

# DRAFT

# 2050 MTP

## Strategic Direction Technical Memo

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# Introduction

The Maryland Department of Transportation (MDOT) is updating its Long-Range Transportation Plan, called *The Playbook*, to create a comprehensive guide for the development of Maryland's transportation infrastructure in the coming decades. At the core of this plan are its vision, guiding principles, objectives, goals, and strategies, which provide a clear strategic framework. This framework is designed to meet the changing transportation needs of Maryland's residents, workers, and visitors, promoting equity while fostering economic growth and improving quality of life. The strategic direction encompasses the following components:

- The **vision** defines the desired future state and long-term outcomes of Maryland's transportation system.
- **Guiding Principles** are concepts that will guide MDOT in its decision-making to support the goals.
- **Goals** show, at the highest level, what MDOT plans to do in the next five years, twenty years, and beyond. Together with the guiding principles they produce a vision of how the transportation system will serve Maryland.
- **Objectives** identify how MDOT will make progress towards the goals and align with the guiding principles.
- **Strategies** are the policies, processes, and programs that MDOT will implement to achieve the objectives of *The Playbook*.

Figure 1 shows the inputs to the vision, guiding principles, goals, and objectives.

*Figure 1. Inputs to the Vision, Guiding Principles, Goals, and Objectives*



## Development of the Strategic Framework

In order to develop the preliminary vision, goals, and objectives, the project team began by reviewing current MDOT modal administration, statewide and Metropolitan Planning

Organization (MPO) plans. Based on these plans and the Moore administration's priorities, the project team drafted the vision, guiding principles, goals, objectives, and strategies. This initial draft framework was included in a public survey in spring 2023 and was shared with internal MDOT stakeholders. Based on feedback from the stakeholders and the public through the survey, the project team revised the vision, guiding principles, goals, objectives, and strategies, presented below.

## Plans Reviewed

In addition to the 2040 Maryland Transportation Plan, the following plans were reviewed in fall 2022, including draft plans when available. For more information on these plans, please see the [Family of Plans Analysis](#).

### Statewide Plans

- State Rail Plan (2022)
- State Freight Plan (2022)
- Draft Statewide Transit Plan (2021)
- Regional Transit Plan (2020)
- 2040 Maryland Bicycle and Pedestrian Master Plan 2019 Update (2019)
- Greenhouse Gas Reduction Act Plan and 2021 Update (2021)
- Maryland Aviation Administration Strategic Plan Update FY 2021-2024 (2021)
- 2021-2025 Maryland Strategic Highway Safety Plan (2020)
- Zero Emission Bus Transition Act Legislative Report (2022)
- Maryland Port Administration Strategic Plan (2019)

### Asset Management Plans

- State Highway Administration Transportation Systems Management and Operations (TSMO) Strategic Plan (2018)
- Strategic Asset Management Plan (2019)
- Asset Management Plan (2021)
- Draft 2022 Maryland Transportation Asset Management Plan Update (2022)

### Funding Plans

- Consolidated Transportation Program (2022)
- State Plan for NEVI Formula Funding Deployment (2022)

### Work Plans

- Shared Mobility Work Plan (2020)
- Connected & Automated Vehicle Strategic Framework (2020)

### Frameworks

- Environmental Justice Principles and Intent (2023)
- Environmental Policy Statement (2023)
- Framework for a Sustainable Transportation System (2019)
- Maryland Aviation Administration Green Promotion and Reporting Program (2018)

## Metropolitan Planning Organization (MPO) Plans

- Maximize2045 (Baltimore Regional Transportation Board, 2019)
- Moving Forward 2045 Long-Range Transportation Plan (Calvert-St. Mary's MPO, 2020)
- The Mountain Side 2050plan (Cumberland Area MPO, 2021)
- Direction 2050 Long-Range Transportation Plan (Hagerstown/Eastern Panhandle MPO, 2019)
- Visualize 2045: A Long-Range Transportation Plan for the National Capital Region (2022)
- Connect 2050: Salisbury/Wicomico MPO Long-Range Transportation Plan (2019)
- Wilmington Area Planning Council 2050 Regional Transportation Plan (2019)

## Administration Priorities

Governor Wes Moore's transportation priority notes that the administration "will build an efficient and equitable transportation system that unharnesses economic growth in our region, drives billions in new investment, protects our environment and our neighbors, and connects people with employers." Paul Wiedefeld, MDOT's Secretary of Transportation, has emphasized the importance of transparency and partnerships with communities, and aspires for MDOT to be "a department that delivers services to meet (the Governor's) goals of social equity, environmental protection, and sustainable communities."

The Equity in Transportation Sector Law has been signed by Governor Moore. The Law stipulates the following impacts:

- Require equity to be considered when developing State transportation plans, reports, and goals.
- Alter the membership of the advisory committee on State transportation goals.
- Require MDOT to conduct transit equity analyses, cost-benefit analyses, and consult with certain communities before announcing or proposing any major service change or any reduction or cancellation of a certain capital expansion projects in the construction program.

The project team used the text of the bills (HB0009 and SB0019) as passed in both chambers in April 2023 while developing the guiding principles, goals, objectives, and strategies.

## Public Outreach and Stakeholder Engagement

### Public Outreach

MDOT engaged with the public and partner organizations via a project website, e-blasts/newsletters, social media posts, and a project web video. Bookmarks with QR codes were distributed to libraries throughout the state and *The Playbook* was advertised at other events, including distribution of palm cards at the Consolidated Transportation Program (CTP) tour throughout the fall of 2023.

The first of several public outreach efforts was a survey that focused on draft strategic direction language. The survey was developed in MetroQuest and was available in English, Spanish, French, and an accessible Word document. The survey was provided via a hyperlink on MDOT's website and was promoted on MDOT social media, highlighted at an in-person event in coordination with the Bicycle Pedestrian Plan, and shared through email blasts. MDOT also coordinated with local government agencies and partner organizations to

ensure that a wide range of experience and perspectives would inform the development of the strategic direction. The survey was active from April 5 to May 5, 2023, during which 506 survey responses and 357 additional comments were received.

## Attainment Report Advisory Committee

The Annual Attainment Report on Transportation System Performance (AR) is an evaluation of the performance of Maryland's transportation system, developed in coordination with the MTP. The AR is written by the Governor's Attainment Report Advisory Committee (ARAC) and MDOT staff every 4-5 years. One of the primary roles of the ARAC is to advise on the selection of the measures used to evaluate the performance of the system. In order to identify these measures, the ARAC reviewed the 2050 MTP goals, objectives, and guiding principles. The ARAC also reviewed and identified performance measures that they recommended for modification, addition, or realignment to an appendix. This process compared measures against AR performance measure selection criteria and reviewed draft targets.

## Internal Engagement

In addition to coordination with the ARAC, MDOT conducted extensive internal engagement, circulating the draft strategic framework to staff within the department and across the modal administrations for review. Based on feedback from both the stakeholders and the general public, the project team revised the strategic framework, which is presented below, along with key performance measures chosen by the ARAC:

# Strategic Framework

## Vision

The vision for Maryland's transportation system is to provide safe, reliable, accessible, equitable, and sustainable transportation options across the State.

## Guiding Principles

**Equity:** Integrate equity considerations in all aspects of transportation planning, programming, and operational processes.

**Resilience:** Improve the transportation system's ability to provide reliable service throughout natural weather events and man-made threats.

**Preservation:** Preserve the condition of the existing transportation system assets to provide safe and efficient movement.

**Modernization:** Transform the transportation system by using proven technological improvements and exploring innovative new ideas.

**Experience:** Improve the experience of all transportation system users.

## Goals

**Enhance Safety and Security:** Protect the safety and security of all residents, workers, and visitors.

**Deliver System Quality:** Deliver a reliable, high-quality, integrated transportation system.

**Serve Communities & Support the Economy:** Expand transportation options to allow Maryland's diverse communities to access opportunities and to support the movement of goods.

**Promote Environmental Stewardship:** Minimize and mitigate the environmental effects of transportation.

# Objectives, Strategies, and Key Performance Measures by Goal

## Enhance Safety and Security

Protect the safety and security of all residents, workers, and visitors.

Objectives	Strategies	Guiding Principles				
		Equity	Resilience	Preservation	Experience	Modernization
<b>Reduce the number of lives lost and injuries sustained on Maryland's transportation system</b>	Implement safety improvements on roadways where the Crash Severity index is high.					
	Develop and implement effective engineering and technology solutions to reduce aggressive and distracted driving, using data-driven methods and proven best practices.			✓	✓	✓
	Identify best practices for reducing transit assaults.					
	Expand work zone enforcement and work with partners to enhance all enforcement.					
<b>Minimize disparities in safety across Maryland's diverse communities</b>	Pursue community engagement with diverse communities to understand their safety concerns.					
	Implement system-wide roadway safety improvements and technology approaches that address the safety of vulnerable user groups (e.g., bicyclists, pedestrians, motorcyclists, older and younger drivers, etc.).	✓				



Objectives	Strategies	Guiding Principles				
		Equity	Resilience	Preservation	Experience	Modernization
<b>Address multimodal safety needs to support a safe, secure, and low stress transportation system</b>	Provide support for safe transit stops and vehicles, including Crime Prevention Through Environmental Design.					
	Implement sustained sidewalk building program to fill in gaps in pedestrian networks.				✓	✓
	Expand active transportation network connections and ensure active transportation routes are protected from vehicular traffic.					
<b>Maintain a safe system during adverse weather events, man-made threats, and other system disruptions</b>	Standardize operations, response, and scene safety practices with first responders and other key partners.		✓	✓		
	Implement unified incident command with first responders.					

### *Key Performance Measures*

- Annual number of fatalities and serious injuries on all roads in Maryland
- Annual number of bicycle fatalities and serious injuries
- Annual number of pedestrian fatalities and serious injuries
- Annual number of fatalities and serious injuries in historically disadvantaged communities on all roads in Maryland

## Deliver System Quality

Deliver a reliable, high-quality, integrated transportation system.

Objectives	Strategies	Guiding Principles				
		Equity	Resilience	Preservation	Experience	Modernization
<b>Increase the percentage of State-owned or funded facilities and assets in a state of good repair</b>	Invest in MDOT roadways to maintain pavement quality.					
	Invest in MDOT bridges to improve the condition of bridges and preserve existing bridges in fair or good condition.		✓	✓	✓	✓
	Leverage MDOT's asset management program and data-driven analyses to prioritize investments in vital infrastructure and transit assets.					
<b>Minimize travel delays and improve reliability and quality</b>	Work with local jurisdictions to prioritize the movement of transit vehicles in congested areas.					
	Implement improvements to enhance the existing transportation system and reduce congestion on highway systems, focusing on integrated freeway and arterial management and operations.					
	Improve MTA transit on-time performance through operational and staffing policies.	✓			✓	✓
	Address congestion and bottlenecks on nationally and regionally significant corridors to facilitate access to major employment, freight, and activity centers.					

Objectives	Strategies	Guiding Principles				
		Equity	Resilience	Preservation	Experience	Modernization
<b>Provide a multimodal system resilient to changing conditions and hazards</b>	Identify assets that are vulnerable to flooding and inundation, and develop adaptation strategies such as reconstruction, relocation, and protective infrastructure.					
	Invest in technology to facilitate 24/7 roadway clearance and public information of incidents through the Coordinated Highway Action Response Team (CHART).		✓	✓		✓
	Prepare for future climate impacts on transportation infrastructure through site and stressor Identification, risk assessment, and adaptation development.					
<b>Accelerate project completion through improved project delivery</b>	Leverage State and federal infrastructure funding with public, private, and other partners.					
	Refine MDOT's project delivery practices to improve decision making and reduce project risks.					
	Partner with local jurisdictions to implement a comprehensive federal grant strategy.		✓	✓		✓
	Develop a project prioritization system that strategically allocates resources to maximize return on investments and align with policy goals.					

### Key Performance Measures

- Preparedness of the transportation system for weather conditions and hazards
- Percentage of lane-miles/fixed guideway transit-miles susceptible to flooding and storm surge
- Percent of all MDOT transit service provided on time
- Truck hours of delay

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- Percent of CTP program that is funded with federal dollars
  - Percent of projects delivered on-time across MDOT
  - Percent of projects delivered on-budget across MDOT

## Serve Communities & Support the Economy

Expand transportation options to allow Maryland's diverse communities to access opportunities and to support the movement of goods.

Objectives	Strategies	Guiding Principles				
		Equity	Resilience	Preservation	Experience	Modernization
<b>Enhance Marylanders' satisfaction with the transportation system and MDOT services</b>	Improve the tracking, responsiveness, and time-to-resolution of all electronic, telephone, written, and in-person correspondence.					
	Improve traveler service transactions by implementing the MVA Customer Service Plan.					
	Provide enhanced training and employee development for MDOT employees interacting directly with our users.	✓	✓	✓	✓	✓
	Implement a new fare collection system that allows for fare capping and transfers between MTA services and Locally Operated Transit Systems (LOTS).					
<b>Apply enhanced technologies to improve communication and relay real-time information</b>	Improve the quality, accuracy, and accessibility of real-time travel information for all modes.					
	Provide reliable and accessible real-time modal choice information to customers and stakeholders.					
	Improve MobilityLink, the MDOT app for paratransit riders to book, manage trips, and monitor vehicle location in real time.				✓	✓
	Address the causes of missed transit trips					

Objectives	Strategies	Guiding Principles				
		Equity	Resilience	Preservation	Experience	Modernization
<b>Increase transit use, active transportation, and transit-oriented development (TOD)</b>	Rethink the role of commuter bus service to meet customers' needs in a post-COVID-19 environment.					
	Support Locally Operated Transit Systems (LOTS) to enhance their service to meet local needs.					
	Develop a statewide bicycle network through the Maryland Pedestrian and Bicycle Plan.	✓			✓	
	Jumpstart TOD activity at key locations in coordination with local jurisdictions.					
<b>Improve quality of life by providing active transportation and transit access to jobs and opportunities</b>	Increase transit, high-occupancy vehicle, carpool, and vanpool options to connect communities to jobs at key employment centers.					
	Coordinate with MTA, WMATA, and local transit agencies to enhance scheduling, station stops/hubs, and ticket integration to create seamless regional service.					
	Strategically invest to improve connectivity and comfort of pedestrian and bicycle networks within and between jurisdictions and for both on and off-road facilities to increase use.	✓			✓	
	Update and apply a complete streets policy on all applicable projects.					
	Partner with Amtrak to invest in passenger rail improvements in the Northeast Corridor.					
	Evolve MARC to serve as a true regional rail system that connects to interregional job hubs and supports Maryland's economy.					

Objectives	Strategies	Guiding Principles				
		Equity	Resilience	Preservation	Experience	Modernization
<b>Prioritize the transportation needs of underserved and overburdened communities in project selection</b>	Identify opportunities to prioritize underserved and overburdened communities in project selection, scoping, and design.					
	Ensure language accessibility in transportation planning and operation.	✓				
	Improve paratransit and fixed-route service for people with disabilities.					
<b>Improve the efficiency and competitiveness of the Port of Baltimore and BWI Marshall Airport</b>	Undertake robust engagement with airport, port, business, and community stakeholders to inform development plans, with a particular focus on inclusive engagement.					
	Improve access for cargo and the supply chain to the port, airport and statewide to accommodate growth, with considerations of ways to limit impacts to neighboring communities.	✓	✓	✓	✓	✓
	Advance airport development plans to enhance competitiveness and customer experience.					

### Key Performance Measures

- Overall satisfaction with MDOT
- Access to transit (within ½ mile of a transit station/stop) by people who live in overburdened and underserved areas as defined by CSNA
- Commute mode share
- Annual transit ridership—Contracted services and LOTS, including paratransit ridership
- Port of Baltimore foreign cargo tonnage and MPA general cargo tonnage
- Percentage of MPA operating budget recovered by revenues
- BWI Marshall Airport total annual passengers
- Comparative airline cost per enplaned passenger (CPE)

## Promote Environmental Stewardship

Minimize and mitigate the environmental effects of transportation.

Objectives	Strategies	Guiding Principles				
		Equity	Resilience	Preservation	Experience	Modernization
<b>Minimize fossil fuel consumption, reduce greenhouse gas emissions, and improve air quality</b>	Lean on Travel-Demand Management (TDM) to reduce vehicular trips.					
	Implement policies and incentives to encourage mode shift.	✓		✓	✓	✓
	Address air pollution through emissions compliance.					
	Promote and/or incentivize fuel-efficient technologies for medium and heavy-duty trucks.					
<b>Support the widespread adoption of alternative fuels, electric vehicles, and innovative technologies</b>	Increase electric vehicle charging infrastructure, including in rural areas and overburdened and underserved areas.	✓		✓	✓	✓
	Convert the MDOT fleet to EVs and alternative fuels					
<b>Protect and enhance the natural environment through avoidance, minimization, and mitigation of adverse impacts related to transportation infrastructure</b>	Conduct thorough environmental impact assessments for transportation projects to identify potential adverse impacts on the natural environment.					
	Continue to coordinate with other State agencies to heighten the awareness of the value and vulnerability of the State's water and natural resources.		✓	✓		✓
	Develop and implement a "Green Port Strategy" consistent with industry trends and initiatives including U.S. EPA's Strategy for Sustainable Seaports.					



Objectives	Strategies	Guiding Principles				
		Equity	Resilience	Preservation	Experience	Modernization
<b>Employ resource protection and conservation practices in project development, construction, operations, and maintenance of transportation assets</b>	Incorporate innovative practices, including the efficient reuse of construction materials, to protect and conserve natural resources in the maintenance and operations of the transportation system.					
	Mitigate stormwater runoff with green infrastructure features to protect sensitive aquatic ecosystems like the Chesapeake Bay.		✓	✓		✓
	Develop a comprehensive Environmental Management System.					
	Implement a comprehensive transportation resilience program aligned with the federal PROTECT initiative.					

### *Key Performance Measures*

- VMT/VMT per capita
- Number of employee partners in statewide TDM programs
- Percentage of MDOT fleet composed of EVs
- Percent of EV's registered from Total Registered Vehicles