



Moving People and Goods Safely and Efficiently





Moving people and goods safely and efficiently is one of the basic functions of a multimodal transportation system.

SAFETY

Staying safe while using the transportation system is a fundamental concern of everyone. Following a significant decrease in the number of traffic fatalities in the mid-1990s, Maryland and the Baltimore region have experienced increases in recent years. This upswing in traffic fatalities reinforces the importance of placing safety as a priority in designing and constructing transportation facilities.

With the federal emphasis on performance-based planning and programming, the BRTB has worked with the Maryland Department of Transportation (MDOT) to develop regional safety performance measures and targets for roadway and transit systems.



**BALTIMORE
METROPOLITAN
COUNCIL**



One set of these measures focuses on reducing fatalities and serious injuries on the region’s roadways. As part of this effort, MDOT and BRTB are committed to the concept of “Toward Zero Deaths.” The goal is to eventually reach zero deaths on roadways throughout the state and the region. Consistent with this goal, MDOT and the BRTB are working to reduce fatalities in the region by half from 2008 to 2030.

BALTIMORE REGION	TOWARD ZERO DEATHS (TZD) DATA
2008 Baseline	242 Fatalities
2030 TZD Target	121 Fatalities

On the local level, the Maryland Department of Transportation Motor Vehicle Administration’s Highway Safety Office (MDOT MHSO) and the BRTB are collaborating to develop local strategic highway safety plans to address the unique environments and concerns in each jurisdiction. These plans will help to guide safety improvements locally.

Another area of emphasis is reducing fatalities and injuries on the region’s transit facilities. The BRTB is coordinating with the Maryland Transit Administration (MDOT MTA) to develop performance targets for these transit safety measures.

MOBILITY

“Mobility” refers to traveling from Point A to Point B as efficiently and reliably as possible. For example, commuters need to be able to reach their places of employment on time every workday. Commutes made more difficult or less reliable because of transit transfers or traffic congestion can cause frustration or possibly, in extreme situations, loss of employment.

Another example: the efficient movement of freight, both within and through a region and between modes, is a vital element of the region’s economy. Many businesses maintain smaller inventories and rely on “just-in-time” deliveries of materials and goods. Anything that complicates or slows the movement of freight slows the delivery of materials and goods to consumers and businesses.



Identifying and Implementing Strategies to Reduce Traffic Congestion

Reducing traffic congestion is a major concern of metropolitan regions, and the Baltimore region is no exception. Federal law requires all metropolitan areas with populations greater than 200,000 to have a Congestion Management Process (CMP). The goal of the CMP is to reduce traffic congestion and increase safety, mobility, and reliability. An effective CMP identifies and analyzes a wide array of congestion management strategies. These can include:

- Managing the demand for travel (for example, by promoting alternatives to single-occupant vehicle travel and by improving bicycle and pedestrian facilities).
- Managing transportation system supply and improving operations through such activities as providing real-time information for transit and roads, implementing signal priority for transit vehicles, and optimizing and coordinating traffic signals.
- Constructing new capacity (for example, expanding transit service, building reserved lanes for transit, and adding new lanes and extending roads).

In coordination with MDOT, the BRTB and BMC staff have placed greater emphasis on strategies that reduce travel demand and improve operational efficiency in recent years. These strategies are typically lower-cost and quicker to implement than higher-cost/longer lead-time strategies that build capacity (such as construction of new lanes).

FREIGHT MOVEMENT

The greater Baltimore region is Maryland's leading goods movement center. Each year, more than 307 million tons of freight valued at nearly \$1 trillion move over Baltimore's highway, rail, port, and airport facilities, serving domestic and international demand for a wide range of goods.

MDOT estimates that freight on the region's transportation system will nearly double by 2030 compared to a baseline year of 2015, with significant percentage increases across the modes and the largest volume increase in truck tonnage.

Given current levels of congestion, the doubling of freight traffic on the region's infrastructure will create additional challenges for both freight movement and travel in general. Other trends

and challenges include the need to enhance highway safety, a need for improved intermodal connections, the security of goods movement, and lack of sufficient truck parking.

The National Highway Freight Program, established in 2015, provides dedicated funding for planning, engineering, and construction activities that contribute to the efficient movement of freight on the National Highway Freight Network (NHFN). Critical Urban Freight Corridors (CUFCs) are one component of the NHFN. In coordination with MDOT, the BRTB designated 25 miles of roadways in the Baltimore region as CUFCs in 2017. These CUFCs will be evaluated every two to three years and revised as needed.



307
MILLION  **TONS** OF FREIGHT
VALUED AT **\$ ONE**
TRILLION

MOVE OVER

   

HIGHWAY RAIL PORT AIRPORT

SERVING DOMESTIC & INTERNATIONAL DEMAND



MAXIMIZE2045

A PERFORMANCE-BASED TRANSPORTATION PLAN

Help shape the future by sharing your thoughts on \$15 billion in key transportation projects planned for the region over the next 25 years.

Over 200 projects are part of two Baltimore Regional Transportation Board (BRTB) transportation plans open for public comment through June 18 – the 2020-2023 Transportation Improvement Program (TIP) and Maximize2045: A Performance-Based Transportation Plan.

Let us know what you think about our plans to invest in the future of transportation by reviewing and commenting on the plans by June 18.

[Learn more at maximize2045.com.](https://maximize2045.com)

GOALS

The BRTB developed the following set of guiding principles for the projects and programs considered in Maximize2045:



IMPROVE SYSTEM SAFETY

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



IMPROVE AND MAINTAIN THE EXISTING INFRASTRUCTURE

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



IMPROVE ACCESSIBILITY

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



INCREASE MOBILITY

Help people and freight to move reliably and efficiently.



CONSERVE AND ENHANCE THE ENVIRONMENT

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



IMPROVE SYSTEM SECURITY

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



PROMOTE PROSPERITY AND ECONOMIC OPPORTUNITY

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



FOSTER PARTICIPATION AND COOPERATION AMONG ALL STAKEHOLDERS

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



PROMOTE INFORMED DECISION MAKING

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

PLANNING FOR TOMORROW

Another key step in the process is to consider how the region will grow and change in the coming decades. This includes changes in population, where people live, and employment opportunities available to the workforce.



The Baltimore region is expected to add

12%
population increase
**OVER
333,000
PEOPLE**

HOUSEHOLDS

will grow a rate of nearly



surpassing population growth leading to
SMALLER HOUSEHOLD SIZES



The region expects to see
**EMPLOYMENT
GROWTH
OF**

28%



with over 461,000 jobs
being added

FUNDING MIX

The projects to be included in the 2020-2023 TIP and Maximize2045 must take into account the level of financial resources that can reasonably be expected to be available through 2045. Here is a breakdown of funding:

Capital Projects

**\$3.7
BILLION**
for all TIP projects

Committed Projects (2020-2023)

**\$16
BILLION**
for 200 projects

**\$12
BILLION**
for major capital
projects

Planned Projects (2024-2045)

System Operations & Preservation

**\$36.7
BILLION**
System Operations

**\$53
BILLION**
planned for
Operations & Preservation
(2024-2045)

**\$16.3
BILLION**
System Preservation



Final
July 23, 2019

MAXIMIZE 2045

A PERFORMANCE-BASED TRANSPORTATION PLAN

Rethinking Legacy  Finding Opportunity



Maximize2045 is an initiative of the Baltimore Regional Transportation Board, the Metropolitan Planning Organization for the Baltimore region.



EMERGING TECHNOLOGIES

The rapid development and deployment of technology is affecting all parts of our lives, especially how we get around and how freight is moved. A variety of technologies are rapidly advancing and are already affecting the transportation industry and challenging transportation planners and policymakers in the Baltimore region.

Currently, technologies poised to have the greatest effects include:

1. Electrification of vehicles

- An electric vehicle (EV) is a vehicle that uses one or more electric motors for propulsion. Electricity is stored in an energy storage device, such as a battery.
- Widespread use can significantly improve air quality through reduced fossil fuel consumption and decreased emissions of greenhouse gases (GHGs) and other harmful air pollutants.
- This technology will provide benefits to personal vehicles, transit vehicles, and freight vehicles.
- Maryland has made significant progress in the past several years and expects to see registration of 60,000 EVs by 2020, approximately 300,000 EVs by 2025, and nearly 1.5 million EVs by 2040, with the infrastructure in place to accommodate those vehicles.