

Comment	BRTB Response
Commenter: Steve Sprecher	
bring back a Red Line of some sort, even if is not the same as the one envisioned. Baltimore needs an east-west rail route. The new infrastructure bill would be a great choice.	The State and regional partners are evaluating the transit needs in central Maryland through the Regional Transit Plan (rtp.mta.maryland.gov). We look to provide a vision for the next 25 years with this plan.
I do love the 310 Commuter Bus service from Columbia to my job in downtown Baltimore! Keep up the good work in advocating for these routes.	Good to hear from a rider when a service is working out.
Commenter: Stuart Stainman	
Does long range 2045 transport plan include study of alt east-west red line for canceled light rail line?	The draft plan does not include a replacement for an east-west transit connection other than the BaltimoreLink improvements that were previously enacted. The State has initiated the Regional Transit Plan (rtp.mta.maryland.gov) which will look to provide a vision for Transit over the next 25 years. Projects identified could be added to the next BRTB long-range plan.
Commenter: David and Constance Highfield	
Carroll County needs to have the Metro extended to Finksburg to provide a timely connection to Owings Mill and points south to Johns Hopkins. We also need a more direct connection to BWI air and	The policy of Carroll County, through our adopted plans and Board of County Commissioners' resolutions, has always been to provide transit services only within the County. There are currently no plans to expand this type of service outside of the County.
Amtrak.	The County is however in the process of updating our Transit Development Plan (TDP), which will provide a plan for public transportation improvements in the County over the next five years. Please contact Stacey Nash at 410 386-2301 to provide input into the TDP process.



Comment	BRTB Response

Commenter: Baltimore-Washington Rapid Rail (BWRR)	
Update the description of SCMaglev in Chapter 2 of the Plan.	Maximize2045, the regional long-range transportation plan, includes a brief description of the SCMaglev project in a section called "megaregional projects." This intent of this section is to keep regional planners and decision makers informed about potential major projects that, while not directly under the BRTB's influence, could affect regional travel patterns in the future.
	The BRTB will include some of the information you have suggested in an enhanced project description to provide planners and decision makers with additional context. However, even the projects in the plan's Preferred Alternative do not have detailed descriptions since their scopes for the most part are conceptual. The regional long-range transportation plan is updated every four years, so the development of the next plan will afford another opportunity to revisit where projects may be in the development process.
Suggested changes to SCMaglev content in the TIP.	Most of the changes suggested were incorporated into the TIP, particularly the revised funding update.
Support of and coordination with four projects in the Plan. (MD 198 widening, Hanover St Bridge over Middle River, MD	Thank you for your support of the projects in the plan and for noting their relationship to a possible SCMaglev project in the immediate vicinity.
32 widening in AA Co, and I-95 Port Covington Access Improvements.)	Regarding I-95 Port Covington Access Improvements, there are no changes proposed that would affect or eliminate this turn onto Annapolis Road.
	From a more general perspective, three of these projects are not at a level of design to enable anything beyond speculative comments. The BRTB expects the MD 198 and Hanover Street Bridge projects to be implemented before the MD 32 project, assuming current conditions and future expectations hold steady. This could change over time as conditions evolve and future funding sources become clearer. Project sponsors will continue to consider the potential interactions among these projects.

Note: This matrix includes a summary of comments received during the public comment period with responses from the BRTB. The full record of comments can be found online at maximize2045.com and in an appendix of the both the TIP and Maximize2045 Additional comments that may have been submitted verbally at a BRTB meeting prior to a vote are not included.

Please refer to meeting minutes at www.baltometro.org for documentation of any verbal comments received during BRTB meetings.

Page 2 of 21



Comment	BRTB Response
Support of and coordination with four projects located in Baltimore City included in the TIP. (Hanover St Bridge Study, Hanover St Bridge over CSX, Reconstruct Patapsco Avenue, and Waterview Avenue Bridge over MD 295.)	The Hanover Street Bridge is moving forward in the investigation as to whether to rebuild or rehab the structure. At this time the State of Maryland is taking steps to bank funds for the bridge's rehabilitation/rebuild. It is unknown at this time whether the building of a Maglev station and stop in Cherry Hill would affect the LOS of the Hanover Street Bridge, that would have to be investigated. The study did determine that the increase of traffic due to Port Covington would not necessarily affected the LOS for the Hanover Bridge once reconstructed; except during peak hours. The structural condition of the Hanover Bridge St. over the CSX has been rated fair to poor. BCDOT is working to improve the condition of the bridge, however the load rating has not been affected by this structure condition rating.
	Patapsco Avenue and Waterview Avenue Bridge roadway and bridge improvements have begun and these improvements would benefit SCMaglev.
Commenter: Despacito Nibbva	
Well you see I used the transportation once, all I gotta say is clean up.	Without knowing more, your comment about conditions should be addressed to the particular agency, whether highway or transit. They would appreciate hearing about your experience as a way to improve the customer experience.
Commenter: Frederick Leong	
No consideration to extending WMATA's DC Metro from Greenbelt to BWI via Columbia, with connectivity to Fort Meade.	In the Washington area where WMATA operates, there have been studies looking at expanding WMATA's service north, however at this time WMATA is not in an expansion phase.
	In the Baltimore region, both Anne Arundel and Howard counties have initiatives or projects:



Comment	BRTB Response	
	Included in <i>Maximize2045</i> however is a Bus Rapid Transit (BRT) project submitted by Howard County that is studying the use of BRT in the U.S. 29 corridor that would provide a connection from Columbia into Prince George's County.	
	In Anne Arundel County's 2018 Transit Development Plan, the communicated a desire to connect Anne Arundel County to the Greenbelt Metro Station. The proposal would extend existing bus route 502, which is a regional route operated by Regional Transit Agency of Central Maryland(RTA). The goal is to bring service on MD 198 to the Baltimore-Washington Parkway, into Fort Meade, and continuing past Arundel Mills to BWI Airport as proposed. Service into Fort Meade will be contingent on the transit bus being able to access the base with general public riders onboard.	
plans for connecting Howard County to Fort Meade and National Business Park appear both inadequate and are often deferred.	The U.S. 1 corridor, MD 175, and access to Columbia Gateway are all being looked at or are in various stages of study. Howard County has many needs and the County and State are looking at most if not all of them.	
MD 200 is vastly underusedneed is for a connection to the Dulles Corridor	MD 200 is outside of the Baltimore region. However, improvements to MD 295 are being considered, just not at a point to be included in this plan.	
	While at this time the MDTA has no plans in its six-year Consolidated Transportation Program to extend the ICC (MD 200) beyond where it is located today, we appreciate your suggestion to extend the ICC westward towards Virginia and eastward towards MD 295.	
Commenter: Ben Martorana – Director of Planning City of Havre de Grace		
improvements to the very complex and highly stressed U.S. 40/Otsego St/Ohio St intersection which is very near the Hatem Bridge	Harford County is aware of the importance of this project to the City of Havre de Grace and to the region. The County will continue to work with MDOT and the BRTB to pursue this project. However, this MDOT SHA roadway competes statewide for limited funding. Should funding become available in the future, this project will be one of many considered by BRTB and its partners.	

Note: This matrix includes a summary of comments received during the public comment period with responses from the BRTB. The full record of comments can be found online at maximize2045.com and in an appendix of the both the TIP and Maximize2045 Additional comments that may have been submitted verbally at a BRTB meeting prior to a vote are not included.

Please refer to meeting minutes at www.baltometro.org for documentation of any verbal comments received during BRTB meetings.

Page 4 of 21



Comment	BRTB Response
---------	---------------

Commenter: Columbia Town Center Community Association	
as more options such as the North South Connector are designed, please adhere to the Howard Co Complete Streets plan.	Your comments regarding Projects 16-1901-42, 16-2001-67 as well as encouragement to conform with air quality standards, adopt complete streets policies to make biking and walking safer and a more viable option are all in line with County Executive Ball's transportation priorities. Howard County is in the process of finalizing a complete streets policy and will be working with developers to ensure that transportation improvements completed in support of increased development do not compromise and could potentially improve our ability to expand walking and biking as alternatives in Columbia.
	We hope this helps, and if you have any questions, please feel free to reach out to the Howard County Office of Transportation with any other concerns.
Support for BRT on U.S. 29, this and other BRT projects are important alternatives to single-occupant car use.	With respect to Bus Rapid Transit (BRT), Howard County is continuing its evaluation of BRT options along the U.S. 29 corridor by identifying choke points and modifications to the corridor that will make enhanced transit service competitive to vehicle travel in the corridor. As part of the Central Maryland Regional Transit Plan Commission, Howard County is also requesting MDOT MTA increase their investment in both short-term service improvements and longer-term studies and plans to increase Bus and MARC service along congested corridors such as I-95 that help provide Howard County residents increased access to employment opportunities and reduce the negative impacts of congestion on the environment and livability of the Central Maryland Region.
Several proposed widenings (U.S. 29, MD 32, I-70, and U.S. 1 should consider impacts to landscapes, drainage, and sufficient wildlife crossings incorporated.	MDOT SHA takes all of these impacts into consideration through the National Environmental Policy Act (NEPA) process. Your concerns have been noted and forwarded to MDOT SHA.



Comment

BRTB Response to Public Comments on *Maximize2045*, FY 2020-2023 Transportation Improvement Program, and Air Quality Conformity Determination maximize2045.com

Comment	DIVI D IVESPOIISE
Commenter: William Cowan	
Since the LOOP Tunnel project is included in the TIP as a viable project, MD should assume this means that tunneling costs would decrease in the future – and thus making transit tunnels cost effective.	At the request of the FHWA, the Loop project has been removed from the final version of the TIP. Instead, the final version of <i>Maximize2045</i> will include a general description of the technologies an underground transport system might use. This section will be in Chapter 3: "Emerging Technologies."
	Over the next several years, the BRTB and its state partners will make every effort to stay informed about tunneling techniques and costs.
For Map ID 43, does this infer that the widening will use ROW for the previously studied yellow line?	The project, MD 100: Howard County line to I-97, may use right-of-way considered as part of the Yellow Line light rail project. At this time, this project is not expected to be implemented until possibly after 2035. The situation could change in the meantime, depending on future traffic conditions, future funding availability, and future regional and/or local priorities. The regional long-range transportation plan is updated every four years, so the development of the next plan will afford another opportunity to revisit where projects may be in the development process.
LOS measures should be change to VMT and density based on persons (person trips). Utilizing standards LOS as a 2045 measure does not take into account decreased headways for autonomous vehicles and is soon becoming an outdated measure.	Agree that LOS is an older measure and several other measures have been developed/adopted using observed real time data. The region's current aggregate trip based model and static highway assignment has limited capabilities. The region is developing/implementing disaggregate travel behavior (Activity Based Model) and traffic simulation (Dynamic Traffic Assignment) tools that will provide horizon year simulated data to calculate additional performance measures.
	Too early in autonomous vehicle development to fully understand their impact on travel behavior, traffic, and location choice decisions. National and other metropolitan area autonomous vehicle simulation studies have relied on scenario planning using "what if" assumptions in estimating the range of possible outcomes.

BRTB Response



Comment	BRTB Response
Include previous rapid transit plans. Baltimore and suburban communities will not thrive without a modern transportation network built around walking, biking, and transit.	By Federal regulation neither the TIP nor Plan are "wish lists", meaning only projects included in reasonably available funding are considered. However, the State and regional partners are currently evaluating transit needs in central Maryland through the Regional Transit Plan . This activity looks to provide a transit vision for the next 25 years.
Previously the City was committed to studying removal of the lower portion of the JFX. As part of the TIP, this alternative should be studied in order to foster economic development east of the current elevated JFX.	Currently Baltimore City is not looking at removing the lower part of the Jones Falls Expressway (I-83).
Commenter: Gloria Moon	
widening highways is a stop-gap measure at best. Congestion will continue when widened lanes lead to more development where none was readily accessible. Transit needs to be increase and made east in the Baltimore-DC area. The use of ETs is not financially viable as it will not pay its way. Instead it destroys more valuable land instead of just increasing the interstate lanes. There is no real justification for ET lanes. Use HOV instead.	Please see mdta.maryland.gov/l95section200/home.html for a description of these projects. ETL's have a revenue source attached to them to pay for their construction, while HOV does not. ETL's are an economical approach to providing additional capacity. The State is not able to afford building more lanes and maintain them without some additional revenue source. The current ETLs within Section 100 have been utilized at greater numbers than anticipated and are considered to be very successful in reducing congestion, improving safety, and allowing routine maintenance to occur safely and efficiently. It is anticipated that the extension of the ETLs into Section 200 will have similar results. The MDTA has coordinated with MDOT MTA for the corridor in regards to transit improvements. MDOT MTA's priority is on rail transit with improvements directed at the MARC service. The I-95 ETL NB Extension improvements are being designed to accommodate MDOT MTA bus service. Congestion – The I-95 ETL NB Extension is being designed to address these current and forecasted needs. Congestion is forecasted to continue to grow worse based upon approved land use and regional trends.



Comment	BRTB Response
	MDTA has evaluated HOV-ETL options in the past and will continue to explore these solutions in the future to address congestion need. The original I-95 Master Plan considered several options including HOV lanes. It was determined during the planning process with the federal and state agencies that the ETL alternative was the preferred solution.
	Other – MDTA is working with Baltimore City to ensure that the 108" waterline is protected or replaced when conditions merit that work. The revenue from toll dollars can not be shifted to other public needs.
The Park & Ride at MD 152 is a major concern for those living in the area. It MUST be confined to the designated Development Envelope growth area and not placed in the wetland areas zoned Agricultural.	Both MDTA and Harford County disagree with this interpretation. Harford County has provided direction that the MD 152 Park-&-Ride is consistent with HarfordNEXT, their latest County Master Plan. MDTA is evaluating the potential to include the MD 24/MD 924 Park-&-Ride facility within the proposed Program.
	The current MD 152 Park-&-Ride will be impacted and cannot remain in the current location. The relocation is being finalized in conjunction with resource/permitting agencies and Harford County.
Commenter: Judy Rose	
I am still opposed to any highway expansion of I-95. I do not believe ET lanes are the answer to congestion and I am not convinced this state has the ability to maintain its existing roadways. Transit is what the people want and need for the future and our elected officials apparently do not have the political will or incentives to pursue it. Maybe because it just makes sense.	The MDTA has coordinated with MDOT MTA for the corridor in regards to transit improvements. MDOT MTA's priority on rail transit improvements is to the MARC service and does not see the value in another rail transit line within the I-95 right-of-way. The I-95 ETL NB Extension improvements are being designed to accommodate MDOT MTA bus service.
Our air quality in Harford County is not the best thanks to vehicular emissions and we have a high rate of cancer, COPD, and heart issues which could be attributed to the close proximity of such highways. We are losing vegetative growth, forestation, and wetland areas which we cannot afford to lose.	The reduction in congestion with the ETL improvements will improve overall air quality. As part of the evaluation a detailed air quality analysis was completed.

Note: This matrix includes a summary of comments received during the public comment period with responses from the BRTB. The full record of comments can be found online at maximize2045.com and in an appendix of the both the TIP and Maximize2045 Additional comments that may have been submitted verbally at a BRTB meeting prior to a vote are not included.

Please refer to meeting minutes at www.baltometro.org for documentation of any verbal comments received during BRTB meetings.

Page 8 of 21



Comment	BRTB Response
Commenter: James Rice	
From Woodlawn to Bayview it takes 4 buses when previously it took 1 bus. Why? Fix it please.	MDOT MTA will consider these comments in our next service change evaluation. Service changes are made three times per year.
	Current changes for September 2019 are nearing completion so this comment will be considered in the next round. A minor service change, if implemented, could occur in February 2020. If this is a major service change and implemented, it will require public meetings and if implemented it would change in September 2020.
Need bus stop at Liberty Rd. and Northwest Hospital. Was previously but they canceled. It's 3 blocks to catch a bus going east into town. It wasn't like that at first and should be a bus stop at or by the corner of Liberty Rd. and Old Court Rd.	MDOT MTA will consider these comments during a service change evaluation. Service changes are made three times per year.
Lime Bus Please.	By "Lime Bus," we assume you mean the CityLink bus running from Northwest Hospital to Harbor East. It would be helpful if you would let MDOT MTA know any specific concerns you have about this particular service.
Commenter: John Pawlus	
Please provide Manchester Bypass. I live on Hanover Pike. Traffic is brutal.	Carroll County submitted the MD 30 (Manchester Bypass) project for consideration as part of the development of the 2015 regional long-range
Option to Manchester Bypass: Widen Bachman Valley Road, direct traffic to Bachman Valley Road then to 97 where your expansion is. Have weight limit for trucks going through Hanover Pike.	transportation plan. The BRTB did not select this project to be included in the 2015 plan. This decision was based on a combination of factors, including the relative merits of the project compared to other projects under consideration and the amount of revenues expected to be available to pay for future projects. That is, there would not be enough money in the future to pay for everything that the local jurisdictions and state agencies would like to build. By federal law, the region must show fiscal constraint in its regional transportation plans (i.e., estimated future project costs cannot exceed the revenues forecasted to be available in the future). Given this fiscal reality, projects determined to have more potential

Note: This matrix includes a summary of comments received during the public comment period with responses from the BRTB. The full record of comments can be found online at maximize2045.com and in an appendix of the both the TIP and Maximize2045 Additional comments that may have been submitted verbally at a BRTB meeting prior to a vote are not included.

Please refer to meeting minutes at www.baltometro.org for documentation of any verbal comments received during BRTB meetings.

Page 9 of 21



Comment	BRTB Response
	regional benefits moved forward while projects determined to have fewer potential regional benefits did not.
	Carroll County chose not to submit the Manchester Bypass project for consideration for <i>Maximize2045</i> because the county is currently working on a Countywide Transportation Master Plan. This plan will evaluate MD 30 for these issues. The County, Town and MDOT SHA are working together on MD 30 efforts.
Commenter: Walt Seymour	
suggest a traffic light at Mayfield Ave. and Meadowridge Rd. Bad blind spot due to the hill and people not adhering to speed limit.	The challenges at this intersection have also been raised by other members of the community. This intersection is on a state road, therefore Howard County reached out to MDOT SHA for information.
	MDOT SHA informed us that they have evaluated this intersection many times in the past. The last study was conducted in 2017. MDOT SHA uses, as required by Maryland vehicle law, the Manual on Uniform Traffic Control Devices (MUTCD) to guide traffic signal studies and installations.
	The analysis performed at this location included:
	13-hour traffic count on a typical weekday to capture the traffic volume on each leg of the intersection
	an analysis of crash data
	on-site observations of traffic operations during peak travel periods
	Based on the results of the study, MDOT SHA did not recommend installation of a traffic signal at this intersection.
	We hope this clarifies how decisions to install new traffic signals are made. If you have any questions or need additional information, please do not hesitate to contact the Howard County Office of Transportation.



Comment BRTB Response

Commenter: Anonymous	
Eliminate Beltway active shoulder projects. Convert to peak hour transit. This undermines much of the TDML work currently under construction.	Using the shoulders on I-695 during peak travel hours is an example of how MDOT SHA has begun to emphasize operational approaches to addressing traffic congestion, as opposed to the traditional approach of adding lanes.
	The State and regional partners are evaluating the transit needs in central Maryland through the Regional Transit Plan (rtp.mta.maryland.gov). As for ETLs please see mdta.maryland.gov/195section200/home.html for a description of these projects.
Eliminate MDTA Section 100 completion and Section 200 through Harford County.	The current ETLs within Section 100 have been utilized at greater numbers than anticipated and are considered to be very successful in reducing congestion, improving safety, and allowing routine maintenance to occur safely and efficiently. It is anticipated that the extension of the ETLs into Section 200 will have similar results.
Promote U.S. 50 BRT project.	Anne Arundel County's Transportation Master Plan, promotes the development of options along major corridors, with U.S. 50 being one. The strategies include operation of an all-day weekday high-quality transit service (four routes) along this corridor with stops in Annapolis, Navy Stadium Park-&-Ride lot, Parole Town Center, Davidsonville, Bowie and continued service to key destinations in downtown Washington, D.C. The transit service would be permitted to run in the carpool lanes at all times. Another benefit is "Enhancing Active and Event Traffic Management" through the implementation of variable speed limits, dynamic lane marking, Variable Message Signs, and enhanced traveler information system this is a corridor identified at both the local and regional level.
	Specifically, U.S. 50 Bus Rapid Transit (BRT) project covering the distance from Parole in Anne Arundel County to New Carrollton in Prince George's County is included in <i>Maximize2045</i> .
	The State and regional partners are currently evaluating the transit needs in central Maryland through the <u>Regional Transit Plan</u> .



Comment BRTB Response

Commenter: Anonymous

Bike infrastructure badly needed in Elkridge.

3 choke points: CXS and U.S. 1, Montgomery Road over I-95, Lawyers Hill to Marshall.

Connect Meadowridge to Ducketts and Loudon Ave. over 100.

Elkridge kids should be able to ride bikes to our parks too. Access to Rockburn and Troy should be comparable to the existing access to Centennial and Blandair.

Elkridge commuters should be able to bike and walk to the Dorsey MARC too!

Thank you for your comments regarding cycling and walking access in the Elkridge community. We understand your frustration and concerns.

BikeHoward's goal is to create a connected network of bicycle facilities countywide, including in Elkridge, which are accessible to all ages, especially to children. Specifically, BikeHoward calls for the following improvements in the mid- to long-term, which correspond to your suggestions:

- Refurbishment and reopening of the tunnel under the CSX tracks in Elkridge to reconnect the two sides of Main Street
- Addition of shoulders and bike lanes along Montgomery Road to facilitate access between Elkridge, Rockburn Park, and areas west
- Building of protected bike lanes or shared-use path along U.S. 1 to access Troy Hill Drive
- Construction of a bridge from Santa Barbara Court to a new pathway on the east side of the CSX tracks, which will provide access under MD 100, to Oxford Square, and to the Dorsey MARC station.

We hope this helps, and if you have any questions, please feel free to reach out to the Howard County Office of Transportation with any other concerns.

And while early in the process, Howard County, Baltimore County and the Baltimore Metropolitan Council are currently writing a Request for Proposals to conduct a feasibility study for a segment of the Patapsco Regional Greenway from Guinness Brewery to Elkridge that should provide bike infrastructure in the Elkridge community.



Comment	BRTB Response
---------	---------------

Commenter: James Himel - Elkridge Rotary Club

De-construct 1.5 miles of I-895 from I-95 north to I-195. This is a low-traffic/obsolete stretch of I-895 that should be served by existing I-95 and I-195. Benefits redevelopment of historic U.S. 1 Elkridge and returns open space to Patapsco State Park for needed parking and recreation. Eliminates multiple bridges from future MDOT maintenance with new construction limited to 2 ramps at I-95 and I-895 existing overpass.

MDOT does not agree with your assessment, the connection to I-95 is an essential component of the roadway.

While at this time the MDTA has no plans in its six-year Consolidated Transportation Program to eliminate I-895 between the I-95 southern interchange and I-195, we appreciate your suggestion. Your comment has been forwarded to MDTA Planning and Program Development Director Melissa Williams, so that she is aware.

BRTB RESPONSE TO PUBLIC ADVISORY COMMITTEE COMMENTS

... with respect to the rapidly transforming transportation environment, it is important that the plan focus on creating choice, reliability and both mitigate and adapt to the impacts of climate change because these are the factors that are driving trends and they will comprise the future that we are planning for.

The BRTB acknowledges that the transportation environment is rapidly transforming and that creating safe and reliable travel options for users of the system is important for both travelers and for the environment. The BRTB will shortly issue a solicitation that will help BRTB members identify which choices and travel options work for people ("Practices for changing mobility") and new guidelines for how development will impact the transportation network ("Regional traffic impact study guidelines"). Better data and practices can help us identify which of these choices and options provide the best environmental benefits and how we might achieve these benefits.

Chapters 2 and 3 of the Plan present an overview of a number of trends in the Baltimore region. However, the policies, analysis and investments contained in the fiscally constrained plan do not directly address a number of trends and advancements in communication and transportation technologies, including but not limited to, the integration of connected and automated vehicles (both automation of passenger and freight vehicles) into the transportation network. Other trends in transportation that are not

The BRTB recognizes the need to have information on future trends and conditions inform the decision making related to selection of projects. This is a key reason for including these types of discussions in the plan.



Comment	BRTB Response
---------	---------------

accounted for in the *Maximize2045* analysis and investments include mobility as a service, scooters and bike share programs.

During the development of the 2015 long-range regional transportation plan, the BRTB held a workshop to conduct some initial exploratory scenario planning. One of the topics considered was the potential effects of autonomous and connected vehicles. The intent of this workshop was to get decision makers thinking about trends that might have major effects in the future.

This is part of a continual process of hearing periodically from transportation service providers in order to stay informed about developments in these trends, including mobility as a service and scooter and bike share programs, and how they might affect travel behavior and patterns in the future.

Performance Measures: Quality of performance in terms of transit should be tracked and presented, particularly to inform decisions related to project prioritization and selection. Access to a transit stop or station is not valuable to riders if the service does not provide access to destinations, frequencies, or travel times. The same goes for a measure that states number of jobs accessible by a bus stop or rail transit station. If the option is not reliable to provide good quality access in a reasonable amount of time, it doesn't matter how close the station is. This is also very important for meeting the transportation needs of underserved and vulnerable populations. Recommendations for measures to consider include assessing the number of jobs accessible by premium public transportation (bus transfer center, rail transit station, major bus route) within 30, 45 and 60 minutes. Additionally or in place of that measure, there could be a measure of the percentage of jobs in the region accessible by walking, transit, and other non SOV/non-driving method of travel.

Some general points about performance measures: Over the past three plans, the BRTB has recognized the importance of—and attempted to be proactive in establishing—relevant performance measures. This plan is the first one to incorporate fully all of the federally required performance measures and targets, owing to the fact that not all of the federal regulations were in place during the development of previous plans.

The BRTB will continue to try to remain proactive in following a performance-based approach to planning and programming projects. At the same time, the region must carefully consider which performance measures (for example, to address accessibility issues) should be added to the measures already required by federal law and regulations. With the number of federally required measures reaching 25, the FHWA and other MPOs caution against adopting an amount of measures that would make data gathering and monitoring too difficult in terms of time, staff availability, and data availability. The BRTB will attempt to find the correct balance between these concerns and the desire to be responsive to the needs of the traveling public.



Comment	BRTB Response
	The environmental justice (EJ) analysis in <i>Maximize2045</i> addresses transit accessibility, travel times, and proximity to key destinations. Specifically, it assesses the impact of the preferred alternative on EJ and non-EJ transportation analysis zones (TAZs) in the context of a number of accessibility and mobility measures. These include: average number of jobs accessible; average number of shopping opportunities accessible; average commute time; average travel time for shopping purposes; average travel time to the closest hospital; and the percentage of the population close to a supermarket, hospital, and college/university. Each of these were evaluated individually for both auto and transit.
	This analysis represents a significant expansion of the EJ analysis conducted for previous plans. However, there are certainly opportunities to improve. The job accessibility measure used a transit travel time of 60 minutes. While a variety of time thresholds (15, 30, 45, 60 minutes) were analyzed for proximity to supermarkets, hospitals, and colleges/universities, as a recommendation of BMC staff, BRTB members agree that it would be useful to expand the job accessibility analysis to include multiple time thresholds. The chosen modes for the EJ analysis (auto and transit) could also be expanded in the future to include walking accessibility.
Performance Measures: Congestion on highways should not be measured as a LOS or volume/capacity ratio, but in terms of travel times and delay which better reflect user experience and perspective. Adding capacity to highways is known to induce additional demand and is therefore an unsustainable long term strategy for addressing highway capacity and congestions.	The performance measures in <i>Maximize2045</i> (described in Chapter 5) address delay and travel time reliability. Level of service (LOS) is one of the factors in the project evaluation criteria (described in Appendix B of <i>Maximize2045</i>) and is not included in any of the performance measures. As part of the development of the next regional long-range transportation plan, the BRTB will continue to refine the methodologies used in selecting the most effective set of projects to carry forward.



Comment	BRTB Response
These measures focus attention on building capacity for vehicles rather than serving trips and travel purposes. There is a variety of published literature and research available to support the adoption of measures that help evaluate transportation performance from the perspective of transportation system users, from personal travelers and commuters to goods distributors and consumers.	BMC staff is aware of the published literature and research on performance measures and is currently using INRIX probe data to monitor user's experience of existing conditions. The region's aggregate trip base model and static highway assignment has limited capabilities. The region is developing and is moving towards adoption of a micro-simulation - disaggregate activity based model (travel behavior) and dynamic traffic simulation (traffic). Disaggregate micro-simulation of individual user's travel behavior and vehicle trajectories provides horizon year simulated data needed to calculated performance measures from a user's perspective.
Performance measures and analysis should help identify and target highway and system investments to address barriers to efficient travel across the network, such as conflicts between freight and commuter travel.	See discussion above about the need to carefully consider which performance measures should be added to the measures already required.
Performance Measures: More attention should be paid to the performance of networks and systems over individual units within them (such as individual highways or transit routes) within the networks. In many cases, systems are served by multiple modes, services and facilities. For example, the network of highways, railways and water based services and facilities serving freight travel should be analyzed for its performance in delivering goods locally and serving the national and international freight distribution taking place via the Port of Baltimore, rail and highway transportation networks.	The travel demand model that BMC staff uses to predict the potential effects of projects in the TIP and the regional long-range transportation plan considers these potential effects across the multimodal transportation network. This includes considering the effects of travel in areas contiguous to the Baltimore metropolitan area (for example, the Washington, DC area; the Wilmington, Delaware area; and so on).
	It is a good point about attempting to measure how effectively the freight network moves goods within and throughout the region. At this point, the sole freight-related measure involves the reliability of truck travel times. This is a federally required measure. The BRTB will continue to consider additional measures, beyond those that federal laws and regulations require, to address other regional concerns.
Funding: Transportation needs far outstrip the dollars available to fund them. The PAC encourages the BRTB to fully investigate and analyze methods of supplementing state and federal funding with regionally collected revenues, which may require a change in State law to implement.	It is true across the country that needs outstrip available dollars. The BRTB will ask BMC staff to explore available information on regional transportation funded processes and possibly undertake broader efforts to explore this in a future UPWP.

Note: This matrix includes a summary of comments received during the public comment period with responses from the BRTB. The full record of comments can be found online at maximize2045.com and in an appendix of the both the TIP and Maximize2045 Additional comments that may have been submitted verbally at a BRTB meeting prior to a vote are not included.

Please refer to meeting minutes at www.baltometro.org for documentation of any verbal comments received during BRTB meetings.

Page 16 of 21



Comment	BRTB Response
Funding: the BRTB should encourage MDOT and the State of Maryland to consider alternatives to the motor fuel tax as the primary source of revenue in light of well documented research that the gas tax is not a sustainable source of revenues. Opportunities for capturing revenues should at a minimum be considered for electric vehicles (currently under	In response to a similar comment from the PAC on the UPWP, the BRTB provided a response that is applicable here.
	The BRTB is aware of MDOTs efforts to actively monitor and participate in national discussions on this complex topic. That said, MDOT further advised the BRTB:
paying to the Transportation Trust Fund due to their lack of gasoline consumption).	"Through participation in regional and national organizations and committees, such as the American Association of State Highway and Transportation Officials (AASHTO) and the I-95 Corridor Coalition, the Maryland Department of Transportation (MDOT) is monitoring the potential impacts of increased corporate average fuel economy (CAFE), including the economic impacts of alternative fuel vehicles such as electric vehicles. The current and projected population of electric vehicles is a very small percentage of the fleet population. In fact, electric vehicles will comprise less than one percent of the light-duty vehicle fleet population in 2020."
The plan appears to favor areas other than Carroll County. The items in Carroll County planned to start sooner are relatively inexpensive streetscape projects, while major improvements, such as the MD RT140 and MD RT91 intersection/corridor improvements are pushed again, out to 2035 or later.	All projects submitted by Carroll County, and in consultation with MDOT SHA, have been included in <i>Maximize2045</i> . The reason these projects appear in the first phase of the plan are because they are further along in the overall process (i.e., they have a percent of design complete and some funding is committed as well as having a reasonable cost that can be funded). These are major considerations in the timing of projects.
Project prioritization and selection needs to be less focused on individual jurisdictions and more focused on how to reach regional transportation goals and objectives. How do these investments improve the performance of full systems of transportation services and facilities?	Projects in the TIP and <i>Maximize2045</i> are grouped by jurisdiction simply to allow for easier review by stakeholders. In terms of project selection, the criteria with the most weight – technical criteria – do not consider jurisdiction outright (more on specific location or corridor) and are calculated by BMC staff. Policy scores are determined by the project sponsors and reflect their role as the decision-makers on the BRTB.
Central Maryland Regional Transit Plan: Included in the Central Maryland Regional Transit Plan should be an analysis of funding and finance options for public transportation. We hope that included in this plan will be consideration of methods for seamless payment of	The BRTB encourages you to participate in MDOT MTA's process to develop a Regional Transit Plan for Central Maryland. We have forwarded your suggestion to MDOT MTA for consideration in this plan process.

Note: This matrix includes a summary of comments received during the public comment period with responses from the BRTB. The full record of comments can be found online at maximize2045.com and in an appendix of the both the TIP and Maximize2045 Additional comments that may have been submitted verbally at a BRTB meeting prior to a vote are not included.

Please refer to meeting minutes at www.baltometro.org for documentation of any verbal comments received during BRTB meetings.

Page 17 of 21



Comment	BRTB Response
transportation service alternatives such as public transportation, bike share, parking and other mobility services.	
Central Maryland Regional Transit Plan: the regional transportation forum, BRTB could partner with MTA to provide modeling analysis and impact assessment of different scenarios and conduct studies to demonstrate the impact and implications of new shared mobility services and transportation options on road congestion, safety, transit ridership, revenues, etc. For example, BRTB could identify and test a variety of scenarios that include a range of potential outcomes caused by the growth of MaaS (mobility as a service), OnDemand services by Ubers and Lyfts alike and the possible design of networks that include high capacity and/or on-demand bus services. The transit plan could seek to identify a model in which more people can have access to the full range of modes in a newly designed system, which is competitive in travel time and cost to car.	MDOT MTA's Regional Transportation Plan (RTP) process, while run on a completely separate mandate and timeline from BRTB's Maximize2045, will overlap in so far as there is BMC and several BRTB members participating in the MDOT MTA run RTP. The BRTB is in the process of issuing a solicitation to identify which choices and travel options work for people ("Practices for changing mobility") and new guidelines for how development will impact the transportation network ("Regional traffic impact study guidelines"). However it is not clear that the MTA will be able to use results from these efforts as they are mandated to have a draft Plan by April 2020.
TIP: The PAC recommends that the TIP be presented as a regional program of projects rather than by individual jurisdiction. There should be efforts to show the connectivity of the individual projects within the context of a regional transportation system and network of services and infrastructure with the purpose of meeting regional transportation goals and needs.	Projects in the TIP and <i>Maximize2045</i> are grouped by jurisdiction simply to allow for easier review by stakeholders. While the BRTB and BMC staff have utilized various methods to show what is being asked here (to show connectivity within a regional context and the connection to regional goals and needs), the BRTB will explore better ways to accomplish that suggestion.
TIP: BRTB members are encouraged to use the MPO forum to analyze locally defined transportation projects and needs within the regional context. Land use modeling could also be woven into these analyses and should be done using a regional model so that all the same basic factors and assumptions are woven into the model. The BRTB staff and	Similar to the response above, the process used to analyze projects is done on a regional basis. The travel demand model looks at trips by individuals to and from specific locations and not at a high level such as a jurisdiction. Land use via cooperative forecasts are included as a basic building block of the model.



Comment	BRTB Response
the forum are there to facilitate this analysis and develop such a blueprint.	There is a Cooperative Forecasting Group (committee) that meets every two months to discuss issues and occasionally the Planning Directors in the region meet to discuss significant issues. Several years ago this Directors group met extensively to understand the densities needed to support major transit projects and therefore make informed decisions during the comprehensive zoning process. BRTB members have also engaged in several scenario planning exercises to better understand impacts on travel in the region. The BRTB encourages the PAC to outline additional steps they feel would be useful to pursue.

BRTB RESPONSE TO COMMENTS FROM INDIVIDUAL PAC MEMBERS

Project prioritization and selection should be looking to measuring the quality of improving transportation issues on individual jurisdictions while showing how these projects improve regional transportation goals and objectives. Continuously supporting and improving Smart growth strategies in our transportation systems. This initiative will better serve more people while fostering economic vitality for both businesses and communities.

I support the PAC comments, and add that no funds should be spent on projects that do not immediately begin to eradicate inequity, reduce carbon emissions, or shift mode away from personal automobiles. We are in a global climate crisis and the survival of billions of people relies on a coordinated effort to radically change our transportation and land use planning. This TIP and *Maximize2045* hardly begin to address this reality.

The BRTB does not disagree with such an approach. The 2-year process has entailed numerous types of analyses and evaluations to result in projects that support the goals the BRTB identified and support. There is a great deal of interaction and at times it is difficult to tell what specifically impacted a particular result.

Through interaction with other MPOs and national organizations, and through local experiences, the BRTB strives to improve the process it pursues when making decisions with considerable impact and cost.

The BRTB collaborates with all members for workable solutions to address what you are suggesting. MDOT supports a wide range of climate-related programs and initiatives to reduce greenhouse gas emissions, as does the Maryland Department of the Environment. MDOT has also reinvigorated a program called Commuter Choice to assist people in choices other than SOV travel and promotes equity in its plans and programs.



Comment	BRTB Response
It's hard to give a yes or no answer to a broad statement for a large metropolitan area. There is emphasis on transportation resources changing (bikeshare, scooters, Lyft, Uber) but no mention of the fact that in the largest city in our consideration, there is a large fraction of the population totally reliant on public transportation.	The metropolitan area the BRTB covers has a diverse set of transportation needs and concerns. The challenge is to come up with a mix of projects that balance these needs and concerns while remaining fiscally responsible and while remaining mindful of the need to find equitable ways of helping people reach the places they need to go. As a regional agency, the BRTB affords opportunities for proponents of varying approaches to have conversations about the best ways to move forward.
Carroll County is seeing its rural nature erode, but the only projects mentioned there are for more highways, something which is out of what seems to me the general thrust of the board.	No new highway projects are being proposed in <i>Maximize2045</i> by the county. The county is proposing capacity enhancement projects to account for existing and future demand on Carroll County roads. Streetscape projects are also included and are some of the higher ranked projects. These projects are intended to enhance the main streets of the towns they are in as well as address much needed infrastructure upgrades at the same time.
The issue of lessening congestion in the region is not directly addressed.	The BRTB will work with a consultant to improve the regional Congestion Management Process (CMP). Work on this contract is expected to begin shortly after the adoption of the final <i>Maximize2045</i> .
	Appendix D of the plan discusses the CMP and specific strategies to manage congestion in the region. This includes a table with descriptions of congestion management approaches the jurisdictions and agencies propose as part of the scopes of both highway and transit projects (see the table starting on Page 11 of Appendix D).
	MDOT SHA and the local jurisdictions are placing greater emphasis on multimodal and operational approaches to addressing traffic congestion, as opposed to the traditional approach of adding lanes. Some examples:
	MDOT SHA proposes to use the shoulders on I-695 during peak travel hours to relieve congestion (see Page 9 of Chapter 7, Map ID 12)



Comment	BRTB Response
	 To encourage modes other than single-occupancy vehicle (SOV), Harford County proposes to add a high-occupancy vehicle (HOV) lane as part of its MD 22 project serving Aberdeen Proving Ground (see Page 11 of Chapter 7) Anne Arundel and Howard counties propose to establish Bus Rapid Transit (BRT) service along major corridors as a means of decreasing reliance on auto travel.