



 **maximize2040**  
A PERFORMANCE-BASED TRANSPORTATION PLAN

for a *greater* Baltimore Region



goals and strategies

APPROVED APRIL 29, 2014



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Maximize2040 is an initiative of the Baltimore Regional Transportation Board,  
the metropolitan planning organization for the Baltimore region.



Photo Source: Mission Media

## Background

### *Federal Requirements: Moving Ahead for Progress in the 21st Century (MAP-21)*

MAP-21 is the name of the law that establishes the requirements of, and authorizes the funding for, federal surface transportation programs.

MAP-21 provides the framework for Federal Highway Administration and Federal Transit Administration regulations and policies. These regulations and policies guide how federal agencies, states, transit providers, and local jurisdictions plan, fund, and implement projects. *Maximize2040* is being developed in accordance with MAP-21 requirements.

### *About the Baltimore Regional Transportation Board*

MAP-21 requires every urbanized area in the U.S. with a population greater than 50,000 to have a metropolitan planning organization (MPO). The Baltimore Regional Transportation Board (BRTB) is the region's federally designated MPO.

The BRTB is an 11-member policy board consisting of representatives of the cities of Annapolis and Baltimore; the counties of Anne Arundel, Baltimore, Carroll, Harford, and Howard; and the Maryland Department of Transportation, Maryland Department of the Environment, Maryland Department of Planning, and Maryland Transit Administration. The functions of an MPO include:

- \* Coordinate federal funding for transportation.
- \* Conduct transportation planning in cooperation with federal agencies, state agencies, and the operators of publicly owned transit services.
- \* Ensure that transportation expenditures are based on a continuing, cooperative, and comprehensive (3-C) planning process.
- \* Provide reasonable opportunity for input from the public and interested parties.

## ★ Why is the Region Doing This?

### *Maximize2040: A Performance-Based Transportation Plan*

Federal law requires each region to develop a regional transportation plan. This plan guides the transportation investments a region expects to make over the next 20-25 years. *Maximize2040: A Performance-Based Transportation Plan* is the name of the next regional transportation plan being developed for the Baltimore region.

*Maximize2040* will contain a list of the major transportation projects the region expects to implement in the period from 2020 to 2040. This plan also will establish the region's broad transportation goals and strategies. These goals and strategies will serve as guiding principles as the region plans and carries out projects.

## ★ Public Comment Period

As a first step in the development of *Maximize2040*, the Baltimore Regional Transportation Board asked for public comments on a draft set of regional goals and strategies. The BRTB developed the draft goals and strategies to meet federal requirements and to advance federal, state, and local policies. These draft goals and strategies incorporate recommendations from the BRTB's advisory groups, including the Citizens Advisory Committee (CAC).

The public was invited to share comments from Friday, March 14 through Monday, April 14, 2014. During this time, an open house was held on Wednesday, April 9 from 4:30 to 7 p.m. at the Baltimore Museum of Industry to allow the public to join the dialogue about these guiding principles.

Visit [www.maximize2040.com](http://www.maximize2040.com) to see the comments received and the BRTB's response.

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Photo Source: Mission Media

### *Definitions*

- \* Goal: "Broad aspiration for the region"
- \* Strategy: "Approach or policy to help the region achieve a goal"



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## GOAL: IMPROVE SYSTEM SAFETY

*Make conditions safer for pedestrians, bicyclists, transit riders and operators, and motorists.*

At a basic level, this involves designing and building safer features to accommodate all users: pedestrians, bicyclists, transit riders and operators, and motorists. This approach includes a focus on making interactions among users of different modes safer. Promoting safety research and education programs is another important way the region can improve safety for all travelers.

The following strategies can improve traveler safety in the Baltimore region:

- A. Adopt relevant state and local plans that seek to reduce transportation-related injuries and fatalities.
- B. Improve traveler safety in all modes through traffic and transit system management and operations techniques.
- C. Invest in cost-effective safety improvements to eliminate hazardous or substandard conditions in high crash locations and corridors (all modes).
- D. Improve the ability of transportation and emergency service agencies to respond in a timely manner to emergency incidents.
- E. Improve conditions to enable pedestrians and bicyclists to travel more safely on a day-to-day basis, including safe interactions with users of other modes and safe access to transit stations and stops.
- F. Support research into better understanding the causes of bicycle and pedestrian crashes and injuries to promote more effective countermeasures.
- G. Educate all travelers of all modes on safe travel techniques that are mode- and age-appropriate.



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## Baltimore Regional Trends



**3%** decrease in driver fatalities, 2009-2012

**21%** increase in occupant fatalities, 2009-2012

**33%** decrease in pedestrian fatalities, 2009-2012

**50%** decrease in bicycle fatalities, 2009-2012



## GOAL: IMPROVE AND MAINTAIN THE EXISTING INFRASTRUCTURE

*Improve the conditions of existing transportation facilities; systematically maintain and replace transportation assets as needed.*

When funding is limited, it makes sense to direct a significant portion of funds to preserving and operating existing facilities. Recognizing this, recent regional transportation plans have allocated approximately 75 percent of funding to system preservation and operations.

The following strategies can help the region improve and maintain its existing transportation assets:

- A. Continue to improve the condition of roadway systems (pavement, bridges, tunnels).
- B. Replace aging traffic signals and Intelligent Transportation System elements on a timely, systematic basis.
- C. Maintain and replace aging transit vehicles on a timely, systematic basis.
- D. Research and invest in cost-effective measures that will reduce emissions and life-cycle costs of transit rolling stock and infrastructure elements.
- E. Continue to improve the condition of existing transit infrastructure and stations/stops.
- F. Increase emphasis on improving the condition of existing pedestrian and bicycle facilities.
- G. Encourage local jurisdictions to develop comprehensive asset management programs to monitor the conditions of transportation assets and repair/replace those assets on a timely, systematic, cost-effective basis.



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### Baltimore Regional Trends



**21%** decrease in number of structurally deficient bridges, 2009-2013

**26%** increase in average age of light rail vehicles, 2009-2013

**3%** decrease in average age of MTA buses, 2009-2013



## GOAL: IMPROVE ACCESSIBILITY

*Help people of all ages and abilities to reach specific destinations.*

Everyone needs to go places: work, doctor's office, shopping, school. Ways to reach these destinations include cars, public transit, walking, and bicycling. This goal considers the needs of all travelers when designing roads, transit stations and stops, and pedestrian and bicycle facilities. The goal also seeks to help people who don't or can't drive get where they need to go.



Photo Source: Mission Media

The following strategies can improve accessibility for all travelers:

- A. Increase transportation alternatives for all segments of the population, including the disabled, the elderly, minority and low-income populations, and transit-dependent individuals.
- B. Continue to improve conditions for pedestrians and transit riders to meet or exceed Americans with Disabilities Act requirements.
- C. Leverage transportation funds in coordination with other funds to provide affordable options for accessing necessities or amenities (e.g., jobs, health care, child care, education).
- D. Consider affordable housing and workforce/economic development planning when determining long-range priorities.
- E. Continue to invest in pedestrian and bicycle facilities and programs, especially those that link to activity centers and public transit.
- F. Integrate strategies identified through the Coordinated Public Transit – Human Services Transportation Plan into regional planning and decision making.
- G. Improve system connectivity and continuity among all modes and across inter-jurisdictional and inter-regional boundaries, including coordination of transit planning and investment and consideration of a regional transit fare system.
- H. Encourage the private sector to provide appropriate access on commercial properties for bicyclists, pedestrians, and transit users.
- I. Support operating policies that enable year-round, obstacle-free access to pedestrian, bicycle, and transit facilities.

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## Baltimore Regional Trends



**3%** decrease in share of population within 1/4 mile of bus route or rail station, 2009-2011

**4%** increase in share of jobs within 1/4 mile of bus route or rail station, 2009-2011



## GOAL: INCREASE MOBILITY

*Help people and freight to move reliably and efficiently.*

Travelers and freight carriers value the ability to get from one specific location to another as reliably and efficiently as possible. Anything that delays or complicates a trip, such as recurring traffic congestion or slowdowns related to crashes or construction, impedes that ability.



The following strategies can improve the reliability and efficiency of the region's transportation system:

- A. Continue to refine and implement a Congestion Management Process (CMP), incorporating the regional Intelligent Transportation System architecture and transportation systems management and operations strategies.
- B. Prepare congestion mitigation plans, including the consideration of congestion pricing, for corridors and locations experiencing recurring high congestion levels.
- C. Balance capacity in the highway, transit, and freight rail systems and pedestrian and bicycle networks, including the consideration of expanded transit service coverage and hours of operation.
- D. Increase mobility, including traffic and transit incident response and recovery, through traffic and transit system management and operations techniques.
- E. Improve transportation system reliability by developing better methods of reporting delays and incidents among modal agencies and through broad-based public information distribution for interstate highways, surface streets, and the transit network.
- F. Develop and support a regional, long-distance bikeway network, including consistent guide signage.

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## Baltimore Regional Trends



**2%** decrease in average weekday local MTA bus ridership, 2010-2013

**13%** increase in average weekday Metro ridership, 2010-2013

**13%** increase in average weekday MARC ridership, 2010-2013

## GOAL: CONSERVE AND ENHANCE THE ENVIRONMENT

*Pass on to future generations the healthiest natural and human environments possible.*

Per federal requirements, the region is responsible for ensuring that transportation plans, programs, and projects do not worsen air quality. In addition, the region has begun to consider the potential effects of climate change on the transportation system. Responsible environmental stewardship also includes conserving resources such as the Chesapeake Bay, wetlands, farmland, wildlife habitat areas, and historic and cultural resources.

The following strategies can help the region practice responsible stewardship:

- A. Ensure that the region conforms to the applicable state air quality plan by developing programs to reduce congestion (e.g., provide alternatives to the use of single-occupant passenger vehicles through Travel Demand Management (TDM) techniques), reduce growth in mobile source emissions, and encourage emission reduction technologies.
- B. Invest in transportation programs and projects, including best management practices, that reduce surface runoff and protect water resources.
- C. Promote efficient use of energy resources by supporting fuel-efficient best management practices and alternative fuel use, including consideration of programs to provide incentives for the use of zero-emission vehicles.
- D. Invest in transportation programs and projects that reduce greenhouse gas emissions in accordance with state and local plans and initiatives regarding sustainability and climate change (e.g., Maryland's Greenhouse Gas Reduction Plan).
- E. Preserve and protect natural and cultural resources.
- F. Enhance the quality of human health by providing multimodal transportation infrastructure and services that promote active living and physical activity and minimize transportation-related emissions.



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Photo Source: Mission Media



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*The most recent air quality conformity analysis was conducted for projects in the current regional transportation plan (as amended) and the most recent short-range Transportation Improvement Program (TIP). This analysis shows that these projects do not worsen the region's air quality or delay the timely implementation of air quality standards.*



## GOAL: IMPROVE SYSTEM SECURITY

*Provide a secure traveling environment for everyone; improve the region's ability to respond to natural and man-made disasters.*

Every traveler understands the need to feel secure and safe when using the transportation system. The concept of transportation system security also covers preparing for and responding to severe weather events, natural disasters, and man-made threats.

The following strategies can help the region address personal security needs as well as regional preparation and response approaches:

- A. Provide for the personal security of transit riders through the use of closed-circuit TV and other security-related features.
- B. Continue to refine a regional emergency coordination and response plan to address large-scale, inter-jurisdictional emergency events, including evacuation routes and procedures.
- C. Improve the capabilities of jurisdictions to respond to and recover from emergencies, including security threats and natural disasters, through the use of traffic and transit system management and operations techniques.
- D. Identify policies and procedures for communication, resource sharing, and cooperative response to emergencies among transportation and non-transportation response agencies.
- E. Leverage transportation and security funds to implement regional priorities.
- F. Increase redundancy in the overall system.
- G. Plan for the potential transportation-related implications of climate change (e.g., rising sea level, storm surge).
- H. Encourage equitable sharing among all modes of the benefits and burdens of security and safety initiatives.



Photo Source: Mission Media

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*Each jurisdiction has its own Evacuation Traffic Management document, funded through Homeland Security and transportation programs. These documents (1) identify and rank evacuation-critical intersections based on evacuation scenarios and (2) indicate resources needed for optimal operation.*

## GOAL: PROMOTE PROSPERITY AND ECONOMIC OPPORTUNITY

*Support the revitalization of communities, the development of activity centers, and the movement of goods and services.*



The region's transportation system should support competitive yet responsible development and growth. This includes considering the link between an efficient, connected transportation system and the economic vitality of nearby communities. The region also can promote economic development by improving transportation facilities that provide access to major activity centers and improve goods movement within and through the region.

The following strategies can help the region promote prosperity and economic opportunity through transportation investments:

- A. Incorporate as appropriate into the region's transportation programs and projects the six livability principles developed jointly by the U.S. Department of Housing and Urban Development, U.S. Department of Transportation, and U.S. Environmental Protection Agency.
- B. Emphasize the coordination of land use decisions, transportation planning, housing availability, and employment opportunities, including consideration of the connections between land use decisions and the costs of transportation.
- C. Coordinate transportation investments with state and local plans regarding growth and development (e.g., PlanMaryland).
- D. Concentrate transportation investments within local- and state-designated growth areas to encourage prosperity in and revitalization of existing communities.
- E. Improve transportation infrastructure (all modes) that improves access to existing communities and regional generators of economic activity (e.g., activity centers and freight corridors), including the consideration of expanded transit service coverage and hours of operation.
- F. Coordinate with communities to provide context-sensitive infrastructure and facilities that integrate with community assets, needs, and preferences.
- G. Promote development around existing transit stations.

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*The Maryland Department of Transportation continues to partner with the private sector to address connections to freight intermodal facilities. These are facilities where more than one type of transportation (e.g., freight trucks and ships at the Port of Baltimore) come together to transfer goods.*



## GOAL: FOSTER PARTICIPATION AND COOPERATION AMONG STAKEHOLDERS

*Enable all interested and affected parties to participate and cooperate to find workable solutions.*



Photo Source: Mission Media

Fostering participation and cooperation means finding ways to communicate more effectively with, and encourage input from, all groups with a stake in the transportation system. This includes local jurisdictions, state agencies, the public, and the private sector. It also means finding ways to encourage financial participation from public and private entities that stand to benefit from transportation projects and programs. This can help the region leverage federal transportation funds to the greatest extent possible.

The following strategies can help the region foster participation and cooperation among all stakeholders:

- A. Coordinate transportation planning and programs across all modes, across inter-jurisdictional and inter-regional boundaries, and among all stakeholders as appropriate and feasible to provide affordable, reliable, safe, and secure transportation alternatives.
- B. Through traditional means and through social media options, engage with and encourage input early and often from all groups with a stake in the performance of the region's transportation system.
- C. To the greatest extent possible, hold public outreach events at accessible venues within affected communities.
- D. Promote environmental justice through programs and policies to ensure that the benefits and burdens of transportation projects are shared equitably.
- E. Engage with businesses, developers, and communities to identify and build support for new approaches and public/private partnerships for funding improvements to the transportation system (all modes).
- F. Leverage federal transportation funds to the greatest extent possible by encouraging matching contributions from entities that stand to benefit from transportation projects and programs—private organizations and companies as well as local jurisdictions.
- G. To the greatest extent possible, work with planners and engineers in all jurisdictions to develop common policies and design strategies, including Complete Streets policies and design templates, for transportation facilities.

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*An Executive Order executed in the summer of 2013 established a state subcommittee to address public/private partnerships. This Order establishes a framework for collaboration and knowledge sharing with respect to state agency regulations, policies, and projects.*

## GOAL: PROMOTE INFORMED DECISION MAKING

*Ensure that adopted transportation policies and performance measures guide the regional decision making process.*



Federal laws and regulations place a major emphasis on managing and measuring the performance of the transportation system. Policy-driven, performance-based planning and programming can result in (1) increased accountability and transparency and (2) improved project decision making. This also involves applying consistent policies and data to help the public and decision makers understand the trade-offs involved in all transportation alternatives.

The following strategies can improve the region's ability to make sound transportation decisions based on consistent policies and performance data:

- A. Analyze, compare, and share data on system conditions, system performance, and the effects of transportation investments relative to established performance measures and targets for use in transportation planning and decision making.
- B. Develop regional assessments of demographic, travel, land use, environmental, fiscal, and technology trends for use in all plans, programs, and projects.
- C. Increase the public's and elected officials' understanding of the trade-offs involved in transportation alternatives.

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*This is a proposed new goal recommended by two of the BRTB's advisory groups. The intent is to recognize the importance of a performance-based approach to project planning and programming, as required by MAP-21. The proposed new goal also promotes investment decisions based on consistent policies and data.*





## Maximize Your Voice!

The Baltimore Regional Transportation Board invites you to be a part of the process to create Maximize2040 in 2014 and 2015!

Here's how you can be involved:

*Connect with us online!*

Follow us on Facebook and Twitter [@maximize2040](https://twitter.com/maximize2040)  

*Join our mailing list*

Visiting our web site at [www.maximize2040.com](http://www.maximize2040.com) to sign-up for our enewsletters

*Contact us*

Contact the Public Involvement Coordinator at 410-732-0500 x1047 or [comments@baltometro.org](mailto:comments@baltometro.org) to find out how you can be involved.

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