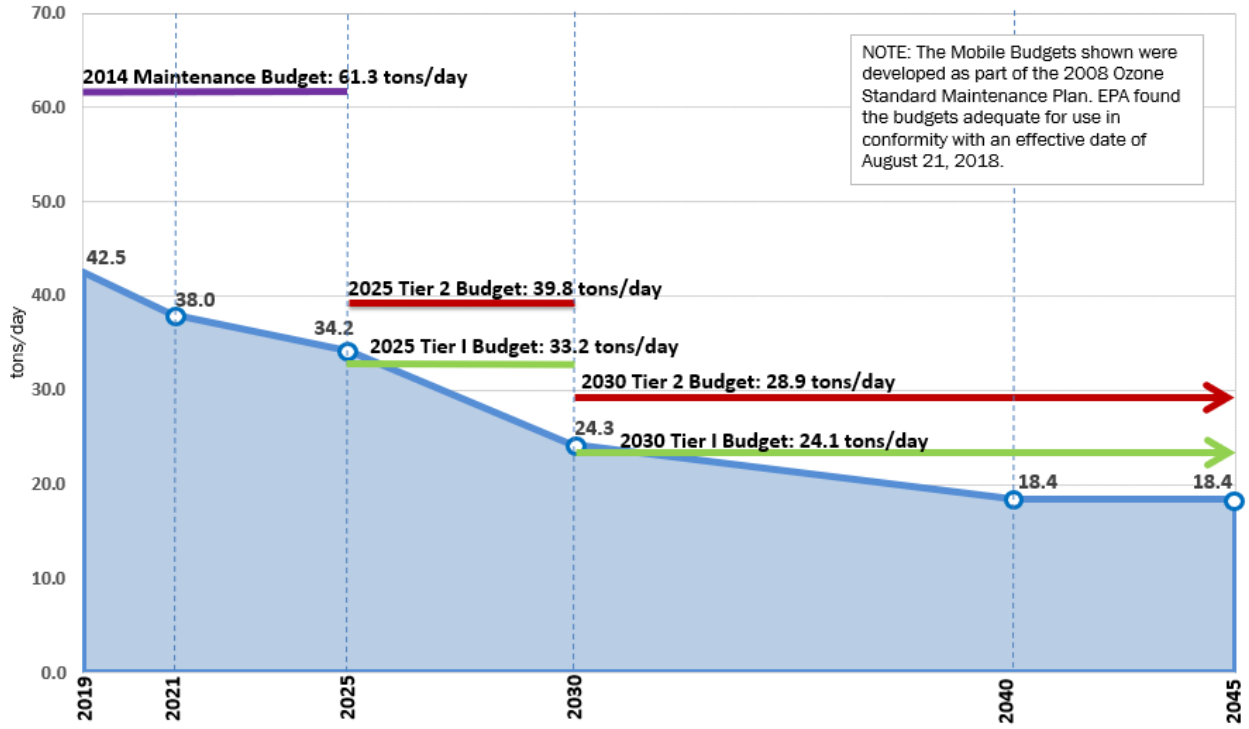
Mobile Emissions Inventories & Tier 1 and Tier 2 Mobile Budgets

Ozone season emissions totals are illustrated in Exhibit 10. The emissions are shown in relation to the Tier 1 and Tier 2 mobile budgets for each pollutant. Emissions levels for VOC and NOx are slightly above the Tier 1 mobile budgets for the 2025 and 2030 analysis years. For the 2025 analysis year, the VOC emissions level is 1 ton/day above the 34.2 tons/day Tier 1 budget, and the NOx emissions level is 1.6 tons/day above the 40.7 tons/day Tier 1 budget. For the 2030 analysis year, the VOC emissions level is 0.2 tons/day above the 24.1 tons/day Tier 1 budget, and the NOx emissions level is 0.5 tons/day above the 27.4 tons/day Tier 1 budget. These emissions are marginally higher than Tier 1 budget levels due to the differences in the inputs used in this conformity analysis relative to those used in the 2008 Ozone Maintenance Plan.

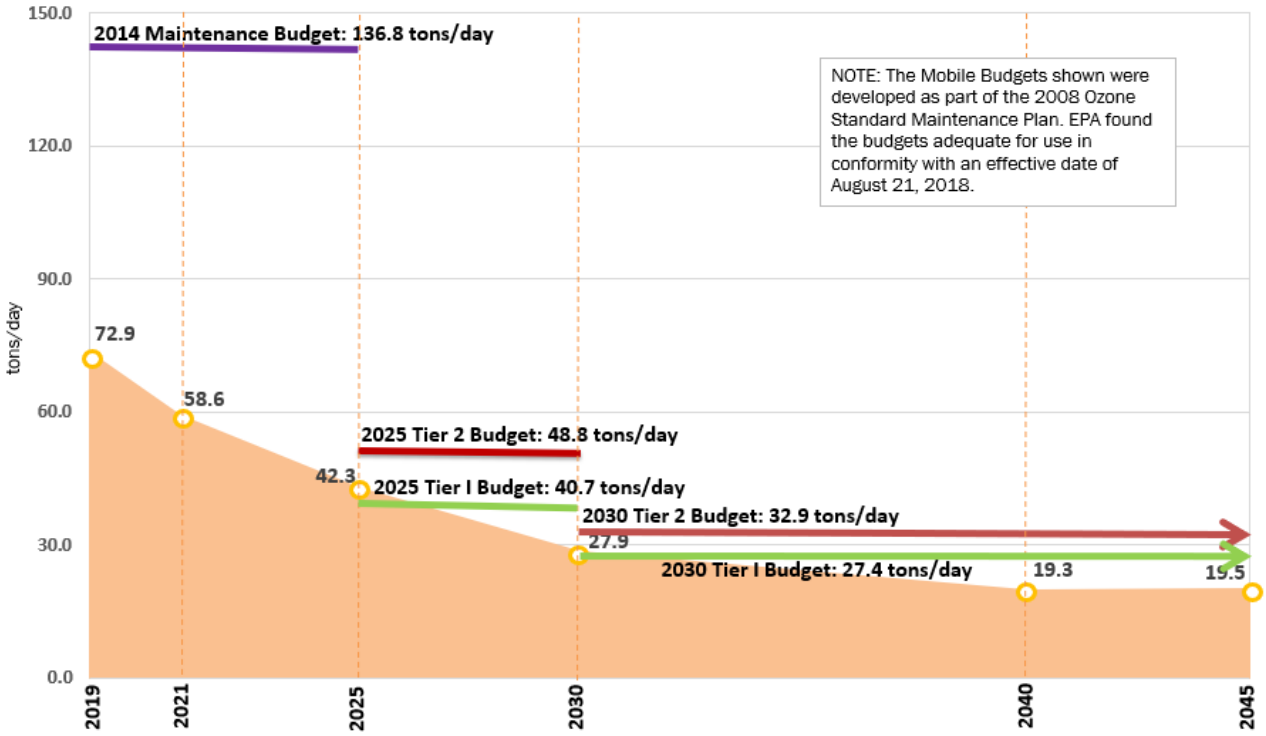
The transportation buffers established in the Tier 2 Mobile Budgets were implemented to account for changes in data, models, or planning assumptions used in the conformity analysis. As outlined earlier in this report, there were numerous input changes between the conformity analysis and the analysis used to set the mobile budgets. Therefore, the Tier 2 budgets are used to demonstrate conformity of the Visualize 2045 transportation plan and FY2019-2024 TIP with respect to VOC and NOx. Emissions levels for VOC and NOx are well below the Tier 2 mobile budgets for all analysis years, as shown in Exhibit 10.

EXHIBIT 10
Mobile Source Emissions

OZONE SEASON VOC



OZONE SEASON NOx



VIN Sensitivity Test

Each input to the conformity analysis impacts the resulting emissions estimates. It would not be feasible with respect to the project schedule to test the impact of each input change individually, but staff did conduct a sensitivity test to determine the impact of the change in the vehicle fleet. Staff re-estimated mobile emissions for the 2025 analysis year, one of the years for which new MVEBs were established in the 2008 Ozone Maintenance Plan, substituting the 2014 VIN data (same data used in the Maintenance plan) for the newer 2016 VIN data (used in conformity analysis).

For the 2025 analysis year, VOC is 3% and NOx is 4% above the respective Tier 1 budgets for each pollutant in the conformity analysis. In the sensitivity test, using the 2014 VIN instead of the 2016 VIN, VOC is only 1% above the Tier 1 budget, and NOx is below the Tier 1 budget. This indicates that the updated vehicle fleet data seem to be causing most of the increase in emissions in the conformity analysis when compared to the analysis used to create the mobile budgets. Exhibit 11 summarizes the results of the VIN sensitivity test.

EXHIBIT 11

IMPACT OF VEHICLE FLEET CHANGES

2025 EMISSIONS VS TIER 1 MOBILE BUDGETS

		2016 VEHICLE FLEET			2014 VEHICLE FLEET		
	2025 Tier 1 Mobile Budgets (tons/day)	Conformity Analysis (tons/day)	Conformity Analysis Difference (tons/day)	Conformity Analysis Percent Diff	VIN Sensitivity Test (tons/day)	Sensitivity Test Difference (tons/day)	Sensitivity Test Percent Diff
VOC	**33.2**	34.2	1.0	3%	33.6	0.4	1%
NOx	**40.7**	42.3	1.6	4%	40.5	-0.2	-0.5%

TERMs

Transportation Emission Reduction Measures (TERMs) are special strategies or actions that the TPB and/or its member agencies can employ to further reduce forecasted emissions from mobile sources. All TERMs are intended to reduce motor vehicle emissions by reducing either the number of vehicle trips (VT), vehicle miles traveled (VMT), or both. These strategies may include ridesharing and telecommuting programs, improved transit and bicycling facilities, clean fuel vehicle programs or other possible actions. TERMs analyzed for the Visualize 2045 conformity analysis were grouped into four categories:

- TPB Commuter Connections Program
- Regional Incident Management Program
- Pedestrian Facilities Expansions & Enhancements
- Freeform Carpooling (Slug Lots)

Exhibit 12 lists the emission reduction potential of these TERMs, by pollutant, for each analysis year. The benefits of these projects are not included in the conformity emissions totals in this report, but are available, if necessary, to ensure that regional emissions stay below the approved motor vehicle emissions budgets and help offset future growth in mobile emissions.

EXHIBIT 12
Transportation Emission Reduction Measures

ADDITIONAL EMISSIONS REDUCTIONS: ALL TERMS COMBINED		
Years/Pollutants	Ozone - VOC (tons/day)	Ozone - NOx (tons/day)
2019	0.228	0.214
2021	0.223	0.191
2025	0.229	0.162
2030	0.177	0.106
2040	0.162	0.074
2045	0.172	0.076

NOTE: Benefits from these TERMs are not included in the emissions totals in this conformity analysis.

Conformity to the 1997 Ozone Standard

Effective April 6, 2015 EPA revoked the 1997 Ozone Standard and eliminated conformity requirements associated with that standard. However, on February 16, 2018, the United States Court of Appeals for the District of Columbia ruled that the revocation of the 1997 Ozone Standard does not waive transportation conformity requirements for all areas. EPA's May 9, 2018 response letter to an enquiry by American Association of State Highway and Transportation Officials (AASHTO) clarifies that areas such as ours, which are designated as nonattainment or maintenance for the 2008 ozone NAAQS, are not affected by the lawsuit. The EPA letter is included as Attachment C.

SUMMARY

The analytical results described in this air quality analysis provide a basis for a determination by the TPB of conformity of the Visualize 2045 Long Range Transportation Plan and the FY2019-2024 TIP and satisfy the requirements of the 2015 Ozone Standard to complete a conformity analysis within one year of EPA's designation of marginal nonattainment.

ATTACHMENT A

Scope of Work

National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Transportation Planning Board

FROM: Jane Posey, TPB Transportation Engineer

SUBJECT: Amendments to the Visualize 2045 Air Quality Conformity Scope of Work

DATE: May 16, 2018

The Transportation Planning Board (TPB) will be asked to amend the Visualize 2045 Air Quality Conformity Scope of Work to respond to two developments that have occurred since the TPB approved the Scope on January 17, 2018. The first update satisfies a requirement related to the 2015 Ozone National Ambient Air Quality Standards (NAAQS), and the second update addresses new financial information related to Washington Metropolitan Area Transit Authority (WMATA) funding.

2015 OZONE NAAQS

Earlier this month the Environmental Protection Agency (EPA) announced final non-attainment designations for the 2015 Ozone NAAQS. The Washington DC-MD-VA region was designated "marginal" non-attainment, which is the lowest level of non-attainment. Marginal non-attainment areas have three years to achieve the standard, which means that our region would have an attainment date of 2021. Non-attainment regions are required to conduct a conformity analysis within one year of the effective date of the designations. The conformity analysis of Visualize 2045 will meet the requirement, but with a requirement to analyze the attainment year, TPB staff will have to add 2021 as a forecast year in the Visualize 2045 conformity analysis.

WMATA FUNDING

In March, lawmakers from the District of Columbia, Maryland, and Virginia agreed to jointly provide $500 million annually for WMATA funding. All three governments have passed legislation to provide dedicated funding sources to support the transit agency. This money will fund WMATA's capital improvements to ensure the system is in a state of good repair, which will include investments such as the infrastructure and equipment needed to run 8-car trains.

Since 2000, the TPB travel demand model has included a technical adjustment to account for the expectation that future peak period Metrorail ridership in the region's "core" downtown area will be subject to capacity limitations of the Metrorail system. This so-called "Metrorail transit constraint" was used to account for WMATA's expressed concern that the Metrorail ridership would exceed peak period capacity in the regional core unless the rail fleet and station infrastructure were expanded to allow for 8-car trains. The recent legislation establishing stable long-term funding will now support WMATA's plans to implement all 8-car trains during peak periods in the Visualize 2045 Plan. Consequently, TPB staff recommends that the transit constraint be removed from the travel model process.

SCOPE OF WORK AMENDMENT

In order to add the new 2021 analysis year, and to remove the transit constraint, the TPB must amend the Visualize 2045 Air Quality Conformity Scope of Work to reflect these updates. The Scope currently lists a 2020 analysis year, which is included to provide the transit constraint levels for future forecast years. With the removal of the transit constraint, the 2020 analysis year will no longer be necessary, and will be replaced with the 2021 analysis year. This substitution will allow for adherence to the original conformity schedule. The updated Scope, with changes highlighted, is attached.

National Capital Region
Transportation Planning Board

May 16, 2018

AIR QUALITY CONFORMITY ANALYSIS: VISUALIZE 2045

AMENDED SCOPE OF WORK

I. INTRODUCTION

Projects solicited for the quadrennial update of the region's transportation plan, Visualize 2045, and the FY2019-2024 Transportation Improvement Program (TIP) are scheduled to be finalized at the January 17, 2018 TPB meeting. This work effort addresses requirements associated with attainment of the ozone standard (volatile organic compounds (VOC) and nitrogen oxides (NOx) as ozone precursor pollutants).

The amended plan must meet air quality conformity regulations: (1) as originally published by the Environmental Protection Agency (EPA) in the November 24, 1993 Federal Register, and (2) as subsequently amended, most recently on March 14, 2012, and (3) as detailed in periodic FHWA / FTA and EPA guidance. These regulations specify both technical criteria and consultation procedures to follow in performing the assessment.

This scope of work provides a context in which to perform the conformity analyses and presents an outline of the work tasks required to address all regulations currently applicable.

II. FEDERAL REQUIREMENTS

As described in the 1990 Clean Air Act Amendments, conformity is demonstrated if transportation plans and programs:

1. Are consistent with most recent estimates of mobile source emissions
2. Provide expeditious implementation of TCMs
3. Contribute to annual emissions reductions

The federal requirements governing air quality conformity compliance are contained in §93.110 through §93.119 of the Transportation Conformity Regulations (printed April 2012), as follows:

CONFORMITY CRITERIA & PROCEDURES	
All Actions at all times	
§93.110	Latest Planning Assumptions
§93.111	Latest Emissions Model
§93.112	Consultation
§93.113	TCMs
§93.114	Currently conforming Plan and TIP
§93.115	Project from a conforming Plan and TIP
§93.116	CO, PM10 and PM2.5 hot spots
§93.117	PM10 and PM2.5 Control Measures
§93.118 and/or §93.119	Emissions Budget and/or Interim Emissions

§ 93.110 Criteria and procedures: Latest planning assumptions - The conformity determination must be based upon the most recent planning assumptions in force at the time of the conformity determination.

§ 93.111 Criteria and procedures: Latest emissions model - The conformity determination must be based on the latest emission estimation model available.

§ 93.112 Criteria and procedures: Consultation – The Conformity must be determined according to the consultation procedures in this subpart and in the applicable implementation plan, and according to the public involvement procedures established in compliance with 23 CFR part 450.

§ 93.113 Criteria and procedures: Timely implementation of TCMs - The transportation plan, TIP, or any FHWA/FTA project which is not from a conforming plan and TIP must provide for the timely implementation of TCMs from the applicable implementation plan.

§93.114 Criteria and procedures: Currently conforming transportation plan and TIP - There must be a currently conforming transportation plan and currently conforming TIP at the time of project approval.

§93.115 Criteria and procedures: Projects from a plan and TIP - The project must come from a conforming plan and program.

§93.116 Criteria and procedures: Localized CO, PM10, and PM2.5 violations (hot spots) -The FHWA/FTA project must not cause or contribute to any new localized CO, PM10, and/or PM2.5 violations or increase the frequency or severity of any existing CO, PM10, and /or PM2.5 violations in CO, PM10, and PM2.5 nonattainment and maintenance areas.

§93.117 Criteria and procedures: Compliance with PM10 and PM2.5 control measures -The FHWA/FTA project must comply with PM10 and PM2.5 control measures in the applicable Implementation Plan.

§93.118 Criteria and procedures: Motor vehicle emissions budget - The transportation plan, TIP, and projects must be consistent with the motor vehicle emissions budget(s).

§93.119 Criteria and procedures: Interim emissions in areas without motor vehicle budgets - The FHWA/FTA project must satisfy the interim emissions test(s).

Assessment Criteria:

Ozone season pollutants will be assessed by comparing the forecast year pollutant levels to the mobile budgets most recently approved or found adequate by the EPA. For the Visualize 2045 conformity assessment there are two possible sets of mobile budgets: 1) the 2009 attainment and 2010 contingency budgets found adequate for use in conformity by EPA in Feb. 2013; or 2) the 2008 Ozone National Ambient Air Quality Standards (NAAQS) Maintenance Plan mobile budgets scheduled to be approved by MWAQC in December and submitted to EPA in early 2018. The budgets found adequate by EPA in 2013 are the most recently approved budgets at the time of the development of this scope of work. However, when the EPA approves or finds adequate the mobile budgets in the 2008 Ozone NAAQS Maintenance Plan, the TPB will immediately be required to use those new budgets. The 2008 Ozone NAAQS Maintenance Plan includes mobile budgets for 2014 (attainment year), 2025 (intermediate year), and 2030 (out year). The 2014 budgets will be used for any analysis year between 2014 and 2024, the 2025 budgets will be used for any analysis year between 2025 and 2029, and the 2030 budgets will be used for any analysis year beyond 2029.

III. POLICY AND TECHNICAL APPROACH

The table below summarizes the key elements of the Policy & Technical Approach:

Pollutants	Ozone Season VOC and NOx
Emissions Model	MOVES2014a
Conformity Test	Budget Test: Using mobile budgets most recently approved by EPA. Two possibilities: 1) 2009 attainment and 2010 contingency budgets found adequate for use in conformity by EPA in Feb. 2013; or 2) 2008 Ozone NAAQS Maintenance Plan mobile budgets scheduled to be approved by MWAQC in December and submitted to EPA in early 2018
Vehicle Fleet Data	December 2016 vehicle registration data for all jurisdictions
Geography	8-hour ozone non-attainment area
Network Inputs	Regionally significant projects
Land Activity	Cooperative Forecasts Round 9.1
HOV/HOT	VA: All HOV 2+/HOT 2+ facilities become HOV 3+/HOT 3+ in 2020 and beyond except I-66 inside the Beltway, which will convert to HOT3+ when I-66 outside the Beltway opens MD: All HOV facilities remain HOV2+ through 2045
Transit Constraint	NO Metrorail "capacity constraint" procedures
Analysis Years	2019, 2021, 2025, 2030, 2040, 2045
Modeled Area	3,722 TAZ System
Travel Demand Model	Version 2.3.70 or latest

IV. CONSULTATION

The TPB adheres to the specifications of the consultation procedures (as outlined in the consultation procedures report adopted by the TPB on May 20, 1998). The TPB will participate in meetings of MWAQC, its Technical Advisory Committee, and its Conformity Subcommittee to discuss the Scope of Work, project inputs, and other elements as needed. The TPB will discuss at meetings or forums, as needed, the following milestones:

- Visualize 2045 Technical Inputs Solicitation
- Scope of Work
- Project submissions: documentation and comments
- Conformity analysis: documentation and comments
- Visualize 2045 Performance
- Process: comments and responses

V. WORK TASKS

The work tasks associated with the Visualize 2045 air quality conformity analysis are as follows:

1. Receive project inputs from programming agencies and organize into conformity documentation listings by:
   - Project type, limits, etc.
   - Phasing with respect to forecast years
   - Transit operating parameters, e.g., schedules, service

2. Update Travel Model Base Transit Service to reflect:
   - Service current to Fall 2017
   - Fares current to Fall 2017

3. Prepare 2016 Vehicle Registration Data (VIN data)
   - Coordinate with States to receive raw VIN data
   - Explore updated VIN decoder software options and procure the software that best suits the agency's needs
   - Convert raw VIN data into MOVES input categories/format

4. Review and Update Land Activity files to reflect Round 9.1 Cooperative Forecasts with respect to:
   - Zonal data files
   - Employment Data Census Adjustment
   - Households by auto ownership, size and income
   - Coordination with agencies outside the MWCOG Cooperative Forecast area (BMC, FAMPO, C-SMMPO etc.)
   - Exogenous Travel (external, through trips etc.)

5. Prepare forecast year highway, HOV, and transit networks including regionally significant projects, as follows:
   - 2019, 2021, 2025, 2030, 2040, and 2045 highway networks
   - 2019, 2021, 2025, 2030, 2040, and 2045 transit network input files
   - Update highway tolls, as necessary

6. Execute travel demand modeling for years 2019, 2021, 2025, 2030, 2040, and 2045

7. Derive Mobile Emissions Estimates for years 2019, 2021, 2025, 2030, 2040, and 2045 using inputs from both 2008 Ozone NAAQS attainment SIP mobile budgets and 2008 Ozone NAAQS Maintenance Plan mobile budgets (2 runs per year)

8. Provide emissions reductions estimates for TERMs

9. Summarize key inputs and outputs (VMT, mode share, emissions, etc.) of the conformity determination for use in the Visualize 2045 Performance Analysis

10. Assess conformity and document results in a report

    - Document methods
    - Draft conformity report
    - Forward to technical committees, policy committees
    - Make available for public and interagency consultation
    - Receive comments
    - Respond to comments and present to TPB for action
    - Finalize report and forward to FHWA, FTA, and EPA

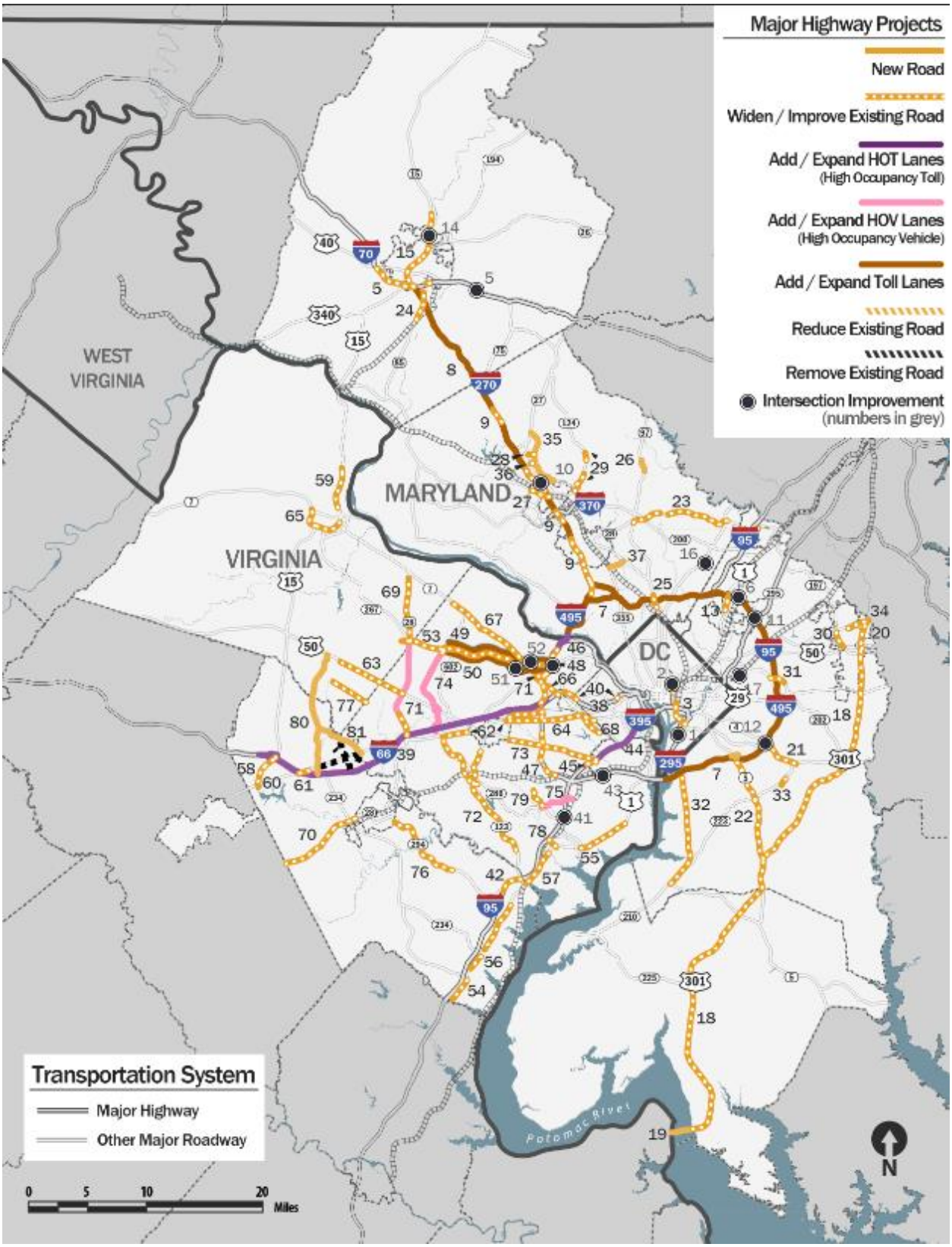
SCHEDULE FOR DEVELOPMENT & ADOPTION OF VISUALIZE 2045

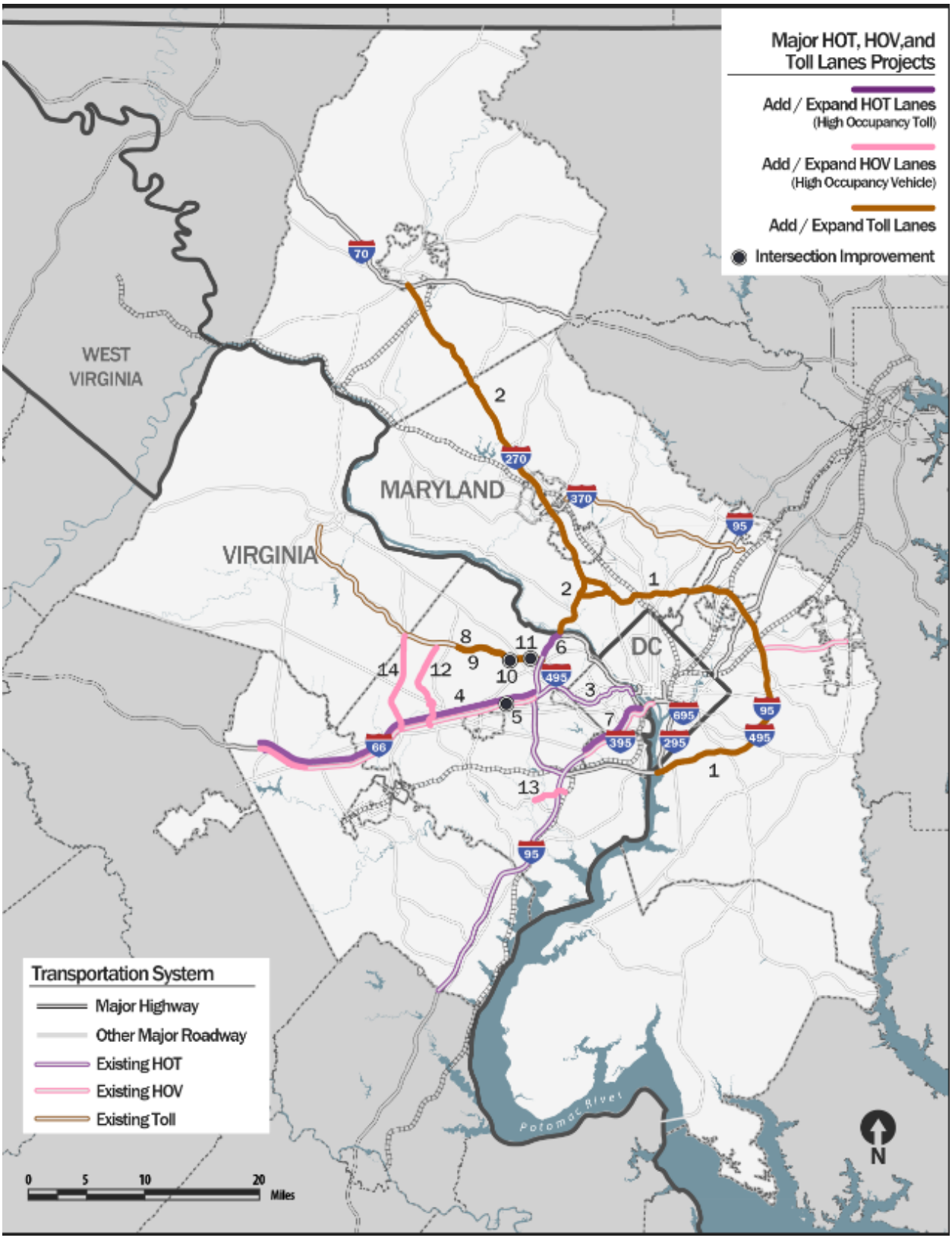
2017	September 20*	TPB is briefed on the draft Solicitation of Technical Inputs document.
	October 18*	TPB releases final Solicitation Document. Transportation agencies begin submitting project information through online database.
	November 17	**DEADLINE:** Transportation agencies complete online submission of draft inputs.
	December 1	Technical Committee reviews draft Visualize 2045 inputs and draft Scope of Work for the Air Quality Conformity Analysis.
	December 14	Visualize 2045 inputs and draft Scope of Work released for **30-day comment period**.
	December 12	TPB staff briefs Metropolitan Washington Air Quality Committee Technical Advisory Committee (MWAQC TAC) on inputs and Scope of Work.
2018	December 20*	TPB is briefed on inputs and draft Scope of Work.
	January 13	Comment period ends.
	January 17*	TPB reviews comments and is asked to approve inputs and draft Scope of Work.
	March 2	**DEADLINE:** Transportation agencies finalize forms (including Congestion Management Documentation forms where needed) and inputs to the FY 2019-2024 TIP. Submissions must not impact conformity inputs. Note that the deadline for changes affecting conformity inputs was December 14, 2017.
	May 10	Public Forum on the development of the FY 2019-2024 TIP.
	September 7	Technical Committee reviews draft Visualize 2045 and Conformity Analysis.
	September 7	Draft Visualize 2045 Plan, TIP, and Conformity Analysis are released for **30-day comment period** at Citizens Advisory Committee (CAC) meeting.
	September 19*	TPB is briefed on the draft Visualize 2045 Plan, TIP, and Conformity Analysis.
	October (TBD)	TPB staff briefs MWAQC TAC on the draft Visualize 2045 Plan, TIP, and Conformity Analysis.
	October 7	Comment period ends.
	October 17*	TPB reviews comments and responses to comments, and is presented with the draft Visualize 2045 Plan, TIP, and Conformity Analysis for approval.

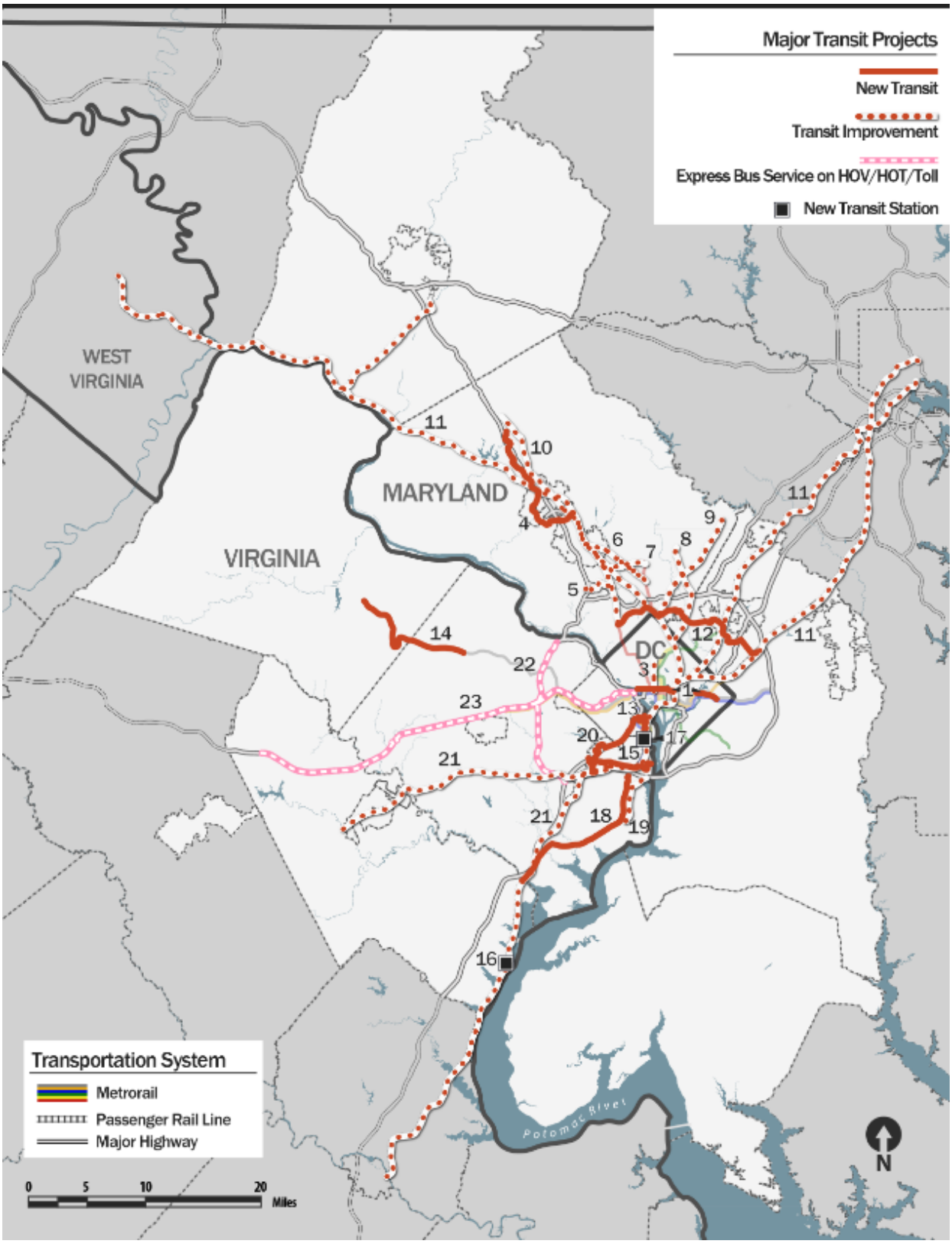
* Regularly scheduled TPB meeting.

ATTACHMENT B

Major Project Inputs


Major Highway Projects
New Road
Widen / Improve Existing Road
Add / Expand HOT Lanes
(High Occupancy Toll)
Add / Expand HOV Lanes
(High Occupancy Vehicle)
Add / Expand Toll Lanes
Reduce Existing Road
Remove Existing Road
Intersection Improvement
(numbers in grey)
WEST VIRGINIA
MARYLAND
VIRGINIA
DC
Potomac River
Transportation System
Major Highway
Other Major Roadway
0 5 10 20
Miles
N


Major HOT, HOV,and Toll Lanes Projects
Add / Expand HOT Lanes
(High Occupancy Toll)
Add / Expand HOV Lanes
(High Occupancy Vehicle)
Add / Expand Toll Lanes
Intersection Improvement
WEST VIRGINIA
MARYLAND
VIRGINIA
DC
Potomac River
Transportation System
Major Highway
Other Major Roadway
Existing HOT
Existing HOV
Existing Toll
0 5 10 20
Miles
N


Major Transit Projects
New Transit
Transit Improvement
Express Bus Service on HOV/HOT/Toll
New Transit Station
WEST VIRGINIA
MARYLAND
VIRGINIA
DC
Potomac River
Transportation System
Metrorail
Passenger Rail Line
Major Highway
0 5 10 20
Miles
N

MAJOR HIGHWAY PROJECTS

DISTRICT OF COLUMBIA

MAJOR HIGHWAYS

1. I-295 - reconstruct interchange at Malcolm X Blvd, 2020 ($200M)
2. I-395 - remove 3rd St SB exit ramp, reconfigure 3rd St SB entrance and 2nd St NB exit ramps, reconnect F St between 2nd and 3rd St, 2019 ($27M)

LOCAL ROADS

3. South Capitol St - convert to 6 lane urban blvd, incl. Frederick Douglass Bridge Reconstruction, 2021 ($822M)
4. **Lane Reductions/Reconfigurations for Bicycle Lanes, 2018, 2019, 2020, 2024 (not mapped)**

MARYLAND

MAJOR HIGHWAYS

5. I-70 - widen to 6 lanes with interchange at Meadow Rd, 2025, 2035 ($143M)
6. I-95/I-495 - interchange at Greenbelt Metro Sta, 2030 ($196M)
7. **I-95/I-495 Traffic Relief Plan, construct 4 managed lanes, 2025 ($4.2B)**
8. **I-270 Traffic Relief Plan, construct 4 managed lanes, 2025 ($3.4B)**
9. **I-270 - "Innovative Congestion Management" project to includes auxiliary lanes & add'l improvements, 2019 ($114M)**
10. I-270 - interchange at Watkins Mill Rd Ext, 2021 ($120M)
11. Baltimore Washington Parkway (MD-295) at MD-193 (Greenbelt Rd) - intersection improvement, 2020 ($8.5M)
12. Suitland Pkwy - interchange at Rena/Forestville Rd, 2025 ($2.8M)
13. US-1 (Baltimore Ave) - reconstruct 4 lanes, 2030 ($116M)
14. US-15 (Catoctin Mtn Hwy) - reconstruct intersection at Monocacy Blvd, 2018 ($61M)
15. **US-15 (Frederick Fwy and Catoctin Mtn Hwy) - widen to 6 lanes with interchange at Biggs Ford Rd, 2030, 2040, 2045 ($420M)**
16. **US-29 (Columbia Pke) - improve interchanges at Stewart Ln, Tech Rd/Industrial Pkwy, Musgrove Rd/Fairland Rd, Greencastle Rd, and Blackburn Rd, 2045 ($646M)**
17. US-50 (John Hanson Hwy) - westbound ramp to Columbia Park Rd, 2025 ($64M)
18. **US-301 (Crain Hwy) - widen to 6 lanes, 2045 ($4.6B)**
19. US-301 - widen Governor Harry Nice Memorial Bridge, 2023 ($768M)

STATE ROUTES

20. MD-3 (Robert Crain Hwy) - widen to 6 lanes, 2035 ($1.8B)
21. MD-4 (Pennsylvania Ave) - widen to 6 lanes with interchanges at Dowerhouse Rd, Westphalia Rd, and Suitland Pkwy, 2040 ($533M)
22. MD-5 (Branch Ave) - upgrade, widen to 6 lanes including interchanges, 2035 ($790M)
23. MD-28 (Norbeck Rd) / MD-198 (Spencerville Rd) - widen to 4, 6 lanes, 2045 ($413M)
24. MD-85 (Buckeystown Pke) - widen to 4, 6 lanes, 2021, 2035 ($220)
25. **MD-97 (Georgia Ave) - widen to 7, 8 lanes, 2025 ($52M)**
26. MD-97 (Brookeville Bypass) - construct 2 lane bypass, 2021 ($52M)
27. MD-117 (Clopper Rd) - widen to 4 lanes, 2030 ($69M)
28. MD-118 (Germantown Rd) - widen to 4 lanes, 2020 ($4.0M)
29. MD-124 (Woodfield Rd) - widen to 6 lanes, 2035 ($129M)

30. MD-197 (Collington Rd) - widen to 4/5 lanes, 2025 ($94M)
31. MD-202 (Landover Rd) - Largo Town Center Metro Access Improvement, reconstruct 6 lanes, 2045 ($24M)
32. MD-210 (Indian Head Hwy) - upgrade to 6 lanes and interchange improvement, 2040 ($754M)
33. MD-223 (Woodyard Rd) - widen to 4 lanes, 2020 ($2.8M)
34. MD-450 (Annapolis Rd) - widen to 4 lanes, 2030 ($67M)

LOCAL ROADS

35. Midcounty Hwy Extension (M-83) - construct 4, 6 lanes, 2025 ($202M)
36. Middlebrook Rd Extended - widen to 4 lanes, 2025 ($16M)
37. Montrose Pkwy East - construct 4 lanes, 2025 ($140M)

VIRGINIA

MAJOR HIGHWAYS

38. I-66 HOT (Inside Beltway), revise operations from HOV 2+ to HOT during peak hours and bus service, 2017, 2021, 2040 ($375M)
39. I-66 HOT (Outside Beltway) - widen to 6 lanes (3 general purpose, 2 HOT, and 1 auxiliary) and bus service, 2021, 2040 ($4.4B)
40. I-66 - Extend existing westbound acceleration/deceleration lane, 2020, 2022 ($59M)
41. I-95/Fairfax County Parkway - enhanced interchanges for BRAC, 2025 ($57M)
42. I-95 - add southbound auxiliary lane, 2028 ($27M)
43. I-95/I-495 - reconstruct interchange at Van Dorn St, 2030 ($40M)
44. I-395 HOT - additional lane and revise operation from HOV 3+ during peak to HOT 3+, 2019 ($220M)
45. I-395 - construct new south bound lane, 2018, 2020 ($58M)
46. I-495 - construct 4 HOT lanes, 2025 ($500M)
47. I-495 Auxiliary Lanes - construct 2 auxiliary lanes in both directions, 2030
48. I-495 - interchange at VA 267, 2030 ($70M)
49. Dulles Toll Rd (VA-267) - Collector-Distributor Road west-bound, 2037 ($62M)
50. Dulles Toll Rd (VA-267) - Collector-Distributor Road east-bound, 2036 ($124M)
51. Dulles Toll Rd (VA-267) - interchange at New Boone Blvd Extension, 2037 ($79M)
52. Dulles Toll Rd (VA-267) - interchange at Greensboro Drive/Tyco Rd, 2036 ($28M)
53. Dulles Access Rd (VA 267) - widen to 6 lanes including interchange reconstruct at I-495, 2030 ($40M)
54. US-1 (Jefferson Davis Hwy) - widen to 6 lanes, 2040 ($58M)
55. US-1 (Richmond Hwy) - widen to 6 lanes, 2025, 2035 ($37M)
56. US-1 (Richmond Hwy) - widen to 6 lanes, 2024, 2030 ($127M)
57. US-1 (Richmond Hwy) - widen to 6 lanes, 2035 ($125M)
58. US-15 (James Madison Hwy) - widen to 4 lanes, 2024, 2030 ($45M)
59. US-15 (James Madison Hwy) - widen to 4 lanes, 2022, 2025 ($33M)
60. US-15 (James Madison Hwy) - widen to 4 lanes, 2030, 2040 ($54M)
61. US-29 (Lee Hwy) - widen to 5 lanes and improve I-66 interchange, 2030 ($255M)
62. US-29 (Lee Hwy) - widen to 3, 6 lanes, 2017, 2025 ($130M)
63. US-50 (Lee Jackson Memorial Hwy) - widen to 6 lanes, 2025 ($100M)
64. US-50 (Arlington Blvd) - widen/reconstruct 6 lanes including interchanges, 2020, 2025($249M)

STATE ROUTES

65. VA-7/US-15 Bypass (Harry Byrd Hwy) - widen to 6 lanes, 2035, 2040 ($55M)
66. VA-7 (Leesburg Pke) - widen to 6 lanes, 2021 ($71M)
67. VA-7 (Leesburg Pke) - widen to 6, 8 lanes, 2021, 2025, 2030 ($49M)
68. VA-7 (Leesburg Pke) - widen to 6 lanes, 2020, 2025 ($34M)
69. VA 28 (Sully Rd) HOV, widen to 8-10 lanes, HOV in additional lanes during peak, 2016, 2025, 2040 ($100M)
70. VA-28 (Nokesville Rd) - widen to 4 or 6 lanes, 2019, 2025, 2022, 2040 ($71M)
71. VA-123 (Chain Bridge Rd) - widen to 8 lanes, 2021 ($22M)
72. VA-123 (Ox Road) - widen to 4, 6 lanes, 2020, 2025 ($69.9M)
73. VA-236 (Little River Tpke) - widen to 6 lanes, 2030 ($58M)
74. VA-286 (Fairfax County Pkwy) HOV - widen to 6 lanes, HOV in additional lanes during Peak, 2025, 2035 ($295M)
75. VA-289 (Franconia/Springfield Parkway), HOV lanes with interchange at Neuman St, 2025 ($16M)
76. VA-294 (Prince William Pkwy) - widen to 6 lanes, 2040 ($263M)
77. VA-620 (Braddock Rd) - widen to 4 lanes, 2025, 2027 ($165M)
78. VA-638 (Pohick Rd) - widen to 4 lanes, 2020 ($12M)
79. VA-638 (Rolling Rd) - widen to 4 Lanes, 2025 ($31M)

LOCAL ROADS

80. Manassas Bypass (VA-234 Bypass) - construct 4 lanes, 2040 ($96M)
81. Manassas Battlefield Bypass - construct 4 lanes and close portions of US-29 (Lee Hwy) and VA-234 (Sudley Rd), 2035, 2040 ($28M)

Note: New or significantly changed projects are identified with **bold text**. Costs identified include total project costs which may include additional elements presented in another list(s).

MAJOR HOT, HOV, AND TOLL LANE PROJECTS*

MARYLAND

MAJOR HIGHWAYS

1. I-95/I-495 Traffic Relief Plan, construct 4 managed lanes, 2025 ($4.2B)

2. I-270 Traffic Relief Plan, construct 4 managed lanes, 2025 ($3.4B)

VIRGINIA

MAJOR HIGHWAYS

3. I-66 HOT (Inside Beltway), revise operations from HOV 2+ to HOT during peak hours and bus service, 2017, 2021, 2040 ($375M)
4. I-66 HOT (Outside Beltway) - widen to 6 lanes (3 general purpose, 2 HOT, and 1 auxiliary) and bus service, 2021, 2040 ($4.4B)
5. I-66 - construct HOV ramps to access Vienna Metro Sta, 2021 ($41M)

6. I-495 - construct 4 HOT lanes, 2025 ($500M)

7. I-395 HOT - additional lane and revise operation from HOV 3+ during peak to HOT 3+, 2019 ($220M)
8. Dulles Toll Rd (VA-267) - Collector-Distributor Road west-bound, 2037 ($62M)
9. Dulles Toll Rd (VA-267) - Collector-Distributor Road east-bound, 2036 ($124M)
10. Dulles Toll Rd (VA-267) - interchange at New Boone Blvd Extension, 2037 ($79M)
11. Dulles Toll Rd (VA-267) - interchange at Greensboro Drive/Tyco Rd, 2036 ($28M)

STATE ROUTES

12. VA-286 (Fairfax County Pkwy) HOV - widen to 6 lanes, HOV in additional lanes during peak, 2025, 2035 ($296M)
13. VA-289 (Franconia/Springfield Parkway), HOV lanes with interchange at Neuman St, 2025 ($16M)
14. VA-28 (Sully Rd) HOV, widen to 8-10 lanes, HOV in additional lanes during peak, 2016, 2025, 2040 ($100M)

Note: New or significantly changed projects are identified with **bold text**. Costs identified include total project costs which may include additional elements presented in another list(s).

* HOT = High-Occupancy Toll Lanes. HOV = High-Occupancy Vehicle Lanes.

MAJOR TRANSIT PROJECTS

DISTRICT OF COLUMBIA

1. DC Streetcar, 2023, 2026 ($348M)
2. DC Dedicated Bicycle Lane Network, 2019, 2024 (not mapped) ($800k)
3. 16th Street Bus Priority Improvements, 2021 ($15M)

MARYLAND

4. Corridor Cities Transitway BRT - from Shady Grove to COMSAT, 2020 ($545M)
5. **North Bethesda Transitway BRT - from Montgomery Mall to White Flint Metro, 2040 ($115M)**
6. **Veirs Mill Rd BRT - from Wheaton Metro to Rockville Metro, 2030 ($6M)**
7. **Randolph Rd BRT - from US-29 to MD-355, 2040 ($102M)**
8. **New Hampshire Ave. BRT - from Takoma Metro to Colesville P&R, 2045 ($285M)**
9. US-29 BRT - from Silver Spring Metro to Burtonsville P&R, 2020 ($39M)
10. **MD-355 BRT - from Bethesda Metro to Clarksburg, 2040 ($1B)**
11. MARC - Increase trip capacity and frequency along all commuter rail lines, 2029 ($1B)
12. Purple Line - Bethesda to New Carrollton, 2020 ($2.4B)

VIRGINIA

13. Crystal City Transitway: Northern Extension BRT, 2023 ($24M)
14. Metro Silver Line (Dulles Corridor Metrorail Project) - Phase 2, 2020 ($2.9B)
15. Duke St Transitway - King St Metro to Fairfax County line, 2024 ($19M)
16. Potomac Shores VRE Station, 2019 ($26M)
17. Potomac Yard Metro Station, 2021 ($268M)
18. US-1 BRT from Huntington Metro Station to Woodbridge, 2030 ($504M)
19. US-1 bus lanes and improved intersections, 2035 ($37M)
20. West End Transitway - Van Dorn St Metro to Pentagon Metro, 2024 ($140M)
21. VRE - Reduce headways along the Manassas and Fredericksburg Lines, 2020 ($105M)
22. I-495 HOT Lane Express Bus Service, 2030 ($254M)
23. I-66 HOT Lane Enhanced Bus Service, 2025, 2040

Note: New or significantly changed projects are identified with **bold text**. Costs identified include total project costs which may include additional elements presented in another list(s).

ATTACHMENT C

EPA Letter

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 9 2018

OFFICE OF
AIR AND RADIATION

Mr. Bud Wright
Executive Director
American Association of State Highway
and Transportation Officials
444 North Capitol Street, N.W.
Washington, D.C. 20001

Dear Mr. Wright:

Thank you for your March 16, 2018 letter to U.S. Environmental Protection Agency (EPA) Administrator Scott Pruitt, regarding our response to the recent decision by the District of Columbia Circuit Court of Appeals on the *South Coast Air Quality Management District v. EPA et al* litigation. In your letter, you raised several issues as well as concerns regarding the potential impacts of the decision on transportation planning.

On April 23, 2018, the Department of Justice filed a motion with the Circuit Court seeking rehearing on various aspects of the decision including portions of the decision that address transportation conformity requirements in certain former nonattainment and maintenance areas for the 1997 ozone national ambient air quality standard (NAAQS). Your letter was included as part of the court filing in order to illustrate the potential impacts of the decision on the planning process.

We believe that there are a number of areas which can continue to make transportation conformity determinations for ozone. Based on our review of the decision, we have concluded that the decision does not affect transportation conformity requirements for areas that are designated as nonattainment or maintenance for the 2008 ozone NAAQS. In other words, transportation conformity determinations for the 2008 ozone NAAQS should continue to be made as they have been prior to the decision. For example:

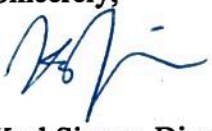
- Areas such as Houston, Dallas, the South Coast, and other 2008 ozone NAAQS nonattainment or maintenance areas may continue to satisfy transportation conformity requirements for ozone by demonstrating conformity for the 2008 ozone NAAQS as they have been doing.
- In addition, there are some 2008 ozone NAAQS areas, such as Atlanta, where a portion of the former 1997 ozone NAAQS nonattainment or maintenance area is not covered by a 2008 ozone NAAQS nonattainment or maintenance area. We believe that such areas can fulfill transportation conformity requirements for the 2008 ozone NAAQS by continuing to demonstrate conformity for the 2008 ozone NAAQS nonattainment or maintenance area as they have been doing. In addition to determining conformity for the 2008 ozone NAAQS nonattainment or maintenance area, such

areas could also determine conformity for the entire former 1997 ozone NAAQS nonattainment or maintenance area. Determining conformity for both ozone NAAQS in this way is an acceptable approach for complying with the decision at this time.

We anticipate issuing transportation conformity guidance on the court decision in the near future consistent with the information in this letter, and we are considering your suggestions for additional guidance. We also continue to work with our counterparts in the U.S. Department of Transportation to assist areas with transportation conformity implementation.

If you have questions, please contact Meg Patulski at (734) 214-4842 or patulski.meg@epa.gov.

Sincerely,



Karl Simon, Director
Transportation and Climate Division
Office of Transportation and Air Quality

visualize2045

A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

APPENDIX D

System Performance Report

October 2018

National Capital Region
Transportation Planning Board

APPENDIX D - SYSTEM PERFORMANCE REPORT
October 17, 2018

ABOUT VISUALIZE 2045 & THE TPB
Visualize 2045 is the federally required long-range transportation plan for the National Capital Region. It identifies and analyzes all regionally significant transportation investments planned through 2045 to help decision makers and the public "visualize" the region's future.

Visualize 2045 is developed by the National Capital Region Transportation Planning Board (TPB), the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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SYSTEM PERFORMANCE REPORT

This report summarizes the work of the National Capital Region Transportation Planning Board (TPB), the Metropolitan Planning Organization (MPO) for the Washington, DC metropolitan area, in the field of performance-based planning and programming (PBPP) and the establishment of performance measure targets in accordance with the federal requirements authorized in the Fixing America's Surface Transportation (FAST) Act. As part of the regional Visualize 2045 long-range metropolitan transportation plan, this system performance report provides an overview of the performance process and targets developed by the TPB in close coordination with the state departments of transportation and providers of public transportation in response to federal requirements for the long-range plan.

The System Performance Report is a requirement of Metropolitan Planning Organizations (MPOs) per federal statutes 23 USC 134(i)(2)(C) and 49 USC 5303(i)(2)(C). This initial report is to serve as a baseline, after which the MPO is required to make updates to the System Performance Report every four years. The system performance report and subsequent updates will evaluate the condition and performance of the transportation system with respect to the applicable performance targets: Highway Safety, Pavement and Bridges, Highway System, Congestion Mitigation and Air Quality (CMAQ), and Transit Asset Management.

OVERVIEW OF PERFORMANCE-BASED PLANNING AND PROGRAMMING REQUIREMENTS

Under the Moving Ahead for Progress in the 21st Century Act (MAP–21) and reinforced in the FAST Act, federal surface transportation regulations require the implementation of performance management requirements through which states and MPOs will "transition to a performance-driven, outcome-based program that provides for a greater level of transparency and accountability, improved project decision-making, and more efficient investment of federal transportation funds."

The Federal Highway Administration (FHWA and the Federal Transit Administration (FTA) have issued a set of rulemakings for the implementation of PBPP. Each rulemaking lays out the goals of performance for a particular area of transportation, establishes the measures for evaluating performance, specifies the data to be used to calculate the measures, and then sets requirements for the setting of targets.

Under the PBPP process, states, MPOs, and providers of public transportation must link federal investment priorities to the achievement of performance targets in the following areas:

- Highway Safety;
- Highway Assets: Pavement and Bridge Condition;
- System Performance (Interstate and National Highway System, Freight Movement on the Interstate System, and the Congestion Mitigation and Air Quality Improvement Program); and
- Transit Safety and Transit Asset Management.

The final Statewide and Metropolitan Planning Rule, published May 27, 2016, provides direction and guidance on requirements for implementation of PBPP, including specified measures and data sources, forecasting performance, target-setting, documentation in the statewide and metropolitan long-range transportation plans and Transportation Improvement Programs (TIPs), and reporting

requirements. The initial part of the PBPP process required coordination and agreement on specific responsibilities for each agency in accordance with the planning rule.

INTEGRATING PBPP INTO THE TRANSPORTATION PLANNING PROCESS

MAP-21, signed into law in 2012, placed increased emphasis on performance management within the Federal-aid highway program, including development of national performance measures to be used by State DOTs and MPOs in setting targets. The law specifically calls for the use of performance-based decision-making within metropolitan transportation planning processes. PBPP involves integrating performance management concepts into the existing federally-required transportation planning and programming processes.

The TPB set initial Transit Asset Management targets in June 2017, initial Highway Safety targets in January 2018, initial System Performance targets in May and June 2018, and initial Highway Asset targets in June 2018. These initial targets will form the basis for evaluating the resulting performance of the transportation system in future years as the TPB and member agencies integrate PBPP into their planning processes. Many projects in the long-range plan and the TIP were developed and selected prior to the PBPP rules being published or baseline performance data collected. In future years, performance compared to targets will inform the plans, projects, and policies of the TPB and member agencies, linking investment priorities to the performance targets.

Each of the following sections of this report discusses the baseline performance of the PBPP performance measures. The methodology for forecasting future performance and setting targets is described. In general, the methodology for setting targets was to assess the trends in recent performance for each performance measure and then forecast performance based on the trend as well as the predicted impact of the projects in the long-range plan and TIP, using relevant indicators from the travel demand model. This reflects the anticipated effect of the projects toward achieving the TPB's performance targets.

HIGHWAY SAFETY PERFORMANCE

This chapter summarizes the federal requirements related to the establishment of regional highway safety performance targets and describes the methodology used to develop the National Capital Region's highway safety targets. The targets described in this report meet the MAP-21/FAST performance-based planning and programming (PBPP) requirements and are consistent with the target setting approaches of Maryland, Virginia, and the District of Columbia.

The Federal Highway Administration (FHWA) published the National Performance Management Measures: Highway Safety Improvement Program; Final Rule on March 15, 2016, with an effective date of April 24, 2016, followed by one year for implementation. The goal of the implementation of the highway safety rule is to improve both the quantity and quality of safety data pertaining to serious injuries and fatalities. State DOTs and MPOs are expected to use the information generated by these regulations to make investment decisions that result in the greatest possible reductions in fatalities and serious injuries. Implementation of the rule will promote greater transparency by disseminating the data publicly. In addition, aggregation of targets and progress at the national level will become possible through improved data consistency among the states and MPOs.

Under the Highway Safety rule, states establish and report annual targets for five highway safety performance measures by August 31 of each year. MPOs then set targets specific to the metropolitan planning area within 180 days. The initial 2018 highway safety targets were approved by the TPB at its regular meeting on January 17, 2018 in Resolution R10-2018 (all PBPP target-setting resolutions are found in the appendix).

HIGHWAY SAFETY PERFORMANCE MEASURES

Annual safety targets are expressed as five-year rolling averages. The five required safety performance measures, along with the prescribed data sources, are outlined in Table 1 below.

Table 1: Summary of Highway Safety Measures

Performance Measure	Description	Data Source
Number of Fatalities *(5 year rolling average)*	Total number of fatalities during a calendar year	FARS[1]
Rate of Fatalities per 100 million VMT *(5 year rolling average)*	Ratio of total fatalities to VMT	FARS and HPMS[2] (or MPO estimate)
Number of Serious Injuries *(5 year rolling average)*	Total number of serious injuries during a calendar year	State reported serious injury data[3]
Rate of Serious Injuries per 100 million VMT *(5 year rolling average)*	Ratio of total serious injuries to VMT	State reported serious injury data[3] and HPMS
Number of Non-Motorized Fatalities and Serious Injuries *(5 year rolling average)*	Total number of fatalities and serious injuries during a calendar year	FARS and State serious injury data[3]

[1] FARS: Fatality Analysis Reporting System
[2] HPMS: Highway Performance Monitoring System
[3] for the first 36 months – after that States must adopt the Model Minimum Uniform Crash Criteria (MMUCC) definition of serious injury

States and MPOs must fulfill the target setting requirements of the final rule. State DOTs are required to set statewide targets for each of the five performance measures. Targets for the first three performance measures (number of fatalities, rate of fatalities, and number of serious injuries) must be identical to the targets set by the State Highway Safety Office (SHSO). Each target must also represent the ***anticipated performance outcome for all public roadways*** in the state, regardless of ownership. A breakdown of responsibilities for target setting are listed below.

State DOTs:

- Required to set statewide targets for each of the five performance measures:
    - Each of these targets must be identical to those set by the State Highway Safety Office (SHSO).
    - Each target shall represent anticipated performance outcome for all public roadways in the State, regardless of ownership.
    - Targets cannot be changed after they are reported.

MPOs:

- For each performance measure, the MPO will either:
    - Agree to plan and program projects so they contribute toward accomplishing the state DOT safety target for that PM, or
    - Commit to a quantifiable target for that PM for the MPO planning area:
        - Each target shall represent ***anticipated performance outcome for all public roadways in the MPO planning area***, regardless of ownership.
        - MPOs shall coordinate with the state DOT(s) to ensure consistency.

MPO Coordination with State DOTs

MPOs are required to establish their performance targets in coordination with their state partners and these targets should be data-driven and realistic. The requirement for these safety targets to be evidence based and predictive of anticipated outcomes does not supersede or diminish any aspirational targets to which local, regional, or state jurisdictions are committed. Coordination is essential between these two entities in setting highway safety targets. Both should work together to share data, review strategies and understand outcomes.

TPB staff have developed the regional highway safety targets in close coordination with the Maryland Highway Safety Office of the Maryland Motor Vehicle Administration and the State Highway Administration's Innovative Performance Planning Division; the Transportation Operations Administration of the District of Columbia Department of Transportation (DDOT); and the Highway Safety Analysis Program at the Virginia Department of Transportation. Each state's unique target setting approach was incorporated into the methodology used to develop the regional targets.

Target Reporting

State DOTs must report their targets to the FHWA within the state's HSIP (Highway Safety Improvement Program) annual report due each year on August 31. This requirement is effective beginning with the 2017 HSIP annual report.

MPOs do not report their targets to the FHWA, but rather to their respective state DOTs in a manner that is documented and mutually agreed upon. MPOs also report progress toward achieving their targets within the "System Performance Report" portion of their long-range transportation plan (Visualize 2045). In addition, MPO TIPs must include a discussion of how the implementation of the TIP will further the achievement of the targets.

FHWA Determination of Significant Progress

States do not have to meet each of their safety targets to avoid the consequences outlined in the rule but must either meet the target or make significant progress toward meeting the target for four of the five performance measures. The FHWA determines that the significant progress threshold is met if the performance measure outcome is better than the "baseline" – which is defined as the 5-year rolling average for that performance measure for the year prior to the establishment of the target. MPO targets are not evaluated by the FHWA.

Consequences for Failing to Meet Targets of Making Significant Progress

State DOTs that have not met or made significant progress toward meeting their safety performance targets lose some flexibility in how they spend their HSIP funds and are required to submit an annual implementation plan that describes actions the DOT will take to meet their targets.

There are no consequences outlined in the rule for MPOs not meeting their targets. However, the FHWA will review how MPOs are incorporating and discussing safety performance measures and targets in their long-range transportation plans and TIPs during MPO certification reviews.

REGIONAL SAFETY TARGET SETTING APPROACH

To account for and incorporate the different target setting approaches used by Maryland, Virginia, and the District of Columbia into targets for the entire National Capital Region (NCR), staff applied the following target setting methodology to develop the TPB approved targets:

- identify a "sub-target" for the Maryland portion of the NCR by applying MDOT's target setting approach to the NCR safety data;
- identify a "sub-target" for the Virginia portion of the NCR by applying VDOT's target setting approach to the NCR safety data;
- identify a "sub-target" for the District of Columbia portion of the NCR by directly incorporating DDOT's targets; and
- establish targets for the entire NCR by mathematically combining items 1 through 3.

Overview of Member States' Target Setting Methodologies

MARYLAND

Maryland applied their existing Toward Zero Deaths approach to develop interim targets to reduce fatalities by at least 50 percent from the 2008 base year to the 2030 target year. This same approach was used to set targets for each of the five performance measures. For each performance measure an exponential trend line connecting the historical (2008) data to the long-term (2030) goal

which was set to 50 percent of the 2008 value. Five-year averages were used to calculate projections, and targets for each interim year were taken from the midpoint of the five-year average (e.g., 2018 annual interim target = midpoint of the 2016-2020 average). Maryland officials provided TPB staff with the exponential trend lines and interim targets for each of the five performance measures based on the safety data for the Suburban Maryland portion of the NCR.

VIRGINIA

Virginia analyzed their statewide safety data using a variety of time periods and trend lines (straight and exponential) using annual, 3-year average, and 5-year average safety measure data. Based on this analysis, Virginia determined the 5-year average targets by apply the following factors to the 2015 base year:

Number of fatalities:	2 percent annual reduction
Number of serious injuries:	5 percent annual reduction
Number of nonmotorist fatalities and serious injuries:	4 percent annual reduction
Rate of fatalities per 100 million VMT:	3 percent annual reduction
Rate of serious injuries per 100 million VMT:	7 percent annual reduction

TPB staff applied these same reduction factors to the data for the Northern Virginia portion of the NCR.

DISTRICT OF COLUMBIA

The District of Columbia analyzed their safety data using a combination of annual and 5-year average data and polynomial trend lines to determine their targets. TPB staff directly incorporated the District of Columbia targets, as published in their HSIP Annual Report, into the NCR target setting methodology.

CALCULATION OF THE NATIONAL CAPITAL REGION HIGHWAY SAFETY TARGETS

Numerical Targets

The NCR targets for the number of fatalities, number of serious injuries, and number of nonmotorist fatalities and serious injuries were calculated by summing the sub-targets for the Suburban Maryland, Northern Virginia, and District of Columbia portions of the region. This is straightforward mathematical addition.

Rate Targets

Determination of rate targets (fatality rate and serious injury rate) are somewhat more complicated and involve mathematically combining the effects of the Suburban Maryland, Northern Virginia and District of Columbia targets according to their respective proportions of total regional VMT. The following steps illustrate the process for the fatality rate (a similar process was used for the serious injury rate):

1) Determine the percent fatality rate reduction represented by each sub target.

Fatalities per 100 MVMT	2012-2016 Average	2014-2018 Average (sub target)	Percent change
Suburban MD	0.792	0.734	-7.38%
NOVA	0.428	0.403	-5.91%
DC	0.598	0.703	17.58%

2) Determine the proportion of total regional VMT attributable to Suburban Maryland, Northern Virginia, and DC.

Sub region	100 MVMT (2016)	Proportion
Suburban MD	213.78	47.95%
NOVA	193.29	43.35%
DC	38.80	8.70%
Sum	**445.87**	**100.00%**

3) Determine the percent change for the regional rate by multiplying the percent change (from step 1) by the VMT proportion (from step 2).

Sub region	A: Percent change in fatality rate (from step 1)	B: Proportion (from step 2)	A x B
Suburban MD	-7.38%	47.95%	-3.537%
NOVA	-5.91%	43.35%	-2.562%
DC	17.58%	8.70%	1.530%
Sum			**-4.569%**

4) Apply the percent change for the regional rate calculate in step 3 (-4.569%) to the 2012-2016 average fatality rate. This is the regional fatality rate target for 2014-2018.

Fatalities per 100 MVMT	2012-2016 Average	Regional percent change (from step 3)	2014-2018 Average (regional target)
NCR	0.617	-4.569%	**0.588**

REGIONAL HIGHWAY SAFETY TARGETS

Figures 1 through 5 and Table 2 display the NCR Highway Safety Targets

Figure 2: Regional Fatality Performance Measure Target

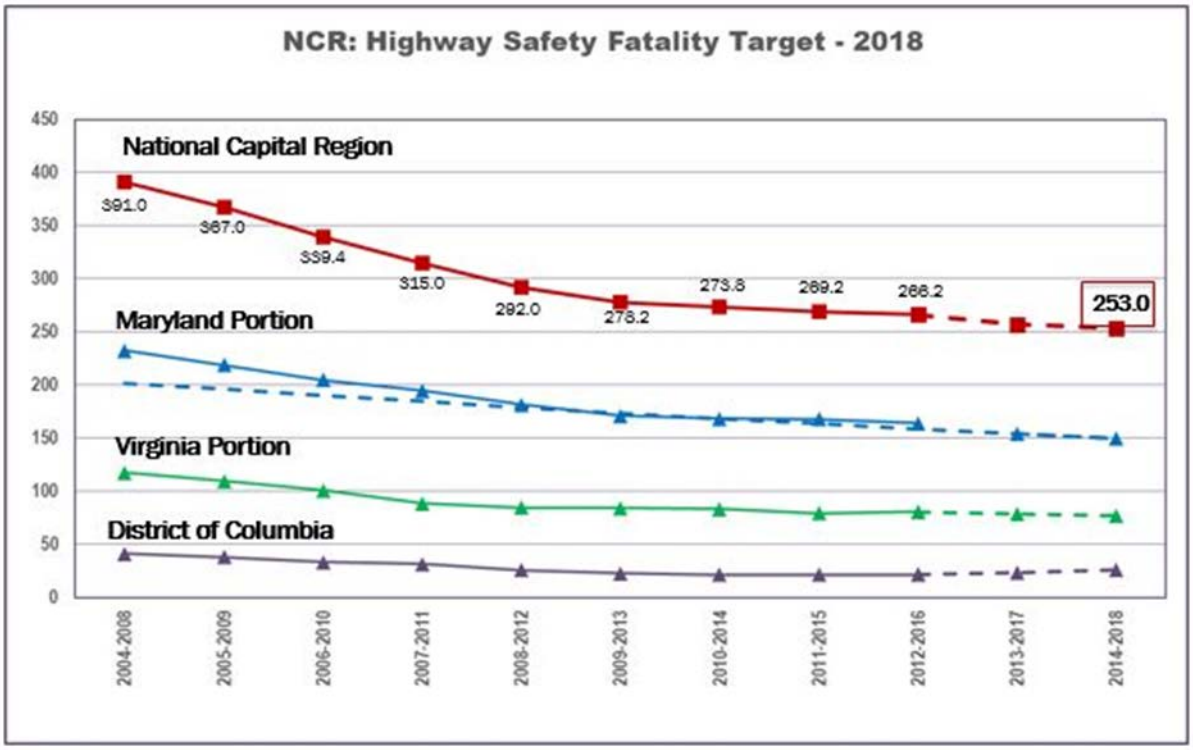

Figure 2: Regional Serious Injury Performance Measure Target

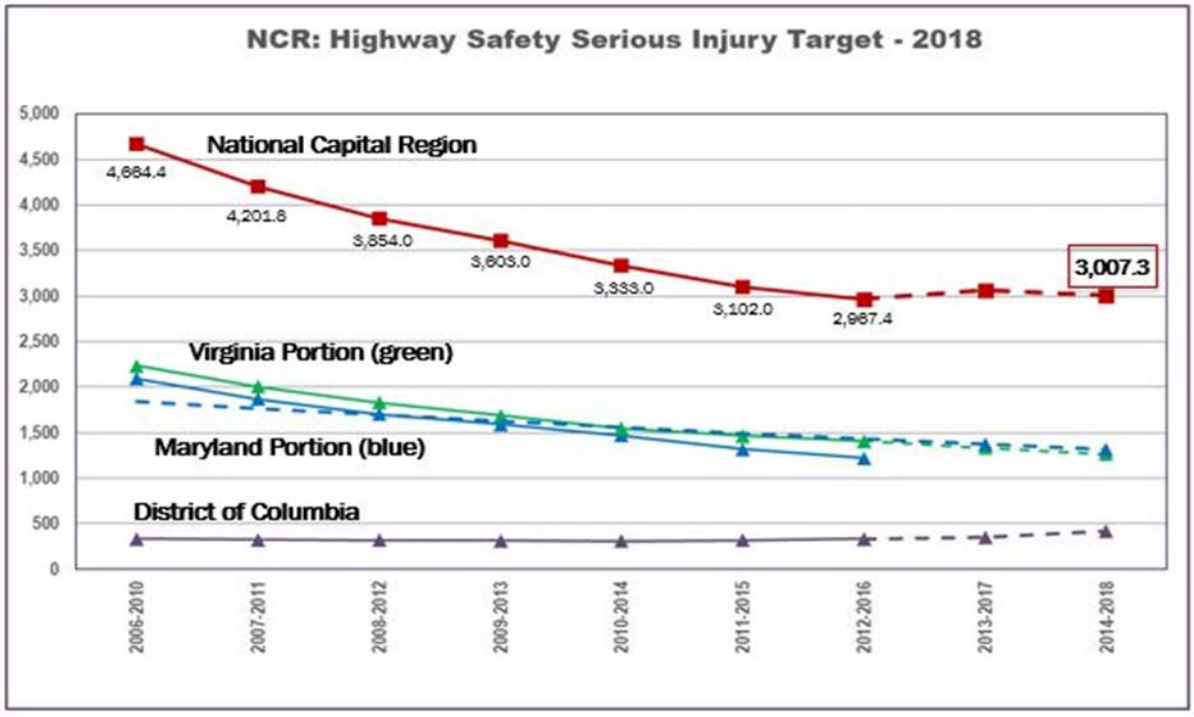

Figure 3: Regional Non-Motorist Fatality and Serious Injury Performance Measure Target

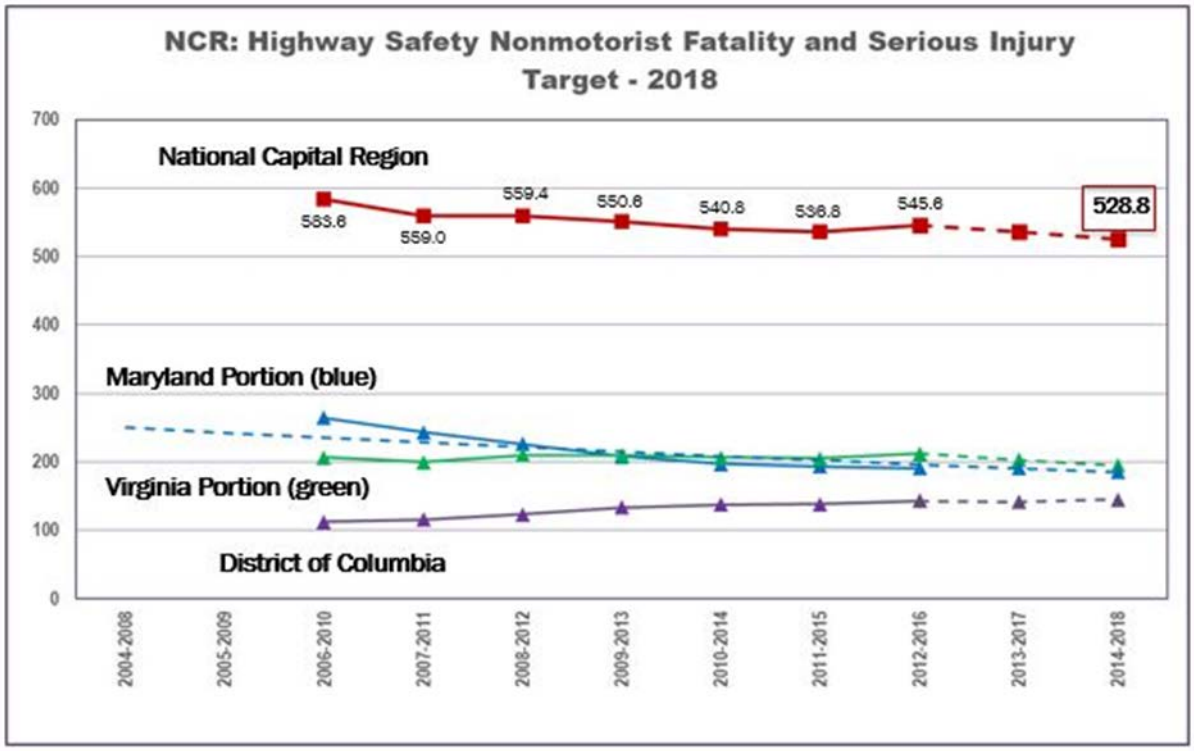

Figure 4: Fatality Rate Performance Measure Target

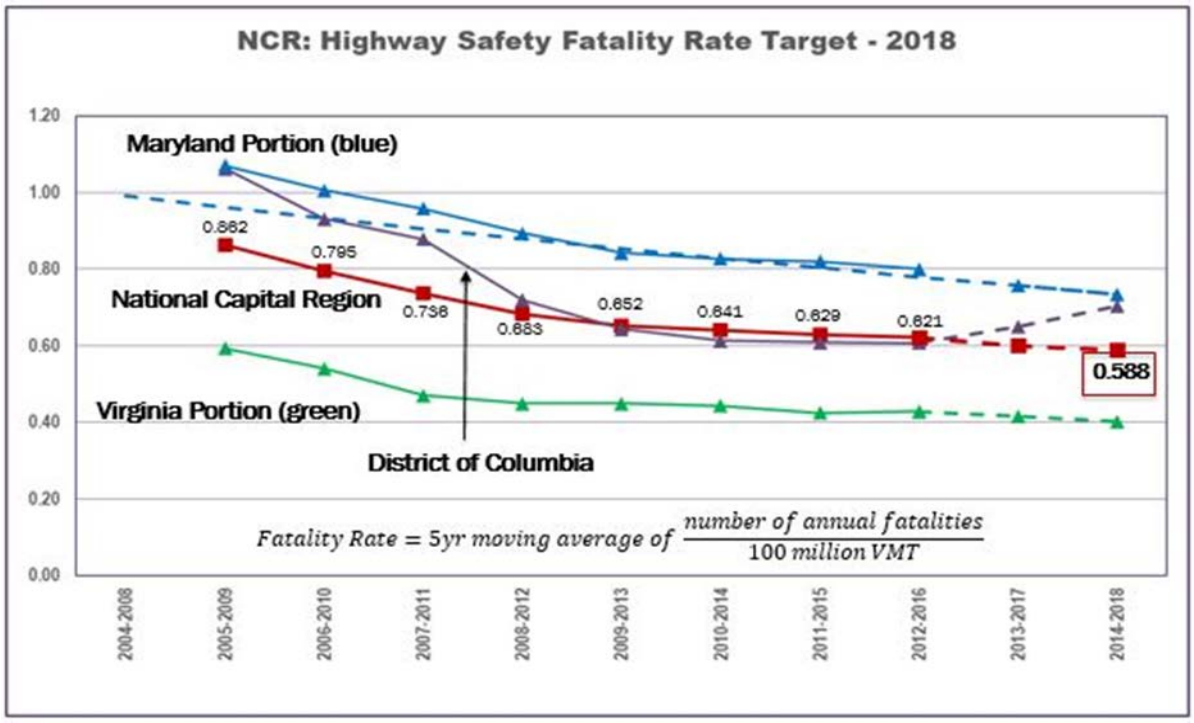

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Figure 1: Serious Injury Rate Performance Measure Target

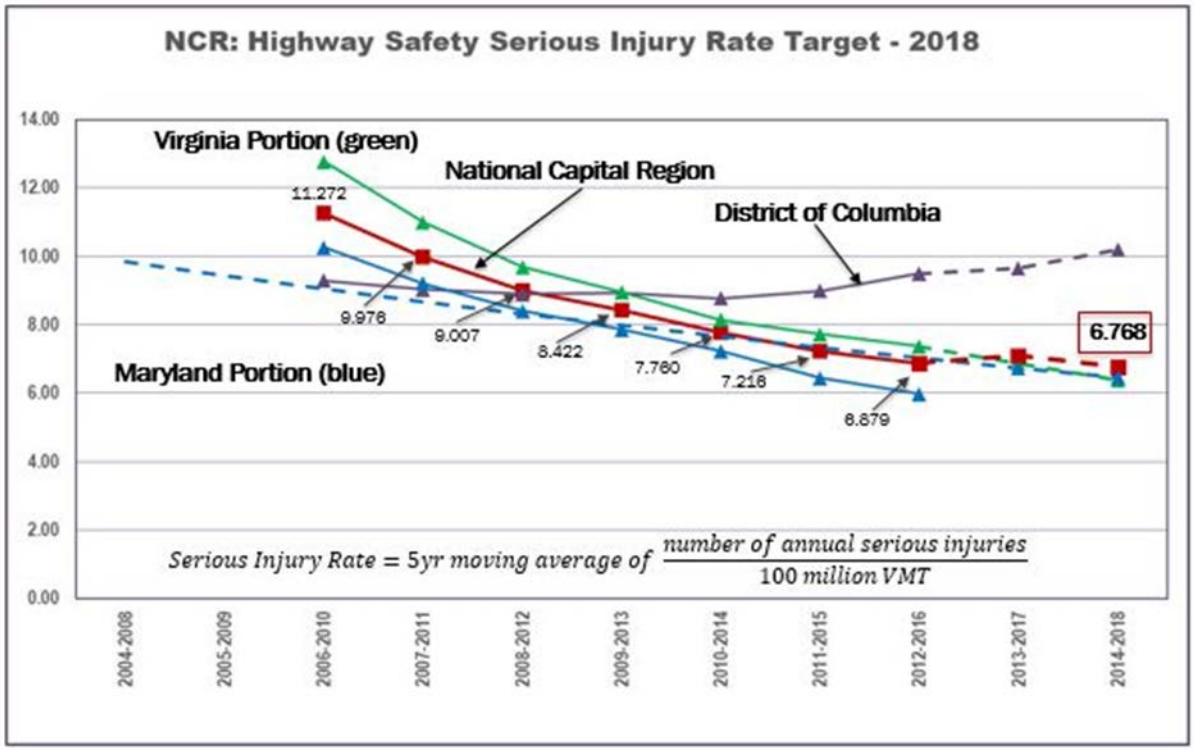


Table 2: Summary of Regional Highway Safety Performance Measure Targets

	2012-2016 Actual	2014-2018 Target	Difference	Percent Difference
# of Fatalities	266.2	253.0	↓ 13.2	↓ 4.9%
Fatality Rate (per 100 MVMT)	0.621	0.588	↓ 0.033	↓ 5.3%
# of Serious Injuries	2,967.4	3,007.3	↑ 39.9	↑ 1.3%
Serious Injury Rate (per 100 MVMT)	6.879	6.768	↓ 0.111	↓ 1.6%
# Nonmotorist Fatalities & Serious Injuries	545.6	528.8	↓ 16.8	↓ 3.1%

Duration

Upon adoption by the TPB, the targets described in this report became the official National Capital Region highway safety targets for calendar year 2018 (as represented by the average of the 5 years of data from CY 2014 through CY 2018). As per federal regulations, the National Capital Region highway safety targets will be updated on an annual basis by no later than February 27 of each calendar year.

PAVEMENT AND BRIDGE CONDITION PERFORMANCE

This report provides an overview of the performance measures concerning the condition of bridges and pavements within the Washington metropolitan planning area. The National Performance Management Measures; Assessing Pavement Condition for the National Highway Performance Program and Bridge Condition for the National Highway Performance Program Final Rule addresses requirements established by the Moving Ahead for Progress in the 21st Century Act (MAP-21) and reflects passage of the Fixing America's Surface Transportation (FAST) Act. The rule became effective on May 20, 2017, with one year for implementation. This section described the TPB's methodology for determining performance targets and coordination with the departments of transportation of the District of Columbia, Maryland, and Virginia. These targets were approved by the TPB on July 18, 2018 in Resolution R2-2019.

NATIONAL HIGHWAY SYSTEM

Figure 6: National Highway System Network in TPB Planning Region

A number of the MAP-21 performance measures directly involved the NHS .The NHS includes the Interstate Highway System as well as other roads important to the nation's economy, defense, and mobility. The NHS was developed by the United States Department of Transportation (DOT) in cooperation with the states, local officials, and MPOs. With the adoption of MAP-21 on October 1, 2012, the NHS became the "enhanced-NHS" by adding roads that were previously classified as principal arterials but not yet part of the system. These Interstate and Non-Interstate roadways on the NHS are the primary roadways for the assessment of MAP-21 PBPP. When performance measures are referring to the Interstate or Non-Interstate roadways on the NHS, it is the MAP-21 "enhanced-NHS."

State DOTs have the ability to make modifications to the NHS by either removing or adding additional roadways. This can be done in writing to the FHWA Division Office. Supporting documents must be included such as maps and documentation of the coordination with the effected jurisdictions. Following that, FHWA will review, summarize, and move for recommendation to FHWA HQ. With approval, FHWA HQ will make modifications to the NHS.

PAVEMENT AND BRIDGE CONDITION PERFORMANCE MEASURES

The Pavement and Bridge Condition Performance Measures final rule, published in the Federal Register on January 18, 2017, established measures for state DOTs to assess the condition of pavements on the non-Interstate National Highway System (NHS); pavements on the Interstate System (IS); and bridges carrying the NHS, including on- and off-ramps connected to the NHS. Targets must be set for six particular areas; 1) Percent of pavements on the Interstate System in good condition, 2) Percent of pavements on the IS in poor condition, 3) Percent of pavements on the NHS (excluding IS) in good condition, 4) Percent of pavements on the NHS (excluding IS) in poor condition, 5) Percentage of NHS bridge deck classified in good condition, 6) Percentage of NHS bridge deck classified in poor condition. Table 8 provides a summary of the measures.

Data for these performance measures are available through databases overseen by the Federal Highway Administration: the Highway Performance Monitoring System (HPMS) and the National Bridge Inventory (NBI). State departments of transportation have the responsibility to report data to the HPMS and the NBI annually.

Table 3: Summary of Pavement and Bridge Performance Measures

	Performance Measures
Pavements	Percent of pavements on the IS in good condition
	Percent of pavements on the IS in poor condition
	Percent of pavements on the NHS in good condition
	Percent of pavements on the NHS in poor condition
Bridges	Percentage of NHS bridge deck classified in good condition
	Percentage of NHS bridge deck classified in poor condition

Pavement Condition

The HPMS database includes the data needed for calculating the good and poor metrics. Data include roughness, cracking, rutting for asphalt pavement, and faulting for concrete pavement. The measures are aggregated by lane miles. In addition, HPMS pavement data collection requirements have been revised to require more comprehensive collection of data for the NHS network.

State DOTs must establish targets, regardless of ownership, for the full extent of the Interstate and non-Interstate NHS. The initial statewide two and four-year targets for the non-Interstate NHS and four-year targets for the Interstate were to be set by May 20, 2018, with subsequent reporting to FHWA by October 1, 2018. MPOs can either support the relevant state DOTs four- year target or establish their own within 180 days after the state DOT's target are established.

Bridge Condition

For the bridge condition performance measures, the measures are calculated based on deck area and a classification of the bridge structure condition. The classification is based on NBI condition ratings for the Deck, Superstructure, Substructure, and Culvert. Condition is determined by the lowest rating of deck, superstructure, substructure, or culvert. If the lowest rating is greater than or equal to 7, the bridge is classified as good; if is less than or equal to 4, the classification is poor. (Bridges rated below 7 but above 4 are classified as fair; there is no related performance measure.) Deck area is computed using NBI criteria of Structure Length, Deck Width or Approach Roadway Width (for some culverts).

State DOTs must establish targets for all bridges carrying the NHS, which includes on- and off-ramps connected to the NHS within a state, and bridges carrying the NHS that cross a State border, regardless of ownership. The initial statewide two and four- year targets were required to be set by May 20, 2018, with subsequent reporting to FHWA by October 1, 2018. As with the pavement performance measures, MPOs can either support the relevant state DOT(s) four-year target or establish their own within 180 days after the State DOT's target are established.

Pavement and Bridge Penalties

If FHWA determines that a state DOT's Interstate pavement condition falls below the minimum level for the most recent year, the state DOT must obligate a portion of National Highway Performance Program (NHPP) and transfer a portion of Surface Transportation Program (STP) funds to address Interstate pavement condition. If for three consecutive years more than 10.0% of a state DOT's NHS bridges' total deck area is classified as Structurally Deficient, the state DOT must obligate and set aside National Highway Performance Program (NHPP) funds for eligible projects on bridges on the NHS.

PAVEMENT AND BRIDGE CONDITION TARGET SETTING APPROACH

The following approaches were used by the region's DOTs in developing pavement and bridge condition targets.

District of Columbia

Tables 4 and 5 below are the established performance measures for both pavement and bridge conditions in the District of Columbia. Targets were established by use of historical data, future programmed projects, and future budgets appropriated to maintain pavement in a state of good repair. It should be noted that for the District of Columbia, it has a number of bridges that are not maintained by DDOT, but rather by the National Park Service (NPS). Regardless of this, those NPS bridges, i.e. The Memorial Bridge, are calculated into the overall bridge condition in the District Columbia.

Table 4: Summary of the DC Two and Four-Year Targets for Pavement Condition

Bridges	CY 2018 – 2020 Two Year Target	CY 2018 – 2022 Four Year Target
Deck Area Good	15.8%	24.9%
Deck Area Poor	8.6%	4.1%

Table 5: Summary of the DC Two and Four-Year Targets for Bridge Condition

Interstate	CY 2018 – 2020 Two Year Target	CY 2018 – 2022 Four Year Target
Percent Good	10%	5%
Percent Poor	5%	5%
NHS (Non-Interstate)	**CY 2018 – 2020 Two Year Target**	**CY 2018 – 2022 Four Year Target**
Percent Good	67%	54%
Percent Poor	7.1%	14.1%

Maryland

Tables 6 and 7 below are the established performance measures for both pavement and bridge conditions in the portion of Interstate and Non-Interstate roadways within the TPB planning area for the state of Maryland. Targets were established by use of historical data, future programmed projects, and future budgets appropriated to maintain pavement in a state of good repair.

Table 6: Summary of MD Four-Year Targets for Pavement Condition

Interstate	CY 2016 – 2018 Two Year Target	CY 2016 – 2020 Four Year Target
Percent Good	~~Not Required~~	62.8%
Percent Poor	~~Not Required~~	0.3%
NHS (Non-Interstate)	**CY 2016 – 2018 Two Year Target**	**CY 2016 – 2020 Four Year Target**
Percent Good	32.4%	31.6%
Percent Poor	6.5%	7.2%

Table 7: Summary of MD Two and Four-Year Targets for Bridge Condition

Bridges	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Deck Area Good	29.5%	27%
Deck Area Poor	2%	5%

Virginia

Tables 8 and 9 below are the established performance measures for both pavement and bridge conditions for the state of Virginia. It was determined through coordination between TPB staff and Virginia DOT staff that determining a regional forecasted target, similar to the case in Maryland, was not feasible. Statewide targets were established by use of historical data, future programmed projects, and future budgets appropriated to maintain pavement in a state of good repair.

Table 8: Summary of VA Two and Four-Year Targets for Pavement Condition

Interstate	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Percent Good	45%	45%
Percent Poor	<3%	<3%
NHS (Non-Interstate)	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Percent Good	25%	25%
Percent Poor	<5%	<5%

Table 9: Summary of VA Two and Four-Year Targets for Bridge Condition

Bridges	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Deck Area Good	33.5%	33%
Deck Area Poor	3.5%	3%

REGIONAL PAVEMENT AND BRIDGE TARGETS

Concerning the Pavement and Bridge Performance Measures, MPOs have two options. The first option is to support the statewide targets established by the state DOTs. The second option is for the MPO to establish their own quantifiable four-year targets for both measures. In this case the TPB chose the latter option. The coordination for the establishment of these targets was highly dependent on the information provided by the states as well as information obtained from the HPMS and the NBI.

Pavement

In deciding a forecasted four-year target for pavement condition for the TPB planning area, initially data was obtained and analyzed for the HPMS database using the field manual inventory, which contains metrics for rutting, faulting, cracking, and international roughness index (IRI). Next, TPB staff were able to calculate the number of lane miles within the planning area for the District of Columbia, Maryland, and Virginia. Table 10 gives the lane mileage for each state or part of the state, as well as the regional total number of lane miles in the TPB region. Finally, the statewide targets, for the District of Columbia and Virginia were applied to their respective lane miles within the TPB region. For the state of Maryland, forecasted targets for the portion of the state in the TPB planning area were provided and applied to the lane miles. Table 11 and Figures 6 and 7 provide the regional pavement condition four-year target calculated by adding up the respective result for each state.

Table 10: Summary of the Lane Miles for Interstate and Non-Interstate Roadways in the TPB Region

	Interstate Lane Miles	Non-Interstate Lane Miles
DC	55.2	464.4
MD*	853.6	2272.4
VA*	767.2	1897.4
Region	1676.0	4634.2

Table 11: Summary of the Four-Year Targets for Pavement Condition on the Interstate and Non-Interstate

Interstate	CY 2018 – 2021 Four Year Target
(1) Percentage of pavements on the Interstate System in Good condition	52.7%
(2) Percentage of pavements on the Interstate System in Poor condition	1.7%
NHS (Non-Interstate)	**CY 2018 – 2021 Four Year Target**
(3) Percentage of pavements on the NHS (excl. Interstate) in Good condition	31.1%
(4) Percentage of pavements on the NHS (excl. Interstate) in Poor condition	7.0%

Figure 7: Graph of Performance and the Four-Year Target for Pavement Condition on the Non-Interstate

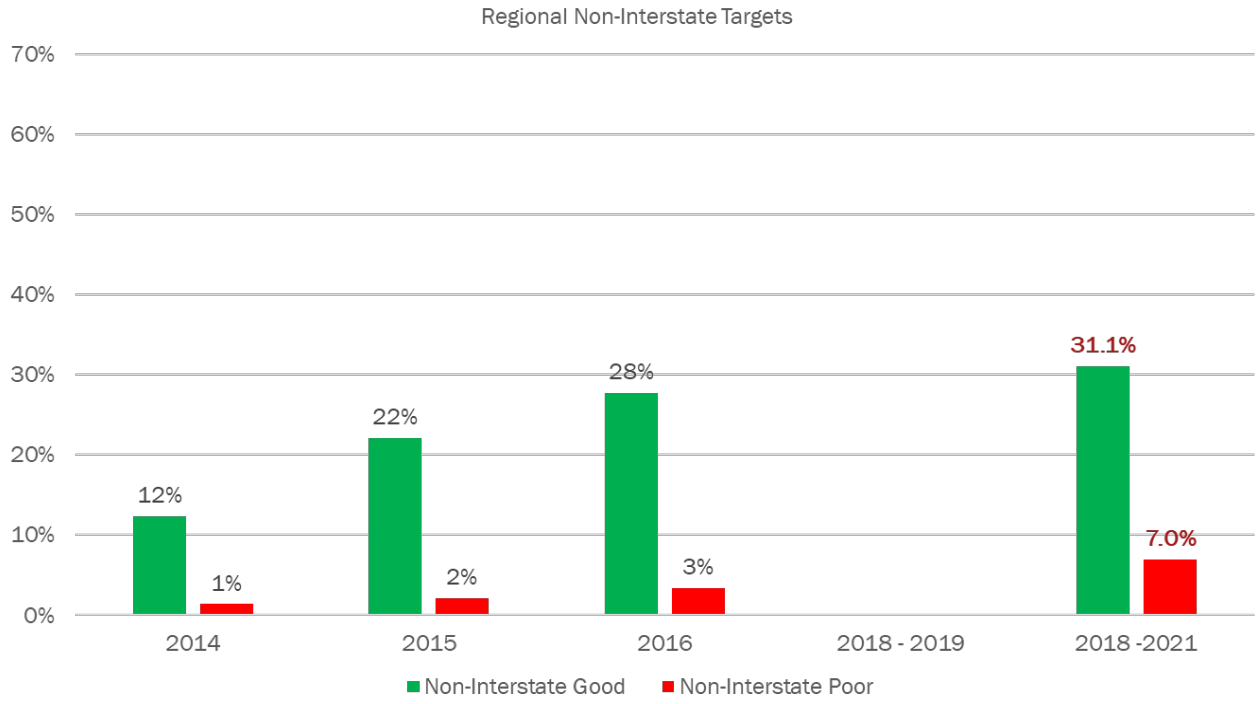
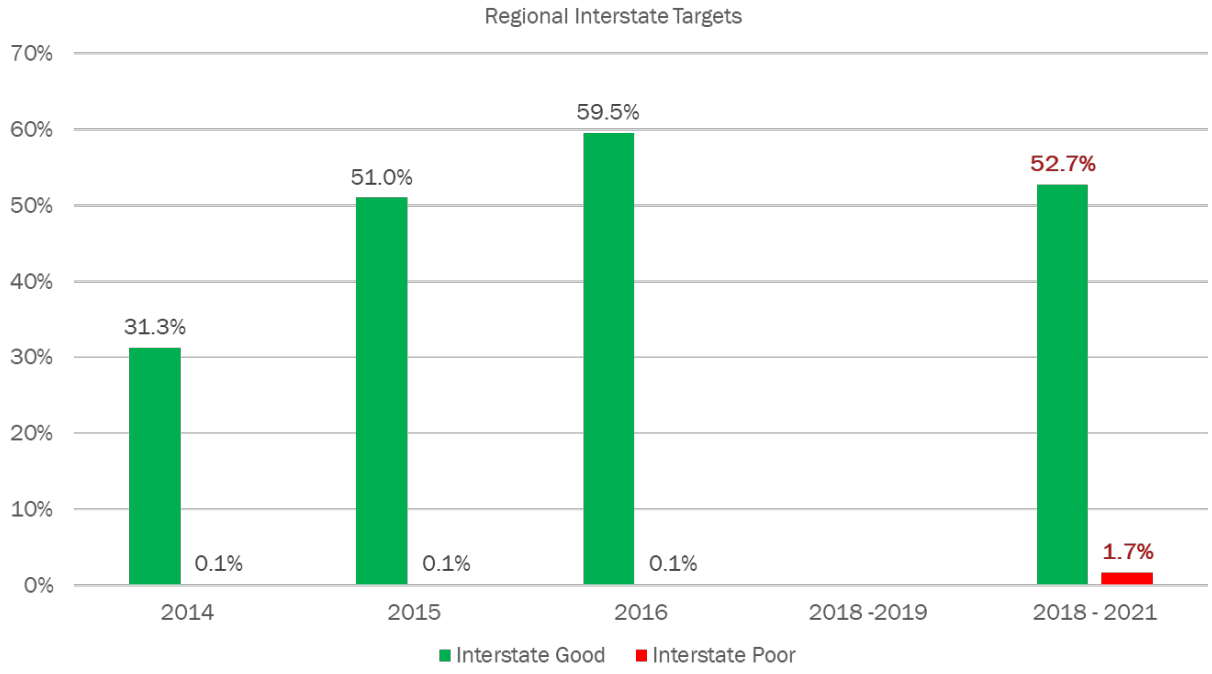


Figure 8: Graph of Performance and the Four-Year Target for Pavement Condition on the Interstate



Bridges

In terms of forecasting the four-year performance measure for the bridge condition within the TPB region, a similar methodology to that of pavement was used. TPB staff collected data from the NBI, analyzing the condition of the surface area as the applicable metric. Next, the deck areas of bridges within the District of Columbia and the portions of Maryland and Virginia that are within the TPB planning area was calculated. Table 12 provides a breakdown of the surface areas of bridges within the TPB planning area. Finally, the statewide targets were applied to the respective deck areas and the four-year target for the region was calculated. The resulting targets are shown below in Table 13 and Figure 8.

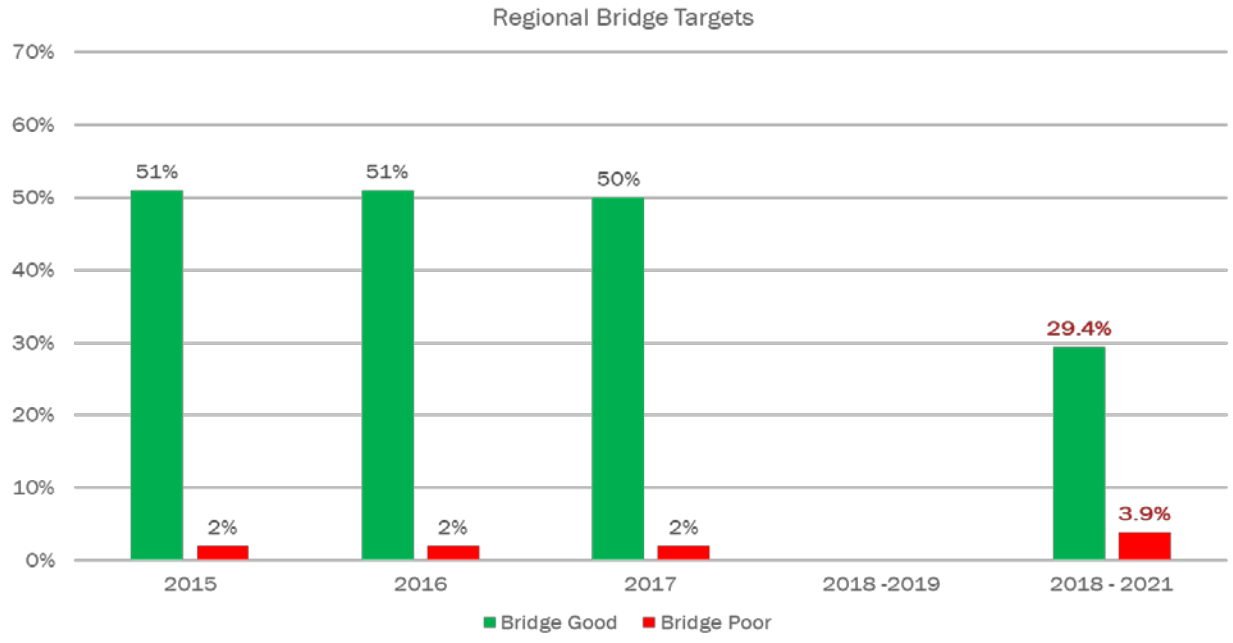
Table 12: Summary of the Total Deck Area of Bridges in the TPB Region

State	Deck Area (square feet)
DC	4,931,177
MD*	9,846,949
VA*	12,691,104
Region	27,469,229

Table 13: Summary of the Two and Four-Year Targets for Bridge Condition

Bridges	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
(5) Percentage of NHS Bridges Classified as in Good Condition	27.1%	29.4%
(6) Percentage of NHS Bridges Classified as in Poor Condition	5.2%	3.9%

Figure 9: Graph of Performance and the Four-Year Target for Bridge Condition



HIGHWAY SYSTEM PERFORMANCE

This section summaries the federal requirements for the TPB in the establishment of performance targets associated with Highway System Performance. This includes performance concerning Travel Time Reliability (TTR) on both the Interstate and Non-Interstate roadways as well as the Truck Travel Time Reliability (TTTR) on Interstate roadways. The targets described in this report meet the MAP-21/FAST PBPP requirements and are consistent with the target setting approaches of Maryland, Virginia, and the District of Columbia. These targets were approved by the TPB at its regular meeting on July 18, 2018 in Resolution R1-2019.

HIGHWAY SYSTEM PERFORMANCE MEASURES

The FHWA published the System Performance: Highway and Freight, Congestion Mitigation and Air Quality (CMAQ) Final Rule on January 18, 2017, with an effective date of May 20, 2017, followed by one year for implementation. Accordingly, state DOTs had until May 20, 2018 to initially set targets. The rule requires state DOTs to set targets for four performance measures concerning Highway and Freight: 1) Interstate Travel Time Reliability (TTR), 2) National Highway System (NHS) TTR, and 3) Freight Reliability (Truck Travel Time Reliability (TTTR))[1]. In addition, the FHWA requires state DOTs to set three performance measures under the CMAQ Program: 1) Peak Hour Excessive Delay (PHED), 2) Mode Share, and 3) Emission Reductions, which are covered in the next chapter.

This report covers the Highway and Freight Performance Measures, specifically, TTR and TTTR, and provides an overview of the measures, data collection, and the methodology and forecasting methods used for future target setting.

Table 14: Summary of Highway System Performance Measures

	Performance Measures
National Highway System	(1) **Interstate (IS) Travel Time Reliability (TTR)** - Percent of person-miles traveled on the Interstate System that are reliable
	(2) **NHS (Non-Interstate) Travel Time Reliability (TTR)** - Percent of person-miles traveled on the non-Interstate NHS that are reliable
Freight Movement	(3) **Freight Reliability (TTTR)** - Percent of the Interstate System Mileage providing for Reliable Truck Travel Times

Travel Time Reliability and Truck Travel Time Reliability

The TTR measure assesses the reliability of roadways on the Interstate and Non-Interstate (NHS) systems. TTR is defined by the FHWA as the percent of person-miles on the (Interstate/NHS) that are reliable. Concerning freight, reliability is the ratio of the Interstate System Mileage providing for reliable TTTR. Data are derived from the travel time data set found in the NPMRDS. The metrics to be

[1] An additional performance measure for Greenhouse Gas Emissions was repealed on May 31, 2018.

used are Level of Travel Time Reliability (LOTTR) and the TTTR Index. A summary of these measures is provided in Table 14.

Regarding the roles and responsibilities of both states and MPOs, state DOTs are required to establish two and four-year targets for the Interstate, but initially only a four-year target for the TTR of the NHS by May 20, 2018. These targets will be included in the state's baseline performance period report due to the FHWA on October 1, 2018. MPOs are required to either support the state targets or establish their own quantifiable four-year targets within 180 days of the state target establishment. The targets set by the region's three DOTs are shown in Table 15 for the TTR for Interstate and Non-Interstate roadways and in Table 16 for TTTR.

Table 15: Statewide TTR Two and Four-Year Targets

State	Interstate or Non-Interstate	Two-Year State Target	Four-Year State Target
District of Columbia	Interstate	24.0%	23.0%
	Non-Interstate	Not Applicable	60.0%
Maryland	Interstate	72.1%	72.1%
	Non-Interstate	Not Applicable	81.7%
Virginia	Interstate	82.2%	82.0%
	Non-Interstate	Not Applicable	82.5%

Table 16: Statewide TTTR Two and Four-Year Targets

State	Two-Year Target	Four-Year Target
District of Columbia	4.0	4.0
Maryland	1.87	1.88
Virginia	1.54	1.57

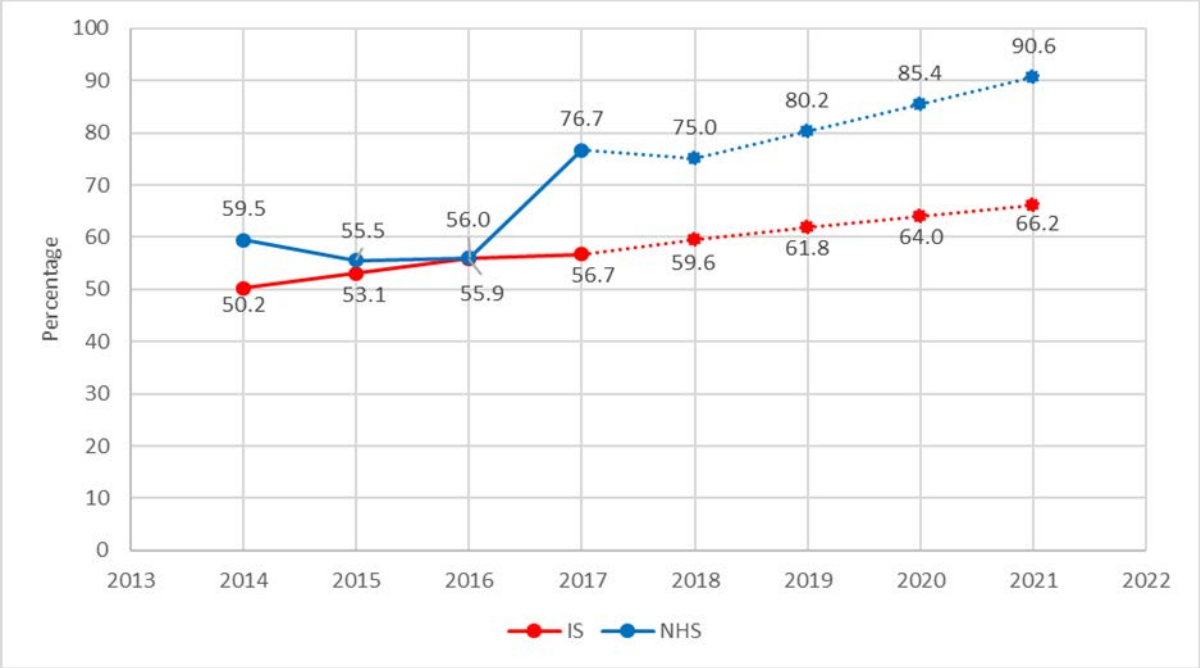
REGIONAL HIGHWAY SYSTEM PERFORMANCE TARGET SETTING APPROACH

As all state DOTs and MPOs are required to do, TPB staff obtained data from the NPMRDS and utilized RITIS with the MAP-21 widget. This enabled staff to review the TTR and TTTR for the TPB Planning Area from 2014 to 2017. With this collection of data, staff applied three general methodologies to determine performance forecasting: the extrapolation of measured performance, the use of travel demand model data, or the average of the two.

- Extrapolation of Measured Performance
    - For this approach, measured data for the previous years of 2014 through 2017 would be selected either by month or year. This data would then be extrapolated, via polynomial regression, through the year 2021. This would cover both the two and four-year targets.
- Travel Demand Model
    - In 2016 TPB produced a travel demand model which produced congestion/related outputs for modelled years 2016, 2020,2025, etc. Forecasting will be achieved by utilizing such outputs as Percentage of Congested AM Peak Hour VMT estimates to project change in congestion, applying the percentage changes to measured performance.
- Averaging
    - Taking the average of both the extrapolation of measured performance and the utilization of the Travel Demand Model as a means of forecasting the targets.

The following pages will show and explain charts of both approaches. The figures showing the TTR for Interstate and NHS roadways are in terms of the percent of person miles on a roadway that is reliable. Figures illustrating TTTR are measured using a scale/index to determine the reliability of conditions for trucks. In all cases, the data shown are for the TPB region.

Figure 2: Graph of Performance of the Regionwide TTR Data for NHS and IS Roadways (Extrapolated)



Figures 10 and 11 illustrate the extrapolation of the previous NPMRDS data collected from years 2014, 2015, and 2016 for TTR and TTTR. Measures were extrapolated from 2018 to 2021, which cover both two and four-year target years of 2019 and 2021. The TTR for Interstate and Non-Interstate roadways shows an overall increase in the TTR, which translates into roadways are becoming more reliable in regard to congestion. Figure 11 shows a decreasing TTTR Index for the roadways. This translates into commercial trucks having achieved more reliable routes of movement with respect to congestion.

Figure 3: Graph of Performance of the Regionwide TTTR Data for IS (Extrapolated)

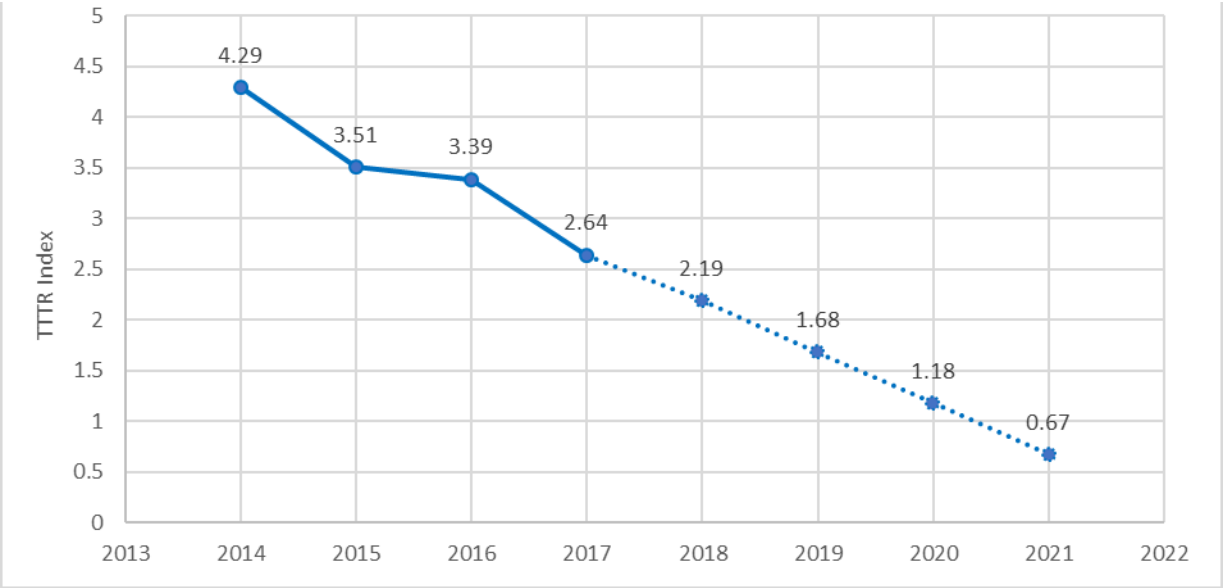


Figure 12 and 13 below illustrates the application of the TPB Travel Demand Model on the performance measures TTR and TTTR. The Travel Demand Model does not provide a specific output for TTR or TTTR, however, it does provide called Percentage of Congested AM Peak Hour VMT. Taking this output, the rate of change was calculated from the TPM Travel Demand Model from year 2017 to 2025. This rate was then applied to the 2016 recorded TTR and TTTR data. The 2016 data was utilized instead of 2017 data, due to a determination that 2017 data is an outlier. With this number and the collected data, a compounded growth rate was calculated far enough to capture both two and four-year target years. Figure 12 illustrates the reliability of roadways slowly decreasing over time. The same steady decrease of the TTTR is shown in Figure 13.

Figure 12: Graph of Performance of Regionwide Data for TTR on NHS and IS (Travel Demand Model)

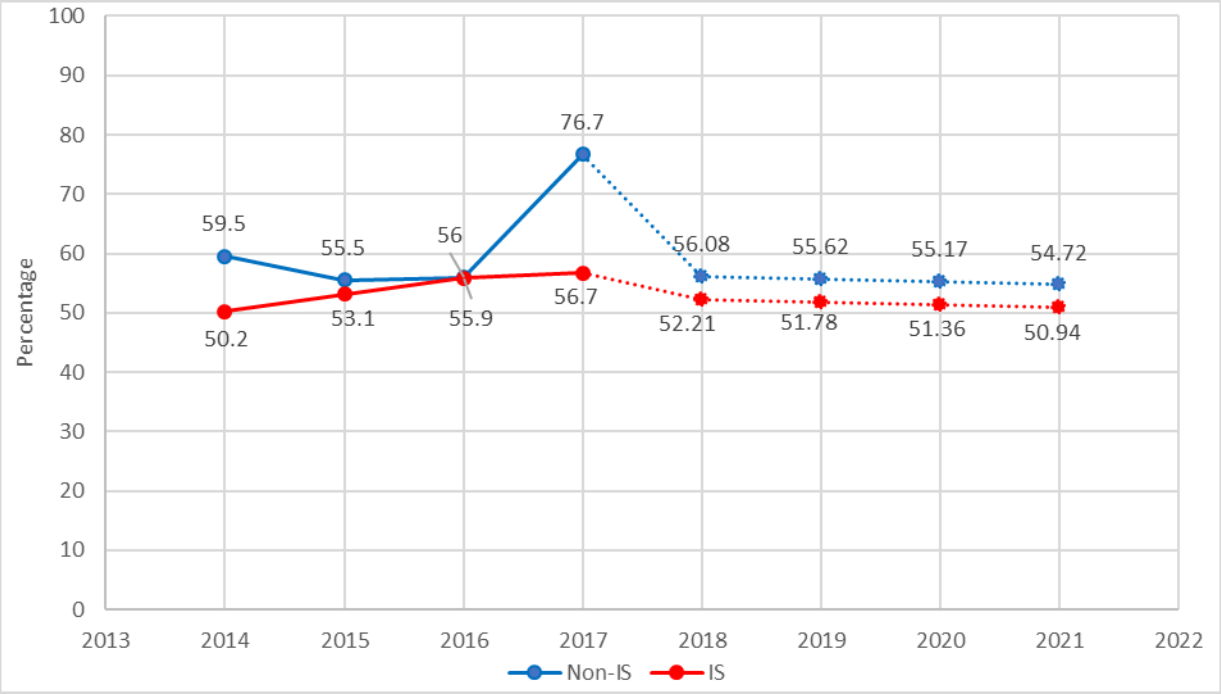


Figure 13: Graph of Performance of Regionwide Data for TTTR on IS (Travel Demand Model)

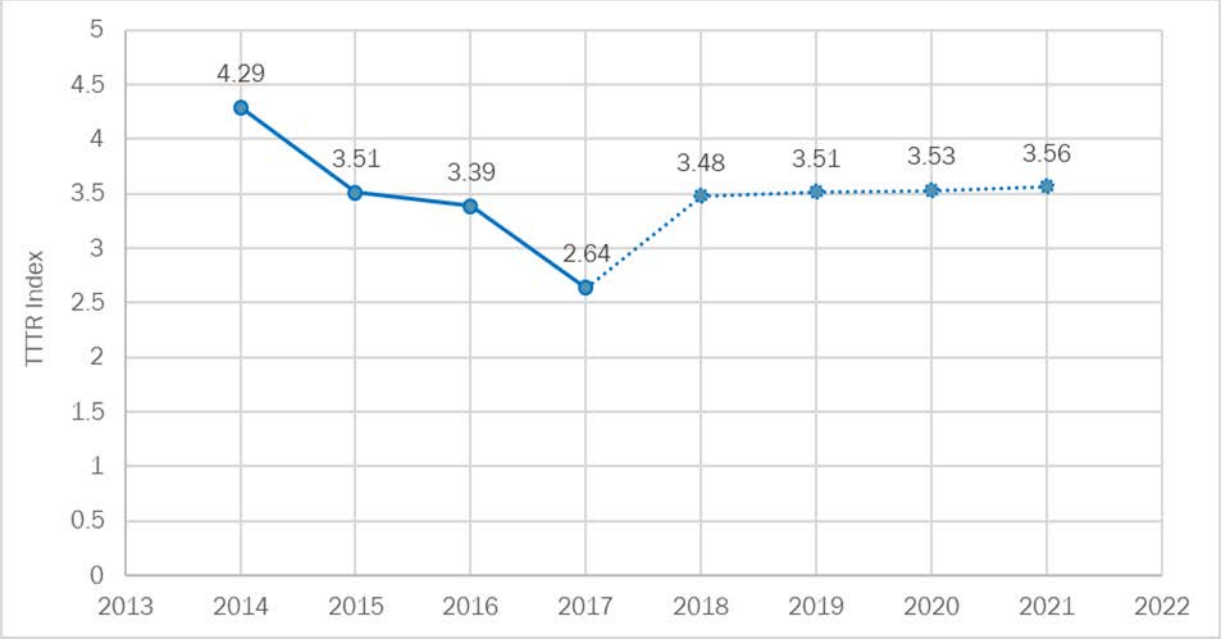


Figure 14: Graph of Performance and the Two and Four-Year Regionwide Targets for TTR

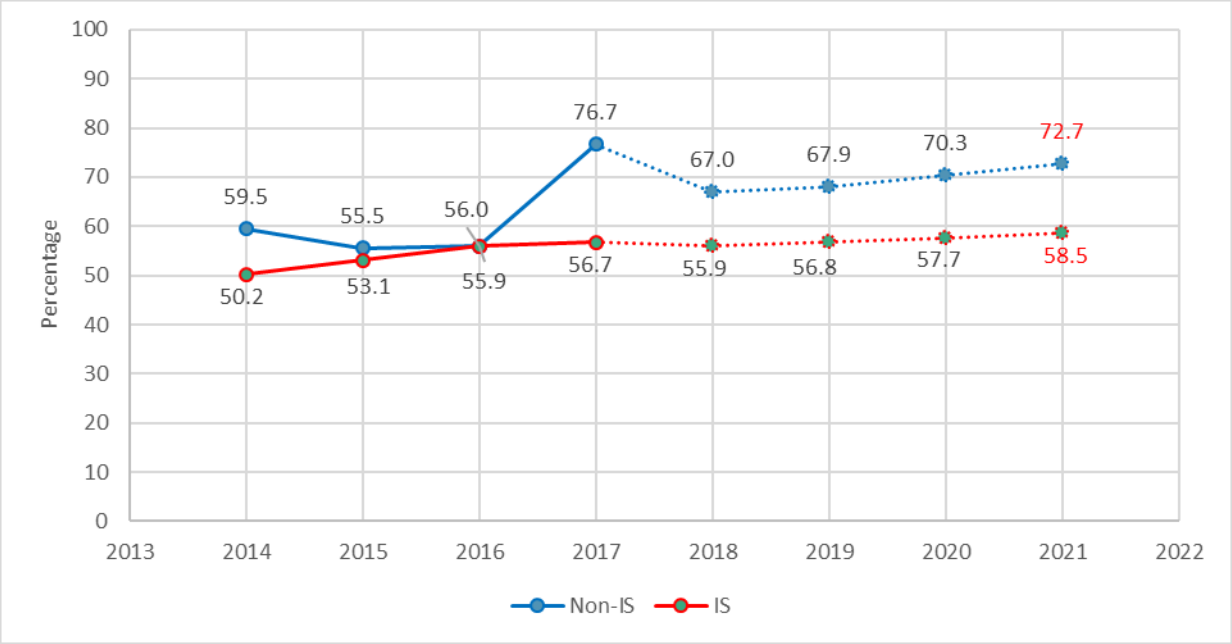
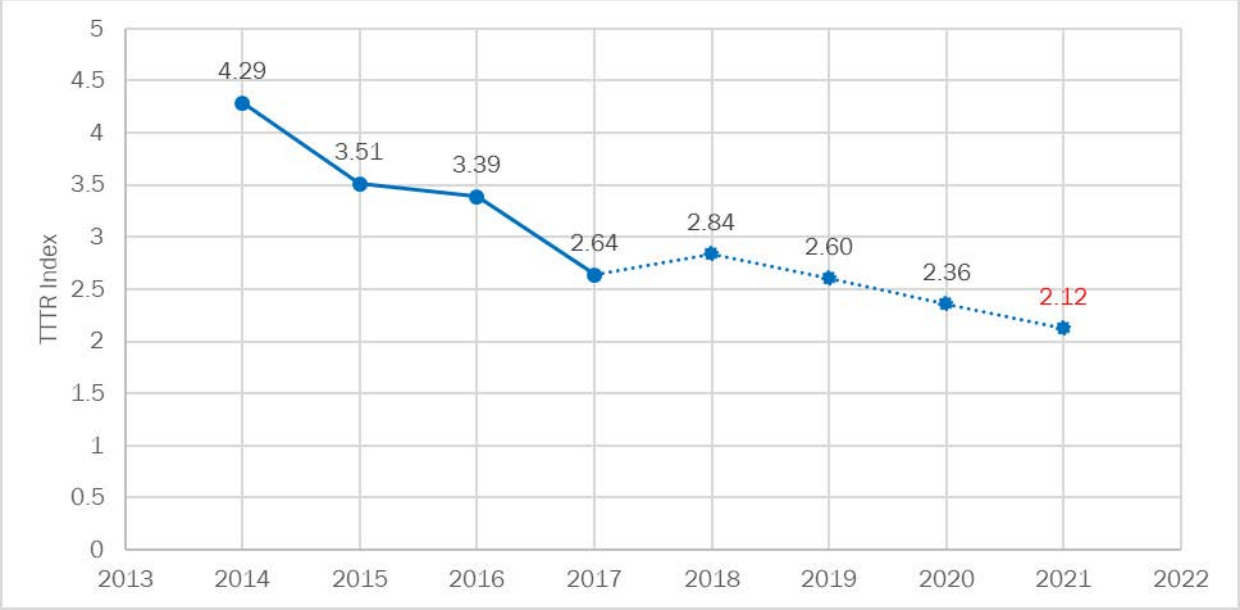


Figure 15: Graph of Performance and the Two and Four-Year Regionwide Targets for TTTR



Regional Highway System Performance Targets

Based on the performance data and forecasting methodology in the previous section, Table 17 shows the adopted regional four-year targets, covering the period 2018 through 2021, for the TPB planning area for the three performance measures.

Table 17: Summary of Four-Year Targets for TTR and TTTR for the TPB Region

	CY 2018 – 2021 Four Year Target
TTR – Interstate Percent of person-miles traveled on the Interstate System that are reliable	**58.5%**
TTR – Non-Interstate NHS Percent of person-miles traveled on the non-Interstate NHS that are reliable	**72.7%**
TTTR Index Ratio of the Interstate System Mileage providing for Reliable Truck Travel Times	**2.12**

CMAQ PROGRAM PERFORMANCE

This section summarizes the federal requirements for the TPB, in the establishment of performance measure targets associated with the Congestion Mitigation and Air Quality (CMAQ) Program. These include unified urbanized targets for the performance measures of Peak Hour Excessive Delay (PHED) and Mode Share in the area of traffic congestion and targets for Emissions Reduction for applicable pollutants and precursors for the nonattainment/maintenance area within the TPB planning area boundary. The targets described in this report meet the MAP-21/FAST PBPP requirements and are consistent with the target setting approaches of Maryland, Virginia, and the District of Columbia. The initial targets were approved by the TPB at its regular meeting on June 20, 2018 in Resolution R19-2018.

CMAQ PROGRAM PERFORMANCE MEASURES

The FHWA published the System Performance: Highway and Freight, Congestion Mitigation and Air Quality (CMAQ) Final Rule on January 18, 2017, with an effective date of May 20, 2017. The state DOTs then had one year until May 20, 2018 to set their initial targets. The rule requires states to set targets for three performance measures concerning CMAQ: 1) Peak Hour Excessive Delay (PHED), 2) Mode Share, and 3) Emissions Reduction. Table 18 summarizes these three performance measures.

This section covers the two CMAQ Program: Traffic Congestion performance measures and the CMAQ Program: Emissions Reduction performance measure. It provides an overview of the measures, data collection, and the methodology utilized for target setting. Additionally, information concerning the CMAQ Program in general is presented, as well as details concerning CMAQ project selection and programming for the states of Virginia, Maryland, and the District of Columbia.

Table 18: Summary of CMAQ Program Performance Measures

	Performance Measures
CMAQ Program: Traffic Congestion	**Peak Hour Excessive Delay – Annual hours of peak hour excessive delay per capita**
	Mode Share – Percent of Non-SOV Travel on the NHS
CMAQ Program: Emissions Reduction	**Emissions – CMAQ-funded projects on-road mobile source total emissions reduction for each applicable criteria pollutant and precursor**

CMAQ PROGRAM TARGET SETTING AND COORDINATION

Peak Hour Excessive Delay (PHED)

Applicable State DOTs and MPOs collectively established a single PHED target for each applicable urbanized area for the first performance period by May 20, 2018. As part of a phased implementation approach, only four-year targets will be reported in the State's baseline performance

period report due by October 1, 2018. There is no requirement for States to report two-year targets or baseline condition for this specific measure in the report for the first performance period. With the first mid performance period progress report, due October 1, 2020, four-year targets may be adjusted, and two-year condition/performance will be reported as baselines.

After the states established their targets by May 20, 2018, MPOs have 180 days to adopt a target. It should be noted again that this target for the applicable urbanized area must be unified, and both DOTs and MPOs should have coordinated and exchanged information with the development of these targets.

Mode Share

Applicable State DOTs and MPOs must collectively establish a single, unified two-year and four-year mode shar target for each applicable urbanized area for the first performance period by May 20, 2018. A baseline report for the first performance period is due October 1, 2018 and must include two and four-year targets and a description of the data collection method used. After the states established their targets on May 20, 2018, MPOs have 180 days to adopt a target. It should be noted again that this target for the applicable urbanized area must be unified, and both DOTs and MPOs should have coordinated and exchanged information with the development of these targets.

Emissions Reduction

State DOTs, with coordination from the MPO, must establish statewide two and four-year targets for total emissions reduction of on-road mobile source emissions for each performance period for all nonattainment and maintenance areas within the state boundary, for each applicable criteria pollutants and precursors. State DOTs must set targets by May 20, 2018 and targets must be reported to FHWA by October 1, 2018. MPOs, in coordination with state DOTs, must establish two and four-year targets for all nonattainment and maintenance areas within the metropolitan planning area. Targets are to be set within 180 days after state DOTs have set their targets. In both cases, the targets shall reflect the anticipated cumulative emissions reductions to be reported by state DOTs in the CMAQ Public Access System for CMAQ projects included in the Statewide Transportation Improvement Program (STIP).

MPO COORDINATION WITH STATE DOTS

MPOs are required to establish their performance targets in coordination with their state partners and these targets should be data-driven and realistic. The requirement for these targets to be evidence based and predictive of anticipated outcomes does not supersede or diminish any aspirational targets to which local, regional, or state jurisdictions are committed. Coordination is essential between the MPO and state DOTs in setting the CMAQ Program targets. Both are to work together to share data, review strategies, and understand outcomes.

TPB staff has worked in close coordination with the DDOT, MDOT and VDOT in the development of these performance targets. The TPB and these state DOTs have also signed Letters of Agreement (LOAs) which detail the guidelines and expectations in terms of coordination on data sharing and the development of these targets. This is in accordance with 23 CFR 450.208 which sets forth the requirements for coordination between applicable states and MPOs.

PHED AND MODE SHARE TARGET SETTING APPROACH

In developing a method that could be utilized for the target setting of these two performance measures, TPB staff considered three techniques: use of the TPB Travel Demand Model, extrapolation of past performance, and an average of the two. The selected methodology for the PHED and Mode Share performance measures was the averaging of the travel demand model output and extrapolation of past performance.

- Travel Demand Model
    - In 2016 TPB produced a travel demand model which produced congestion/related outputs for modelled years 2016, 2020,2025, etc. Forecasting utilized the output AM Peak Hour VMT estimates to project change in congestion, applying the percentage increases to measured performance.
    - Use of the travel demand model considers near-term predicted changes in population, employment and other factors that increase travel demand, as well as changes in the highway and transit network.
- Extrapolation of Measured Performance
    - For this approach, measured data for the previous years of 2014 through 2017 is extrapolated, via linear regression, through the year 2021. This approach generally used a fitted line, though a best fit curve was also considered.
    - The extrapolation method captures recent trends over time but depends upon consistent data.
- Averaging
    - Taking both the results from the Extrapolation of Measured Performance and the Travel Demand Model and averaging those methodologies.

The forecast for the two performance measures using the averaging technique through 2021 was then used to set the four-year targets for these measures for the urbanized area.

Peak Hour Excessive Delay (PHED)

PHED is based on the calculation of all segments of the NHS. PHED is defined as the extra amount of time spent in congested conditions defined by speed thresholds that are lower than a normal delay threshold. For this measure, the speed threshold is 20 mph or 60% of the posted speed limit, or whichever is greater. The FHWA requires that the data collected must occur during the weekdays (Monday through Friday), with a required morning peak timeframe of 6:00AM – 10:00AM, and a choice between two evening peak timeframes: 3:00PM – 7:00PM or 4:00PM – 8:00PM. TPB staff selected the earlier PM peak (3:00PM – 7:00PM) for all calculations; the same PM peak is also being used by the coordinating state DOTs.

Data for all peaks were collected for the region from the National Performance Management Research Data Set (NPMRDS).This data was collected by INRIX using a widget created for the Regional Integrated Transportation Information System (RITIS). RITIS is an automated data sharing, dissemination, and archiving system that includes many performance measure, dashboard, and visual analytics tools that help agencies gain situational awareness, measure performance, and communicate. The data from this is calculated to create a measure by the University of Maryland Center for Advanced Transportation Technology Laboratory (CATT Lab). The RITIS widget is designed to provided historical data and baseline metrics.

Table 19 provides a summary of the past years performance for the PHED performance measures in the TPB Region

Table 19: Summary of PHED Data for TPB Region

	2014	2015	2016	2017
Peak Hours of Excessive Delay (PHED) for the Washington, DC-MD-VA Urbanized Area	**18.5**	**19.1**	**21.1**	**23.0**

Figure 16 shows an application of the second methodology using the TPB Travel Demand Model. For the purposes of forecasting PHED in the TPB region, the forecasted population and the VHD (Vehicle Hours Delay) was used from the travel demand model. From these two sets the compounded growth rate was calculated. This rate of growth was then applied to most recent data (2017) showing the amount of growth from 2017 to 2025. With these two endpoints, the other points in between were calculated, providing a forecasted target.

For comparative purposes, Figure 17 shows the extrapolation of PHED data based on linear regression. Due to the increase in 2017, this leads to an extrapolation of PHED increasing more rapidly than forecast by the travel demand model. Lastly, Figure 18 shows the averaging of the previous two methods, which is the selected method for setting a 4-year target.

Figure 46: Travel Demand Model Method applied to PHED Data

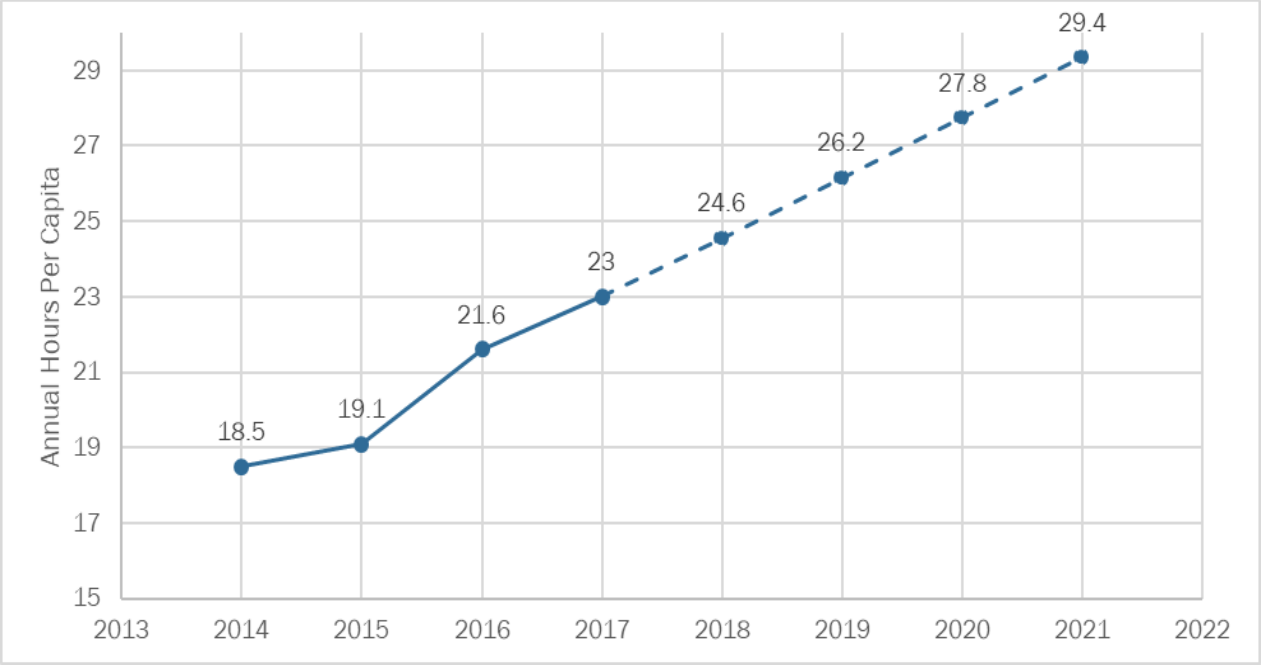


Figure 67: Extrapolation Method applied to PHED Data

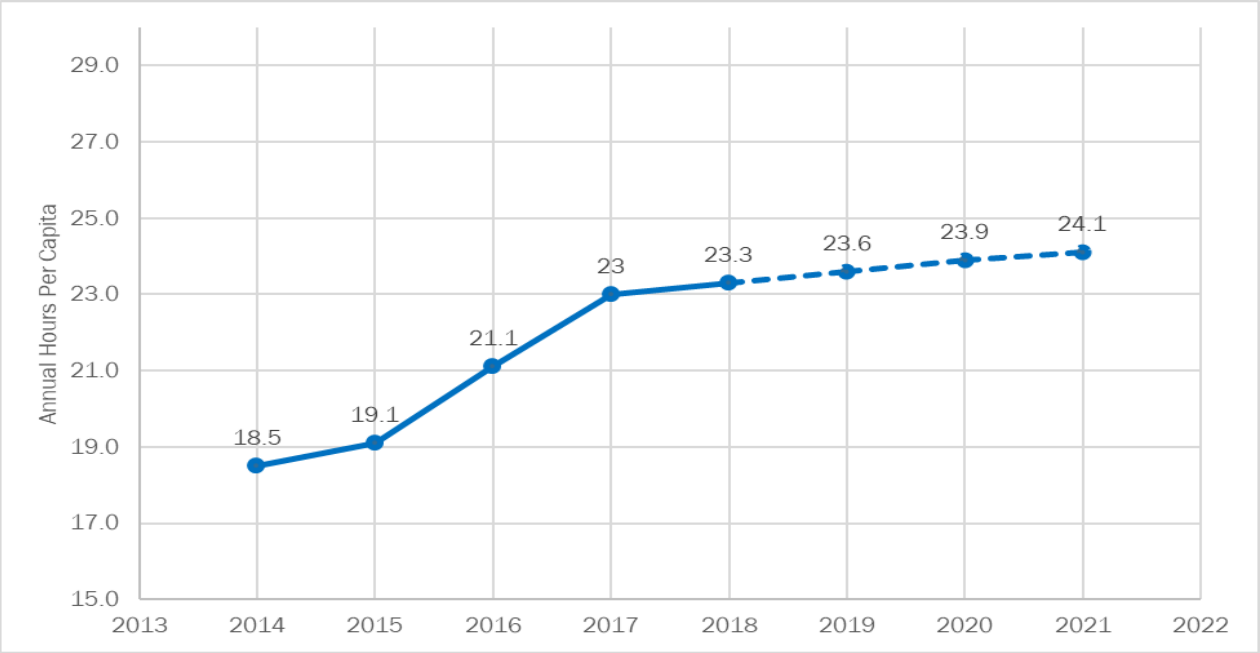
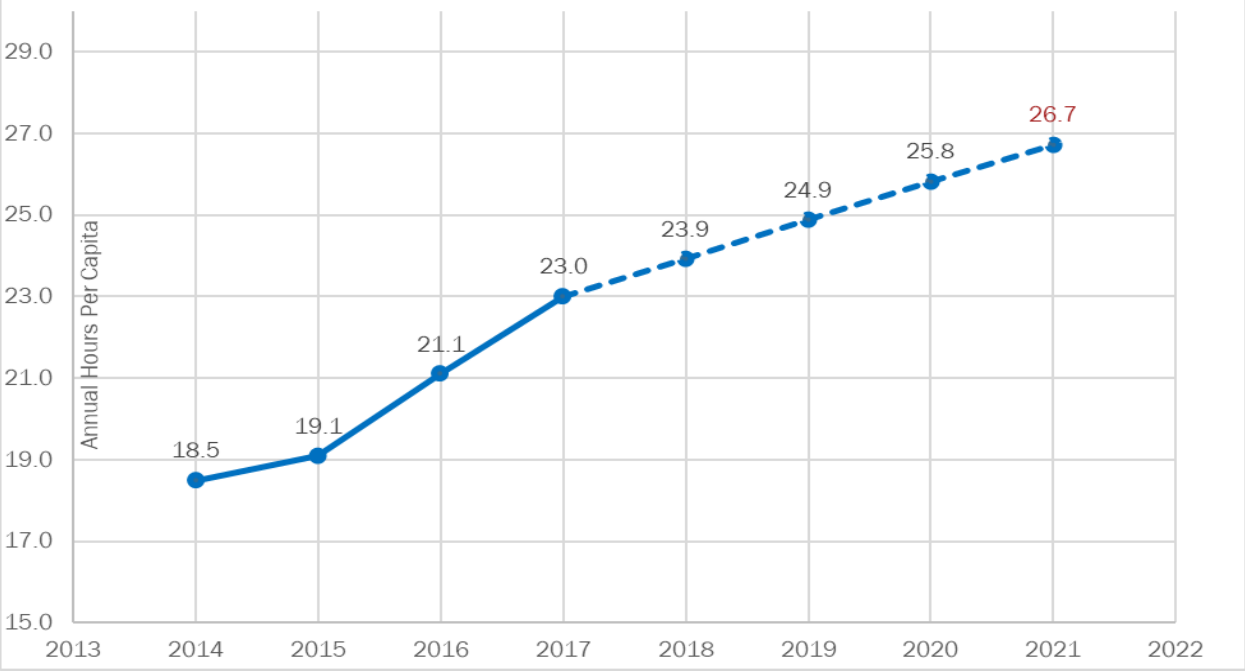


Figure 58: Averaging Method applied to PHED Data



Mode Share

Mode Share is a calculation of the percent of Non-SOV Travel within the urbanized area. Non-SOV Travel, defined by the FHWA, applies to travel occurring on modes other than driving alone in a motorized vehicle and includes travel avoided by telecommuting. It is a measure of the percentage of all surface transportation occurring in an urbanized area with a population of at least 1 million. For the TPB region, this includes the Washington DC-MD-VA Urbanized Area (UZA).

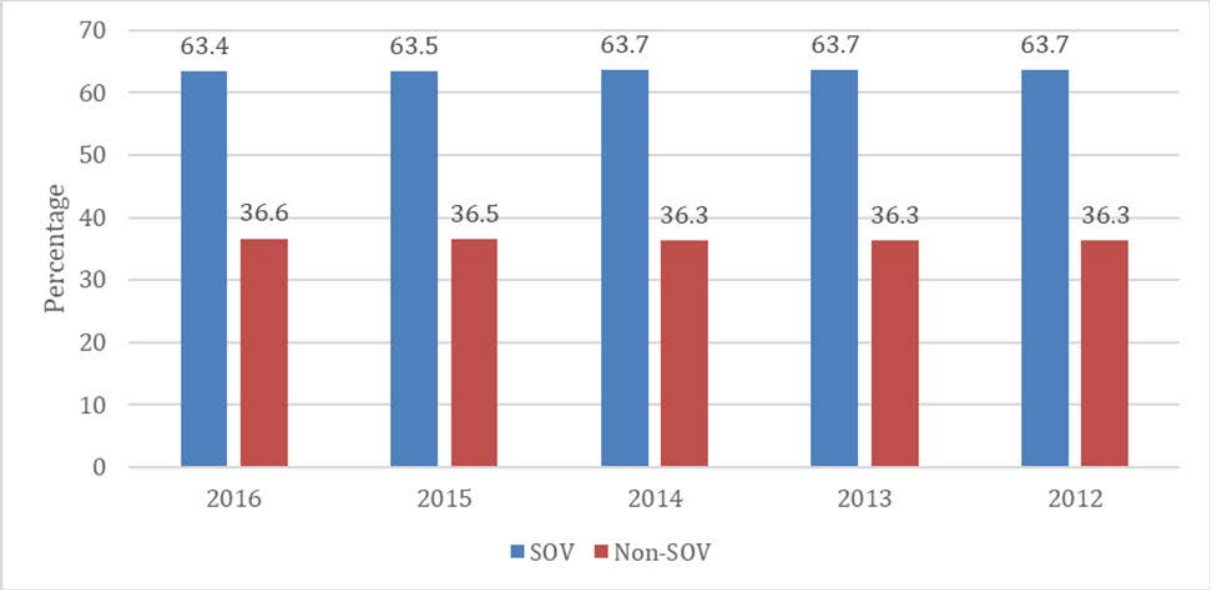
The FHWA has provided three data collection models as a means of estimating the required performance targets. Model A allows use of the U. S. Census Bureau's American Community Survey (ACS) data found in the table titled "Journey to Work." Model B allows for data collected from localized surveys. Model C involves estimating the percent of non-SOV based on volume measurements of actual use for each mode of transportation, including telework. For purposes of this region's measure, Model A was utilized.

In selecting this model, explicit guidelines are detailed on how to utilize the ACS data. Data is to be obtained from the "Journey to Work" dataset, labeled *DP03*. These data sets contain the five-year estimates of the economic characteristics of those surveyed. Within, this dataset is a breakdown on how people commute to work, either by driving alone (SOV) or car-pooling, public transportation, walking, other means, or working at home (Non-SOV).

Figure 19 was created from the "Journey to Work" DP03 dataset. The original datasets showed a breakdown between modes of transportation people utilized to get to work, Figure 19 combines that data and makes a clear indication of SOV versus Non-SOV percentages. Figure 19 contains this information starting in 2012 and concluding with the most recent dataset published in 2016. There has not been significant change in the rate of SOV or Non-SOV travel within the Washington UZA.

The TPB is responsible for setting both two-year (2018, 2019) and four-year (2018, 2019, 2020, 2021) unified targets with Virginia, Maryland, and District of Columbia Departments of Transportation. In determining the unified targets for both two and four years, there is no formula or calculation specified. The FHWA only requires estimations for target projections. Without the

Figure 79: Summary of Mode Share (Non-SOV) Data from ACS



restrictions of calculations and formulas for target setting, there are a few methodologies that can be used by the TPB to determine their targets. The approach selected was a combination of a straight-line projection and use of data from the travel demand model.

Figure 20 illustrates the application of forecasted Non-SOV work trip travel through year 2021 with input from the TPB Travel Demand Model. Initially, a five-year average was calculated from years 2012 – 2016. Next, the absolute change of SOV work trips from years 2016 to 2025 was calculated and then converted to the actual percentage change. This percent change was then applied to the five-year average. Since this was a calculation of SOV work trips, this percent was subtracted from 100 percent to calculate the Non-SOV work trip percentage. Figure 21 shows the extrapolation of the ACS data from years 2012 - 2016. Lastly, Figure 22 shows the averaging of the previous two methods, which is the selected method for setting the 2-year and 4-year targets. Table 20 provides a summary of the two and four-year targets for PHED and Mode Share in the TPB Region.

Figure 20: Travel Demand Model Method applied to Mode Share (Non-SOV) Data

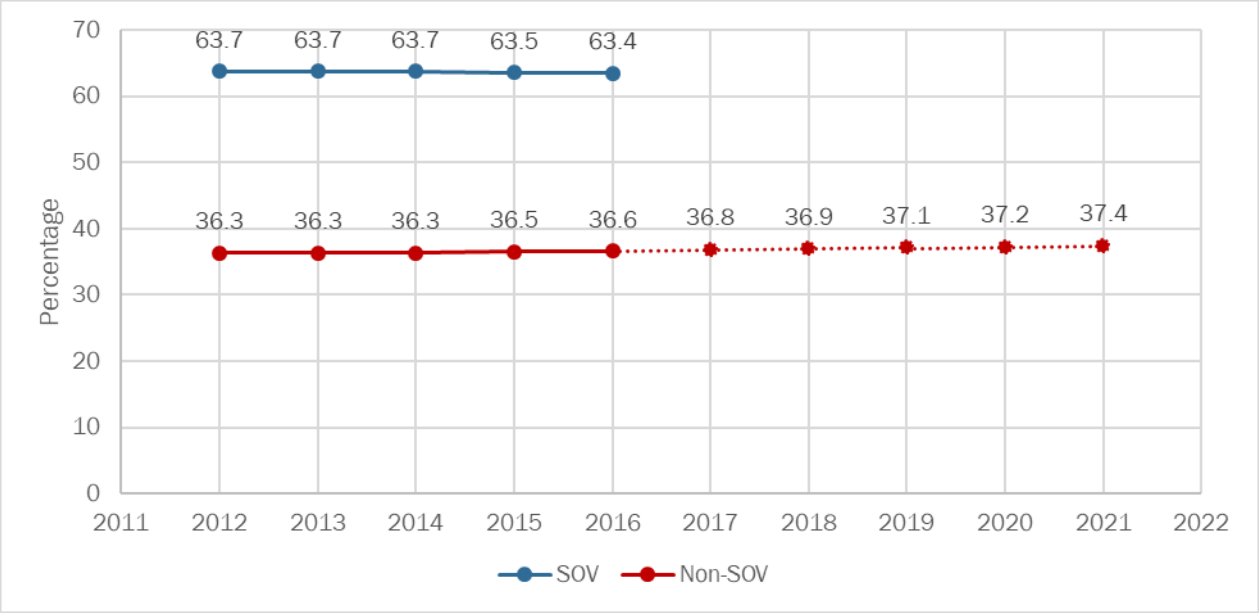


Figure 21: Extrapolation Method applied to Mode Share (Non-SOV) Data

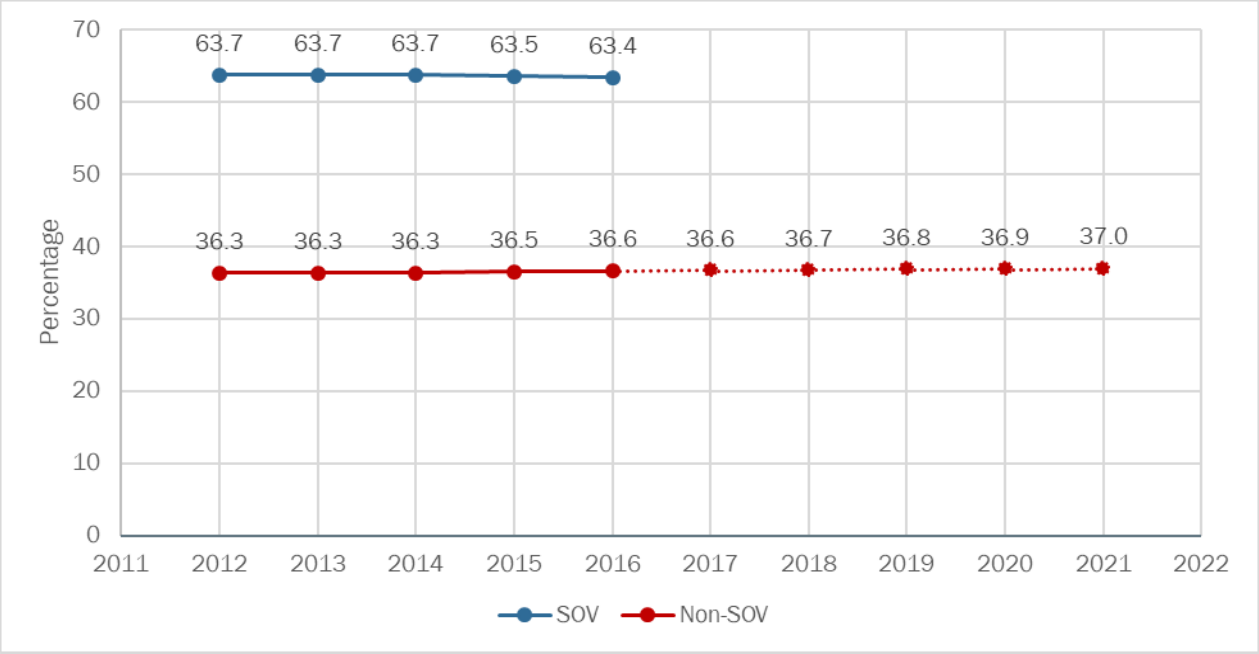


Figure 22: Averaging Method applied to Mode Share (Non-SOV) Data

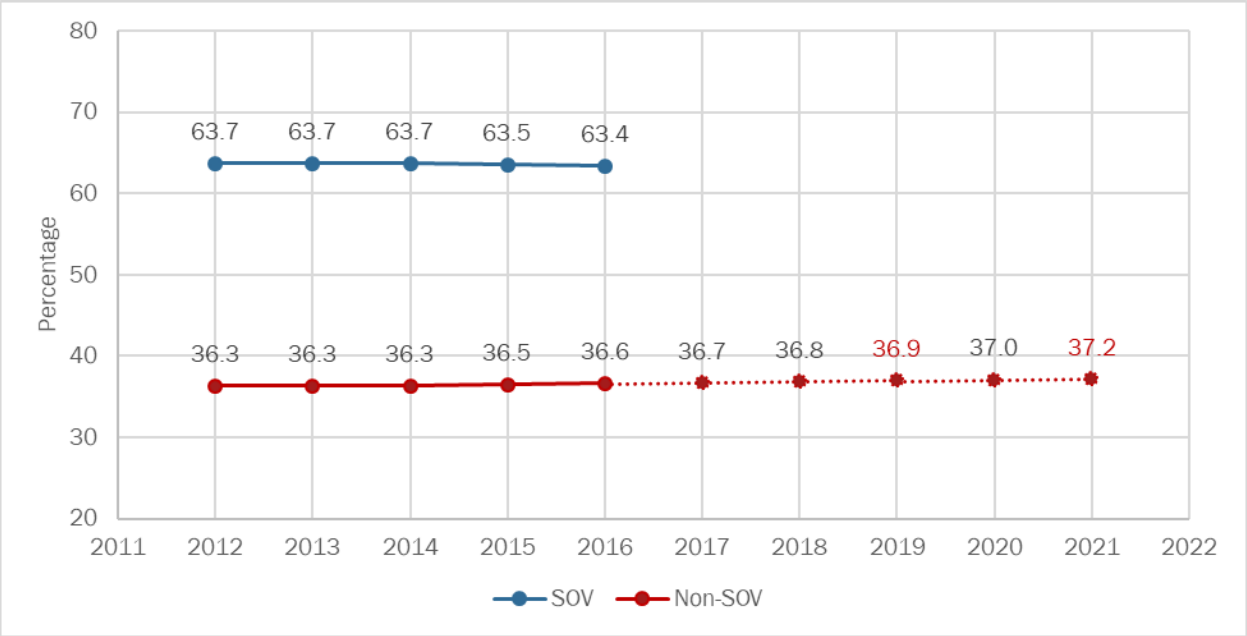


Table 20: Summary of Two and Four-Year Targets for PHED and Mode Share for the TPB Region

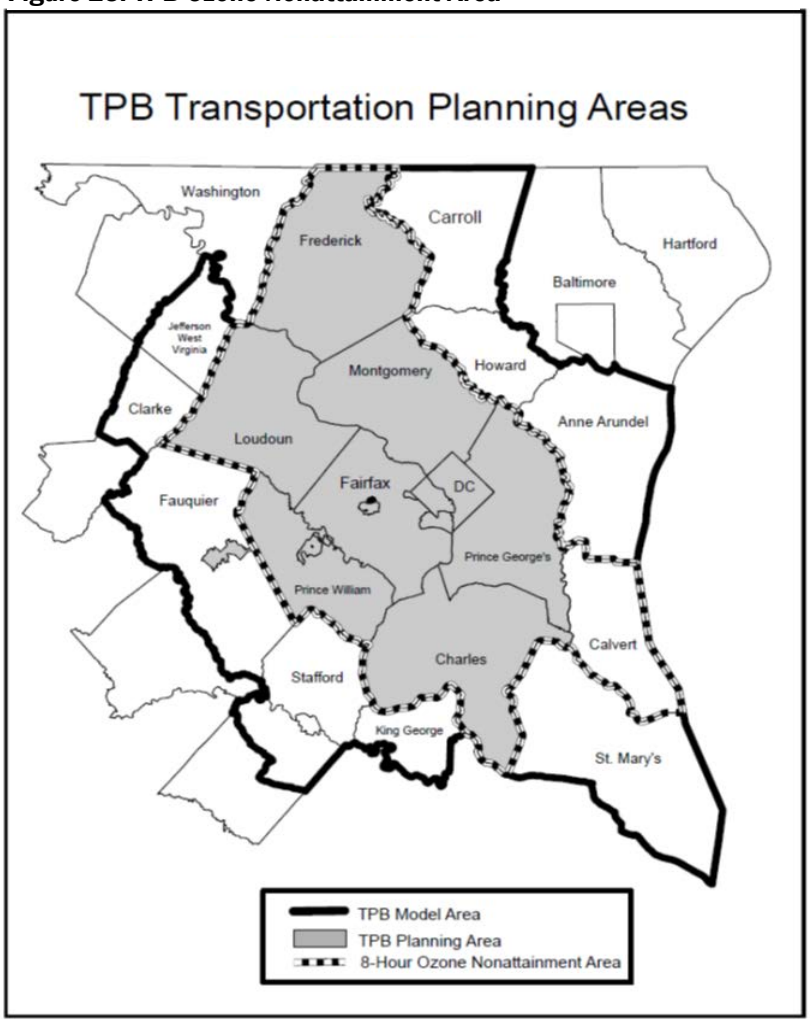
Performance Measure	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Peak Hour Excessive Delay (PHED)	Not Required	26.7 Hours
Mode Share (Non-SOV)	36.9%	37.2%

Emissions Reduction

Emissions reduction is defined as the total on-road mobile source total emission reductions for each applicable criteria pollutant and precursor for a nonattainment area. For the nonattainment area in the TPB region, the applicable criteria pollutants are Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NOx). This performance measure applies to projects that receive or are programmed for CMAQ funding. Data was collected from the CMAQ Public Access System, as specified in the federal rulemaking. State DOTs report emissions reductions information in the Public Access System for CMAQ funded projects in their Statewide Transportation Improvement Program (STIP).

It should be noted that the regional nonattainment area includes Calvert County; however, this county is not part of the TPB planning area. Maryland DOT and Calvert County are conducting a separate performance measure analysis for emissions reduction for that part of the nonattainment area. The TPB Ozone Nonattainment Area is shown in Figure 23.

Figure 23: TPB Ozone Nonattainment Area



FEDERAL REQUIREMENTS FOR CMAQ PROJECT FUNDING

The CMAQ program supports two important goals of the U.S. Department of Transportation: improving air quality and relieving congestion. While these goals are not new elements of the program, they were strengthened in SAFETEA-LU and further bolstered in provisions added to the MAP-21. Growing highway congestion continues to rise at a faster rate than transportation investments. Reducing congestion is a key objective of federal surface transportation policy, and one that has gathered increasing importance in the past several years. The costs of congestion can be an obstacle to economic activity. In addition, congestion can hamper quality of life through diminished air quality, lost personal time, and other negative factors. Accordingly, the CMAQ Program includes federal funds programmatically allocated to each state for funding applicable projects.

Three state jurisdictions share the Washington DC-MD-VA Ozone Nonattainment area. All three of these states have different internal processes concerning the selection and programming of CMAQ projects. These separate processes are detailed as follows.

The District of Columbia, Maryland, and Virginia departments of transportation each receive CMAQ funding and allocate it annually to fund applicable projects. Each state follows its own selection process for identifying and funding CMAQ projects; for Maryland and Virginia many such projects are funded elsewhere in the state than the TPB planning area. Projects are selected on various criteria, only one of which is estimated emissions reduction benefits. Projects are not required to have quantifiable emissions reduction benefits; a quantitative assessment is sufficient. All projects awarded annually must be entered into the CMAQ Public Access System (PAS). Data for the CMAQ Emissions Reduction performance measure for the region is taken from the quantified benefits included in the projects listed in the PAS that have been funded in the region. Table 21 lists the quantified benefits, if any, included in the PAS for the region for recent years (2014 to 2017).

Further information on each state's CMAQ project process and methodology for forecasting future performance and setting targets follows.

Table 21: Summary of Emissions Reduction Perforance for the TPB Area

FISCAL YEAR	VOC (kg/day)	NOx (kg/day)
2014	8.087	11.688
2015	0.072	0.816
2016	3.672	5.956
2017	2.532	4.074

CMAQ PROJECT PROGRAMMING

Three state jurisdictions share the Washington DC-MD-VA Ozone Nonattainment area. All three of these states have different internal processes concerning the selection and programming of CMAQ projects. These separate processes are detailed as follows.

Maryland

The Maryland Consolidated Transportation Program (CTP) is a six-year capital budget for transportation projects, where CMAQ programming is determined during the one-year development process. CMAQ projects selected for programming are done so based on criteria provided by the CTP. Projects should meet all federal and legal requirements; support departmental program priorities; meet all federal match requirements to maximize federal revenue; support State plans and objectives; support existing project commitments and uphold intergovernmental agreements; and lastly support alternative modes of transportation (transit, bike, pedestrian). Projects selected for programming must be included in the STIP and must also be consistent with local plans and be included in the regional MPO long-range plan.

A majority of the CMAQ funding is used for transit projects (bus replacements, MARC, and light rail). CMAQ funding has also been used for park and ride projects, traffic flow improvement projects, such as signal synchronization and the Coordinated Highways Action Response Team (CHART) program.

Virginia

Within the region, the Northern Virginia Transportation Authority (NVTA) coordinates Northern Virginia's annual programming of federal CMAQ projects as well as Regional Surface Transportation (RST) funds. CMAQ funds contribute to the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS).

The recommendation of programming is done through the NVTA's Regional Jurisdiction and Agency Coordinating Committee (RJACC). Final approval is given by the Commonwealth Transportation Board

(CTB). VDOT provides local matches for approved CMAQ projects, but only if the project utilizes the funds within an established timeline. Recipients have 24 months to obligate the funds and then 48 months to expend the funds. CMAQ projects are eligible for potential funding after an application submission, a Transportation Emissions Estimation Models (TEEM) worksheet submittal for air quality benefit calculation, and a resolution of support from the respective governing bodies. Moving forward, VDOT is encouraging the use of the FHWA CMAQ calculator tool kit for all applicable project types.

District of Columbia

Currently the District of Columbia department of transportation does not have any additional steps in determining CMAQ programming beyond the federal requirements. A majority of the CMAQ programs that have been selected for funding have involved bike lanes and TDM. In the future, the department plans to add additional requirements, other than the federal minimum standards, in the programming of CMAQ projects.

REGIONAL EMISSIONS REDUCTIONS TARGETS

For the emissions reduction performance measure, TPB staff developed a method that incorporated the states' respective methodologies for state targets, to create regional emissions reductions targets for the applicable portion of the Washington DC-MD-VA nonattainment area. In terms of developing a methodology that could be utilized for target setting, TPB staff considered four techniques. First, taking the average past years' data and setting targets reflective of those averages. Second, setting a trend line based on past years' data and setting targets based on those projections. Third, using the percentage of CMAQ funding in the TIP and the cost-effectiveness (kg/ton), created by a ratio, of quantified CMAQ projects in the CMAQ Public Access System to forecast future emissions and thereby creating targets. Fourth, list expected CMAQ projects for the next four years and sum the forecast emissions reduction benefits forecast by each state for CMAQ projects planned in the region. The combined emissions reduction is then used to set the two-year and four-year targets for the two applicable pollutants. This fourth method was suggested from FHWA presentations and webinars; however, it is not a requirement. The fourth method was utilized for target setting using information provided by the three state departments of transportation.

Based on the available quantified data and the information provided by the District of Columbia, Maryland, and Virginia departments of transportation, the TPB summed the forecast emissions reduction benefits forecast by each state for CMAQ projects planned in the region. The combined emissions reduction was then used to set the two-year and four-year targets for the two applicable pollutants, shown in Table 22.

Table 22: Two-Year and Four-Year Targets for Emissions Reduction in the TPB Planning Area

		FFY 2018 – 2019 Two Year Target	FFY 2018 – 2021 Four Year Target
Total Emissions Reductions for the TPB portion of the Washington DC -MD-VA nonattainment area	Volatile Organic Compounds (VOCs)	1.838 Kg/Day	2.195 Kg/Day
	Nitrogen Oxides (NOx)	4.019 Kg/Day	4.703 Kg/Day

TRANSIT ASSET MANAGEMENT PERFORMANCE

This section presents the transit asset management (TAM) targets adopted by the National Capital Region Transportation Planning Board (TPB) for 2017. The final Transit Asset Management rule was published in the Federal Register on July 26, 2016, and became effective October 1, 2016.[2] Transit asset management (TAM) is "a strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively through the life cycle of such assets."

Under the final TAM rule, transit providers must collect and report data for four performance measures, covering rolling stock, equipment, infrastructure, and facility condition. For these measures, transit providers have to annually set targets for the fiscal year, develop a four-year TAM plan for managing capital assets, and use a decision support tool and analytical process to develop a prioritized list of investments.

Each provider of public transportation was required to adopt annual targets for the performance of their transit assets, initially by January 1, 2017. Subsequently, MPOs have 180 days to adopt transit asset targets for their metropolitan planning area to comply with requirements. Accordingly, the TPB adopted initial transit asset targets for the region in June 2017 in Resolution R24-2017. Subsequently, the schedule for target setting is tied to fiscal years, with most transit agencies setting the next round of targets in the October 2018 timeframe. The TPB anticipates setting a new round of regional transit asset targets in January 2019.

REGIONAL TARGET SETTING APPROACH

The final TAM rule applies to all recipients and subrecipients of federal transit funds (e.g., Section 53XX funds) that own, operate, or manage capital assets used in the provision of public transportation and requires accounting for all assets used in the provision of public transportation service, regardless of funding source, and whether used by the recipient or subrecipient directly, or leased by a third party.

The federal TAM rulemaking defines two tiers of providers of public transportation. Tier 1 providers are those that operate rail service or more than 100 vehicles in regular service. Tier 2 providers are those operating less than 100 vehicles in regular service. Tier 1 providers must set transit asset targets for their agency, as well as fulfilling other additional reporting and asset management requirements. Tier 2 providers can set their own targets, or participate in a group plan with other Tier 2 providers whereby targets are set for the group as a whole. Note that a parent organization can operate several services, such as bus service and paratransit service, that combined exceed 100 vehicles.

The region has seven Tier 1 providers of public transportation as defined in the federal rulemaking:

1. WMATA: Metrorail, Metrobus, MetroAccess
2. District of Columbia: Streetcar, Circulator
3. Fairfax County: Connector, Community and Neighborhood Services
4. Montgomery County: Ride On
5. Prince George's County: TheBus, Call-A-Bus

[2] https://www.gpo.gov/fdsys/pkg/FR-2016-07-26/pdf/2016-16883.pdf

6. Potomac and Rappahannock Transportation Commission (PRTC): OmniRide, OmniLink
7. Virginia Railway Express (VRE)

The region has twelve Tier 2 providers as defined in the federal rulemaking, including several small paratransit providers and non-profit providers:

Northern Virginia

1. Alexandria: DASH, DOT
2. Arlington: ART
3. Fairfax City: CUE
4. Loudoun County Transit
5. Virginia Regional Transit (VRT)
6. The Arc of Greater Prince William
7. Every Citizen Has Opportunities, Inc. (ECHO)
8. Endependence Center of Northern VA
9. Weinstein Jewish Community Center
10. Prince William Area Agency on Aging

Suburban Maryland

11. Charles County: VanGo
12. Frederick County: TransIT

All of the Tier 2 providers in the region have chosen to participate in a group plan with their respective state agency: the Maryland Transit Administration (MTA) or the Virginia Department of Rail and Public Transportation (DRPT). Accordingly, there are nine reporting entities in the TPB's metropolitan planning area.

Providers of public transportation operating within the region but based outside of the TPB's metropolitan planning area, such as MTA Commuter Bus and MARC commuter rail, do not need to be included.

The following schedule for TAM requirements was published in the final rulemaking in July 2016, and subsequently modified by FTA through issued guidance in February and April 2017[3].

- **By January 1, 2017:** Providers of public transportation to establish initial performance targets.
- **By June 30, 2017:** The MPO (i.e., TPB) shall adopt transit asset targets for the metropolitan region within 180 days as required by the Statewide and Metropolitan Planning Rule.
    - Subsequently, regional transit asset targets shall be adopted with every new long-range plan or Transportation Improvement Program (TIP).
- **Starting October 2017:** Providers of public transportation report performance data and targets in the National Transit Database (NTD) within four months after fiscal year end:
    - Optional reporting for this year, e.g., FY 2017 data and FY 2018 targets due October 31, 2017 (if fiscal year July-June).
    - Mandatory reporting for future years, e.g., FY 2018 data and FY 2019 targets by October 31, 2018 (if fiscal year July-June).

[3] February 2017 guidance: https://www.transit.dot.gov/TAM/gettingstarted/htmlFAQs
April 2017 guidance: https://www.transit.dot.gov/regulations-and-guidance/transportation-planning/metropolitan-planning-organization-responsibilities

- Starting October 2019, submit a narrative report describing changes in the condition of the provider's transit system from the previous year and progress made during the year to meet the performance targets.

- **By October 2018:** Providers of public transportation must develop four-year TAM Plans. Subsequently, plans must be updated every four years.

TRANSIT ASSET PERFORMANCE MEASURES

As shown in Table 23, there are four transit asset performance measures, two of which are age-based and two of which are condition-based:

1. Rolling stock (Age)
2. Equipment: (non-revenue) service vehicles (Age)
3. Infrastructure: rail fixed-guideway track, signals, and systems (Condition)
4. Stations/Facilities (Condition)

Within each of the performance measures, assets are further divided into asset classes. For example, distinct asset classes for buses can be 30-foot, 35-foot, 40-foot, articulated, etc. Each asset class is measured separately for performance and for target-setting. In addition, for the age-based performance measures, providers may set their own standard — the useful life benchmark (ULB) — for each asset class. So, two agencies may have different standards for their 40-foot buses as well as different targets for the anticipated percentage of buses that will exceed those standards, to reflect different degrees of usage and operating conditions, variations in maintenance efforts, etc. This limits the feasibility of comparison among agencies and of the integration of data to measure regional performance or set regional targets.

Table 23: Transit Asset Management Performance Measures

	Performance Measure	Asset Classes
Rolling stock (Age)	Percentage of revenue vehicles within a particular asset class that have met or exceeded useful life benchmark (ULB).	40 foot bus, 60 foot bus, vans, automobiles, locomotives, rail vehicles
Equipment - (non-revenue) service vehicles (Age)	Percentage of vehicles that have met or exceeded their ULB.	Cranes, prime movers, vehicle lifts, tow trucks
Infrastructure-rail fixed-guideway track, signals, and systems (Condition)	The percentage of track segments, signal, and systems with performance restrictions.	Signal or relay house, interlockings, catenary, mechanical, electrical and IT systems
Stations/ Facilities (Condition)	The percentage of facilities, within an asset class, rated below 3 on the TERM scale.	Stations, depots, administration, parking garages, terminals

Data Sources

Providers of public transportation measure their performance in accordance with the definitions and requirements of federal rulemaking, including the TAM final rule and the final rule on National Transit Database (NTD) Asset Inventory Reporting. The FTA has also published a Guideway Performance Assessment Guidebook and a Facility Performance Assessment Guidebook to provide guidance to providers of public transportation on how to collect data and measure performance for these assets.

REGIONAL TRANSIT ASSET MANAGEMENT TARGETS

In most cases for the 2017 target-setting process, providers set targets that are approximately equivalent to their current performance. In future years, TPB staff will work with the providers of public transportation to collate performance data across the region.

The nine reporting entities for provision of public transportation provided their targets to the TPB, as shown in Table 24. The targets for the metropolitan planning region are presented in tabular form to account for the differences in targets and standards among the providers of public transportation. Targets are the threshold for the maximum percentage of assets at or exceeding acceptable standards.

Table 24: Regional Transit Asset Management Targets

Reporting Entity	Rolling Stock	Service Vehicles	Rail Infrastructure	Station/ Facility Condition
WMATA	1% Rail, 3% Bus	15%[c,d]	5%	32%
DDOT	0% Rail, 40% Bus	20%[c]	5%	20%
Ffx. Co.	10%	14%[e]	n/a	0%
Mont. Co.	8%[a]	50%[c,d]	n/a	50%[f]
Pr. Geo. Co.	0%	18%[d]	n/a	0%
PRTC	46%[b]	50%[c]	n/a	0%
VRE	0% Rail	50%[e]	n/a	0%
Maryland Tier 2 (MTA)	24%[a]	31%[d]	n/a	25%[f]
Virginia Tier 2 (DRPT)	20%	Not reported	n/a	20%

a: heavy-duty buses; b: 45-foot buses; c: autos; d: trucks; e: service vehicles; f: maintenance/administrative facilities

TRANSIT SAFETY

The Federal Transit Administration (FTA) published the Public Transportation Agency Safety Plan final rule on July 19, 2018 with an effective date of July 19, 2019, followed by one year for implementation. This rule requires providers of public transportation that receive federal funds as a recipient or sub-recipient to develop and implement a safety plan based on the principles of the Safety Management System. In addition, the FTA published the National Public Transportation Safety Plan on January 28, 2017 which laid out four performance measures for which the safety plan will have to include targets set by the providers of public transportation.

Under these federal transit safety rules, providers of public transportation and the TPB as the MPO must collect and report data for four performance measures that track the condition of transit safety in the TPB planning area. These measures include the number and rate of fatalities, injuries, safety events (derailments, collisions, fires, and evacuations), and also system reliability (mean distance between major and other mechanical system failures). Once the targets are established, the TPB must collect data and report the performance outcomes in the long-range transportation plan. The results of this monitoring effort are intended to inform future funding decisions on projects and programs that affect transit safety.

Regional coordination and development of regional transit safety targets will take place between 2019 and 2021.

APPENDIX: TPB RESOLUTIONS

TPB R24-2017
June 21, 2017

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

RESOLUTION TO ADOPT TARGETS FOR THE REGION'S TRANSIT ASSETS

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 FAST Act continued the implementation of performance based planning and programming to achieve desired performance outcomes for the multimodal transportation system, including the setting of targets for future performance by States, providers of public transportation, and metropolitan planning organizations (MPOs); and

WHEREAS, the Federal Transit Administration (FTA) issued a final rule on transit asset management to establish a system to monitor and manage public transportation assets to improve safety and increase reliability and performance, under which providers of public transportation receiving federal funds were required to set their initial asset management targets by January 1, 2017; and

WHEREAS, the Federal Highway Administration (FHWA) and the FTA issued a joint final rule on planning (Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning), under which MPOs shall establish performance targets within 180 days of a State or transit provider setting targets; and

WHEREAS, the transit agencies or jurisdictions operating public transportation in the National Capital Region have developed information and targets toward compliance with the law and regulation and have communicated their current targets for transit asset management to the TPB; and

WHEREAS, the transit agencies or jurisdictions operating public transportation coordinated with TPB staff on a method for development of regional targets, and given the diversity of agency sizes, asset usage levels, and other factors among the necessary agencies concurred with the adoption of a matrix of local targets for this initial set of regional transit asset management targets;

NOW, THEREFORE, BE IT RESOLVED THAT the National Capital Region Transportation Planning Board adopts the following set of targets for the region's transit assets, as described in the attached materials.

Adopted by the Transportation Planning Board at its regular meeting on June 21, 2017

REGIONAL TARGETS FOR TRANSIT ASSET MANAGEMENT – 2017
NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD

Reporting Entity	Rolling Stock	Service Vehicles	Rail Infrastructure	Station/ Facility Condition
WMATA	1% Rail, 3% Bus	15%[c,d]	5%	32%
DDOT	0% Rail, 40% Bus	20%[c]	5%	20%
Ffx. Co.	10%	14%[e]	n/a	0%
Mont. Co.	8%[a]	50%[c,d]	n/a	50%[f]
Pr. Geo. Co.	0%	18%[d]	n/a	0%
PRTC	46%[b]	50%[c]	n/a	0%
VRE	0% Rail	50%[e]	n/a	0%
Maryland Tier 2 (MTA)	24%[a]	31%[d]	n/a	25%[f]
Virginia Tier 2 (DRPT)	20%	Not reported	n/a	20%

a: heavy-duty buses; b: 45-foot buses; c: autos; d: trucks; e: service vehicles; f: maintenance/administrative facilities

TPB R10-2018
January 17, 2018

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

RESOLUTION TO ADOPT HIGHWAY SAFETY TARGETS FOR THE NATIONAL CAPITAL REGION

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 provisions of the FAST Act continued the implementation of performance based planning and programming to achieve desired performance outcomes for the multimodal transportation system, including the setting of targets for future performance by States and metropolitan planning organizations (MPOs); and

WHEREAS, safety of all modes of travel is an important element of TPB's Vision, and a regional priority, with many its member jurisdictions having adopted aspirational safety goals associated with Vision Zero and Towards Zero Deaths; and

WHEREAS, the TPB encourages every member jurisdiction in the region to adopt similar aspirational goals and calls on the transportation agencies of the region to redouble their efforts to develop projects, programs and policies to achieve dramatic reductions in fatalities and serious injuries; and

WHEREAS, the Federal Highway Administration (FHWA) issued a final rule to establish performance measures for State departments of transportation (State DOT) and MPOs to establish and report evidence based highway safety targets for the following performance measures: number of fatalities, rate of fatalities per hundred million vehicle miles traveled (VMT), number of serious injuries, rate of serious injuries per VMT, and number of combined non-motorized fatalities and non-motorized serious injuries by August 31, 2017 for State DOTs and by February 27, 2018 for MPOs; and

WHEREAS, TPB staff have coordinated with officials at the Maryland Department of Transportation (MDOT), the Virginia Department of Transportation (VDOT), and the District Department of Transportation (DDOT) to develop regional highway safety targets that are evidence based, consistent with the targets submitted by each member state DOT, and reflective of the outcomes expected through the implementation of funded safety projects and policies; and

WHEREAS, these highway safety targets have been reviewed and recommended for TPB approval by the Transportation Safety Subcommittee and the TPB Technical Committee; and

WHEREAS, the TPB acknowledges that among the recommended set of evidence-based targets the target for serious injuries unfortunately is higher than the most recent data, which does not match regional aspirations; and

WHEREAS, the TPB remains focused on achieving its aspirational goals and will use the annual regional highway safety targets and the target setting process to evaluate the region's progress toward achieving its aspirational goals; and

NOW, THEREFORE, BE IT RESOLVED THAT the National Capital Region Transportation Planning Board adopts the following set of highway safety targets for the National Capital Region for the 2014-2018 period and further described in the attached materials.

Table 1: Regional Highway Safety Targets – 2014-2018 Average

Performance Measure	2014-2018 Target
Number of fatalities	253.0
Rate of fatalities per 100 million vehicle miles of travel	0.588
Number of serious injuries	3,007.3
Rate of serious injuries per 100 million vehicle miles of travel	6.768
Number of nonmotorist fatalities and serious Injuries	528.8

Adopted with amendments by the Transportation Planning Board at its regular meeting on January 17, 2018.

TPB R19-2018
June 20, 2018

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

RESOLUTION TO ADOPT REGIONAL CONGESTION MITIGATION AND AIR QUALITY PROGRAM PERFORMANCE MEASURE TARGETS

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 provisions of the FAST Act continued the implementation of performance-based planning and programming to achieve desired performance outcomes for the multimodal transportation system, including the setting of targets for future performance by States and metropolitan planning organizations (MPOs); and

WHEREAS, The Federal Highway Administration (FHWA) published the System Performance: Highway and Freight, Congestion Mitigation and Air Quality (CMAQ) Final Rule on January 18, 2017, with an effective date of May 20, 2017. The state departments of transportation (state DOTs) must set targets for performance measures in the rule by May 20, 2018, and must submit a Baseline Period Performance Report with the targets to FHWA by October 1, 2018. MPOs must work in coordination with state DOTs in the development of two-year and four-year targets and are required to set targets within 180 days after state DOTs set targets; and

WHEREAS, the District Department of Transportation (DDOT), the Maryland Department of Transportation (MDOT), and the Virginia Department of Transportation (VDOT) and the TPB are required to establish targets for the CMAQ Program performance measures of: 1) Peak Hour Excessive Delay (PHED), 2) Mode Share – Non-Single Occupancy Vehicle (Non-SOV), and 3) Emissions Reductions; and

WHEREAS, DDOT, MDOT, VDOT and the TPB are initially required to agree on and establish a single four-year target for the Washington-DC-VA-MD urbanized area for the performance measure of Peak Hour Excessive Delay (PHED); and

WHEREAS, DDOT, MDOT and VDOT and the TPB are required to agree on and establish single two-year and four-year targets for the Washington-DC-VA-MD urbanized area for the performance measure of Mode Share (Non-SOV); and

WHEREAS, DDOT, MDOT and VDOT are required to establish two-year and four-year targets for the performance measure of emissions reduction from CMAQ-funded projects and programs for their portion of the Washington DC nonattainment area for two applicable criteria pollutant and precursors: Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NOx), and the TPB is required to coordinate with state DOTs in the establishment of two-year and four-year targets for emissions reduction from CMAQ-funded projects and programs for the portion of the Washington DC nonattainment area within the metropolitan planning area boundary; and

WHEREAS, TPB staff have coordinated with officials at DDOT, MDOT and VDOT to develop regional CMAQ Program targets that are evidence based, consistent with the targets submitted by each member state DOT, and reflective of the outcomes expected through the implementation of funded projects, programs, and policies; and

WHEREAS, as of May 20, 2018, DDOT, MDOT and VDOT have set targets as specified above, including single targets for the performance measures of PHD and Mode Share for the Washington-DC-VA-MD urbanized area; and

WHEREAS, the TPB encourages every jurisdiction in the region to adopt aspirational goals and calls on the transportation agencies of the region to redouble their efforts to develop projects, programs and policies to achieve reductions in traffic congestion and emissions; and

WHEREAS, the TPB will use the two-year and four-year regional CMAQ Program target setting process as one method to evaluate the region's progress toward achieving said aspirational goals going forward with each future performance period; and

WHEREAS, these CMAQ Program targets have been reviewed and recommended for TPB approval by the TPB Technical Committee at the May 4 and June 6 meetings, and have been reviewed by the TPB at its May 16 meeting;

NOW, THEREFORE, BE IT RESOLVED THAT the National Capital Region Transportation Planning Board adopts the following set of two-year and four-year CMAQ Program targets for the National Capital Region, as shown the following tables and as described in the attached materials.

Approved by the Transportation Planning Board at its regular meeting on June 20, 2018.

Table 1: CMAQ Program Targets: Mode Share and Peak Hour Excessive Delay (PHED)

Performance Measures for the Washington DC-MD-VA urbanized area	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Peak Hour Excessive Delay (PHED)	Not Required	26.7 Hours
Mode Share (Non-SOV)	36.9%	37.2%

Table 2: CMAQ Program Targets: On-Road Mobile Emissions Reductions

		FFY 2018 – 2019 Two Year Target	FFY 2018 – 2021 Four Year Target
Total Emissions Reductions for the TPB portion of the Washington DC -MD-VA nonattainment area	Volatile Organic Compounds (VOCs)	1.838 Kg/Day	2.195 Kg/Day
	Nitrogen Oxides (NOx)	4.019 Kg/Day	4.703 Kg/Day

TPB R1-2019
July 18, 2018

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

RESOLUTION TO ADOPT REGIONAL HIGHWAY AND FREIGHT PERFORMANCE MEASURE TARGETS

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 provisions of the FAST Act continued the implementation of performance-based planning and programming to achieve desired performance outcomes for the multimodal transportation system, including the setting of targets for future performance by States and metropolitan planning organizations (MPOs); and

WHEREAS, The Federal Highway Administration (FHWA) published the System Performance: Highway and Freight, Congestion Mitigation and Air Quality (CMAQ) Final Rule on January 18, 2017, with an effective date of May 20, 2018, at which time the state departments of transportation (State DOTs) adopted their initial performance targets in accordance with the rule; and

WHEREAS, State DOTs must submit a Baseline Performance report by October 1, 2018; and

WHEREAS, MPOs must work in coordination with state DOTs to determine whether the MPO will support the state DOTs' targets or develop their own quantifiable four-year targets; and

WHEREAS, MPOs must adopt targets within 180 days after state DOTs adopt initial targets; and

WHEREAS, the performance measures that require the establishment of targets are: 1) Travel Time Reliability (TTR) for both Interstate and Non-Interstate roadways on the National Highway System (NHS), and 2) Truck Travel Time Reliability (TTTR) for Interstate Roadways; and

WHEREAS, the District Department of Transportation (DDOT), Maryland Department of Transportation (MDOT), and the Virginia Department of Transportation (VDOT) were required to establish two and four-year targets for the performance measure of Travel Time Reliability (TTR) on Interstate roadways on the National Highway System (NHS), and only a four-year target for Non-Interstate roadways on the National Highway System (NHS); and

WHEREAS, DDOT, MDOT, and VDOT were required to establish two-year and four-year targets for Truck Travel Time Reliability (TTTR) for roadways on the Interstate System; and

WHEREAS, the TPB staff has coordinated with the state DOTs and reviewed the option of either supporting the state DOTs' targets or establishing regional quantifiable four-year targets for Travel Time Reliability (TTR) and Truck Travel Time Reliability (TTTR); and

WHEREAS, TPB staff has coordinated with the state DOTs to develop and establish regional highway and freight targets that are evidence based, consistent with the targets submitted by each member state DOT, and reflective of the outcomes expected through the implementation of funded projects, programs, and policies; and

WHEREAS, the TPB encourages every jurisdiction in the region to adopt similar goals and calls on the transportation agencies of the region to redouble their efforts to develop projects, programs and policies to achieve increased reliability on roadways; and

WHEREAS, the TPB will use the four-year regional highway and freight target setting process to evaluate the region's progress toward achieving said goals going forward with each future performance period; and

WHEREAS, these highway and freight targets have been reviewed by the TPB Technical Committee at its June 1 and July 6 meetings, and recommends that the TPB approve these targets, and the TPB received a briefing on the draft highway and freight targets at its June 20 meeting,

NOW, THEREFORE, BE IT RESOLVED THAT the National Capital Region Transportation Planning Board adopts the following set of four-year highway and freight targets for the National Capital Region, as described in the attached materials.

Approved by the Transportation Planning Board at its regular meeting on July 18, 2018.

Table 1: Travel Time Reliability Region Targets for Interstate and Non-Interstate Roadways

National Highway System	CY 2018 – 2021 Four Year Target
TTR – Interstate Percent of person-miles traveled on the Interstate System that are reliable	58.5%
TTR - Non-Interstate NHS Percent of person-miles traveled on the non-Interstate NHS that are reliable	72.7%

Table 2: Truck Travel Time Reliability Regional Targets for the Interstate Roadways

Interstate System	CY 2018 – 2021 Four Year Target
TTTR Index Ratio of the Interstate System Mileage providing for Reliable Truck Travel Times	2.12

TPB R2-2019
July 18, 2018

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

RESOLUTION TO ADOPT REGIONAL PAVEMENT AND BRIDGE PERFORMANCE MEASURE TARGETS

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 provisions of the FAST Act continued the implementation of performance-based planning and programming to achieve desired performance outcomes for the multimodal transportation system, including the setting of targets for future performance by States and metropolitan planning organizations (MPOs); and

WHEREAS, The Federal Highway Administration (FHWA) published the Pavement and Bridge Condition Final Rule on January 18, 2017, with an effective date of May 20, 2018, at which time the state departments of transportation (State DOTs) adopted their initial performance targets in accordance with the rule; and

WHEREAS, State DOTs must submit a Baseline Performance report by October 1, 2018; and

WHEREAS, MPOs must work in coordination with state DOTs to determine whether the MPO will support the state DOTs' targets or develop their own quantifiable four-year targets; and

WHEREAS, MPOs must adopt targets within 180 days after state DOTs adopt initial targets; and

WHEREAS, the performance measures that require the establishment of targets are: 1) Percentage of pavements of the Interstate System in Good condition, 2) Percentage of pavements of the Interstate System in Poor condition, 3) Percentage of pavements of the non-Interstate on the National Highway System (NHS) in Good condition, 4) Percentage of pavements of the non-Interstate on the National Highway System (NHS) in Poor condition, 5) Percentage of National Highway System (NHS) bridges classified as in Good condition, and 6) Percentage of National Highway System (NHS) bridges classified as in Poor condition; and

WHEREAS, the District Department of Transportation (DDOT), Maryland Department of Transportation (MDOT), and the Virginia Department of Transportation (VDOT) were required to establish a four-year target for the condition of pavement for the Interstate roadways, and two and four-year targets for the condition of pavement for non-Interstate roadways on the National Highway System (NHS); and

WHEREAS, DDOT, MDOT, and VDOT were required to establish two-year and four-year targets for the condition of National Highway System (NHS) bridges; and

WHEREAS, the TPB staff has coordinated with the state DOTs and reviewed the option of either supporting the state DOTs' targets or establishing regional quantifiable four-year targets for pavement and bridge conditions; and

WHEREAS, TPB staff has coordinated with the state DOTs to develop and establish regional pavement and bridge targets that are evidence based, consistent with the targets adopted by each member state DOT, and reflective of the outcomes expected through the implementation of funded projects, programs, and policies; and

WHEREAS, the TPB encourages every jurisdiction in the region to adopt similar goals and calls on the transportation agencies of the region to redouble their efforts to develop projects, programs and policies to achieve good pavement and bridge conditions; and

WHEREAS, the TPB will use the four-year regional pavement and bridge target setting process to evaluate the region's progress toward achieving said goals going forward with each future performance period; and

WHEREAS, these pavement and bridge targets have been reviewed and recommended for TPB approval by the TPB Technical Committee at its June 1 and July 6 meetings, and recommends that the TPB approve these targets, and the TPB received a briefing on the draft pavement and bridge targets at its June 20 meeting.

NOW, THEREFORE, BE IT RESOLVED THAT the National Capital Region Transportation Planning Board adopts the following set of four-year pavement and bridge targets for the National Capital Region, as described in the attached materials.

Approved by the Transportation Planning Board at its regular meeting on July 18, 2018.

Table 1: Regional Pavement Targets for Interstate and Non-Interstate Roadways

Interstate	CY 2018 – 2021 Four Year Target
(1) Percentage of pavements on the **Interstate System** in **Good** condition	**52.7%**
(2) Percentage of pavements on the **Interstate System** in **Poor** condition	**1.7%**
NHS (Non-Interstate)	**CY 2018 – 2021 Four Year Target**
(3) Percentage of pavements on the **NHS** (excl. Interstate) in **Good** condition	**31.1%**
(4) Percentage of pavements on the **NHS** (excl. Interstate) in **Poor** condition	**7.0%**

Table 2: Regional Bridge Targets for NHS

Bridges	CY 2018 – 2021 Four Year Target
(5) Percentage of **NHS** Bridges Classified as in **Good** Condition	**29.8%**
(6) Percentage of **NHS** Bridges Classified as in **Poor** Condition	**3.5%**

visualize2045

A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

APPENDIX E

Congestion Management Process Federal Compliance and Impact on Plan Development

October 2018

National Capital Region
Transportation Planning Board

APPENDIX E: CONGESTION MANAGEMENT PROCESS FEDERAL COMPLIANCE AND IMPACT ON PLAN DEVELOPMENT
October 17, 2018

ABOUT VISUALIZE 2045 & THE TPB
Visualize 2045 is the federally required long-range transportation plan for the National Capital Region. It identifies and analyzes all regionally significant transportation investments planned through 2045 to help decision makers and the public "visualize" the region's future.

Visualize 2045 is developed by the National Capital Region Transportation Planning Board (TPB), the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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Introduction

TPB maintains a regional Congestion Management Process (CMP) in accordance with federal law (USC Titles 23 and 49) and associated regulations. Chapter 6 on Performance Planning includes Visualize 2045's primary information on the CMP, in conjunction with other performance drivers of the regional planning process (Performance-Based Planning and Programming and Safety). As a complement to Chapter 6, this appendix serves specifically to document the compliance of Visualize 2045 with federal CMP law and regulations, and to provide more information on how the CMP impacted plan development.

A critical section of USC Title 23 states, "…the transportation planning process under this section shall address congestion management through a process that provides for effective management and operation … through the use of travel demand reduction and operational management strategies." The Washington metropolitan region robustly addresses travel demand reduction and operational management strategies through ongoing programs, and as well as reflecting these strategies in the projects, programs, and policies supported in Visualize 2045.

Technical information regarding CMP strategies and analyses is compiled under the auspices of TPB's Technical Committee into a biennial regional Congestion Management Process Technical Report [www.mwcog.org/cmp]. A wide range of CMP information was made available in the Technical Report to advise TPB member agencies as Visualize 2045 projects were planned and programmed.

Major components of the CMP pursuant to federal regulations and reflected in Visualize 2045 include:

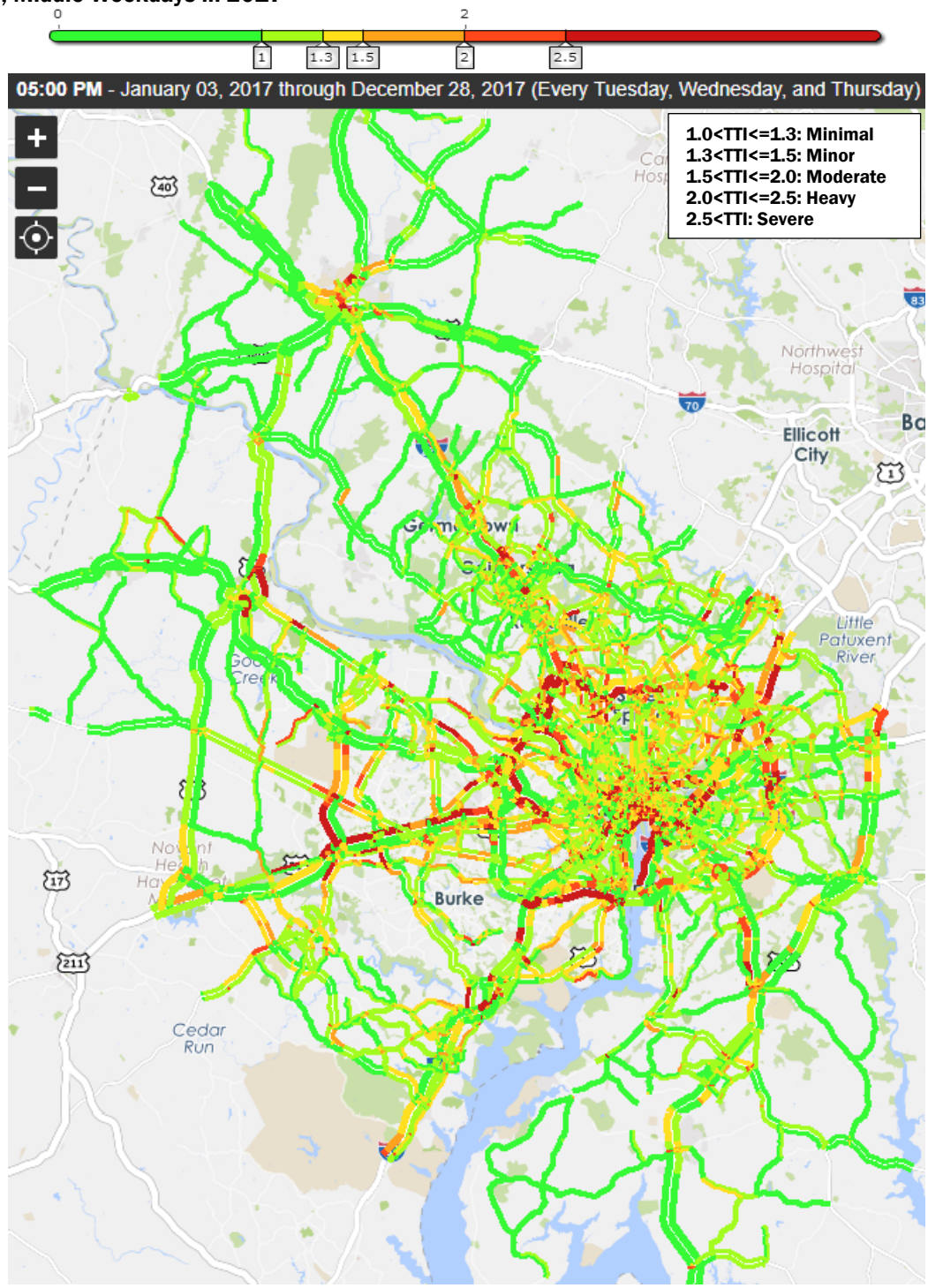
- Monitoring and evaluating system performance
- Implementing and assessing strategies
- Compiling project-specific congestion management information.

Monitoring and Evaluating System Performance

In monitoring and evaluating transportation system performance, the TPB uses vehicle probe data (see Figure E1) to support both the CMP and travel demand forecast model calibration, complementing operating agencies' own information, and illustrating locations of existing congestion. Travel demand modeling forecasts, in turn, provide information on future congestion locations. This provides an overall picture of current and future congestion in the region, and helps set the stage for agencies to consider and implement CMP strategies, including those integrated into capacity-increasing roadway projects.

The CMP component of Visualize 2045 defines and analyzes a wide range of potential demand management and operations management strategies for consideration. TPB, through its Technical Committee, Systems Performance, Operations, and Technology Subcommittee, Travel Forecasting Subcommittee, and other committees, reviewed and considered both the locations of congestion and the potential strategies during Visualize 2045 development.

Figure E1: Example CMP Congestion Summary Using Travel Time Index – Selected NHS Arterials, 5:00-6:00 pm, Middle Weekdays in 2017



Source: 2018 Congestion Management Process Technical Report. Note: Congestion levels are categorized by the value of TTI, where TTI = 1.0 signifies free-flow conditions.

For planned (Visualize 2045) or programmed (TIP) projects, cross-referencing the locations of planned or programmed improvements with the locations of congestion helps guide decision makers to prioritize areas for current and future projects and associated CMP strategies. Table E1 shows that most of the region's top roadway bottlenecks (2017) also have Visualize 2045 projects programmed in their vicinity.

Implementation of CMP strategies is encouraged. The region relies particularly on non-capital congestion strategies in the Commuter Connections program of demand management activities, and the Systems Performance, Operations, and Technology (SPOTS) program of operations management strategies, notably traffic incident coordination through the Metropolitan Area Transportation Operations Coordination (MATOC) Program.

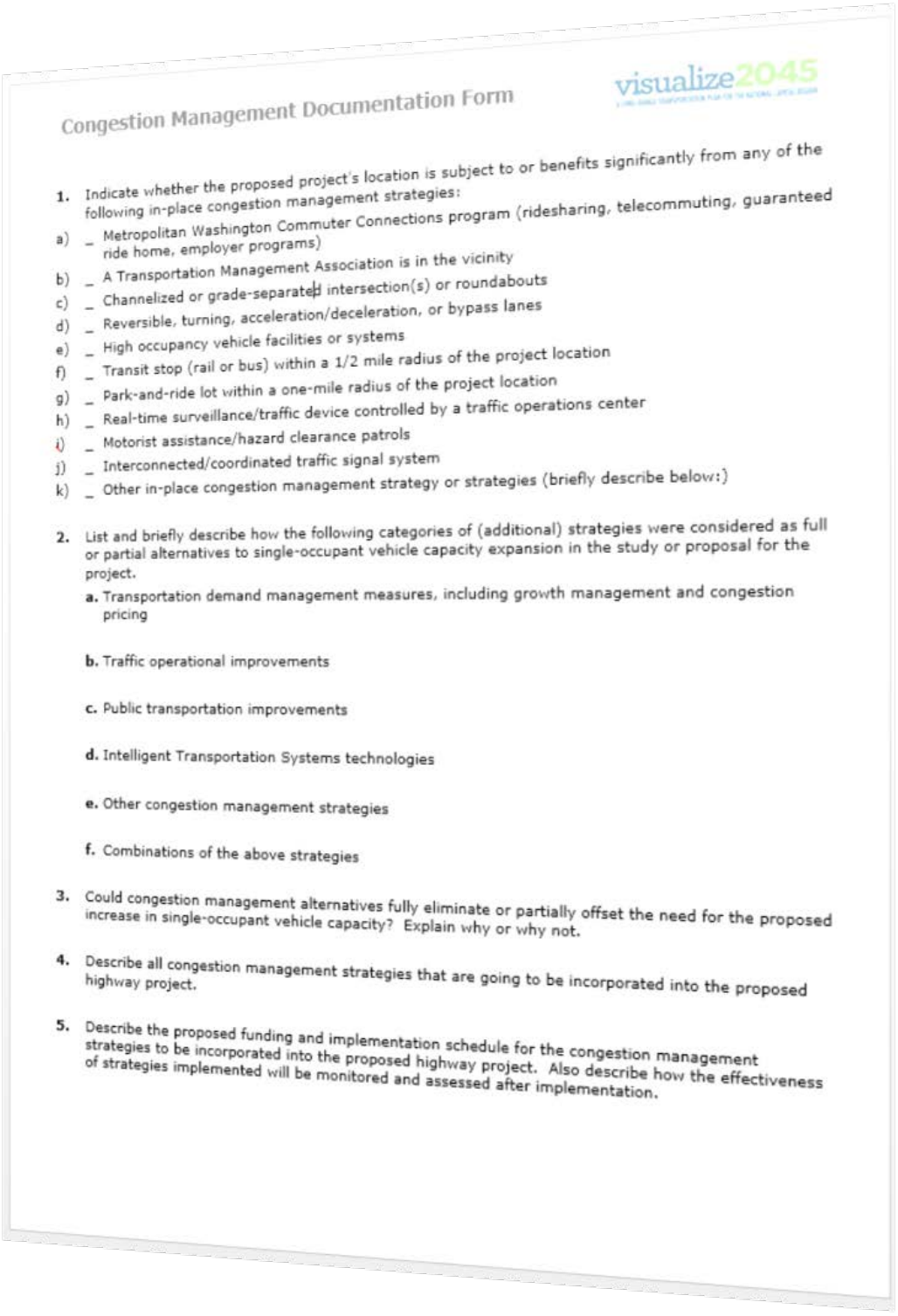
Table E1: Comparison of Top Ten Bottleneck Locations (2017) and Visualize 2045 Projects

Rank (2017)	Bottleneck Location	Visualize 2045 Projects/ Studies in Vicinity
1	I-495 IL between VA 267 and GW Pkwy	Multiple Projects
2	I-95 SB between Lorton Rd and Gordon Blvd	Multiple Projects
3	DC 295 NB between Pennsylvania Ave SE and E Capitol St	None
4	I-495 IL between New Hampshire Ave and University Blvd	One Project
5	I-495 IL between I-270 and Connecticut Ave	One Project
6	I-495 OL vicinity of Telegraph Rd	One Project
7	Interchange of VA 267 and I-495	Multiple Projects
8	I-395 NB between Jefferson Davis Hwy and GW Pkwy	One Study
9	N Capitol St between H St NE and R St NE	None
10	I-66 EB near Exit 69 (US 29 Arlington)	Multiple Projects

Sources: 2018 Congestion Management Process Technical Report (bottlenecks), and 2018 Visualize 2045 Conformity determination (projects). IL = Inner Loop; OL = Outer Loop.

The TPB also compiles information pertinent to specific projects in its CMP documentation process form (Figure E2) within the Technical Inputs Solicitation document. These forms provide documentation that the planning of federally-funded SOV projects has included considerations of CMP strategy alternatives, and integrate such components where feasible.

Figure E2: Visualize 2045 Technical Inputs Solicitation Congestion Management Documentation Form



Congestion Management Documentation Form

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1. Indicate whether the proposed project's location is subject to or benefits significantly from any of the following in-place congestion management strategies:

a) _ Metropolitan Washington Commuter Connections program (ridesharing, telecommuting, guaranteed ride home, employer programs)
b) _ A Transportation Management Association is in the vicinity
c) _ Channelized or grade-separated intersection(s) or roundabouts
d) _ Reversible, turning, acceleration/deceleration, or bypass lanes
e) _ High occupancy vehicle facilities or systems
f) _ Transit stop (rail or bus) within a 1/2 mile radius of the project location
g) _ Park-and-ride lot within a one-mile radius of the project location
h) _ Real-time surveillance/traffic device controlled by a traffic operations center
i) _ Motorist assistance/hazard clearance patrols
j) _ Interconnected/coordinated traffic signal system
k) _ Other in-place congestion management strategy or strategies (briefly describe below:)

2. List and briefly describe how the following categories of (additional) strategies were considered as full or partial alternatives to single-occupant vehicle capacity expansion in the study or proposal for the project.

a. Transportation demand management measures, including growth management and congestion pricing

b. Traffic operational improvements

c. Public transportation improvements

d. Intelligent Transportation Systems technologies

e. Other congestion management strategies

f. Combinations of the above strategies

3. Could congestion management alternatives fully eliminate or partially offset the need for the proposed increase in single-occupant vehicle capacity? Explain why or why not.

4. Describe all congestion management strategies that are going to be incorporated into the proposed highway project.

5. Describe the proposed funding and implementation schedule for the congestion management strategies to be incorporated into the proposed highway project. Also describe how the effectiveness of strategies implemented will be monitored and assessed after implementation.

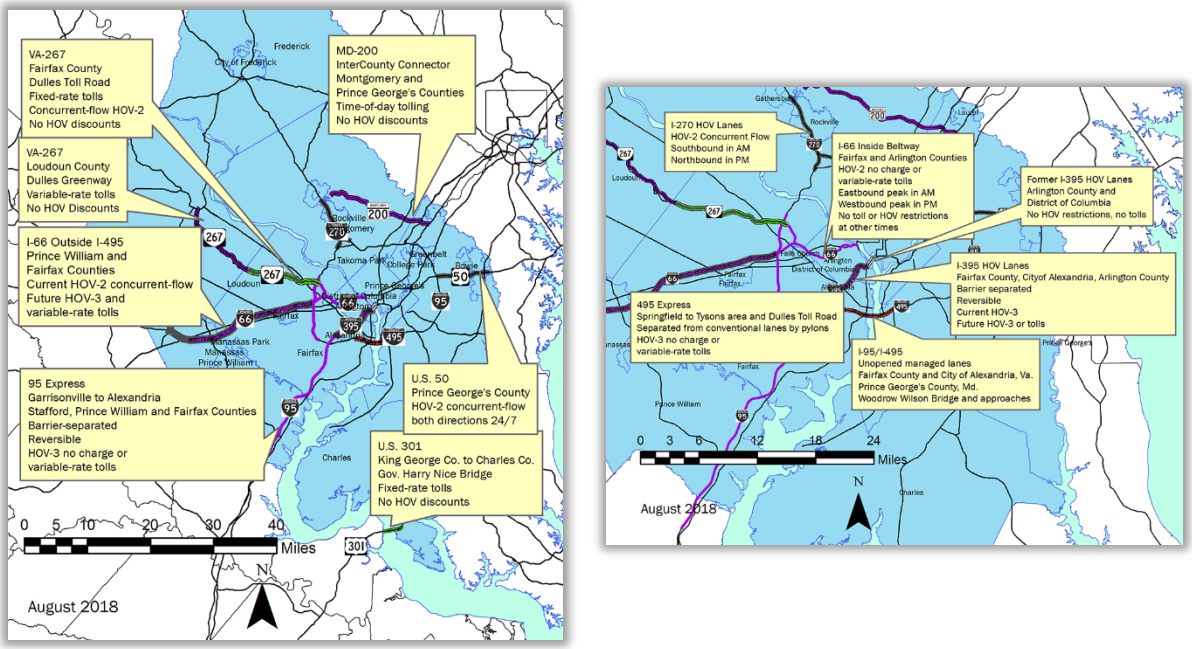
Implementing and Assessing Strategies

The CMP serves to document the region's consideration and implementation of congestion management strategies as alternatives to SOV capacity expansion. Both demand management and operational management strategies have been considered and supported in the region, including in the major Commuter Connections and Metropolitan Area Transportation Operations Coordination (MATOC) programs. Visualize 2045 is reflective of the TPB's longstanding pursuit of such strategies.

DEMAND MANAGEMENT IN VISUALIZE 2045

Demand Management aims at influencing travelers' behavior for the purpose of redistributing or reducing travel demand. Existing demand management strategies contribute to a more effective use and improved safety of existing and future transportation systems. The long-range plan took a number of demand management strategies into consideration when planning for the region's transportation infrastructure. Such strategies include alternative commute programs, managed facilities (such as HOV facilities and variably priced lanes, as show in Figure E3), public transportation improvements, pedestrian and bicycle facility improvements, and growth management (implementing transportation and land use activities).

Figure E3: Regional and Central Area Overviews of Managed Lanes Facilities (AM Configuration).

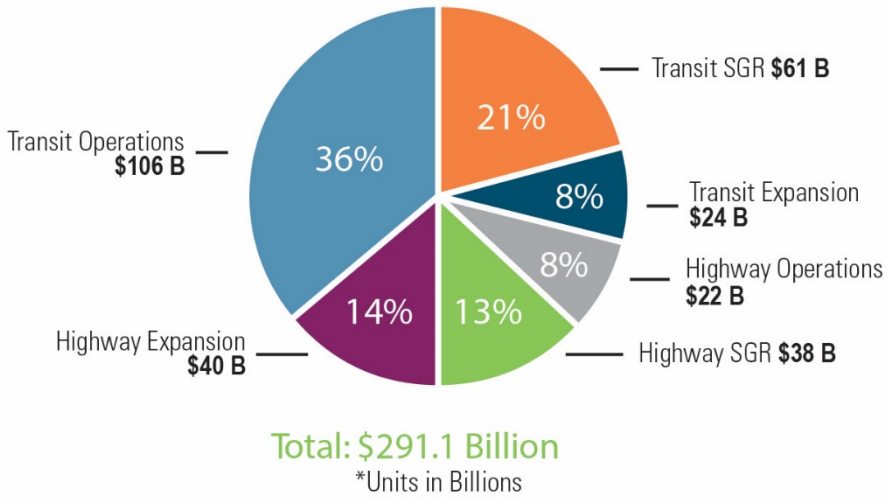


Source: TPB.

As noted in Chapter 6, the region's primary demand management strategy is the multi-faceted Commuter Connections program, encouraging a wide range of alternatives to SOVs, including ridersharing, transit, bicycling, telework, and living near work. Regional long-range plans have reflected transportation demand management (TDM) programs, such as employer outreach, marketing, and the regional Guaranteed Ride Home program.

Visualize 2045's commitment to TDM is also reflected in its significant support for transit, and its overall multimodal approach. Maintaining and increasing the share of travel in the region by transit (instead of SOV) is critical to meeting regional congestion management. Figure E4 shows total expenditures, separated by mode and type. Transit expenditures include those for WMATA, local transit, and commuter rail. Over the 27-year period of Visualize 2045, public transportation is projected to absorb 66 percent of the total expenditures of $292.2 billion – evidence of the region's commitment to transit as an alternative to SOV capacity.

Figure E4: Multimodal Visualize 2045 Projected to Devote 66% of Expenditures for Transit



Source: Appendix A: Financial Analysis for the Visualize 2045 Long-Range Transportation Plan for the National Capital Region.
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OPERATIONAL MANAGEMENT IN VISUALIZE 2045

The TPB Vision states that the region "will use the best available technology to maximize system effectiveness." An important part of the CMP effort focuses on defining the existing operational management strategies that contribute to the more effective use and improved safety of existing and future transportation systems. Such strategies include incident management programs, Intelligent Transportation Systems (ITS) Technologies, traveler information systems, and traffic engineering improvements. Many of these strategies are ongoing programs by member agencies, or, as in the case of ITS, are secondary aspects of overall capital projects, but are nonetheless crucial for the region's CMP.

The Metropolitan Area Transportation Operations Coordination (MATOC) Program is a critical component of the region's operational management. Since 2009, MATOC has performed real-time monitoring of transportation systems conditions, providing alert notifications to member agencies who operate portions of those systems, to mitigate and reduce impacts of incidents on congestion.

The CMP and Visualize 2045's Capacity Increases

Visualize 2045 emphasizes alternatives to SOV capacity increases, but they may be deemed necessary in certain cases. Federal law and regulations list capacity increases as another possible component of operational management strategies, for consideration in cases of:

- Elimination of bottlenecks, where a modest increase of capacity at a critical chokepoint can relieve congestion affecting a facility or facilities well beyond the chokepoint location. For example, widening the ramp from I-495 Capital Beltway Outer Loop to westbound VA 267 (Dulles Toll Road) relieved miles of regularly occurring backups on the Beltway and across the American Legion Bridge.

- Safety improvements, where safety issues may be worsening congestion, such as at high-crash locations, mitigating the safety issues may help alleviate congestion associated with those locations.

- Traffic operational improvements, including adding or lengthening left turn, right turn, or merge lanes or reconfiguring the engineering design of intersections to aid traffic flow while maintaining safety.

The TPB asks agencies who program significant SOV capacity increases to document their required consideration of congestion management strategy alternatives via the Congestion Management Documentation Form in the Visualize 2045/Transportation Improvement Program Technical Inputs Solicitation document.

CMP Certification

The TPB, in approving its self-certification documentation in association with Visualize 2045, certifies that it addresses congestion management through maintaining a process for integrated management and operation of the multimodal transportation system. Visualize 2045 is a multimodal plan that emphasizes travel demand reduction and operational management, reflective of the region's CMP.

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A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

APPENDIX F

Safety Planning

October 2018

National Capital Region
Transportation Planning Board

APPENDIX F: SAFETY PLANNING
October 17, 2018

ABOUT VISUALIZE 2045 & THE TPB
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A safe transportation system is a foundational element of a livable region. With approximately 260 deaths and nearly 3,000 serious injuries in crashes every year on the region's roads, improving safety of all modes is critical to improving the quality of life for citizens and visitors. It requires commitment to a coordinated, collaborative, and comprehensive transportation safety planning process that is informed by analysis of safety data.

Federal Legislation

The Fixing America's Surface Transportation (FAST) Act was signed by the President of the United States on December 4, 2015. It continues the emphasis on safety that was a hallmark of MAP-21 (Moving Ahead for Progress in the 21st Century) the preceding legislation. Federal regulations stemming from the FAST Act require that MPOs work to "increase the safety of the transportation system for motorized and non-motorized users" through the transportation planning process. The TPB is also required to track five safety performance measures and set targets for each of them every year.[1]

Safety in the TPB Transportation Planning Process

Through the transportation planning process, PBPP, and the public participation process, the TPB ensures safety is considered throughout its programs and plans. Transportation safety is highlighted in the TPB Vision, included in the Regional Transportation Priorities Plan, considered in the projects that go into Visualize 2045, and required as part of this region's performance-based planning and programming (PBPP) requirements. The TPB's Transportation Safety Subcommittee meets regularly to guide ongoing highway safety analysis, identify the most significant highway safety problems, and foster regional coordination. TPB staff regularly analyze and summarize regional highway safety data. Further, the TPB leads the annual Street Smart pedestrian and bicycle safety campaign to educate drivers, pedestrians, and bicyclists about safe use of the region's roadways. Collaboration with TPB safety partners at the Maryland Department of Transportation (MDOT), The Virginia Department of Transportation (VDOT), and the District Department of Transportation (DDOT) is ongoing and essential. TPB staff work with our state partners on the development of each state's Strategic Highway Safety Plan and our state partners regularly participate in Transportation Safety Subcommittee meetings. Each member state shares safety data and aids with its analysis.

Safety also plays a significant role in TPB program areas such as Congestion Management, Systems Performance, Management, and Operations, Traffic Signals, Bicycle and Pedestrian Planning, regional Bus Planning, Freight Planning, Access for All, and the Transportation-Land Use Connections program.

[1] see Chapter 6 – Performance Planning for more information on the required safety performance measures and targets

Street Smart

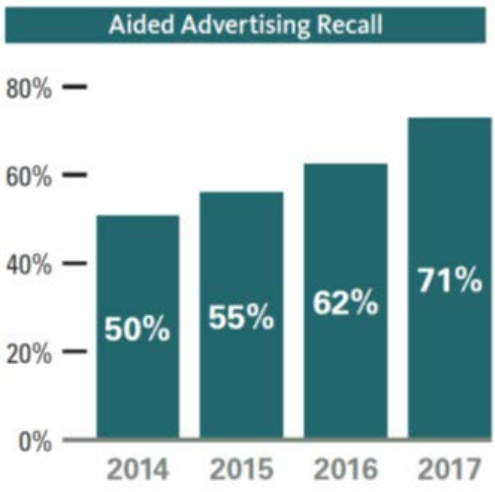
Since 2002, the Metropolitan Washington Council of Governments' (MWCOG) Street Smart program has worked to protect vulnerable road users by raising awareness and promoting enforcement of pedestrian and bicycle safety laws. The region-wide Street Smart public safety campaign targets drivers, pedestrians, and bicyclists in the District of Columbia, suburban Maryland, and Northern Virginia. The initiative integrates several components, including out-of-home advertising, media relations, donated media, street-level outreach events, digital efforts, and increased law enforcement. One-month waves of paid and donated media run in the fall and spring.

Street Smart Campaign Annual Report Cover for Fiscal Year 2017

The goals of the Street Smart campaign are to:

- Reduce pedestrian and cyclist injuries and deaths in the region;
- Educate drivers, pedestrians, and cyclists about safe use of roadways; and
- Increase enforcement of pedestrian and bicycle safety laws and raise awareness about enforcement.

The District Department of Transportation, the Maryland Office of Highway Safety, and the Virginia Department of Motor Vehicles provide federal and state highway safety funds to support the program. Local funding support is provided by WMATA, while the COG dues cover COG's administrative costs for the program. The major funding agencies and interested local jurisdictions serve on the Street Smart Advisory Group, which works with the consultant and with COG staff to develop advertising materials and guide the program.



Graphic showing the percentage of people by year who were able to recall something about the Street Smart advertising campaign when prompted.

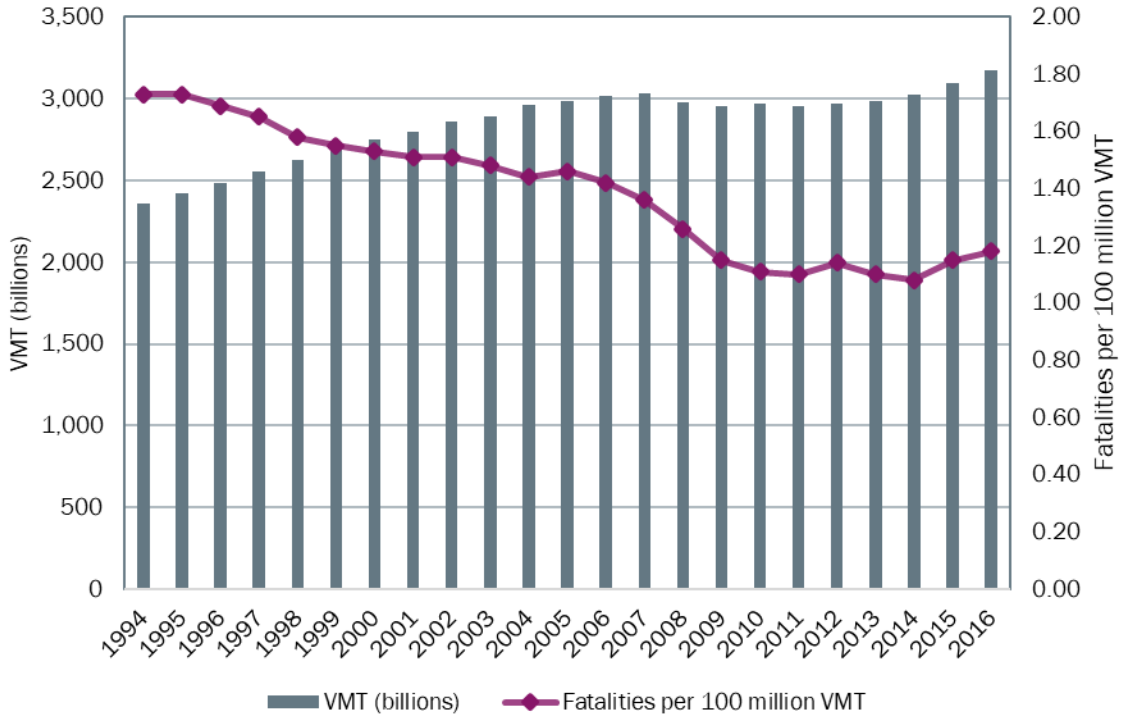
An on-line survey carried out pre- and post-campaign in the Spring gauges the effectiveness of the campaign. The surveys measure awareness and attitudes among 300 drivers and pedestrians. The groups surveyed are a representative sample of residents living in three geographic areas: the Maryland suburbs, Northern Virginia, and the District of Columbia. The surveys measure recognition of the campaign ads and messaging. Ads

created for the campaign have been shared with numerous agencies across the country, and even abroad. Campaign materials can be found on the web site, **www.bestreetsmart.net**.

National and Regional Safety Trends

According to data published by the National Highway Traffic Safety Administration (NHTSA) for the United States as a whole, fatal crashes increased by 5.8 percent from 2015 to 2016, and the fatality rate rose from 1.15 to 1.18 fatalities per 100 million vehicle miles of travel between 2015 and 2016. A total of 37,461 people lost their lives in motor vehicle crashes in 2016. Most persons killed in traffic crashes were drivers (50 percent), followed by passengers (17 percent), pedestrians (16 percent), motorcyclists (14 percent), and pedalcyclists (2 percent). Of the persons who were killed in traffic crashes in 2016, 28 percent died in alcohol-impaired driving crashes. Figure 1 (below) shows the fatality rate per 100 million vehicle miles traveled (VMT) for the United States from 1994 to 2016.

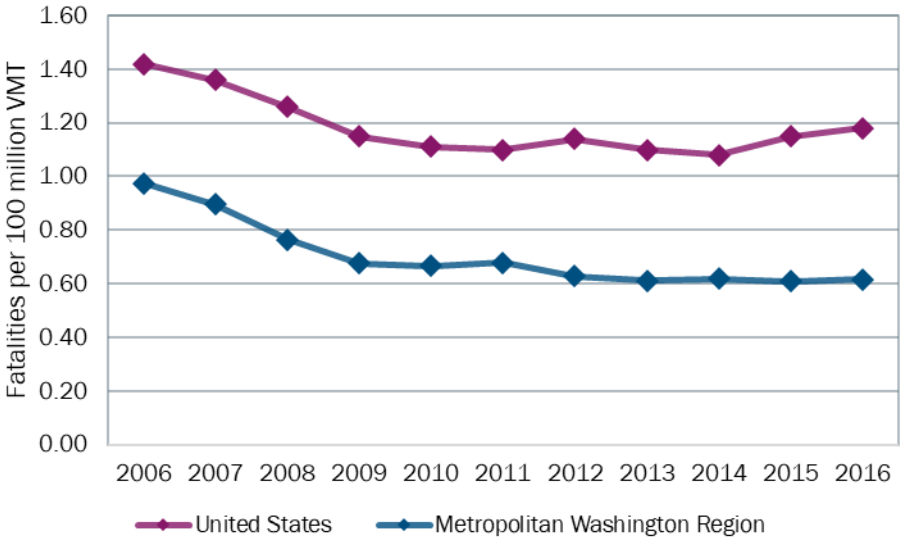
Figure 1: U.S. Roadway Fatality Rate per 100 million VMT



Source: Fatality Analysis Reporting System (FARS), National Highway Traffic Safety Administration

As shown in Figure 2 (next page), the metropolitan Washington region's roadway fatality rate is significantly less than that of the nation overall. Because roadway fatality rates per VMT are generally lower in urban areas than rural areas, the lower rate of fatalities for metropolitan Washington is likely a reflection of the fact that our region is more urban and less rural than the nation as a whole.

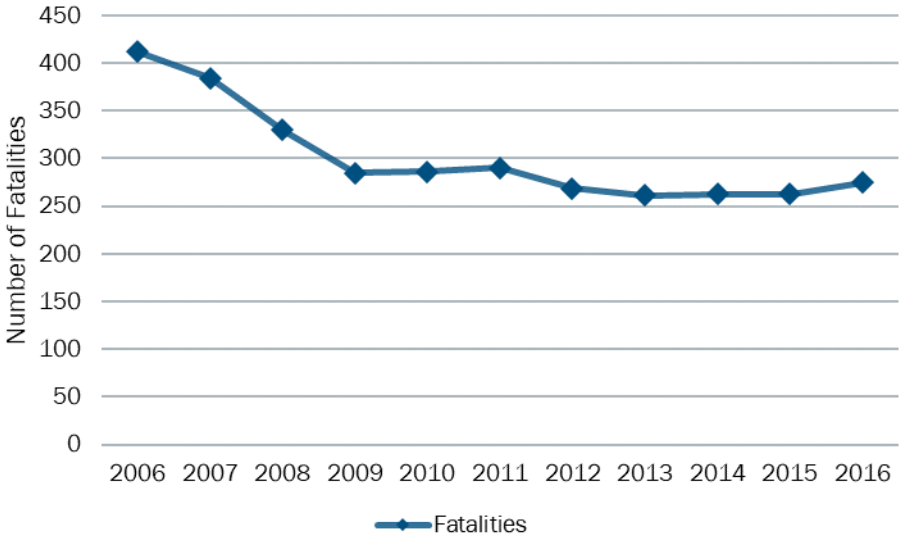
Figure 2: Fatality Rates: U.S. and the Metropolitan Washington Region



Sources: FARS and COG

In 2006, 412 people died in crashes on the region's roadways. By 2009, the number of annual fatalities declined to 285. Since then the number of roadway fatalities in our region has plateaued (see Figure 3 below) to between 275 and 290 annually.

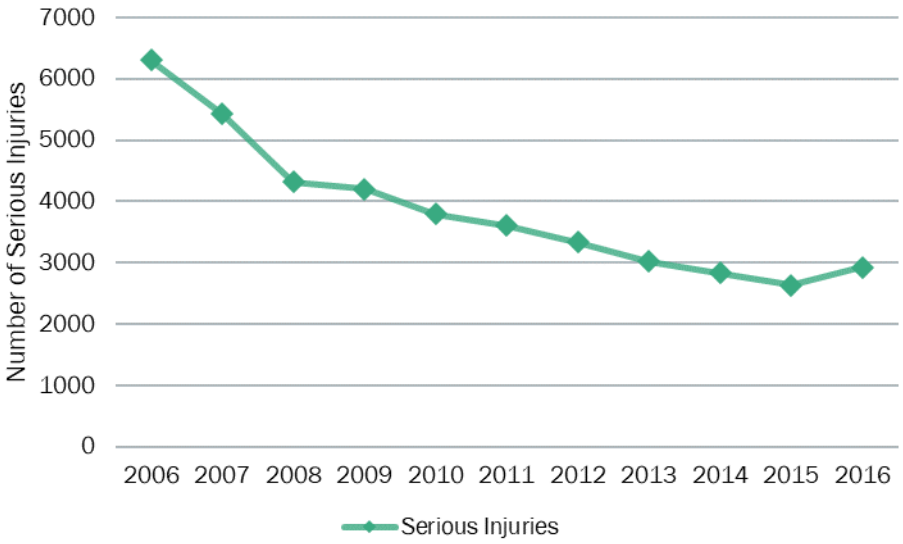
Figure 3: Fatalities in the Metropolitan Washington Region



Source: COG Analysis of FARS data

The TPB analyzes crashes that result in serious injuries in addition to those that result in fatalities. The number of serious injuries in metropolitan Washington has declined steadily in the past decade (see Figure 4 next page). In 2006 there were 6,306 serious injuries in the region and by 2015 the number had declined 58 percent to 2,635. This was followed by an increase to 2,923 in 2016.

Figure 4: Serious Injuries in the Metropolitan Washington Region



COG Analysis of State Safety Data

While the region has a fatality rate that is lower than the national rate, local decision makers continue to emphasize the importance of transportation safety and understand that 275 deaths per year is unacceptably high. To emphasize this point, the TPB encourages every jurisdiction in the region to adopt aspirational safety goals like those associated with Vision Zero and Towards Zero Deaths and calls on the transportation agencies of the region to redouble their efforts to develop projects, programs and policies to achieve dramatic reductions in fatalities and serious injuries.[2]

Safety Data Sources

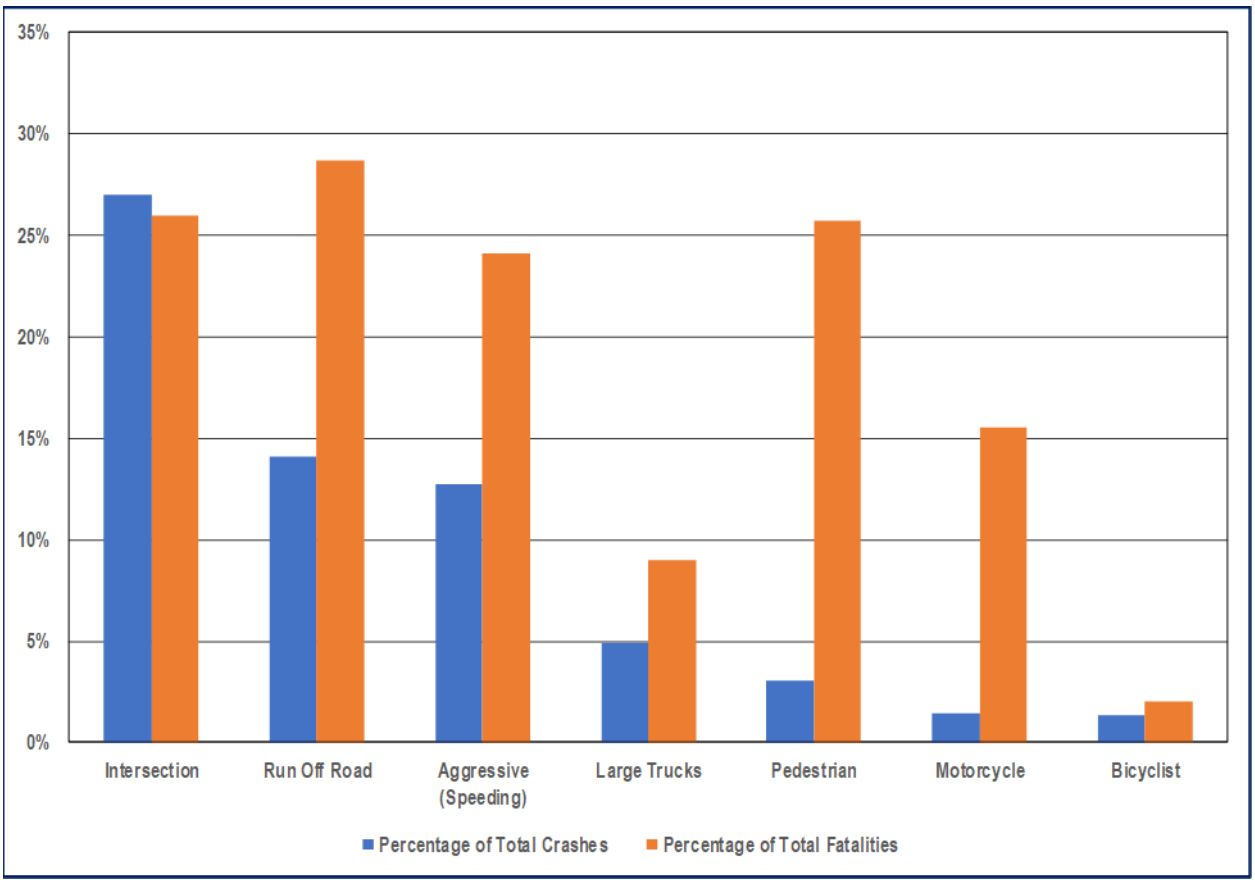
Crash reports are the primary source for transportation safety data. These reports are generated by a law enforcement officer report at the crash scene and summarize details such as what factors contributed to the crash, driver behavior, crash location, vehicle make, model and characteristics as well as many other data elements. These reports are collected, and their data uploaded into state-level databases by officials in our member states of Maryland, Virginia, and the District of Columbia. These data are analyzed to discern trends over time, evaluate public education and law enforcement efforts, identify roadway types that account for more collisions that would be expected, among other purposes.

Data sources outside of crash data include hospital emergency room data, motor vehicle data, traffic citations, crowd sourced data from transportation system users about areas that are perceived to be unsafe, traffic speed data from smart phone applications, and many others. Recent advancements in automated counting technology and new smartphone applications for pedestrians and bicyclists hold the potential to help planners better understand travel patterns, develop exposure rates and capture historically undocumented crashes or near misses.

[2] TPB Resolution to Adopt Highway Safety Targets for the National Capital Region (Resolution R10-2018), January 2018.

Analysis of five years of crash data (2012–2016) in the metropolitan Washington Region provides a comparison between the proportion of overall crashes to the proportion of overall fatalities by crash "type" (see Figure 5 below).

Figure 5: Proportion of Fatalities to Crashes



COG Analysis of State Safety Data

Note: Because Maryland, Virginia, and the District of Columbia collect crash data differently, it is not possible to have completely similar data to compare across state lines. This is particularly true for the "run off road" (which includes only the Maryland and Virginia portions of the region) crash type, and the "large truck" crash type where our member states have varying definitions of what constitutes a large truck. Also note that these percentages will not add up to 100 percent. This is because a single crash can be assigned to more than one crash type, for example a crash can involve speeding and a motorcycle, or a bicyclist and an intersection.

This highlights the vulnerability of pedestrians, bicyclists, and motorcyclists by showing that even though they account for a small proportion of crashes, they result in a large proportion of fatalities. This information supports the regional Street Smart campaign which is focused on reducing the number of crashes involving pedestrians and bicyclists.

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A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

APPENDIX G

Environmental Consultation and Mitigation

October 2018

National Capital Region
Transportation Planning Board

APPENDIX G: ENVIRONMENTAL CONSULTATION AND MITIGATION

October 17, 2018

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ENVIRONMENTAL CONSULTATION

The TPB's consultation process was developed during environment consultation initiatives completed between 2007 and 2009. This effort established relationships with environmental agencies to solicit input and comments on the draft long-range transportation plan and mitigation discussion. During this process, input from environmental agencies representatives concluded that agency staff cannot provide meaningful comments on regional, system-wide long-range transportation plan due to lack of project-level details and resources. These agencies are intimately involved at project-level planning and/or during National Environmental Policy Act (NEPA) review processes for specific projects.

An activity agency staff commented on as helpful is the development of maps identifying environmental and historic resources along with the transportation projects. A new interactive map provides a regional-level resource to inform the relationship between the transportation and environmental concerns: mwcog.org/EnviroInventoryMap. The map allows the public and decision makers to view the natural resource data layers along with the transportation projects expected to be built by 2045 from the financially constrained element of this plan. By defining and inventorying environmental resources and data, the interactive map can be used to inform state and local agencies and the public about the relationship between the projects in the constrained element and environmental concerns at the regional scale.

Further, to keep agencies aware of transportation projects in the long-range plan, TPB staff maintains a list of agency contacts and includes them on all TPB public comment period announcements.

ENVIRONMENTAL MITIGATION DISCUSSION

DISCUSSION OF POTENTIAL ENVIRONMENTAL MITIGATION ACTIVITIES

This discussion of potential environmental mitigation activities for Visualize 2045 provides an overview of mitigation activities being considered throughout the region. Federal regulations require that the TPB include "A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. This discussion may focus on policies, programs or strategies, rather than at the project level" (23 C.F.R. § 450.322(f)(7)).

VISUALIZE 2045 AND PROJECT-LEVEL ENVIRONMENTAL ANALYSIS

The constrained element of Visualize 2045 includes projects expected to be built by 2045. However, for many projects it is represented at the earliest stages of project development. Even the most fundamental details of a project, such as exact alignments and dimensions, are largely unknown. Therefore, as an improvement approaches the preliminary engineering stage, detailed consideration of environmental resources is expressly conducted at the local, project-specific level through the NEPA review process.

Further, the National Capital Region is composed of three states: the District of Columbia, Maryland and Virginia; all of which have their own approach and regulations on the environment and implementing transportation projects. Currently, with exceptions for regional ambient air quality, offsetting environmental impacts during the long-range planning process is not required.

ENVIRONMENTAL MITIGATION OVERVIEW

Environmental resources and areas are generally impacted by transportation projects as a result of construction, increased traffic, stormwater runoff from paved surfaces, among others. Examples of these resources where mitigation efforts can be focused include:

- Neighborhoods and communities, homes and businesses
- Cultural resources (i.e. historic properties or archaeological sites);
- Parks and recreation areas;
- Wetlands and water resources;
- Forested and other natural areas;
- Agricultural areas;
- Endangered and threatened species; and
- Air Quality.

Environmental mitigation is the process of addressing damage to the environment caused by transportation or other public works projects. Actions taken to avoid or minimize environmental damage are considered the most preferable method of mitigation.

Potential environmental mitigation activities may include:

- avoiding impacts altogether;
- minimizing a proposed activity/project size or its involvement;
- rectifying impacts (restoring temporary impacts);
- precautionary and/or abatement measures to reduce construction impacts;
- employing special features or operational management measures to reduce impacts; and
- Compensating for environmental impacts by providing suitable, replacement or substitute environmental resources of equivalent or greater value, on or off-site.

POTENTIAL MITIGATION ACTIVITIES IDENTIFIED IN ENVIRONMENTAL STUDIES

A review of environmental studies from five major projects in the region showed a wide range of potential activities being considered throughout the region. A summary of those potential mitigation activities are provided here. Many studies discuss both planned strategies to prevent the environmental impact (minimization) and strategies to atone for it (mitigation).

Table 1: Mitigation Strategies Identified in the Washington Region

Resource	Potential Mitigation Strategy
Neighborhoods and communities, homes and businesses	▪ Minimize noise impact with sound barriers ▪ Prevent the spread of hazardous materials with soil testing and treatment
Wetlands and Water Resources	▪ Replace or restore wetlands ▪ Submerge or utilize bottomless culverts ▪ Bridge sensitive areas instead of laying pavement directly onto the ground ▪ Improve storm water management
Forested and other natural areas	▪ Use selective cutting and clearing ▪ Replace or restore forested areas ▪ Preserve existing vegetation
Endangered and threatened species	▪ Use selective cutting and clearing ▪ Bridge sensitive areas instead of laying pavement directly onto the ground ▪ Replace or restore forested areas
Air Quality	▪ Control loose exposed soils with watering or canvas sheets ▪ Minimize idling of heavy construction vehicles

visualize2045

A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

APPENDIX H

Report on Phase 1 of Public Outreach: Public Input Survey

October 2018

National Capital Region
Transportation Planning Board

REPORT ON PHASE 1 OF PUBLIC OUTREACH: PUBLIC INPUT SURVEY
October 17, 2018

ABOUT THE TPB
The National Capital Region Transportation Planning Board (TPB) is the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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INTRODUCTION

Transportation Planning Board (TPB) staff conducted the Visualize 2045 Public Input Survey over the summer of 2017. The survey aimed to gather people's general attitudes and opinions about transportation in the region to inform ongoing discussions among elected officials and regional planners as they developed the Visualize 2045 long-range transportation plan and beyond. The results of this and other public outreach activities are a part of the Visualize 2045 plan for leaders and planners to use as they continue to discuss, identify, and develop potential improvements to the region's transportation system.

In October 2017, TPB staff shared a small number of "preliminary" findings with the board. Now, staff have completed a more in-depth analysis since those initial findings.

This deeper analysis includes findings from each of the main categories of questions asked in the survey. They were: 1) top factors which influence people's travel choices; 2) issues which affect people's travel experience; and 3) respondents' ideas for improving the region's transportation system. The analysis also includes the geographic breakdown of survey respondents and other demographic data.

BACKGROUND

The Visualize 2045 Public Input Survey was open for eight weeks, from June 17 to August 21, 2017. The survey aimed to gather general attitudes and opinions about transportation in the region. The purpose of gathering such information was to inform ongoing discussions among elected officials and regional planners throughout the development of the Visualize 2045 long-range transportation plan and beyond.

The survey used MetroQuest public engagement software and was available in English and Spanish versions. The simple, fun, and interactive online survey tool asked respondents about:

- Daily travel behaviors and patterns
- Key issues related to reliability, affordability, travel time, travel options, and safety
- Suggestions for transportation projects or other improvements
- Sociodemographic characteristics

A live "demo" version of the survey is still available for viewing at https://visualize2045-demo.metroquest.com.

METHODOLOGY

Two different methodologies were used to gather responses to the public input survey: a random sample and an "open survey." The random sample was meant to capture a geographically representative sample of the region while the open survey was available for any member of the public who wanted to participate.

Both the random sample and open surveys were conducted concurrently and used the same web-based MetroQuest tool and survey questionnaire.

Random sample

The random sample approach used a probability-based random sample of adults residing in households located within local jurisdictions comprising the TPB Planning Area to obtain a geographically representative sample. An address-based sampling method randomly selected the households invited by mail to complete the survey using a web link and a unique PIN provided in the invitation letter. To ensure a random survey, the adult household member whose birthday was next after receipt of the letter was asked to complete the survey. A $15 gift card incentive was provided upon completion.

Households were recruited in three "waves." In the first two waves of mail recruitment, a total of 12,000 households were invited to participate in the random sample survey, and every household in the region had an equal probability of being selected to participate. The recruitment plan set the target at 600 participants from these first two waves, assuming that not every randomly selected household receiving a letter asking for their participation in the survey would agree to participate. The first two waves achieved the target number of completed surveys, and at least one survey response was received from every jurisdiction within the TPB Planning Area. However, some jurisdictions did not produce as many survey responses in proportion to the jurisdiction's share of households in the region. These included Prince George's County in Maryland, some zip codes in the District of Columbia, and some of the outer jurisdictions. To ensure better geographic representation, the third wave of recruitment oversampled households in these underrepresented areas.

A total of 755 persons in the TPB jurisdictions responded to the request to participate and complete the survey online. Overall, about 5% of the households that were mailed letters requesting their participation completed the survey. Based on the number of completed survey responses in the TPB jurisdictions, a sampling error of about +/- 3.5% at the 90-percent confidence level is estimated. Table 1 shows the completed responses and response rate by jurisdiction.

Table 1: Completed Responses and Response Rate by Jurisdiction

Jurisdiction	Number of Surveys Completed	Response Rate
District of Columbia	135	4.1%
Arlington County	49	7.7%
City of Alexandria	29	6.7%
Montgomery County	134	6.1%
Prince George's County	94	3.0%
Fairfax County	167	6.8%
Loudoun County	41	4.8%
Prince William County	52	4.8%
Frederick County	35	6.6%
Charles County	16	3.3%
Fauquier Urbanized Area	3	2.8%
TPB Regional Total	**755**	**5.0%**

The random sample survey was designed to be geographically representative and statistically valid. To ensure that the survey results accurately represented the opinions of all adults residing in households in the TPB Planning Area, the 755 survey responses were weighted and tabulated based on the proportion of households for each county-level jurisdiction in the TPB Planning Area compared with the proportion of survey respondents from each jurisdiction strata.

The jurisdictional household estimates from the Round 9.1 Cooperative Forecast were used to develop the weights for the jurisdictions (see "% Households in Region" in Table 2). Household totals for independent cities in Virginia were combined with larger county jurisdictions for the weighting and tabulation of responses due to the small number of completed samples for the smaller jurisdictions: responses from the City of Fairfax and Falls Church were combined with Fairfax County, and responses from Manassas and Manassas Park were combined with Prince William County.

The weighting procedure involved assigning more weight to responses from jurisdictions that received fewer responses compared to the regional average. This ensures adequate geographic representation in the survey. The underrepresented jurisdictions were Prince George's County, Charles County, Prince William County, and Loudoun County. Likewise, responses from overrepresented jurisdictions were assigned less weight. The overrepresented jurisdictions were the District of Columbia and Arlington County.

Table 2: Proportion of Survey Respondents and Households by Jurisdiction

Jurisdiction	% Respondents from Jurisdiction	% Households in Region
District of Columbia	17.9	14.7
Arlington County	6.5	5.1
City of Alexandria	3.8	3.5
Montgomery County	17.7	18.6
Prince George's County	12.5	15.9
Fairfax County	22.1	20.7
Loudoun County	5.4	6.0
Prince William County	6.9	8.0
Frederick County	4.6	4.4
Charles County	2.1	2.7
Fauquier Urbanized Area	0.4	0.4

Open survey

The open survey was available for any member of the public who wanted to participate. To generate a wide response and reach a broad cross section of the region's population, staff developed a multifaceted public outreach campaign.[1] This campaign included working with TPB members, jurisdictions, and agencies to help spread the word. Partners and advocates also shared the survey links to their networks. TPB staff and contract staff conducted the survey using tablet computers at locations around the region and handed out postcards at Metro stations to reach as many people as possible.

The open survey was not designed to be statistically representative of any sociodemographic factor and was not designed to be geographically representative. Respondents to the open survey had the option of providing their e-mail address to be entered into a drawing for a chance to win one of ten $50 Visa gift cards.

Since the survey tool was web-based, the most impactful outreach came from online sources and partners. E-mail blasts from the TPB or from partner organizations generated many subsequent responses.

[1] The public outreach strategy is detailed in the memo entitled "Visualize 2045 Public Outreach: Summary of Phase 1 Activities" which was presented to the TPB on September 20, 2017.

FINDINGS

In total, there were 755 respondents in the random sample and 5,460 respondents to the open survey, for a total of 6,215 respondents.

For the purposes of reporting quantitative results in this report, the data from the random sample will be cited more frequently than data from the open survey. This is because the random sample captured a geographically representative sample of residents throughout the region. The random sample data was also weighted to approximate a closer representation of the region. The results from the open survey are presented separately and are also used for qualitative results.

Reliability Rises to the Top

THE QUESTION

Survey respondents were asked to identify what factors have the greatest influence on their decisions about how, when, and where to travel. The survey provided a list of five factors to choose from---reliability, affordability, travel time, travel options, and safety—and gave respondents the option to add other factors not mentioned on the list:

What's important to you?

We all have different priorities when it comes to making decisions about how we get where we're going. Which factors have the greatest influence on the travel choices you make every day? (Choose two.)

Reliability	"It's important that I can count on getting where I'm going on time without unexpected delays."
Affordability	"It's important that I can afford the travel options that work best for me."
Travel Time	"It's important that I can get where I want to go as quickly as possible."
Travel Options	"It's important that I have options other than driving to get where I want to go."
Safety	"It's important that I feel safe from personal harm or injury when traveling."

OVERALL FINDINGS

"Reliability" and "Travel Time" were most often selected as top factors influencing people's travel choices. Reliability stood out as the most important factor to 65% of all random sample respondents. The overwhelming response for "Reliability" placed it far ahead of the other factors. Clearly, people in the region want to be able to rely on their daily travel to get them where they are going on time and without unexpected delays.

Travel time was the second-most important factor to travelers, selected by 45% of random sample respondents as one of the top two factors influencing their travel choices. This shows that people want their trips to be reliable, and they seek to reach their destinations in the shortest amount of time possible.

Top Factors Influencing People's Travel Choices

65% of random sample respondents selected **RELIABILITY** as a top factor influencing their travel choices

45% of random sample respondents selected **TRAVEL TIME** as a top factor influencing their travel choices

Other factors influencing people's travel choices selected by respondents include affordability (30%), safety (21%), travel options (14%), and other (2%).

RELIABILITY IS THE HIGHEST PRIORITY FOR ALMOST EVERYONE

Reliability rose to the top for almost all breakdowns of groups by many different factors including age, most frequent mode of travel, and more. However, there was one group that chose affordability as the highest priority over reliability: the lowest income group. Across different age brackets, races, and geographic locations reliability was ranked the highest – but for the people who have the least amount of money to spend on travel, affordability ranked the most important to them. This next section shares the various breakdowns within the groups.

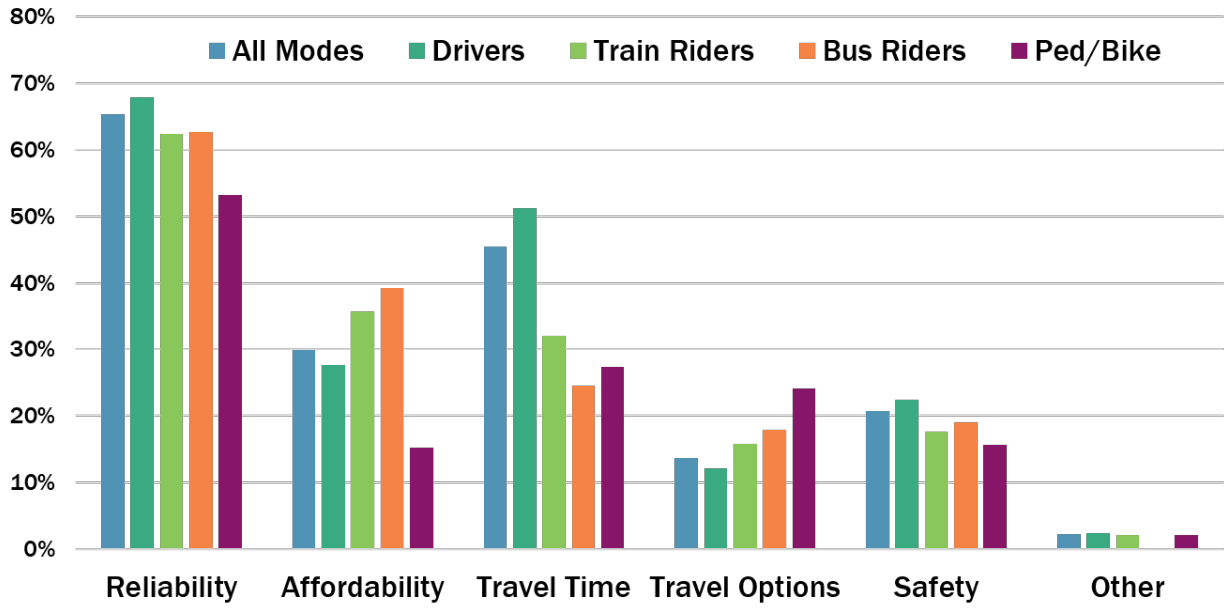
Priorities Analyzed by Respondents' Most Frequent Mode of Travel

Respondents' primary mode of travel influenced their selection of priorities. The survey asked respondents to indicate the mode of travel most frequently used for daily travel, which include all types of trip purposes including work/commute trips and non-work/personal trips. Based on the primary travel mode indicated by the respondent, the random sample respondents were categorized into four primary modes: 1) drivers; 2) train riders; 3) bus riders; and 4) pedestrians and bicyclists. [2]

The survey showed that reliability was the highest rated priority across all travel modes, with more than one-half of respondents of all travel modes selecting reliability as a top factor (Figure 1). Travel time was the second highest rated priority; drivers prioritized travel time significantly more than other travel modes. Bus riders prioritized affordability more than other travel modes, while affordability was the least important factor for pedestrians and bicyclists. Providing more travel options was most important for pedestrians and bicyclists and least important for drivers. While safety was not as highly rated as a priority compared with other factors, drivers prioritized safety more than other travel modes.

[2] Pedestrians and bicyclists were combined into a single category due to small sample sizes.

Figure 1: Priorities by Mode of Travel



In sum, reliability was the number one factor influencing people's travel for all travel modes: drivers, train riders, bus riders, and pedestrians and bicyclists. The ranking of priorities for drivers (in order of importance) is reliability (#1), travel time (#2), affordability (#3), safety (#4), and travel options (#5). The ranking of priorities for train riders and bus riders (in order of importance) is reliability (#1), affordability (#2), travel time (#3), safety (#4), and travel options (#5). For pedestrians and bicyclists, the ranking of priorities is reliability (#1), travel time (#2), travel options (#3), safety (#4), and affordability (#5).

Priorities Analyzed by Respondents' Location in the Region

Respondents' priorities differed slightly based on their location in the region. Due to the relatively small sample size of the random sample survey, respondents' locations were grouped into sub-regions rather than individual jurisdictions. Based on the postal address where the survey was mailed, the random sample respondents were aggregated into three sub-regions:

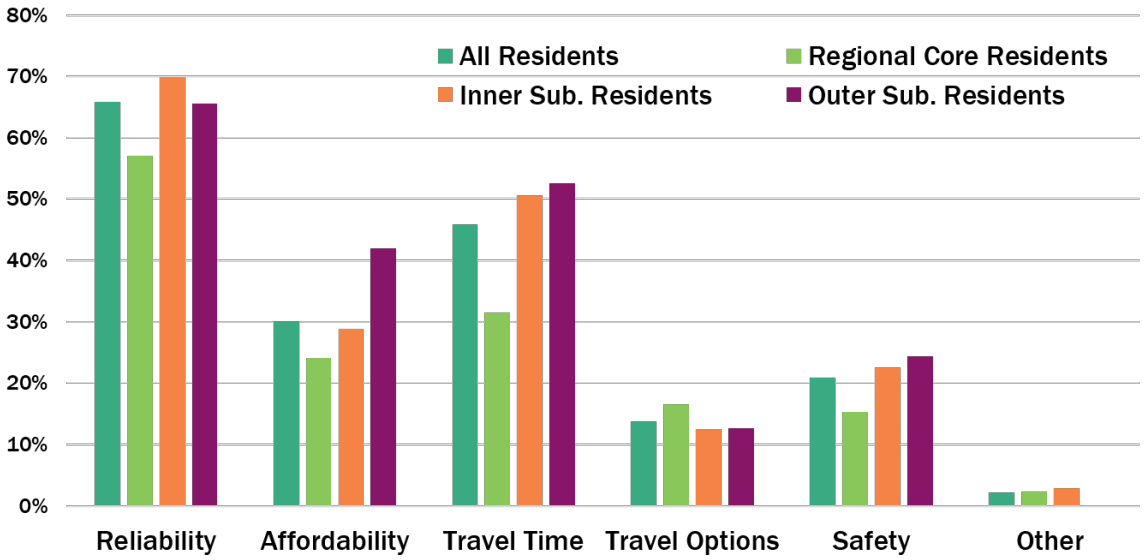
1) Regional Core (District of Columbia, Arlington County, and the City of Alexandria);
2) Inner Suburbs (Fairfax, Montgomery, and Prince George's Counties); and
3) Outer Suburbs (Charles, Frederick, Loudoun, and Prince William Counties).

The survey showed that reliability was the highest rated priority for all residents in the region, with suburban residents prioritizing reliability more than regional core residents (Figure 2). Travel time was the second highest rated priority among residents; suburban residents prioritized travel time significantly more than regional core residents. Suburban residents also prioritized safety more than core residents. Outer suburb residents prioritized affordability more than core and inner suburb residents. Core residents prioritized travel options more than suburban residents.

In sum, reliability was the number one factor influencing people's travel across all regional sub-areas. The ranking of priorities for regional core residents (in order of importance) is reliability (#1),

travel time (#2), affordability (#3), travel options (#4), and safety (#5). The ranking of priorities for inner suburb and outer suburb residents (in order of importance) is reliability (#1), travel time (#2), affordability (#3), safety (#4), and travel options (#5).

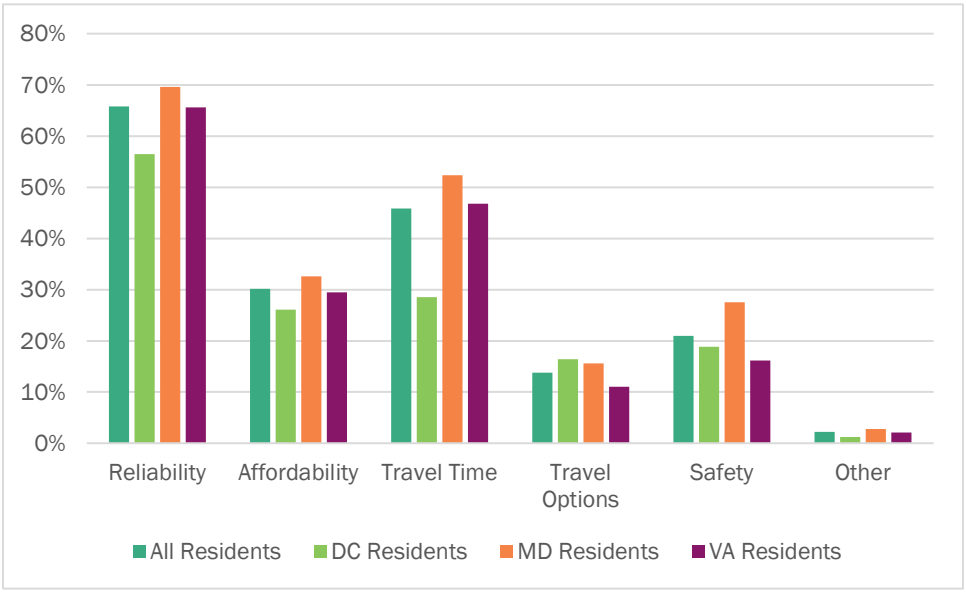
Figure 2: Priorities by Regional Sub-Area



Priorities Analyzed by Respondents' State

Reliability was the highest rated priority for all residents in the region, with more than 50% of residents from the District of Columbia, Maryland, and Virginia indicating reliability as a top factor (Figure 3). Travel time was the second highest rated priority among residents; Maryland and Virginia

Figure 3: Priorities by State



residents prioritized travel time significantly more than District of Columbia residents. Travel options were prioritized more by District of Columbia and Maryland residents than Virginia residents. Maryland residents prioritized safety and affordability more than District of Columbia and Virginia residents.

Priorities Analyzed by Other Characteristics

Respondents were also given the option of providing more demographic characteristics. The addendum of tables at the end of this report contains the other demographic breakdowns of responses to the priorities question. The other demographic characteristics included in the addendum of tables to this report are gender, household income, disability status, age, and race/ethnicity.

Respondents to the open survey also prioritized reliability at the top. 60% of respondents said that reliability is in their top two priorities when it comes to influencing their travel decisions. The next highest factor was travel time, which 41% of respondents placed in their top two. Across all modes of travel, respondents to the open survey chose reliability as their top priority. Travel time came in second for all modes except for pedestrians and cyclists, for who travel options came in second.

Priority	Open Survey Responses	% Open Survey Respondents Selecting Priority
Reliability	3,284	60%
Travel Time	2,254	41%
Travel Options	1,337	24%
Affordability	1,182	22%
Safety	1,008	18%
Other	158	3%
Total	9,223	

Respondents were asked to suggest other priorities that matter to them and impact how they choose to travel. Some ideas included:

- "Sustainability"
- "Comfort"
- "Weather"
- "Convenience"
- "How much stuff I carry with me determines how I get around."
- "It is important to me that I can read or exercise while traveling."
- "Flexibility –the ability to change destinations and times of travel."
- "Community: I want to feel connected to my community while traveling."
- "Efficiency"
- "Carbon footprint"
- "Simplicity"
- "Lack of stress"
- "Health"

Issues Affecting Respondents' Travel Experience

THE QUESTION

Survey respondents were also asked to evaluate how different issues affect their travel experience. The purpose of asking this question was to learn more about what people in the region see as the biggest barriers to having an improved transportation experience.

The survey asked respondents about 20 different issues, grouped into categories according to the five factors on the preceding screen. Respondents were asked to rate each issue on a scale of "1" to "5", with higher ratings signifying a greater impact. As before, respondents had the opportunity to add other issues not mentioned, or to provide qualitative comments on their responses.

What affects your travel?

How much do each of the issues on this screen affect your travel? Rate each issue on a scale of "1" to "5", with higher ratings signifying a greater impact on your travel.

Reliability	Affordability	Travel Time	Travel Options	Safety
Traffic Congestion	Vehicle Ownership Costs	Time Spent in Traffic	Need for Rail Transit	Dangerous Driving
Traffic Incidents	Tolls and Parking	Time Needed for Transit	Need for Bus Transit	Infrastructure Conditions
Train Delays	Rail Fares	Lack of Faster Options	Need for Driving Options	Crime
Bus Delays	Bus Fares	Distance to Destinations	Need for Walking and Bicycling	Street Design

OVERALL FINDINGS

"Traffic congestion" and "time spent in traffic" rose to the top as affecting people's travel experience the most. The overwhelming response for "traffic congestion" placed it far ahead of the other factors, indicating that people in the region are significantly impacted by traffic congestion in their daily travel. "Need for driving options" and "need for rail options" tied for third-most important issue affecting people's travel.

Each of the 20 issues were grouped into five priority categories: reliability, affordability, travel time, travel options, and safety. Some notable patterns can be observed in the distribution of priority categories. Two reliability issues ranked among the top ten issues (traffic congestion and traffic incidents), in addition to two travel options

Top Issues Affecting People's Travel Experience

TRAFFIC CONGESTION
"Traffic on the roads makes it hard for me to get where I'm going on time."

TIME SPENT IN TRAFFIC
"Traffic makes it take too long to drive where I need to go."

NEED FOR RAIL TRANSIT
"More or better rail transit options would make my travel experience better."

issues (need for driving options and need for rail transit options), and two safety issues (dangerous driving and infrastructure conditions). All four travel time issues ranked among the top ten (time spent in traffic, lack of faster options, time needed for transit, distance to destinations). No affordability issue ranked among the top ten issues identified by random sample respondents.

Table 3: Respondents' Responses to Issues Question - Sorted by Overall Average (Also Includes Averages by Sub-Regional Area by Primary Travel Mode)

Issue	Priority	Overall Average	Average by Primary Travel Mode				Average by Sub-Regional Area		
			Drive	Train	Bus	Ped/Bike	Core	Inner	Outer
Traffic Congestion	Reliability	4.0	4.3	3.2	3.5	2.5	2.9	4.3	4.7
Time Spent in Traffic	Travel Time	3.6	3.8	3.2	3.1	2.4	2.7	3.8	4.4
Need for Driving Options	Travel Options	3.5	3.9	2.5	2.1	1.9	2.3	3.8	4.6
Need for Rail Transit Options	Travel Options	3.5	3.4	4.1	3.3	3.0	3.1	3.6	3.8
Lack of Faster Options	Travel Time	3.4	3.5	3.2	3.3	2.5	2.6	3.6	4.2
Traffic Incidents	Reliability	3.4	3.6	2.8	3.0	2.1	2.3	3.6	4.2
Time Needed for Transit	Travel Time	3.3	3.4	3.1	2.8	2.7	2.7	3.7	3.3
Dangerous Driving	Safety	3.2	3.3	2.7	3.0	3.0	2.5	3.3	3.7
Infrastructure Conditions	Safety	2.8	2.9	2.8	2.8	2.5	2.4	2.9	3.1
Distance to Destinations	Travel Time	2.7	2.8	2.7	2.3	2.0	2.0	2.9	3.4
Train Delays	Reliability	2.7	2.4	3.5	3.4	2.7	2.6	2.8	2.4
Need for Bus Transit Options	Travel Options	2.7	2.5	3.2	3.6	2.6	2.6	2.6	2.9
Tolls and Parking	Affordability	2.6	2.7	2.2	2.7	2.2	2.0	2.7	3.2
Need for Walk & Bike Options	Travel Options	2.5	2.4	2.7	2.2	3.4	2.4	2.5	2.6
Street Design	Safety	2.5	2.5	2.6	2.5	2.5	2.2	2.6	2.7
Vehicle Ownership Costs	Affordability	2.5	2.5	2.1	2.9	2.1	2.0	2.5	2.9
Rail Fares	Affordability	2.3	2.3	2.5	2.5	1.7	2.0	2.4	2.5
Bus Delays	Reliability	2.2	2.0	2.7	2.9	2.3	2.2	2.2	2.2
Crime	Safety	2.1	2.0	2.0	2.7	1.7	1.9	2.1	2.1
Bus Fares	Affordability	1.8	1.7	1.8	2.5	1.4	1.6	1.8	2.1

DIFFERENT ISSUES MATTER TO DIFFERENT PEOPLE

Issues Analyzed by Respondents' Most Frequent Mode of Travel

The survey results showed that the top issues identified generally corresponded with the respondent's primary mode of travel. For people who drive as their most common mode of travel (drivers), the top issue was traffic congestion, followed by need for driving options, and time spent in traffic (Table 3 and Figure 4). Dangerous driving, time needed for transit, and traffic incidents were also issues that rated higher for drivers compared to transit riders and pedestrians/cyclists.

For people who ride a train as their most frequent mode of travel (train riders), their top three issues in order were the need for rail transit options, train delays, and time spent in traffic (Figure 4). People who ride the bus as their most frequent mode of travel (bus riders) identified the need for bus transit options as the top issue, followed by traffic congestion and train delays. Bus riders were also more concerned about bus fares, crime, and vehicle ownership costs than users of other travel modes (Table 3). The top issue for pedestrians and cyclists was the need for walking and biking options, followed by the need for rail transit options and dangerous driving.

Figure 4: Top Three Issues Overall and by Mode of Travel

	#1	#2	#3
All Respondents (755)	Traffic Congestion	Time Spent in Traffic	Need for Driving Options
Drivers (550)	Traffic Congestion	Need for Driving Options	Time Spent in Traffic
Train Riders (92)	Need for Rail Transit Options	Train Delays	Time Spent in Traffic
Bus Riders (57)	Need for Bus Transit Options	Traffic Congestion	Train Delays
Pedestrians & Cyclists (38)	Need for Walking & Bicycling Options	Need for Rail Transit Options	Dangerous Driving

Issues Analyzed by Respondents' Location in the Region

There were also differences in issues depending on where people lived in the region. The most notable differences were between regional core residents and suburban residents. For regional core residents, the top issue was need for rail transit options, followed by traffic congestion and time needed for transit. All top issues for core residents were related to public transit, including traffic

congestion which impacts bus transit. Residents in both inner suburbs and outer suburbs identified traffic congestion as the top issue, and other driving related issues such as need for driving options and time spent in traffic ranked among the top three issues.

Some of the issues that ranked higher for residents in inner suburbs compared residents in other parts of the region include time needed for transit and train delays. Outer suburb residents were most concerned with driving and traffic related issues such as traffic congestion, time spent in traffic, need for driving options, lack of faster options, traffic incidents, dangerous driving, distance to destinations, tolls and parking, and vehicle ownership costs. Need for bus transit options and bus fares also rated higher for outer suburb residents than other residents in the region.

Figure 5: Top Three Issues Overall and by Sub-Region

	#1	#2	#3
All Respondents (755)	Traffic Congestion	Time Spent in Traffic	Need for Driving Options
Regional Core (213)	Need for Rail Transit Options	Traffic Congestion	Time Needed for Transit
Inner Suburbs (395)	Traffic Congestion	Time Spent in Traffic	Need for Driving Options
Outer Suburbs (147)	Traffic Congestion	Need for Driving Options	Time Spent in Traffic

Issues Analyzed by Respondents' State

The most notable differences in issues were between District of Columbia residents and Maryland/Virginia residents. Traffic congestion was the top issue for both Maryland and Virginia residents, followed by need for driving options, and time spent in traffic. For District of Columbia residents, the top issue was need for rail transit options, followed by traffic congestion, and need for bus transit options. Driving and traffic related issues were generally more important for Maryland and Virginia residents than District of Columbia residents. See Table 9 in the addendum of tables for the results of this question broken down by the respondents' state.

Issues Analyzed by Other Characteristics

Respondents were also given the option of providing more demographic characteristics. The addendum of tables at the end of this report contains the other demographic breakdowns of responses to the issues question. The other demographic characteristics included in the addendum of tables to this report are gender, household income, disability status, age, and race/ethnicity.

Respondents to the open survey said that the most pressing issue they face is the need for more and better rail transit options. The second and third most pressing issues for open survey respondents were traffic congestion and time spent in traffic.

Respondents were asked to comment on the issues they face in their daily travel. Some comments included:

REGARDING TRAFFIC CONGESTION:
"I avoid driving as much as possible; otherwise this would be a bigger concern."
"I have to allow for 1.5 to 2 hours just to travel 23 miles."
"I bike to work and know my commute time is always the same regardless of traffic."

REGARDING TIME SPENT IN TRAFFIC:
"I limit where I consider to work due to traffic and time it takes to get there."
"Congestion slows down buses on key corridors. Bus only lanes should be a priority."

REGARDING NEED FOR RAIL TRANSIT OPTIONS:
"Light rail or more/improved metro would get people off the roads."
"More frequent train VRE departure times, and weekend service are needed for getting in and out of northern VA and DC for those of us who live beyond Metro."

Lots of New Ideas

THE QUESTION

Finally, respondents were invited to submit their ideas and suggestions for ways to make the region's transportation system better. Respondents could drag and drop markers onto an interactive map to identify where and what kind of improvement they thought should be made.

Six main types of improvements were provided as options: road, rail transit, bus transit, walking and bicycling, land-use and policies, and other. Within each of these categories were further options, including improvements to existing facilities, construction of new facilities, and service expansions.

OVERALL FINDINGS

Later this fall an interactive map available through **visualize2045.org** will show all the map markers and comments that respondents submitted. This will allow people to explore what ideas there are throughout the region for transportation and other improvements.

Tables 4 and 5 show the types of responses received for two categories of map markers: rail and road improvements. Of the rail ideas, the overwhelming majority of markers were for new or expanded rail lines or stations. Of the road ideas, the most common improvement type chosen was for a new or widened road or bridge.

It's important to note that even though the map markers have been categorized by these improvement types, the respondents could have written comments that were in favor or against improvements within that category. Therefore, a map marker cannot be read as an endorsement of a project or idea – the map markers can only represent the fact that respondents were thinking about something in that category, and if they did not write an accompanying comment explaining what they meant, we cannot know their intentions.

Table 4: Map Marker Rail Ideas

Rail Ideas: Improvement Type	# of ideas
New or expanded rail lines/stations	1,914
No improvement type specified	818
Service hours/frequency	582
Station improvements	159
Other rail idea	150
Maintenance issue	106
Accessibility for persons with disabilities	9

Table 5: Map Marker Road Ideas

Road Ideas: Improvement Type	# of ideas
New or widened road/bridge	1,734
No improvement type specified	1,110
Other roadway idea	535
Calm/slow down traffic	495
Express/toll lanes	363
Maintenance issue	278

Three more tables with the other categories can be found in the addendum of tables at the end of this report (Tables 15-17): bus improvements, walking and bicycling improvements, and land-use policies.

Respondents could also choose the 'other' category for their map marker. 583 other ideas were shared, with a wide range of ideas within the transportation sector as well as beyond. Respondents thought outside the box of the survey constraints and added some very important considerations to the discussion of the future of transportation in the region. Some highlights of the ideas include:

- "Better paratransit services for people in lower density areas. People in wheelchairs have limited accessibility. More on-demand services."
- "More EV charging stations."
- "Better information about travel options."
- "Smaller businesses should be able to set up shop in the city easily."
- "Better accessibility for folks as they age and have limited mobility."
- "Offering financial incentives to organizations who encourage teleworking."
- "Why are there no high speed water ferries on the Potomac servicing DC? Stations should be developed up and down the river like they have in London."
- "We should study the potential benefits of trolleys in Del Ray and other dense developments."
- "Regular transit to/from Annapolis (mode agnostic)."

CONCLUSION

The Visualize 2045 Public Input Survey paints a picture of attitudes and opinions about the region's transportation system. Public opinion can help decision-makers better understand people's attitudes and experiences of the transportation system.

The survey demonstrated to the TPB that reliability is a top priority of regional residents. And, Visualize 2045 highlights projects and programs that will help the region create a more reliable transportation system. The aspirational element along with the TPB's seven endorsed initiatives also address reliability within the transportation system. When the TPB held public forums in 2018, participants discussed the seven initiatives and how to make the system better in the future. See Appendix I - Report on Phase 2 of Public Outreach: Public Forums and Open Houses to learn more about the public forums.

The opinions gleaned from the survey will continue to inform ongoing discussions in the region among elected officials and regional planners even after Visualize 2045 is adopted. The information gathered can further help the region's leadership as they continue to discuss, identify, and develop potential improvements to the region's transportation system.

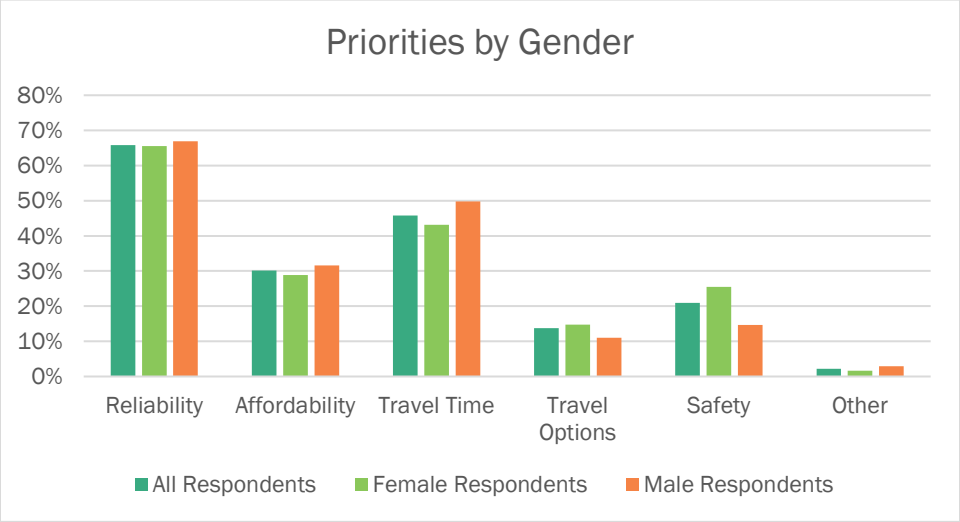
ADDENDUM OF TABLES

Question 1: Priorities

PRIORITIES ANALYZED BY RESPONDENTS' GENDER

Reliability was the highest rated priority for both male and female residents, with two-thirds of men and women selecting reliability as a top factor. In terms of key differences by gender, male residents prioritized travel time more than female residents, while female residents prioritized safety more than male residents.

Figure 6: Priorities by Gender



PRIORITIES ANALYZED BY RESPONDENTS' INCOME

Reliability was the highest rated priority for all households except for the lowest income households (less than $25,000 annual income). Higher income households, particularly those earning more than $150,000, prioritized travel time more than lower income households. Low income households (less than $50,000) prioritized affordability more than higher income households. Travel options was least important for households earning less than $25,000. Safety was the least important factor for the highest income households (more than $150,000).

Table 6: Priorities by Income

	Respondents' Household Income					
Priority	**<$25K**	**$25-50K**	**$50-75K**	**$75-100K**	**$100-150K**	**>$150K**
Reliability	51.3%	62.4%	67.0%	69.6%	62.5%	70.5%
Affordability	54.0%	57.8%	33.5%	29.6%	29.0%	18.7%
Travel Time	28.1%	20.3%	45.7%	44.6%	47.1%	60.0%
Travel Options	7.1%	17.9%	12.5%	11.6%	15.0%	13.0%
Safety	24.7%	22.2%	27.1%	24.6%	20.3%	10.8%
Other	4.9%	3.6%	0.8%	1.8%	3.8%	1.1%

PRIORITIES ANALYZED BY RESPONDENTS' DISABILITY STATUS

Reliability was the highest rated priority for all residents regardless of disability status. Persons with disabilities prioritized affordability and safety more than persons without disabilities. Persons without disabilities prioritized travel time more than persons with disabilities.

Figure 7: Priorities by Disability Status

PRIORITIES ANALYZED BY RESPONDENTS' AGE

Reliability was the highest rated priority for all residents regardless of age (Table 7). Older adults (55 and older) prioritized safety more than younger age groups. Prime working-age adults (25-54) prioritized travel time more than other age groups. Teenagers and young adults (18-24) prioritized affordability more than older age groups. Senior adults (75 and older) prioritized travel options more than younger age groups.

Table 7: Priorities by Age

	Respondents' Age						
Priority	**18-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65-74**	**75+**
Reliability	79.7%	64.8%	65.8%	73.2%	73.0%	74.2%	67.9%
Affordability	50.7%	33.3%	38.6%	25.2%	31.5%	30.7%	25.0%
Travel Time	30.0%	53.0%	59.9%	58.6%	38.6%	40.3%	31.9%
Travel Options	8.2%	12.1%	11.2%	16.0%	15.6%	15.5%	33.2%
Safety	9.2%	23.7%	15.7%	17.6%	27.7%	28.6%	33.0%
Other	4.9%	2.3%	2.2%	0.5%	2.2%	4.7%	3.3%

PRIORITIES ANALYZED BY RESPONDENTS' RACE/ETHNICITY

Reliability was the highest rated priority for all racial/ethnic groups (except for two or more races). In terms of key differences by race/ethnicity, Hispanics and African-Americans prioritized affordability more than other racial/ethnic groups. Non-Hispanic whites prioritized travel time more than other groups. African-Americans also prioritized travel options and safety more than other racial/ethnic groups.

Table 8: Priorities by Race/Ethnicity

Priority	White	Black	Asian	Hispanic	Other Race	Two or More Races
Reliability	66.7%	63.3%	66.7%	85.3%	63.2%	38.8%
Affordability	28.0%	39.9%	22.6%	46.7%	29.4%	35.5%
Travel Time	49.7%	40.8%	44.3%	29.4%	45.5%	43.2%
Travel Options	12.5%	17.9%	7.6%	6.2%	9.6%	19.1%
Safety	16.9%	29.7%	23.9%	20.3%	28.1%	19.5%
Other	3.0%	1.8%	1.3%	0.0%	0.0%	3.9%

Question 2: Issues

ISSUES ANALYZED BY RESPONDENTS' HOME STATE

Table 9: Transportation Issues Ratings by State

	DC Residents	Maryland Residents	Virginia Residents
Reliability			
Traffic Congestion	2.9	4.6	3.9
Traffic Incidents	2.1	3.9	3.4
Train Delays	2.5	3.0	2.5
Bus Delays	2.2	2.4	2.0
Affordability			
Vehicle Ownership Costs	2.1	3.0	2.1
Tolls and Parking	2.0	2.9	2.6
Rail Fares	2.0	2.6	2.1
Bus Fares	1.7	2.1	1.6
Travel Time			
Time Spent in Traffic	2.6	4.1	3.6
Time Needed for Transit	2.6	3.8	3.3
Lack of Faster Options	2.5	3.9	3.4
Distance to Destinations	1.9	3.4	2.5
Travel Options			
Rail Transit	3.0	3.8	3.4
Bus Transit	2.7	2.9	2.5
Driving	2.2	4.1	3.6
Walking and Bicycling	2.5	2.5	2.5
Safety			
Dangerous Driving	2.5	3.6	3.0
Infrastructure Conditions	2.4	3.3	2.6
Crime	2.0	2.4	1.8
Street Design	2.2	2.8	2.4

ISSUES BY ANALYZED BY RESPONDENTS' GENDER

For both female and male residents, the top issues were traffic congestion and time spent in traffic. While female residents rated most issues slightly higher than male residents, differences in issue ratings across gender were not as pronounced as other demographic factors.

Table 10: Transportation Issues Ratings by Gender

	Female	Male
Reliability		
Traffic Congestion	4.1	3.9
Traffic Incidents	3.5	3.2
Train Delays	2.8	2.5
Bus Delays	2.4	1.9
Affordability		
Vehicle Ownership Costs	2.6	2.2
Tolls and Parking	2.7	2.5
Rail Fares	2.4	2.1
Bus Fares	1.9	1.7
Travel Time		
Time Spent in Traffic	3.7	3.5
Time Needed for Transit	3.4	3.2
Lack of Faster Options	3.5	3.3
Distance to Destinations	2.8	2.6
Travel Options		
Rail Transit	3.6	3.3
Bus Transit	2.9	2.4
Driving	3.6	3.4
Walking and Bicycling	2.5	2.5
Safety		
Dangerous Driving	3.3	2.9
Infrastructure Conditions	2.9	2.7
Crime	2.2	1.8
Street Design	2.6	2.4

ISSUES ANALYZED BY RESPONDENTS' HOUSEHOLD INCOME

Traffic congestion was the top issue across all income groups. Bus transit related issues such as need for bus transit options, bus fares, and bus delays were more important for lower income households (less than $75,000) than higher income households (greater than $75,000), in addition to rail transit issues such as train delays and rail fares. Tolls and parking, distance to destinations, dangerous driving, and crime also rated higher for lower income households less than $75,000. Vehicle ownership costs and need for bus transit options were top issues for very low-income households earning less than $25,000.

Table 11: Transportation Issues Ratings by Household Income

	Household Income					
	<$25K	**$25-50K**	**$50-75K**	**$75-100K**	**$100-150K**	**>$150K**
Reliability						
Traffic Congestion	4.1	3.9	4.2	3.9	3.9	4.0
Traffic Incidents	3.5	3.3	3.5	3.3	3.3	3.4
Train Delays	3.0	2.9	3.0	2.5	2.6	2.5
Bus Delays	2.9	2.5	2.7	1.9	2.1	1.9
Affordability						
Vehicle Ownership Costs	3.7	3.5	2.7	2.3	2.2	1.9
Tolls and Parking	3.4	3.2	2.9	2.6	2.5	2.3
Rail Fares	3.2	2.9	2.8	2.3	2.0	2.0
Bus Fares	3.0	2.3	2.3	1.7	1.6	1.5
Travel Time						
Time Spent in Traffic	3.6	3.4	3.7	3.6	3.6	3.7
Time Needed for Transit	3.4	3.4	3.5	3.1	3.2	3.6
Lack of Faster Options	3.3	3.6	3.6	3.2	3.4	3.5
Distance to Destinations	3.2	3.0	2.9	2.5	2.5	2.7
Travel Options						
Rail Transit	3.4	3.6	3.6	3.4	3.5	3.5
Bus Transit	3.7	3.3	2.9	2.4	2.7	2.4
Driving	3.4	3.3	3.7	3.4	3.4	3.6
Walking and Bicycling	2.6	2.4	2.6	2.4	2.5	2.7
Safety						
Dangerous Driving	3.3	3.3	3.3	3.0	3.2	2.9
Infrastructure Conditions	3.1	3.2	2.9	2.6	2.8	2.7
Crime	2.6	2.7	2.2	2.0	1.8	1.8
Street Design	2.7	2.9	2.7	2.2	2.5	2.6

ISSUES ANALYZED BY RESPONDENTS' DISABILITY STATUS

Traffic congestion and time spent in traffic were top issues for all respondents regardless of disability status. People with disabilities were more concerned than non-disabled residents on several issues, including vehicle ownership costs, train delays, bus fares, bus transit options, and crime.

Table 12: Transportation Issues Ratings by Disability Status

	People without Disabilities	People with Disabilities
Reliability		
Traffic Congestion	4.0	4.2
Traffic Incidents	3.3	3.5
Train Delays	2.6	3.1
Bus Delays	2.1	2.4
Affordability		
Vehicle Ownership Costs	2.4	3.0
Tolls and Parking	2.6	3.0
Rail Fares	2.3	2.7
Bus Fares	1.7	2.4
Travel Time		
Time Spent in Traffic	3.6	3.6
Time Needed for Transit	3.3	3.2
Lack of Faster Options	3.4	3.4
Distance to Destinations	2.7	3.0
Travel Options		
Rail Transit	3.5	3.4
Bus Transit	2.6	3.1
Driving	3.5	3.3
Walking and Bicycling	2.5	2.4
Safety		
Dangerous Driving	3.1	3.2
Infrastructure Conditions	2.8	3.1
Crime	2.0	2.5
Street Design	2.5	2.7

ISSUES ANALYZED BY RESPONDENTS' AGE

The most notable differences in issues were between younger adults (aged 34 and younger) and adults over 35 years of age. Need for rail transit and need for bus transit generally rated higher for younger cohorts compared with older age groups, suggesting generational differences in mode preference. Need for driving options were more generally more important for middle-age and older residents 45 and older. While traffic congestion was an important issue across all age groups, they were least important for the youngest cohort (24 years and younger). Traffic incidents were most important for prime working age adults (25-64 years). Walking and bicycling were generally more important for younger age cohorts (54 years and younger). Affordability issues such as vehicle ownership costs, rail fares, and bus fares were most important for teenagers and young adults (24 years and younger).

Table 13: Transportation Issues Ratings by Age

	18-24	25-34	35-44	45-54	55-64	65-74	75+
Reliability							
Traffic Congestion	3.5	3.9	4.1	4.1	4.2	4.0	3.8
Traffic Incidents	3.0	3.4	3.3	3.5	3.5	3.2	3.0
Train Delays	3.3	2.9	2.7	2.5	2.7	2.4	2.3
Bus Delays	2.7	2.2	1.9	2.3	2.3	2.0	2.2
Affordability							
Vehicle Ownership Costs	2.9	2.5	2.5	2.5	2.4	2.2	2.1
Tolls and Parking	2.7	2.7	2.7	2.6	2.6	2.5	2.3
Rail Fares	2.9	2.4	2.3	2.2	2.3	1.9	2.2
Bus Fares	2.3	1.8	1.7	1.8	1.8	1.6	1.7
Travel Time							
Time Spent in Traffic	3.0	3.5	3.9	3.8	3.7	3.4	2.9
Time Needed for Transit	3.4	3.6	3.4	3.3	3.1	3.1	2.9
Lack of Faster Options	3.4	3.6	3.4	3.5	3.4	3.0	3.2
Distance to Destinations	2.4	2.7	2.8	2.7	2.9	2.5	2.8
Travel Options							
Rail Transit	3.7	3.9	3.4	3.3	3.4	3.1	3.4
Bus Transit	3.0	2.9	2.6	2.6	2.5	2.5	2.6
Driving	3.2	3.4	3.5	3.7	3.7	3.5	3.7
Walking and Bicycling	2.6	2.8	2.9	2.6	2.3	2.0	1.6
Safety							
Dangerous Driving	2.7	2.8	3.2	3.2	3.3	3.2	3.3
Infrastructure Conditions	2.2	2.9	2.7	2.9	2.9	2.7	2.6
Crime	2.2	2.0	1.9	2.0	2.3	1.9	2.4
Street Design	2.8	2.5	2.5	2.5	2.6	2.1	2.7

ISSUES ANALYZED BY RESPONDENTS' RACE/ETHNICITY

Traffic congestion was the top issue across racial/ethnic groups. Need for rail transit and lack of faster options were top issues for Hispanic residents. Affordability issues such as vehicle ownership costs, tolls and parking, rail fares, and bus fares were less important for white residents compared with African-American, Asian, and Hispanic residents. Other transit-related issues such as train and bus delays, time needed for transit, and rail and bus transit options were less important for non-Hispanic whites. Driving and traffic related issues such as driving options, and vehicle ownership costs were more important for African-American residents compared with other racial/ethnic groups.

Table 14: Transportation Issues Ratings by Race/Ethnicity

	White	Black	Asian	Hispanic	Other Race	Two or More Races
Reliability						
Traffic Congestion	3.9	4.3	3.9	4.0	4.5	4.2
Traffic Incidents	3.2	3.8	3.4	3.6	3.8	3.4
Train Delays	2.5	3.2	2.9	3.1	3.6	2.6
Bus Delays	1.9	2.5	2.5	2.9	3.1	2.6
Affordability						
Vehicle Ownership Costs	2.1	3.3	2.6	2.7	3.0	2.4
Tolls and Parking	2.4	3.1	2.9	2.9	3.1	2.5
Rail Fares	2.0	2.8	2.5	3.1	3.2	2.4
Bus Fares	1.5	2.2	2.0	2.5	2.7	2.0
Travel Time						
Time Spent in Traffic	3.5	3.9	3.9	3.8	3.8	3.6
Time Needed for Transit	3.2	3.5	3.5	3.7	4.0	3.4
Lack of Faster Options	3.3	3.6	3.7	4.1	3.8	3.2
Distance to Destinations	2.4	3.2	3.1	3.1	3.7	2.9
Travel Options						
Rail Transit	3.3	3.7	3.8	4.4	3.7	3.9
Bus Transit	2.4	3.1	3.2	3.5	2.5	3.0
Driving	3.4	3.9	3.6	3.5	3.9	3.0
Walking and Bicycling	2.6	2.4	2.6	2.6	1.9	2.7
Safety						
Dangerous Driving	3.0	3.4	3.3	3.6	3.7	2.8
Infrastructure Conditions	2.6	3.2	3.0	3.2	3.9	2.8
Crime	1.7	2.6	2.2	2.4	3.1	2.2
Street Design	2.4	2.7	2.7	2.9	3.1	2.7

Question 3: Your Ideas

Table 15: Map Marker Bus Ideas

Bus Ideas: Improvement Type	# of ideas
Express bus or BRT	544
New or expanded bus route/stop	483
No improvement type specified	444
Service hours/frequency	278
Other bus idea	88
Bus stop improvements	59
Accessibility for persons with disabilities	7
Maintenance issue	1

Table 16: Map Marker Walking and Biking Ideas

Walk/Bike Ideas: Improvement Type	# of ideas
Bicycle lane or path	2,340
No improvement type specified	850
Sidewalk or walking path	715
Crosswalk/signal/lighting	405
Other walk or bike idea	182
Bikeshare station	167
Maintenance issue	88
Accessibility for persons with disabilities	18

Table 17: Map Marker Land-Use and Policy Ideas

Land-use & Policy Ideas: Categories	# of ideas
More housing/affordable housing	397
Other	386
No category specified	306
More commercial/retail development	154
More job opportunities	69
Parking prices	48

visualize2045

A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

APPENDIX I

Report on Phase 2 of Public Outreach: Public Forums and Open Houses

October 2018

National Capital Region
Transportation Planning Board

REPORT ON PHASE 2 OF PUBLIC OUTREACH: PUBLIC FORUMS AND OPEN HOUSES
October 17, 2018

ABOUT VISUALIZE 2045 & THE TPB
Visualize 2045 is the federally required long-range transportation plan for the National Capital Region. It identifies and analyzes all regionally significant transportation investments planned through 2045 to help decision makers and the public "visualize" the region's future.

Visualize 2045 is developed by the National Capital Region Transportation Planning Board (TPB), the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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OVERVIEW

In the spring of 2018, the Transportation Planning Board conducted 12 public forums around the region in which more than 300 residents shared their hopes and concerns about the region's transportation future. At these events, discussion focused on how the region should move forward with implementing the seven initiatives that the TPB endorsed in December 2017 and January of 2018. In the fall, the TPB hosted three open houses to provide the public with an opportunity to learn about the contents of the draft plan.

This report documents how the forums were designed and implemented and provides a summary of the input received from participants. It also summarizes the open houses that concluded public outreach activities for Visualize 2045.

FORUM DESIGN AND IMPLEMENTATION

Visualize 2045 is the federally required long-range transportation plan for the National Capital Region that is scheduled for final approval in October 2018. Public outreach has been integrated into the development of Visualize 2045 over a two-year period in calendar years 2017 and 2018.

Phase I Outreach, which was conducted in 2017, was designed to "cast a wide net" and obtain input from a large number of people about high-level concerns and interests. During Phase I, the following activities were accomplished or initiated:

- Branding and Identity (Winter-Spring 2017) – The name "Visualize 2045" and a graphic identity were selected.
- Website and Newsletter (Spring 2017 through Fall 2018) – An electronic newsletter and a new website were developed. These core communications vehicles have been used to regularly share information throughout the development of the plan.
- Public Input Survey (Summer-Fall 2017) – Staff conducted a survey to obtain information about public attitudes toward transportation in the region. The survey was intended to "take the pulse of the region" by getting a general sense of the public's transportation priorities, concerns and ideas. The survey also helped to acquaint residents with the TPB and with Visualize 2045. Two approaches were used to gather feedback: One method reached a geographically representative sample through a randomized mailing, and the other reached out to all residents of the region through public events, social media, and other communications. In total, more than 6,000 people completed the survey.

Phase II Outreach in 2018 was designed to "dig deeper" by engaging the public in discussion. Phase II activities include a series of public forums that were conducted in the spring of 2018 and open houses which are scheduled for the fall. The public forums are the primary subject of this report.

Overview of the Forums

When the TPB endorsed the seven initiatives at the end of 2017, it provided a unique opportunity for regional planners to engage the public in a discussion about the direction our transportation plans

should take. For the first time, the TPB decided that its long-range plan, in the form of "Visualize 2045," would include unfunded aspirational initiatives – ideas we would like to fund, not simply the things that we are likely to fund. The open-endedness of this new aspirational element gave the TPB the chance to ask the public what direction that think we should take.

Staff decided to conduct public forums that would be heavily focused on small-group discussions throughout the region. At these sessions, TPB staff representatives asked residents to "visualize" our transportation future with a focus on the seven initiatives that were endorsed. The primary purpose of the forums was to obtain information about how the public believes we might implement these ideas.

The TPB's endorsed initiatives comprise the following topics:

- Regional land-use balance optimization
- Regionwide bus rapid transit and transitways
- Metrorail capacity improvements
- Employer-based travel demand management policies
- Regional express travel network
- Completion of the National Capital Trail
- Pedestrian and bicycle access to high-capacity transit.

To explain the seven endorsed initiatives, TPB staff developed an online presentation using a GIS story map. A story map uses text, maps, illustrations, and other graphics to explain and map complex data and information. The story map was used as a live presentation tool at the forums and was also made available on the Visualize 2045 website: visualize2045.org. The outreach team decided to avoid "information overload" at the forums, limiting the handout materials to a printed brochure that explained each of the seven initiatives.

The forums typically lasted two hours and followed a common format. Following opening presentations, participants used their mobile phones to answer questions about their travel patterns and their opinions about transportation. Using Poll Everywhere software, the participants' answers were instantaneously tallied in graphs that were projected on a screen. This polling helped to provide a baseline for understanding who was in the room and warmed up participants for group discussions. The answers to the polls also provided the basis for identifying those initiatives that would be more extensively discussed in small groups.

The majority of time at the forums was devoted to group discussions at four tables where participants had the chance to share their experiences, hopes, and concerns. A facilitator was assigned to each table to lead discussion, while a scribe took notes. At three of the four tables, discussions focused on a single, specific initiative. At the fourth table, the four initiatives that were not covered at the other tables were discussed. Discussion periods were limited to 15-minutes periods. At the end of each period, participants were asked to move to another table and another topic. Over the course of three 15-minute periods, everyone had the opportunity to provide comments at three tables on a variety of topics.

The qualitative feedback elicited from the forums has been summarized in the "findings" section of this report and will also be reflected in the public involvement chapter/appendix of the long-range plan document. In addition to providing this focused input, the forums served to raise public awareness of the TPB and the regional planning process.

Forum Preparation and Implementation

Of the 12 forums, nine were conducted in the evenings at various locations throughout the region. The other three forums included special sessions for the TPB's Access for All Advisory Committee and Citizens Advisory Committee, as well as an online/virtual forum that was hosted via WebEx.

Forum	Venue	Date
Frederick, Maryland	Thomas Johnson High School	April 11, 2018
College Park, Maryland	College Park Airport Operations Building	April 18, 2018
La Plata, Maryland	Charles County Government Center	April 25, 2018
Rockville, Maryland	Montgomery County Executive Offices	April 26, 2018
Washington, DC	COG Offices	May 1, 2018
Arlington, Virginia	Central Library	May 2, 2018
Fairfax, Virginia	Providence Community Center	May 8, 2018
TPB Citizens Advisory Committee	COG Offices	May 10, 2018
Access for All Advisory Committee	COG Offices	May 10, 2018
Leesburg, Virginia	Loudoun County Government Center	May 16, 2018
Woodbridge, Virginia	Prince William County Government Center	May 23, 2018
Online Forum	N/A	June 6, 2018

In addition, comments and feedback were solicited online via visualize2045.org.

The TPB enlisted the help of a consultant, Johnson, Mirmiran and Thompson, Inc. (JMT), to assist with designing, planning, and implementing/facilitating the forums. JMT and their subconsultant, PRR, Inc., worked closely with TPB staff throughout all stages of the public forum process to ensure that all tasks were completed within the short timeframe allotted for hosting the forums and collecting feedback.

To promote the forums, TPB staff posted the dates and locations on the visualize2045.org website, sent email blasts to the Visualize 2045 distribution list, and posted forum information and reminders on the TPB Facebook and Twitter accounts. The TPB also leveraged contacts among elected officials and jurisdiction staff, as well as members of the CAC and AFA, to help promote the forums and the opportunity to participate.

The project consultants developed distribution lists for each forum using website research. In total, consultant staff pulled together over 3,500 email addresses to send English and Spanish forum flyers to in each of the nine evening forums. Typical recipients included, but were not limited to:

- County and City leadership (mayors, clerks, council members) and department staff (Aging, Disability, Communications, Planning, Transportation, Social Services, etc.)
- Community, homeowner, and civic associations

- Advocacy and special interest groups (transportation, environmental, disability, aging, racial, cultural, social, ped/bike, etc.)
- Community and social institutions (libraries, senior centers, community centers, YMCAs, large churches, food pantries, etc.)
- Economic and business development group/departments
- Local news/media

Emails were sent 1-2 weeks ahead of each forum and again 1-3 days prior to the events as a reminder. The messages asked each recipient to forward the forum flyer and information to their distribution lists, post the event on their website, calendar, and/or social media accounts, and to print and post the flyers in their community hubs/places of business to help promote the events.

In addition, staff sent "Ambassador Kits" to the TPB, Technical Committee, and Citizens Advisory Committee members which provided ready-to-use messages – sample emails, tweets, etc. -- that could be easily tailored and forwarded to organizations and individuals who may have been interested in attending or knowing about the forums.

Warm-up Activities

While the main vehicle for obtaining input was small-group discussion, a couple of activities at the forums were designed get attendees thinking about issues and opportunities. Input from those activities is summarized below.

POST-IT NOTE EXERCISE

Upon arrival at the evening forums, attendees were asked to write on post-it notes about what they currently like about transportation in the region and how they would like to see transportation in the region improved. The notes were then stuck on a wall for everyone to see, and common themes were tallied and documented in follow-up to each forum. Most respondents' comments were locally oriented, but there were some regional commonalities:

What do you like about transportation in our region?

- Many participants favorably noted the region's multi-modal transit options, like buses and Metro. They wrote that in many places, good alternatives to driving are available. But, some cautioned, these options are only viable when they are functioning reliably.
- Appreciation for the availability of pedestrian/bicycle infrastructure was noted in most jurisdictions.

How would you like to see transportation in our region improved?

- Comments frequently highlighted the need for more and better public transit, especially Metrorail. Other post-it notes called for improved bicycle and pedestrian infrastructure:
    - Metro – Comments called for more connections, more frequent trains, more weekend trains, and train improvements.
    - Pedestrian/Bicycle - Safer trails (on and off road), more options, and more trail connections were cited as improvements that participants wanted to see.
- Participants also wrote that they would like to see expanded bus schedules and they wanted buses to stay on schedule.

LIVE POLLING

After the opening presentations, staff conducted a quick poll of attendees. Using their mobile phones, participants answered seven questions that gauged who was in the audience and their transportation habits and experiences. Poll Everywhere software instantaneously tallied the participants' answers in graphs that were projected on a screen. The common/majority answers were:

1. *How did you get to tonight's meeting?*
   "Drove alone" was the number one answer, while "carpooling" was second.

2. *From what you already know about these initiatives, which of them are you most interested in? (choose 2)*
   "Bring jobs and housing closer together" was the first choice, followed by "Expand bus rapid transit regionwide."

3. *How do you usually travel to work or school?*
   Again, "drive alone" was the most common response.

4. *How long does your one-way commute typically take?*
   Over half said their one-way commute was less than 30 minutes.

5. *I am generally satisfied with the transportation options in my daily life.*
   Overall, most participants agreed or strongly agreed that they feel satisfied with the transportation options in their daily life.

6. *25 years from now, how will transportation options compare to today?*
   Slightly more than half of participants felt that there will be more transportation options in 25 years.

7. *Which factors have the greatest influences on the travel choices you make every day? (choose 2)*
   "Travel time" was the number one influence on participant's travel choices, followed closely by "Reliability."

THEMES FROM FORUM DISCUSSIONS

The forums focused on group discussions at tables where participants had the chance to share their experiences, hopes, and concerns. Each forum typically had four tables with discussions occurring concurrently. A facilitator at each table led discussion, while a scribe took notes.

Based upon the answers at each forum to polling question #2 above ("Which initiatives are you most interested in?"), staff at each forum selected single topics to be discussed at three of the tables. The fourth table combined the four remaining topics that were not covered in the other discussions. Across all the forums, the following three topics were most commonly the subject of single-topic discussions: Bring Jobs and Housing Closer Together; Expand Bus Rapid Transit Regionwide; Improve Walk and Bike Access to Transit.

Discussion periods were limited to 15-minutes periods. At the end of each period, staff blew a horn and asked the participants to move to another table to discuss a different topic. Over the course of three 15-minute periods, everyone had the opportunity to provide comments at three tables on a variety of topics.

Over the course of a typical forum, three rounds of discussions were held at four tables. Some forums that were less well-attended featured fewer discussions and/or tables. Nonetheless, notes from all the sessions indicate that more than 120 separate discussions were held. Staff has summarized those discussion notes and grouped them into key themes.

General Observations

Across the discussions at all 12 forums, some overarching themes can be identified:

- ***The concepts are familiar.*** Participants quickly grasped the concepts underlying the seven initiatives and, in many cases, they indicated they have daily experience with them. They seemed to understand that to a large extent, the power of these ideas lies in their very practicality and familiarity.

- ***There are things we can do right now.*** Many participants expressed frustration that progress is not happening fast enough. In every session, people identified specific facilities that should be built, and they identified improvements, such as operational changes, that could be implemented relatively quickly.

- ***Good ideas can be combined for greater impact***. Discussion groups invariably included suggestions related to other initiatives. For example, transit discussions often included ideas about pedestrian access improvements. Inherently, participants understood that the initiatives are most effectively implemented in combination with each other.

- ***Equity and balance are major concerns.*** Many participants expressed concern that some communities are being left behind. Some are worried about affordable housing and gentrification, and the acute transportation challenges that low-income people face. Others emphasized that we need to pay attention to the specific needs of all corners of region. For example, in some outlying locations, participants noted that telecommuting is not viable because broadband internet service is not available.

- ***We need to think more "outside the box."*** At some sessions, participants were critical of the TPB's seven initiatives, suggesting they were simply repackaged old ideas that were evidence of outmoded thinking. But among those participants who broadly supported the initiatives, there were calls for regional leaders to start thinking in a more visionary sense, by pro-actively anticipating a world in which technology and other changes will call for bold solutions.

Themes Related to the Seven Endorsed Initiatives

The following key points have been distilled from conversations at the forums related to specific initiatives. These findings identify what people would like to see in the future and what they are concerned about.

BRING JOBS AND HOUSING CLOSER TOGETHER

People would like to see:

- ***Vibrant communities, more options for travel***. Forum participants seemed to understand the intrinsic value of Activity Centers, describing a desire for a sense of community and economic opportunity. Participants also spoke fluidly about the transportation benefits of Activity Centers. They said that living and/or working in centers would provide more opportunities to walk and bike and to use transit.

- ***Diversity on many levels***. In the future, many participants said, Activity Centers should provide a variety of options to a wide array of people for housing and employment. They expressed support for economic, ethnic, racial and generational diversity.

- ***Balanced growth within the region***. At forums throughout the region, attendees said they would like to see a more balanced regional approach to growth. They called out the need for a better east-west balance, particularly with job growth. They said Activity Centers along corridors should be mutually supportive. And they recognized the need to coordinate growth across jurisdictional borders.

They are concerned about:

- ***Affordability was a frequently cited concern***. Most discussions on this initiative began with the topic of affordability. Participants noted that new development near transit was often unaffordable for middle-class families, including teachers and first-responders. For established communities, some spoke about the insidious pressures of gentrification.

- ***Transportation connections are still missing.*** Participants noted that too many Activity Centers lack transportation options. Particularly in the outer jurisdictions they expressed concerns that in some cases, plans for high-capacity transit were not materializing. Some said that walking and biking within Activity Centers was unsafe or inconvenient.

- ***Job growth is key.*** Employment growth in Activity Centers was a major concern for forum participants, although it was expressed differently in different places. Participants noted that job growth on the eastern side of the region and in outer jurisdictions was lagging. Some noted that office space has been overbuilt in inner suburbs. Others commented on the lack of diversity in the economic base of some communities. Some participants noted, for example, that Activity Centers seem to be excessively focused on retail.

- ***Our auto-oriented culture is entrenched.*** People at the forums cautioned that solo driving will be a major phenomenon for generations. Some said that today Americans frequently switch jobs and cannot plan their lives around transit. Low-density development is continuing to create demands for more roads, and transportation planners will not be able to keep up. In several cases, participants also noted that schools put pressures on our roads.

- ***Cultural aversions to concentrated development.*** Whether speaking for themselves or others, participants said that many people find concentrated development to be unappealing and impractical. Many families still need and want to live in single-family homes, some indicated. Some voiced the attitude that dense development is more appropriate for low-income or single people. Forum participants also expressed concerns that putting more people in denser locations will just result in more intense localized traffic. Others said that land use should not be the business of transportation planners.

EXPAND BUS RAPID TRANSIT REGIONWIDE

People would like to see:

- ***Dramatic extension of the transit network.*** Participants in many sessions were enthusiastic about opportunities to use BRT to expand high-quality transit throughout the region. In each session, specific suggested routes were identified, such as Route 1 in Prince George's or Route 40 in Frederick. Participants also suggested connections to existing transit, as well as direct, single-trip services. They noted that BRT could be especially useful for low-income or transit-dependent communities.

- ***Relatively quick and less expensive to implement***. Attendees at a number of forums supported BRT as a faster, cheaper option than rail. "Let's get started" was sentiment heard in a number of discussions, reflecting support for the general concept of BRT and a bit of impatience that it has not moved forward more quickly.

- ***"Let's do it right***." Participants articulated the need for BRT to be reliable and high-quality. Many called for dedicated bus lanes. Others suggested using new technologies to ensure reliability. "I think it would be fantastic… if it's done right," was a typical comment.

They are concerned about:

- ***BRT can seem to be suboptimal transit***. The most common negative comments reflected a sense of disappointment that the region would "settle" for BRT. Some participants noted that BRT would not be fast enough and it would not be permanent. Attendees said that many commuters have negative attitudes about buses that will be hard to change. Others were worried that the focus on BRT would divert attention from the needs of Metrorail.

- *Too easy to not do it right*. Some participants expressed skepticism that the region's jurisdictions would end up implementing a more limited version of express bus service and label it "BRT." Some warned that without dedicated lanes, it would not be worth it.

- *Best purpose for BRT is not clear*. While some forum participants suggested that BRT could be used for a wide variety of purposes, others said they were confused about how it would be best used. Was it better for low-density or higher-density locations? Interstate highways or arterials? Does it really need lots of bells and whistles, or is it essentially a low-cost alternative to rail? Discussions suggested the BRT concept could suffer if it is presented as an option for all unmet transit needs.

- *Community needs still need to be addressed*. Some attendees expressed concern that BRT could undermine important local bus services. Others noted that first- and last-mile connections to transit are necessary to make BRT— or any high-quality transit service— effective.

- *This is already an old solution*. At some forums, participants said that the region's focus on BRT is evidence of out-of-date planning. Ride sharing services, like Uber and Lyft, are already negatively affecting transit ridership, they said, and the emergence of autonomous vehicles will soon make it largely obsolete.

MOVE MORE PEOPLE ON METRORAIL

People would like to see:

- *Affirmation of key elements in the initiative.* Participants articulated the important role that Metro plays in our region and expressed strong support for key elements of the initiative, particularly eight-car trains.

- *Promote synergistic impacts*. Many participants identified features of the other TPB initiatives that could have a positive impact on Metro's core capacity. For example, discussions focused on land-use improvements and express bus services that could reduce pressure on the core.

- *Consider modified versions of the full initiative*. Some comments identified more modest improvements in core capacity that they said were more achievable in the short-term, such as terminating Silver Line service at Rosslyn instead of building a new Blue Line station.

- *Make short-term improvements*. Small group discussions on this initiative invariably identified operational and other short-term improvements, such as better lighting and signage. Participants at many sessions also called for adjustments or reductions in fares. Many said that the system is too expensive, especially when compared with driving.

They are concerned about:

- *Apparent intractability of the funding shortfall*. Participants frequently expressed frustration about what they perceived to be a lack of leadership to more conclusively solve the Metro system's funding shortfall. Many observed that this is clearly an urgent problem and it has been apparent for quite a while.

- *Reversing negative public attitudes*. Many participants said that a prolonged period of bad publicity has affected public opinion about Metro. Those negative attitudes will be hard to reverse, they said.

- *Too much focus on the core*. Particularly in the outer jurisdictions, forum attendees expressed concern that their transit needs are being ignored because of the unrelenting focus on Metro. Some called for increased attention on commuter rail and express buses. Others said the region should focus on circumferential rail, such as continuation of the Purple Line into Virginia.

PROVIDE MORE TELECOMMUTING AND OTHER OPTIONS FOR COMMUTING

People would like to see:

- *Increased worker satisfaction and productivity.* Participants highlighted the personal advantages of telework, including reducing the stress of driving and using transit. They spoke less about the positive effects of telework on regionwide congestion.

- *Government incentives and/or requirements.* At a number of forums, participants called for tax incentives to encourage telecommuting. Others suggested local governments establish rules requiring offices over a certain size to have designated Transportation Demand Management staff to handle employee transportation issues.

- *More options for federal workers.* At many forums, participants said that our region's largest employer, the federal government, should take the lead in providing telework options.

- *Broadband improvements.* In outer jurisdictions, forum attendees emphasized that reliable internet access is still not the norm in many rural areas of our region. This is a major impediment for teleworking.

- *Changes in implementation and promotion*. Participants offered a variety of suggestions for how businesses can implement telework policies effectively. They said that more education is needed and that change is often slow, especially among older supervisors.

They are concerned about:

- *Federal policies rolling back telework.* At several forums, participants expressed concern that recently the federal government has become more restrictive with telework policies.

- *Telecommuting won't work for many jobs*. Many participants commented that teleworking is largely focused on professional office jobs, and policy makers must be sensitive to the fact that it will not work for many employees. Others expressed fears about losing a sense of collaboration and team work if teleworking is implemented too widely.

- *Impact on communities*. Some attendees suggested that we may need to design communities differently if a significant percentage of the population is working from home. Some noted that office space already has been overbuilt in some places in the region.

- ***Potential to exacerbate congestion.*** Some forum participants expressed skepticism about the initiative's promise to reduce car trips and cut congestion. They feared that more people working at home would result in more discretionary trips throughout the day. Some also said that a concurrent increase in teleworking and the emergence of autonomous vehicles will create a world in which vehicles are circulating on the roads on a more pervasive basis.

EXPAND THE EXPRESS HIGHWAY NETWORK

People would like to see:

- ***Effective and efficient demand management.*** Participants at a number of sessions spoke positively about the express lanes that are already in place in the region, saying they are providing options that are less congested and they increasingly are accepted by the public. Some spoke positively about the revenue that toll roads generate.

- ***New road capacity.*** At a number of forums, participants listed road improvements they would like to see, and they understood that such projects are much more likely to happen if they are tolled.

- ***Operational enhancements.*** Attendees offered specific suggestions for making toll roads more user-friendly and reliable. Suggested ideas included better coordination of EZ passes and improved signage. Some noted that new technologies, particularly associated with the emergence of autonomous vehicles, should be coordinated with express lane technologies.

- ***Combined with high-quality transit.*** Participants at several forums emphasized the opportunities for new transit that will be offered by express lanes, including congestion-free travel lanes and new revenues that can be directed to transit.

They are concerned about:

- ***Objections to road widening.*** Participants at some forums expressed broad objections to all road widenings, noting concerns about generating induced demand and displacing bottlenecks to other locations. Some specifically criticized recent measures, such as the new Traffic Relief Plan in Maryland or the I-66 HOT lanes in Virginia.

- ***Lack of interjurisdictional/inter-state coordination.*** Even some participants who supported the concept of express lanes said they were concerned that facilities did not seem to be coordinated between jurisdictions and particularly, across state lines.

- ***Focusing on the affluent.*** At a number of forums, participants used the term "Lexus lanes" to criticize the preferential treatment that express lanes provide to those who can afford to pay.

- ***Transit will get left behind.*** Participants at some sessions were cynical about whether express lanes will actually provide significant improvements in transit. Some doubted that toll revenues would be adequate enough for meaningful transit improvements or that decision makers would ultimately direct revenue to transit at all.

- ***Bad personal experiences.*** Some attendees expressed frustration with toll road experiences. They said that on a daily basis, it was difficult to know whether or not express lanes were

worth using. Some said the current lanes did not offer enough benefit to warrant the significant cost.

IMPROVE WALK AND BIKE ACCESS TO TRANSIT

People would like to see:

- ***Build on recent successes.*** Many participants said the region has become much friendlier to walking and biking in recent years. But, some noted, more work needs to be done, especially in the outer edges of the region and in low-income communities. Participants called for walking and biking to be better integrated into local planning. Some suggested that private development funding should be tapped more extensively.

- ***Prioritize specific projects and locations***. Participants suggested a variety of methods for prioritizing ped/bike access to transit, such as focusing on locations with high crash rates or identifying key gaps in existing sidewalk networks. Many participants suggested specific projects and locations. For example, participants at the Fairfax forum called for better connections between Tysons and neighboring communities.

- ***Suggested types of improvements***. Attendees listed numerous types of improvements they would like to see, such as pedestrian bridges, protected bike lanes, and traffic calming measures. Many highlighted the importance of enhancements such as better lighting and signage. Some noted the importance of ensuring that facilities can accommodate a variety of users, particularly seniors and people with disabilities. Some called for a separation on multi-use paths between pedestrians and bicyclists.

- ***Cultural shift.*** In a variety of ways, many participants said they looked forward to a continued shift in how walking and biking are viewed. They said that more education is needed to encourage respect for non-motorized transportation- and to encourage more people to walk and bike. Some said that employers should be encourage or required to support bicycling and walking.

They are concerned about:

- ***Walking and biking are still not adequately promoted.*** Some forum participants said that despite recent improvements, local and state governments still are not doing enough to promote walking and biking. Participants said that such improvements should be better funded. Others said that improvements around transit are often accompanied by capacity improvements for vehicles, but not necessarily for walking and biking.

- ***Perceived divisions between bicyclists and pedestrians.*** At several forums, participants expressed concern about growing animosity between walkers and bikers. Some criticized bicyclists for being discourteous to pedestrians. A number of attendees also complained about dockless bicycles, which they said frequently create obstacles on sidewalks and eyesores in parks.

- ***Don't forget about vulnerable populations.*** At a number of forums, participants emphasized that pedestrian access to bus transit is major problem, and the region should not only focus

on access to rail. Other attendees reminded decision makers not to forget about the needs of people with disabilities.

- *Bicycling and walking are still too dangerous*. A number of participants highlighted concerns about the continuing dangers of walking and biking. Some even suggested that with ongoing safety challenges, it was irresponsible to promote non-motorized transportation.

COMPLETE THE NATIONAL CAPITAL TRAIL

People would like to see:

- ***A connected regional trail system.*** Participants at several forums envisioned a network of high-quality, inter-connected trails throughout the region. In some cases, they identified specific paths and trails that should be included in such a system.

- *Better maintenance, enhancements*. Attendees identified key features, particularly better lighting, that are needed to make trails available and attractive to a variety of users. Others highlighted the importance of trail maintenance.

- *Separated bikeways*. Citing concerns about safety, some participants emphasized that bike lanes need to be separated from vehicular traffic and from pedestrians as well. Participants also suggested that more access points to trails were needed.

- *Trails extensively used for transportation, not just recreation*. Trail supporters emphasized that trails in the future should become widely accepted as ways to get to work and to school, and not simply viewed as recreational facilities. Some forum participants spoke about the need to get employers to promote bicycling and trail use, including a suggestion to create incentives for commuters to use trails.

They are concerned about:

- ***The National Capital Trail is too narrowly defined.*** Particularly outside the regional core, it seemed that participants could not directly relate to the limited geography of the National Capital Trail that was identified in the TPB's endorsed initiatives. In some cases, they wondered why specific trails in their jurisdiction had been left out.

ASSESSMENT OF THE FORUMS

The forums accomplished their primary purpose of gathering qualitative input to inform future implementation activities related to the TPB's endorsed initiatives. The summary of key themes, which is provided in this report, reflects more than 100 thoughtful discussions that explored the underlying motivations, hopes, and anxieties of a broad range of residents from throughout the region.

More than 300 people attended the sessions and satisfaction was high. Evaluation forms completed at the end of each event gave high marks to the program's content and outcomes. Staff also received positive feedback on an anecdotal basis during and after the forums. Participants, who in

some cases arrived at the sessions with a sense of skepticism, seemed to generally "feel heard" by the time the meetings concluded. There were, not surprisingly, some exceptions to these generally positive attitudes.

A continuing challenge in organizing these types of sessions is trying to ensure organizers are reaching people who may not be typically active in transportation planning activities. To a large extent, the attendees at the sessions were already active in planning in their communities and in some cases, they were participants in the TPB process. Further, the demographic makeup of the forum participants did not fully reflect the region's racial and ethnic diversity, despite attempts to reach minority communities in advertising the forums.

A special forum conducted for the TPB's Access for All Advisory Committee was included in the program of forums in an attempt to be sure the perspectives of disadvantaged communities were included in this outreach effort. In the future, TPB workshops and forums may seek to tap into established groups and meetings to ensure that particular voices are heard. Focus groups, in which participants are paid, may also be conducted to augment the input that is received and make sure that key voices are not left out.

Because staff anticipated that attendance at the forums would likely be disproportionately comprised of people who are already active in the planning process, these events were only one part of a larger effort to conduct outreach for Visualize 2045. Indeed, the survey conducted during Phase I outreach activities, which is described in the introduction of this report, was specifically designed to be more broadly inclusive by reaching a large number of people who would not be expected to attend public meetings. For future updates of the TPB's long-range plan, public outreach is again likely to employ a variety of techniques to try to maximize input from a variety of voices and communities.

OPEN HOUSES

To wrap up outreach activities, the TPB held three open houses in September 2018 as part of the final public comment period for Visualize 2045. These sessions, which were open between 4:00 and 7:00 p.m., were hosted at the following locations and dates:

- September 12, Upcounty Regional Services Center, Germantown, Maryland
- September 13, Ron Brown College Preparatory High School, District of Columbia
- September 17, Virginia Department of Transportation District Offices

The open houses featured 22 display boards on easels with content derived from the draft elements of the plan. Subject-matter experts from the TPB staff and the TPB's member governments were on-hand at the events to talk with the region's residents in informal, one-on-one conversations. Participants included unaffiliated residents, advocacy group representatives, other active stakeholders, and elected officials.

Conversations at the open houses were wide-ranging. Some participants came to discuss specific projects, while others wanted to learn about the plan's regional analysis and forecasts. Still other attendees came to share their ideas about emerging challenges and future planning activities. The event in the District of Columbia was combined with the monthly meeting of the TPB's Citizens Advisory Committee, which gave committee members the opportunity to discuss the open house format and provide input on the Visualize 2045 outreach efforts overall.

In all, more than 100 people attended these events to learn about and discuss the full range of content in Visualize 2045, including major planned improvements, the systems performance analysis, the financial plan, and aspirational elements. While the open houses were primarily designed to share information with the public, the sessions turned out to be a useful way for TPB staff, elected officials, and jurisdiction staff to observe and better understand how residents will react to the ideas and contents in the draft plan. These observations will help the TPB and its staff position itself for future planning activities and outreach efforts.

NEXT STEPS

Following a final 30-day public comment period, the TPB is scheduled to approve Visualize 2045 on October 17, 2018. Future outreach efforts conducted by the TPB are expected to focus on implementation of the seven endorsed initiatives.

visualize2045

A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

APPENDIX J

Public Outreach: Summary of Public Comment Periods

October 2018

APPENDIX J: SUMMARY OF PUBLIC COMMENT PERIODS ON THE VISUALIZE 2045 LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

October 17, 2018

ABOUT VISUALIZE 2045 & THE TPB

Visualize 2045 is the federally required long-range transportation plan for the National Capital Region. It identifies and analyzes all regionally significant transportation investments planned through 2045 to help decision makers and the public "visualize" the region's future.

Visualize 2045 is developed by the National Capital Region Transportation Planning Board (TPB), the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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SUMMARY OF PUBLIC COMMENT PERIODS

The TPB held a total of three 30-day public comment and inter-agency review periods during the development of Visualize 2045. The first comment period was held, according to the schedule set forth in the Technical Inputs Solicitation document between December 14, 2017 and January 13, 2018. This comment period was focused on the projects being submitted for inclusion in the Air Quality Conformity Analysis of Visualize 2045 and the FY 2019-2024 TIP. Comments were received from 166 individuals, non-profit organizations, or governmental representatives during this period. These comments and the responses provided by TPB staff and the implementing agencies are summarized in the memorandum dated January 17, 2018 on page 3. A compilation of all comments received during this period follows that memo.

A second 30-day comment period on the inputs to the conformity analysis was held from January 19 – February 17, 2018. This comment period was held to include the New Hampshire Avenue Bus Rapid Transit (BRT) project along with the other BRT projects that Montgomery County had previously submitted. Comments were received from five individuals and two governmental representatives. The comments and responses are summarized in the memo dated February 21, 2018 on page 63. The memo is followed by a compilation of those seven comments.

The Technical Inputs Solicitation schedule called for a final comment period to be held from September 13 – October 13, 2018 on the plan, its performance, and the Air Quality Conformity Analysis. In March 2018, the TPB Steering Committee reviewed and approved a TPB staff recommendation to change the dates of the fall public comment period to September 7 – October 7, 2018. The purpose of this change in dates was to give TPB staff and member agencies more time to review, consider, and respond the comments received prior to the TPB's scheduled action to approve Visualize 2045 on October 17, 2018.

During this final comment period, 109 comments were received from individuals, governmental representatives, and non-profit organizations. A summary of these comments and the responses provided by TPB staff and the implementing agencies, are presented in the attached memo dated October 11, 2018. A compilation of all comments received during this period follows that memo.

DECEMBER 14, 2017 – JANUARY 13, 2018 COMMENT PERIOD

MEMORANDUM

TO: Transportation Planning Board

FROM: Lyn Erickson, TPB Plan Development and Coordination Program Director

SUBJECT: Summary of Comments Received and Proposed Responses on the Project Submissions for Inclusion in the Air Quality Conformity Analysis of the constrained element of Visualize 2045 and the FY 2019-2024 Transportation Improvement Program (TIP)

DATE: January 17, 2018

At the December 20, 2017 meeting the board was briefed on the draft project submissions to be included in the Air Quality Conformity Analysis of the constrained element of Visualize 2045 and the FY 2019-2024 TIP. The project submissions were released for a 30-day public comment and interagency review period at the TPB Citizens Advisory Committee meeting on December 14, 2017. This comment period closed on January 13, 2018.

Comments submitted by individuals, organizations and businesses have been posted on the TPB's website at www.mwcog.org/TPBcomment. This memorandum provides a summary of the comments received and responses provided by TPB staff in consultation with the implementing agencies. A compilation of the comments received as posted is provided separately from this memorandum.

The TPB will be briefed on the comments received and responses provided. Following that briefing, the board will be asked to approve the project submissions for inclusion in the Air Quality Conformity Analysis of the constrained element of Visualize 2045 and the FY 2019-2024 TIP. The comments and responses will be included in the documentation of Visualize 2045.

COMMENTS AND RESPONSES

Comments were received from 166 individuals, non-profit organizations, or governmental representatives. TPB staff have reviewed each comment and summarized their main points in this memo. Where comments pertain to the TPB's processes and procedures, TPB staff have provided responses. For comments that are project-specific in nature, the implementing agencies have provided responses. Comments were received on the following projects and topics:

A. I-270 and I-495 Toll Lanes
B. I-95 Southbound Auxiliary Lane
C. MD 201 Widening
D. US 301 Widening
E. MD 97 Widening
F. US 15 Widening
G. New Hampshire Ave. BRT
H. Development, structure and content of the constrained element
I. Other Comments

A. I-270 AND I-495 TOLL LANES

Two sets of comments were received on MDOT's proposal to add two new managed lanes in each direction on I-270 between I-495 and I-70, and on I-495 from the American Legion Bridge to the Woodrow Wilson Bridge.

1. **Comment:** The portion of I-495 from the American Legion Bridge to I-270 and of I-270 from the split north should be prioritized and completed first.

   MDOT Response: The Hogan Administration's proposed Traffic Relief Plan would add new managed or toll lanes to I-270 and I-495 (Capital Beltway), leaving the existing lanes un-tolled. These managed lanes will provide drivers with the choice to pay for a quicker trip, simultaneously reducing delays for those who choose to stay in the existing free lanes. During the development process, MDOT and the private concessionaire will be looking at the best way to phase these improvements.

2. **Comment:** These projects will only benefit private partners and roads will remain crowded.

   MDOT Response: The Hogan Administration's proposed Traffic Relief Plan would add new managed or toll lanes to I-270 and I-495 (Capital Beltway), leaving the existing lanes un-tolled. These managed lanes will provide drivers with the choice to pay for a quicker trip, simultaneously reducing delays for those who choose to stay in the existing free lanes.

   These improvements to our most congested roadways are critical to spur increased economic development and restore quality of life for countless Marylanders who have been negatively affected by years of traffic congestion, both in the Baltimore City and Washington, D.C. metropolitan areas. Maryland has the second-longest commuting times in the country, and the Washington metropolitan region is the most congested region in the nation based on annual delay and congestion cost per auto-commuter data. More information on the Traffic Relief Plan is available on the Maryland Department of Transportation State Highway Administration (MDOT SHA) website at www.roads.maryland.gov/trafficreliefplan.

   The Hogan Administration will continue to pursue a balanced approach to address transportation demands. In addition to the Traffic Relief Plan, the Maryland Department of Transportation (MDOT) is moving forward with Purple Line construction in Montgomery and Prince George's Counties and the recently revamped Baltimore's transit system BaltimoreLink launch. We have pledged more funding for the Washington Metropolitan Area Transit Authority (WMATA) with Virginia, Washington, and the federal government matching Maryland's offer.

3. **Comment:** The Coalition for Smarter Growth and co-signatories oppose the 76-mile Maryland Express Toll Lanes proposal for the Beltway and I-270. Unlike the Virginia HOT lanes, the Maryland proposal doesn't guarantee that HOV users will travel free, and doesn't use the revenues to fund express bus service or build park and ride lots for carpoolers and transit users.

   MDOT Response: The Express toll lanes projects along Maryland's portion of I 495 and I 270 is currently under development under a public private partnership program. The project scope as currently proposed is preliminary and likely to evolve further as alternative private sector proposals are evaluated. Maryland Department of Transportation will be considering all proposals including special toll treatment for HOVs, toll exempt transit services along the express lanes and other rideshare and transit supportive investments in the corridor. The TPB will be

notified and briefed on any further evolution of the scope of work and services for these two projects.

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The Hogan Administration will continue to pursue a balanced approach to address transportation demands. In addition to the Traffic Relief Plan, the Maryland Department of Transportation (MDOT) is moving forward with Purple Line construction in Montgomery and Prince George's Counties and the recently revamped Baltimore's transit system BaltimoreLink launch. We have pledged more funding for the Washington Metropolitan Area Transit Authority (WMATA) with Virginia, Washington, and the federal government matching Maryland's offer.

B. I-95 SOUTHBOUND AUXILIARY LANE

Five sets of comments were received in support of VDOT's proposal to add an auxiliary lane on I-95 between VA 123 and VA 294.

1. **Comment:** The terminus should extend to VA 234

   VDOT Response: While the comment supports the project, any extension would require further project development and collaboration between VDOT, Prince William County, Fairfax County, Metro and Trans Urban.

2. **Comment**: The project should be implemented sooner than the projected 2028 completion date.

   TPB Staff Response: Staff have forwarded this recommendation to VDOT.

3. **Comment**: The intersection with VA 123 should be improved by converting the I-95 southbound lane to an exit lane ramp to VA 123 northbound, shifting VA 123 exit ramp from I-95 southbound to west of the I-95 entrance ramp from US 1 (removing merging point), removing the ramp from VA 123 to I-95 southbound, adding dual left-turn lanes to provide access from VA 123 to I-95 southbound, and adding an auxiliary lane on southbound I-95 from US 1 to VA 294.

   VDOT Response: The comment supports the I-95 South Bound Auxiliary Lane between Route 123 and Route 294 proposed by Prince William County. The county has developed a funding plan that would meet the TPB's Fiscal Constraint standard. The wide range of additional projects suggested would require further project development and collaboration between VDOT, Prince William County, Fairfax County, Metro and Trans Urban.

C. MD 201 WIDENING

Two sets of comments were received on MDOT's proposal to widen MD 201 from I-495 to north of Muirkirk Road.

1. **Comment:** The project should include a separated bicycle/pedestrian path.

   MDOT Response: Bicycle and pedestrian access will be considered as part of the project. However, the manner in which bicycles and pedestrians will be accommodated would need to be determined as part of the project development process.

2. **Comment:** The project should also improve the Sunnyside Road bridge over Indian Creek and the Powder Mill road bridge over the railroad tracks.

   MDOT Response: Should the MD 201 improvements move forward, bridge improvements on Sunnyside Road and Powder Mill Road will not be a part of the scope of the project since they would not help to remedy the congestion issues along the MD 201 corridor. Further, Sunnyside Road is a Prince George's County road, and is not a part of the State roadway system. MDOT SHA will not be providing improvements to bridges along Sunnyside Road as part of the MD 201 improvements.

3. **Comment:** The project will increase pollution and encourage further development.

   MDOT Response: The MD 201 project is being considered with input from Prince George's County to address traffic generated by the existing and planned development in the area. All transportation improvements will go through a rigorous planning process that will include the environmental impacts of all proposed alternatives. Transit accommodations will be examined through this process as well and will allow for significant public outreach and involvement. This project is not currently funded for planning and is slated to be completed in 2045. The purpose and need for this project will be the first step in the process and will not be started for some time.

D. US 301 WIDENING

Three sets of comments were received on MDOT's proposal to widen US 301 from the Governor Harry Nice Bridge to US 50.

1. **Comment:** The project should include provisions for future transit accommodations.

   MDOT Response: Transit accommodations along the US 301 corridor in portions of Prince George's County and Charles County have been under consideration for some time. As part of MDOT MTA's Southern Maryland Rapid Transit (SMRT) study, MDOT MTA has worked with MDOT SHA to develop transit alternatives that are compatible with planned MDOT SHA projects along the US 301 and MD 5 corridors in Prince George's County and Charles County. In August 2017, MDOT MTA released the SMRT Alternatives Report, which consists of a summary of LRT and BRT alternatives that were developed. Currently, MDOT SHA has been focusing on a subset of the larger MD 301 Transportation Corridor project; the MD 5 (Mattawoman-Beantown Road) and US 301/MD 228/MD 5 Business intersections. MDOT SHA is currently exploring various improvements and strategies to best address the safety and operation needs at these two intersections.

2. **Comment**: The facility should be upgraded to a limited-access highway without stop lights and with highway speed limits throughout.

3. **Comment:** Effective alternatives to the proposed expansion of Route 301 from Route 50 to the Henry Nice Bridge from 4 to 6 lanes throughout the corridor have not been studied.

   MDOT Response: The large-scale US 301 South Corridor Transportation Study (I-595/US 50 to the Potomac River) has been on hold awaiting funding for the completion of planning and subsequent phases. For a significant portion of this corridor, MDOT SHA has developed an overarching vision for the US 301 corridor between US 50 and the MD 5 Split at T.B./Brandywine in the 1999 Access Management Plan for US 301. The plan envisions a six-lane, fully access-controlled freeway, with service roads on one or both sides. However, as an immediate measure to address operations and safety on US 301, MDOT SHA has been focusing on a subset of the larger MD 301 Transportation Corridor project, the MD 5 (Mattawoman-Beantown Road) and US 301/MD 228/MD 5 Business intersections. MDOT SHA is currently exploring various improvements and strategies to best address the safety and operation needs at these two intersections.

E. MD 97 WIDENING

One comment was received in opposition to MDOT's proposal to widen MD 97 at the interchange with I-495.

1. **Comment**: Enhanced transit service would serve the area better than widening this facility.

   MDOT Response: MDOT SHA is conducting a study, funded by Montgomery County, to address MD 97 (Georgia Avenue) safety and traffic operations between MD 390 (16th Street) and MD 192 (Forest Glen Road). This study's purpose and need is not focused on traffic capacity improvements to MD 97, which in most segments between MD 390 and MD 192 already has seven or eight lanes including the existing dynamic center lane. Currently, MDOT SHA is working to identify a selected alternative and complete the study in line with the federal transportation planning process. Montgomery County prioritizes the identification of design funding for MD 97 improvements in its 2017 transportation priorities letter, submitted to MDOT in June 2017. Currently, full design funding remains to be identified.

F. US 15 WIDENING

Six sets of comments were received in opposition to VDOT's proposal to widen US 15 between Battlefield Parkway and Montresor Road.

1. **Comment**: The project circumvents an underway Loudoun County public process by local stakeholders for improvements to this road. The stakeholders group has not reached consensus. Requested analyses by stakeholders (of induced traffic, environmental and safety impacts) have not been conducted.

   VDOT Response: The Loudoun County Board of Supervisors has gone on the record in October 2017 as supporting the widening of Route 15 from two to four lanes from Battlefield Parkway to Rte 661 Montresor Road. The scope of work for the county's stakeholders group is to provide

recommendations for specific elements of the widening (i.e. configuration of some of the intersections, and to provide input on the continuing study of how much farther north the widening should extend.

2. **Comment:** The project does not meet criteria to achieve Goal 4: Maximize operational effectiveness and safety, or Goal 5: Protect and enhance the environment, as stated.

   VDOT Response: The corridor is experiencing severe congestion on a daily basis and elevated instances of severe crashes. See the study Route 15 Congestion Report dated May 2017 and revised through October 2017, prepared for the Loudoun County Board of Supervisors by Kimley Horn.

3. **Comment:** The project is being forwarded before the Loudoun County Board of Supervisors has voted to approve the Comprehensive Plan Amendment to change the designation of the road from a 2-lane local access rural arterial to a 4-lane median-divided controlled access rural arterial.

   TPB Staff Response: Including this project in the air quality conformity analysis does not preclude Loudoun County from changing the functional class in its documentation of the transportation system. Similarly, a change to the functional class of the roadway at the County level would not preclude the TPB from including the project in the analysis.

   VDOT Response: When the Loudoun County Board of Supervisors endorsed a four lane Route 15 from Battlefield Parkway to Montresor Road in October 2017, they also requested VDOT to utilize all existing SYIP funds allocated to the Route 15 corridor north of Leesburg to initiate preliminary engineering.

4. **Comment:** The entire length of Route 15 between north of Leesburg to the Potomac River at the Point of Rocks Bridge needs to be considered in this project

   Loudoun County Response: Route 15, between Whites Ferry Road and the Maryland state line, is the subject of the Route 15 Safety and Operations Study which is in progress. That project will determine how far north the widening needs to be extended. Traffic counts were recently captured; the analysis is ongoing.

   According to VDOT's traffic data, the traffic counts decrease on Route 15 as you head north from Whites Ferry Road because drivers are turning onto local roads.

   The Point of Rocks bridge over the Potomac River, crossing into Maryland, is only 2 lanes. It doesn't make sense to widen Route 15 all the way to the Maryland line if the bridge is going to remain 2 lanes. We are planning to meet with representatives from the Maryland State Highway Administration and Frederick County, MD as part of the Safety and Operations Study to find out if there are any planned improvements to Route 15 in Maryland.

5. **Comment:** The project should not be included in the constrained element until a roundabout or traffic-calming alternatives have been fairly studied.

   Loudoun County Response: The Route 15 Congestion Report, which is on-line at www.loudoun.gov/Route15 studied roundabouts at both Route 15/King Street and Route 15/Whites Ferry Road.

The report concluded that a roundabout would not work at Route 15/King Street. A roundabout at the intersection of Route 15/Whites Ferry Road could work, but there is some public opposition to it. Since the analysis determined that a traffic signal will perform as effectively as a roundabout at that intersection, County staff intends to recommend that the signal be retained for now (we understand that the signal will have to be modified to support widening of Route 15).

In August 2016, Loudoun County initiated the Route 15 Congestion Study and presented the Report to the Board on May 18, 2017, which recommended the widening of Route 15 from Battlefield Parkway to Montresor Road and identified improvement alternatives at the intersections of King Street and Whites Ferry Road.

Following the presentation to the Loudoun County Board on May 18, 2017, the Board directed the staff from the Department of Transportation and Capital Infrastructure (DTCI) to the following actions items:

1. Expand the Report to include a Safety and Operational Analysis of Route 15 from Whites Ferry Road to the Maryland State Line.
2. Conduct additional public workshops, including two rounds of two meetings, to present the Report and obtain feedback on the concepts for the Corridor Improvement Plan resulting from the Whites Ferry Road to Maryland state line corridor study;
3. Coordinate directly with the District Supervisors to conduct the public workshops and to establish a Stakeholders Committee. The purpose of the Stakeholder Committee is to gain feedback and public opinion on the Report and provide input for the development of the Safety and Operational Analysis;
4. Upon completion of the public workshops, return to the Board at a future Board Business meeting to obtain further direction regarding the Route 15 Congestion Report; and
5. Initiate a Comprehensive Plan amendment (CPAM) to modify the Countywide Transportation Plan (CTP) to extend the limits of the four-lane section of Route 15 from Tutt Lane to Montresor Road.

The first round of public engagement for the Route 15 Congestion Report and the Safety and Operations Study consisted of three public input meetings; an online interactive survey; establishment of a website for the Route 15 project; and creation of a dedicated email address (Route15@loudoun.gov) to receive input. A total of 239 people attended the public input meetings which were held on the following dates: June 26, 2017; July 8, 2017 and July 15, 2017.

A website was established for the Route 15 project (www.loudoun.gov/Route15), which provides the public with access to materials from the public input meetings and general project progress information. Through this website, individuals who were not able to attend one of the public input meetings can view the information that was presented including maps, presentations and the Report.

The County also conducted an internet based interactive survey between July 12, 2017, and July 24, 2017, which was linked through the project website. The survey provided input exercises that were similar to those given during the public meetings. The survey collected 2,006 unique responses. The County received 29 comments that were submitted through the Route 15 email address.

Key statistics from the public engagement process were as follows:

- Route 15 Widening to Montresor Road: 76% were in favor, 13% were in favor if certain conditions were met, and 11% were opposed;
- Route 15 and King Street Intersection Modifications: 52% favor grade separation, 34% favor a roundabout, and 14% favor a traffic signal
- Route 15 and Whites Ferry Road/Raspberry Drive Intersection Modifications: 57% favor a roundabout, 22% favor a traffic signal, and 21% favor a bowtie roundabout

The result of the Route 15 public engagement process demonstrate that the majority of the public have expressed desire for Route 15 to be widened to four lanes to Montresor Road.

The Route 15 Stakeholder Committee has been established; there are 19 representatives from homeowner associations, business and civic groups located along the Route 15 corridor from the Town of Leesburg to the Maryland state line. The Stakeholder Committee has met three times; the documents are available on the County's Route 15 web site www.loudoun.gov/Route15.

Additionally, the County has initiated a Comprehensive Plan Amendment (CPAM) to amend the Countywide Transportation Plan (CTP), as directed by the Board of Supervisors, to show the Ultimate Condition of Route 15 to be a 4-lane median divided roadway north of Leesburg to Montresor Road. Staff presented at the Loudoun County Planning Commission public hearing on December 19, 2017. A recording of the meeting is available here. 23 members of the public spoke during the Planning Commission public hearing; 10 were in favor of the Route 15 CPAM; 9 were against; and 4 did not express support or opposition to it. Many of the concerns that were expressed by those who were opposed to the Route 15 CPAM concerned access issues that would be handled during design, not during the CTP amendment process.

The County has initiated a capital improvement project to widen Route 15 to 4-lanes to Montresor Road and we have submitted an application to the Northern Virginia Transportation Authority seeking funds for the project.

Additional VDOT Response: The need to widen Route 15 to four lanes is documented by Loudoun County's recent studies prepared by Kimley Horn. Impacts of the no-build alternative are also documented. The proposed transportation improvements will reduce congestion, thereby increasing accessibility and mobility for travelers. The County has worked with stakeholders and is in the process of preparing and adopting appropriate Comprehensive Plan amendments addressing Route 15.

The project will address traffic operations and safety. Currently, because of narrow lanes, lack of adequate shoulders, turn lanes and passing areas, and traffic significantly higher than the facility's capacity create conditions a driver's error can result in a crash that closes the facility for extended periods. It appears the commenter may be confusing controlled access with limited access, neither of which is contemplated at this time. The comments seemed to be centered on a potential median divided facility, details of which can be addressed during preliminary engineering.

VDOT is required to implement Context Sensitive Solutions (CSS) on all of its projects included in the Six Year Improvements Program (SYIP). The CSS approach seeks a realistic and practical balance between traditional transportation objectives and preservation of scenic, aesthetic,

historic, and environmental resources, and other community values and needs. It is also VDOT policy to incorporate provisions for non-motorized traffic on all SYIP projects. Widening the roadway will also improve water quality because current storm water management regulations require addressing water quality for existing pavements as well as increases in impervious surfaces

The project will improve the local as well as regional economy by providing more reliable access and reductions in major disruptions of the facility when there are severe crashes. The decrease in traffic congestion and the reduced disruption to mobility caused by crashes in the corridor will decrease travel time between Leesburg, VA and Maryland.

G. NEW HAMPSHIRE AVE. BRT

Two sets of comments were received urging that the New Hampshire Avenue BRT be included in the constrained element.

1. **Comment:** There is high density and demand for BRT service on New Hampshire Avenue and it has been identified as a priority project. This project should be included in the constrained element.

   TPB Staff Response: Montgomery County has reviewed this project and determined that it can be included in the constrained element for construction. Please see the public comment notice included with this item for more details.

H. DEVELOPMENT, STRUCTURE, AND CONTENT OF THE CONSTRAINED ELEMENT

Two comment letters were received from the Coalition for Smarter Growth and Just Economics on a variety of topics. Project-specific comments have been included elsewhere in this memo. These comments pertain to the development, structure and content of the constrained element. An additional 110 comments were received echoing the Coalition for Smarter Growth's comments.

1. **Comment:** The CLRP does not incorporate at its core the findings of the Transportation Planning Board's (TPB) Long Range Plan Task Force (LRPTF) findings. Specifically, it does not frame the CLRP around Balanced Land Use, Transportation Demand Management, Bus Rapid Transit, and Metro Core Capacity which performed best in the analysis and the voting by the task force.

   TPB Staff Response: The TPB's financially constrained long-range transportation plan is framed around its policy goals as described in its Vision and Regional Transportation Proprieties Plan documents. The proposed constrained element includes projects and reflects programs that support these policy goals and are reflective of the findings of the Long-Range Plan Task Force. In an effort to better achieve its transportation goals and priorities, beyond the levels its current transportation plan was anticipated to provide for, the TPB examined the types of projects, programs and policies that its member jurisdictions and agencies could implement beyond those already included in its financially constrained long-range plan. Based on this work, the TPB endorsed a set of concepts represented by five improvement initiatives it endorsed. These five initiatives are also rooted in the TPB's Goals and priorities, and specifically focus on better addressing the challenges the region faces in achieving its goals and priorities. In its resolution endorsing these initiatives, the TPB has issued a call to its member jurisdictions and agencies to "commit to fully explore the initiatives to identify specific implementation actions that could be

taken, individually and collectively, to make them part of TPB's future fiscally constrained long-range plans." An assessment of the proposed new projects against these endorsed initiatives has been undertaken for this update and will be considered by the Board.

2. **Comment:** The CLRP has never been explicitly structured to incorporate and support TPB's goals including those that are examined under scenario analysis.

   TPB Staff Response: The TPB has adopted a comprehensive set of multi-modal goals and objectives to support the socioeconomic and environmental development of the National Capital Region. These are explicitly documented in the TPB's Vision document. Additionally, the TPB, based on its Vision goals, developed a specific set of transportation priority principles reflected in its Regional Transportation Priority Plan document. The solicitation of inputs to the CLRP issued by the TPB explicitly notes these documents and calls for projects, programs and policies proposed to be added to the long-range plan to be consistent with and advance these policy goals and priorities. The various scenario analysis examined by the TPB are intended to better inform each successive edition of its CLRP of its policy goals and priorities.

3. **Comment:** We would like to see the dates of all transit projects (including MARC) moved up to as early an implementation year as possible.

   TPB Staff Response: The anticipated completion dates of all projects are based on the agency's estimate of the project readiness for implementation. This includes development of project details, needed local, state and federal approval and funding availability. It is not unusual for project implementation dates to be advanced in response to any acceleration in any of these aspects of project development and implementation.

4. **Comment:** Visualize 2045 largely fails to include regionally significant measures that can help achieve the balanced land use scenario. Measures such as pricing curbside and off-street parking; pricing all roadway travel, more infill development; comprehensive policy reform that would reduce sprawl should be undertaken in the region.

   TPB Staff Response: The region's jurisdictions and their planning offices have fully adopted the Regional Activity Centers concept to help plan the future growth in an efficient and sustainable manner. The long-term land use forecasts represented by MWCOG's cooperative forecasts Round 9.0 has a majority of the new growth in jobs and households located in regional Activity Centers. The TPB continues to promote a balanced and optimized distribution of jobs and housing in this region. One of the five improvement initiatives endorsed by the TPB is focused on this concept. The proposed update to his forecast, cooperative forecast Round 9.1, will be examined relative to previous forecasts to determine the extent to which it advances the optimize regional land use balance initiative endorsed by the TPB.

I. OTHER COMMENTS

- Thirty comments were received in opposition to the implementation of a Potomac River bridge crossing. Two comments were received in support of such a crossing.

  TPB Staff Response: A project of this nature has not been proposed for inclusion in the constrained element of Visualize 2045 or as a study by any agency and is not a subject of the Board's action at this time. A Potomac River crossing was included in a menu of items that

the Long-Range Plan Task force reviewed as part of a separate exercise, but was not advanced as a part of the recommended initiatives that the TPB endorsed in December 2017.

- One comment was received in opposition to the conversion of the Baltimore-Washington Parkway to an expanded tolled interstate style highway.

  TPB Staff Response: This project is not being proposed to be added to the long-range plan update at this time.

  MDOT Response: Currently, the Baltimore Washington Parkway is owned by the National Park Service (NPS), and the Maryland Department of Transportation (MDOT) has begun discussions with them and the Secretary of the Interior to transfer ownership of the facility to the Maryland Transportation Authority (MDTA). However, the project is in the 2018 long range plan as a study only. The proposed 4 Express Toll Lanes (ETL), 2 in each direction, will provide drivers with the choice to pay for a quicker trip, simultaneously reducing delays for those who choose to stay in the existing free lanes, similar to the I-95 ETLs in Baltimore.

- One comment was received in opposition to the inclusion of the Manassas Battlefield Bypass and Bi-County Parkway (Route 234 Extended North) in the constrained element due to its environmental impacts

  TPB Staff Response: The FHWA's Planning Department and VDOT will conduct an environmental impact study. Consistent with the requirement for such studies we expect all environmental impacts to be examined and every effort made to minimize the impact and mitigate any impact. Should the scope of the project change during this process the TPB will be notified of such changes

- Four comments were received in support of the bicycle lane projects proposed by DDOT.
- Four comments were received in support of the Montgomery County BRT projects.
- Individual comments were received suggesting the following projects or operational strategies be included in the constrained element in the future:
    - I-95 northbound auxiliary lane from VA 294 to VA 123
    - Metrorail on I-95 to Fredericksburg
    - a 4th Lane on I-95 throughout Prince William County
    - HOT Lanes on I-95 from I-495 to MD 100
    - a pedestrian mall crossing Potomac River
    - extension of the Purple Line connecting the ends of all Metro lines
    - light rail link to Baltimore Washington International Airport
    - replacement of timed traffic signals with on-demand signals
    - elimination of all "no turn on red" restrictions
    - planning for on-demand transportation service and autonomous vehicles

Compilation of Comments Received on the Project Submissions for Inclusion in the Air Quality Conformity Analysis of the Constrained Element of Visualize 2045 and the FY 2019-2024 TIP

Draft project submissions for the Visualize 2045 Constrained Element

Submitted by: A Business

Rybeck, Rick *Washington, District of Columbia 20009*

Just Economics LLC

Subject: Visualize 20145 - Public Comment

See attached document - page 11

Submitted by: A Governmental Body

Surovell, Scott *Mt. Vernon, Virginia 22121*

Virginia General Assembly Members

Subject:

See attached document - page 14

Hucker, Tom *Rockville, Maryland 20850*

Montgomery County Council

Subject: Letter on Visualize 2045

See attached - page 15.

Submitted by: A Non-profit Organization

Grymes, Charlie *Prince William County, Virginia 0*

Prince William Conservation Alliance

Subject: comments on project submissions to be included in the Air Quality Conformity Analysis for the constrained element of Visualize 2045

See attached. - page 17

Schwartz, Stewart *Washington, District of Columbia 20002*

Coalition for Smarter Growth and partners

Subject: Comments on draft CLRP

See attached sign-on letter by 8 organizations - page 19, additional supporting comments on page 41

Polkey, Martha *Leesburg, Virginia 20176*

The Catoctin Coalition

Subject: US 15 Widening from Battlefield Parkway to VA 661

The Catoctin Coalition strongly opposes the proposed project. 1. It circumvents an underway Loudoun County public process by local stakeholders for improvements to this road. The stakeholders group has not reached consensus. Requested analyses by stakeholders (of induced traffic, environmental and safety impacts) have not been conducted. 2. It does not in fact meet criteria to achieve Goal 4: Maximize operational effectiveness and safety, or Goal 5: Protect and enhance the environment, as stated. 3. It is being forwarded before the Loudoun County Board of Supervisors has voted to approve the Comprehensive Plan Amendment to change the designation of the road from a 2-lane local access rural arterial to a 4-lane median-divided controlled access rural arterial. 4. It circumvents an underway County process revising the comprehensive and transportation plans. I have attached a document that addresses, point by point, concerns with this transportation project. - page 40

Submitted by: An Individual

Pace, David *Woodbridge, Virginia 22192-1011*

Subject: US 301 WIDENING PROJECT

The Project "US 301 WIDENING From the Governor Harry Nice Bridge to US 50/I-595" is a good start, but it is insufficient to siphon East Coast through traffic from I-95/The Beltway. Through traffic will still be dissuaded from bypassing the Beltway route because US 301 will still be slowed by stoplights and community reduced speed limits. What is needed is to make US 301 a limited access highway with no stoplights and with full highway speed limits throughout. Compared to the proposed widening, adding limited access interchanges would be relatively cheap and would be far more effective than merely widening.

Slater, Tina *Silver Spring, Maryland 20910*

Subject: Comments/Concerns with draft Visualize 2045 Plan.

Attached please find my 2-page comment letter about the draft Visualize 2045 Plan. - page 23

Brenman, Marc *Kensington, Maryland 20895*

Subject: Comments on Visualize 2045 CLRP

See attached - page 25

Gustafson, Peter *Leesburg, Virginia 20176*

Subject: Route 15 Widening

Budiansky, Stephen *Leesburg, Virginia 20176*

Subject: comment on project submission for Visualize 2045: Rt 15

See attached - page 29

Logue, Patricia *Leesburg, Virginia 20176*

Subject: Route 15 Widening

Please see comments submitted to my (Selma Estates) Homeowners Association Stakeholder Committee Representative. The entire length of Route 15 between north of Leesburg to the Potomac River a the Point of Rocks Bridge needs to be considered in this project. This Project as described does not address the major congestion problem of daily traffic coming from Maryland and Pennsylvania by way of the Point of Rocks and Brunswick MD river crossings. It addresses northbound traffic leaving Leesburg only. Congestion relief and safety priorities for the entire length of Route 15 in Virginia north of Leesburg are listed in the attached document.

Milne, William *Lake Ridge, Virginia 22192*

Subject: I-95 Southbound Auxiliary Lane from VA 123 to VA 294

See attached document - page 30

Snow, Lucinda *Germantown, Maryland 20874*

Subject: Comments on Proposals in the Visualize 2045 Constrained Element

Here are my comments: * Regarding the proposed I-270 Toll Lanes from I-495 to I-70/US 40. All these new toll lanes are a fad congestion relief. I-270 should not be widened in Montgomery County and south. Adding a lane in each direction north of Montgomery County may be in order. The real â€œTraffic Relief Planâ€ for this region comes from the Brunswick Line MARC Expansion Plan, which should be implemented before any widening is done on I-270. * Regarding the proposed I-495 Toll Lanes from American Legion Bridge to Woodrow Wilson Bridge. Before anything is done on this plan the Purple Line should be completed and it's impact assessed first. If the impacts from the Purple Line on congestion are positive, then extension of the Purple Line should be considered before any 1-495 widening is

considered. * I can't comment on the other road proposals in MD, as I am not familiar with them. I do support the list of transit projects, that is where our major efforts need to go.

Boles, Margaret A. *Prince George's County, Maryland 0*

Subject: Comment on multiple topics

Document attached - page 31

Berger, Trent *Clifton, Virginia 20124*

Subject:

I strongly support the following project: 1) Adding HOT lanes on I-495 in MD from the American Legion to Woodrow Wilson bridges. 2) Extending the HOT lanes in VA to the American Legion bridge. 3) Adding the auxiliary lane on I-95 in Woodbridge. 4) Adding HOT lanes on I-270. Unfortunately, a few projects that are much needed I do not see here. These include: 1) Adding a 4th lane on I-95 throughout ALL of Prince William County 2) Adding HOT lanes on I-95 between the Capital Beltway and exit 43 in Maryland.

Brune, David R. *Woodbridge, Virginia 22192*

Subject: I-95 Southbound Auxiliary Lane from VA 123 to VA 294

Absolutely essential improvement project BUT it should not stop at VA 294 â€“ this improvement needs to continue to VA 234 which will make a much more meaningful impact. If at all possible â€“ this needs to happen sooner than 2025. Ideally, the extension to VA294 would be completed by 2020 with further extension to VA 234 by 2022.

Finnegan, Eileen *Silver Spring, Maryland 20903*

Subject: Comments on Visualize 2045 Constrained Element: Missing New Project

See attached - page 32

Blankinship, Brian *Woodbridge, Virginia 0*

Subject: I-95 Southbound Auxiliary Lane Comment (in favor)

See attached - page 33

McCoy, Kristina *Woodbridge, Virginia 22192*

Subject: I-95 Southbound Auxiliary Lane Comment (in favor)

The Visualize 2045 plan includes a potential I-95 Southbound Auxiliary Lane. Since this region is the most congested traffic area in the US, the project should be moved up earlier than the 2028 expected completion date. There is rarely a time day or night that this area is not congested. This is a safety hazard as the area looses a lane and effectively loses two lanes as traffic from Lorton/Rte-1/Ft. Belvoir merge from what becomes the Rte-123 merge lane. The effective loss of two lanes slow commuters and through traffic to a halt creating a dangerous mix of widely differing approach speeds. The constant traffic jam also increases pollution of both the air and the water below the bridge (Occoquan, a Chesapeake Bay tributary). Additionally it impacts the dynamic activity centers in the commercial realm, the DC commuter bedroom communities, and museums (Quantico Marine Corps Museum and pending American Military History). Thank you for this opportunity to comment. Regards

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Chisholm, Kevin *Arlington, Virginia 0*

Subject: Visualize 2045 Comment

Funding (near term and long term) heavily favors (1) automobile usage and (2) suburban projects or projects for citizens outside the beltway. Very little funding is projected to be used to encourage or support non-automotive transportation.

Scheufler, Mark *Manassas, Virginia 20111*

Subject: Draft project submissions for the Visualize 2045 Constrained Element - "I-95 Southbound Widening from VA 123 to VA 294"

Draft project submissions for the Visualize 2045 Constrained Element

See attached - page 34

Ausema, John *Greenbelt, Maryland 20770*

Subject: new projects

I have comments regarding several of the projects on the long range plan: 1 - For widening MD 201, this project should include a separated bike/ped path that also continues along the existing multi-lane section of road between Cherrywood Ln and Crescent Rd. Improvements to the Sunnyside Rd bridge over Indian Creek and the Power Mill road bridge over the RR tracks should be considered as part of the project, with enhanced bike/ped facilities 2 - Any widening of route 301 should include provision for a future transit way (rail or BRT) of some kind. 3 - I strongly support the BRT routes in Montgomery County and the bike lanes in DC 4 - For the proposed toll lanes in MD, the priority should be for re-building the American Legion Bridge and creating toll lanes from there to the 270 split and north along 270.

Other Regional Transportation Issue

Submitted by: A Non-profit Organization

Cameron, Diane *Kensington, Maryland 20895*

Conservation Montgomery

Subject: Thank you for voting NO on Outer Beltway Bridge.

As a member of the Board of Conservation Montgomery, and as a member & former staffer of Audubon Naturalist Society, I'm writing to thank the Board for voting NO on the proposed Outer Beltway Bridge. And, thank you for voting YES on improved funding for transit and bus service in our region.

Submitted by: An Individual

Rushing, Kathryn *Silver Spring , Maryland 20904*

Subject: Proposed Outer Beltway

Please, no outer Beltway! Protect our regionâ€™s drinking supply and water quality and do the right thing! Long-term solutions to traffic issues should never compromise public safety and the safety of our natural resources. Thank you.

Lindholm, Martin *Bethesda, Maryland 20814*

Subject: Do not build an outer beltway bridge

We are lucky to live in a region that is seeing rapid growth, but we all know this presents its own set of challenges. It has been shown that roads lead to increased sprawl and more car trips. The outer beltway is just such an initiative, more likely to exacerbate our transportation issues in the long term than to solve them. It also poses serious environmental issues, not just in the loss of green space and habitats, but also a substantial risk to the water that 5 million area residents drink. It is time for our region to focus on a more sustainable model of growth, with higher density areas accessible by public transportation. Our public transportation desperately needs a more ambitious vision and a commitment that stretches across jurisdictions and past the next fiscal year. If you aim to support our growth while reducing congestion, please focus on opportunities like tying together Montgomery County with Tyson's Corner using public transportation, not another beltway.

Bush, Elizabeth *Bethesda, Maryland 20816*

Subject: outer beltway, new bridge

I am NOT in favor of a new outer beltway/Potomac River crossing. There is too much chance of harming the entire region's water supply, which comes from the Potomac River, downstream of the proposed River crossing.

Todd, Cindy *SILVER SPRING, Maryland 20904*

Subject: NO new bridge over the Potomac

No new bridge over the Potomac. This is STILL a bad idea and jeopardizes our water supply.

Chevy Chase, Frank *Chevy Chase, Maryland 20815*

ANS - Jones Mill Road

Subject: Potomac River bridge

Thanks for not pursuing another bridge across the Potomac. Our water supply will be in much better shape if this bridge is not built.

Cochran, Clayton *Kensington, Maryland 20895*

Subject: Proposed New Bridge for the Potomac River

I am writing as former Conservation Chair of the Potomac Chapter of the Appalachian Mountain Club, a current volunteer Trail Ranger for Montgomery County, and a volunteer with the Audubon Naturalist Society, and a nearly 50-year resident of Montgomery County. The LAST thing that Montgomery County needs is to again bridge the Potomac River. Catering to the business interests of Virginians (who have turned over their countryside to massive road systems

and dreadful sprawl), and to a few parochial Mont. Co. business interests will do great damage to the general public. We depend on good water from the Potomac. The massive traffic that will indundate our county via a new bridge will forever change the character of our area. Please do not allow this monstrosity to proceed and think of people, not special interests. Thank you, Clayton E. Cochran

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Greene, Mitch *Silver Spring, Maryland 20901*

Subject: Thank you.

Thank you for not advancing the Northern Potomac bridge crossing. While I firmly believe that more ways across the Potomac are necessary to improve traffic flow in the area, building a whole new bridge--in a sensitive area!--is not the answer. Perhaps I live in a fantasy world but I love stacked highways and bridges. They're complicated, but they use the (mostly!) unused vertical space. Thank you again for keeping our drinking water safe.

Goldberg, Robert *Germantown, Maryland 20876-4422*

Subject: Outer Beltway - northern Potomac bridge crossing

See attached - page 39

Whitfield, Paula *Silver Spring, Maryland 20910*

Subject: strongly against outer beltway bridge.

I am strongly, vehemently opposed to the propose beltway bridge. Not only would it put our drinking water supply in danger it would continue to fragment and destroy habitat even more than it already has been in this area.. enough is enough.. NO to this bridge! Thank you, Paula

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Liotta, Marilynn *Silver Spring, Maryland 20902*

Subject: Potomac bridges

No more bridges across the Potomac..think about pollution please. And fix the metro and it's parking facilities so it's appealing enough to transport more people.

Ambler, Anne *Silver Spring, Maryland 20902*

Subject: Thanks for prioritizing drinking water: no new highway bridge

Thank you for not including another highway crossing of the Potomac in the long range transportation plan. The focus should be on providing comprehensive mass transit as a large part of improving quality of life while preserving our forests and farms. Another bridge and the highway that would connect it would have seriously degraded our water supply, through both the construction itself and the development and traffic it would bring. Sincerely, Anne Ambler Silver Spring

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Bartolomeo, Kathleen *Greenbelt, Maryland 20770*

Subject: Potomac Bridge

Thank you for protecting our water by not voting for the new Potomac Bridge. Sincerely, Kathy Bartolomeo

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Goldberg, Robert *Germantown, Maryland 20876-4422*

Subject: Thank you for not recommending the additional bridge crossing of the Potomac River

Thank you for not recommending the additional bridge crossing of the Potomac River. Your decision will help to protect our drinking water, farms, and Agricultural Reserve.

Bailey, Joyce *Barnesville , Maryland 20838*

Subject: outer Beltway Bridge across the Potomac

Dear Planning Board Members, I am writing to encourage you to NOT PURSUE plans to build a second bridge across the Potomac River. This is not a viable solution to our areas transportation needs. It has been shown repeatedly that

building additional roads and bridges simply stimulates more far flung development and road congestion. We need to protect our drinking water and the source of that water is the Potomac River. Our River is already challenged by upstream pollution and at times, low flow rates due to longer periods of drought in our area brought on by Climate Change. We need to keep traffic away from the river so that any spills and accidents occurring on our roadways do not spill over into the Potomac River. We all know that despite our best efforts, accidents and spills do happen all too frequently. We need to protect our drinking water by protecting our River. We are counting on you to abandon any plans to build another bridge across the Potomac. Thank you.

Witherel, Jeff and Linda *unknown, District of Columbia 0*

Subject:

Is there any consideration in the plan for Metro down/up I 95 ILO HOV lanes?. I feel that by relying on Metro to/from Fredericksburg vice HOV we will be taking vehicles off of this congested avenue.

Suvarna, Shreenivas *CLARKSBURG, Maryland 20871*

Subject: Possible Idea to help reduce traffic congestion

Hello, I had an idea that might be a way to get people out of their cars and use public transportation more. A lot of people work in one state and live in another, but many of those do not deal with DC. The current transportation issue with the area is that it takes longer to commute using public transportation vs drive by a lot of time. In my case, I live in MD but work in N. VA and it would take over 2.5 hours to commute from the metro plus time getting to the Metro, where as if I drive, I can make the drive in 45 min on normal traffic. I would suggest that a second crossing be created, but let us be better about it and create something to get people out of their cars. Seeing this, I would suggest a Mall across the Potomac that would connect VA and MD together. There would be parking lots and buses from the location, but the only way to cross would be to walk. In addition the mall could have restaurants and stores to spur the economy. Regards, Seenu Suvarna

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Lane, June B. and Edward S. *Loudoun County, Virginia 0*

Subject: Today's Vote on a New Potomac Bridge

Before the meeting today, I want to weigh in on the idea of a new Potomac Bridge. After having been active in local transportation issues for many years, my husband and I want to register our opposition to any further consideration of a bridge anywhere in Loudoun County. We have seen no actual scientific studies (as opposed to that commissioned by the group that wants the bridge based on either best practices in traffic management or the will of the people. Once people understand the issues involved, they realize that a new bridge anywhere in Loudoun (or perhaps anywhere other than supporting the upgrading of the American Legion Bridge) will cause more problems than it solves. The financial cost would be ghastly. If the bridge is supported by tolls, it would cost so much that people would avoid it. If it is supported by taxes, that expenditure will drain money from other, more effective projects. DROP THE BRIDGE FROM THE PLANNING DOCUMENTS!!!

Agarwal, Nitin *Gaithersburg, Maryland 20878*

Subject: Please oppose the proposed bridge on Potomac

The proposed northern Potomac bridge would create a new and unnecessary risk to this already fragile drinking water supply. Four of the regionâ€™s drinking water intakes are downstream from the most frequently proposed northern bridge crossing, and an accident which leads to a major spill of gasoline or other toxic chemicals would directly threaten drinking water for the majority of the regionâ€™s residents. If the intakes need to be shut down, we will have only 48 hours of drinking water supply without the Potomac. Accidents are common, and a study of data from 1991-2000 found that the likelihood of a spill in the event of a crash was 50% higher for hazardous materials than non-hazardous.

Sterling, Diana *Sterling, Virginia 20165*

Subject: Proposed northern Potomac bridge crossing

Hello, I'm writing to ask that you vote no to a new Potomac bridge in Loudoun county. It will generate new traffic, by as much as 85% according to one VDOT study. Loudoun will become a mainline for big rigs carrying freight. Route 28, Route 7 & the Dulles Toll Road will turn into a parking lot (again). A second crossing will divert taxpayer dollars from critically needed projects such as Metro and improvements to east/west corridors that could ease our already congested roadways. The bridge will bring more pollution, noise and lowered home values. It will destroy a large chunk of the

Potomac River watershed, wetlands and our dwindling green spaces. A bridge in this location also threatens our drinking water supply. Please do not include such a crossing in the plan. sincerely, ~D Diana Bendit

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BENJAMIN, KATHERINE *GARRETT PARK, Maryland 20896*

Subject: Potomac bridge crossing for outer beltway

No to the bridge. Protect our drinking water!

Schubert, Richard *Bethesda, Maryland 20817*

Subject: Outer beltway

Ladies and Gentlemen: Just because there is an undeveloped piece of land does not mean it needs to be destroyed. I strongly encourage you to REJECT any proposition that would lead to furtherance of an Outer Beltway. There are already more than enough roads traversing Montgomery County; enough trees have been cut; enough watersheds polluted; enough rocks blasted; enough concrete and asphalt poured. Try to take a longer view: someday your children and grandchildren will need to deal with the results of the destruction such a road would bring-- please don't do it. Thank you. Richard Schubert Bethesda MD

Henderson-O'Keefe, Parrie *Washington, District of Columbia 20010*

Subject: Additional Northern Potomac Bridge Crossing

DO NOT ADD AN ADDITIONAL BRIDGE ACROSS THE POTOMAC. We can not continue to pave every piece of precious land in service to the almight automobile! Find alternatives that DISCOURAGE car use, not encourage it. When you start putting automobiles ahead of safe water and green spaces youâ€™ve made a deal with the devil. You donâ€™t raise our region, you lower it. Our quality of life goes down, our safety goes down, and we destroy our environment. This is insane.

Padgett, Philip & Mary *Kensington, Maryland 20895*

Subject: No Outer Beltway Bridge

Dear Chairman, No, do not approve the building of an outer beltway bridge. This is a bad idea that only would exacerbate the bad decisions of the past. When we fly into Dulles Airport, we often approach first over Maryland. Looking down, we see a verdant land of balanced, smart growth. As soon as the plane crosses the Potomac into Virginia, we are over a World War I battlefield of rapacious development. When oh when did "Virginia Mother of Presidents" become "Virginia Panderer to Developers?" Enough is enough. Our region must find and take a better alternative path to the future. If a shock to the system is needed to start that, then saying no to an outer beltway bridge is the right action at the right time - now! Sincerely, Philip and Mary Padgett, Kensington, MD

Wayne, Barbara *Sterling, Virginia 20165*

Subject: Additional Northern Potomac River Crossing

In addition to promoting sprawl, increasing congestion and competing with the new metro stations in eastern Loudoun, the Northern Potomac Crossing project will present a clear threat to the region's drinking water supply. The Potomac River in this area is a sole source aquifer depended on by about five million of your neighbors. A bridge in the area will provide an opportunity for disaster which could result in leaving those millions without any drinkable water for an undetermined period of time. Without the river, we have 24-48 hours of drinking water. One spill amounting to one tanker truck could contaminate intakes for Fairfax, Montgomery, Prince Georges and Loudoun Counties, Rockville and the District. All this for a "developer's dream." Please ensure this project does NOT make it onto your plans in any form. It should never see the light of day.

Ambler, Anne *Silver Spring, Maryland 20902*

Subject: NO to another Potomac River crossing

I am a resident of Montgomery County who values what this area offers. That includes relatively clean air and water and a nationally recognized agricultural reserve that contributes greatly to preserving that clean air and water. Another bridge and highway do not compensate for their degradation. A major highway bridge increases the likelihood of a chemical spill that could contaminate our drinking water. Accidents are common, and a study of data from 1991-2000 found that

the likelihood of a spill in the event of a crash was 50% higher for hazardous materials than non-hazardous. One tanker truck of hazardous material can contaminate an entire drinking water system. Remember Charleston? The amount equivalent to one tanker left 300,000 Charleston WV residents without water for over 10 days in 2014. Is this the future for the DC Metro area? Clearly Third World. Please focus on transit and stop planning more highways as a First World country that values its future should do.

Browne, Janice *Silver Spring, Maryland 20910*

Subject: Say NO to another Potomac bridge

The proposal to build another Potomac crossing is extremely ill-advised. As this area's primary source of drinking water, the risk of contamination -- both from construction and operation -- is simply too high. The many reasons NOT to do this are the same as the previous times this proposal was defeated. Please refer to the testimony of the Audubon Naturalist Society. http://conservationblog.anshome.org/blog/action-alert-outer-beltway-bridge-still-threatens-our-drinking-water-supply-regional-vote-weds-12-20-17/ Thank you.

Brown, Doug *unknown, District of Columbia 0*

Subject:

Once again a new Potomac bridge crossing is being evaluated, and once again the studies show as they always do what a bad idea this is in so many different ways from air and water quality to increased traffic congestion and volume. Please remove this study from your list of projects for the future and focus on the ones that show they have the merit to be implemented, mass transit, land use and fixing existing roadways and bridges that are in poor shape and outdated.

Miller, Kristie *Washington, District of Columbia 20008*

Subject: Outer Beltway Bridge

Please do not even consider building this bridge. It could seriously imperil the DC area drinking water supply in the event of a toxic spill. As we have learned to our cost, such accidents are all but inevitable. Do not gamble with our communityâ€™s health and safety!

Gravitz, Michael *Chevy Chase, Maryland 20815*

Subject: Opposing the outer bridge crossing of the Potomac

Dear Commission members, In an era of increasingly worse summer heat, bad air pollution that comes mostly from transportation sources, a need to protect Potomac River water intakes and Montgomery County's Ag Reserve, it seems silly to have to urge your committee to oppose this idea for another Potomac River crossing and highway. The State of Maryland is already losing money on the Intercounty Connector, we don't need an outer Beltway, and this proposed plan for another Potomac River crossing looks lined up to compound these mistakes. As a taxpayer in Montgomery County and Maryland, a breather of air, and supporter of the Ag Reserve, I wish to register my strong opposition to this idea. There are many, many alternatives to this idea --all of them a better use of resources and greener solutions. Mike Gravitz

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Farb, Anna *Columbia, Maryland 21044*

Subject: Outer Beltway Bridge

The proposed northern Potomac bridge would create a new and unnecessary risk to this already fragile drinking water supply. Four of the regionâ€™s drinking water intakes are downstream from the most frequently proposed northern bridge crossing, and an accident which leads to a major spill of gasoline or other toxic chemicals would directly threaten drinking water for the majority of the regionâ€™s residents.

Keenan, Linda *Silver Spring, Maryland 20901*

Subject: Proposed North Potomac Bridge

I am writing to urge you to oppose any new bridges across the Potomac River. We should not be planning to accommodate more auto traffic and increase runoff, we should be planning projects that encourage other modes of transportation that do not increase impervious surfaces. I will urge all of my elected officials to oppose new bridges and Beltway widening. Thank you.

Other Regional Transportation Issue

Pearce, Alison *Garrett Park, Maryland 20896*

Subject: Outer Beltway Bridge

I am opposed a new outer beltway bridge. A major highway bridge increases the likelihood of a chemical spill that could contaminate our drinking water. In 1997, 1 out of 10 trucks in the US was transporting hazardous material. About half of those carried flammable liquids, such as gasoline, diesel fuel, and fuel oil. Accidents are common, and a study of data from 1991-2000 found that the likelihood of a spill in the event of a crash was 50% higher for hazardous materials than non-hazardous. One tanker truck of hazardous material can contaminate an entire drinking water system. Water intakes for Fairfax County, the City of Rockville, Montgomery and Prince Georgeâ€™s Counties, and the District of Columbia are all downstream from the most likely crossing.

Other Regional Transportation Issue

Just Economics

Comment on Visualize 2045

January 12, 2018

To the Transportation Planning Board & Staff:

The Washington Metropolitan Region (Region) suffers from very bad traffic congestion. Yet congestion arises from land use patterns as much as it arises from particular transportation facilities. This was recently demonstrated by modeling the "Balanced Land Use" scenario as part of the Long Range Plan Task Force. **Visualize 2045 largely fails to include regionally significant measures that can help achieve the balanced land use scenario.**

During the 1900s, many people believed that congestion was caused by land use density. It was assumed that spreading out homes and businesses through suburbanization would reduce density and congestion. Although there is generally more congestion in high-density places than in low-density places, it turns out that low- to medium-density, single-use development patterns (often referred to as "sprawl") create the most traffic congestion. In high-density places with diverse land uses, walking, biking, transit and other forms of shared transportation are often an option. In places characterized by sprawl, almost every activity outside the home requires a private vehicle trip.

Cars take up lots of space when parked – and even more space when moving (1 car-length between it and the next vehicle for every 10mph of speed). Additionally, while we tolerate homelessness for people, we do not tolerate "homelessness" for cars. Zoning and other development regulations often require that cars have dedicated parking spaces at home, at work and at shopping and entertainment venues. Thus, there are more than 2 dedicated parking spaces for each vehicle. Space dedicated to parking (much of it vacant much of the time) creates additional distance between trip origins and trip destinations. The space requirements associated with auto parking and travel combined with the necessity for using a car for almost every activity ensure that sprawl will generate worse traffic congestion than higher-density areas that permit walking, cycling, transit and other forms of shared transportation.

Many of the highway projects in the draft updated constrained long-range plan (Visualize 2045), seek to **accommodate sprawl by adding new lanes**. History shows that this approach encourages more sprawl development that will soon overwhelm the improved facilities. More balanced land use (placing houses, jobs and shops closer together in a mixed-use environment) performs better in terms of reducing congestion, energy consumption and pollution. **But key actions required to move toward more balanced land use are omitted from Visualize 2045**.

With the exception of a few tolled HOV lanes, most of the Region's roads and highways are free

to use regardless of the distance travelled and regardless of the level of congestion. This encourages many households and businesses to locate at the periphery of the Region, where land prices are lower. Unfortunately, lower land prices are offset by increasing traffic congestion, energy consumption and pollution. But these negative effects become apparent to households and businesses only indirectly. If these effects were more apparent directly, in terms of transportation and land use costs, many households and businesses would make different and more beneficial land use choices.

The jurisdictions that comprise the Region can help achieve the "balanced land use scenario" by adopting an integrated set of policies including the following:

- Parking (curbside and off-street) should be priced according to demand.
- All roadway travel should be priced according to distance and congestion. Additional surcharges can be added for heavy and/or heavily polluting vehicles. NOTE: Metrorail already charges users according to distance and congestion. **Distance- and congestion-based roadway prices encourage households and businesses to locate closer to daily activities and to the people that they regularly engage.**
- Development Impact Fees should be assessed **only** in those areas where infrastructure is lacking or where infrastructure would need to be expanded to accommodate new development. **This discourages sprawl development**;
- Property taxes should be transformed into public service access fees. This is accomplished by reducing the property tax rate applied to privately-created building values and increasing the tax rate applied to publicly-created land values.
    - The lower rate on building values makes buildings cheaper to construct, improve and maintain;
    - The higher rate on land values moderates land prices. It also creates an economic incentive to develop high-value land (typically infill sites near existing infrastructure). **Increased infill development reduces the demand for sprawl development.**
- Zoning regulations should be changed to:
    - Replace parking minimums with parking maximums in activity centers; and
    - Permit greater density and mixed-use development in tightly-defined activity centers.

To some people, the "balanced land use" scenario seems like an unattainable ideal. **Balanced land use is attainable**. Sprawl is not natural or inevitable. Sprawl has been (and is being) subsidized by incentives embedded in existing tax, regulatory and roadway pricing policies. Every jurisdiction within the Region can benefit from a comprehensive set of policy reforms that will reduce sprawl. Just Economics is prepared to assist the Region's jurisdictions (individually or collectively) to implement these and other measures that can simultaneously:

- Enhance opportunities and incentives for walking, cycling, transit and other forms of shared transportation, thereby **reducing SOV trips and congestion**;
- Reduce rents for both housing and business space, enhancing housing affordability and job creation;
- Enhance infill development and thereby reduce demand for expensive infrastructure extensions (**reduced public expenditures**);

- Enhance land value return and recycling to make infrastructure financially self-sustaining to a greater degree than today (**enhanced public revenues**);
- Enhanced equity because roadway and transit users pay for public goods and services in proportion to the benefits that they receive or the costs that they impose upon others;
- Enhanced equity because landowners will pay in proportion to the public benefits that they receive.

The transportation departments of the District, Maryland and Virginia, the transportation staff at the Transportation Planning Board, and the Transportation Planning Board members themselves have played an important role in making the Washington Metropolitan Region one of the most prosperous and desirable metropolitan regions in the country. At one level, congestion is a symptom of success. Congestion arises from people going to work, to school, to shop and to visit friends and entertain themselves. Cities where the factories and stores have closed generally don't suffer from traffic congestion. But, while some congestion is unavoidable, it is like friction. And too much friction can cause the Region's economic machine to under-perform or even decline.

The Washington Metropolitan Region is at a pivotal moment. Climate change and urban sprawl did not happen in an instant. Neither can they be remedied in an instant. But a failure to take meaningful action now will have inevitable and unavoidable consequences in the future. TPB has a track record of stepping beyond its transportation silo and working with MWCOG's and the member jurisdictions' planning, environmental, housing and economic development departments to create a regional vision and to address some of the Region's most pressing challenges. Therefore TPB, MWCOG and the Region's jurisdictions can do this again. They can design and implement a "balanced land use" program as outlined above. The elements of this program have been used successfully in communities in the United States and around the world. If we are successful, our children and grandchildren will praise us for our courage and foresight. If we fail this challenge, they will curse us for timidity and ignorance. Let us act and be praiseworthy.

Thank you for considering my remarks. Please let me know if you have any questions or if I can provide any assistance regarding the design and implementation of a "balanced land use" approach to transportation solutions, affordable housing and sustainable, equitable prosperity.

Sincerely,

Rick Rybeck, Director

COMMONWEALTH OF VIRGINIA

GENERAL ASSEMBLY OF VIRGINIA

RICHMOND

January 13, 2018

Chairman Charles Allen
National Capital Region Transportation Planning Board
777 North Capitol Street NE, Suite 300
Washington, DC 20002-4239

RE: MCOG Draft Project List for Air Conformity Inputs

Dear Chairman Allen:

We are writing to submit public comment regarding the Metropolitan Council of Governments' Draft Project List of Air Conformity. The list includes the U.S. 1 Bus Rapid Transit System (Project 808) with a completion date of 2030.

I am not familiar with that completion date. The elected officials representing the U.S. 1 Corridor have endorsed completing the project as soon as possible and are endeavoring to complete it by 2022 or 2024 at the latest.

Additionally, consistent with the U.S. 1 Multimodal Alternative Analysis, we have also pledged to achieve a two-stop extension of the Yellow Line in the next 15 years. If the list is intended to cover project through 2045, then the Yellow Line Extension should likewise be included with a completion date no later than 2032.

We are elected officials who represent U.S. 1 and we have repeatedly stated that we want to construct this project much sooner than 2030. We have been committed to completing this project ever since we endorsed the Route One Multimodal Alternatives Study in October of 2014. Please change the expected completion date for Project 808 to 2022 and add the Yellow Line Extension.

Sincerely Yours,

Senator Scott A. Surovell
36th District

Delegate Paul E. Krizek
44th District

CC: Chairman Sharon S. Bulova
Supervisor Daniel G. Storck
Supervisor Jeffrey C. McKay
Mr. Thomas P. Biesadny

MONTGOMERY COUNTY COUNCIL
ROCKVILLE, MARYLAND

TOM HUCKER
COUNCILMEMBER
DISTRICT 5

January 13, 2018

Chairman Charles Allen
National Capital Region Transportation Planning Board
777 North Capitol Street NE, Suite 300
Washington, DC 20002-4239

Dear Chairman Allen,

I urge you to reconsider the list of projects for inclusion in Visualize 2045 and to include bus rapid transit (BRT) on New Hampshire Avenue between the Colesville Park and Ride Lot (north of Randolph Road) south to Eastern Avenue (at the border with the District of Columbia). Ideally, with the support of the District's Mayor and Council, this route would continue south to the Fort Totten Metro station, connecting eastern Montgomery and northern Prince George's commuters with the Purple Line at the Takoma/Langley Station, and to the Red Line and Green Line at Fort Totten.

For the following reasons, New Hampshire Avenue BRT should be added to the Visualize 2045 plan:

- We know there is already very high demand for bus service in this corridor. The implementation of Metro K9 limited stop bus service (between FDA and Fort Totten) in 2013 resulted in a 25% increase in ridership, followed by a 61% increase in 2014. As of June, 2017 K9 ridership has leveled off but is still steadily strong; there was a 5% increase in 2017 with over 320,000 riders on this route in the Metro FY17 fiscal year.[1]

- There is very high existing residential density on New Hampshire Avenue that could support BRT. And significant new development is underway in Hillandale, all of which will rely heavily on transit.

[1] Metrobus Monthly Ridership - June 2017: https://www.wmata.com/initiatives/plans/upload/201706-JCC-June-2017-Preliminary-Ridership-Rpt_-07092017.pdf

- It will connect Fort Totten and the Takoma-Langley Transit Center directly with the U.S. Food and Drug Administration (FDA), campus, already the largest employer on the eastern side of Montgomery County, and one that is rapidly growing. According to the FDA Master Plan update, nearly 9,000 additonal employees will be added at the FDA's White Oak campus on New Hampshire Avenue.

- The Montgomery County Council has identified BRT on New Hampshire Avenue as a priority transit project. In 2013, the Council approved a long term transit priorities plan, the Countywide Transit Corridors Functional Master Plan, which listed BRT on New Hampshire Avenue as a priority BRT project for study and eventual construction. Since then, we've invested further in BRT on New Hampshire Avenue; by allocating $2 million in 2015 for a New Hampshire Avenue BRT study.

- The Takoma-Langley Crossroads is the highest trafficked transit hub outside of the reach of a Metro station and must continue to be a focus of mass transit enhancements.

- The cross-jurisdictional nature of the project would also make it eligible for funding from other local Maryland governments, the state of Maryland, the District of Columbia, and the federal government.

Thank you for including other important Montgomery County BRT corridors, like Randolph Road, Viers Mill Road, 355 and the Bethesda Transitway, in Visualize 2045. However, New Hampshire Avenue BRT should not be left behind. It has long been a stated priority for BRT expansion in Montgomery County BRT and should be reflected as such in Visualize 2045.

Sincerely,

Tom Hucker

From: Charlie Grymes <cgrymes@gmail.com>
Sent: Saturday, January 13, 2018 5:50 PM
To: TPBcomment
Cc: Kim Hosen
Subject: comments on project submissions to be included in the Air Quality Conformity Analysis for the constrained element of Visualize 2045

The Prince William Conservation Alliance supports improving mobility in our region. That includes upgrading our highway network, in addition to expanding the network of bike/pedestrian paths.

We need to expand the number of live-work-play communities, places where people can get "from here to there" without using a car.

The Prince William Conservation Alliance supports converting VRE from a rush hour commuter rail system into a two-way transit system. That will incentivize transit-oriented development, which will improve mobility and minimize costs to taxpayers over the long run.

We support the proposed Virginia Railway Express (VRE) Service Improvements on the Fredericksburg and Manassas lines (ConID 504 in the inputs for the Air Quality Conformity Analysis at https://www.mwcog.org/assets/1/28/12202017_-_Item_9_-_Visualize_2045_Conformity_Input_Table.pdf).

Bus Rapid Transit (BRT) on Route 1 (ConID 808) will also support mobility in a corridor where new housing and jobs should be concentrated.

The region also needs to increase the capacity for moving people in cars and buses.

Building interchanges on VA 234 Bypass (ConID 678 for Balls Ford Road, ConID 727 for Sudley Manor Drive, and ConID 739 for University Boulevard) are appropriate investments. They will help spur the growth planed at Innovation, and will smooth traffic flow between Route 28 and I-66.

The improved traffic flow resulting from those interchanges should eliminate the need to build a new Route 28 bypass around Manassas. The ongoing study (ConID 656) is considering Option 2B, but that would damage Bull Run Regional Park and affect historic sites associated with the First Battle of Manassas in 1861..
In contrast, proposals for building a Bi-County Parkway in Prince William-Loudoun counties (ConID 286) are a waste of money. That road would not improve safety, reduce traffic congestion, or facilitate transit-oriented development. It would simply encourage more sprawl.

ConID 853 appears to be mis-labeled. If that project involves new ramps located 1.5 miles west of Route 15, then the "University Boulevard Ramps" are on the other side of Haymarket from University Boulevard. Those ramps are an inappropriate inducement for extending suburban sprawl into the Rural Area of Prince William County.

Those ramps were never included in the public hearing for I-66 Outside the Beltway. When they were revealed along with a new parking lot and bridge over I-66 *after* the public involvement process, Prince William officials made their opposition clear - see http://www.pwconserve.org/landuse/i66/main.html for more details.

ConID 853 should be dropped. If ConID 785 (Heathcote Boulevard Extension) is associated with those ramps, then it too should be deleted.

The proposed I-66 flyover ramps .65 miles east of VA Bus 234 were also proposed after completion of the public involvement process. Their impact on Manassas Battlefield National Park is not appropriate. Those ramps (with no ConID number) should be deleted.

- Charlie Grymes
Chair, Prince William Conservation Alliance
www.pwconserve.org

Coalition for Smarter Growth
DC • MD • VA

January 13, 2018

Chair Charles Allen
Transportation Planning Board
Metropolitan Washington Council of Governments
777 N. Capitol Street, Suite 300
Washington, DC 20002

Re: Joint Sign-On Letter re Draft Constrained Long Range Plan

Dear Chair Allen and members of the Transportation Planning Board:

The undersigned organizations write to express our strong concerns about the draft Constrained Long Range Plan (CLRP) because it does not incorporate at its core the findings of the Transportation Planning Board's (TPB) Long Range Plan Task Force (LRPTF) findings. Specifically, it does not frame the CLRP around Balanced Land Use, Transportation Demand Management, Bus Rapid Transit, and Metro Core Capacity which performed best in the analysis and the voting by the task force (see our comment letter of Nov 30, 2017). We don't mention Express Toll Lanes here because this coalition continues to support transit and transit-oriented development as the framework for regional growth and transportation, offering the best long-term transportation performance, and the best approach for social equity, sustainability and economic competitiveness.

While the TPB has on many occasions developed scenarios that have shown the benefits of land use, demand management and transit solutions, and frequently called on the jurisdictional transportation planners to address climate change, the east-west economic divide, and "access-for-all" in their submissions, the CLRP has never been explicitly structured to incorporate and support these goals.

We have another global concern, and that is the overwhelming number of highway and arterial road expansion projects across suburban Maryland and Virginia in this draft plan. Certainly a number are necessary but over the long term if we don't change the pattern and design of development and achieve the TPB goals of focusing more growth in activity centers in a pedestrian and bicycle friendly, and transit-accessible environment, then we will not achieve a sustainable and effective transportation system. We have long argued that the CLRP should be focused on investing in TOD packages which combine local streets, bike/pedestrian and transit, along with rail and BRT connections between centers.

Time does not permit us to comment on every project or to sign on all of our partners, so please accept the following comments as not being all inclusive:

1) We would like to see the dates of all transit projects moved up to as early an implementation year as possible.
2) We are strongly supportive of all bicycle infrastructure projects.
3) We are strongly supportive of all bus rapid transit projects that meet at least Gold Standard BRT for the maximum extent of their routes (i.e. minimal time in mixed-traffic, and maximum incorporation of features such as level-boarding, all-door boarding, off-board fare collection, real time information, dedicated lanes, and traffic signal priority.
4) We support Metrorail and bus investments.
5) We support deletion of the VRE extension to Haymarket in favor of more rail cars and more frequent service, station platform expansions throughout the system, and a station closer to Godwin Drive to be closer to the Innovation center.
6) We support the MARC investment plan and want the dates for implementation of MARC projects moved up.
7) We recommend that the Long Bridge, American Legion Bridge, and Rosslyn Metro tunnel be your top big-project investment focus, after the Metro capital rehabilitation. We do support extension of the Virginia HOT lanes across the American Legion Bridge to the I-270 spur to address the most significant need, provided that significant investment is made in express bus service including connecting Red Line and Silver Line job centers.
8) We strongly oppose the 76-mile Maryland Express Toll Lanes proposal for the Beltway and I-270 and we oppose conversion of the Baltimore-Washington Parkway to an expanded tolled interstate style highway. Unlike the Virginia HOT lanes, the Maryland proposal doesn't guarantee that HOV users will travel free, and doesn't use the revenues to fund express bus service or build park and ride lots for carpoolers and transit users. The tight right-of-way on a long stretch of 495 means massive tree loss. The 495 proposal ignores the fact that a big cause of outer loop traffic in the morning and inner loop traffic in the evening is the east-west jobs imbalance. Addressing that imbalance with Maryland incentive investments in TOD in eastern Montgomery and Prince George's, combined with a Purple Line extension to Virginia would be a more effective long-term solution. I-270 expansion to Frederick will fuel more sprawling development in the absence of better land use policies. A combination of land use, HOV and bus extension on I-270, MARC investment, and Route 355 BRT would be a more effective approach.
9) We continue to oppose inclusion of the Manassas Battlefield Bypass and BiCounty Parkway (Route 234 Extended North) in the CLRP. Both have been the source of broad opposition and have been shown not to address area congestion. Rather, they open up rural land to development, harm the historic battlefield, put the Bull Run watershed and Occoquan drinking water supply at risk, and add to traffic. Many of our organizations have offered a range of more

effective alternatives including roundabout near the battlefield, and the investment in I-66 and Route 28, along with VRE, meets most of the needs in the area.

10) Proposed expansion of Route 301 from Route 50 to the Henry Nice Bridge. We are concerned that effective alternatives to this expansion from 4 to 6 lanes throughout the corridor have not been studied, including land use, targeted interchange investments, and local parallel road networks that reduce demand in the key bottleneck areas of 301.
11) Another project may seem small but is symbolic of the problems we see with local and state transportation planning. This is the Loudoun/VDOT proposal to widen a 3.6 segment of Route 15 north of Leesburg -- a prelude to widening it all the way to the Potomac. However, the agencies never fairly studied a roundabout solution like the one proven successful at Route 50/Route 15 in Loudoun. Roundabouts with a two-lane Route 15 will move traffic better, make the road safer, and save money. Widening from two to four lanes while keeping traffic lights will mean continued traffic delays, and only lead to future proposals for costly interchanges. If this end-to-end expansion were to be built, VDOT will have spent hundreds of millions of dollars, fueled more sprawling development, and compromised another rural landscape. We recommend rejection of this project in the CLRP to allow for a thorough study of a roundabout and traffic calming alternative.

Thank you for consideration of our comments.

Sincerely,

Stewart Schwartz
Executive Director
Coalition for Smarter Growth

Caroline Taylor
Executive Director
Montgomery Countryside Alliance

John Sutherland
President
Arlington Coalition for Sensible Transportation

Christopher G. Miller
President
Piedmont Environmental Council

John Campagna
Executive Director
1000 Friends of Maryland

Lauren Greenberger
President
Sugarloaf Citizens Association

Trip Pollard
Senior Attorney, Director Land and Community Program
Southern Environmental Law Center

Charlie Grymes
Chair
Prince William Conservation Alliance

Don & Tina Slater
402 Mansfield Road
Silver Spring MD 20910-5515

January 13, 2018

Chair Charles Allen
Transportation Planning Board
Metropolitan Washington Council of Governments
777 N. Capitol Street, Suite 300
Washington, DC 20002

Re: Draft Visualize 2045 Long Range Plan

Dear Chair Allen and members of the Transportation Planning Board:

As a past member of the TPB's Citizens Advisory Committee, and a current member of Purple Line NOW!, Action Committee for Transit, and Montgomery County Sierra Club, I pay attention to transportation issues and especially want to see our region develop more transit, better land use, and fewer highways. I have listed below some items that I see as supporting/incorporating core findings of the TPB's Long Range Plan Task Force, while other items (also mentioned below) do not. Visualize 2045 should emphasize Balanced Land Use, Transportation Demand Management, Bus Rapid Transit, and Metro Core Capacity. The TPB should push the jurisdictional transportation planners to address climate change, the east-west economic divide, and access for all in their submissions.

In that regard, the number of highway and arterial road expansion projects across suburban Maryland (and Virginia) in this draft Visualize 2045 plan cause concern. Certainly a number are necessary but over the long term, if we don't change the pattern and design of development and achieve the TPB goals of focusing more growth in activity centers in a pedestrian and bicycle friendly, and transit-accessible environment, then we will not achieve a sustainable and effective transportation system. Smart growth advocates have long argued that the Long Range Plan should be focused on investing in TOD packages of local streets, bike/pedestrian and transit, along with rail and BRT connections between centers.

Here are some comments I hope you will consider:

1) Transit project dates should be moved up to as early an implementation year as possible.

2) Strongly support all bicycle infrastructure projects.

3) Support all bus rapid transit projects that meet at least Gold Standard BRT for the maximum extent of their routes (i.e. minimal time in mixed-traffic, and maximum incorporation of features such as level-boarding, all-door boarding, off-board fare collection, real time information, dedicated lanes, and traffic signal priority.

4) It is imperative that our region support Metrorail and bus investments.

5) The MARC investment plan is good; dates for implementation of MARC projects should be moved up. This, plus implementation of BRT on Rt. 355 in Montgomery County could go a long ways towards relieving current traffic congestion on I-270.

6) The Long Bridge, American Legion Bridge, and Rosslyn Metro tunnel should be the next top big-investment projects. Extending Virginia HOT lanes across the American Legion Bridge to the I270 spur will address the most significant need, provided that significant investment is made in express bus service including connecting Red Line and Silver Line job centers.

7) Please do not support the 76-mile Maryland Express Toll Lanes proposal for the 495/Beltway, I-270 and the conversion of Baltimore-Washington Parkway to an expanded tolled interstate style highway. Unlike the Virginia HOT lanes, the Maryland proposal doesn't guarantee that HOV users will travel free, and doesn't use the revenues to fund express bus service or build park and ride lots for carpoolers and transit users. The 495 proposal has an extremely tight ROW, would involve taking of many homes, massive tree loss and simply ignores the fact that a big cause of outer loop traffic in the a.m. and inner loop traffic in the p.m. is due to the east-west jobs imbalance. To address this, Maryland should incentivize investments in TOD in eastern Montgomery and Prince George's. This, combined with mobility relief provided by the upcoming Purple Line (which could be extended to Virginia), would be a more effective long-term solution. Note also that I-270 expansion to Frederick will fuel more sprawling development in the absence of better land use policies. A combination of land use, HOV and bus extension on I-270, MARC investment, and Route 355 BRT would be a more effective approach.

Thank you for considering my comments.

Sincerely,
Tina Slater

From: Marc Brenman <mbrenman001@comcast.net>

Sent: Thursday, January 11, 2018 10:47 PM

To: TPBcomment

Subject: Comments on Visualize 2045 CLRP

1. Tolling and pricing have economically regressive effects on low income people. If these solutions are pursued, means must be found to reduce the adverse effects on low income people.
2. Right now, all the North-South truck traffic on the East is forced onto the Beltway. An Outer Beltway is the obvious solution.
3. The current MetroRail system is hub and spokes. The ends of the spokes need to be connected.
4. Bus Rapid Transit is an obvious and low cost solution to many public transit commuter problems.
5. All timed traffic signals should be replaced with on demand signals. A huge amount of time and energy is wasted waiting for cross traffic that isn't there.
6. All "no right turn on red" rules should be ended.
7. Telecommuting and other virtual transportation initiatives should be encouraged.
8. Planning should include transportation on demand services such as Uber and Lyft.
9. Planning should include the imminent arrival of autonomous vehicles.
10. Metro needs a dedicated funding source.
11. There should be a direct light rail link to BWI, unlike the current convoluted system.

Marc Brenman
4917 Flanders Av.
Kensington, MD 20895
mbrenman001@comcast.net
240-676-2436
Author of The Right to Transportation and Planning as if People Matter: Governing for Social Equity

From: Peter Gustafson <peterggustafson@me.com>
Sent: Saturday, January 13, 2018 11:28 PM
To: TPBcomment
Cc: bos@loudoun.gov; Phyllis.Randall@loudoun.gov; Ralph.Buona@loudoun.gov; Suzanne.Volpe@loudoun.gov; Tony.Buffington@loudoun.gov; Ron.Meyer@loudoun.gov; Geary Higgins; Matt.Letourneau@loudoun.gov; Kristen Umstattd; Koran.Saines@loudoun.gov; Eugene.Scheel@loudoun.gov; Stacy Carey
Subject: Route 15 Widening

Transportation Planning Board (TPB) member–

Thank you for serving our region on the all-important TPB. I realize that the important decisions facing you are not easy and often controversial. Many competing interests need to be considered before arriving at the best long-term solutions.

I am writing to you in response to **VDOT**'s/Loudoun County's project submission to the Washington Council of Governments' (COG) TPB's *Visualize 2045: A Long-Range Transportation Plan for the Nation Capital Region*. The specific project name is: **Route 15 Widening**.

Who am I? My name is Peter G. Gustafson. My wife Mary and I live along US Route 15 near Lucketts in an old log home (circa 1800) overlooking the Potomac River Valley. We've lived and farmed here for 36 years. My formal education is in environmental science and biology. We're partners in a small graphic design business and give generously of our time to local community organizations. I've been a member of the Lucketts Ruritan Club since 1986. Presently, I'm serving at the pleasure of the Loudoun County Board of Supervisors as a citizen stakeholder representative on US Route 15 improvements for the Ruritan club. After two recent fatalities, I have also recently worked alongside several others to encourage VDOT to facilitate specific safety improvements to the road (Citizens for a Safer Route 15). The first phase of this work is now complete.

The Problem: As I'm sure you're aware, right now US Route 15 is a hot issue in Loudoun and amongst its many users: local residents, commuters, tourists, travelers and commercial traffic from adjoining jurisdictions and beyond. Emotions are running high within our local community—we're becoming increasing polarized over congestion, safety and access. In spite of discussions going back 20 years or more, it has, of late, become a political 'pressure point' as daily backups—both morning and night—waste countless man-hours, disrupt people's schedules, use costly and finite fuel resources, lower air quality, decrease land values, and threaten people's safety. Local officials have responded by instructing staff and the VDOT to make progress. Now, you are, as a TPB member, also being asked to play a role—entrusted with helping to determine the future of our US Route 15—or James Monroe Highway as its sometimes called—in VDOT's project application: **Route 15 Widening**.

The Context: This is not just any ribbon of asphalt. As a transportation corridor, it predates history. Beginning as a game trail, then followed by native peoples tracking that game, it was to become a critical North-South route in colonial America and our new nation—far enough west for the rivers to be forded, and east of the mountains. This "Old Carolina Road", a.k.a. "Rogues Road" saw "Mad" Antony Wayne travel south to join Lafayette and later Robert E. Lee's Army of Northern Virginia headed north to invade Maryland. These events, among many others and the beautiful and historic homes situated along the route, have contributed to it being recognized Federally as part of the Journey Though Hallowed Ground (www.hallowedground.org), part of the Mosby Heritage Area (www.mosbyheritagearea.org), exclusively as the Catoctin Rural Historic District (https://www.dhr.virginia.gov/registers/Counties/Loudoun/053-0012_Catoctin_Rural_Historic_District_1988_FINAL_Nomination.pdf) and a Virginia Scenic Byway

(http://www.virginiadot.org/programs/prog-byways-sites.asp). In addition, the area through which this road passes is unique geologically. To quote from a recent report prepared by the State*:

> (It is a) "…unique region of the Mid-Atlantic Piedmont that is underlain by the Leesburg Limestone Conglomerate of the Balls Bluff Formation. This unique rock has been locally called 'calico marble' or 'Potomac marble' but is actually a limestone conglomerate composed of limestone and other rock fragments from previously existing rock formations cemented together by calcium carbonate. The rocks were formed about 210 million years ago. The local names are derived from the rock's use as decorative stone for the columns in the U.S. Capitol Statuary Hall and for agricultural lime. This is a unique geological formation for the Piedmont. Car-sized to room-sized outcrops and boulders of the conglomerate are well exposed along and east of US Rt. 15…"

It is unique, sensitive and irreplaceable.

The unprecedented growth of the last several decades have led to the present situation of rush hour congestion and and unsafe conditions. Adding to the problem are the limited alternatives with US Route 15 being sandwiched between the Potomac River on the East and Catoctin Mountain to the West. The stretch from Leesburg to the Maryland State Line also terminates at the only river crossing in the 42 miles north of the Cabin John Bridge on Interstate 495!

An Attempt at a Solution: The Loudoun County Board of Supervisors (BODS) has put forth a concerted effort to solving the problems of congestion and safety once and for all—all the while retaining local access and the road's significant scenic, cultural, historic assets through "context sensitive" improvements. A scheduled process was put in-place engaging a paid consult (Kimley-Horn), county staff, local elected officials, VDOT, and a Stakeholders Committee of local community representatives. Stakeholders were tasked at representing their respective communities and arriving at a consensus on solutions and phased implementation of improvements (https://www.loudoun.gov/index.aspx?nid=3997). Unfortunately, jumping ahead of this process, has been an amendment (CPAM) to the Countywide Transportation Plan (CTP) to 4-lane a significant portion of the road to Route 661 or Montresor Road (www.loudoun.gov/documentcenter/view/130389). The CPAM was approved by the planning commission with little debate and remains unapproved by the County Board of Supervisors.

In the rush for a "fix", there has been insufficient and or inaccurate information, unsubstantiated solutions, and competing interests. The process involving citizen input, county staff, elected officials and VDOT working together needs to run its course. To summarize:

- A Loudoun County BOS-appointed citizens Stakeholder Committee is currently evaluating transportation improvements for this section of the roadway. The "Committee" was not informed of VDOT's application for advancement of this project—nor was it placed on the agenda at any stakeholder's meeting.
- This project has leapfrogged Loudoun County's comprehensive county land use and transportation planning processes currently being updated.
- VDOT has submitted this project prior to Loudoun County BOS' approval and vote scheduled for February 14, 2018.
- The citizens' Stakeholder Committee disproportionately represents several newer and larger suburban communities with Home Owner's Associations (HOAs)to the detriment of the larger proportion of rural residents. In addition, the Stakeholder Committee has yet to reach consensus on solutions
- Requested studies on alternates to 4-lanes of less expensive, intrusive, and safer congestion-reducing intersection treatments such as roundabouts have not been performed. Cost-benefit analyses of those solutions need to include not only construction cost but accident reduction, emmissions and noise reduction, and improved fuel efficiency data.
- Widening a 3.6-mile portion of a scenic byway, which will *still* funnel traffic volumes onto an existing 2-lane highway. Five miles further north is the 2-lane Potomac River bridge into Maryland.
- The $33 million project cost for 4-laning a 3.6-mile of highway that according to current induced-traffic estimates will be equally congested in 5 years without truely comprehensive transportation planning incorporating additional solutions and alternatives—a huge waste of scarce transportation dollars.

- Cost estimates are likely underestimated, given the karst geology of the project area, (with sinkholes that have opened up on Route 15 twice within the past decade) and at least one cave entrance within feet of the current two-lane highway just north of Whites Ferry Road.
- A large portion of the road is within floodplain.
- VDOT's "Route 15 Widening" is a flawed response to congestion and safety in response to political pressure. This application is premature given it's timing in the ongoing planning process. Exploration of alternatives, a comprehensive resource inventory and analysis and environmental safeguards have not been performed and remain insufficient and incomplete, contrary of the visionary planning necessary.
- The recent endorsement of the National Capital Region Transportation Planning Board's five initiatives found to have the most potential to improve the region's transportation system has not been considered.

At present, VDOT's application to 4-lane Route 15 from Battlefield Parkway to Montresor Road should be rejected. It would be premature to approve.

Thank you for your time and consideration.

**Survey Report: Stumptown Vernal Woods Property. Loudoun County, Virginia; Gary P. Fleming and Karen D. Patterson, Vegetation Ecologists, Virginia Department of Conservation and Recreation, Division of Natural Heritage, January 11, 2018*

Peter G Gustafson
42230 Black Walnut Lane, Leesburg, VA 20176
(h) 703 777-6368
(c) 571-239-7030
peterggustafson@me.com

From: STEPHEN BUDIANSKY <sbudiansky@me.com>
Sent: Saturday, January 13, 2018 8:23 PM
To: TPBcomment
Subject: comment on project submission for Visualize 2045: Rt 15

Dear Sirs:

As a resident of Loudoun County who relies upon Rt 15, I am writing to express my strong opposition to the Project Submission for widening 3.6 miles of Rt 15 north of Leesburg.

This is an ill-conceived and extraordinarily wasteful proposal that ignores the needs of residents, threatens the safety and access of local residents to Rt 15, imperils the scenic amenities that our rural businesses depend upon to attract vitally needed tourism revenue, and worst of all short-circuits existing processes to examine and recommend sensible solutions the problems of Rt 15.

It is premature to rush forward with a piecemeal project when an existing Stakeholders Committee appointed by Loudoun County has not even had a chance to study and weigh in on proposed solutions.

The assertions in this Project Submission that widening from 2 to 4 lanes a tiny segment of Rt 15 will improve Homeland Security, International Travel and Commerce, Economic Vitality, and Accessibility are frankly laughable — and reflect no study whatsoever.

I ask you to reject this slapped together proposal and allow serious studies to go ahead without premature action that make a mockery of any sensible process.

Stephen Budiansky
Chapel Lane
Leesburg, VA

.

Comments from William Milne

A **forth lane** extending Southbound from the Occoquan Bridge/Route 123 Interchange to the Prince William Parkway will; (1) reduce traffic congestion on the Occoquan bridge where commuters transit southbound on I-95 from 4-lanes to 5-lanes (including the overpass from HWY-1) back to 3-lanes over a 1000' stretch of road as they approach and cross the Occoquan bridge, (2) better handle the southbound Route 123 traffic coming from Fairfax county onto I-95, and (3) improve the quality of life for residents in Lake Ridge and the Town of Occoquan.

I moved to Lake Ridge in 2003 (lived in Springfield during the" mixing bowl" project) and over the years watched VDOT begin work to widen I-95 over the Occoquan River and widen HWY 123 on the Occoquan bridge as valves for easing the I-95 traffic coming from Fairfax County. While VDOT might have eased traffic congestion in Fairfax County, their planning efforts appear to have merely pushed more of the congestion towards Prince William County's (one of the fastest growing counties in VA).

In addition, while the I-95 express lane project created more highway capacity, it did nothing to reduce congestion at two major gateways into Prince William County (PWC Parkway and HWY-123). Moreover, the agreement with TransUnion also revealed a lack of judgement and long-range planning by signing a contract that did not allow for I-95 expansion without additional costs to the taxpayer; *"… if there is the talk of widening I-95, Transurban gets the first crack at adding new lanes to Interstate 95, which it would operate as toll lanes. If the company opts not to add new lanes, VDOT may add additional lanes as a department project…such Additional Lanes will constitute a compensation event, according to a copy of the agreement McCord shared with Potomac Local."* http://potomaclocal.com/2017/01/13/virginia-wont-consider-widening-i-95-blames-express-lanes/

VDOTs own Environmental Assessment of the I-95 express lanes project concluded that, *"while the project would improve the overall situation, several currently failing road segments would remain at failing levels."* The Occoquan Bridge/HWY-123 sector on/near I-95 is one such example. It further concluded that *"after completion, the merge areas at the northern and southern ends of the HOT lanes would still operate at failing levels."* So, *"while this billion-dollar project was primarily aimed at moving commuters through the corridor…it did not address the need to connect emerging urban nodes in the two counties…or to the surrounding region."*

VDOTs mandate should be to address the Occoquan Bridge/HWY-123 interchange congestion by adding an additional lane leveraging better engineering designs. Please don't wait until 2028 to address the issue.

Proposed bike lanes:

This is a wonderful use of taxpayer funds, offering better safety for riders and more transit options for people going to and from work in the city. Plus, this will relieve motor vehicular traffic and pollution in the city. All noble goals! Thank you for this proposal.

Toll lanes:

While toll lanes sound like a good option, they seem to only benefit the private partner who will be taking the tolls. The roads will remain overcrowded until we can dedicate our transportations funds to enhance the public transit options such as: more multi-passenger commercial vans like some hotels have that could be used to transport workers to their jobs; more buses; more and better funding of the Metro system so that it could be cleaner, safer, and more appealing to more of the public. I use the Metro any time I go into the city and it is a much better option than driving into the city at any time of day for me, an over 70 woman.

Widening 201:

The widening of 201 is a complete waste of public transportation money and would increase the pollution in an area that never should have been developed anyway. It would only encourage the foolish future development of other lands that are far outside the reach of public transit by a county that should have known better than to develop this land for commercial and residential use. There were many other options for development or redevelopment available at the time, but the Prince George's County Counsel, Planning Board, and the County Executive were too shortsighted to realize or explore them. The citizens held meetings to Envision Prince George's County and proposed more development near public transportation, but our recommendations fell on deaf ears. This is a perfect example of poor planning and it should not be rewarded with a wider road to increase the pollution in that area of the county when public transit could be an excellent option and would create more jobs and increase private entrepreneurship as well.

Georgia Ave.-16th St.:

Are you kidding me, 7 or 8 lanes of traffic going through an already developed area? No, no, no, a thousand times NO, where are the planners that want to make a toll lane here to alleviate traffic; or the people who could devise a public transit option for this area? We do not need a major highway in the middle of residential dwellings just because too many people are not being trained to use public transit as an option, or no one is far sighted enough to develop a mini bus system to serve that area properly...

Randolph Rd. BRT:

Yes, this is a very good idea and it will work well for that area and address all of the goals that you have sighted. This is a good use of Transit Funds and Planning.

MetroRail Capacity:

Yes, yes, yes, we must increase the capacity and comfort on the Metrorail especially during the rush hour times. Anything that we can do to make Metro more inviting is a good plan and will help us be a better Metropolitan area, more viable, more modern, more open to better development.

From: Eileen Finnegan <finnegan20903@yahoo.com>
Sent: Saturday, January 13, 2018 8:05 PM
To: TPBcomment
Cc: Council President Hans Riemer; Tom Hucker; Councilmember Elrich; Glenn Orlin; Debbie Leigh; Andrew Austin
Subject: Comments on Visualize 2045 Constrained Element: Missing New Project

Dear Transportation Planning Board Chair Allen, all TPB Board Members & TPB staff,

There is a serious omission in the Montgomery County transit submission for new projects to be included in the Visualize 2045 Long-Range Transportation Plan for the National Capital Region. The omission is the New Hampshire Avenue Bus Rapid Transit project (NH BRT), part of the larger Montgomery County BRT system.

Although submitted as a "study" by MC DOT, this particular transit facility is integral to the regional transportation network, and should have full "for construction" status in this major TBP update, just as the 4 other BRTs submitted. **Please amend the draft plan to add this critical new project.**

High-density development is being approved in the New Hampshire corridor based on this BRT line being in place in the near future. Here are a few added reasons to gain your support for adding this important transit facility to the Visualize 2045 Plan:

- The NH BRT, part of the County's Transitway Master Plan, is a keystone element to the White Oak Science Gateway Master Plan, connects the Montgomery-Prince George's bi-county area to the Purple line at Takoma-Langley Crossroads, and will service the growing FDA campus on New Hampshire Ave in White Oak.
- The NH BRT line has been identified by County Council as the next BRT to move forward after the three lines currently underway, i.e. US29, MD 355 and Viers Mill Road.
- The NH BRT is an acknowledged priority of the County Executive and the Montgomery County Council as detailed in the Joint Priorities letter to the Maryland Department of Transportation on June 29, 2017. The letter is attached; see item 4 under the BRT section on page 3/4.
- The NH BRT is critical to achieving the Non-Auto-Driver-Mode-Share (NADMS) goals of the 2014 White Oak Science Gateway Master Plan. This WOSG plan, approved without achieving transportation balance, is based on greatly increasing the person throughput on New Hampshire Ave with BRT transit.
- GSA is moving forward with the Food and Drug Administration Master Plan update for this growing federal agency in White Oak. An additional 9,000 employees are anticipated on the FDA headquarters campus on New Hampshire Avenue in the coming years. For more information on this pending update see: https://www.gsa.gov/portal/content/166346
- The NH BRT will provide high-quality transit for underserved communities along the Montgomery and Prince George's county line.
- The New Hampshire corridor is currently problematic. Given the additional density being approved with more anticipated, advancing this transit service in the TPB's CLRP process is critical.

I urge the Transportation Planning Board to request the Montgomery County Department of Transportation to amend the submission and add this necessary project to the 2045 vision for the region.

Thank you for your consideration.

Eileen Finnegan
10404 Sweetbriar Parkway
Silver Spring, MD 20903
301-439-2263

The Visualize 2045 plan includes a potential I-95 Southbound Auxiliary Lane to be built in 2028. It certainly should be funded for construction by 2028. Considering this is the most congested traffic area in the United States, it should be moved up earlier.

There is almost no time day or night that this area is not congested. This is a safety hazard as the area looses a lane and effectively loses two lanes as traffic from Lorton/Rte-1/Ft. Belvoir merge from what becomes the Rte-123 merge lane which ends at Rte-123. The effective loss of two lanes slow commuters and through traffic to a halt creating a dangerous mix of widely differing approach speeds.

The constant traffic jam also increases pollution of both the air and the water below the bridge (Occoquan River, a Chesapeake Bay tributary). Additoinally it impacts the dynamic activity centers in the commercial realm, the Washgington DC commuter bedroom community, and museums such as the Quantico Marine Corps Museum and the soon to be open Museum of American Military History.

Again I suggest since this area is rated the most congested traffic area in the United States, the I-95 Southbound Auxiliary Lane should be moved up earlier to as soon as possible.

Brian Blankinship
Woodbridge, VA

Please consider modifying the scope of the "I-95 Southbound Widening from VA 123 to VA 294" project. The current scope as written will do little to resolve this safety/congestion bottleneck.

Please consider modifying the scope to: "I-95 Southbound Widening from US 1 to VA 294 with VA 123/I-95 interchange configuration changes"

General Recommendations:

- Convert I-95 Southbound lane to an exit lane ramp to VA 123N
- Shift VA 123 Exit Ramp from I-95S around/west of the I-95S Entrance Ramp from US 1 (Removes Merge point)
- Remove Ramp from VA 123N to I-95S
- Add Dual Left Turn Lanes to provide access from VA123N to I-95S
- Add I-95S Auxiliary Lane from US 1 to VA 294

More detailed recommendations for this project are linked/attached.

https://www.google.com/maps/d/edit?mid=zQQBCxHd6New.kPg56RYdjMTU

http://novarapidtransit.org/I95_VA123_US1_Interchange_Improvement_12152016.pdf

While this project will not reduce traffic volume congestion during peak periods in the long run, it will improve safety, reduce accidents, provide better access to Prince William County., and reduce congestion during off-peak hours (Reason it is the worse bottleneck in DC metro area)

This project needs to be completed ASAP. With the completion of the fourth I-395 Southbound lane from Duke Street to Edsel Road, the I-95 FredEX Express Lanes and the I95S Rappahannock River Crossing projects this may become the biggest bottleneck in the United States.

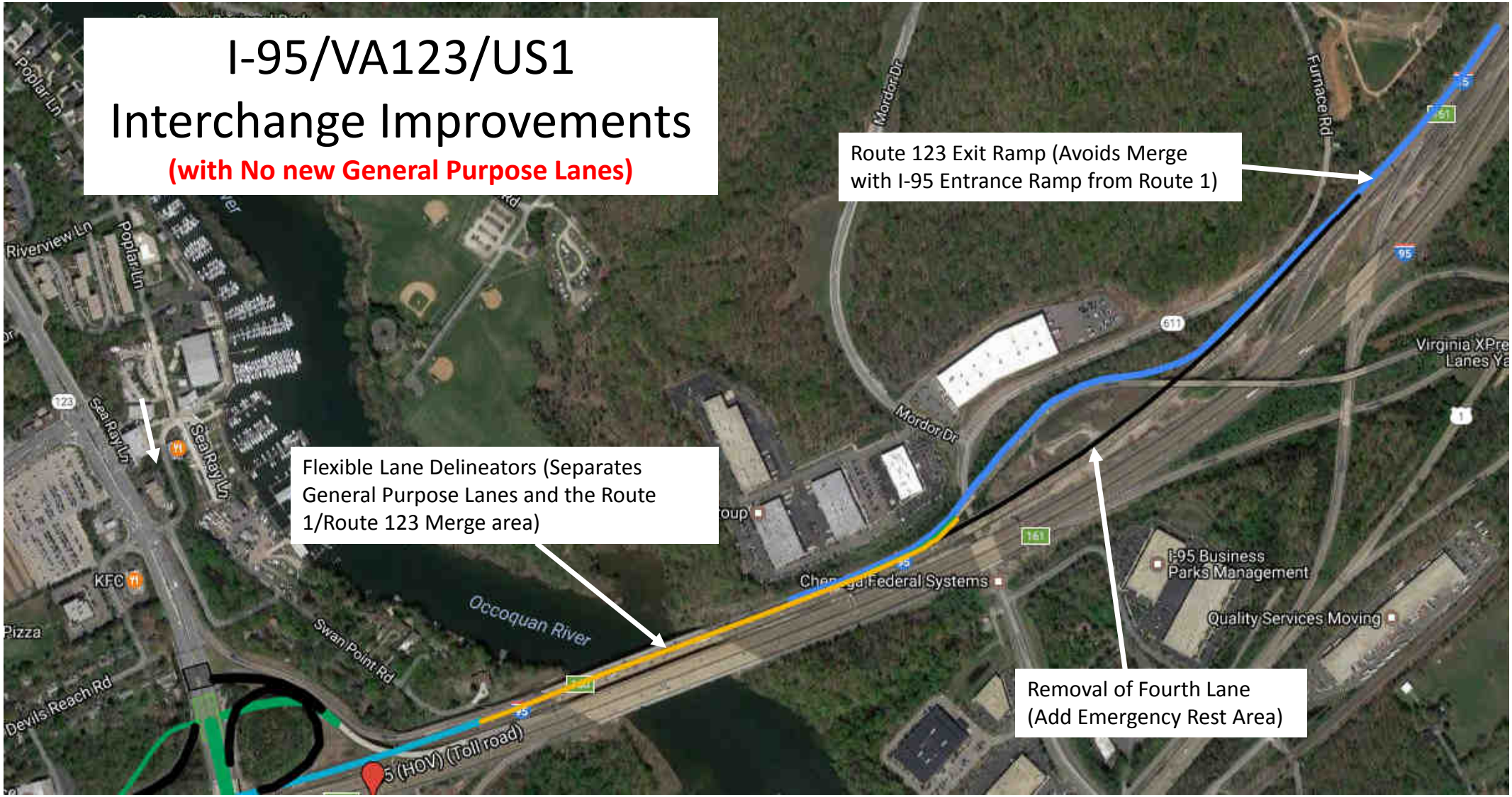
Also, please consider adding the "I-95 Northbound Widening from VA 294 to VA 123" as well. This is also a top ten congestion point in the DC Region.

Thank you for considering these comments,
Mark Scheufler
Manassas, VA 20111
novarapidtransit.org

TOP 10 BOTTLENECKS

Rank (Last Quarter Rank)	Location	Average duration	Average max length (miles)	Total duration	Impact factor
1 (1)*	I-95 S @ VA-123/EXIT 160	8 h 09 m	2.88	31 d 05 h 50 m	136,097
2 (2)	BALTIMORE-WASHINGTON PKWY N @ POWDER MILL RD	7 h 17 m	2.75	27 d 23 h 07 m	94,142
3 (14)	DC-295 S @ EAST CAPITOL ST	10 h 46 m	1.3	41 d 06 h 49 m	78,882
4 (3)	I-495 CCW @ MD-97/GEORGIA AVE/EXIT 31	4 h 11 m	2.73	16 d 02 h 08 m	74,102
5 (8)	I-66 E @ SYCAMORE ST/EXIT 69	7 h 14 m	1.86	27 d 18 h 15 m	72,505
6 (5)	I-495 CW @ CLARA BARTON PKWY/EXIT 41	4 h 40 m	3.2	17 d 22 h 31 m	72,256
7 (4)	I-495 CW @ I-270 SPUR	2 h 25 m	4.18	9 d 06 h 20 m	71,830
8 (9)	I-95 N @ VA-123/EXIT 160	4 h 21 m	3.12	16 d 16 h 40 m	70,787
9 (6)	I-495 CW @ MD-214/CENTRAL AVE/EXIT 15	3 h 06 m	3.04	11 d 22 h 31 m	62,133
10 (10)	I-66 W @ VADEN DR/EXIT 62	4 h 55 m	1.42	18 d 20 h 34 m	59,729

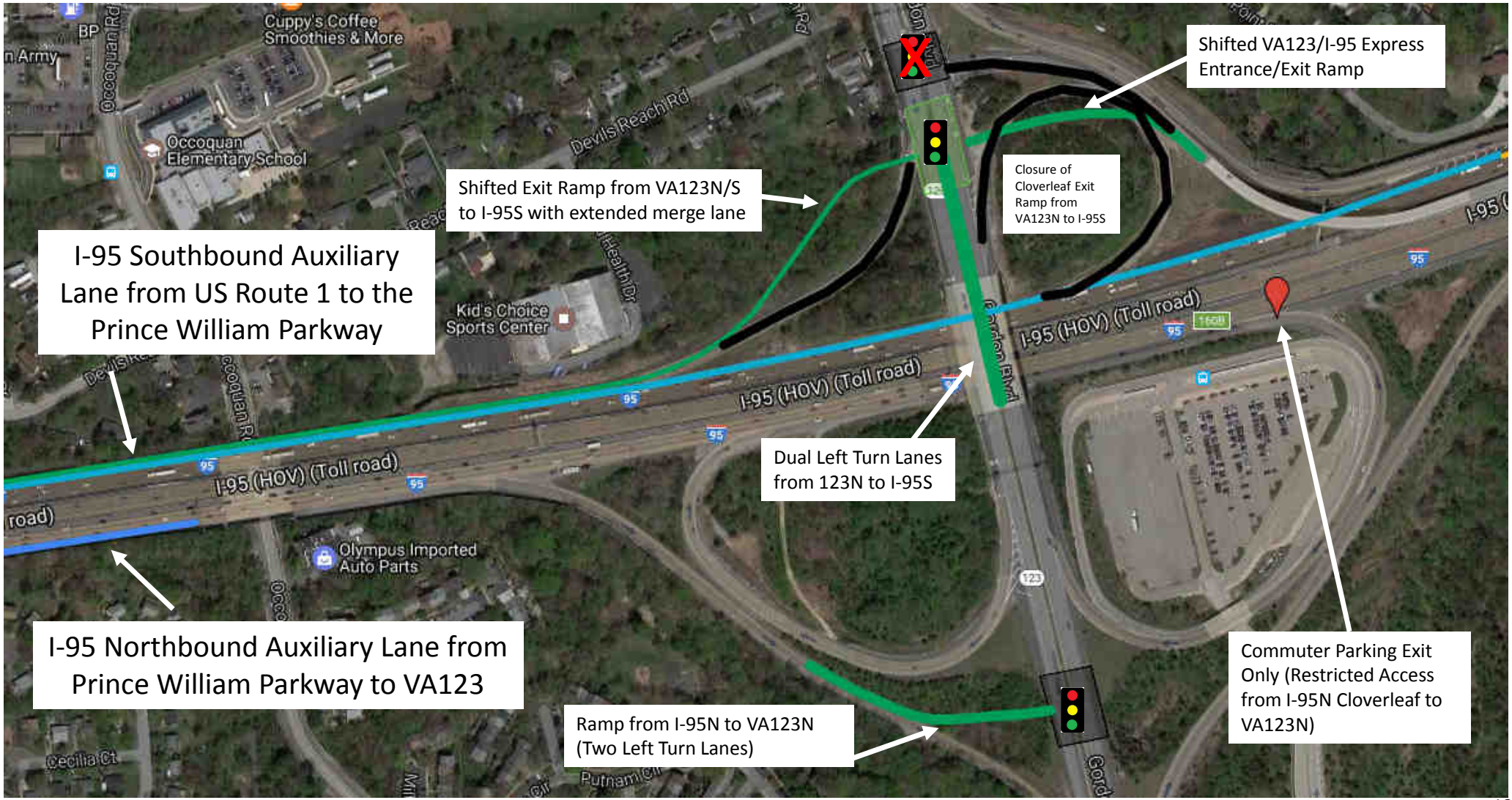
** See "Bottlenecks" section in the "Background" chapter for ranking variability from quarter to quarter.*


I-95/VA123/US1
Interchange Improvements
(with No new General Purpose Lanes)
Route 123 Exit Ramp (Avoids Merge with I-95 Entrance Ramp from Route 1)
Flexible Lane Delineators (Separates General Purpose Lanes and the Route 1/Route 123 Merge area)
Removal of Fourth Lane (Add Emergency Rest Area)
Riverview Ln
Poplar Ln
Sea Ray Ln
KFC
Pizza
Devils Reach Rd
Occoquan River
Swan Point Rd
Mordor Dr
Furnace Rd
I-95 Business Parks Management
Quality Services Moving
(HOV) (Toll road)

12/15/16

I-95/VA123/US1 Interchange Improvements

(**with No new General Purpose Lanes**)



12/15/16

COMPREHENSIVE AGREEMENT RELATING TO THE I-95 HOV/HOT LANES PROJECT DATED AS OF JULY 31, 2012

- "Additional Lanes will constitute a Compensation Event."
- **Additional Lanes** means any additional GP Lanes along the I-95 Corridor within the Project Right of Way to the extent the plans for such improvements have not been included in (i) the CLRP and the SYIP as of November 30, 2011 or (ii) the Technical Requirements; provided however, that the addition of a fourth general purpose traffic lane travelling southbound on I-395 between Seminary Road and Edsall Road will not be an Additional Lane.
- **Interpretation:** Auxiliary Lanes between Entrances and Exits can be added without a Compensation Event

12/15/16

December 18, 2017

Dear Sir/Madam:

I wish to state my opposition to the northern Potomac bridge crossing that is being proposed as part of the proposed "Outer Beltway". My reasons follow:

A major highway bridge increases the likelihood of a chemical spill that could contaminate our drinking water. In 1997, 1 out of 10 trucks in the U.S. was transporting hazardous material. About half of those carried flammable liquids, such as gasoline, diesel fuel, and fuel oil. Accidents are common, and a study of data from 1991 to 2000 found that the likelihood of a spill in the event of a crash was 50% higher for hazardous materials than non-hazardous.

- One tanker truck of hazardous material can contaminate an entire drinking water system. A chemical spill in the amount equivalent to one tanker left 300,000 Charleston WV residents without water for over 10 days in 2014.
- We could have less than a day to react before a spill contaminates municipal water intakes serving nearly 5 million area residents. Water intakes for Fairfax County, the City of Rockville, Montgomery and Prince George's Counties, and the District of Columbia are all downstream from the most likely crossing.
- A spill requiring cleanup lasting longer than 48 hours could result in most of the Washington Metro Area being without water. We currently have only 24 to 48 hours of water supply without the Potomac.
- Climate change could make backup water supplies less reliable during spill events. Droughts are predicted to be more frequent and longer, resulting in backup supplies being used more extensively and potentially running out.
- The construction of the necessary connecting roads to the proposed bridge could do irreparable harm to the Montgomery County Agricultural Reserve and lead to extensive development in the Reserve.

Sincerely,

Robert N. Goldberg
21404 Davis Mill Road
Germantown, Maryland 20876-4422
Telephone: 301-540-2915
E-mail: r.n.goldberg@att.net

PROJECT SUBMISSION FORM

visualize2045
A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

Basic Project Information

CEID 3608

1. **Submitting Agency: VDOT**
2. **Secondary Agency: Loudoun County**
3. **Agency Project ID:**
4. **Project Type:** ☐ Interstate ☒ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. **Category:** ☒ System Expansion ☐ System Maintenance ☐ Operational Program ☐ Study ☐ Other
6. **Project Name:** **Route 15 Widening**
7. **Facility:**
8. **From (☐ at):**
9. **To:**

Prefix	Route	Name	Modifier
US	15	James Madison Highway	
		Battlefield Parkway	
VA	661	Montresor Road	

10. **Description:** **Reconstruction with added capacity. This two lane road will be widened to four lanes.**
11. **Projected Completion Year: 2025**
12. **Project Manager: James Zeller**
13. **Project Manager E-Mail: James.Zeller@VDOT.virginia.gov**
14. **Project Information URL: www.loudoun.gov/Route15**
15. **Total Miles: 3.6 miles**
16. **Schematic (file upload):**
17. **State/Local Project Standing (file upload):**
18. **Jurisdictions: Loudoun County**
19. **2018 Baseline Cost (in Thousands): $33 million** cost estimate as of 10/17/2017
20. **Amended Cost (in Thousands):** cost estimate as of MM/DD/YYYY
21. **Funding Sources:** ☒ Federal ☒ State ☒ Local ☐ Private ☐ Bonds ☐ Other

Regional Policy Framework

Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

22. **Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

☒ Single Driver ☐ Carpool/HOV
☐ Metrorail ☐ Commuter Rail ☐ Streetcar/Light Rail
☐ BRT ☐ Express/Commuter bus ☐ Metrobus ☐ Local Bus
☒ Bicycling ☐ Walking ☐ Other

☐ Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

RESPONSE: VDOT accepted the bike trail proposal in order to advance this road widening project.

23. **Promote Regional Activity Centers**

☐ Does this project begin or end in an Activity Center?

☐ Does this project connect two or more Activity Centers?

☐ Does this project promote non-auto travel within one or more Activity Centers?

24. **Ensure System Maintenance, Preservation, and Safety**

☒ Does this project contribute to enhanced system maintenance, preservation, or safety?

RESPONSE: The project will degrade preservation and safety.
Preservation: Route 15 is a National Scenic Byway in a National Heritage Area (Journey Through Hallowed Ground Region). The project will degrade the historic and scenic attributes of an otherwise-pristine two-lane rural highway in the Catoctin Rural Historic District that has remained the same for many decades. Substantial land from historic properties (Rockland, on the National Register of Historic Places) and one contributing structure to the Catoctin Rural Historic District (the Old Limestone School, now a private home), will be taken as part of the highway expansion.

Safety will be reduced. The project, which changes the designation from a rural 2-lane local access arterial to a 4-lane divided controlled access rural arterial, will reduce safe access for all private drives, roads and entrances along the section of highway. Impacted are working farms which to retain viable need to move farm machinery across and up and down the section of roadway (which will, subsequent to the lane additions, need to negotiate two extra lanes of traffic), visitors to wineries, breweries, regional parks, and equestrian facilities on Limestone School Road—which have no other close access to the highway.

Most traffic from the eastern side of Route 15 makes left-hand turns onto Route 15 toward Leesburg. A controlled access designation eliminates property owners and visitors' ability to make left-hand turns. Property values and business profitability are adversely affected. Affected property owners were not notified of the impending change in designation. It was not a topic of an ongoing, Loudoun County Route 15 Stakeholders Committee group deliberating about improvements to this roadway, nor was its description provided to them.

Where "controlled access" points are located, drivers will have an additional lane of traffic to negotiate to make a left-hand turn off of Route 15 onto a side road/drive/entrance, and two additional lanes of traffic to negotiate to make a left-hand turn onto the highway;

The proposed widening does not include analysis of whether intersection controls such as roundabouts would eliminate the need for expensive widening (because of the increased capacity and multimodal safety that RAB provide).

25. **Maximize Operational Effectiveness and Safety**

☐ Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

☐ Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

RESPONSE: A focus of citizen efforts for decades, with repeated requests to VDOT by citizens, local, and state officials, has been to increase safety along this National Scenic Byway in the Journey Through Hallowed Ground Region. The project ignores these goals. It will not reduce travel time and does not enhance safety for motorists, pedestrians, and/or bicyclists. It will reduce access for property owners, park visitors, and customers along roads, drives, and business entrances, who will have left-hand turning access reduced or eliminated.

26. **Protect and Enhance the Natural Environment**

☒ Is this project expected to contribute to reductions in emissions of criteria pollutants?

☒ Is this project expected to contribute to reductions in emissions of greenhouse gases?

RESPONSE: It will induce traffic (no studies requested by citizens have been performed) and increase cut-through traffic to adjacent rural areas on narrow two-lane and unpaved roads, including through historic villages already overwhelmed with such traffic documented in local studies. It includes no intersection treatments (such as roundabouts) which would increase safety, access, and congestion reduction—and no study has been done to evaluate whether similar congestion reduction (without inducing traffic) could be achieved for millions less by installing roundabouts (particularly at Montresor Road) instead of a four-lane median-divided controlled access highway. The project is being forwarded without any comprehensive transportation plan for the area and county (a process currently underway). No studies of environmental impacts (emissions, noise, vibrations, reduced fuel efficiency)—requested by stakeholders committee members since September—have been performed by the consultant or Loudoun County or VDOT.

27. **Support Interregional and International Travel and Commerce**

Please identify all freight carrier modes that this project enhances, supports, or promotes.

☒ Long-Haul Truck ☒ Local Delivery ☐ Rail ☐ Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

☐ Air ☐ Amtrak intercity passenger rail ☐ Intercity bus

RESPONSE: It will facilitate regional delivery at a direct cost to local delivery for rural businesses including parks, wineries, breweries, pick-your-own farms, and equestrian facilities.

28. **Additional Policy Framework Response**

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

The project will improve regional north-south mobility between Virginia and Maryland.

RESPONSE: The project ends 8 miles south of the Potomac River and the Maryland State Line. Maryland has no short or long-term plans to increase capacity south to the river, particularly at the location of the current 2-lane bridge. There has been no planning or coordination with either Frederick County or the state of Maryland on improvements to the arterial.

Federal Planning Factors

29. Please identify any and all planning factors that are addressed by this project:

a. ☒ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

RESPONSE: The project will degrade the economic vitality of the rural economy of the area, by reducing safe access to wineries, breweries, equestrian facilities, and other local businesses whose customers require safe and expedited access onto and off of Route 15.

b. ☒ Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue? ☐ Yes; ☐ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

RESPONSE: It will decrease the safety of the transportation system for all motorized and non-motorized users. Safe access will be reduced because of the "4-lane, divided, controlled access" redesignation.

c. ☒ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

RESPONSE: Four-laning for 3.6 miles further north on a 2-lane highway, and to rural road that becomes a two-lane unpaved road in a rural area does nothing to "increase Homeland Security."

d. ☒ Increase **accessibility and mobility** of people.

RESPONSE: Four-laning up to a rural road that becomes a two-lane unpaved road in a rural area does little to "increase accessibility and mobility of people."

e. ☒ Increase accessibility and mobility of **freight**.

RESPONSE: The route is plagued by freight hauled in overweight and unsafe trucks that are avoiding inspection stations on other routes. Enforcement is sporadic and ineffective.

f. ☒ Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

RESPONSE: The project, by any measure, degrades, instead of protecting and enhancing, "the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns." It is being advanced prior to the underway process of revising the county's transportation and land use plan, with no comprehensive analysis of its impact. The project lies in a fragile geologic area, a karst region characterized by sinkholes, voids, and cave entrances, one within feet of the current roadway in the project area. Sinkholes have closed portions of the highway in the past decade. Large sections of the project area are adjacent to streams and are within the floodplain area. Massive mitigation efforts will be required with little return for the investment.

g. ☒ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

RESPONSE: The project will degrade the local transportation system across and between modes, for people and freight. It will reduce safety and access for local residents and businesses.

h. ☒ Promote efficient system **management and operation**.

RESPONSE: Given the actual impacts of 29a through g, it does NOT promote efficient system management and operation.

i. ☒ Emphasize the **preservation** of the existing transportation system.

RESPONSE: It will substantially degrade the preservation of the existing transportation system because of reduced access and induced demand.

j. ☒ Improve **resiliency** and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

RESPONSE: Induced traffic will push congestion further north onto the 2-lane road, reducing reliability of the system at huge cost. Large sections of the project area are adjacent to streams and are within the floodplain area. Massive mitigation efforts will be required with little return for the investment.

k. ☐ Enhance travel and **tourism**.

RESPONSE: The project will destroy the setting of a National Register of Historic Places property, Rockland, a working farm that has been in the same family for centuries, with acreage on both sides of the road. A mature arbor and trees that protect the site from the roadway will be bulldozed. Another contributing property to the Catoctin Rural Historic District further north in the project zone, the Old Limestone School (now a private residence), 80 feet from the current two-lane rural highway, will either be taken or have a 4-lane highway just feet from its front door. It will reduce safe access for visitors to two regional parks, and numerous wineries, a brewery, pick-your-own farms, and equestrian facilities that are part of the area's growing rural economy and rely upon the rural and scenic setting to attract tourists to their venues.

Environmental Mitigation

30. Have any potential mitigation activities been identified for this project? ☒ Yes; ☐ No

a. If yes, what types of mitigation activities have been identified?

☒ Air Quality; ☒ Floodplains; ☐ Socioeconomics; ☒ Geology, Soils and Groundwater; ☐ Vibrations;

☐ Energy; ☒ Noise; ☒ Surface Water; ☐ Hazardous and Contaminated Materials; ☒ Wetlands

RESPONSE: Surveys of impacted properties have not yet been conducted; their costs may be substantial. The project lies in a fragile geologic area, a karst region characterized by sinkholes, voids, and cave entrances, one within feet of the current roadway in the project area. Sinkholes have closed portions of the highway in the past

decade. Large sections of the project area are adjacent to streams and are within the floodplain area. Massive mitigation efforts will be required with little return for the investment.

Congestion Management Information

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program? ☒ Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? ☒ Recurring; ☐ Non-recurring

c. If the congestion is on another facility, please identify it:

RESPONSE: The project does not designate intersection solutions and so does not evaluate to what degree congestion reduction could be achieved at substantial cost savings by simply redesigning intersections (for example, replacing the Route 15 bypass/Business Route 15 merge area with a roundabout, replacing the Whites Ferry signal with a roundabout and realigning Limestone School Road with Montresor Road with a roundabout.) Loudoun County requested as early as 2004 that VDOT study the latter alternative. It has not.

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial? ☒ Yes; ☐ No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

☒ None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

☐ The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

☐ The number of lane-miles added to the highway system by the project totals less than one lane-mile

☐ The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

☐ The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles

☐ The project consists of preliminary studies or engineering only, and is not funded for construction

☐ The construction costs for the project are less than $10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

RESPONSE: This project increases capacity on a segment of a principal arterial. Requested studies on the induced traffic that the increased capacity will invite or the subsequent adverse effects on side roads or points further north have been conducted. Multiple studies note that capacity additions reach previous congestion levels within 5 years. Is $33 million on a project that will fail in 5 years worth the cost?

Record Management

33. Completed Year:

34. Project is being withdrawn from the CLRP: ☐ Yes

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator: Cina Dabestani

37. Created On: 10/30/2017

38. Last Updated by: Regina Moore

39. Last Updated On: 12/12/2017

40. Comments:

The following text was received via email from the 110 individuals signed below:

Hello Transportation Planning Board,

I write to register my concerns about the draft Constrained Long-Range Transportation Plan (CLRP). This is a massive list of projects, which lists an overwhelming number of road widening and interchange projects in Maryland and Virginia. Since new and wider roads fill up so quickly, it will add to traffic, and not make conditions better. More traffic and massive roads like those found in LA will harm our quality of life, and chase people and companies away.

You studied new approaches to the problem and found that balanced land use, demand management, bus rapid transit, and Metro core capacity solutions worked better than road expansion for our transportation network and our environment. Yet, these solutions are not the basis of this latest draft CLRP. Why?

I recommend that you immediately do a major amendment to this long-range plan, one that puts balanced land use (transit-oriented development, more housing closer to jobs, etc), demand management, and transit first. Doing so is essential to preserving the character of our communities and our quality of life, and for reducing air pollution and the greenhouse gas emissions that fuel climate change.

Thank you,

Naomi Engle
23417 Peach Tree Rd
Clarksburg, MD 20871

Christopher Richter
17447 Macduff Ave.
Olney, MD 20832

Ross Simons
502 Robinson Court
Alexandria, VA 22302

Liz Craver
2521 Ross Street
Alexandria, VA 22306

Stephen Ashurst
14401 Hollyhock Way
Burtonsville, MD 20866

Peter German
11612 Hunters Green Ct
Reston, VA 20191

Elizabrth Willins
7074 Hanover Pkwy Apt C1
Greenbelt, MD 20770

Kevin Shanahan
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Arlington, VA 22203

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Falls Church, VA 22042

Evelyn Naranjo
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Ivy Main
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McLean, VA 22101

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Falls Church, VA 22042

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David Seldin
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Laurel, MD 20723

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JANUARY 19 – FEBRUARY 17, 2018 COMMENT PERIOD

MEMORANDUM

TO: Transportation Planning Board

FROM: Lyn Erickson, TPB Plan Development and Coordination Program Director

SUBJECT: Summary of Comments Received and Proposed Responses on an Additional Project Submission for Inclusion in the Air Quality Conformity Analysis of the constrained element of Visualize 2045 and the FY 2019-2024 Transportation Improvement Program (TIP)

DATE: February 21, 2018

At the January 17 meeting, the board approved the project submissions and the Air Quality Conformity Analysis scope of work for the financially constrained element of Visualize 2045. The board was also briefed on a request from Montgomery County to include the New Hampshire Avenue Bus Rapid Transit (BRT) project, which was not in the set of projects described during the initial public comment period. The board opened an additional 30-day public comment period that began on January 19 and closed on February 17.

Comments submitted have been posted on the TPB's website at www.mwcog.org/TPBcomment. This memorandum provides a summary of the comments received and responses provided by TPB staff. A compilation of the comments received as posted is attached to this memorandum.

The TPB will be briefed on the comments received and responses provided. Following that briefing, the board will be asked to approve the additional project submission for inclusion in the Air Quality Conformity Analysis of the constrained element of Visualize 2045 and the FY 2019-2024 TIP. The comments and responses will be included in the documentation of Visualize 2045.

COMMENTS AND RESPONSES

Comments were received from five individuals and two governmental representatives. TPB staff have reviewed each comment and summarized their main points in this memo. Comments were received on the following projects and topics:

A. New Hampshire Ave. BRT in Montgomery County
B. US Route 15 widening in Loudoun County
C. Bicycle/Pedestrian connections between Montgomery and Loudoun counties

A. NEW HAMPSHIRE AVE. BRT IN MONTGOMERY COUNTY

Five comments were received in support of Montgomery County's proposal to include the New Hampshire Ave. BRT project in the air quality analysis. The comments make the following points:

1. **Comment:** The project will reduce pollution, increase access to jobs and services, and benefit lower-income communities.

   TPB Staff Response: The collective impacts of this and the other projects included in the financially constrained element of Visualize 2045 on air pollution and access to jobs will be

modeled and projected in the Air Quality Conformity Analysis and the Performance Analysis that will be published in September. The analyses will not break out the impacts of individual projects.

2. **Comment:** The project is critical to achieve the goals of the White Oak Science Gateway Master Plan, and the segment from White Oak to Eastern Avenue should be prioritized for completion before 2030.

   TPB Staff Response: Staff have forwarded this recommendation to Montgomery County Department of Transportation. The project is currently planned for implementation in 2045, but this does not preclude Montgomery County from advancing the completion date of some or all of the project in future updates to the long-range plan.

B. US ROUTE 15 WIDENING IN LOUDOUN COUNTY

One comment was received in support of VDOT's proposal to widen US 15.

1. **Comment:** The project will improve safety and reduce congestion.

   TPB Staff Response: The board approved the inclusion of this project in the air quality analysis at its January 17 meeting. The impact of this and all other projects included in the financially constrained element of Visualize 2045 on travel demand and congestion will be modeled and projected in the Air Quality Conformity Analysis and the Performance Analysis that will be published in September. The analyses will not break out the impacts of individual projects.

C. BICYCLE/PEDESTRIAN CONNECTION BETWEEN MONTGOMERY AND LOUDOUN COUNTIES

One comment was received suggesting a bicycle/pedestrian crossing of the Potomac River between Montgomery County and Loudoun County.

1. **Comment:** Such a project would alleviate concerns about development and congestion while providing healthy alternatives and improvements to traffic.

   TPB Staff Response: A project of this nature has not been proposed for inclusion in the constrained element of Visualize 2045 or as a study by any agency and is not a subject of the board's action at this time. A bicycle/pedestrian facility would not be included in the travel demand modeling used to perform the air quality conformity analysis.

Comments Received on the Additional Project Submission for Inclusion in the Air Quality Conformity Analysis of the Constrained Element of Visualize 2045 and the FY 2019-2024 TIP

New Hampshire Ave BRT project in Montgomery County

Submitted by: A Governmental Body or Representative

Ludlow, Suzanne *Takoma Park, Maryland 20912* *2/16/2018*

City of Takoma Park, Office of the City Manager

Subject: New Hampshire Bus Rapid Transportation Project, Visualize 2045

Attached please find comments from the City Manager of Takoma Park regarding the New Hampshire Avenue BRT proposal. (see page 3)

Kostiuk, Kacy *Takoma Park, Maryland 20912* *2/20/2018 8:10:39 AM*

Subject: Support for New Hampshire Ave BRT Project

I am writing to support the inclusion of Montgomery County's New Hampshire Avenue Bus Rapid Transit Project in the Air Quality Analysis for the constrained element of Visualize 2045. The City of Takoma Park has strongly supported the County's plans for Bus Rapid Transit on New Hampshire Avenue for many years. This could serve an important role in connecting Takoma Park residents and residents throughout the region with jobs, shopping, recreation, and other opportunities, making it possible to travel more easily and smoothly in the region while providing a more environmentally friendly and cost-effective alternative to driving. Sincerely, Kacy Kostiuk Councilmember, City of Takoma Park Member, COG Transportation Planning Board

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Submitted by: An Individual

Landy, Gail *,* *1/19/2018*

Subject: Rapid Transit Bus

The Rapid Transit Bus sited to run on the Route 29 corridor in Eastern Montgomery County will reduce pollution, and give residents access to sustainable jobs. Lower income people live in Eastern Montgomery County, and are limited in employment due to lack of vehicles for transit. Cars and trucks are the major source of air pollution in Montgomery County. As a Gaithersburg, resident I know that public transportation is a benefit to people in Upper Montgomery County. We depend on Metro and the Marc commuter train for cheaper and convenient transit to jobs in the county and DC. We also rely on Ride On and Metro Buses for daily transit. Why shouldn't Eastern Montgomery County have the same advantage.

Finnegan, Eileen *Silver Spring, Maryland 20903* *1/30/2018 10:21:52 AM*

Subject: New Hampshire BRT inclusion in Visualize 2045

The New Hampshire Bus Rapid Transit segment proposed by Montgomery County Department of Transportation is necessary to achieve the goals of the recent White Oak Science Gateway Master Plan. The first segment from White Oat to Eastern Ave/Fort Totten should be prioritized for completion before 2030. The balance of the route to Colesville should follow. The New Hampshire BRT route will serve a growing FDA, high-density development in New Hampshire corridor, the Purple Line at Langley Park and the heavy ridership from Takoma/Langley. It adds to the high-quality transit services in the Eastern Montgomery/Northern Prince George's county area. Please approve this late submission request of MoCo DOT to the Visualize 2045 long-range plan

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Ditzler, Barbara *Silver Spring, Maryland 20910* *1/22/2018 11:10:44 AM*

Subject: BRT - New Hampshire Ave

More routes on the planned MoCo BRT Transit System is a big plus for the community. We need better and more transit to improve our daily lives, the air we breathe and our general environment. New Hampshire Ave line is a natural to help join our BRT system together and minimize congestion

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Other Regional Transportation Issue

Submitted by: An Individual

Goodrum, David *Leesburg, Virginia 20176* *2/7/2018 3:56:05 PM*

Subject: Rte 15 widening: Thank You!

Thank you for the inclusion of Rte 15 in Visualize 2045, and the FY 2019-2024 Transportation Improvement Program. As a resident who lives on the section of Rte 15 along the stretch of road that this plan affects, I'm delighted to finally see that action is going to be taken after years and years of unsafe roads and the worst congestion in Loudoun County. The end result of this project will save lives and make the daily lives of people who live here, as well as the surrounding communities that are impacted, much better. Let me say it again: Thank You!!!

Eckstein, Michelle *Sterling, Virginia 20165* *1/31/2018 2:45:29 PM*

Subject: Potomac River Bridge

We need more effective transportation solutions between Montgomery and Loudoun counties. There is a lot of debate about creating new bridges north of the DC. To combat concerns of cost, sprawl, traffic, and pollution, I recommend a building "foot/bike only" bridge across the Potomac. This would allow environmentally friendly transportation which utilizes the existing C&O canal towpath and W&OD trail. People have flocked to other cities that have invested in a strong bike and pedestrian culture. For the health of DMV residents, improvements in traffic, and the future growth of the area please look towards adding bike paths and bridges which can be used for daily commuting. Michelle Eckstein

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City of Takoma Park, Maryland

Office of the City Manager
Tel: (301) 891-7230
Fax: (301) 270-8794
email: SuzanneL@takomaparkmd.gov

7500 Maple Avenue
Takoma Park, MD 20912
www.takomaparkmd.gov

Suzanne R. Ludlow, City Manager

February 16, 2018

Transportation Planning Board
777 North Capital Street, NE, Suite 300
Washington, DC 20002-4239

RE: New Hampshire Bus Rapid Transportation Project, Visualize 2045

The City of Takoma Park supports Montgomery County's request of the addition of the New Hampshire Bus Rapid Transit Project to the Montgomery County inputs to the constrained element of Visualize 2045.

This project provides for design and construction work related to the Bus Rapid Transit (BRT) line on New Hampshire Avenue from the Colesville Park and Ride Lot to Eastern Avenue. Activity centers are located at Takoma/Langley Crossroads and at White Oak. Corridor recommendations, from north to south, include a mixed traffic transitway from Colesville Park-and-Ride to Lockwood Drive, and dedicated lane(s) from Lockwood Drive to the District line at Eastern Avenue.

The County Council approved the Countywide Transit Corridors Functional Master Plan, an amendment to the Master Plan of Highways and Transportation, on November 26, 2013. The New Hampshire Avenue Corridor Bus Rapid Transit project is a priority for both the City and County.

The City of Takoma Park has strongly supported the County's plans for BRT on New Hampshire Avenue for many years, along with other key investments in transit for the area such as the Purple Line, the Takoma/Langley Transit Center, and the K9 MetroExtra service improvements. The New Hampshire Avenue Corridor Concept plan was adopted by the City in 2008 to convert a 1.25-mile segment of New Hampshire Avenue into a pedestrian-friendly, multi-way boulevard. The plan specifically calls for "a rapid bus route with limited stops and frequency" for New Hampshire Avenue, reiterating the WMATA 2003 rapid bus priority corridor that identifies the New Hampshire Corridor for BRT. As noted in the Transit Corridors Master Plan, New Hampshire Avenue in Takoma Park is a prime candidate for early implementation of the BRT network and the City supports the County's effort to move forward on this initiative.

Sincerely,

Suzanne R. Ludlow
City Manager

SEPTEMBER 7 – OCTOBER 7, 2018 COMMENT PERIOD

MEMORANDUM

TO: Transportation Planning Board

FROM: Lyn Erickson, Plan Development and Coordination Program Director

SUBJECT: Summary of Comments Received and Proposed Responses on Visualize 2045, the FY 2019-2024 Transportation Improvement Program (TIP), and the Air Quality Conformity Analysis

DATE: October 11, 2018

On September 7, 2018, the draft Visualize 2045 long-range transportation plan, the draft FY 2019-2024 Transportation Improvement Program (TIP), and the draft Air Quality Conformity Analysis were released for a 30-day public comment and inter-agency review period. The board was briefed on Visualize 2045, the FY 2019-2024 TIP, and the Air Quality Conformity Analysis at its September 21 meeting. The comment period closed on October 7. The board will be briefed on the comments received and recommended responses and asked to accept the comments for inclusion in the documentation of Visualize 2045, the FY 2019-2024 TIP, and the Air Quality Conformity Analysis at the October 17 meeting.

This memorandum provides a summary of the comments and feedback received on Visualize 2045, the TIP, and the draft Air Quality Conformity Analysis, and provides recommended responses for the board's consideration. This memo presents this summary in three parts.

Part A summarizes comments and feedback received on Visualize 2045 and the TIP from the following: TPB members including Fairfax County, the City of Falls Church, and the National Capital Planning Commission; the TPB's Access for All Advisory Committee (AFA); 97 individuals; and 8 advocacy organizations. Where appropriate, responses to comments are provided.

Part B summarizes the comments received from the Metropolitan Washington Air Quality Committee (MWAQC) on the Air Quality Conformity Analysis and provides a response from TPB staff.

Part C provides responses to questions posed and comments made by board members during the presentation of Visualize 2045 at the board meeting and work session held on September 21.

All comments received have been made available for review online at mwcog.org/TPBcomment. While this memo contains a summary of the comments, a separate compilation of every comment received has been made available to TPB members in both hardcopy and online formats.

PART A: COMMENTS RECEIVED ON VISUALIZE 2045 AND THE FY 2019-2024 TIP

In a departure from comments received on previous TPB-approved plans, many of the comments received on Visualize 2045 were not project-specific and did not focus on the Visualize 2045 Constrained Element. Instead, commenters focused on other elements of the plan, including the long-range planning process itself and the aspirational initiatives.

Comments were received from TPB members including Fairfax County, the City of Falls Church, and the National Capital Planning Commission; the TPB's Access for All Advisory Committee (AFA); 97 individuals; and 8 advocacy organizations. The letters from Fairfax County, the City of Falls Church, and the National Capital Planning Commission and the memo provided by the TPB's Access for All Advisory Committee (AFA) are found in Appendix A of this memo.

Staff have summarized comments received into two categories: those that provide general feedback on the plan and TIP; and those comments that focus on specific projects, locations, or issues. Category 1 comments do not warrant a response, rather this information is being provided on behalf of the commenters to the TPB members. Category 2 comments refer to specific projects, the need for improvements in specific locations, or to specific issues. TPB staff have prepared a set of draft responses to these comments, consulting with staff from member agencies where necessary. In both categories, the comments are summarized and grouped together by topic area.

CATEGORY 1: General Comments and Feedback on Visualize 2045, the TIP, and the TPB's Long-Range Transportation Planning Process (no response needed)

Comments on Bus Rapid Transit (BRT)

1. Comments emphasized the importance of dedicated lanes for BRT and that BRT provides the opportunity for innovative solutions to be implemented in areas.
2. There will not be enough usage of BRT to make up for the loss of travel lanes for vehicular traffic.

Comments on Commuter Rail and Metro

1. Service levels on the region's commuter rail systems should be increased.
2. Express lines for both Metrorail and commuter rail should be implemented.
3. The Purple Line should be extended into Virginia or a circumferential Metrorail line should be added near the Capital Beltway.
4. Rather than a new Metro station in Rosslyn, a new Silver/Orange line transfer station at East Falls Church should be built.
5. Metrorail should be extended to Prince William County (Haymarket, Manassas).

Comments on Toll Facilities

1. Support was indicated for the I-270 and I-495 Managed Lanes projects in Maryland and the I-495 HOT Lanes expansion project in Virginia.
2. Toll facilities can be a burden to low and even middle-income populations.
3. Comments opposed tolling outright.

4. Comments supported tolling, but on existing facilities only and were opposed to additional capacity.

Comments on Bicycle and Pedestrian Infrastructure

1. Visualize 2045 doesn't do enough to provide options for bicyclists and pedestrians.
2. TPB planning efforts should be cognizant of new and emerging technologies such as electric bikes and powered scooters.
3. A dedicated funding source should be established for bicycle and pedestrian projects.
4. There is a need to prioritize funding for accessible bicycle and pedestrian options.
5. Barrier or parking-separations are essential for the success of bicycle lanes. Implementing agencies should consider separate facilities each for vehicles, pedestrians, and bicycles and scooters.
6. The funding in the Maryland portion of the TIP for bicycle and pedestrian improvements should be redirected to badly needed road and transit projects.

Comments on the TPB's Role in Land Use Planning

1. The region is not only divided by race and income but by access to jobs.
2. The TPB should play a bigger role in land-use planning.
3. The TPB should do more to encourage people to live close to their jobs, increasing the job-housing proximity rate.
4. Concentrating residential development in Regional Activity Centers will increase housing prices and force more people to move outside of those centers.
5. The data assumptions made in COG's Regional Employment Monitoring System have produced a jobs-to-population ratio that seems high.
6. A socio-economic analysis should be conducted to make sure that development in regional activity centers does not have adverse impacts.
7. Development should be incentivized in underutilized activity centers and around under-utilized Metrorail and transit stations, particularly on the eastern side of the region, and greenfield development should be limited.
8. Corridors should be identified that are appropriate for housing.
9. Following the 2020 U.S. Census, the definitions of the region's activity centers should be revisited.
10. The TPB should work with COG and others to develop regional housing programs and address the need for affordable housing.

General Comments on Visualize 2045 and the FY 2019-2024 TIP

1. Comments were received both in favor of and in opposition to expanding capacity on the region's highways.
2. The TPB should make assessments of progress on the seven Aspirational Initiatives whenever the plan is updated.
3. The TPB should strive to promote increased service and provide more affordable options on the region's public transportation systems.
4. Visualize 2045 should allocate resources for investments that may be required to accommodate Amazon's new headquarters.
5. The plan should give greater consideration to the impacts of emerging technologies and automation.
6. Visualize 2045 should show planned improvements mapped against large traffic-generators (military bases, campuses, etc.).

CATEGORY 2: Comments on Specific Projects, Locations or Issues (response provided)

Comments on Bus Rapid Transit (BRT)

1. BRT should be implemented on Virginia's Route 7.

   Response: According to the Northern Virginia Transportation Commission, the Envision Route 7 has completed the Phase II Study and determined that BRT from Mark Center to Tysons via the East Falls Church Metro Station is a viable transit solution for the corridor. The next step is a Phase III Conceptual Engineering Study to refine the project cost and identify right-of-way that could be utilized by the BRT and guide jurisdictions on how to preserve that right-of-way. This study is expected to continue through 2019. Once funding for construction of the project has been established, the project will be eligible to be submitted for inclusion in the constrained element of the TPB's long-range plan.

2. BRT should be implemented between the Branch Avenue Metro Station and Charles County in Maryland.

   Response: Transit accommodations along the US 301 corridor in portions of Prince George's County and Charles County have been under consideration for some time. As part of MDOT MTA's Southern Maryland Rapid Transit (SMRT) study, MDOT MTA has worked with MDOT SHA to develop transit alternatives that are compatible with planned MDOT SHA projects along the US 301 and MD 5 corridors in Prince George's County and Charles County. The completed SMRT Alternatives Report included a summary of LRT and BRT alternatives that were developed. MDOT MTA recommended a specific BRT alternative, and any further advancement to 30% design would require a preferred alternative, available and dedicated funding, and a funding partnership with the participating counties. Currently, MDOT SHA has been focusing on a subset of the larger US 301 Transportation Corridor project; the MD 5 (Mattawoman-Beantown Road) and US 301/MD 228/MD 5 Business intersections. Since early 2018, MDOT SHA has been engaged in the ongoing re-evaluation of the US 301/MD 5 intersection to further develop flyover concepts for that location. For both the US 301/MD 5 Flyover and US 301/MD 228/MD 5 Business Interchange, MDOT SHA anticipates hosting a public workshop in December 2018 to present refined options to stakeholders. Advancing design and subsequent phases for these projects as funds become available will happen after a preferred alternative is selected.

Comments on Commuter Rail and Metro

1. Commuter rail routes should be expanded in both Maryland and Virginia and service levels should be increased, including more run-through service.

   Response: Visualize 2045 includes the MARC Growth and Investment Plan and the VRE System Plan which both plan for increases in service and expanded stations.

2. Visualize 2045 should include the construction of a second entrance to the East Falls Church Metro Station.

   Response: Implementation of this project has been delayed by Arlington County due to a reduction in funding.

3. WMATA should expand the number of routes and improve service levels on all routes. Where possible, buses should run in dedicated lanes.

   Response: WMATA's Regional Bus Transportation Project Study is currently underway to examine some of these issues and more. Dedicated bus lanes are planned and implemented at the discretion of each jurisdiction.

Comments on Potomac River Crossings

1. A number of comments were received both in favor of (13) and in opposition to (8) new Potomac River bridge crossings.

   Response: No project of this nature is included in the constrained or aspirational elements of Visualize 2045.

Comments on Specific Roadway Projects

1. The completion date of the Battlefield Bypass in Prince William County should be advanced earlier than the current estimate of 2040.
2. Virginia Route 28 in Loudoun County should not be widened.
3. Maryland Route 5 in Prince George's and Charles counties should not be widened.

   Response: These comments have been shared with the TPB members and the respective implementing agencies.

Comments on Bicycle and Pedestrian Infrastructure

1. The Capital Trails Network should be included in lieu of the National Capital Trail in the Aspirational Element. The views in this comment were echoed by more than 50 commenters.

   Response: The National Capital Trail included in Visualize 2045 is the initiative approved by the Long-Range Plan Task Force and subsequently by the TPB. TPB member agencies have been called upon to develop and implement projects to advance the endorsed initiatives. Consistent with this call to action, one request is to expand the National Capital Trail strategically to include trails from all member jurisdictions. The TPB staff anticipates this work activity to be completed and to be included in the next update of Visualize 2045. It is to be noted that the TPB has a regional bicycle and pedestrian plan which includes all of the bicycle and pedestrian improvements within the member jurisdictions. It will be updated in FY 2019. The strategic expansion of the National Capital Trail could draw from projects in this regional bicycle and pedestrian plan.

General Comments on Visualize 2045 and the FY 2019-2024 TIP

1. The TPB should employ a scoring system to prioritize projects in the TIP and to discourage bad investments and promote its goals.

   Response: The TPB acknowledges that the region's major implementing agencies each have their own project scoring, selection, and prioritization systems. The TPB has been briefed on many of these systems (such as Virginia DOT's SMART SCALE) and believes them to be consistent with its own goals.

2. Visualize 2045 should provide a breakdown of transportation infrastructure investment by the core, inner, and outer jurisdictions.

   Response: Visualize 2045 is a regional plan and is intended to look at regional mobility and accessibility. Decisions on where to invest in infrastructure are made based on demonstrated needs for movement, not on population distribution.

PART B: COMMENT AND RESPONSE ON THE AIR QUALITY CONFORMITY ANALYSIS OF THE VISUALIZE 2045 PLAN AND FY 2019-2024 TIP

The Metropolitan Washington Air Quality Committee (MWAQC) provided comments to TPB in its October 1, 2018 letter, which is included in this memo as Attachment B.

MWAQC Comments Summary:

1. Concurs that the transportation sector emissions associated with the proposed transportation plans meet the motor vehicle emissions budgets (Tier 2) in the 2008 Ozone National Ambient Air Quality Standard Maintenance Plan.
2. Expresses concerns about the use of the Tier 2 emissions budgets and wishes to stress that the future transportation plans should account for air emissions so that future conformity analyses would not need to use Tier 2 MVEB buffers.
3. Acknowledges that the Tier 2 emissions budgets were provided to account for conditions where the conformity analysis is based on different data, models, or planning assumptions, including, but not limited to, updates to demographic, land use, or project-related assumptions, than were used to create the emissions budgets in the maintenance plan.
4. Mentions that the region has made significant progress in reducing emissions but emphasizes the need to continue its efforts to further reduce emissions to meet the 2015 ozone NAAQS, in particular from on-road mobile sources.
5. Notes that the emissions graphics in the Visualize 2045 plan document only include the Tier 2 budget lines and suggests that the Tier 1 budget lines should also be shown.
6. Pledges to work with TPB to help members implement new measures to further reduce air pollution. Comments that since on-road emissions play a significant role in the overall ozone problem in this region, it is important that the transportation sector plays its role in resolving this problem.
7. Is encouraged to learn that the region is achieving reductions in VMT per capita, but urges the TPB's continued investment in public transit, ride-sharing, bike and pedestrian infrastructure, and other alternative modes.

8. Appreciates the joint TPB/MWAQC/CEEPC comment letter regarding the federal proposal to modify the emissions standards for model year 2021-2026 light-duty vehicles.

TPB Response:

The TPB appreciates MWAQC's review and concurrence that the regional emissions estimates from the Visualize 2045 Plan and FY2019-2024 TIP conform to the motor vehicle emissions budgets contained in the 2008 Ozone National Ambient Air Quality Standard Maintenance Plan and found adequate for use in air quality conformity analyses by the US EPA.

The Board notes MWAQC's concern about the use of Tier 2 emissions budgets. The TPB appreciates MWAQC's acknowledgment that the Maintenance Plan provided two tiers of emissions budgets for use in transportation conformity analyses. The EPA's determination of adequacy of the emissions budgets for use in conformity, published in Federal Register on August 6, 2018, explicitly noted the ability to use the Tier 2 emissions budgets and the conditions for their use. Tier 2 emissions budgets are to be used when a conformity analysis is "based on different data, models, or planning assumptions, including, but not limited to, updates to demographic, land use, or project-related assumptions, than were used to create the MVEBs in the maintenance plan", and if estimated emissions are higher than Tier 1 levels.

The air quality conformity analysis of the Visualize 2045 plan and FY2019-2024 TIP is based on different data, models and planning assumptions than were used to create the MVEBs. Specifically, the conformity analysis contains a new round of land activity forecasts, updated vehicle fleet data, a modified travel demand model, and new project inputs. These changes are documented in the conformity report and were discussed in briefings provided throughout the consultation and comment period. Additionally, the TPB's sensitivity analysis on the changes in inputs, also documented in the conformity report (Appendix C of the Visualize 2045 Plan document), indicates that the changes in the vehicle fleet data are a significant contributor to emissions exceeding Tier 1 levels.

The TPB notes that transportation emissions from the Visualize 2045 plan and FY2019-2024 TIP are below the Tier 2 budget levels and are significantly below the levels needed to attain the 2008 ozone standards in 2014. The Visualize 2045 plan analysis estimates that by 2019, mobile source VOC emissions at 42.5 tons/day and NOx emissions at 72.9 tons/day are already significantly below the 2014 levels of 61.3 tons/day for VOC and 136.8 tons/day for NOx.

The TPB agrees with MWAQC regarding the significant progress the region has made in reducing emissions. It is worth noting the substantial reduction in mobile source emissions projected for the 2014-2030 timeframe (the 2008 Ozone standards maintenance period). Estimates of NOx emissions are 70% lower in 2025 and 80% lower in 2030 relative to the mobile source emissions levels in 2014. Similarly, estimates of mobile source VOC emissions, relative to 2014 levels, are 46% lower in 2025 and 61% lower in 2030.

In addition to federal emissions control programs, the projects, programs, and policies reflected in the Visualize 2045 plan contribute to reducing emissions by decreasing levels of congestion forecast in the previous plan and promoting alternative modes of travel. Examples of congestion reducing projects include doubling the amount of tolled facilities in the region, an almost 50% increase in high capacity transit miles, and concentrating about three fourths of job and two thirds of household growth in regional activity centers. The Visualize 2045 plan forecasts transit, walk/bicycle, and

ridesharing modes of travel to all increase at a higher rate than single driver trips. Additionally, relative to the 2016 CLRP, the Visualize 2045 plan is forecast to reduce future (2045) daily vehicle hours of delay and congested lane miles by about 33% while reducing the amount of VMT per capita.

MWAQC noted that the emissions graphics used in the in the Visualize 2045 plan document do not depict the two tiers of emission budgets and suggested that both tiers be shown. The TPB has updated the graphics in the main Visualize 2045 plan document to include both tiers. The graphics showing both mobile budget tiers, as well as detailed information about the use of the Tier 2 budgets have always been a part of the primary air quality conformity report.

The TPB agrees with MWAQC on the need for continued investment in public transit, ridesharing, and other programs to reduce emissions. In support of this, Visualize 2045 includes an additional $5.4 Billion in dedicated funding for the region's Metro system. Additionally, the TPB remains committed to transportation emission reduction measures and travel demand management (TDM) strategies. The TPB continues to implement and enhance its regional Commuter Connections (TDM) program. The TPB has made enhancing TDM strategies one of its top endorsed initiatives to reduce congestion, increase mobility, and reduce emissions.

The TPB agrees that there should be a continued effort in the region to reduce emissions across all sectors to be able to meet the tougher 2015 Ozone standards. The TPB appreciates MWAQC's pledge to work together to help implement new measures to further reduce air pollution. The Board looks forward to continuing its collaboration and cooperation with its member agencies and those of MWAQC in the development of plans and actions to reduce emissions from all sources to improve the region's air quality and protect public health.

PART C: RESPONSES TO WORK SESSION AND BOARD MEETING QUESTIONS

Part C provides responses to questions posed and comments made by board members during the presentation of the Visualize 2045 long-range plan at the board meeting and work session held on September 21.

1. The title of the 2nd endorsed initiative has been narrowed to only include BRT. It should be broadened "back to the way it was adopted by the board".

   Response: The text in the Draft Visualize 2045 Plan document has been revised as "Regionwide Bus Rapid Transit (BRT) and Transitways" to account for others forms of rapid transit and match the text from TPB's December 2017 resolution.

2. How has the proportional allocation of system expansion funding between highway system and transit system changed over the past several long-range transportation plans?

   Response: Prior to 2014, the long-range plan financial plan did not distinguish between capital funding for system expansion and capital funding for state of good repair. However, information is available that allows a reasonable estimate of system expansion funding. Table 1, below, summarizes the available information for Visualize 2045 and the preceding three long-range plans, completed in the years specified. Note that dollar amounts are not

comparable, as the year of expenditure and the period of each long-range plan differs. However, relative modal allocation is comparable.

Table 1. Long Range Plan - Expansion Funding by Mode (Millions $ YOE)

	2006	2010	2014	*Visualize 2045* 2018
Highway	$27,082	$24,736	$26,137	$40,085
Percentage of all Expansion Dollars	*76%*	*67%*	*63%*	*62%*
Transit	$8,705	$12,386	$15,486	$24,200
Percentage of all Expansion Dollars	*24%*	*33%*	*37%*	*38%*

3. How does the planned Visualize 2045 investments quantitatively reflect each of the endorsed aspirational initiatives?

   Response: Table 2, below, shows the result of an assessment of project funding in the Visualize 2045 project database, for the applicable endorsed asportation initiatives. Overall, close to half of the funding proposed for capacity expansion can be identified as directly supporting the initiatives, and this figure certainly undercounts the total funds being invested by the region's transportation agencies. This is so since the projects included in Visualize 2045 Plan are limited to those that are programmed to receive federal funds and / or federal approval. Transportation agencies implements projects and programs that support one or more endorsed initiatives which do not use federal funds and/or need federal approval and are thus not reflected in the Visualize 2045 Plan.

   It is also important to note that the following analysis looks only at funding for highway and transit expansion projects. Two of the initiatives, Optimize Regional Land-Use Balance and Employer-Based Travel Demand Management Policies are not included, as they are not funded through expansion projects in the Visualize 2045 Plan. Furthermore, many of the larger multi-modal projects in Visualize 2045 that would support the initiatives for Improve Access to Transit Stations and Improve the Trail Network do not discretely identify the funding for those components in the long-range plan.

   Table 2. Visualize 2045 Expansion funding for the Endorsed Aspirational Initiatives

Endorsed Aspirational Initiatives	Visualize 2045 Funding for Expansion ($ Millions)
Expand Bus Rapid Transit (BRT) and Transitways	$4.541
Move More People on Metrorail	$8.736
Expand the Express Highway Network	$14,448
Improve Walk and Bike Access to Transit	$1,404
Complete the National Capital Trail	$212
Expansion Funding Supporting Endorsed Initiatives	**$29,341**
Proportion of Total Expansion funding ($64.3 B)	***45.6%***

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SHARON BULOVA
CHAIRMAN

October 5, 2018

Mr. Kanathur Srikanth
Executive Director
National Capital Region Transportation Planning Board
777 North Capitol Street NE, Suite 300
Washington, DC 20002

Reference: Comments on Visualize 2045

Dear Mr. Srikanth:

Thank you for providing an opportunity to comment on the draft Visualize 2045 Plan. On behalf of the Fairfax County Board of Supervisors, I am writing to provide the Transportation Planning Board (TPB) comments regarding the Draft Plan that were discussed by the Board on October 2, 2018.

Overall, the Board supports the plan and recommends the Transportation Planning Board adopt Visualize 2045 on October 17, 2018. The Board supports and encourages this new kind of long-range planning effort by the TPB, which now includes aspirational projects, programs, and policies that go beyond financial constraints. The Board appreciates the multi-modal approach to accommodate anticipated growth in population and employment. Also, the Board is pleased that Visualize 2045 highlights bicycle and pedestrian projects, freight planning, and other transportation programs aimed at reducing congestion and improving air quality, as well as, presenting and analyzing key land-use issues facing the region, including the links between land-use, economic vitality, and transportation.

The Board is especially pleased to see two highway projects in the Plan that will greatly benefit the region: 1) Maryland's I-95/495 Traffic Relief Plan, and 2) Virginia's I-495 – construct 4 HOT lanes project. Together, these two projects will address one of the region's major congested bottlenecks – the American Legion Bridge. The County believes that the capacity needs across the Potomac River must be addressed to alleviate the existing congestion and to ensure that the region remains economically vibrant.

The Board also appreciates the inclusion of the Washington Metropolitan Area Transit Authority's plans for expanding capacity on Metrorail by running all eight-car trains during peak hours, making capacity improvements to stations in the system core, and planning to construct a new Rosslyn tunnel under the Potomac River.

The Board requests that this letter be made a part of the public comments record, and that full consideration be given to these comments in adopting the Final Visualize 2045 Long-Range Transportation Plan at the TPB's October 17, 2018, meeting.

Thank you for the opportunity to provide comments on the Draft Plan. If you need any clarification or further information, please call Mike Lake at (703) 877-5666 or me at (703) 324-2321.

Sincerely,

Sharon Bulova
Chairman

cc: Members, Fairfax County Board of Supervisors
Bryan J. Hill, County Executive
Robert A. Stalzer, Deputy County Executive
Catherine A. Chianese, Assistant County Executive
Tom Biesiadny, Director, Department of Transportation

CITY OF FALLS CHURCH

October 5, 2018

Mr. Charles Allen
Chair, National Capital Region Transportation Planning Board
777 North Capitol Street, NE, Suite 300
Washington, DC 20002-4239

Transmitted via email: TPBcomment@mwcog.org

RE: Visualize 2045 Plan Update Community Plan

Dear Mr. Allen:

The City of Falls Church is pleased to continue our partnership with COG and our regional partners in the development of the vital regional long-range transportation plan. Thank you for the strong regional staff planning efforts and community input opportunity. This letter serves as the City's comments for the 30-day public comment period. We request that the following core principles and key projects be included in the final Visualize 2045 plan:

Core Principles Integrated into Plan Update (not in priority order):

- City supports continued investment that supports economic development and the needs of tomorrow's economy
- City supports continued investment in regional activity centers, as called for in the Region Forward plan
- City supports the vision of a multimodal transportation network, as that has been demonstrated to be equitable and sustainable
- Continue monitoring advances in technology for innovation and cybersecurity and advise on policies as well as requirements that enhance quality of life

Key Projects Integrated into Plan Update (not in priority order):

- Continued investment in regional bike and pedestrian network – both within and among activity centers
- Invest in underutilized transit stations, such as West Falls Church Metro
- Route 7 high-capacity transit, i.e., Rapid Bus Transit
- East Falls Church Metro Station second entrance

Please do not hesitate to contact Cindy Mester, Deputy City Manager, at cmester@fallschurchva.gov if you have any questions or if we can provide additional details.

Sincerely,

Wyatt Shields
City Manager

National Capital Planning Commission
401 9th Street, NW North Lobby, Suite 500 Washington, DC 20004 Tel 202.482.7200 Fax 202.482.7272 www.ncpc.gov

IN REPLY REFER TO:
NCPC FILE No. 8025

October 10, 2018

Chairman Charles Allen
National Capital Region Transportation Planning Board
777 North Capitol Street NE, Suite 300
Washington, DC 20002-4239

RE: NCPC Comments on draft TPB Visualize 2045 Plan: A Long-Range Transportation Plan for the National Capital Region

Dear Mr. Allen:

Thank you for the opportunity to comment on the Visualize 2045 plan. As the federal government's central planning agency for the National Capital Region, the National Capital Planning Commission (NCPC) has a shared interest in a multi-modal regional transportation system that meets the travel needs of the region's workers, residents, and visitors. NCPC prepares a comprehensive plan that guides federal development, and reviews federal master plans and projects in the region based on the comprehensive plan's policies. Our interest in Visualize 2045, and the comments in this letter, reflect the plan's use as a helpful resource for developing our policies and in our review of regional federal development.

First, we commend you on creating a plan that combines the aspirational, feasible, and required aspects of a long-range regional transportation document. The draft plan reflects the significant work of the Transportation Planning Board (TPB) to adopt aspirational projects, programs and policies that reflect the region's shared development goals, as well as the projects that are financially feasible.

In addition, the plan takes a technical, complicated subject and makes it clear and easy to understand. The plan and related documents provide useful, well-researched contextual information that links transportation to the region's demographic and land use characteristics, as well as trends and emerging issues. It is also clear that the TPB made a serious commitment to connect with the public in this process.

NCPC supports the aspirational ideas of Visualize 2045 and notes that they are generally consistent with the policies in the *Comprehensive Plan for the National Capital: Federal Elements*. Regional federal facilities, and the workers and visitors that travel to them, rely on an efficient, inter-connected, and sustainable transportation system. The Comprehensive Plan supports a multimodal transportation system and maintaining the region's transportation assets in good repair. Many federal workplaces and campuses are located in or in close proximity to Regional Activity Centers and Metro stations, reflecting the shared development history and continued recognition of the importance of transit in getting federal employees to work. Listed below are summaries of select policies that support the aspirational initiatives identified in Visualize 2045.

Transportation Element:

- Support an integrated network of complementary regional transit services.
- Support the efforts of local jurisdictions to design and implement new, expanded, and innovative transit services that supplement existing transit and fill unmet transit needs
- Create partnerships with federal agencies and local governments that support multi-modal commuting and shorter commute times through federal facility location decisions and Live-Near-Your-Work programs.
- Work with local jurisdiction bike coordinators, the Metropolitan Washington Council of Governments, Commuter Connections, cycling organizations, such as the Washington Area Bicyclist Association, and others, to promote bicycle commuting among federal employees.
- Support transit-oriented development at Metrorail stations, within Regional Activity Centers, and at other transit nodes.
- Support multimodal connections and transportation alternatives in the regional system
- Encourage ridesharing, biking, walking, transit, and other non-SOV modes of transportation for federal commuters and visitors

Workplace Element Policies:

- Locate federal facilities within walking distance of existing or planned fixed route transit services.
- Locate new federal facilities to support regional and local agency objectives that encourage compact forms of growth and development and support local and federal goals to increase local and regional transit system ridership.
- Locate federal workplaces near a variety of housing options to benefit employees.
- Encourage telework and Alternate Work Schedules for federal employees where it benefits the federal government and the public.
- Support local agency efforts to create new housing options where federal workplaces exist, or area planned.
- Promote Live-Near-Your-Work initiatives for a variety of housing options close to public transit and/or federal facilities.

NCPC is currently working on updates to the Comprehensive Plan Transportation and the Federal Workplace policy elements. Visualize 2045 will serve as an important resource to help us understand how these policies, which guide federal development in the region, can leverage and support the region's transportation objectives.

Many federal installations and campuses in the region have mission and security needs that can affect public access and other transportation issues. NCPC is committed to working with federal and regional stakeholders to identify strategies that successfully address security and promote access, mobility and connectivity.

Pursuant to our authorities, NCPC also reviews transportation projects on federally managed lands and other areas of federal interest, and participates in other reviews, including NEPA and Section 106 compliance. NCPC has or may participate in the future review of a number of Visualize 2045 projects. Examples include the Purple Line, Corridor Cities Transit-way, the Arlington Bridge rehabilitation, and Long Bridge capacity improvements. NCPC may also review projects occurring at Ronald Reagan Washington National Airport, Washington Dulles International Airport, Metrorail, stream valley parks acquired through the Capper-Cramton Act, and development within the Central Area in the District of Columbia, among others. For example, the I-270/495 Managed Lane Study could impact federal facilities including the Beltsville Agricultural Research Center, NSA – Bethesda, and National Park Service and Capper Crampton parks. We look forward to working with regional project proponents on these important projects.

NCPC works closely with federal applicant agencies during our review of master plans and projects to consider and address transportation-related issues. NCPC requires Transportation Management Plans for federal campuses and installations as part of the master planning process that establish transportation goals consistent with the comprehensive plan policies and agency missions. The information in Visualize 2045, regarding proposed projects, as well as aspirational goals, will be helpful for NCPC and applicants during the review process.

Several federal agencies manage regional transportation assets, most notably the National Park Service (NPS). NPS will shortly release its National Capital Region Long Range Transportation Plan. This document sets a 20-year vision for the important transportation assets NPS manages that provide access to the region's iconic destinations, including several parkways, major bridges, and highly used trail systems. We encourage the TPB to continue working with the NPS to understand the mission, issues, and opportunities that guide these federally managed resources, and how best to incorporate them into larger regional plans.

Again, thank you for the opportunity to comment on Visualize 2045. We look forward to our continued participation on the TPB, and working together to improve the region's mobility and sustainability. Please contact Julia Koster at julia.koster@ncpc.gov for any further information.

Sincerely,

Marcel Acosta
Executive Director

National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Charles Allen, Chair, Transportation Planning Board

FROM: Kacy Kostiuk, Chair, Access for All Advisory Committee

SUBJECT: AFA Comments on the Visualize 2045 Draft

DATE: October 5, 2018

At the September 13, 2018 Access for All Advisory (AFA) Committee meeting, the committee received a series of presentations on the region's long-range metropolitan transportation plan, Visualize 2045. The committee discussed the plan elements and provided comments on transportation-related concerns for the populations the AFA represents. The AFA comments are organized in two categories: comments specific to Visualize 2045 draft and other general transportation concerns.

Overall, the AFA stressed the importance of affordable, reliable, and accessible rail, bus, and paratransit for people with disabilities, those with limited incomes, minority communities, people with limited English skills, and older adults. The AFA had eight summary comments with additional detail under each comment provided in the following pages.

- The AFA recommends that Visualize 2045
    - include additional and more affordable public transportation options throughout the region;
    - prioritize transportation funding for accessible pedestrian and bicycle options critical for people with disabilities' and older adults' safety, access, and mobility;
    - consider and accommodate the impact of technology and automation;
    - recognize the additional burdens that managed lanes may place on low-income populations; and
    - note that the "Access to Jobs" measure shows an East-West divide, and that the region is not only divided by race and income, but also by access to jobs.
- The AFA wanted to stress to the TPB that
    - accessibility for people with disabilities and those with limited-English skills should be considered throughout the planning, design, construction, and implementation stages of transportation projects or services;
    - front-line transit employees and transportation network company drivers, such as Uber and Lyft drivers need diversity and sensitivity training; and
    - the region should ensure MetroAccess has the resources to serve additional demand while maintaining service quality and provide more alternative options.

COMMENTS SPECIFIC TO THE VISUALIZE 2045 DRAFT

THE AFA RECOMMENDS THAT VISUALIZE 2045 INCLUDE ADDITIONAL AND MORE AFFORDABLE PUBLIC TRANSPORTATION OPTIONS THROUGHOUT THE REGION.

- The committee noted a need for expansion of bus service, including more interjurisdictional service and restoring bus service cuts made in the last few years.
- The AFA is concerned about Metrorail remaining both affordable and available to residents and low-income workers. It continues to be concerned about reductions in rail and bus service and the impact on those who are transit-dependent. The committee supports incentives for people with limited incomes; incentives could include user-side subsides or reduced fare programs.
- The AFA also recognizes Metro's current challenges and expressed strong support for it to continue efforts to improve safety, maintenance, and service quality.
- The AFA is concerned about transit-dependent populations being priced out of high-density areas, such as activity centers and near Metrorail stations. Some people are unable to live in these areas well served by transit and other public services because the housing costs are out of reach, so they are forced to find housing that is farther away from these critical services.

THE AFA RECOMMENDS PRIORITIZING TRANSPORTATION FUNDING FOR ACCESSIBLE PEDESTRIAN AND BICYCLE OPTIONS IN VISUALIZE 2045, WHICH IS CRITICAL FOR PEOPLE WITH DISABILITIES' AND OLDER ADULTS' SAFETY, ACCESS, AND MOBILITY.

- Implementation agencies should consider the safety concerns of people with disabilities and the need for education and awareness of pedestrians, bicyclists, and drivers as these agencies maintain, build, and propose bike lanes.
- The AFA recommends greater coordination between jurisdictions on creating standards for a high-quality, uniform enhanced auditory signaling system for visually- impaired pedestrian travel.
- Bikeshare programs should increase the availability of accessible bikes (e.g. hand bikes, side-by-side bikes, electric bikes and tricycles) to promote adaptive cycling in the region.

VISUALIZE 2045 SHOULD CONSIDER AND ACCOMMODATE THE IMPACT OF TECHNOLOGY IN REGIONAL TRANSPORTATION.

- The TPB should more explicitly plan to accommodate the expected increase in electric and autonomous vehicles and estimate impact on regional air quality.
- The plan should be flexible and consider how to accommodate the expected increase in app-based services (and associated accessibility challenges), technology-oriented jobs, teleworking and the impact on regional congestion. Solutions include supporting policies for federal, state and local governments on app-based and automated vehicle accessibility standards and improved telework policies for both public and private sector employees.

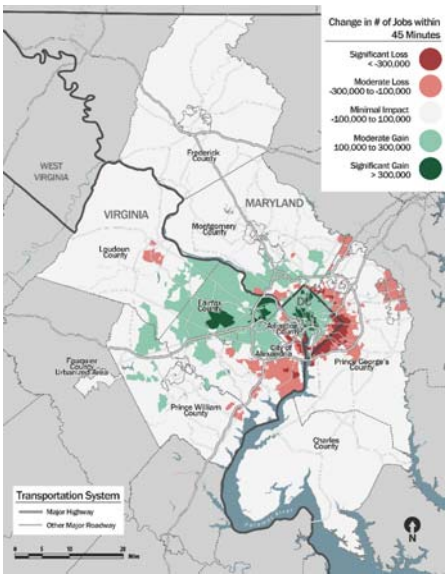
THE AFA EXPRESSED CONCERN ABOUT THE ADDITIONAL BURDENS THAT MANAGED LANES MAY PLACE ON LOW-INCOME POPULATIONS.

- The plan includes managed lane facilities on I-495 and I-270 which require users to pay fees for use of the facilities when driving alone. The AFA commented that tolled facilities tend to place additional burdens on low-income workers, people with disabilities, and those with limited English skills, and asked if the project would have affordability and accessibility provisions.
- The AFA committee questioned if low-income populations can fully participate in the benefits of these new facilities and from the benefits of purchasing a transponder as well as pre-paying tolls with a credit card.

THE AFA EXPRESSED CONCERN THAT THE REGION IS NOT ONLY DIVIDED BY RACE AND INCOME, BUT ALSO BY ACCESS TO JOBS.

- The AFA received a presentation on the performance analysis of the Visualize 2045 draft, including Figure 1 showing changes in "access to jobs by auto" with the greatest losses on the eastern side of the region and that the greatest gains are on the western side of the region.
- The AFA supports actions to address the East-West divide, such as an increase in all modes of transportation to connect the eastern part of the region to the job-rich western portion.

Figure 1: Changes to Access to Jobs by Auto in 45 Minutes, 2019 to 2045



COMMENTS ON OTHER TRANSPORTATION CONCERNS

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES AND THOSE WITH LIMITED-ENGLISH SKILLS SHOULD BE CONSIDERED THROUGHOUT THE PLANNING, DESIGN, CONSTRUCTION, AND IMPLEMENTATION STAGES OF TRANSPORTATION PROJECTS OR SERVICES.

- When implementing agencies consider the needs of people with disabilities early on, as well as throughout the planning stages of a project, the accessibility and usability of the transportation improvement can be greatly improved for everyone.
- The AFA noted that people using mobility devices have difficulty in finding accessible parking options in D.C. as well as the need for more accessible transportation options in general.
- Regarding language access, the AFA recommends that WMATA as well as the District Department of Transportation (DDOT), the Maryland Department of Transportation (MDOT) and the Virginia Department of Transportation (VDOT) provide greater language access to limited English speakers to ensure that they can comment on proposed service changes and/or transportation projects. WMATA's efforts to build partnerships with language access advocacy organizations should continue.

FRONT-LINE TRANSIT EMPLOYEES AND RIDE-SHARING COMPANY DRIVERS NEED DIVERSITY AND SENSITIVITY TRAINING.

- The committee recommends that transportation providers augment sensitivity training of front-line employees and transportation network company drivers so that they know how to appropriately communicate and assist all customers; such training should include awareness of and sensitivity to different types of disabilities, the lesbian, gay, bisexual, and transgender (LGBT) community, and a diverse set of cultural and ethnic backgrounds.

THE REGION SHOULD ENSURE METROACCESS HAS THE RESOURCES TO SERVE ADDITIONAL DEMAND WHILE MAINTAINING SERVICE QUALITY AND PROVIDE MORE ALTERNATIVE OPTIONS.

- Demand for ADA paratransit will increase due to the aging population and requirements to transition people with intellectual and developmental disabilities to community-based independent living. AFA members expressed concerns that MetroAccess may not have the resources to serve this additional demand and maintain service quality at the same time; not all human service agencies will be able to afford to provide the transportation for the people they expect to serve, as many have done in the past.
- The AFA noted that some people with severe disabilities need a greater level of service than what ADA paratransit can provide. Pilot programs directly funding human service agencies to provide transportation to their clients rather than using MetroAccess have shown good results and resulted in cost-savings for jurisdictions.
- The AFA recommends that the region continue to support alternatives to MetroAccess, such as taxi pilots, and the use of transportation network companies or other providers, to the extent that these options can provide fully accessible service for people with a wide range of disabilities and are less expensive to the jurisdictions than MetroAccess.

APPENDIX B

October 1, 2018

The Honorable Charles Allen, Chair
National Capital Region Transportation Planning Board
777 North Capitol Street, NE, Suite 300
Washington, D.C. 20002

Dear Chair Allen:

Thank you for providing an opportunity to comment on the air quality conformity analysis in the draft Visualize 2045 plan. MWAQC has reviewed the above analysis and concurs that the transportation sector emissions associated with the proposed transportation plans meet the motor vehicle emissions budgets (MVEBs) in the 2008 Ozone National Ambient Air Quality Standard Maintenance Plan.

However, the Visualize 2045 plan results in having to use Tier 2 transportation buffers for some of the future years, so MWAQC urges TPB to redouble efforts to reduce air pollution emissions from the transportation sector so that future mobile emission budgets remain within Tier 1 MVEBs to fully protect the health of our residents.

The Washington region has made significant progress in reducing emissions of ozone precursors such as, volatile organic compounds (VOC) and nitrogen oxides (NO_x) from both transportation and non-transportation sectors over the years. As a result, the region has been able to meet all but the 2015 ozone National Ambient Air Quality Standard (NAAQS). The region has met the 2008 ozone standard of 75 parts per billion (ppb) since 2014 and submitted a request in early 2018 to EPA to redesignate the area to attainment for the 2008 ozone standard along with a required demonstration to maintain compliance in the future (maintenance plan).

The Washington region developed two sets of MVEBs (Tier 1 and Tier 2) for VOC and NO_x as part of the maintenance plan for the 2008 ozone standard using EPA's latest MOVES2014a model. The Tier 1 MVEBs together with Tier 2 MVEBs, which included a conformity buffer, were developed for 2025 and beyond. These MVEBs replaced the previously used MVEBs, which were developed earlier using Mobile6.2 model based on the 1997 ozone NAAQS. EPA, on August 21, 2018, found these budgets were adequate for transportation conformity purposes.

MWAQC notes that the air quality conformity assessment shows that transportation emissions are below the Tier 1 MVEBs for most of the analysis period. However, transportation emissions are above the Tier 1 MVEBs for 2025 and 2030. Therefore, TPB had to use the Tier 2 MVEBs buffers for demonstrating conformity in those two years.

The Tier 2 MVEBs buffers were provided for in the 2008 ozone NAAQS maintenance plan to account for conditions where the conformity analysis is based on different data, models, or planning assumptions, including, but not limited to, updates to demographic, land use, or project-related assumptions, then were used to create the MVEBs in the maintenance plan. Nevertheless, MWAQC is concerned about the use of the Tier 2 MVEBs buffers and wishes to stress that the future transportation plans should account for air emissions so that future conformity analyses would not need to use Tier 2 MVEBs buffers.

MWAQC notes that the draft Visualize 2045 plan document does not address the reliance on the Tier 2 buffers in 2025 and 2030. On pages 54 and 55, the Tier 1 MVEBs for NO_x and VOCs are not included and the budget is shown to reflect solely the Tier 2 buffer. Any acknowledgement of the Tier 1 MVEBs and why emissions are projected to be above the Tier 1 MVEBs should be addressed specifically in the primary document and not relegated only to an Appendix.

This is particularly important as the Washington region faces continuing challenges related to air quality. The region needs to attain the 2015 ozone standard of 70 ppb by August 2021. The draft data for the period 2016 through 2018 shows the region's design value for ozone at 72 ppb. Additionally, the region's design value has been above the current standard since 2016. Also, the region had its first Code Red air quality day this summer since 2012. Source apportionment modeling conducted separately by the United States Environmental Protection Agency and the Ozone Transport Commission has shown that on-road mobile sources are a primary driver of ozone formation in the region. This evidence shows that even though the region has made significant progress in reducing emissions, it needs to continue its efforts to further reduce emissions to meet the 2015 ozone NAAQS, in particular from on-road mobile sources.

MWAQC is working on the "What We Can Do" scenario project to identify local actions that will help the region both attain the above ozone standard and eliminate future unhealthy air days. We pledge to work with TPB to help our members implement new measures to further reduce air pollution. Since on-road emissions play a significant role in the overall ozone problem in this region, it is important that the transportation sector plays its role in resolving this problem.

MWAQC is encouraged to learn that the region is achieving reductions in per capita VMT, even with an increase in employment. However, due to population and job growth, the region is experiencing an increase in total VMT. Therefore, we urge TPB's continued investment in VMT and emission reduction strategies such as public transit, ride-sharing, pedestrian and bike infrastructure, other travel demand management strategies, and Transportation Emission Reduction Measures (TERMS) to reduce future growth in vehicle emissions.

Our local and state efforts in the Washington region may become even more important in the future if less stringent emission standards for light-duty motor vehicles for the model years 2021-2026 are enacted as proposed, especially since the region is experiencing an increase in the market share of light and heavy-duty trucks. If these standards are approved, there will be further increase in emissions of ozone precursors which would lead to even higher ozone levels in the region, resulting in more difficult emissions reduction efforts for the region in the future. MWAQC appreciates TPB joining MWAQC in requesting continuation of the existing light-duty vehicle emission standards.

Thank you again for the opportunity to comment on the draft conformity analysis in the Visualize 2045 plan.

Sincerely,

Hon. Hans Riemer
Chair, Metropolitan Washington Air Quality Committee

MEMORANDUM

TO: Transportation Planning Board

FROM: Andrew Austin, TPB Transportation Planner

SUBJECT: Compilation of Comments Received on the 2016 Amendment to the Financially Constrained Long-Range Transportation Plan (CLRP), the FY 2017-2022 Transportation Improvement Program (TIP), and the Air Quality Conformity Analysis

DATE: October 11, 2018

Attached to this memo is a compilation of all comments received Visualize 2045, the FY 2019-2024 TIP, and the Air Quality Conformity Analysis during the public comment and inter-agency review period held by the TPB from September 7 through October 7, 2018.

The comments are organized into the following groups:

1. Comments submitted by TPB member jurisdictions, TPB committees and COG Committees
2. Comments submitted by non-profit advocacy organizations
3. Comments submitted by individuals

Comments Received on Visualize 2045, the FY 2019-2024 TIP, and the Air Quality Conformity Analysis

Submitted by: TPB/COG Member Jurisdiction or Committee

Acosta, Marcel — *Washington, District of Columbia* — Comment ID: 112

National Capital Planning Commission

Subject: NCPC Comments on draft TPB Visualize 2045 Plan

See comments in attachment on page 20.

Bulova, Sharon — *Fairfax, Virginia* — Comment ID: 111

County of Fairfax

Subject: comments on Visualize 2045

See comments in attachment on page 23.

Kostiuk, Kacy — *Washington, District of Columbia* — Comment ID: 113

TPB Access for All Advisory Committee

Subject: AFA Comments on the Visualize 2045 Draft

See comments in attachment on page 25.

Riemer, Hans — *Washington, District of Columbia* — Comment ID: 63

Metropolitan Washington Air Quality Committee

Subject: MWAQC Transportation Conformity Comment Letter

See comments in attachment on page 29.

Shields, Wyatt — *Falls Church, Virginia* — Comment ID: 100

City of Falls Church

Subject: City of Falls Church's Comments on Visualize 2045

See comments in attachment on page 31.

Submitted by: Non-profit or Advocacy Organization

Grymes, Charles — *Manassas, Virginia* — Comment ID: 62

Prince William Conservation Alliance

Subject: Visualize 2045

The Prince William Conservation Alliance supports the focus on mobility. Jurisdictions need to integrate land use planning more effectively with transportation planning. Housing density needs to be highest near transportation nodes such as Virginia Railway Express (VRE) stations in places such as Prince William County, and in the long run VRE needs to be upgraded from a commuter rail system into a transit system with service throughout the day and on weekends. That upgrade will be more realistic if more people live/work within walking/biking distance of VRE stations, such as the soon-to-be-expanded station at Broad Run. While the Transportation Planning Board has traditionally minimized involvement in land use planning, it can not achieve its goals unless it is more effective in shaping land use. The transportation challenges for short-distance commuters also need to be prioritized. Many service workers depend upon local bus service; do not ignore those opportunities.

Harris, Katie *Washington, District of Columbia* Comment ID: 59

Washington Area Bicyclist Association (WABA)

Subject: Walking and biking are central to our future

A successful long range plan needs to put biking, walking, and transit at its core. If we want to achieve our environmental, air quality and sustainability goals as a region, we need to be much more forward-thinking in planning for people who bike and walk. Visualize 2045 needs to include a plan for a regional paved trail network, like the one that the Capital Trails Coalition has defined. This coalition, composed of government agencies (including many TPB members), non-profit organizations, business improvement districts, civic associations, and many more, has done extensive research on the existing and planned trail network. The coalition has also collaboratively defined criteria for trail network inclusion. The TPB should adopt both the criteria, and the trail network, as the aspirational trails initiative in the long-range plan. See also comments in attachment on page 33.

McCary, Richard *Sterling, Virginia* Comment ID: 108

Committee for Dulles

Subject: Visualize 2045 Comment

See comments in attachment on page 34.

Meurlin, Keith *Dulles, Virginia* Comment ID: 69

Washington Airports Task Force Subject:

Visualize 2045 Comment

See comments in attachment on page 36.

Paschall, Daniel *Durham, North Carolina* Comment ID: 64

East Coast Greenway Alliance

Subject: Comments Made at September 21, 2018 TPB Meeting

See comments in attachment on page 37.

Swift, Susan *Rockville, Maryland* Comment ID: 71

Suburban Maryland Transportation Alliance (SMTA)

Subject: Visualize 2045 and TIP Comments

See comments in attachment on page 38.

Taylor, Caroline *Poolesville, Maryland* Comment ID: 90

Montgomery Countryside Alliance

Subject: Visualize 2045 - the right mix

On behalf of Montgomery Countryside Alliance, a registered 501(c)(3) in Maryland with over 9000 members and supporters, I would like to thank the Transportation Planning Board and staff for their work on developing a long range plan that combines land-use, transit, etc. to address our regional transportation needs. The seven items in the aspirational section are properly highlighted and we look forward to working with Montgomery County to ensure that we achieve these goals. We will continue to focus on those solutions that can achieve demonstrable success for our region, while defending against projects that would promote sprawl development and induced traffic such as the outer Potomac highway crossing. Respectfully,

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Whitfield, Rob *Fairfax, Virginia* Comment ID: 60

Fairfax County Taxpayers Alliance

Subject: Comments Made at September 21, 2018 TPB Meeting

See comments in attachment on page 40.

Submitted by: An Individual

Abeles, nancy , Comment ID: 68

Subject: Comments Made at September 21, 2018 TPB Meeting

See comments in attachment on page 41.

Alexandria, Daniel *Alexandria, Virginia* Comment ID: 32

Subject:

Please put more effort into de-emphasizing the automobile and supporting safer, healthier alternative transport such as cycling, walking and (working) public transportation. The region remains biking unfriendly which is a determent if we want to continue to attract and maintain a young, talented population and keep our citizens safe. Work more with the Capital Trails Coalition.

Amer, Nathan *Washington, District of Columbia* Comment ID: 10

Subject: We need additional bike infrastructure

I'd like to make my voice heard that more bike and pedestrian infrastructure should be added to the Visualize 2045 plan. With the roll-out of more docked and dockless bikes as well as the recent inclusion or electric scooters, it is clear that our city is moving in a different direction beyond just automobiles. In 25+ years and considering the current growth rate of our city, we will continue to face significant traffic challenges and no amount of car infrastructure is going to change that. I think we need to prioritize green, safe, dedicated and PROTECTED bike/scooter lanes so that more people can feel comfortable using these alternative (and non-polluting!) sources of transportation. We need to work to get more cars off the road and not add to the automobile congestion that leads to dirty air and climate change.

Anderson, Scott , Comment ID: 106

Subject: Oppose Toll Lanes

Toll lanes discriminate against average Americans in favor of the wealthy. I strongly oppose toll lanes. If people want to avoid traffic, then they can use the train and subway system.

Badgley, Ashley *Washington , District of Columbia* Comment ID: 53

Subject: Bikes

Hello, the plan falls short when it comes to protected bike lanes and trails. For the safety, health and happiness of dc residents, we need less cars and buses and more bikes. However, until there are more PROTECTED bike lanes, people won't ride. Cyclists are dying because of drivers believing they own the road and not looking. Take more action to curb emissions and get more people on bikes.

Baroody, Marie *Sterling, Virginia* Comment ID: 82

Subject: Visualize 2045

Please stop the crazy talk about a bridge over the Potomac in the Sterling area. I vehemently oppose this proposal and am all with Montgomery County's opposition! Keep the environment safe!

Baroody, Marie *Sterling, Virginia* Comment ID: 102

Subject: Visualize 2045 Comment

As a new resident of Loudoun County I have come to realize that MORE is not always best. By more, I mean cars, trucks, motorcycles, trailers, etc. I am vehemently opposed to another Potomac crossing bridge in our county and feel it will only bring MORE of the above, sacrificing our environment, our way of living and getting around, & our pockets. Montgomery County SHOULD be opposed, as they are the only sensible ones if they hold their ground. Fairfax County has already been overbuilt and I donâ€™t feel we need even more, particularly when it involves the community vs. just politicians with their â€˜visionsâ€™ for all. All means their friends, rick developers, and sponsors; it does not mean the every day person who lives here.

Bell, Lissa *Hyattsville, Maryland* Comment ID: 11

Subject:

This plan needs to do much more and invest much more money in the areas of walking and biking infrastructure. Please fully adopt the Capital Trails Network as part of the long-range transportation plan.

Bethesda, MARK *bethesda, Maryland* Comment ID: 19

Subject: Biking/walking

I strongly urge you to adopt the Capital Trails Network initiative as part of your long-term plan. I drive, I ride Metro, I bike, and I walk. We need all those things and we need to do a better job with all of them. But please don't put biking and walking on the back burner. These are critically important parts of our area's transportation network. Be bold! Incorporate the full Capital Trails Network into your long-term plan! Thanks.

Bonanno-Watson, David Allen *Oxon Hill, Maryland* Comment ID: 39

Subject: Future of transportation

I love bicycling. I fix bikes for a living. I commute by bike. I would really love to see more and better cycling infrastructure.

Boxerman, Josh *Washington, District of Columbia* Comment ID: 1

Subject: more bike and transit infrastructure and less highways

this plan doesn't go far enough to get people out of their cars and onto bikes and transit. we should be talking about adopting the full Capital Trails Network, for starters. we should be talking about removing highways, not expanding them. this is for the sake of our air, our health, our climate, and our cities.

Callaghan, Clare *Rockville, Maryland* Comment ID: 79

Subject: Input

We need to improve cross region transit. Not everyone wants to get into DC. More frequent MARC to Frederick, extend its service hours, and consider running metro from grosvenor to Dulles. An elevated line across the Potomac to Dulles would connect the 270 biotech corridor with the Dulles IT corridor.

Ciminio, Andrea *Kensington, Maryland* Comment ID: 15

Subject: Visualize 2045 and bike infrastructure

I encourage the TPB to fully adopt the Capital Trails Network as a key part of the long-range transportation plan, and invest in trails and bicycling and walking projects. We need more investment in cycling and walking and less investment in infrastructure for cars. I bike commute every weekday from Montgomery County to Washington DC and everyday I am reminded of what a small fraction of our transportation dollars are spent to make our roads safe for the people trying to get to their destination in the most eco-friendly, healthiest, and cheapest way. Let's change that with Visualize 2045 so we can reduce traffic fatalities, help the environment and help people who can't afford to have cars.

Clark, James *Bethesda, Maryland* Comment ID: 95

Subject: Transit 2045

Focus on carbon reduction by all services and modes. True BRT, be brave instead of cowards. Multiple river crossings between Virginia and Maryland at Montgomery County. Extend the Purple Line into Virginia. More speeding cameras and more traffic enforcement. Automobile drivers are horrible dangers to our society. True bike lanes that are safe and physically separated from autos. Establish large multi-block woonerfs. Strongly encourage business to allow teleworking or simply pass legislation to require it of them. We should work from home 3 days a week and only commute 2 days a week. There should be more MARC and VRE trains and service. It should be simple and fast to ride a train from Richmond to Baltimore.

Comeaux, Noel *Alexandria, Virginia* Comment ID: 105

Subject: Visualize 2045 Comment

Can you please add ferry as a Transportation Demand Management alternative to the plan? Simply the potential for it as an alternative, denoted by the growth of the system in New York, City, means there is a value for its inclusion. Further, reports such as TRB's TRCP 102 and forthcoming research from the TRB AP085 Ferry Committee will further show its value as a stand-alone mode but notably as part of any multimodal trip - commuting or recreational.

Corris, Kirstin *Washington, District of Columbia* Comment ID: 42

Subject: More Bike Infrastructure Needed

In spite of the lack of bike infrastructure currently in DC, more and more people are choosing cycling as transportation. This will only continue to grow. Failing to increase the infrastructure for cyclists will only gum up the roads as cyclists will ride in the road where there is no convenient bike accommodations. Please consider getting ahead of the problem instead of trying to catch up after the fact. Our city is falling behind other major urban areas. If New York can build cycling infrastructure, any city can. Additionally, I support a closed-off section of the heart of downtown where only bicycles and pedestrians can go. Many cities have done this and the economic benefits are clear. These areas boom with consumers strolling, enjoying, shopping. Sincerely, Kirstin Corris

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DeMaio, Paul *Washington, District of Columbia* Comment ID: 47

Subject:

We deserve the future we plan for and this future should be one with biking and walking representing a significant portion of trips in our region. Visualize 2045 needs to envision a bolder future for people who walk and bike. It doesn't plan for the transportation future that we need. The TPB could encourage more biking and walking by adopting the Capital Trails Network as the aspirational trail initiative in the long-range plan. This trail network has been researched, defined, and mapped by the Capital Trails Coalition, a group of public agencies representing TPB member jurisdictions, non-profit organizations, and other stakeholders. The TPB needs to fully adopt the Capital Trails Network as a key part of the long-range transportation plan, and invest in trails and bicycling and walking projects.

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derleth, james *washington, District of Columbia* Comment ID: 20

Subject: People Friendly Transportation

To whom it may concern, as you develop the 2045 plan, please focus on people friendly transportation options (pedestrian and bike lanes, public transportation). More roads are not the answer. They isolate communities, increase pollution and congestion, and weaken neighborhoods. Sincerely, Jim Derleth

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DesJardins, Zachary *Alexandria, Virginia* Comment ID: 51

Subject:

Please include the Capital Trails Network within your plan and fully fund it. It is included as an aspiration goal but lacks funding unlike highways Please omit all highway expansions because they will only make congestion worse, not better. Your organization's previous support for highway expansion has made congestion worse time and time again, how much more money must we waste before this stops?

Ditzler, Brian *Silver Spring, Maryland* Comment ID: 54

Subject: Comments on Visualize 2045

The 4 points in the Call to Action to regional leaders are well reasoned. However, one cannot achieve all 4 goals if the aspirational initiative of "expand express highway network" is adopted. The later would inevitably increase single occupant travel ("induce demand") and lessen usage of Metrorail and other transit options. Expanding express highway network also would exacerbate the region's existing significant problem of not meeting Federal air quality standards. The public's unfortunate preference for SUVs and aversion to buying electric vehicles will make it difficult to meet vehicle-related emissions budgets for ozone, and this problem would be magnified by expansion of an express highway network. I strongly support the major transit projects listed on p. 40, but would find it totally unacceptable to have no increase in commuter rail, as shown on p. 36. MARC expansion would help manage peak period travel demand without the problems of highway expansion.

Dooling, Robb *Washington, District of Columbia* Comment ID: 65

Subject: Adopt the Capital Trails Network and place people at the top of the transportation hierarchy

More than ever, Greater Washington needs a transportation hierarchy placing people above automobiles to ensure a sustainable and equitable future. Visualize 2045 needs to envision a bolder future for people who walk and bike. The TPB should fully adopt the Capital Trails Network as a key part of its long-range transportation plan, and invest heavily in trails and bicycling and walking projects.

Dortch, Rosalyn D *Upper Marlboro, Maryland* Comment ID: 48

Subject: 2045 Visual

I would love to see more bike trails in their DC MD and VA area with safe bike street lanes for street biking. Thank you

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Dunbar, Henry *Arlington, Virginia* Comment ID: 23

Subject: Bike/Ped Planning

Visualize 2045 needs to envision a bolder future for people who walk and bike. It doesn't plan for the transportation future that we need. The TPB should encourage more biking and walking by adopting the Capital Trails Network as the aspirational trail initiative in the long-range plan! This trail network has been researched, defined, and mapped by the Capital Trails Coalition, a group of public agencies representing TPB member jurisdictions, non-profit organizations (including WABA), and other stakeholders. The TPB needs to fully adopt the Capital Trails Network as a key part of the long-range transportation plan, and invest in trails and bicycling and walking projects. Additionally, Visualize 2045 should encourage localities to build out as much bike and pedestrian infrastructure as possible within the street grid. Trails are great, but they don't take people everywhere they need to go.

Dye, Martha *McLean, Virginia* Comment ID: 33

Subject:

The TPB could encourage more biking and walking by adopting the Capital Trails Network as the aspirational trail initiative in the long-range plan! This trail network has been researched, defined, and mapped by the Capital Trails Coalition, a group of public agencies representing TPB member jurisdictions, non-profit organizations (including WABA), and other stakeholders. The TPB needs to fully adopt the Capital Trails Network as a key part of the long-range transportation plan, and invest in trails and bicycling and walking projects. If our Transportation Planning Board refuses to be bold, to think big, and to develop new transportation solutions, then we will be stuck with the same transportation problems (congestion and traffic fatalities to name a few).

Dyer, Charles *,* Comment ID: 37

Subject: TPB comments

Dear Madam/Sir Please make provisions for biking and walking for the health of our populace and planet. Thank you. Charles Dyer M D

Epley, David *Washington, District of Columbia* Comment ID: 28

Subject: Expand biking and walking infrastructure

The Visualize 2045 Plan does not go nearly far enough to provide robust, safe infrastructure for bikers and walkers. It overly heavily favors car infrastructure which the region should be moving away from for reasons of health, affordability and combating climate change. The current plan is not acceptable for our region. Please do more to have biking and walking emphasized or at least on par with existing car infrastructure instead of being an afterthought.

Fisher, Jonathan *Arlington, Virginia* Comment ID: 38

Subject: visualize 2045

I bike almost everywhere in Arlington and DC, although I also increasingly find myself incorporate mass transportation, walking, bike-sharing, and scooters. There is a clear trend of city dwellers not wanting to have a car, but to have ready access to convenient alternatives. I'd like to encourage you to think hard about making the region more accessible for cycling and pedestrian access (as well as mass transit) and recognize the need to deemphasize the role of cars. We need clean air and walkable neighborhoods, as well as pleasant ways to get there. As population increases in the area, making it easier to drive will only exacerbate current problems with traffic. As we have seen when gas prices spike, commuters will change their behavior when the alternatives look comparatively better. Imagine a future with better air quality, less traffic, and healthier residents getting exercise as they explore the area!

Fleckner, John *Washington, District of Columbia* Comment ID: 5

Subject: Need More Consideration for Bikes and Pedestrians

Urging you to give more attention to the needs and interests of cyclists and pedestrians as you develop regional transportation plans. Great cities and regions support a wide range of transportation options, including connected trails and routes that are convenient and safe. The DC metro area has made great strides over the past half century but we must settle for good enough for the twentieth century. Thank you

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Glemm, Alexis *Alexandria, Virginia* Comment ID: 9

Subject:

The plan doesn't go nearly far enough for people who bike and walk. The plan invests in automobile infrastructure to the detriment of people who walk and bike. Why do regional planners think itâ€™s OK to continue to make bicyclists and pedestrians fight for scraps at the bottom of the barrel? Visualize 2045 needs to envision a bolder future for people who walk and bike. It doesn't plan for the transportation future that we need. The TPB could encourage more biking and walking by adopting the Capital Trails Network as the aspirational trail initiative in the long-range plan. This trail network has been researched, defined, and mapped by the Capital Trails Coalition, a group of public agencies representing TPB member jurisdictions, non-profit organizations (including WABA), and other stakeholders. The TPB needs to fully adopt the Capital Trails Network as a key part of the long-range transportation plan, and invest in trails and bicycling and walking projects.

Graham, Barry *Silver Spring, Maryland* Comment ID: 89

Subject: Visualize 2045 Comments

I am in favor of anything to improve traffic flow andI am in support of the funding of all the initiatives to widen I270, I495 and to build the several improved interchanges on US-29 north of the beltway. I also want to see a new road bridge over the Potomac (basically a new beltway continuing from each end of I200). There also needs to be the completion of the Purple line and it needs to be extended at the West end to Tysons Corner.

Gronenberg, Bob *,* Comment ID: 103

Subject: Metro Single Tracking

See comments in attachment on page 42.

Gross, Jason *Arlington , Virginia* Comment ID: 13

Subject:

Pleas prioritize pedestrian and bicycle lanes over cars. Only 40% of people in the metro area use cars daily yet over 85% of the space is assigned to cars. This is unfair and unsustainable. With the advent of electric scoooters and bike rentals the crowding on sidewalks will only be exacerbated. Please democratize the plan to serve the majority of people: those NOT in cars.

Harchik, Suzanne *Arlington, Virginia* Comment ID: 94

Subject: 2045 Transportation Plan

1. Stop punishing car owners and single drivers; circumstances donâ€™t always allow carpooling or public transportation. 2. More Potomac and Anacostia crossings needed: 2a. Create separate crossings for pedestrians, bikes and scooters, and vehicles. This keeps traffic moving at appropriate speeds. 2b. If tolls are to be charged, charge ALL who cross, donâ€™t let non-vehicle traffic cross gratis. 3. Create new laws in metro region to hold pedestrians and bike/scooters accountable for their safety; ie crossing a street while on a cell phone. 4. Artificial city/urban creation will be disasterous if economy tanks. Be prepared for when income drops and include that in development plans.

Hartnett, Maureen *Brookeville, Maryland* Comment ID: 104

Subject: Visualize 2045 Comment

See comments in attachment on page 43.

Henke, Lee *Sterling, Virginia* Comment ID: 101

Subject: Bridge Connecting Maryland and Virginia

I would like to express my family's OPPOSITION to the proposed bridge from Maryland to Virginia. We live in the Broad Run Farms community, which is on the Potomac River and is a unique and tranquil enclave of homes with a close-knit and supportive environment. We work hard to preserve the rural-like setting, prevent erosion and other environmental damage to the river, and love the life we have made here. We feel strongly that the bridge, which would come right down/over our road (Broad Run Drive used feeds directly to Route 28) would not only diminish our home value (significant investment) but destroy the peaceful and oasis-like setting we have in Broad Run Farms with noise pollution, and additional environmental damage to the river and surrounding areas brought about by increased traffic. We, as a community, will fight the proposed bridge cohesively and with all of our energy

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Hovland, Erik *Falls Church, Virginia* Comment ID: 16

Subject: Bike Pedestrian

I would like to see more resources devoted to Bike/Pedestrian paths and lanes. They do not only improve transportation, but improve the regions health. Bike trails and running paths have repeatedly been reported as one of the most valued assets of the region by those who work and live here. I think expanding this network and connecting existing trails would make for a safer, healthier, and more effective transit system. I especially think a WO&D like trail down I-66 to Gainesville would be great! But also connect this trail with north and south routes to the WO&D along Route 28 and down to springfield via FFX County Pkwy.

Humphreys, Richard *Chevy Chase, Maryland* Comment ID: 22

Subject: Vision 2045

This plan doesn't go far enough to get people out of their cars and onto bikes and transit. we should be talking about adopting the full Capital Trails Network, for starters. we should be talking about removing highways, not expanding them, and reducing the social costs of car based transport. This is for the sake of our air, our health, our climate, and our cities

---

Husband, Sarah *Arlington, Virginia* Comment ID: 18

Subject: Improved cycling and pedestrian paths

As a bicycle commuter that bikes from Arlington to DC to get to work, I want you to think big with regard to cycling and pedestrian access. With the advent of electric-assist bikes, bike sharing, and electric scooters, getting around town without a car is more popular than ever. Young people don't want to drive, they don't want a car. We need to build our infrastructure to support future needs. To maintain a beautiful city, breathable air, and pleasant walkable neighborhoods, we need massive investments in public transit, cycling and pedestrian infrastructure. With an exploding population, we'll never be able to have a pleasant driving experience if everyone is driving.

Husson, Patrick *Camp Springs, Maryland* Comment ID: 110

Subject: Visualize 2045 Comment

See comments in attachment on page 45.

Irwin, Allen *Alexandria, Virginia* Comment ID: 85

Subject: Adopt the Capital Trails Network

I encourage MWCOG to endorse the aspirations of the Capital Trails Network in Visualize 2045. A metro Washington with an enhanced, connected pedestrian and trail network would be healthier, have increased non-motor transit share, and redundant transportation options in the event of systemic disruptions. Not everyone drives but everyone travels and including the Capital Trails Network in future plans would help all travelers get to where they need to go. Thank you

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Isbell, Justin *Arlington, Virginia* Comment ID: 43

Subject:

I am writing to encourage the Transportation Planning Board to fully adopt the Capital Trails Coalition Plan as part of the Visualize 2045 plan. The Capital Trails Coalition Plan is a forward thinking plan that reduces greenhouse gas emissions, reduces congestion and encourages healthy, active transportation that connects people to each other, the environment, their communities and to businesses.

Jones, Hunter *,* Comment ID: 46

Subject: Public Comment on Visualize 2045 and the FY 2019-2024 TIP

See comments in attachment on page 49.

Jorge, Mike *Middlebrook, Maryland* Comment ID: 66

Subject: PLEASE pursue to add at LEAST TWO new Potomac River bridge or the Bi-County Parkway

PLEASE pursue to add at least TWO new Potomac River bridge or the Bi-County Parkway it is one of the effective solutions for residents and commuters.

Karas, Matthew *Fairfax Station, Virginia* Comment ID: 78

Subject: New Bridge, metro line, and general comments

I hope this project considers two things: another bridge across the Potomac and a metro line following the tracks of Amtrack to Burke/Manassas. But, Metro will never become a stable cost-effective solution until metro's labor costs are decreased or at least frozen for a while. I applaud Fairfax County's plans to improve the Fairfax County parkway! But more than anything, VA DC and MD need to work together. Be adults, negotiate, compromise, and get the job done.

Katz, Michael *Bethesda, Maryland* Comment ID: 17

Subject: Strengthen cycling infrastructure in Visualize 2045

I avoid thousands of miles of car trips per year around Montgomery County, DC, and Virginia through the use of bicycles and bike+transit for transportation. Most of my cycling trips require that I ride on roads with substantial motor vehicle traffic, which is dangerous for my lungs and my safety. Please strengthen the infrastructure for cyclists and pedestrians in the Visualize 2045 plan. If you need an example of how fair things can be for cyclists and pedestrians, I recommend a field trip to Amsterdam!

Kelly, Laurie *Takoma Park , Maryland* Comment ID: 55

Subject:

We applaud this pragmatic, powerful plan for moving more people. We are fortunate to live in an Activity Center soon to be served by the Purple Line where driving is less essential. Weâ€™re not auto-dependent commuters, but we do need our car to regularly visit places where public transportation does not exist. We do hope infrastructure will in fact remain in a state of good repair.

Keltz, Melanie *Silver Spring, Maryland* Comment ID: 91

Subject: Different idea to local transportation

I have always thought a transit system similar to a ski lift gondola would be a good choice in the Washington area. Poles to hold the cables could be put in the the center dividers on current roads. Cable transfer stations can be used to change the direction of gondolas to multiple other cables or as entry/exit stations. 4 or 6 person gondolas would be the default, large enough for a family or small enough for commuters. Having an option for individual use could be used for safety reasons. Destination would be set upon entry and computers would 'read' information at transfer points to guide gondola to correct direction. Electric power that could keep pace with technology and grow with new developments. I don't believe AC or heat would be needed as everyone has a coat on in winter and windows could be opened in summer. As the system grows, cables can be expanded into neighborhood streets.

Klein, Grant *Washington, District of Columbia* Comment ID: 24

Subject: More protected bike lanes, more bike laws, more bikes, more bikers

We should be envisioning a future where more people commute by bike than by personal vehicle. It fulfills many goals simultaneously and our policy should reflect that. We need less cars in and around cities and more opportunities for people to bike safely. Thank you.

Klein, Jim *Alexandria, Virginia* Comment ID: 75

Subject: Visualize 2045 comment on bicycle and pedestrian goals

While I applaud the two aspirational goals of Visualize 2045 related to bicycle and pedestrian elements of the transportation system, they do not go far enough. Please expand the vision of the National Capital Trail to encourage more biking and walking by adopting the Capital Trails NETWORK as the aspirational trail initiative in the long-range plan!, Build on the existing work that has been done to embolden the vision for a regional trail system. The Capital Trails Coalition spent a tremendous amount of effort to define a methodology and criteria for including trails in a regional trails plan that has been established collaboratively. Please adopt this specific methodology and criteria for inclusion in a regional trail network (http://capitaltrailscoalition.org/network-inclusion/) I would also recommend that a funding stream be established for bicycle and pedestrian projects meeting the criteria of the Capital Trails Network as a percent of transportation infrastructure.

Koch, Stefan *Prince William County, Virginia* Comment ID: 107

Subject: Long Term TransportationPlan

Hello. I live in Prince William County and work in Fairfax County and I have little choice but to drive to most locations. I hope that the region will invest more in bicycle routes, sidewalks, as well Metro & VRE. Don't build any new roads, just maintain the ones we have now and put $ into transit. Thank you.

Kohlenberger, Jim *Bethesda, Maryland* Comment ID: 6

Subject: Visualize 2045 needs to envision a bolder future for people who walk and bike

As an avid biker and walker in the national capitol region, I am writing to encourage you to envision a bolder biking future as a part of Visualize 2045. The Transportation Planning Board could encourage more biking and walking by adopting the Capital Trails Network as the aspirational trail initiative in the long-range plan! This trail network has been researched, defined, and mapped by the Capital Trails Coalition, a group of public agencies representing TPB member jurisdictions, non-profit organizations, and other stakeholders. Thanks you in advance for thinking about an integrated plan that fully incorporates ALL forms of transportation including cyclists and walkers. Jim

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Kruglik, Harry *Washington, District of Columbia* Comment ID: 35

Subject: Support bikes!

Please do more to support bikes with bike lanes separate from traffic and a comprehensive system of trails connecting downtown with all of the city and suburbs. Advance Vision Zero! Thanks, Harry

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Lawson, Derick *Arlington, Virginia* Comment ID: 21

Subject: Visualize biking

The future of transportation is not in the personal automobile, it is in public transportation, biking, walking. I would love to see a drive, or focus, and this direction for the area. Thank you

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Lebasowki, John *Germantown, Maryland* Comment ID: 76

Subject:

This area needs 3 more crossings north of AL bridge. Nothing is more urgent than this.

Longo, Jeffrey *Falls Church, Virginia* Comment ID: 81

Subject: BRT on Rt 7

Bus Rapid Transit on Rt 7 in VA should be included in this. The initiative will provide high quality bus service that connects multiple jurisdictionsâ€™ activity centers, including Tysons, Falls Church City, Seven Corners, Baileys Crossroads/Skyline, and Alexandria, with only two of the afforementioned activity centers currently having high capacity rapid transit (metro rail) available to them in walking distance. It fits within the vision of the document and studies for land aquisition are already being completed, so project completion should fall within the 45 year scope. Please add the Rt 7 BRT project to this document.

Maimone, Chris *Fairfax, Virginia* Comment ID: 26

Subject: Need improved facilities for pedestrians and cyclists

Reviewing the Visualize 2045 it is clear that the TPB has not fully embraced that walking & biking represent an increasing element of the transportation landscape, and most importantly, that they are fundamental to all solutions. For example, the TPB has ignored the impact of electric bikes which are relatively new to the landscape but appear to be revolutionizing bikes as transportation. By favoring car transportation in planning, the TPB is perpetuating a car centric culture rather than attempting to make a positive impact to increase alternatives. The TPB could encourage more biking and walking by adopting the Capital Trails Network as the aspirational trail initiative in the long-range plan! This trail network has been researched, defined, and mapped by the Capital Trails Coalition, a group of public agencies representing TPB member jurisdictions, non-profit organizations (including WABA), and other stakeholders.

Marcin, Daniel *Silver Spring, Maryland* Comment ID: 27

Subject: More transit, please

It's great that you've proposed a new transit loop line, and reorganizing Orange & Silver to go directly to Union Station on an alternate path. But honestly, that's the minimum of what we need today. I urge you to be even bolder and not to compromise on your stated goals. Additionally, I would hope that any road paving or track laying comes with protected bicycle lane or bicycle path accompaniment. If there is infrastructure, people will bike. Just look at how many people took out the electric Capital Bikeshare bikes on the first day, and how many people will ride on protected bike lanes in safe areas.

Maynard, Terry *Reston, Virginia* Comment ID: 83

Subject: Amazon's HQ2

The financially constrained plan makes no allocations for the possible location of Amazon's HQ2 in our area. Your own forecasts suggest that it will generate 390K jobs and, hence, a lot of traffic. I would recommend that you set aside a certain amount of money from this financially constrained plan to develop and allow funding for transpo improvements in the various areas where HQ2 might be located.

McDonald, Mike *Arlington, Virginia* Comment ID: 58

Subject: Orange Line Expansion

One of the things that I think is most notably missing in regards to the transit projects is any expansion of the Orange Line. The metro area extends west all the way to Haymarket which is 20 miles past the current end of the Orange Line. Given that the Silver Line will go all the way out to Ashburn, I don't understand why the Orange Line stops so short. I currently live in Arlington near Rosslyn but work out in Fairfax near exit 57A on I-66. I would much rather take the metro to work, however if I were to do that with the current metro, it would take me an additional 45 minutes to get to and from work with train and bus transfers. The current system doesn't cater much to those who reverse commute (commute west) along the I-66 corridor. Additionally, I think a metro loop mirroring the Capital Beltway is also something missing from this plan. The current metro plan makes travel cumbersome when going from the end of one spoke to another (i.e. Dulles to Bethesda).

Mendoza, Erik *Washington, District of Columbia* Comment ID: 50

Subject: Bicycle lanes in NE

With E-Bikes now becoming a growing mode of transportation, bike lanes from Woodridge/mt rainier in/near NE on Rhode Island avenue as this is the most direct route for commuting. In general, more bike lanes all over the city and connecting the city so that the people who live in the communities of DC can interconnect, bypassing car traffic for a relatively inexpensive, high efficiency network of lanes. E-Bikes are now enabling a wider group of people (age, physical ability etc.) to use bicycles and relieve car traffic stress. I personally do not ride e-bikes often, but see and hear from so many people that are either using or want to use them. If the city is going to allow companies to rent e-bikes or other forms of wheeled transportation, said city should provide adequate safe travel lanes. Thanks in advance.

Miller, Michael *Alexandria, Virginia* Comment ID: 96

Subject:

We need safe, protected cycling lanes. Cycle paths should be separated from pedestrian paths. The Mt. Vernon Trail, for instance, is not wide enough to safely allow for bicycle and pedestrian traffic. The paths should be separated. There is no safe bike path to the metro stations or train stations. Bike lanes should be located next to the curb with the car parking on the outside of the bike lanes to protect the bikes from traffic. Get ready for affordable electric bikes and scooters to hit the market. I would like to give up my car but I do not feel safe biking in the DMV. This six minute video is a good example of build it and they will come as it pertains to bicycling and safe bicycle paths. https://www.youtube.com/watch?v=XuBdf9jYj7o The video documents how The Netherlands became so bike friendly. It's a joy to go there and see how safely people from the young to the very old can cycle safely as a mode of transportation. It's a freedom that we do not enjoy here in VA.

Morton, Bruce *Bethesda, Maryland* Comment ID: 57

Subject: Visualize 20145

Communities that work make active transport, particularly biking, safe and convenient. I strongly support transportation planning that provides bike lanes, bike stands, bike sharing. Cars and roads have ruined American cities and destroyed the environment. Please move into the 21st Century by making active and public transit the default.

Muchnick, Allen *Manassas, Virginia* Comment ID: 99

Subject: Visualize 2045 Comments

Visualize 2045 is far superior to the previous CLRPs, and the public education and outreach program for developing Visualize 2045 is commendable. The 7 aspirational elements MAY positively influence future transportation project submissions to better meet the TPB's objectives for a more effective, equitable, reliable, and sustainable transportation network. To do that, however, the TPB should at least annually assess the TIP and CLRP submissions against various benchmarks and performance measures, including the realization of the 7 aspirational elements. That said, the proposed National Capital Trail is far too geographically limited and should be expanded throughout ALL TPB jurisdictions, not just those covered by the proposed Capital Trails Network. Similarly, ped/bike access to Metrorail should be broadened to include other significant public transit nodes. The Express Lane element should focus on converting existing lanes, not adding more pavement, where feasible.

Neuringer, Jason *Rockville, Maryland* Comment ID: 44

Subject: Wrong on so many levels

This "report" is flawed on so many levels and makes a fairy-tale prediction of future growth. Future population growth will inevitable lead to vehicle traffic and this report makes no attempt to alleviate that. 1) Cars are here to stay and Cars will be a part of the future. Your presumption that housing should be focused around urban centers means values and prices for property will only increase thereby forcing more people to look further out for residence, forcing more to drive. The fact that this obvious oversight is never addressed is more alarming than humorous. 2) There are no successful implementations of Bus Rapid Transit anywhere in the United States. No matter how much you want BRT to work, it will not. Period. There is not enough bus usage anywhere in the region to make up for travel lanes lost to regular vehicle traffic. 3). The easiest way to aleviate Metro DC traffic?BUILD AN ADDITIONAL POTOMAC CROSSING! No other planning idea can solve traffic better.

Nordling, Courtney *Sterling, Virginia* Comment ID: 73

Subject: Comment on possible bridge spanning the Potomac

I do not support the proposal for a new Potomac river crossing in Loudoun County. It is not the responsibility of Loudoun County to bear the burden of Marylanders who choose to work in Virginia. Bringing in more traffic in the middle of the county will essentially divide the county in half and fill routes 28 and 7 with more traffic than they can handle.

Olesen, Andrew *Arlington, Virginia* Comment ID: 31

Subject: Human and Plant Friendly Transportation

Dear MWCOG, I am writing to urge you to consider a holistic transportation plan that looks beyond more roads and more cars as the solution. Considering the total cost, including land use cars are one of the most expensive ways to move people around an urban area like Greater Washington. They are also dangerous, polluting and killing pedestrians and cyclists who are just trying to get around their city. We are seeing the emergence of electric bicycles and scooters as smaller, lighter, more social ways of moving around our area. I strongly encourage you to consider the Capital Trails Coalition plan and invest in making DC a leading example for non-car transportation. Great things happen when there is a continuous and safe-from-traffic infrastructure for bicycle and other human-scale transportation. People are healthier, neighbors meet each other, local businesses do better. Let's make that how we Visualize 2045, not a mass of highways, parking, wide lanes, and toll systems.

PARNES, JEFFREY *Oak Hill, Virginia* Comment ID: 61

Subject: Lack of additional interstate connectivitiy

A quick glance at the Visualize 2045 proposed transportation improvements reflects poorly on plans to increase interstate connectivity. No new crossing of the Potomac River have been built since the completion of the interstates (I-95 (1958), I-495 (1962) and I-66 (1955). In 1960 the Washington, DC, Metro area had a population of about 2 million Today our population is about 5.7 million. In 2045 it is estimated to be 6.9 million. It is imperative that the Visualize 2045 scope be enlarged to include additional Metro and roadway connectivity north and south of the current locations to support the existing and proposed increased populations

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Pierson, Jennifer *Washington, District of Columbia* Comment ID: 40

Subject: Be bold, think big, and elevate the needs of pedestrians and bicyclists

The TPB, Visualize 2045 and 2019-2024 TIP need to recognize that the nature of transportation is rapidly transforming in our region and the safety and needs of a population that does not move around in cars need to be lifted up as equal stakeholders. One way to do this is by adopting the Capital Trails Network as the aspirational trail initiative in the long-range plan! This trail network has been researched, defined, and mapped by the Capital Trails Coalition, a group of public agencies representing TPB member jurisdictions, non-profit organizations (including WABA), and other stakeholders. The TPB needs to fully adopt the Capital Trails Network as a key part of the long-range transportation plan, and invest in trails and bicycling and walking projects. If the Transportation Planning Board refuses to be bold, to think big, and to develop new transportation solutions, then we will be stuck with the same transportation problems, congestion and traffic fatalities on the rise.

Pizarro, Diego *Dumfries, Virginia* Comment ID: 92

Subject:

I believe we should further extend public transportation, i.e. metro system of sorts, to Prince William County. So many commuters from Washington all the way South down here. An article was just realized of how the commute from Washington to Stafford is considered one of the worse commutes on the east coast. Adding more options may lessen the load on the highways.

Pooley, Julie *Sterling, Virginia* Comment ID: 98

Subject: No new Potomac River bridge

I applaud your focus on reducing road congestion and getting cars off the road. To that end, please do not consider adding another Potomac River bridge crossing. This would only created "induced traffic" and further crowd the already congested roadways in Loudoun County Virginia. Instead please focus on more environmentally friendly options such as improvements to the existing American Legion bridge and Point of Rocks bridge. Thank you!

Pritchard , Allen *Washington , District of Columbia* Comment ID: 8

Subject: More bike infrastructure please

Please fully adopt the Capital Trails Network as a key part of the long-range transportation plan, and invest in trails and bicycling and walking projects. Be bold, think big, look beyond the automobile. Thanks, Allen

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Rapp, William *Washington, District of Columbia* Comment ID: 49

Subject: Capital Trails Network

I urge you to fully adopt the Capital Trails Network as a key part of the long-range transportation plan, and invest in trails and bicycling and walking projects. This is important! Thank you. Bill Rapp

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Rasheed, Aamir *Sterling, Virginia* Comment ID: 93

Subject: Public Transportation

It seems that the way to handle traffic on the beltway is to constantly add more lanes or add tolls to those lanes (really a revenue generator not anything that reduces # of cars when there are non-toll lanes adjacent) or to build an outer beltway which just means more cars. I would advocate that we instead look at public railway along the beltway. More and more jobs are outside of Washington, DC city lines, yet all Metro lines are designed to get people in and out of DC. With FBI looking to move their headquarters outside of DC, even the federal government is doing so. Let's look to see that one can get from one point to another along the beltway using Metro without having to resort to going into DC to do so. This would also probably alleviate crowding issues at existing transfer station in DC. Thank you.

Rautner, Amy *Sterling, Virginia* Comment ID: 97

Subject: No Bridge ANYWHERE in Loudoun -- Rte 28 is already Gridlocked

If the lengthy study, and the elaborate graph put together is to be believed, then the 3% of residents who need to travel FROM Loudoun County TO Montgomery County DO NOT warrant a bridge that will put 67,000 more cars on Route 28 as they travel to Fairfax County. THREE PERCENT is not sufficient need, no matter how much money the developers have promised the Board of Supervisors. The citizens of Loudoun will pay for it with the impact on our quality of life for decades. If the study and resulting graph are legitimate then a bridge in Loudoun SHOULD NOT be a possibility in the plan, not if the plan honestly is trying to find solutions for the people who live in the communities that will be crippled by such a misuse of funds. Look at the results of the study, look at the graph -- there is no legitimate case for THREE PERCENT of the trips to make it possible for 67,000 cars to cut through our community to support Fairfax County's economy while damaging our community on the way by.

Rice, Kerry G *Kensington, Maryland* Comment ID: 30

Subject: Visualize 2045 biking

Hello, I want to lend my support for continued funding and development of safe bike paths that are interconnected throughout the region. I have been a WABA member for many years and for environmental and health reasons, see biking as an excellent alternative to car commuting. I would like to see the TPB encourage more biking and walking by adopting the Capital Trails Network as the aspirational trail initiative in the long-range plan. This trail network has been researched, defined, and mapped by the Capital Trails Coalition, a group of public agencies representing TPB member jurisdictions, non-profit organizations (including WABA), and other stakeholders. I also suggest that biking supports (such as ample bus bike racks for the ride back home/uphill) be added and advertised so residents feel they are capable of a biking commute. Thank you, Kerry Grace Rice

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roberts, deborah *washington, District of Columbia* Comment ID: 87

Subject:

I'm a longtime professional DC resident who has relied on DC's public transit system for over 2 decades. Using public transit is a lifestyle choice - for its ease, safety, and positive environmental impact. Being able to live without a car is among the top 5 reasons why I continue to reside here. (I do not consider for-profit rideshare companies like Uber as "public transportation"). I'm a major proponent of Metrobus, which I use more than Metrorail for a number of reasons. I would like to see robust bus service, and a transition to CNG buses as opposed to the hybrids, which are incredibly loud and pollute more. Dedicated bus lanes would be a good step. I am strongly opposed to cutting service by removing bus stops (or as the consultant calls it, "consolidation") as this poses a hardship to many riders and discourages people from using Metrobus. A balance of express buses and "local" service is a good compromise.

Roscello, Walter *La Plata, Maryland* Comment ID: 56

Subject: General comments

This is a nice plan, but we need to do more to move things between the Constrained plan and the Aspirational plan. They read like a divide between "business as usual" and "things the experts recommend but the government has been unwilling to do". In particular, increasing density and access around transit stations should move to the Constrained plan, along with more of the BRT. In the timeframes in this plan, it is likely that BRT can operate without drivers (especially in the constrained environment of dedicated busway), reducing operating costs and headways. The Capitol Trail component should also indicate existing and recommended feeder trails, showing the geographic reach for those that will be able to access the trail and commercial areas served.

Rosenkranz, Ryan *Washington, District of Columbia* Comment ID: 7

Subject:

More bike lanes and trails are essential

Rust, John *Ashburn, Virginia* Comment ID: 72

Subject: Great Work

Please keep up the good work!

Schoenecker, Lee *Washington, District of Columbia* Comment ID: 70

Subject: Review of Visualize 2045

Attached is my review of Visualize 2045. It is a very good document and considerably better than past federally-required four-year plans in large part because of its seven aspirational elements---particularly that which, "brings jobs and housing closer together." In fact, Visualize 2045 could turn out to be one of the more important COG and TPB documents in recent years.

Schroeder, Alex *Washington, District of Columbia* Comment ID: 29

Subject: Visualize 2045

Thanks for this comprehensive plan! As it pertains to transportation, I like the overall trend I'm reading of getting more cars off of the roads. However, I'm concerned at the pretty uninspiring initiative of improving walking/biking. First of all, I don't think the two belong in the same category - there are enough improvements to be made for each. Second, I would like to see more dedicated, protected bike infrastructure - more lanes that replace car lanes or parking. I bike to work/home, not to transit to then get to work/home. We don't want better paths to transit only, we want better paths everywhere. I would love to see whole streets closed to cars and given back to human beings. Unfortunately I don't find this plan bold at all. It will take a truly forward-thinking, gutsy set of ideas to visualize our world in 2045, and this plan does not encapsulate that. I see DC as being a transportation leader, and if this bike/ped plan stays as is, our city will be woefully behind.

Sedgley, Matthew *Frederick, Maryland* Comment ID: 4

Subject: Parks

More parks and protection for open spaces please. Hate the endless concrete in some areas

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Serfass, Julie *Washington, District of Columbia* Comment ID: 34

Subject: Focus more on walkers/bikers

Please include the Capital Trails Network as envisioned by the Capital Trails Network as a part of long range planning. This is a great opportunity to design our transportation around any form of transportation other than cars and it would be great to see more of a focus on walking and biking at the least. I bike commute and simply carving out a bike lane on a road isn't enough to provide safe infrastructure. Thank you.

Shehabi, Hisham *Washington, District of Columbia* Comment ID: 45

Subject: Visualize 2045 - Comments by a new resident in DC area

See comments in attachment on page 50.

Silver Spring, Sebastian *Silver Spring, Maryland* Comment ID: 2

Subject: Viz 2045

Great plan overall. One comment about BRT: it needs dedicated lanes, especially in congested areas. There are ways to provide dedicated lanes while minimizing property takings and lane repurposing. Montgomery County is currently designing a BRT on Route 29 without dedicated lanes in the most congested areas. In response, we proposed a plan that would extend dedicated lanes through some of the most congested areas within the existing curb-to-curb width while still keeping 6 lanes. It consists of narrowing the general purpose lanes to a safer width and using bidirectional or reversible busways in constrained areas. We call it "Better BRT" and you can read more about it at BetterBRT.growingeastcounty.com. I encourage you to emphasize the importance of dedicated lanes and provide innovative solutions to achieving them in the report. Thank you for the opportunity to submit comments.

Simpson, Keith *Sterling, Virginia* Comment ID: 74

Subject:

Money from the TIPand visualize 2045 associated with beltway widening and improvements and 270 improvements could be used for an additional river crossing to the West which could provide the same congestion relief and provide an alternate route in case of a disaster to one of our bridges providing better long term stability for the region.

Stanford, Jason *,* Comment ID: 67

Subject: Comments Made at September 21, 2018 TPB Meeting

See comments in attachment on page 51.

Stanley, John *Arlington, Virginia* Comment ID: 14

Subject: Future of cycling

I am disappointed to see that the Visualize 2045 plan seems more like "Visualize 1945." It's entirely too automobile-centered, and does not reflect today's emerging modern urban sensibility, which places cycling and walking at the center of how people in cities want to live. I urge you to substantially re-think the plan in light of how young people in cities today -- who will be dominant in 2045 -- actually want to live. Sincerely, John Stanley Arlington

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Stenhouse, Jeb *Washington, District of Columbia* Comment ID: 41

Subject: Please include Capital Trails Network in Visualize 2045

The most important long-term priority for regional transportation planning is to reduce reliance on the private automobile. Please include robust investment in all other forms of transportation, including the Capital Trails Network as well as significant increases in intercity and intracity bus and rail networks. I would also ask that if any Visualize 2045 planners have not biked or walked/run on the current trail network, they should be required to do so in order to understand the full breadth of the transportation experience they are planning to cover - and trust me, you will appreciate getting out from behind the wheel and enjoying the trail experience!

Stokely, Peter *Arlington, Virginia* Comment ID: 52

Subject:

See comments in attachment on page 52.

Strauss, Steve *Washington, District of Columbia* Comment ID: 3

Subject: Transit Elements in Visualize 2045

See comments in attachment on page 53.

Szibler, Stephen *Washington, District of Columbia* Comment ID: 25

Subject: Visualize 2045

The Transportation Planning Board needs to fully adopt the Capital Trails Network as a key part of the long-range transportation plan, and invest in trails and bicycling and walking projects. As it stands the plan is too car-centric.

Thomson, Craig *Springfield, Virginia* Comment ID: 86

Subject:

Jobs and housing need to be closer together so that working people who do not have cars can still get to their jobs. Mass transit and multi dwelling unit development are therefore really important. The disparity between market rents and median or average incomes for working people is so massive that affordable housing is part of that same solution.

Versel, Malcolm *Rockville, Maryland* Comment ID: 12

Subject: Importance of Cycling Routes and Separate Infrastructure for Bicycles and Motorized Vehicles

As someone who has ridden and continues to ride a bicycle regularly in all weather conditions over many years, I can attest to the now-more-important-than-ever importance of keeping bicycle traffic and motorized vehicle traffic as separate as possible. Motorized vehicles are more numerous than ever, given the vast growth explosion in the DC Metro area over the past couple of decades. That growth likely will continue to accelerate as more multi-family units are built on land once occupied by single-family homes. Another factor of concerns to cyclists is that many vehicles are larger and wider than before, as motorists opt for SUV and truck-like vehicles. This further disadvantages cyclists and increases the risks of cycling in lanes shared with vehicles. The TPB May encourage more biking and walking by adopting the Capital Trails Network as the aspirational trail initiative in the long-range plan! Trails are important for all! Thank you for considering my comments.

Vias, Tyrone *Brunswick, Maryland* Comment ID: 77

Subject:

See comments in attachment on page 54.

Vorndran, John *McLean, Virginia* Comment ID: 84

Subject: Express Rail Lines

New York City has express trains throughout its subway system. Have express trains been considered for Metro, VRE, and AmTrak? Even if they have, they should be re-considered. Perhaps creating large parking garages by Fredericksburg, Gainesville, Leesburg, Frederick, Waldorf, Annapolis/Bowie, Columbia/Ellicott City (or where land is cheapest) where express trains run directly into a Metro stop (Metro Center, Lâ€™Enfant Plaza, Stadium Armory, Fort Tottten) where riders can transfer to multiple lines (or the end of one Metro line) as I believe that would ease 95/495/395/66/295/97 highway traffic because because people would drive to these express trains centers outside the city.

Warner, John *Waldorf, Maryland* Comment ID: 88

Subject: Bus rapid transit- Charles county

I was disappointed that there are no plans to build bus rapid transit lanes from DC to Charles County MD. There is currently a tremendous amount of traffic on route 210 and route 5 during rush hour. One single bus rapid transit lane would greatly inventivize bus ridership, as commute times would be vastly decreased for bus riders. This would address latent demand and be scalable over the coming decades (whereas adding highway lanes is not).

Wayne, Barbara *Sterling, Virginia* Comment ID: 80

Crossroads Jobs, Inc.

Subject: Comments on Visualize 2045

I am happy to see that the new Potomac River Bridge, proposed for Loudoun County, did NOT make the plan. A new bridge would make traffic much worse by creating inappropriate regional bypass routes and increasing development in vehicle-centered areas. I also do not believe that additional widening and implementing HOV lanes on Route 28 from the Dulles Toll Road to Route 7 is the right thing to do. Circling communities with ever-expanding highways is very bad for local businesses, creating islands of socioeconomic decay hemmed in by un-crossable moats of speeding (or more likely idling), polluting vehicles. Eastern Loudoun will resemble a slum thanks to these tactics. Letâ€™s support our new metro stations by not creating vehicle-based alternatives that will look good at first and soon fill up to make traffic worse. Create more ways to connect neighborhoods and local residents with businesses using bike and pedestrian trails. Fund new metro tunnels to improve reliability and safety.

Weinstein, Zachary *Silver Spring, Maryland* Comment ID: 36

Subject: Reword Aspirational Initiative 5

Visualize 2045 should reword Aspirational Initiative 5: Expand Express Highway Network to specify that governments should apply congestion pricing to existing highway lanes instead of adding new lanes. The plan should primarily aim to reduce congestion, not expand highways. Adding new lanes will not decrease congestion. Even if the new lanes have congestion pricing, the old lanes would have the same congestion due to induced demand. Additionally, the new lanes would cause environmental damage inconsistent with the region's climate commitments by increasing total vehicle numbers, covering more land with pavement, and encouraging sprawl. Applying congestion pricing to existing roads would decrease congestion, encourage road users to carpool or use public transit, and provide funding for transit improvements with no negative environmental consequences. Visualize 2045 should not seek to expand highways. Instead, make the goal solely about reducing congestion.

Wheeler, Ann *Haymarket, Virginia* Comment ID: 109

Subject: Prince William County Plan Lacking

Your vision for Prince William County is woefully lacking in better transportation infrastructure given that it is way behind itâ€™s neighboring jurisdictions and the vast majority of its citizens travel to get to work. 1.The Battlefield bypass by the year 2040 seems too far out. 2.The expansion of the VRE in western PWC is missing. 3.The addition of Metro on the east end, given thatâ€™s the worse congestion in the state, should have been included. It appears the only option for the citizens of Prince William County is to buy their way down the road with the use of HOT lanes, for roads we have already paid for through taxes. Was anyone from PWC on this commission?

National Capital Planning Commission
401 9th Street, NW North Lobby, Suite 500 Washington, DC 20004 Tel 202.482.7200 Fax 202.482.7272 www.ncpc.gov

IN REPLY REFER TO:
NCPC FILE No. 8025

October 10, 2018

Chairman Charles Allen
National Capital Region Transportation Planning Board
777 North Capitol Street NE, Suite 300
Washington, DC 20002-4239

RE: NCPC Comments on draft TPB Visualize 2045 Plan: A Long-Range Transportation Plan for the National Capital Region

Dear Mr. Allen:

Thank you for the opportunity to comment on the Visualize 2045 plan. As the federal government's central planning agency for the National Capital Region, the National Capital Planning Commission (NCPC) has a shared interest in a multi-modal regional transportation system that meets the travel needs of the region's workers, residents, and visitors. NCPC prepares a comprehensive plan that guides federal development, and reviews federal master plans and projects in the region based on the comprehensive plan's policies. Our interest in Visualize 2045, and the comments in this letter, reflect the plan's use as a helpful resource for developing our policies and in our review of regional federal development.

First, we commend you on creating a plan that combines the aspirational, feasible, and required aspects of a long-range regional transportation document. The draft plan reflects the significant work of the Transportation Planning Board (TPB) to adopt aspirational projects, programs and policies that reflect the region's shared development goals, as well as the projects that are financially feasible.

In addition, the plan takes a technical, complicated subject and makes it clear and easy to understand. The plan and related documents provide useful, well-researched contextual information that links transportation to the region's demographic and land use characteristics, as well as trends and emerging issues. It is also clear that the TPB made a serious commitment to connect with the public in this process.

NCPC supports the aspirational ideas of Visualize 2045 and notes that they are generally consistent with the policies in the *Comprehensive Plan for the National Capital: Federal Elements*. Regional federal facilities, and the workers and visitors that travel to them, rely on an efficient, inter-connected, and sustainable transportation system. The Comprehensive Plan supports a multimodal transportation system and maintaining the region's transportation assets in good repair. Many federal workplaces and campuses are located in or in close proximity to Regional Activity Centers and Metro stations, reflecting the shared development history and continued recognition of the importance of transit in getting federal employees to work. Listed below are summaries of select policies that support the aspirational initiatives identified in Visualize 2045.

Transportation Element:

- Support an integrated network of complementary regional transit services.
- Support the efforts of local jurisdictions to design and implement new, expanded, and innovative transit services that supplement existing transit and fill unmet transit needs
- Create partnerships with federal agencies and local governments that support multi-modal commuting and shorter commute times through federal facility location decisions and Live-Near-Your-Work programs.
- Work with local jurisdiction bike coordinators, the Metropolitan Washington Council of Governments, Commuter Connections, cycling organizations, such as the Washington Area Bicyclist Association, and others, to promote bicycle commuting among federal employees.
- Support transit-oriented development at Metrorail stations, within Regional Activity Centers, and at other transit nodes.
- Support multimodal connections and transportation alternatives in the regional system
- Encourage ridesharing, biking, walking, transit, and other non-SOV modes of transportation for federal commuters and visitors

Workplace Element Policies:

- Locate federal facilities within walking distance of existing or planned fixed route transit services.
- Locate new federal facilities to support regional and local agency objectives that encourage compact forms of growth and development and support local and federal goals to increase local and regional transit system ridership.
- Locate federal workplaces near a variety of housing options to benefit employees.
- Encourage telework and Alternate Work Schedules for federal employees where it benefits the federal government and the public.
- Support local agency efforts to create new housing options where federal workplaces exist, or area planned.
- Promote Live-Near-Your-Work initiatives for a variety of housing options close to public transit and/or federal facilities.

NCPC is currently working on updates to the Comprehensive Plan Transportation and the Federal Workplace policy elements. Visualize 2045 will serve as an important resource to help us understand how these policies, which guide federal development in the region, can leverage and support the region's transportation objectives.

Many federal installations and campuses in the region have mission and security needs that can affect public access and other transportation issues. NCPC is committed to working with federal and regional stakeholders to identify strategies that successfully address security and promote access, mobility and connectivity.

Pursuant to our authorities, NCPC also reviews transportation projects on federally managed lands and other areas of federal interest, and participates in other reviews, including NEPA and Section 106 compliance. NCPC has or may participate in the future review of a number of Visualize 2045 projects. Examples include the Purple Line, Corridor Cities Transit-way, the Arlington Bridge rehabilitation, and Long Bridge capacity improvements. NCPC may also review projects occurring at Ronald Reagan Washington National Airport, Washington Dulles International Airport, Metrorail, stream valley parks acquired through the Capper-Cramton Act, and development within the Central Area in the District of Columbia, among others. For example, the I-270/495 Managed Lane Study could impact federal facilities including the Beltsville Agricultural Research Center, NSA – Bethesda, and National Park Service and Capper Crampton parks. We look forward to working with regional project proponents on these important projects.

NCPC works closely with federal applicant agencies during our review of master plans and projects to consider and address transportation-related issues. NCPC requires Transportation Management Plans for federal campuses and installations as part of the master planning process that establish transportation goals consistent with the comprehensive plan policies and agency missions. The information in Visualize 2045, regarding proposed projects, as well as aspirational goals, will be helpful for NCPC and applicants during the review process.

Several federal agencies manage regional transportation assets, most notably the National Park Service (NPS). NPS will shortly release its National Capital Region Long Range Transportation Plan. This document sets a 20-year vision for the important transportation assets NPS manages that provide access to the region's iconic destinations, including several parkways, major bridges, and highly used trail systems. We encourage the TPB to continue working with the NPS to understand the mission, issues, and opportunities that guide these federally managed resources, and how best to incorporate them into larger regional plans.

Again, thank you for the opportunity to comment on Visualize 2045. We look forward to our continued participation on the TPB, and working together to improve the region's mobility and sustainability. Please contact Julia Koster at julia.koster@ncpc.gov for any further information.

Sincerely,

Marcel Acosta
Executive Director

COMMONWEALTH OF VIRGINIA
County of Fairfax
BOARD OF SUPERVISORS

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12000 GOVERNMENT CENTER PKWY
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chairman@fairfaxcounty.gov

SHARON BULOVA
CHAIRMAN

October 5, 2018

Mr. Kanathur Srikanth
Executive Director
National Capital Region Transportation Planning Board
777 North Capitol Street NE, Suite 300
Washington, DC 20002

Reference: Comments on Visualize 2045

Dear Mr. Srikanth:

Thank you for providing an opportunity to comment on the draft Visualize 2045 Plan. On behalf of the Fairfax County Board of Supervisors, I am writing to provide the Transportation Planning Board (TPB) comments regarding the Draft Plan that were discussed by the Board on October 2, 2018.

Overall, the Board supports the plan and recommends the Transportation Planning Board adopt Visualize 2045 on October 17, 2018. The Board supports and encourages this new kind of long-range planning effort by the TPB, which now includes aspirational projects, programs, and policies that go beyond financial constraints. The Board appreciates the multi-modal approach to accommodate anticipated growth in population and employment. Also, the Board is pleased that Visualize 2045 highlights bicycle and pedestrian projects, freight planning, and other transportation programs aimed at reducing congestion and improving air quality, as well as, presenting and analyzing key land-use issues facing the region, including the links between land-use, economic vitality, and transportation.

The Board is especially pleased to see two highway projects in the Plan that will greatly benefit the region: 1) Maryland's I-95/495 Traffic Relief Plan, and 2) Virginia's I-495 – construct 4 HOT lanes project. Together, these two projects will address one of the region's major congested bottlenecks – the American Legion Bridge. The County believes that the capacity needs across the Potomac River must be addressed to alleviate the existing congestion and to ensure that the region remains economically vibrant.

The Board also appreciates the inclusion of the Washington Metropolitan Area Transit Authority's plans for expanding capacity on Metrorail by running all eight-car trains during peak hours, making capacity improvements to stations in the system core, and planning to construct a new Rosslyn tunnel under the Potomac River.

The Board requests that this letter be made a part of the public comments record, and that full consideration be given to these comments in adopting the Final Visualize 2045 Long-Range Transportation Plan at the TPB's October 17, 2018, meeting.

Thank you for the opportunity to provide comments on the Draft Plan. If you need any clarification or further information, please call Mike Lake at (703) 877-5666 or me at (703) 324-2321.

Sincerely,

Sharon Bulova
Chairman

cc: Members, Fairfax County Board of Supervisors
Bryan J. Hill, County Executive
Robert A. Stalzer, Deputy County Executive
Catherine A. Chianese, Assistant County Executive
Tom Biesiadny, Director, Department of Transportation

National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Charles Allen, Chair, Transportation Planning Board

FROM: Kacy Kostiuk, Chair, Access for All Advisory Committee

SUBJECT: AFA Comments on the Visualize 2045 Draft

DATE: October 5, 2018

At the September 13, 2018 Access for All Advisory (AFA) Committee meeting, the committee received a series of presentations on the region's long-range metropolitan transportation plan, Visualize 2045. The committee discussed the plan elements and provided comments on transportation-related concerns for the populations the AFA represents. The AFA comments are organized in two categories: comments specific to Visualize 2045 draft and other general transportation concerns.

Overall, the AFA stressed the importance of affordable, reliable, and accessible rail, bus, and paratransit for people with disabilities, those with limited incomes, minority communities, people with limited English skills, and older adults. The AFA had eight summary comments with additional detail under each comment provided in the following pages.

- The AFA recommends that Visualize 2045
    - include additional and more affordable public transportation options throughout the region;
    - prioritize transportation funding for accessible pedestrian and bicycle options critical for people with disabilities' and older adults' safety, access, and mobility;
    - consider and accommodate the impact of technology and automation;
    - recognize the additional burdens that managed lanes may place on low-income populations; and
    - note that the "Access to Jobs" measure shows an East-West divide, and that the region is not only divided by race and income, but also by access to jobs.
- The AFA wanted to stress to the TPB that
    - accessibility for people with disabilities and those with limited-English skills should be considered throughout the planning, design, construction, and implementation stages of transportation projects or services;
    - front-line transit employees and transportation network company drivers, such as Uber and Lyft drivers need diversity and sensitivity training; and
    - the region should ensure MetroAccess has the resources to serve additional demand while maintaining service quality and provide more alternative options.

COMMENTS SPECIFIC TO THE VISUALIZE 2045 DRAFT

THE AFA RECOMMENDS THAT VISUALIZE 2045 INCLUDE ADDITIONAL AND MORE AFFORDABLE PUBLIC TRANSPORTATION OPTIONS THROUGHOUT THE REGION.

- The committee noted a need for expansion of bus service, including more interjurisdictional service and restoring bus service cuts made in the last few years.
- The AFA is concerned about Metrorail remaining both affordable and available to residents and low-income workers. It continues to be concerned about reductions in rail and bus service and the impact on those who are transit-dependent. The committee supports incentives for people with limited incomes; incentives could include user-side subsides or reduced fare programs.
- The AFA also recognizes Metro's current challenges and expressed strong support for it to continue efforts to improve safety, maintenance, and service quality.
- The AFA is concerned about transit-dependent populations being priced out of high-density areas, such as activity centers and near Metrorail stations. Some people are unable to live in these areas well served by transit and other public services because the housing costs are out of reach, so they are forced to find housing that is farther away from these critical services.

THE AFA RECOMMENDS PRIORITIZING TRANSPORTATION FUNDING FOR ACCESSIBLE PEDESTRIAN AND BICYCLE OPTIONS IN VISUALIZE 2045, WHICH IS CRITICAL FOR PEOPLE WITH DISABILITIES' AND OLDER ADULTS' SAFETY, ACCESS, AND MOBILITY.

- Implementation agencies should consider the safety concerns of people with disabilities and the need for education and awareness of pedestrians, bicyclists, and drivers as these agencies maintain, build, and propose bike lanes.
- The AFA recommends greater coordination between jurisdictions on creating standards for a high-quality, uniform enhanced auditory signaling system for visually- impaired pedestrian travel.
- Bikeshare programs should increase the availability of accessible bikes (e.g. hand bikes, side-by-side bikes, electric bikes and tricycles) to promote adaptive cycling in the region.

VISUALIZE 2045 SHOULD CONSIDER AND ACCOMMODATE THE IMPACT OF TECHNOLOGY IN REGIONAL TRANSPORTATION.

- The TPB should more explicitly plan to accommodate the expected increase in electric and autonomous vehicles and estimate impact on regional air quality.
- The plan should be flexible and consider how to accommodate the expected increase in app-based services (and associated accessibility challenges), technology-oriented jobs, teleworking and the impact on regional congestion. Solutions include supporting policies for federal, state and local governments on app-based and automated vehicle accessibility standards and improved telework policies for both public and private sector employees.

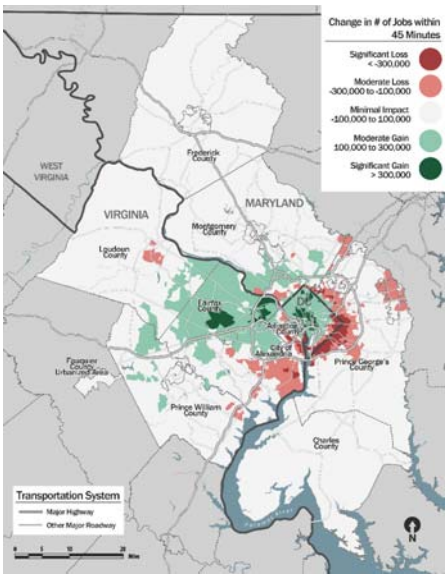
THE AFA EXPRESSED CONCERN ABOUT THE ADDITIONAL BURDENS THAT MANAGED LANES MAY PLACE ON LOW-INCOME POPULATIONS.

- The plan includes managed lane facilities on I-495 and I-270 which require users to pay fees for use of the facilities when driving alone. The AFA commented that tolled facilities tend to place additional burdens on low-income workers, people with disabilities, and those with limited English skills, and asked if the project would have affordability and accessibility provisions.
- The AFA committee questioned if low-income populations can fully participate in the benefits of these new facilities and from the benefits of purchasing a transponder as well as pre-paying tolls with a credit card.

THE AFA EXPRESSED CONCERN THAT THE REGION IS NOT ONLY DIVIDED BY RACE AND INCOME, BUT ALSO BY ACCESS TO JOBS.

- The AFA received a presentation on the performance analysis of the Visualize 2045 draft, including Figure 1 showing changes in "access to jobs by auto" with the greatest losses on the eastern side of the region and that the greatest gains are on the western side of the region.
- The AFA supports actions to address the East-West divide, such as an increase in all modes of transportation to connect the eastern part of the region to the job-rich western portion.

Figure 1: Changes to Access to Jobs by Auto in 45 Minutes, 2019 to 2045



COMMENTS ON OTHER TRANSPORTATION CONCERNS

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES AND THOSE WITH LIMITED-ENGLISH SKILLS SHOULD BE CONSIDERED THROUGHOUT THE PLANNING, DESIGN, CONSTRUCTION, AND IMPLEMENTATION STAGES OF TRANSPORTATION PROJECTS OR SERVICES.

- When implementing agencies consider the needs of people with disabilities early on, as well as throughout the planning stages of a project, the accessibility and usability of the transportation improvement can be greatly improved for everyone.
- The AFA noted that people using mobility devices have difficulty in finding accessible parking options in D.C. as well as the need for more accessible transportation options in general.
- Regarding language access, the AFA recommends that WMATA as well as the District Department of Transportation (DDOT), the Maryland Department of Transportation (MDOT) and the Virginia Department of Transportation (VDOT) provide greater language access to limited English speakers to ensure that they can comment on proposed service changes and/or transportation projects. WMATA's efforts to build partnerships with language access advocacy organizations should continue.

FRONT-LINE TRANSIT EMPLOYEES AND RIDE-SHARING COMPANY DRIVERS NEED DIVERSITY AND SENSITIVITY TRAINING.

- The committee recommends that transportation providers augment sensitivity training of front-line employees and transportation network company drivers so that they know how to appropriately communicate and assist all customers; such training should include awareness of and sensitivity to different types of disabilities, the lesbian, gay, bisexual, and transgender (LGBT) community, and a diverse set of cultural and ethnic backgrounds.

THE REGION SHOULD ENSURE METROACCESS HAS THE RESOURCES TO SERVE ADDITIONAL DEMAND WHILE MAINTAINING SERVICE QUALITY AND PROVIDE MORE ALTERNATIVE OPTIONS.

- Demand for ADA paratransit will increase due to the aging population and requirements to transition people with intellectual and developmental disabilities to community-based independent living. AFA members expressed concerns that MetroAccess may not have the resources to serve this additional demand and maintain service quality at the same time; not all human service agencies will be able to afford to provide the transportation for the people they expect to serve, as many have done in the past.
- The AFA noted that some people with severe disabilities need a greater level of service than what ADA paratransit can provide. Pilot programs directly funding human service agencies to provide transportation to their clients rather than using MetroAccess have shown good results and resulted in cost-savings for jurisdictions.
- The AFA recommends that the region continue to support alternatives to MetroAccess, such as taxi pilots, and the use of transportation network companies or other providers, to the extent that these options can provide fully accessible service for people with a wide range of disabilities and are less expensive to the jurisdictions than MetroAccess.

October 1, 2018

The Honorable Charles Allen, Chair
National Capital Region Transportation Planning Board
777 North Capitol Street, NE, Suite 300
Washington, D.C. 20002

Dear Chair Allen:

Thank you for providing an opportunity to comment on the air quality conformity analysis in the draft Visualize 2045 plan. MWAQC has reviewed the above analysis and concurs that the transportation sector emissions associated with the proposed transportation plans meet the motor vehicle emissions budgets (MVEBs) in the 2008 Ozone National Ambient Air Quality Standard Maintenance Plan.

However, the Visualize 2045 plan results in having to use Tier 2 transportation buffers for some of the future years, so MWAQC urges TPB to redouble efforts to reduce air pollution emissions from the transportation sector so that future mobile emission budgets remain within Tier 1 MVEBs to fully protect the health of our residents.

The Washington region has made significant progress in reducing emissions of ozone precursors such as, volatile organic compounds (VOC) and nitrogen oxides (NO_x) from both transportation and non-transportation sectors over the years. As a result, the region has been able to meet all but the 2015 ozone National Ambient Air Quality Standard (NAAQS). The region has met the 2008 ozone standard of 75 parts per billion (ppb) since 2014 and submitted a request in early 2018 to EPA to redesignate the area to attainment for the 2008 ozone standard along with a required demonstration to maintain compliance in the future (maintenance plan).

The Washington region developed two sets of MVEBs (Tier 1 and Tier 2) for VOC and NO_x as part of the maintenance plan for the 2008 ozone standard using EPA's latest MOVES2014a model. The Tier 1 MVEBs together with Tier 2 MVEBs, which included a conformity buffer, were developed for 2025 and beyond. These MVEBs replaced the previously used MVEBs, which were developed earlier using Mobile6.2 model based on the 1997 ozone NAAQS. EPA, on August 21, 2018, found these budgets were adequate for transportation conformity purposes.

MWAQC notes that the air quality conformity assessment shows that transportation emissions are below the Tier 1 MVEBs for most of the analysis period. However, transportation emissions are above the Tier 1 MVEBs for 2025 and 2030. Therefore, TPB had to use the Tier 2 MVEBs buffers for demonstrating conformity in those two years.

The Tier 2 MVEBs buffers were provided for in the 2008 ozone NAAQS maintenance plan to account for conditions where the conformity analysis is based on different data, models, or planning assumptions, including, but not limited to, updates to demographic, land use, or project-related assumptions, then were used to create the MVEBs in the maintenance plan. Nevertheless, MWAQC is concerned about the use of the Tier 2 MVEBs buffers and wishes to stress that the future transportation plans should account for air emissions so that future conformity analyses would not need to use Tier 2 MVEBs buffers.

MWAQC notes that the draft Visualize 2045 plan document does not address the reliance on the Tier 2 buffers in 2025 and 2030. On pages 54 and 55, the Tier 1 MVEBs for NO_x and VOCs are not included and the budget is shown to reflect solely the Tier 2 buffer. Any acknowledgement of the Tier 1 MVEBs and why emissions are projected to be above the Tier 1 MVEBs should be addressed specifically in the primary document and not relegated only to an Appendix.

This is particularly important as the Washington region faces continuing challenges related to air quality. The region needs to attain the 2015 ozone standard of 70 ppb by August 2021. The draft data for the period 2016 through 2018 shows the region's design value for ozone at 72 ppb. Additionally, the region's design value has been above the current standard since 2016. Also, the region had its first Code Red air quality day this summer since 2012. Source apportionment modeling conducted separately by the United States Environmental Protection Agency and the Ozone Transport Commission has shown that on-road mobile sources are a primary driver of ozone formation in the region. This evidence shows that even though the region has made significant progress in reducing emissions, it needs to continue its efforts to further reduce emissions to meet the 2015 ozone NAAQS, in particular from on-road mobile sources.

MWAQC is working on the "What We Can Do" scenario project to identify local actions that will help the region both attain the above ozone standard and eliminate future unhealthy air days. We pledge to work with TPB to help our members implement new measures to further reduce air pollution. Since on-road emissions play a significant role in the overall ozone problem in this region, it is important that the transportation sector plays its role in resolving this problem.

MWAQC is encouraged to learn that the region is achieving reductions in per capita VMT, even with an increase in employment. However, due to population and job growth, the region is experiencing an increase in total VMT. Therefore, we urge TPB's continued investment in VMT and emission reduction strategies such as public transit, ride-sharing, pedestrian and bike infrastructure, other travel demand management strategies, and Transportation Emission Reduction Measures (TERMS) to reduce future growth in vehicle emissions.

Our local and state efforts in the Washington region may become even more important in the future if less stringent emission standards for light-duty motor vehicles for the model years 2021-2026 are enacted as proposed, especially since the region is experiencing an increase in the market share of light and heavy-duty trucks. If these standards are approved, there will be further increase in emissions of ozone precursors which would lead to even higher ozone levels in the region, resulting in more difficult emissions reduction efforts for the region in the future. MWAQC appreciates TPB joining MWAQC in requesting continuation of the existing light-duty vehicle emission standards.

Thank you again for the opportunity to comment on the draft conformity analysis in the Visualize 2045 plan.

Sincerely,

Hon. Hans Riemer
Chair, Metropolitan Washington Air Quality Committee

CITY OF FALLS CHURCH

October 5, 2018

Mr. Charles Allen
Chair, National Capital Region Transportation Planning Board
777 North Capitol Street, NE, Suite 300
Washington, DC 20002-4239

Transmitted via email: TPBcomment@mwcog.org

RE: Visualize 2045 Plan Update Community Plan

Dear Mr. Allen:

The City of Falls Church is pleased to continue our partnership with COG and our regional partners in the development of the vital regional long-range transportation plan. Thank you for the strong regional staff planning efforts and community input opportunity. This letter serves as the City's comments for the 30-day public comment period. We request that the following core principles and key projects be included in the final Visualize 2045 plan:

Core Principles Integrated into Plan Update (not in priority order):

- City supports continued investment that supports economic development and the needs of tomorrow's economy
- City supports continued investment in regional activity centers, as called for in the Region Forward plan
- City supports the vision of a multimodal transportation network, as that has been demonstrated to be equitable and sustainable
- Continue monitoring advances in technology for innovation and cybersecurity and advise on policies as well as requirements that enhance quality of life

Key Projects Integrated into Plan Update (not in priority order):

- Continued investment in regional bike and pedestrian network – both within and among activity centers
- Invest in underutilized transit stations, such as West Falls Church Metro
- Route 7 high-capacity transit, i.e., Rapid Bus Transit
- East Falls Church Metro Station second entrance

Please do not hesitate to contact Cindy Mester, Deputy City Manager, at cmester@fallschurchva.gov if you have any questions or if we can provide additional details.

Sincerely,

Wyatt Shields
City Manager

The following is a transcript of comments made by Katie Harris at the TPB meeting on September 21, 2018.

Thank you, Chairman Allen, and Board. My name is Katie Harris and I'm here on behalf of the Washington Area Bicyclists Association. I'm here in regards to the bicycle and pedestrian elements of Visualize 2045.

We're in full support of the two initiatives: the National Capital Trail and bike-ped access to Metrorail stations. Our concern is that these two initiatives don't go far enough for people who walk and bike. We see, in Appendix 1 from Visualize 2045, where the public feedback from the TPB-led public forums is shared, and one of the concerns that we see in that appendix about the National Capital Trail is that the National Capital Trail is too narrowly defined.

And I quote from the appendix: "Particularly outside of the regional core, it seems that participants could not directly relate to the limited geography of the National Capital Trail that was identified in the TPB-endorsed initiative." In some cases they wondered why specific trails in their jurisdiction have been left out.

And we agree with this concern. We also present a really promising opportunity, which is that the Capital Trails Coalition, a collaboration between public agencies, private nonprofits, business improvement districts, and many others -- some of the agencies that are represented on the Transportation Planning Board -- have created an extensive plan for a trail network that would be much more regional in scope than the National Capital Trail. It's called the Capital Trails Network, and we've spoken to some of you about this plan for the network and we urge the TPB to adopt this as the aspirational element for the long-range plan. Thank you.

Committee for Dulles
45969 Nokes Blvd., Suite 100
Sterling, Virginia 20166

October 6, 2018

Metropolitan Washington Council of Governments
National Capital Region Transportation Planning Board
777 North Capitol Street N.E., Suite 300
Washington, DC 20002-4239

Re: Visualize 2045

The Committee for Dulles is a unique organization dedicated to the issues concerning and wellbeing of Dulles International Airport. We have been in existence for over 50 years and represent groups and employers with over 10,000 people.

We are deeply concerned about the transportation mix of Visualize 2045. The current mix of funding between programmed transit and highway investments will not meet future needs. The current proposed funding of 68% for transit and 33% for roadways should be the exact opposite. The area needs more roads. It is critical to the economic viability of the area and Dulles International Airport.

Our support for transit is strong and historic. The Committee for Dulles was one of the first organizations to support mass transit in the Metropolitan Washington area. We were also one of the first organizations to support the Silver Line. And, we will continue to support commonsense solutions for transit.

With this in mind, a new Potomac Bridge Crossing, upriver from the American Legion Bridge is sorely needed and should be included in the plan. This need has been ignored for too long. The new bridge will provide improved access to Dulles International Airport and reduce congestion at the American Legion Bridge. It will also help Northern Virginians with air travel should they want to fly from the Baltimore Washington International Airport. Lastly, a new bridge crossing will create many business opportunities in Maryland and Virginia.

The Committee for Dulles, respectfully requests a change in the funding mix between transit and highway investments and the inclusion of a new Potomac Bridge Crossing in Visualize 2045.

Sincerely,

Rich McCary
Executive Committee Member
Committee for Dulles

Washington Airports Task Force

www.washingtonairports.com

October 5, 2018

National Capital Region Transportation Planning Board
777 North Capitol Street NE, Suite 300
Washington, DC 20002-4239

To Whom It May Concern:

The Washington Airports Task Force (WATF), a Virginia 501 (c)(3) corporation whose mission is to enhance and expand aviation services for the National Capital Region, appreciates the opportunity to comment on the MWCOG Transportation Planning Board's Visualize 2045, FY 2019-2045 Transportation Improvement Program and Air Quality Conformity Analysis. The WATF is acutely aware of the challenge that transportation presents to passengers and businesses that need access to our region's airports.

Overall, the current Program presents what we believe to be a very unbalanced approach to regional transportation funding because it allocates 66% of total transportation funding to transit and only 33% to roads, when only 7% of the region's trips are by transit. The Program assumes an almost 40% increase in ridership over the period of the study; however, in 2045 that will still account for only 7% of total trips. The WATF finds that the proposed funding allocation is unacceptable.

The WATF does not advocate significant cuts in transit; however, we cannot ignore the lack of investment in roads that handle over 80% of daily trips for our region's citizens. *Without significant increases in the surface network, regional congestion and delays will dramatically increase. This will have a significant impact on our region's economy and citizens' quality of life*.

Further, one project that is conspicuous by its absence is an additional Potomac River Crossing between Loudoun and Montgomery Counties. Congestion leading up to and on the American Legion Bridge is an all day, every day occurrence, costing our citizens in terms of productivity and quality of life, and harming our environment. Even with proposed HOT lanes and improved capacity on the existing bridge, this major transit point will only get worse. A new Potomac River Crossing would be the single most impactful measure that could be taken to help relieve regional congestion, as it is proposed to handle an expected 100,000 trips per day.

A new bridge would provide improved access to the international air services at Washington Dulles International Airport for residents of Montgomery County, as well as for the entire region, due to the impact this Project would have on reducing overall congestion. A new bridge would also provide improved access to the low-fare air services at Baltimore Washington International Airport for residents of Northern Virginia. The bottom line is that a new bridge would provide more opportunity for residents and businesses to connect to cities and markets around the country and the world, and would provide airport and airline options for residents that they currently do not enjoy because of congestion.

The WATF supports greater funding to support our region's roadway network and believes that it is imperative that a new Potomac River Crossing be included in Visualize 2045 Program.

Sincerely,

Keith W. Meurlin

44701 Propeller Court • Suite 100 • Dulles, VA 20166
OFFICE: (703) 572-8714 FAX: (703) 572-8718 E-Mail: watf@washingtonairports.com

The following is a transcript of comments made by Daniel Paschall at the TPB meeting on September 21, 2018.

Thank you to Chairman and the Board for this opportunity. I'm Daniel Paschall. I'm with the East Coast Greenway Alliance. We represent a trail project that's going from Maine to Florida, so sort of an urban Appalachian Trail, but connecting all the major cities down the East Coast.

We are part of the Capital Trails Network and so I wanted to come down here, actually from Philadelphia. I'm the coordinator for the Mid-Atlantic Region, so I see trail networks not only in the D.C. region but in Philly, in Delaware, in Baltimore. So it's very important that we wanted to support the Capital Trails Network as being adopted as one of the aspirational elements of Visualize 2045. And also wanted to recognize that, you know, this network is -- it's not just the region and it's not just even our trail along the East Coast, but the Great Allegheny Passage and the C&O Towpath are part of this, and that will eventually be part of what was recently announced by Rails to Trails, the Great American Trail. So this idea, if you know the railroad project to connect both coasts back in the 1800s, this is a trail project to connect Washington state to Washington, D.C.

So there's more information coming out about that, and we have the American Discovery Trail, September 11th National Memorial Trail, another one to connect all the major crash sites of September 11th. These are regional trails and they basically provide a spine for other trails in the area.

And you wouldn't build, you know, a beltway without roads to get to it. There shouldn't be, you know, a beltway of a trail without trails to get to that to provide safety, but not only that, transportation and economic development and, you know, thinking about congestion in the area. If you provide more options, you'll basically get more people off the road and onto healthier ways of transportation. So thank you very much.

SUBURBAN MARYLAND
TRANSPORTATION ALLIANCE

Charles Allen, Chair
National Capital Region Transportation Planning Board
777 North Capitol Street NE, Suite 300
Washington, DC 20002-4239
Via.https://www.mwcog.org/visualize2045/

October 5, 2018

SUBJ: Suburban Maryland Transportation Alliance (SMTA) - Comments on Visualize 2045

Dear Mr. Allen,

SMTA appreciates the opportunity to comment on the draft Visualize 2045 Plan, and to highlight our support of the projects that are regionally significant and add meaningful capacity to the transportation network.

We agree that by bringing these elements together, the draft plan aims to help decision makers and the public "visualize" the region's future by illustrating:

- What the region *aspires* to do if more resources were available,
- What the region *can do* with current levels of funding, and,
- What the region *must do* to meet federal requirements.

Toward that end, Visualize 2045 and the FY 2019-2025 TIP include important projects like the Purple Line and the Traffic Relief Plan that will add capacity to I-270 and I-495 with self-supporting express toll lanes. These is long overdue for those who waste 67,000 hours every day sitting in congestion and reducing air quality on Maryland's interstates.

That being said, SMTA notes two major concerns with the draft of the 2045 Plan:

1) A second bridge crossing the Potomac River should be included in the Aspirational Initiatives. It is inconceivable that after 9-11, crippling snowstorms and Metro shutdowns, the draft 2045 Plan does not include a second bridge – not only for mobility goals but for homeland security. In addition, another bridge would meet five of the six Performance Based Planning & Programming (PBPP) measures that address emissions, congestion, miles traveled and freight reliability.

2) SMTA supports all modes of transportation in order to create a truly connected, regional system serving commuting and non-commuting trips. Bicycle facilities are crucial, however, most of them do not rise to the level or regional significance nor can they compete with other improvements on a cost/benefit basis. Given the backlog of delayed road and transit projects

we urge the TPB to focus our limited resources on regionally-significant projects that will add meaningful capacity. As shown on Table 11 of the TIP, Maryland has submitted a disproportionate amount of bicycle/pedestrian projects – when compared to the District and Virginia's. Funds for these projects should be redirected to long-overdue road and transit improvements such as Mid-County Highway and the Corridor Cities Transitway.

SMTA is appreciative of the TPB's efforts to make this plan more integrated across jurisdictional lines, and more thoughtful. With the addition of the second bridge and a better balance in bike/ped projects, the draft plan will better address transportation initiatives for residents, workers and businesses in Maryland and the entire region.

Sincerely,

Jennifer Russel, Chair
Suburban Maryland Transportation Alliance

cc: SMTA Board of Directors and Advisory Board

The following is a transcript of comments made by Rob Whitfield at the TPB meeting on September 21, 2018.

Members of the TPB, thank you for the opportunity to speak. I'm Rob Whitfield. Fairfax County Taxpayers Alliance looks at the cost-effectiveness of projects, both in transportation and other aspects of government spending.

I've been to two meetings of Visualize 2045 in Fairfax County. My estimate is that no more than 20 people attended either of the meetings. And, unfortunately, the agenda seems to be driven by minorities who advocate for bike and pedestrian trails, but we have very few advocates for the fundamental means of mobility, which is the highway network. The majority of the population and household and employment growth in the last 20 years has occurred outside the Capital Beltway, and the Council of Governments has projected that trend to continue.

I got this half an hour ago; I haven't found any details that show within the region the breakdown between the core, the inner jurisdictions, and the outer jurisdictions. So that that overlay needs to be provided into here so that we can see where projected growth with COG's existing planning process projects that will -- I mean, I support the activity center concept but if in fact the majority of employment and household growth is going to be outside the capital beltway, that's where the primary funding needs to occur. Fairfax County is close to 1.2 million; Loudoun County is now 400,000 people; Prince William County is about 450,000 people. We have over 2.2 million people living in suburban Northern Virginia, and yet we don't even have a representative on the Commonwealth Transportation Board who represents "normal" interests. They're special interest appointees.

So I will have much more to say on this when I see the further steps being taken in this process, but I do advocate that you have to focus primarily over 81 percent of the people today use highways for commuting. And if you include those who commute by buses, we rely on the highway network for around 90 percent of commuting. So I'll have more to say at subsequent meetings. Thank you.

The following is a transcript of comments made by Nancy Abeles at the TPB meeting on September 21, 2018.

This year, our region selected seven new initiatives to improve transportation planning. Doing so, TPB finally acknowledged that land use and housing affordability are factors in travel woes. Now TPB must acknowledge that transportation is really about people, and that the public can be the best planning resource.

I'm Nancy Abeles. I've been a community representative on multiple transportation advisories, including TPB's Citizens Advisory. I'm here to say how deeper, more proactive engagement should be either an eighth initiative or a tool to amplify the seven.

Beginning with Houston, Texas, some transportation agencies now use these interactions to revamp failing systems. Houston asked a broad inclusive spectrum of direct stakeholders, including communities and system operators, to redesign their bus system from scratch, and they used "of the moment" planned use data to see actual densities of where people live and work. Planning time was short, the low investment primarily for outreach. New routes and timetables for existing assets were implemented literally overnight. Transit ridership significantly increased, road congestion lessened, travel time shortened, because homes and jobs connected better.

Continuing engagement will keep this system resilient. Houston's people now use more of all transit modes all week because work and personal needs are being addressed. They improved their region's overall transportation network, economy, and quality of life.

But usually, with a lot of rigmarole, communities are made either a project's victim or enemy. That's because too much happens behind closed doors, and politics interfere with whether a project is beneficial or cost-effective. We can see through legacy projects or have actually been told by project staff that a project's fate rests not upon merit or return on investment, but on who gets elected.

Better public involvement can correct or validate assumptions by on-the-ground knowledge to make planning both more effective and transparent. In summary, greater, deeper public engagement can improve planning by bringing together top-down and bottom-up thinking. With the next 20, ten, or even five years becoming less predictable, all kinds of experts believe that we've reached a major global pivot point that makes it harder to plan. There will be different, potentially unforeseen transportation options, kinds of housing, and even forms of cities.

Based on personal needs in the face of these unknowns, the public will make ongoing choices of where to live and work. How better than to make regular people into agents of culture change by their more integral involvement in the planning process. The public wants connection between long-range planning and here-and-now reality. Solutions don't come from roads or vehicles, but from people. We are here to connect if elected officials,

planners, and transportation agencies will listen. Thank you for the opportunity to comment.

Sent: Saturday, October 6, 2018 2:25 PM
To: TPBcomment
Subject: Metro Single Tracking

A solution to the area's horrific weekend traffic would be for Congress to pass legislation declaring "single tracking" a high crime and misdemeanor. I travel the world over and our Metro is the only transit system that is so addicted to single tracking which results in unreasonable delays, not only for passengers traveling through the affected area, but throughout the system. Single tracking forces Metro to increase the already pitiful weekend headways and have trains wait unpredictably long times for clearance. With my bus running every 60 minutes, and single tracking, it can (and has) taken me 2 hours to travel from Dupont Circle to my home in Alexandria!

So I drive.

The solution is to close the area where track work is required in both directions and run a "bus bridge." By working on both tracks simultaneously, the total duration of the repair can be cut in half! It's safer for the workers too, and would allow "normal" service on the remainder of the line. The London Tube is a two track system and that's how they do it. Why aren't we as smart?

Thanks.

Bob Gronenberg

Sent: Saturday, October 6, 2018 12:40 PM
To: TPBcomment
Subject: Visualize 2045

Hello, I have lived on both Maryland and VA suburbs and, a short time in DC so, I've experienced all sides of the Metro area, since moving here from St. Louis, in 1963. We now live on 2 acres, in a more rural landscape, near Olney, Maryland. But, we still daily contend with 2 very congested roads: New Hampshire Avenue and Georgia Avenue. I would like to see this congestion remedied and the roads made safer, if possible.

I have a huge interest in transportation and road improvements in the area. It affects what we do every day. And it even hinders my art school from growing, because parents don't want to get stuck in traffic. I used to have 30 students and due to congestion, I now only have ten.

In the 60s we used to be able to walk to DC or Georgetown from Alexandria and Arlington. We took trains to Baltimore and only took buses for college or work. Most folks had one car and, none had two vehicles, even though almost everyone had 3 or more kids. I never imagined a day when families would have more than one car and, I never owned one myself until five years after we had kids. We live in an entirely car-centered world now.

The area has shifted from pedestrian-friendly to a transport-needed area. I wouldn't recommend that anyone walk or stand at a bus stop. It just isn't the safest mode of transportation an more. Even if you put in more of these options, I doubt many will risk their lives using them. Even bicycle lanes may mostly be used on weekends when traffic on the roads is not as troublesome. Also, how can we give police protection on a beltway bicycle path? This is a different very society than we had in the 60s! Please don't implement anything inherently unsafe!

My suggestions are:

1. Build 2 or more bridges connecting VA to MD, above Great Falls. This has been needed since at least, the Civil War. (You can even add several more ferries in the interim.) The bridges will get the most traffic off our over-crowded main arteries.

2. Give tax incentives to people to live closest to their work places and give other incentives to people who actually work from home. There is a huge attraction to these work options.

3. Give more incentives to home school families. We would be in a world of hurt if we had those families on the roads during the rush hours. They should be monetarily thanked for their choice to stay off the roads!

4. Refrain from making any more toll roads and complex roads stacked on top of each other. We have enough of them and we don't want to turn DC into Houston, one of the worst cities I've even seen! Once you get 3 or more roads stacked-up GPS can't help you navigate them!

5. Please don't add any more lanes to existing highways. They reduce forestation and are wide enough...too wide, really..they are noisy, break-up communities and affect our quality of life.

6. If possible, find a way to charge tourists for the privilege of visiting this area..maybe big busses can be charged impact fees. Essentially, treat DC more like a National Park.

7. Finally, beautify the roads and intersections we have now or, we add in the future. America is a mature country and we need to work harder to encourage more public art and landscaping. The lack of it is an embarrassment to us, on the world stage. Without any effort, we are very good at making America more and more ugly. But, I believe we can do better..and, what better time, as we try fix absolutely horrendous traffic congestion. Plus, if we have to stand for hours of our lives at intersections, it would improve the experience, if they were clean and attractive!

8. Finally, one more suggestion would be to find a better way for local and state transportation groups to communicate. I've attended planning meetings in the past for road improvement in our area and I was told by the speakers that local and state authorities did not communicate..at all. Please encourage me that this is fixed now and there is a also good cross-pollination going on between counties and towns and across the DC border..and the State Transportation Department. That would make my day!

Blessing to you as you proceed with this very challenging but, needful activity.

Maureen Hartnett

6107 Joyce Drive
Camp Springs, MD 20748

October 7, 2018

Chair Charles Allen
National Capital Region Transportation Planning Board
777 North Capitol Street NE, Suite 300
Washington, DC 20002-4239

Dear Chair Allen:

An article in today's *Washington Post*[1] examined the economic outcomes for middle-class children born in the early 1980s in various jurisdictions. The map of the area clearly demonstrated the "east-west divide" mentioned in the Visualize 2045 report[2]. A well-executed long-range transportation plan could help reduce this opportunity disparity by linking future workers with jobs at Regional Activity Centers throughout the region.

I appreciate the variety in the various road, transit, and pedestrian projects planned by the Transportation Planning Board (TPB). It was heartening to see an acknowledgement that we "can't build our way out" of congestion problems and that the potential exorbitant cost of overbuilding "underscored the importance of supplementing any proposed system expansions with supporting land-use policies,...pricing mechanisms and other programs.[3]" Several projects, such as improvements to MD-210 and improved connections to the Oxon Hill Farm Trail, would positively affect me.

My specific concerns relate to program priorities proposed in eastern portion of our region. Your report noted that Charles County is expected to grow in population by 44% compared to today. However, the map of "Major Transit Projects[4]" shows a conspicuous gap in additional transit infrastructure in

[1]Ingraham, Christopher. "Downward mobility: Where middle-class kids are worse off than their parents." *The Washington Post*. 7 October 2018, p.G3.

[2]p.6

[3]p.32

[4]Figure 5.2 p.40

eastern and southern Prince George's County and in Charles County. Major Highway Project #22, a proposed $790 million expansion of MD-5 with a planning horizon of 2035, would thus become the backbone linking new communities in that area with jobs and activities elsewhere.

Adding additional traffic to MD-5 concerns me because there are already several heavily congested portions of the roadway. I, like many commuters surveyed, consider reliability in choosing how I get around. Thus, I never use Branch Avenue to reach the beltway in the morning, despite living very close to it, because the stop-and-go traffic on the ramps to I-495 makes my travel times inconsistent. Adding traffic to MD-5 also seems inconsistent with planning goals calling for reduced automobile dependence and limiting future development outside of Regional Activity Centers.

"Appendix J: Public Outreach: Summary of Public Comment Periods" mentioned the 2017 "Southern Maryland Rapid Transit Study." This report, produced by the Maryland Transit Administration (MTA), described a system connecting the Branch Avenue Metro station with Waldorf that could be built for $1.5 billion. I urge the TPB to consider adding this project to the financially-constrained list of projects proposed for 2045. Such a line would meet a majority of the aspirational initiatives created by the TPB. It would "expand bus rapid transit regionwide" and could induce demand for Metrorail and thus "move more people on Metrorail." The system could "bring jobs and housing closer together" through redevelopment of underused properties at several proposed stations[5]. Such concentrated new development would also "improve walk and bike access to transit."

The major criticism of the project is that not enough demand exists to make it cost-effective to run outside of commute hours. However, a benefit of concentrating new development along this transit line, as opposed to spreading it out into more car-dependent areas, is that there would be a potential for more future riders. It is also possible that careful planning could reduce the capital outlays necessary to build the system. An earlier report, the "Southern Maryland Transit Corridor Preservation Study", advocated for a beltway crossing using a tunnel[6]. If the I-495 Managed Lanes project is built, a cut-and-cover tunnel box could be placed in the area for use by a future

[5]For instance, the Woodyard Crossing shopping center is a proposed station stop. It is currently underused after major tenants including K-Mart and Toys-R-Us have left.

[6]MTA Maryland. "Southern Maryland Transit Corridor Preservation Study." August

transit corridor. Such construction is not unique. Traffic was shifted around construction of the Washington St overpass in Alexandria as it was built. In Edmonton, Alberta, constructing a stub transit tunnel under the site of a future office building saved $140 million Canadian dollars when the transit line was later constructed.

The focus on Regional Activity Centers fails to highlight the fact that some large employers can greatly affect local travel patterns. As a result of BRAC, Joint Base Andrews in Camp Springs, MD and Joint Base Anacostia-Bolling in Washington, DC have added jobs. Some proposed projects, such as the I-495 Managed Lanes project and the reconstruction of the I-295/Malcolm X Avenue interchange, directly support these large employers. It would be useful if large traffic generators were marked on planning maps.

One area I believe the TPB could improve in is public outreach. I did not know about this document or process until a WTOP story the other day mentioned the end of the public comment period. When I examined "Appendix I: Report on Phase 2 of Public Outreach: Public Forums and Open Houses," I noticed that none of the hearings occurred in my area. The closest ones were in College Park, on April 18, 2018, and in Washington, DC on May 1, 2018. The only Charles County meeting occurred in La Plata on April 25, 2018. Considering the prevalence of Equity Emphasis Areas (EEAs) in this part of the region[7], it is disappointing that it appears neglected in terms of both outreach and future investment.

My sincere hope is that our region's long-range plans supports everyone, especially those of us residing in Prince George's and Charles Counties. Infrastructure investment could help correct past inequities and enrich the Washington area as a whole.

2010, p.5-2.

[7]CE 2023 in the "FY 2019-2024 Transport Plan" is allocated for roadway revitalization for inside-the-beltway communities in Prince George's County. However, only $5 million is allocated through 2020.

Thank you for your time and consideration.

Sincerely,

Patrick Husson

From: Jones, Hunter H
Sent: Friday, September 14, 2018 12:35 PM
To: TPBcomment
Subject: Public Comment on Visualize 2045 and the FY 2019-2024 TIP

To whom it may concern:

I envision a transportation system with hundreds of miles of paved trails, networks of protected bike lanes and laws that support and protect people who travel by bike.

There are some positive elements within Visualize 2045; however, the plan doesn't go nearly far enough for people who bike and walk. The plan invests in automobile infrastructure to the detriment of people who walk and bike. Visualize 2045 needs to envision a bolder future for people who walk and bike. It doesn't plan for the transportation future that we need.

The TPB could encourage more biking and walking by adopting the Capital Trails Network as the aspirational trail initiative in the long-range plan! This trail network has been researched, defined, and mapped by the Capital Trails Coalition, a group of public agencies representing TPB member jurisdictions, non-profit organizations, and other stakeholders. The TPB needs to fully adopt the Capital Trails Network as a key part of the long-range transportation plan, and invest in trails and bicycling and walking projects.

If our Transportation Planning Board refuses to be bold, to think big, and to develop new transportation solutions, then we will be stuck with the same transportation problems (congestion and traffic fatalities to name a few).

Kind regards,
Hunter

From: Hisham Shehabi
Sent: Friday, September 14, 2018 11:08 AM
To: TPBcomment
Subject: Visualize 2045 - Comments by a new resident in DC area

Good morning,

Thank you for being so elaborate in explaining your vision for the transportation system going forward in the next decades. It is quite refreshing to be in a place where such a public consultation so far in advance is possible.

My wife and I just moved to DC, and are likely going to be here for some time. As such, I feel compelled to take up the opportunity to share my ideas on the Visualize 2045 plan.

Having moved here from Switzerland, where I commuted to and from work, did excercise and socialized on a bicycle on most days of the year, I was quite appalled at the state of the bicycle paths in the DC area. While I understand that cars reign supreme in the US, the Visualize 2045 is a chance to rethink the way an American city can contribute to the health and happiness of its residents and visitors.

In the past months leading up to my move to DC, I have followed quite closely the work of the WABA group on bicycle advocacy. Having joined their 50-state bike ride last week which criss-crossed across the beautiful city of DC, I couldn't help but feel that my presence on the road seemed like a nuisance to others, cars but also pedestrians. In turn, I did not feel safe. This problem is multi-pronged and goes back to the mentality and mindset of drivers, who also don't stop really for non-signalled pedestrian crossings!

The work you are presenting in Visualize 2045 around bicycle paths, is only about increasing the flow to metro stations for commute, but I suppose that a bicycle-friendly city is more than just about connecting people on bicycles to the closest metro stations. It is about making more trails available, dedicated and safe for people to commute. The Capital Trails Coalition has come up with such a plan, which I believe would be a huge oversight on your behalf not to include in your plans.

Having seen the collaborative and forward-thinking approach this group has put together, it would be a missed opportunity not to bring this group of stakeholders on board. The dedication of trails is but one element to consider. The policies behind cycling infrastructure need to also be considered, including bike racks, tire pumps around the city and other 'soft' support infrastructure (subsidies, events, education, awareness, etc). With such a coalition already in place, all this thinking has already been done and ready to be executed in line with your development plans.

I guess you are more than familiar with the host of benefits economic, social and health associated with moving to a more bicycle friendly city, but here are a few links below to further cement the concepts. Moreover, wouldn't it be cool to join the cities of Fyn, Denmark; Gelderland, the Netherlands; Heusden-Zolder, Belgium; Woensdrecht, the Netherlands and Yorkshire, Great Britain as officially acclaimed bicycle-friendly cities by the International Cycling Union?

The great thing about planning so far ahead is the opportunities for inclusion and collaboration that open up due to the long-term nature of the process itself.

Wishing you all the best in your planning for the future development of the city.

Best regards from a surprisingly-quick-to-call-DC-home resident.
Hisham

The following is a transcript of comments made by Jason Stanford at the TPB meeting on September 21, 2018.

Hi. Thank you for the opportunity to speak today. Left to fester, the transportation challenges that have plagued our area -- congestion and delays -- will choke the economic development and quality of life that have been the cornerstones of our region for decades. Fundamentally, we need more transportation capacity to move more people throughout our region. We also need more transportation funding to ensure that existing and new funding are programmed in a manner that reduce transit and highway congestion and delay to the greatest extent possible.

The current divide between program, transit, and highway investment is dramatic. Currently, 66 percent of total transportation spending will be dedicated to transit while only 33 percent to roadways, despite transit only accounting for 7 percent of the total trips taken throughout the region. Even with the projected 38 percent ridership growth, the TPB's own analysis indicates that the transit trips will still make up around 7 percent of the total regional trips in 2045. This does not mean that we need substantial cuts for transit, but it does underscore the region's dramatic under-investment in a network upon which over 80 percent of all daily trips depend and why, absent significant greater investment in that network, regional congestion and delays will become dramatically worse.

To be clear, the Alliance is and has always been a strong supporter of increased investment in transit, ridesharing, transit-oriented development, mixed-use, and similar policies. However, it's hard to be confident that future programmed investments in Visualize 2045 draft best address actual future demands and needs. In short, Visualize 2045 makes clear that we as a region are falling far short of the targeted transportation investments required to improve mobility, to maintain prosperity, to improve our quality of life, and keep our region moving forward.

Meeting this challenge requires that Visualize 2045 and the TPB's subsequent actions embrace a far more focused approach on those transportation investments that best address the region's most pressing transportation needs. We can do better and we must. Thank you.

Comments of Peter Stokely

As a DC metro area resident, native, commuter and bicyclist, I urge you to incorporate the Capital Trails Coalition's long-term trail vision into the Visualize 2045 plan. This is perfect opportunity to combine the two long range mobility plans which will have synergistic effects. Safe bicycle mobility is key to a modern thriving metro area and will keep the DC metro area competitive with other metro areas such as Denver, Seattle and Portland when trying to grow the economy and attract qualified workers. Automobile ownership trends are decreasing with the new generation, and other mobility options are becoming more popular, including cycling. The Capital Trails Coalition plan will unite DC with its surrounding counties and provide a safe stress-free network of trails which will improve mobility and access to jobs for all income groups, and will increase the attractiveness and property values in the connected neighborhoods. Increasing mode share to non-automobile options such as cycling will be a win-win for our community by reducing congestion, increasing public health and wellbeing, linking neighborhoods, increasing property values and the overall attractiveness and competitiveness of the Washington DC metro area. I urge you to incorporate the Capital Trails Coalition's long-term trail vision into the Visualize 2045 plan.

Comments on Visualize 2045

1. Visualize 2045 fails to consider the role that improved and expanded commuter rail could play in reducing traffic congestion, accommodating growth and connecting affordable housing in Baltimore with jobs in the DC area. Visualize 2045 should be revised to include capacity and reliability investments in the MARC Penn line -- 4 tracks to Baltimore with the center island platform constructed at BWI; investments in the Brunswick line to allow for two way service in the rush hours and some midday service; construction of additional trans-Potomac capacity to allow for more VRE service and MARC and VRE run-through trains. Commuter rail expansion is much more appropriate for the region, and cheaper, than Metrorail extensions.

2. Visualize 2045 fails to consider a cheaper and more productive option to a new stub-end station in Rosslyn. Build a new Silver line transfer station at East Falls Church with cross-platform transfers to and from Orange line trains. This is a much cheaper solution than a new underground Rosslyn station for the Blue line and it allows for shorter headways on the entire Silver line if demand along the 22 mile segment ever requires it.

Blue and Orange line trains would continue to operate in and out to the District. Rush hour Silver line trains would terminate at East Falls Church with cross platform transfers to Orange line trains for travel to Arlington and the District. The ratio of Orange line trains would increase (by replacing the Silver line train slots). During off-peak periods all three Virginia services could run through Rosslyn to the District. This is a cheaper solution than building a new Rosslyn stub-in terminal for the Blue line.

3. The region should give stronger consideration to managing its growth and limiting greenfield development requiring expensive highway development. More incentives should be provided for investment on the east side of the region. Greater development density needs to be allowed/promoted at underutilized Metrorail station on the east side of the region.

4. The Transportation Planning Board should use its control of the TIP to discourage bad transportation investments and more strongly promote projects in line with its objectives. States need to be encouraged to focus on demand management projects and transit more than highway widening. Projects in the TIP should be scored for performance against COG goals and low scoring projects should not be included in the TIP. TPB voting should be on a weighted basis to conform with one person, one vote.

Steve Strauss

Comments of Tyrone Vias

Visualize 2045 is an impressive blueprint for the future which must balance many significant challenges. Originally being a NYC resident and currently in Law Enforcement I will offer some global remarks since planning for a region is no simple task.

1. My roundtrip commute is 130 miles long from Brunswick to DC. As a first responder my schedule can be rather unpredictable. So thoughts based on this.

    a. Tolls seems to be the new talk to pay for everything but takes a very significant amount of disposable income out of the middle class' pocket, not to mention fuel and wear and tear on a vehicle. Toll roads easily adds anywhere from $100-$300 in additional costs which are not sustainable for a middle-class family on incomes that do not rise with the rising costs of everything else.

    b. Brunswick has the good fortune of having the MARC train. However, the MARC train schedule out of Brunswick to DC is rather limited and for a person with a crazy schedule almost unusable. I would love to take the train in but it is not a viable option. Though not perfect the NY/NJ/CT area has a far more robust and usable commuter rail system which the National Capitol Region so desperately needs. For the sake of brevity, I would also loop commuter buses as well. As far as I am concerned commuter buses in the NCR are non-existent in certain areas. Road repair and improvements are a great thing but if the roads are going to be too expensive to traverse for Middle class residents then a robust, reliable, flexible commuter bus and rail system should be given a far higher priority.

Thank you for your attention.

LETTERS RECEIVED AFTER CLOSE OF FINAL COMMENT PERIOD

October 16, 2018

City of College Park
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www.collegeparkmd.gov

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Office of the Mayor
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Mayor

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District 4
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9238 Limestone Place
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Denise Mitchell
4500 Knox Road
301-852-8126

The Honorable Charles Allen
City Councilmember, City of Washington, DC
Chair, National Capital Region Transportation Planning Board
777 N. Capitol Street
Washington, DC 20002

Dear Chair Allen:

I am writing to reiterate our letter of January 9, 2018, in opposition to the proposal initiated by the Maryland Department of Transportation to widen the Capital Beltway (I-495) and the Baltimore-Washington Parkway (MD 295). As the National Capital Region Transportation Planning Board (TPB) considers final passage of Visualize 2045 and, in particular, the financially constrained element, I also write to encourage the Transportation Planning Board to pass an amendment to reiterate and reinforce the requirements of the Maryland Department of Transportation (MDOT) under the National Environmental Policy Act to consider the impacts on local communities that this project would have.

The City of College Park remains concerned about the impacts this project would have on our community. Although MDOT has stated that it intends to work within the existing State Highway Administration Right-of-Way, MDOT is currently considering options for expansion of I-495 that would add up to an additional four lanes of traffic around the entire stretch of I-495 within Maryland. It is difficult to understand how this could be accomplished within the existing right-of-way. Expanding the Beltway could have significant additional impacts on the communities surrounding I-495, including creating an additional traffic burden on local streets, creating additional noise and pollution, and further dividing communities already divided by the Beltway.

As expressed in our January letter, we are concerned that the harmful impacts created by Beltway expansion would outweigh minimal impact in reducing congestion. Significant studies have shown that highway expansion does little to address congestion in the long run – as development patterns follow highway construction, new traffic leads to further congestion. In order to ensure minimal impact on our community and the other communities surrounding the Beltway, College Park encourages MDOT to consider a more multi-modal approach including consideration of land use patterns. We are greatly encouraged by other strategies included within Visualize 2045.

Over the past several days, in close consultation with TPB staff, we have drafted proposed amendments to Resolution R5-2019, which would approve Visualize 2045, and now request that the TPB adopt these amendments. We crafted these proposed amendments in a way so that they would not disrupt the regional transportation planning or air quality conformity analysis processes. At the same time, the amended resolution would formally request that MDOT consider the impacts to local communities, abide by the state intent not to impact homes along the project right of way, and consider integration of multi-modal elements as part of the project. These provisions do not create any additional burden for MDOT beyond what is currently required by the National Environmental Policy Act, 42 U.S.C. section 4321 et seq., but would request that MDOT consider ways to reduce the impacts on local communities and report back to the TPB. Unfortunately, although the additional burden to MDOT in responding to these requests would be minimal, MDOT has not agreed to support these amendments.

We appreciate your consideration and the work of the Transportation Planning Board to address these important issues impacting our region, including congestion of our roads, while maintaining the high quality of life in our existing neighborhoods.

Sincerely,

Patrick L. Wojahn
Mayor

Enclosures: Proposed Amendments to TPB R5-2019
January 9, 2018 letter to Charles Allen, Chair, TPB
January 9, 2018 letter to MDOT Secretary Pete Rahn

Copy: College Park City Council
MDOT Secretary Pete Rahn
County Council Member Dannielle M. Glaros
County Council Member Mary Lehman
District 21 Delegation

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January 9, 2018

Charles Allen, Chair
National Capital Region Transportation Planning Board
Metropolitan Washington Council of Governments
777 North Capitol Street NE, Suite 300
Washington, DC 20002

Dear Chair Allen:

The College Park City Council is responding to the Transportation Planning Board's (TPB) request for comments on the Maryland proposal to widen I-270, I-495, and the Baltimore-Washington Parkway. The Council provides the comments below regarding I-495 and the Baltimore-Washington Parkway.

The Council opposes the proposed widening of the Capital Beltway (I-495) and the Baltimore-Washington Parkway (MD 295). While road widening often provides short-term congestion relief, studies have shown that in the long-term similar projects lead to more driving, trips, and sprawl. The 2012 Baltimore-Washington Parkway Feasibility Study concluded that additional lanes would accommodate more traffic, but also create more demand that would lead to similar levels of congestion to the level prior to the widening project.

Additionally, the Council is very concerned about the negative environmental impacts these widening projects would have, as well as the damage to neighborhoods adjacent to the roads. The Baltimore-Washington Parkway is an historic treasure and the character of the parkway should be protected.

Thank you for the opportunity to provide comment on this proposal, and thank you for the TPB's support of increased investment in transit systems and transit-oriented development as long-term solutions that create sustainable, healthy, and vibrant communities and economies.

Sincerely,

Patrick L. Wojahn
Mayor

cc: The Honorable Rushern Baker, Prince George's County Executive
The Honorable Jim Rosapepe, 21st District Delegation
The Honorable Barbara Frush, 21st District Delegation
The Honorable Joseline Peña-Melnyk, 21st District Delegation
The Honorable Ben Barnes, 21st District Delegation
The Honorable Dannielle Glaros, Chair and Prince George's County Council
The Honorable Mary Lehman, Prince George's County Council
Kanathur Srikanth, Metropolitan Washington Council of Governments

City of College Park
240-487-3501
www.collegeparkmd.gov

Office of the Mayor
and City Council
4500 Knox Road
College Park, MD 20740

Mayor

Patrick L. Wojahn
5015 Lackawanna Street
240-988-7763

Councilmembers

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9817 53rd Avenue
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6809 Dartmouth Avenue
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District 4
Dustyn Kujawa
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Denise Mitchell
4500 Knox Road
301-852-8126

January 9, 2018

Secretary Pete K. Rahn
Maryland Department of Transportation
6 St. Paul Street
Baltimore, MD 21202

Dear Secretary Rahn:

The City Council respectfully opposes the proposed widening of the Capital Beltway (I-495) and the Baltimore-Washington Parkway (MD 295). While road widening often provides short-term congestion relief, studies have shown that in the long-term similar projects lead to more driving, trips, and sprawl. The 2012 Baltimore-Washington Parkway Feasibility Study concluded that additional lanes would accommodate more traffic, but also create more demand that would lead to similar levels of congestion to the pre-widening level.

Additionally, the Council is very concerned about the negative environmental impacts these widening projects would have, as well as the damage to neighborhoods adjacent to the roads. The Baltimore-Washington Parkway is an historic treasure and the character of the parkway should be protected.

The City Council applauds your support for the Purple Line and for dedicated funding for our regions transit system. We respectfully request your administration to increase investment in the MARC Train and other mass-transit systems, as well as transit-oriented development as long-term solutions that create sustainable, healthy, and vibrant communities and economies.

Sincerely,

Patrick L. Wojahn
Mayor

cc: The Honorable Rushern Baker, Prince George's County Executive
The Honorable Jim Rosapepe, 21st District Delegation
The Honorable Barbara Frush, 21st District Delegation
The Honorable Joseline Peña-Melnyk, 21st District Delegation
The Honorable Ben Barnes, 21st District Delegation
The Honorable Dannielle Glaros, Chair and Prince George's County Council
The Honorable Mary Lehman, Prince George's County Council

CITY OF GREENBELT

25 CRESCENT ROAD, GREENBELT, MD. 20770-1886

October 12, 2018

Transportation Planning Board
777 North Capitol Street
Washington, DC 20001

Members of the Transportation Planning Board,

We are writing on behalf of the residents of Greenbelt to express concern over the inclusion of several MDOT roadway widening proposals for I-495, I-270 and MD 201 in the Vision 2045 constrained long range plan. These proposals would impact our quality of life, with potential degradation to our air quality, increases in our noise levels, and causing the induction of additional traffic near and through our community.

Greenbelt continues to strongly support collaborative efforts to address regional transportation needs and encourages MDOT to thoroughly explore creative alternatives to the I-495, I-270 and MD 201 expansion proposals. We feel that sustainable investments in mass transit such as Metrorail, extended bus service, MARC train service, light rail, bus rapid transit, and path connections for bikes and pedestrians are the best long term uses for our transportation resources.

Thank you for your consideration,

Emmett V. Jordan, Mayor

Judith F. Davis, Mayor Pro Tem

Colin Byrd, Member of Council

Leta M. Mach, Member of Council

Silke I. Pope, Member of Council

Edward V. J. Putens, Member of Council

Rodney M. Roberts, Member of Council

Cc: Greenbelt City Council

October 16, 2018

The Honorable Charles Allen
Chair, National Capital Region Transportation Planning Board
Metropolitan Washington Council of Governments
777 North Capitol Street NE, Suite 300
Washington DC 20002

Dear Chairman Allen:

The Maryland Department of Transportation (MDOT) would like to respond to concerns that we have recently heard regarding the I-495 and I-270 Managed Lane Study and the National Environmental Policy Act (NEPA) process. The National Capital Region is one of the most congested in the nation, and Marylanders face some of the highest commuting times. We anticipate that the existing significant congestion within the Baltimore-Washington region will remain, and even worsen, in the future. A comprehensive transportation network, including highway and transit improvements, is needed to relieve congestion.

Previous studies, including the Capital Beltway/Purple Line Study, determined that both transit and highway improvements are needed to fully meet the travel demand and provide the necessary enhancements for the needed capacity and safety within the I-495 and I-270 corridors. Because of the I-495 and I-270 extensive highway linkage to other regional transportation facilities, severe congestion along these corridors has a region-wide effect on all transportation modes. Transportation improvements to provide congestion relief on I-495 and I-270 are needed to enhance existing and proposed multimodal transportation services.

The MDOT State Highway Administration (MDOT SHA) recognizes the unique and important community and environmental resources along the corridors and will develop the I-495 and I-270 Managed Lanes Study in an environmentally responsible manner. Our approach is to implement a solution within the existing highways rights-of-way, and we are committed to working with citizens, businesses, and federal, state, and local agencies to ensure that concerns related to property and environmental resources are addressed.

The I-495 & I-270 Managed Lanes Study, initiated in March 2018, is in an early stage of planning. As part of the National Environmental Policy Act process, the study's approach for alternatives analysis and development includes a three phase, iterative process. The first phase is the development of a spectrum of potential alternatives, sometimes referred to as a preliminary range of alternatives. The MDOT SHA met with interested agencies and the public in July to seek input regarding this preliminary range of alternatives. The preliminary range of alternatives

includes fifteen alternatives including adding managed lanes, general purpose lanes, transit and the no-build.

Considering feedback from the public and our federal, state, and local partners, the MDOT SHA is evaluating the preliminary range of alternatives to determine which alternatives represent reasonable approaches that meet the study's purpose and need. Only those alternatives determined to be reasonable and to adequately meet the purpose and need will be carried forward to the second phase of the alternatives analysis and development process, known as the alternatives retained for detailed study.

The MDOT SHA values public feedback on the I-495 and I-270 study and will continue to provide the public opportunities to be involved in this important environmental study. Multiple project workshops will be held throughout 2019 providing the opportunity for public feedback along with multiple other opportunities for feedback from our federal, state, and local partners resulting in the MDOT SHA recommended preferred alternative and ultimately Draft Environmental Impact Statement (DEIS).

Questions or comments on the study may be provided anytime via the I-495 and I-270 Public-Private Partnership (P3) Program email at 495-270-P3@sha.state.md.us. Updated information on the study and public involvement opportunities can be found on the I-495 and I-270 P3 Program website at www.495-270-P3.com.

If you need further assistance, please contact Lisa B. Choplin, DBIA, MDOT SHA I-495 and I-270 P3 Office Director, at 410-637-3320 or via email at lchoplin@sha.state.md.us. Ms. Choplin will be happy to assist you. You can also feel free to contact me directly.

Sincerely,

R. Earl Lewis, Jr.
Deputy Secretary for Policy,
Planning & Enterprise Services

cc: Mr. Pete Rahn, MDOT Secretary
Lisa B. Choplin, DBIA, Director, I-495 and I-270 P3 Office, MDOT SHA
Mr. Gregory Slater, Administrator, MDOT SHA

Cheverly Planning Board

Town of Cheverly, MD

October 15, 2018

Mr. Charles Allen, Chair Transportation Planning Board
777 North Capitol Street NE, Suite 300
Washington, DC 20002

Mr. Allen,

The Planning Board for the Town of Cheverly respectfully submits this letter for consideration in the development of the Visualize 2045 Long Range Transportation Plan for the National Capital Region.

We are concerned about the draft recommendations CLRP 1182 and 3281 which call for the development of managed lanes on Interstate 95/495 in Prince Georges and Montgomery counties. We are supportive of sustainable transportation solutions that bring meaningful improvement to the region's transportation issues. However, it is our understanding that the MD SHA study to evaluate different alternatives is still in process, and this recommendation presents a foregone conclusion that managed lanes are the only solution or even a preferred solution.

We would instead prefer to see a more generalized recommendation for I 95/495 Transportation Improvements that may include alternatives such as transit or High Occupancy Vehicle lanes.

Thank you in advance for your consideration.

Sincerely,

Margaret MacDonnell
Chair, Cheverly Planning Board

cc: Michael Callahan, Mayor, Town of Cheverly
David Warrington, Town Administrator, Town of Cheverly

October 17, 2018

The Honorable Charles Allen, Chair
National Capital Region Transportation Planning Board
777 North Capitol Street NE, Suite 300
Washington, DC 20002

Dear Chair Allen:

Thank you for providing an opportunity to comment on the Visualize 2045 plan. The Greater Washington Partnership (the Partnership) is a team of civic-minded CEOs, drawing from leading employers and entrepreneurs, who are committed to making the Capital Region of Baltimore, Washington, and Richmond one of the world's best places to live, work and build a business. The CEOs that make up the Partnership, employ nearly 200,000 people in the region, and include a wide range of innovative organizations across industries, including Exelon Corporation, Northrop Grumman, Monumental Sports, and Capital One.

Our transportation system, which has helped drive the region's economic success, provides robust mobility options that connect residents to essential destinations and cultural assets. However, with nearly 50 percent of all commuters crossing a county line and 20 percent crossing a state border to access a job on a daily basis, multi-jurisdictional coordination of transportation plans and investments must keep pace with the demands of the region's residents.

The Transportation Planning Board's Visualize 2045 includes key projects that will bridge jurisdictional divides such as Maryland's Traffic Relief Plan connecting to Virginia's expanded I-495 Express Lanes, which will include a new American Legion Bridge – one of the region's major congestion chokepoints that must be addressed for the region to remain economically competitive. The plan also includes aspirational components with benefits that can only be achieved through regional coordination and partnership with the public and private sectors, including efforts to reduce drive alone commute trips. We commend this forward-looking plan and urge the TPB to lean in on these plans to realize the potential benefits in the next 20 years.

Many of the projects and aspirational components of Visualize 2045 will be included in the Capital Region's first employer-led *Blueprint for Regional Mobility*, a principles-based transportation agenda that cuts across jurisdictional boundaries and includes a range of solutions from capital projects to technology enhancements to operation and governance reforms that together will measurably improve the performance, reliability, and connectivity of our transportation system. This initiative is led by the Partnership's mobility co-chairs of Tom

GREATER WASHINGTON PARTNERSHIP
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Washington, DC 20036

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Ferrell of Dominion Energy, Ken Samet of MedStar Health, and Mark Weinberger of EY, and will be released in November.

The Blueprint focuses on four priorities: (1) connecting the super-region; (2) improving the consumer experience; (3) ensuring equitable access; and (4) integrating innovation to improve outcomes. Laying out an agenda for working together to make tangible progress on these priorities, with specific actions our region's public leaders and private employers can take to address the unique challenges facing our region. Only through collective action can we ensure that when one wins, we all win.

The Partnership supports Visualize 2045 and recommends the TPB adopt it. The Partnership is committed to doing its part and working with the TPB to implement the initiatives specified in the long-range plan and forthcoming Blueprint for Regional Mobility.

Sincerely,

Jason S. Miller
CEO, Greater Washington Partnership

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visualize2045

A LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

APPENDIX K

Federal Compliance Checklist

October 2018

National Capital Region
Transportation Planning Board

APPENDIX K: FEDERAL COMPLIANCE CHECKLIST
Visualize 2045
October 17, 2018

ABOUT VISUALIZE 2045 & THE TPB
Visualize 2045 is the federally required long-range transportation plan for the National Capital Region. It identifies and analyzes all regionally significant transportation investments planned through 2045 to help decision makers and the public "visualize" the region's future.

Visualize 2045 is developed by the National Capital Region Transportation Planning Board (TPB), the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

CREDITS
Contributing Editors: Lyn Erickson, Wendy Klancher, Lori Zeller

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Alternative formats of this document are available upon request. Visit **www.mwcog.org/accommodations** or call (202) 962-3300 or (202) 962-3213 (TDD).

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El Consejo de Gobiernos del Área Metropolitana de Washington (COG) cumple con el Título VI de la Ley sobre los Derechos Civiles de 1964 y otras leyes y reglamentos en todos sus programas y actividades. Para obtener más información, someter un pleito relacionado al Título VI, u obtener información en otro idioma, visite www.mwcog.org/nondiscrimination o llame al (202) 962-3300.

National Capital Region
Transportation Planning Board

This checklist includes applicable federal requirements to the TPB based on the USDOT's May 27, 2016 **final planning rule.** The 21 items in this checklist are not an exhaustive list of requirements for the MPO process nor plan.

1. The long-range transportation plan ("plan") has no less than a 20-year planning horizon.
Visualize 2045 has a 27- year planning horizon – 2019 to 2045.
2. The plan includes both long-range and short-range strategies/actions that provide for the development of a safe and integrated multimodal transportation system to address current and future transportation demand.
Visualize 2045 includes both long- and short-range strategies and actions that address this requirement, as demonstrated by projects in the constrained element (Chapter 5), the TPB policy framework (Chapter 3) and the aspirational initiatives (Chapter 4).
3. If the applicable State Implementation Plans (SIPs) include transportation control measures (TCMs), the MPO should coordinate the plan development with process for developing the TCMs.
The currently active SIPs do not include any transportation control measures. However, Appendix G of the Visualize 2045 air quality conformity report documents the completion of all TCMs from all previous SIPs.
4. The MPO, the State(s), and the public transportation operator(s) shall validate data used in preparing other existing modal plans for providing input to the plan. The Plan shall use the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. The Plan shall include current and projected transportation demand of persons and goods to the horizon year of the plan.
Visualize 2045 uses the latest available estimates and assumptions for population, households, and employment from MWCOG's Round 9.1 Cooperative Forecasts of land activity adopted by the COG Board of Directors on October 10, 2018 and described in Chapter 2. The TPB's regional travel demand model forecasts demand on the region's transportation system by residents and workers in both the base year and the horizon year of the plan—2045 (Chapter 5). The travel demand model, which includes the Cooperative Forecasts as a significant assumption, is validated and used by transportation agencies and others in local planning efforts for future projects and inputs to the constrained element.
5. The MPO planning process shall provide for the implementation of projects and strategies that address the following planning factors: • Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency; • Increase the safety of the transportation system for motorized and non-motorized users; • Increase the security of the transportation system for motorized and non-motorized users;

- Increase accessibility and mobility of people and freight;
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation;
- Emphasize the preservation of the existing transportation system;
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- Enhance travel and tourism.

These planning factors helped shape Visualize 2045 and appear in multiple ways throughout the plan. As described in Chapter 3, ("Consideration of the Federal Planning Factors"), the first step in plan development is the solicitation of projects for inclusion in the constrained element, and implementing agencies were asked which planning factors their project addressed. Throughout the Visualize 2045 document, text boxes appear which link plan elements to the planning factors. Also described in Chapter 3 is the TPB policy framework which reflects many of the planning factors. The Additional Elements in Chapter 7 provide details on the TPB's work on planning factors such as travel and tourism, resiliency and reliability and transportation security. Safety planning and targets are described in Chapter 6 - Performance Planning.

6. The plan shall include existing and proposed transportation facilities that serve important national and regional transportation functions over the period of the transportation plan.

Existing transportation facilities are described in Chapter 2 and the proposed facilities are shown in Chapter 5.

7. The plan shall include a description of the performance measures and performance targets used in assessing the performance of the transportation system, and a report on progress achieved in meeting the performance targets.

The plan includes a description of the performance measures and targets that resulted from the cooperative process in Chapter 6- Performance Planning. Given that performance targets had only been recently set when Visualize 2045 was adopted in 2018, the next plan will assess the progress achieved in meeting the targets.

8. The plan shall include operational and management strategies to improve the performance of existing transportation facilities to relieve congestion and maximize the safety and mobility.

Operational and management strategies are found in Chapter 7- Additional Elements and a description of the congestion management process is described in Chapter 6.

9. The plan shall include consideration of the results of the congestion management process, including the identification of SOV projects.
The overall congestion management process is described in Chapter 6 and further detail is provided in Appendix E. The lists of projects and map on pages 37 and 38 in Chapter 5 identify all of the regionally significant projects in Visualize 2045 that will add capacity to the region's highways and arterial roadways. The projects symbolized on the map as "New Road" or "Widen/Improve Existing Road" will add capacity specifically for single-occupant vehicles. The Air Quality Conformity Project Input Tables in Appendix B of the conformity report provide greater detail on all new capacity being added to regionally significant roadway segments as well as smaller secondary and urban roads.
10. The plan shall include an assessment of capital investment and other strategies to preserve the existing and future infrastructure, provide for multimodal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters.
Visualize 2045 accomplishes this requirement in a number of ways. The financially constrained element (Chapter 5) demonstrates the focus on preservation (as 34% of the expenditures are slated for maintaining the system in a state-of-good-repair). Multimodal capacity increases account for 22% of the expenditures forecast in the financial plan (also in Chapter 5). The aspirational element (Chapter 4) speaks to regional priorities and needs, and Chapter 7 has a discussion of the vulnerability of transportation infrastructure to natural disasters under "Resiliency and Reliability."
11. The plan shall include transportation and transit enhancement activities, including consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption.
The financially constrained element (Chapter 5) includes transportation and transit enhancement activities and the role of intercity buses is discussed in Chapter 7- Additional Elements.
12. The plan shall include a description of existing and proposed transportation facilities in sufficient detail and include cost estimates.
A description of existing and proposed transportation facilities is found in Chapter 2 and Chapter 5, respectively. The TPB's financial plan includes cost estimates for the existing and proposed transportation facilities which is summarized in Chapter 5 with details in Appendix A.

13. The plan shall include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities.
Chapter 7 has a discussion of potential environmental mitigation activities which are further described in Appendix G.
14. The MPO shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan. The consultation shall involve, as appropriate, a comparison of transportation plans with State conservation plans or maps, if available.
Environmental consultation and mitigation are described Chapter 7 and an interactive on-line map allows for the comparison of transportation plans and environmental -related data. Environmental consultation and potential environmental mitigation activities are further described in Appendix G.
15. The plan shall include a financial plan that demonstrates how the plan can be implemented and includes:
• Cooperatively- developed estimates of costs and revenue sources reasonably expected to be available to adequately operate and maintain the highways and public transit (in “year of expenditure dollars”)
The financial plan includes cooperatively-developed costs and revenues in year of expenditures dollars reasonably expected to be available. The financial information is summarized in Chapter 5 and details are provided in Appendix A.
• Recommendations on any additional financing strategies to fund projects and programs included in the plan.
Recommendations can be found in Appendix A.
16. The metropolitan transportation plan should integrate the priorities, goals and strategies in the State's Highway Safety plans and Improvement programs, and public transportation agency safety plans.
The TPB’s planning process, including PBPP target setting, is closely coordinated with member state DOT’s and WMATA; these agencies’ safety plans and programs are reflected in discussions at the TPB’s Transportation Safety and Public Transportation Subcommittees. Chapter 6 includes information on safety planning.

17. The plan shall demonstrate that stakeholders were given the opportunity to comment on the plan based on the TPB's Public Participation Plan; (Including representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cash out program, shuttle program, or telework program), representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled).

Stakeholders were given a number of opportunities to comment on the plan and be involved in plan development as outlined in Chapter 8, which was guided by the TPB's Public Participation Plan. In addition to the two mandatory 30-day public comment periods on the plan (Appendix J), the TPB did extensive public outreach for Visualize 2045 in 2017 and 2018: Phase 1 included a public input survey (Appendix H) and Phase 2 included public forums and open houses (Appendix I).

The TPB's comprehensive committee structure provides on-going comment opportunities and coordination with many of the stakeholders listed in this requirement. Committees provide key guidance on many of the Additional Elements for Visualize 2045 (Chapter 7). The TPB also conducts studies involving stakeholder interests such as intercity buses (described in Chapter 7 as well).

18. The plan shall demonstrate consultation with agencies involved in: a) tourism; b) natural disaster risk reduction.

Agencies were given an opportunity to participate in the public comment periods, the survey (Phase 1) and public forums and opens houses (Phase 2). The TPB's work on travel and tourism is described in Chapter 7.

19. The plan was made readily-available for public review in electronically accessible formats.

The plan was made electronically available in a variety of ways. The Visualize 2045 website was updated with key documents. A Visualize 2045 email list also provided periodic updates by email for stakeholders and members of the public. The TPB News website, bi-monthly TPB News email newsletter, and the use of social media helped keep the public informed of key steps in the process and provided website links for more details in electronically accessible formats.

20. Visualization techniques were used to describe the plan.

Beginning in 2010, the TPB made available to the public in an online, searchable database of all the transportation projects and programs in the long-range transportation plan and TIP. The Visualize 2045 plan and website also includes a variety of other maps and visualizations to describe the plan, including new major projects in the financially constrained element of the plan, an interactive "Storymap," which describes the seven aspirational initiatives, plus more.

21. Air quality conformity determination on any updated or amended transportation plan in accordance with the Clean Air Act and EPA regulations.
On October 17, 2018, the TPB approved the air quality conformity determination of the financially constrained element of Visualize 2045 and the FY 2019-2024 TIP. The plan and TIP conform to the requirements (Sections 174 and 176(c) and (d) of the Clean Air Act as amended (42 U.S.C. 7504, 7506(c) and (d)), and meet air quality conformity regulations: (1) as originally published by the Environmental Protection Agency (EPA) in the November 24, 1993 Federal Register, and (2) as subsequently amended, most recently in April 2012, and (3) as detailed in periodic FHWA / FTA and EPA guidance.

TPB R5-2019
October 17, 2018

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

RESOLUTION APPROVING THE VISUALIZE 2045 LONG-RANGE TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION

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 Federal Planning Regulations of the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) implementing the FAST Act, which became effective June 27, 2016, specify the development and content of the long-range transportation plan and require that it be reviewed and updated at least every four years; and

WHEREAS, on October 15, 2014, the TPB approved the 2014 Constrained Long-Range Transportation Plan (CLRP), and amended the CLRP on November 16, 2016, and the plans were developed as specified in the Federal Planning Regulations; and

WHEREAS, on November 16, 2016, the TPB approved the FY 2017-2022 Transportation Improvement Program (TIP) which was developed as specified in the Federal Planning Regulations; and

WHEREAS, the TPB has developed a new long-range transportation plan, which is the quadrennial update to the 2014 CLRP, called "Visualize 2045," that meets federal planning requirements, addresses the federal planning factors and goals in the TPB Vision and the Regional Transportation Priorities Plan, and includes a new "Aspirational Element" as specified by TPB Resolution R8-2018; and

WHEREAS, on October 18, 2017, the TPB issued a Technical Inputs Solicitation Submission Guide, which is a formal call for area transportation implementing agencies to submit technical details, including those necessary to perform the required air quality and financial analyses of the Visualize 2045 Constrained Element, for projects, programs, and policies to be included in Visualize 2045 and the FY 2019-2024 TIP; and

WHEREAS, the transportation implementing agencies in the region provided project submissions for Visualize 2045 and the FY 2019-2024 TIP, and the TPB Technical Committee and the TPB reviewed the project submissions at meetings in December 2017 and January 2018; and

WHEREAS, on January 17, 2018 the TPB approved the regionally significant projects submitted for inclusion in the Air Quality Conformity Analysis of Visualize 2045 and the FY 2019-2024 TIP; and

WHEREAS, on September 7, 2018 the draft Visualize 2045, the FY 2019-2024 TIP and the Air Quality Conformity Analysis were released for a 30-day public comment period and inter-agency review; and

WHEREAS, all plan elements are succinctly described in one Visualize 2045 plan document, with supplemental information provided in a series of appendices, and all this information is found and will continue to be found in one place on the TPB's website at Visualize2045.org; and

WHEREAS, a financial plan was developed and included for Visualize 2045 which can be found in *Appendix A: Financial Plan of Visualize 2045*, that demonstrates that the forecast revenues reasonably expected to be available are equal to the estimated costs of expanding and adequately maintaining and operating the highway and transit system in the region through 2045; and

WHEREAS, through recent legislative actions, the region can demonstrate that it can fully fund the largest transit provider's (Washington Metropolitan Area Transit Authority (WMATA)) operational and state of good repair needs through 2045; and

WHEREAS, during the development of Visualize 2045, the FY 2019-2024 TIP, the Air Quality Conformity Analysis, the TPB Participation Plan was followed, and numerous opportunities were provided for public comment: (1) multiple outreach activities were conducted to hear from residents about their attitudes and ideas about transportation in the region, including a survey conducted in the Summer of 2017 and twelve deliberative forums conducted in the Spring of 2018; (2) at the December 14, 2017 TPB Citizens Advisory Committee (CAC) meeting, the project submissions for inclusion in the Air Quality Conformity Analysis and the Air Quality Conformity work scope were released, and an opportunity for public comment on these submissions was provided at the beginning of the January TPB meeting; (3) at the January 17, 2018 meeting, the TPB accepted a set of public comments and responses on the on the project submissions for inclusion in the Visualize 2045 and TIP documents; (4) on July 12, 2018, a Public Forum was held on the development of the FY 2019-2024 TIP; (5) on September 7, 2018, the draft Visualize 2045, the draft FY 2019-2024 TIP, and the draft Air Quality Conformity Analysis were released for a 30-day public comment period which closed on October 7, 2018; (6) on September 12, 13 and 17, three open houses were conducted to share information about the contents of Visualize 2045; (7) on September 13, 2018, Visualize 2045 was presented to the TPB's Access for All Advisory Committee for their consideration and comment; (8) an opportunity for public comment on these documents was provided on the TPB website and at the beginning of the September and October TPB meetings; and (9) the documentation of Visualize 2045, the FY 2019-2024 TIP, the Air Quality Conformity Analysis will include summaries of all comments and responses; and

WHEREAS, on September 21, 2018, the TPB received a briefing on the entire Visualize 2045 document showing how the plan meets federal planning requirements, addresses the federal planning factors and goals in the TPB Vision and the Regional Transportation Priorities Plan, and includes a new "Aspirational Element" as specified by TPB Resolution R8-2018; and

WHEREAS, on October 5, 2018 the TPB Technical Committee passed Resolution TR1-2019 recommending favorable action on Visualize 2045 by the Board; and

WHEREAS, on October 17, 2018, the TPB passed Resolution R4-2019, determining that Visualize 2045 and the FY 2019-2024 TIP conform with the requirements of the Clean Air Act Amendments of 1990; and

NOW, THEREFORE, BE IT RESOLVED THAT the National Capital Region Transportation Planning Board approves Visualize 2045, the long-range transportation plan for the National Capital Region.

Approved by the Transportation Planning Board at its regular meeting on October 17, 2018.