

THE PLAYBOOK

Bold Calls. Strategic Moves. Effective Results.



MDOT
MARYLAND DEPARTMENT
OF TRANSPORTATION



WES MOORE

The Governor's Gameplan

Our administration wants to transform our transportation system and provide accessible, equitable and sustainable options to Marylanders across the State. Our communities are expanding, our jobs are growing, and we need to make sure that everyone in the region can get from where they live to where opportunity lies. Building a transportation system that meets the needs of all Marylanders is a core priority for our administration, and that's why we're creating a long-term transportation plan to serve the State for generations to come. Whether you drive, take the bus, ride the train, bike, stroll or walk, you are a key member of our team, and this playbook lays the groundwork for strategic moves and effective results, ensuring our transportation infrastructure investments connect all Marylanders to life's opportunities and that no one is left behind.



PAUL WIEDEFELD

The Transportation Secretary's Strategy

The Maryland Department of Transportation (MDOT) is an agency that works in partnership with the communities it serves and promotes social equity, environmental protection, and sustainable communities. The facilities and services that we provide are central to the quality of life of every Marylander by providing critical access to day-to-day mobility needs, such as employment, health care and leisure activities. Simply put, MDOT is a multimodal agency Taking You Places. We are a place to ride, walk, bike, drive, fly, and cruise. We are a place to do business. We are a place to work where you can make a difference. We connect people to communities. And we connect people to life's opportunities. We are committed to looking at everything we do through an equity lens so that we can take transportation to a different place, support larger societal goals, and really listen to ALL of our customers -- internal and external -- because together we can help ensure we support Governor Moore's vision of a bolder, brighter future where no one is left behind. Thanks to this vision and months of extensive engagement with our customers and stakeholders, I am pleased to present the Maryland Department of Transportation's Playbook. The Playbook is the Department's 20-year plan to guide us in making strategic transportation investments to better serve all Marylanders. We appreciate your continued support and contributions that made this Playbook possible.

Submit your comments here: <https://arcg.is/119TfL>

Or e-mail us at MDOTMTP@mdot.maryland.gov

September Draft 2023

1

COACH'S CORNER

PG

06

An introduction to the Playbook.

2

SCOUTING REPORT

PG

10

Analysis of the transportation system's existing conditions, trends, revenues, and needs.

3

GAME PLAN

PG

36

Our approach to implementing the Playbook and improving the transportation system over the next five years.

4

TEAM RECORD +PLAYER STATS

PG

50

How we will measure successful implementation of the Playbook.

Submit your
comments
here:

[https://arcg.
is/119TfL](https://arcg.is/119TfL)

Or e-mail us
at [MDOT-
MTP@
mdot.mary-
land.gov](mailto:MDOT-MTP@mdot.maryland.gov)





Everyone relies on transportation. We all depend on an interconnected system of facilities and assets that keep us moving and connected to jobs, goods, services, and each other. From the port and airports that deliver cargo and passengers via waterways and airways, to transit services, motor vehicles, and State highways that move vehicles large and small along our roadways, railways, and bridges — there is one Maryland transportation system.

The 2050 Maryland Transportation Plan, the “Playbook”, will improve how we move goods and services and connect people to the places where they live, work, and play. The Playbook clearly outlines Maryland’s vision to provide safe, reliable, accessible, equitable, and sustainable transportation options to Marylanders across the State. Everyone has a part to play in planning, delivering and operating Maryland’s multimodal transportation system.

Maryland’s needs, priorities, and resources are reflected in the Playbook mission, vision, guiding principles, and goals. The Playbook will guide transportation policies and investment strategies, with a focus on delivering exemplary customer service, increasing sustainable funding, leveraging federal dollars, and developing the necessary workforce to deliver projects on time and within budget.

Like any good playbook for a successful sports team, the Playbook is comprised of numerous scenarios, examples and detailed options for how MDOT plans to continue delivering safe, sustainable, intelligent, exceptional, and inclusive transportation solutions for all Marylanders.

Marylanders count on us. People of all ages and abilities are affected by our capability to anticipate their needs, respond to challenges, and work together. They trust us. And we take this seriously.

Each MDOT modal administration and everyone who has a part to play in planning, delivering and operating Maryland’s transportation system works together to deliver a connected and integrated transportation system.

This document represents a vision for the future of transportation in Maryland. In the near-term, we face real fiscal challenges that may affect the pace of progress. But working as a team, we know that we can implement the game changing policies and projects to leave no one behind.

Executive Summary

Guiding Principles are concepts that will guide the Department in our decision making to support the goals.

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

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

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

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 show, at the highest level, what MDOT plans to do in the next five years, 20 years, and beyond. Together with the guiding principles they produce a vision of how the transportation system will serve Maryland, and the key outcomes we desire for Maryland.

Enhance Safety and Security: By protecting the safety of all residents, workers, and visitors, we will achieve zero traffic-related fatalities and serious injuries.

Deliver System Quality: By investing to achieve system quality, we will create an infrastructure program that is financially sustainable, environmentally resilient, and in a state of good repair.

Serve Communities and Support the Economy: By expanding transportation options to allow Maryland's diverse communities to access opportunities and to support the movement of goods, we will expand transit and active transportation use, and bolster the regional economy.

Promote Environmental Stewardship: By minimizing and mitigating the environmental effects of transportation, we will achieve a 20% reduction in vehicle-miles traveled per capita, a 40% reduction in transportation sector greenhouse gas (GHG) emissions by 2031, and move towards net-zero by 2045.



MISSION STATEMENT

The Maryland Department of Transportation is a customer-driven leader that delivers safe, sustainable, intelligent, exceptional, and inclusive transportation solutions in order to connect our customers to life's opportunities

Coach's Corner

Plan Introduction



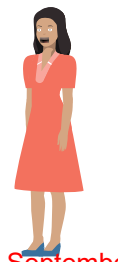



Our transportation system binds the State together. It connects Marylanders to jobs, goods, services, and each other. Delivering an efficient transportation system can enhance communities, protect the environment, drive economic mobility, and generate more capital investment. Every five years, Maryland law requires that MDOT develop a long range transportation plan, a 20-year planning horizon document that reflects the application of programmatic transportation goals to project prioritization. The 2050 Maryland Transportation Plan (MTP) provides a long-term vision for how the Maryland Department of Transportation (MDOT) can seize opportunities and navigate challenges in the coming decades. The vision of the Playbook is to provide safe, reliable, accessible, equitable, and sustainable transportation options across the State.

Informed by input from Marylanders, the MTP examines the most critical transportation needs, identifies noteworthy trends, and crafts statewide goals and objectives. The purpose of the plan is to identify strategies to help MDOT achieve these goals and objectives. Together, these strategies serve as Maryland's Playbook and provide the opportunity to work together to deliver a winning future for all Marylanders. The 2050 MTP is aligned with the Moore-Miller Administration's commitment to leave no one behind. Specifically, this plan identifies efforts to prioritize equity, the environment, and engagement with our communities, particularly our most underserved residents.

The Team

MDOT's mission is to be a customer-driven leader that delivers safe, sustainable, intelligent, exceptional, and inclusive transportation solutions in order to connect our customers to life's opportunities. A complete team effort is required to deliver on this mission. MDOT partners with modal agencies, the metropolitan planning organizations (MPOs), local governments, stakeholders, and, most importantly, Marylanders, to solve problems and achieve progress in all regions of the State.

Marylanders are the most valuable players on the transportation team and our ultimate success is determined by how well our transportation system serves them. In recognition of this, MDOT has crafted example Marylanders to represent the needs and concerns of citizens across the State. These example Marylanders were developed to show a representative sampling of different needs based on commuting patterns and lived experiences. Throughout this plan, you can see how Marylanders will be impacted by changes and how their needs have informed the strategies presented. Let's get to know these Marylanders:

<p>I'm an architect living in Mount Vernon. I travel frequently, I get to work using car sharing services and the light rail to get to BWI Airport.</p>	<p>As a transportation sourcing lead at a furniture company, I oversee more than 12,000 cargo containers coming into the Port of Baltimore.</p>	<p>I'm a third grade teacher living in Silver Spring and I depend on transit to get around. I'm a few blocks from the school where I teach and my children attend.</p>	<p>I'm an accountant living in Ellicott City. My friends drive me to Johns Hopkins Bayview campus for my visual rehab treatments.</p>	<p>As an emergency response technician for MDOT, I spend a lot of my time on I-270 helping stranded motorists.</p>	<p>As an owner of an automotive reconditioning service business, I rely on my parts and materials being delivered to the Eastern Shore on time.</p>
<p>Anita</p>	<p>Kelley</p>	<p>Cora</p>	<p>Curtis</p>	<p>Becky</p>	<p>Marcus</p>
<p>Submit your comments here: https://arcg.is/119TfL Or e-mail us at [6] MDOTMTP@mdot.maryland.gov</p> 					



MDOT is comprised of six transportation modes, each of which play an important role in moving people and goods around Maryland and to neighboring states.

- » The Maryland Aviation Administration (MAA) owns and operates Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall) and Martin State Airport.
- » The Maryland Port Administration (MPA) owns and operates the Port of Baltimore to stimulate the flow of waterborne commerce to the State of Maryland in a manner that provides economic benefit to the citizens of the State.
- » The State Highway Administration (SHA) maintains Maryland's highways to provide a safe, well-maintained, reliable highway system that enables mobility choices for all customers and supports Maryland's communities, economy, and environment.
- » The Motor Vehicle Administration (MVA) is responsible for ensuring all Maryland vehicles (cars, trucks, motorcycles, etc.) and drivers are licensed and road ready.
- » The Maryland Transit Administration (MTA) operates local buses, commuter buses, light rail, Metro, Maryland Area Regional Commuter (MARC) Train Service, and a comprehensive paratransit system. MTA also manages the taxi access system and directs funding and statewide assistance to Locally Operated Transit Systems.
- » The Maryland Transportation Authority (MDTA) is responsible for constructing, managing, operating, and improving the State's toll facilities, as well as for financing new revenue-producing transportation projects.

The Playbook is informed by and will inform future versions of the following MDOT modal administration plans: State Rail Plan, State Freight Plan, Bicycle and Pedestrian Master Plan, Zero Emission Bus Transition Act Legislative Report, State Zero Emission Vehicle Infrastructure Plan, Greenhouse Gas Reduction Act Plan, MAA Strategic Plan, MPA Strategic Plan, Strategic Highway Safety Plan, Strategic Asset Management Plan, Asset Management Plan, Shared Mobility Work Plan, and Connected & Automated Vehicle Strategic Framework. The Playbook is also informed by the Moore-Miller Administration Guidance, Metropolitan Planning Organization (MPO) plans, long range plans from peer states, federal requirements, State priorities, public input, and stakeholder concerns. A complete diagram of MDOT's family of plans is on page 56.



MOTOR VEHICLE
ADMINISTRATION



MARYLAND TRANSIT
ADMINISTRATION



MARYLAND
TRANSPORTATION
AUTHORITY



MARYLAND AVIATION
ADMINISTRATION



MARYLAND PORT
ADMINISTRATION



STATE HIGHWAY
ADMINISTRATION

Submit your
comments

here: [https://
arcg.is/119TfL](https://arcg.is/119TfL)

Or e-mail us
at MDOT-

[MTP@mdot.
maryland.gov](mailto:MTP@mdot.maryland.gov)

PLAN TIMELINE

Winter 2022

RESEARCH AND ANALYSIS

Spring 2023

STRATEGIC DIRECTION
DEVELOPMENT

LONG-TERM NEEDS
FORECASTING

OUTREACH PLANNING

PUBLIC SURVEY #1

Summer 2023

STRATEGY DEVELOPMENT

PERFORMANCE MEASURE
SELECTION

PUBLIC SURVEY #2

PLAN REVIEW

Fall/Winter 2023

PUBLIC COMMENT PERIOD

CONSOLIDATED
TRANSPORTATION PROGRAM
TOUR MEETINGS

RECORDED WEBINAR

January 2024

2050 PLAYBOOK PUBLISHED

Engagement

As part of the MTP process, MDOT conducted extensive engagement both internally throughout MDOT and externally with its local, State, and regional planning partners and the wider public.

A full memorandum detailing the public engagement and stakeholder outreach performed in service of the 2050 MTP can be found in the appendix and at [the Playbook website](#).

The **Attainment Report Advisory Committee (ARAC)** is comprised of 20 members from public agencies, nonprofits, universities, and other organizations with a focus on transportation. The ARAC met four times to review the goals, benchmarks, and indicators, as well as to advise MDOT on the selection of appropriate performance measures and targets.

The **MDOT Planning Council** is comprised of the Planning Directors and staff from each MDOT modal administration. Other partners in information technology and real estate are also invited to join. The Council met four times during the Playbook development to discuss key milestones.

MPO RoundTable Meetings were held with representatives from Maryland's seven Metropolitan Planning Organizations (MPOs) four times during the Playbook development to discuss key milestones and seek input.

ONLINE
SURVEY
PARTICIPANTS

2,523

ONLINE
SURVEY
COMMENTS

578

The public provided feedback on the draft strategic direction, transportation needs, and budget allocation via **Public Surveys**. 2,523 respondents provided 578 unique comments during two rounds of surveying. Surveys were developed in MetroQuest and were available in Spanish, French, and an accessible MS Word document.

MDOT coordinated further **Digital Engagement** with its partners and the public via a project website, e-blasts/newsletters, social media posts, and a [project web video](#). In addition to the feedback opportunities outlined above, updates were coordinated via the MDOTMTP@mdot.maryland.gov email.

Other Engagement methods included distributing bookmarks and posters with QR codes to county public libraries throughout the State. The public was invited to participate in the surveys and comment on the draft plan at various MPO meetings, active transportation outreach events, and Commuter Choice outreach events.





“We can be a State with a dynamic economy. We can be a State where our finances support our ambition. We can be a State that unleashes a new wave of dynamism by harnessing the great assets we already have – and getting them moving in the same direction.” - Governor Wes Moore, MACo Summer Conference Keynote

Submit your comments
here: <https://arcg.is/119TfL>
Or e-mail us at MDOT-
MTP@mdot.maryland.gov



The Scouting Report

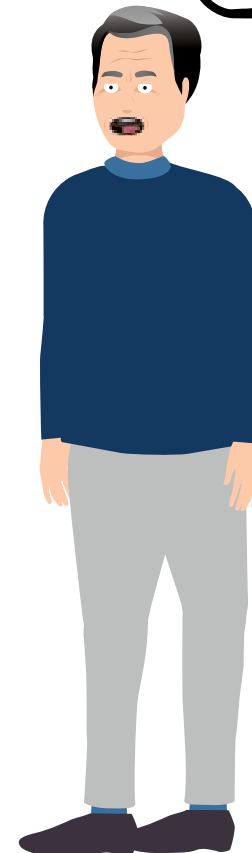
Sports teams rely on scouting reports to assess challenges, evaluate players, and develop strategies that give them the best opportunity to win. Similarly, to deliver an effective transportation system, MDOT must examine its existing system conditions and consider future trends to identify what investments are needed to ensure the system will meet future needs. Transportation investments and decisions impact people's lives and recognition of those implications is critical for making good investments and decisions. While MDOT explored many trends, this section features those that are most significant for transportation policy in the coming decades.

I commute much less, now that my office offers a hybrid schedule.

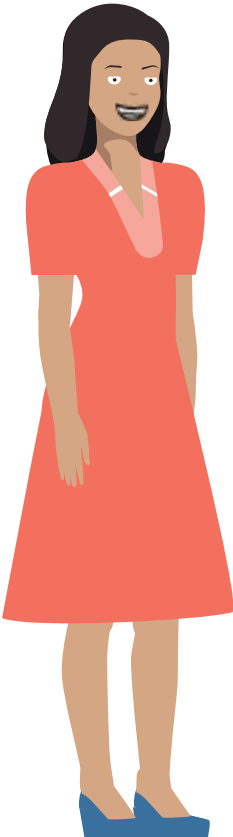
- Anita

My business faces challenges like roadway congestion, along with limited and unpredictable overnight truck parking.

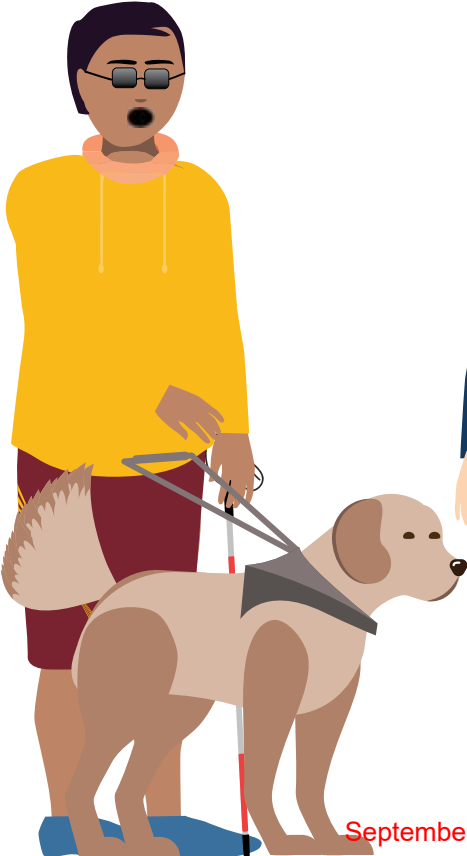
- Kelley



The new Purple Line connecting Bethesda to New Carrollton will open up more opportunities for me to find work.
- Cora



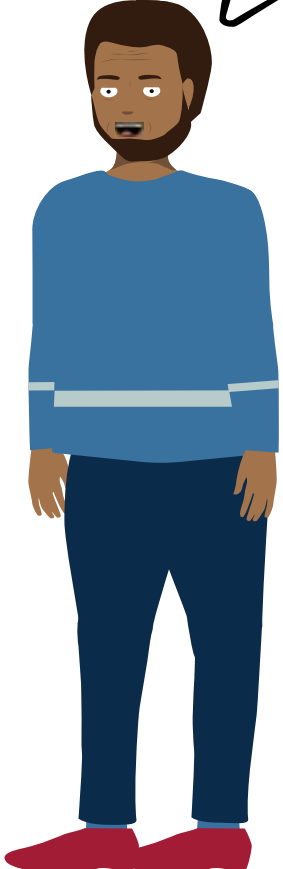
More people moving to my neighborhood will increase the demand for enhanced pedestrian and ADA facilities.
- Curtis



My patrol vehicle will soon be an electric vehicle! As charging infrastructure expands, I'll consider purchasing one for personal use.
- Becky



With fewer drivers around, a truck driver shortage would create more delays for my business.
- Marcus



Existing System Conditions

Maryland's transportation system is interconnected, complex, and critical to the State's success. Residents and employers have made decisions about where to live and locate their businesses based in part on their transportation needs and how well the system meets their needs. Analyzing data about travel characteristics helps inform the Playbook and guide MDOT in prioritizing services and system investments.



State-maintained lane miles of roadways



Bridges and Elevated Structures



Electric Vehicle charging stations



Miles of road-separated active transportation routes



Miles of State Truck Route System



Miles of active rail track



Miles of sidewalks on State-owned roads



MTA-operated bus and rail routes



Public use airports



State-operated cargo terminals



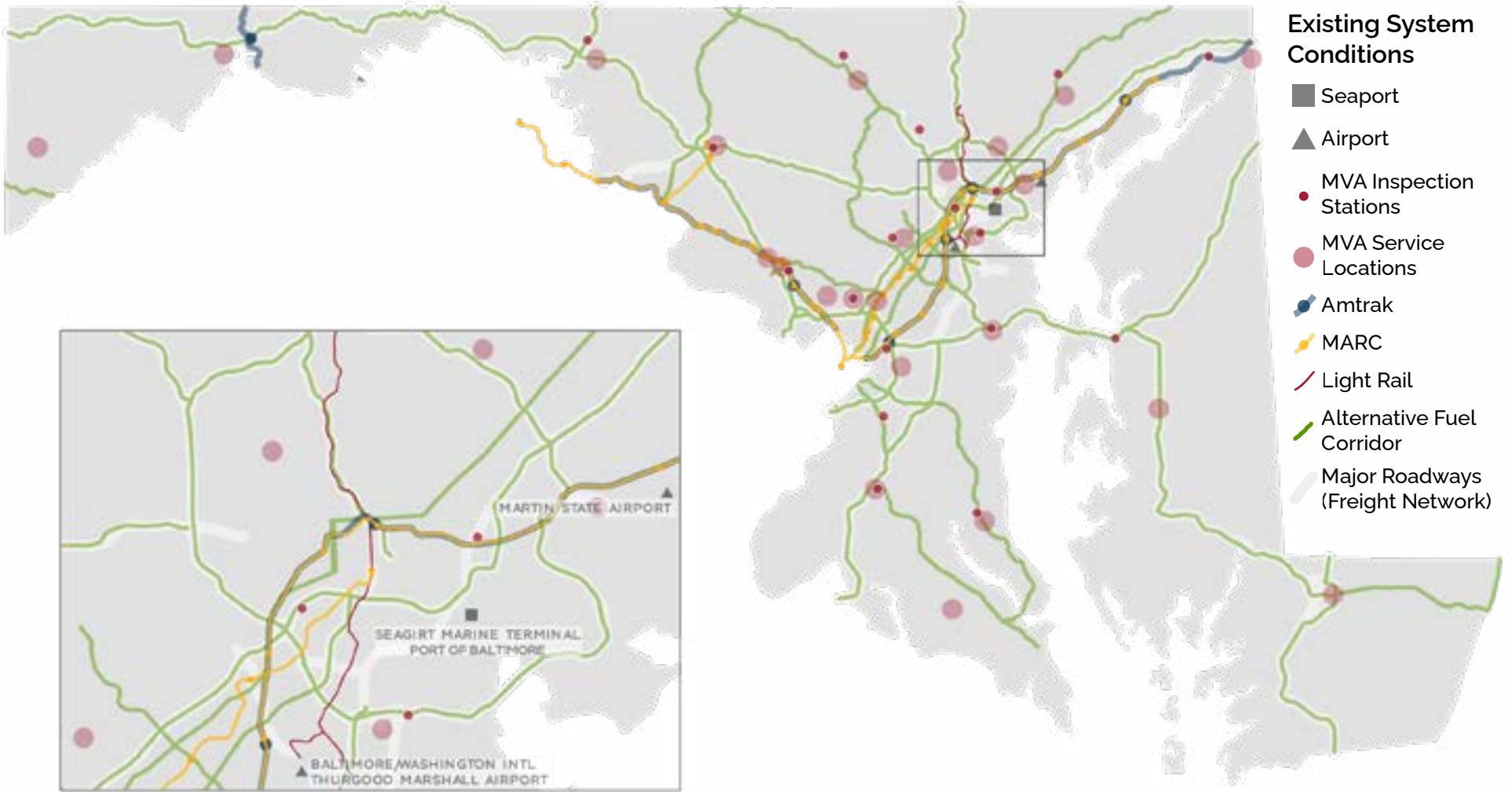
Commercial service airports



MAA-operated airports



International cruise terminal



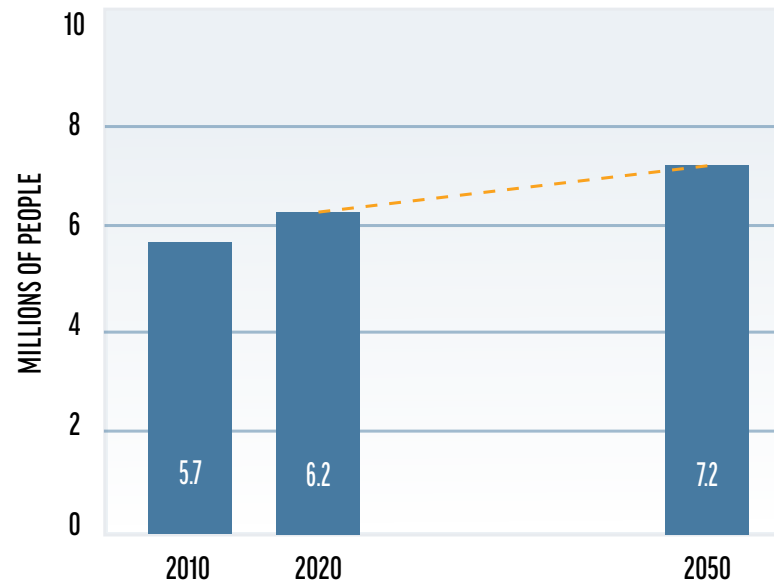
CHANGES

While Maryland's population continues to grow, the number of licensed drivers has decreased from a peak of 4.46 million in 2019. Maryland also has one of the highest rates of working from home, which contributes to lower vehicle miles traveled (VMT) per capita and lower rates of driving alone to work since 2020.

These changing travel habits can help us to meet goals about reducing driving alone, but they also pose new challenges for how transit and the broader transportation system operates. As fewer Marylanders hold a drivers license, we need to provide more mobility options for them. As commuting patterns shift, we need to evolve our public transit, particularly services like MTA commuter bus and MARC train, to meet the new patterns of activity and serve workers.

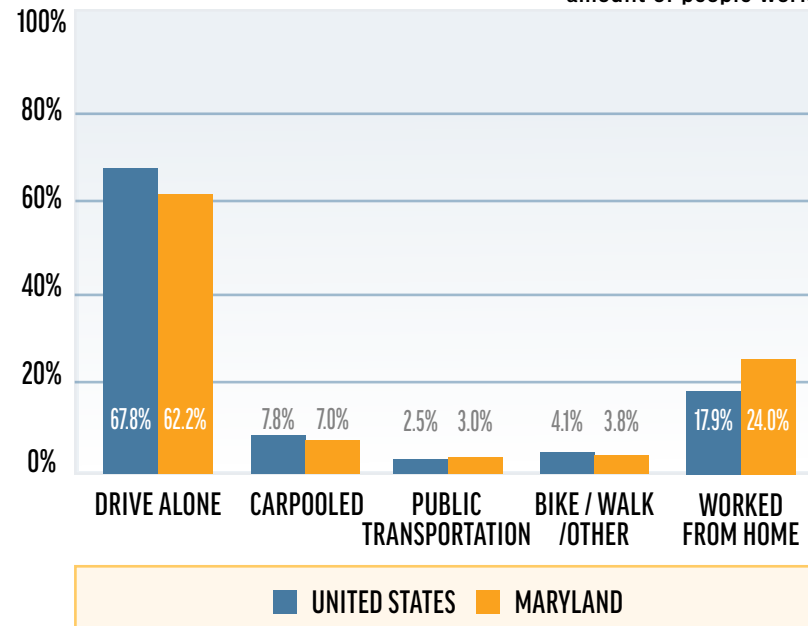
PROJECTED POPULATION GROWTH

The State of Maryland will experience a steady rise in population by the year 2050.



MODE OF TRANSPORTATION TO WORK

The majority of people in Maryland drive alone to work with a considerable amount of people working from home.



*The most recent US Decennial Census of Population was completed in 2020.

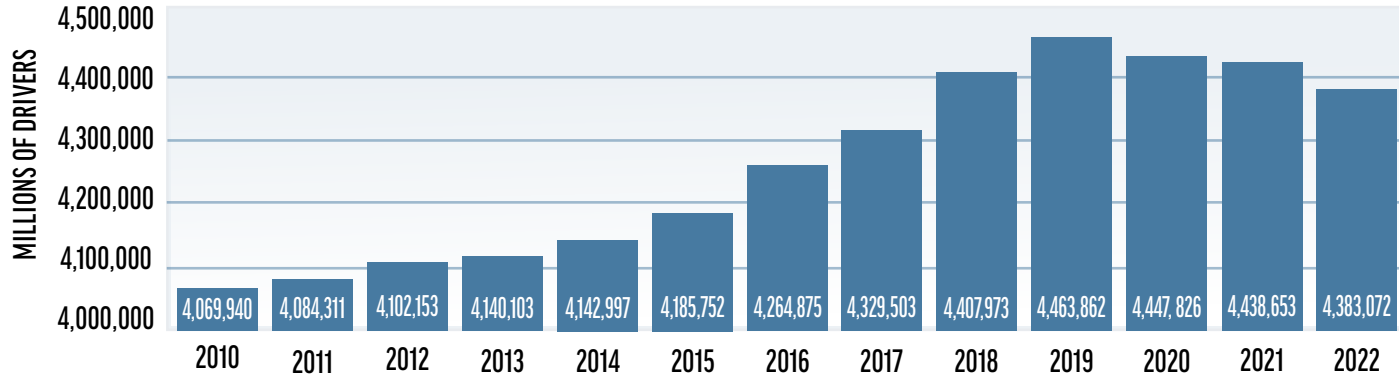
Decennial Census (2010 and 2020) and MSDC ([Preliminary Historical and Projected Total Population for Maryland's Jurisdictions](#))

U.S. Census, American Community Survey, 2021 1-Year Estimate

September Draft 2023

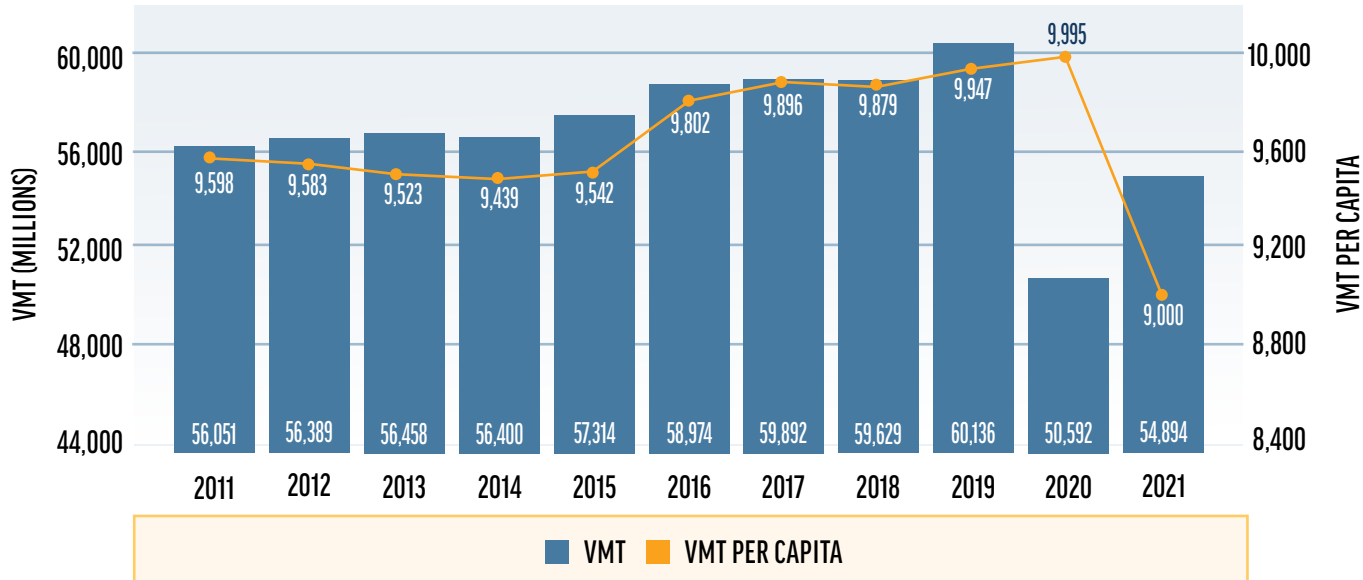
LICENSED DRIVERS

The amount of licensed drivers has increased substantially since 2010 but has been in a slow decline since 2019.



VMT AND VMT PER CAPITA

The VMT and VMT PER CAPITA were steadily rising but declined due to COVID-19.



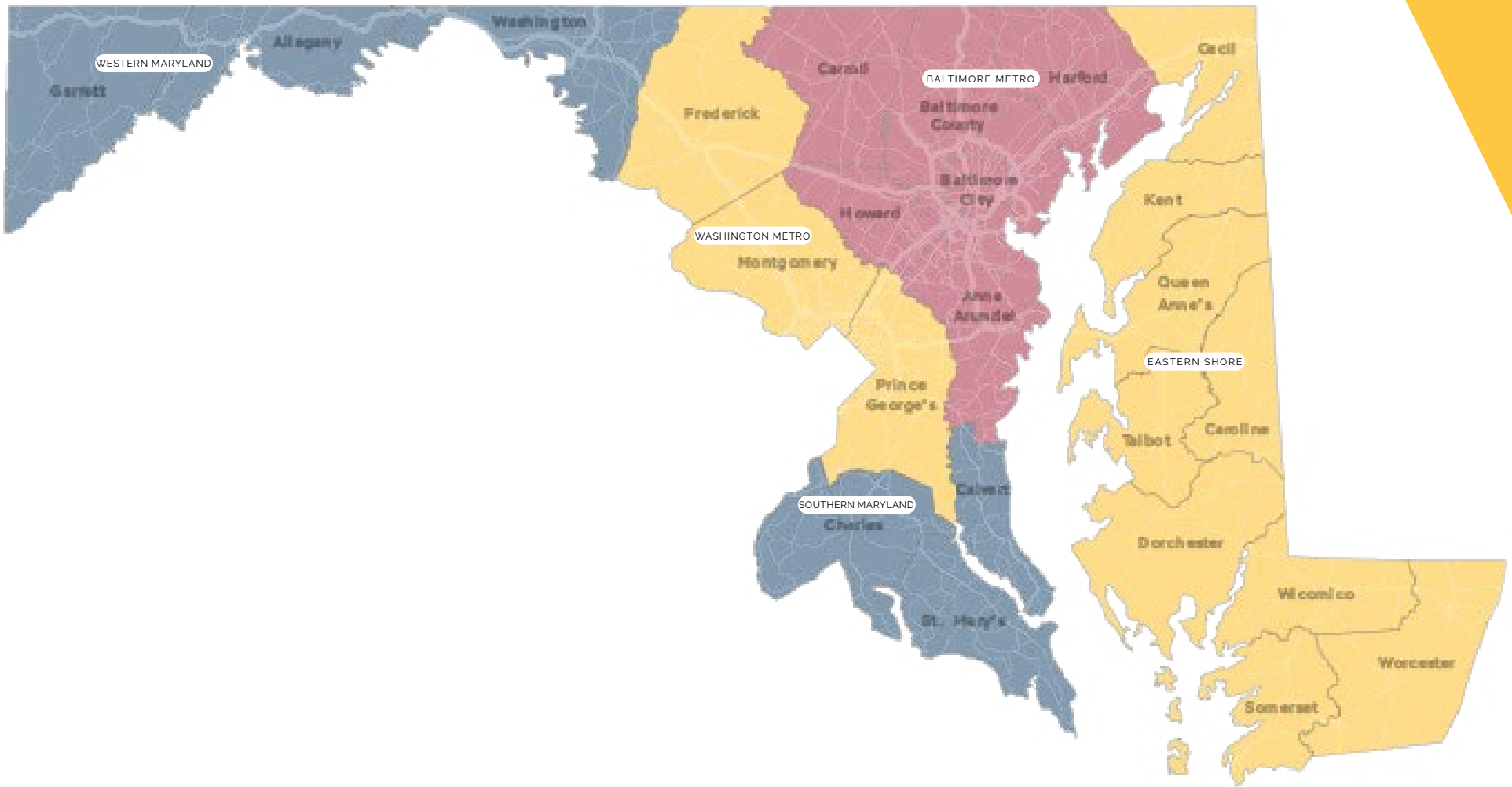
GEOGRAPHY

Though Maryland is the ninth smallest State, it is geographically diverse. The State's defining geographic feature is the Chesapeake Bay, which nearly divides the State. The Bay's 7,000 miles of shoreline affords numerous natural harbors for ships large and small; of which the most prominent is the Port of Baltimore, one of the nation's busiest ports. Maryland's small size and unique shape mean that many of its cities and towns are within commuting distance of major job centers across the border in Washington, DC, Virginia, and Pennsylvania.

Maryland can be grouped into five regions – the Eastern Shore, the Baltimore Metro Region, the Washington Metro Region, Southern Maryland, and Western Maryland.

- » **Western Maryland** is characterized by forested mountain ridges, traversed by interstates that connect the State with the Midwest.
- » **Washington Metro** consists of suburban and rural areas north of Washington D.C. and surrounding the historic City of Frederick.
- » **Baltimore Metro**, Maryland's most populous region, comprises Baltimore City and its surrounding counties.
- » **Southern Maryland** is characterized by rapid, low-density suburbanization driven by its proximity to Washington D.C.
- » **Eastern Shore** is relatively flat, mostly rural, and home to a thriving agricultural industry. Its coastal beach towns are also a destination for tourists.

Each region has its own distinct needs and associated transportation system. The Playbook identifies strategies that fit these diverse needs, recognizing that our urban, suburban, and rural areas will require targeted and context-specific solutions to implement our statewide goals around mobility, economic opportunity, and the climate.



POPULATION

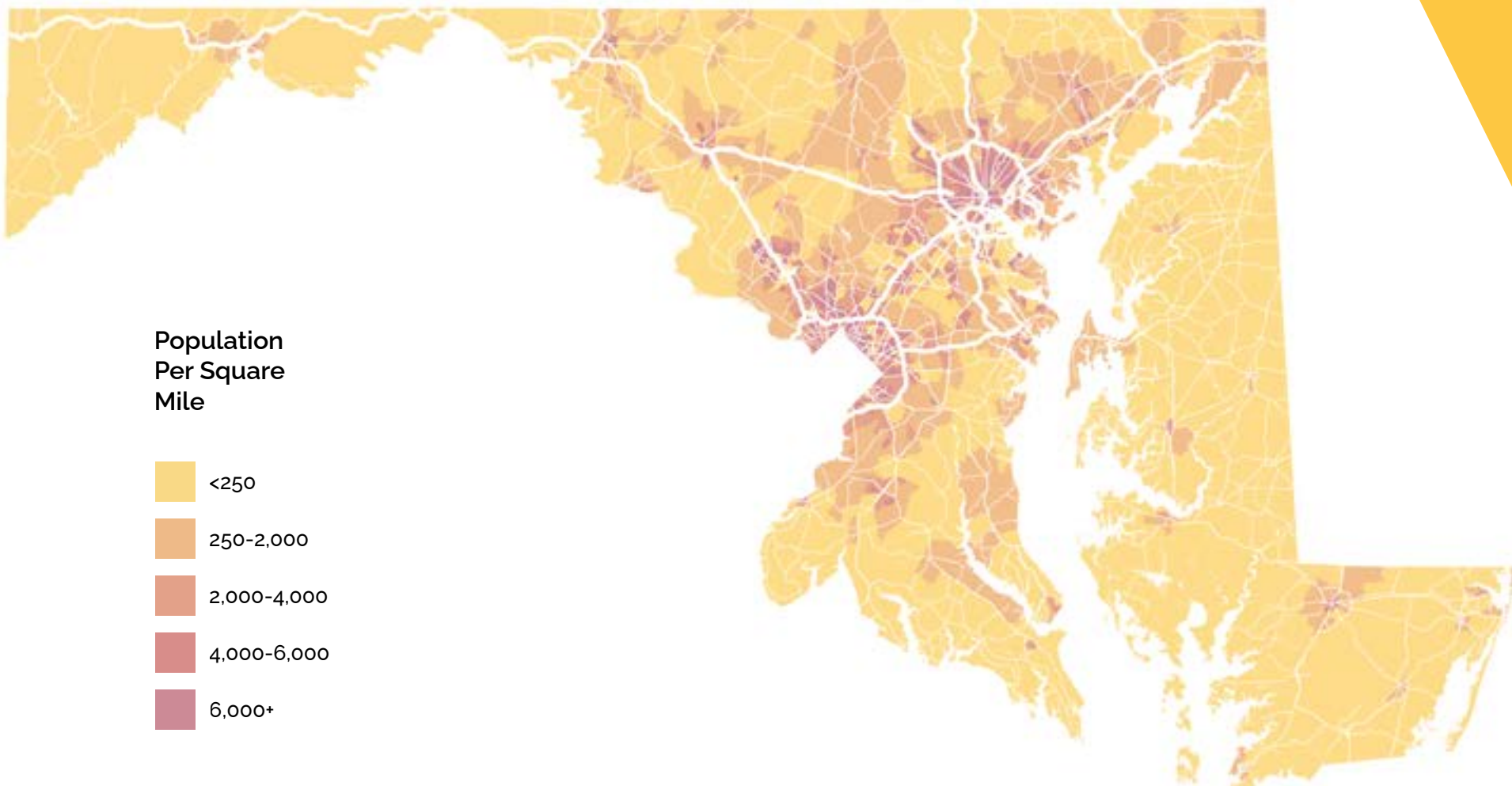
Maryland's population is estimated at 6.2 million, making it the 18th most populous State. However, the State ranks 42nd in land area, making it the fifth most densely populated State. Population and population density are primarily concentrated in central Maryland along the I-95 corridor between Washington, D.C. and Baltimore, and along I-270 extending from Washington, D.C. into Montgomery County. Baltimore, Silver Spring, Bethesda, and Towson are key high-density population and employment centers within this broader area. Outside of these areas, land uses become more suburban in character before transitioning into more rural land uses. MDOT will continue to support smart growth and transit-oriented development that promotes efficient use of land in our dense corridors, strengthens our economy, and protects our rural and green spaces.

Maryland's population is growing. Between 2010 and 2020, the State's population grew 7.0 percent, just below the national average of 7.4 percent.

Continued population growth is expected in Maryland. By 2050, the State is projected to add just over 1,000,000 new residents, representing an 16.28 percent increase in population. Population in Southern Maryland is expected to grow more than 31 percent, the fastest among the five regions. This will put further strain on the transportation system. MDOT will continue to work with our partners in Southern Maryland on transit solutions to address this growth.

	2020 CENSUS	2050 PROJECTIONS	% GROWTH
BALTIMORE METRO REGION	2,794,636	3,150,530	12.73%
WASHINGTON METRO REGION	2,300,979	2,690,860	16.94%
SOUTHERN MARYLAND REGION	373,177	490,480	31.43%
WESTERN MARYLAND REGION	251,617	297,490	18.23%
EASTERN SHORE REGION	456,815	553,660	21.20%
MARYLAND	6,177,224	7,183,020	16.28%

The population is projected to rise in each region of Maryland with the highest projected rise being the Southern Maryland region.



ACS 2021 5-Year Estimates
 Decennial Census (2010 and 2020)
 Decennial Census (2020) and MSDC ([Preliminary Historical and Projected Total Population for Maryland's Jurisdictions](#))

Submit your
 comments here:

<https://arcgis/119Tfl>

Or e-mail us at

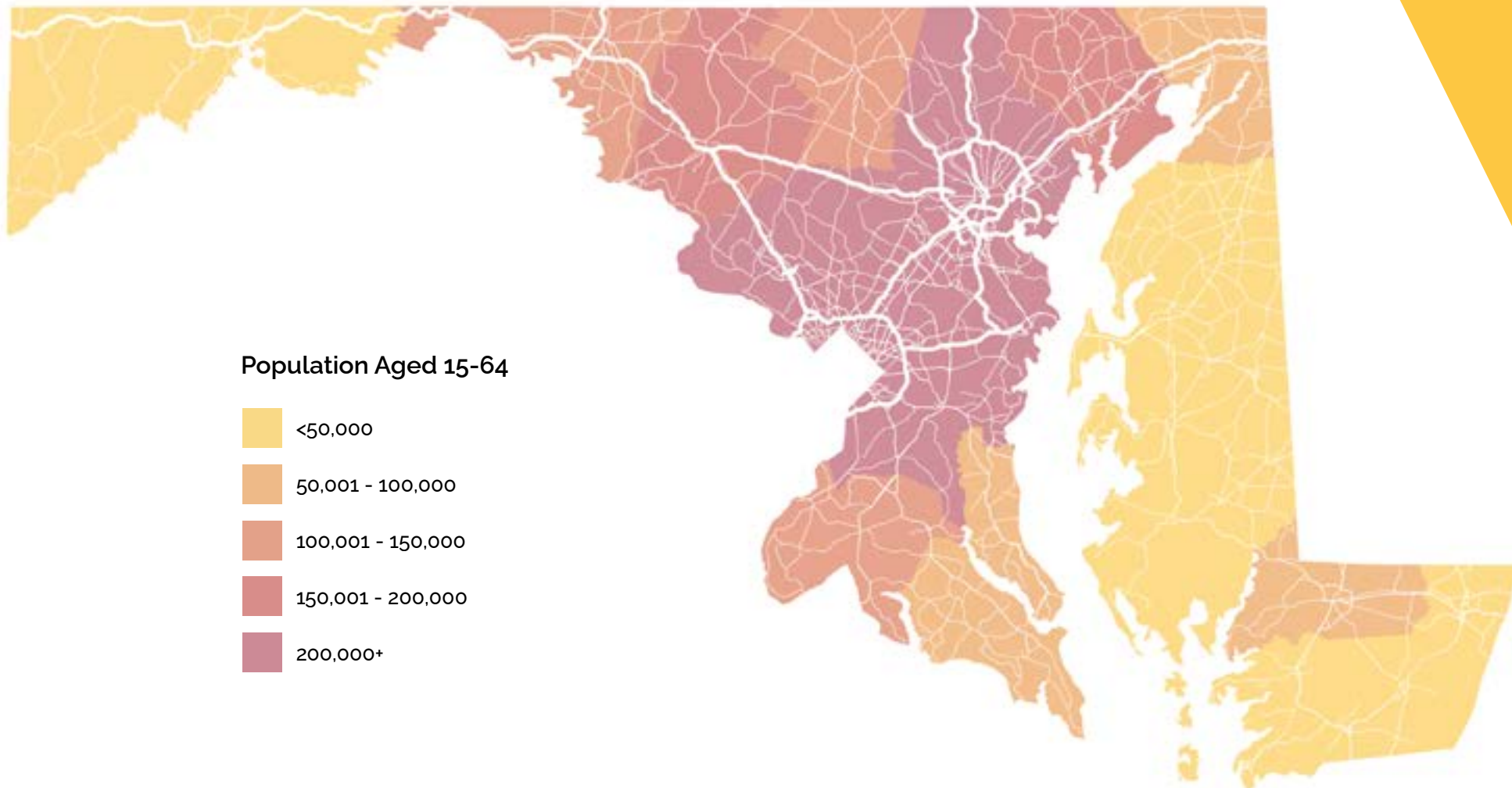
MDOTMTP@mdot.maryland.gov



DEMOGRAPHICS

Maryland is diverse in both its geographic regions and its population. Based on U.S. Census race data, about half (49%) of Maryland's population identifies as 'white alone'. The highest percentage of minority populations in Maryland is in Prince George's County, followed by Baltimore City and Charles County; while the concentration of minority population is lowest in the Western Maryland region. Understanding where minority populations are located, along with other socioeconomic factors such as income and age, helps to identify the unique transportation needs of the regions.

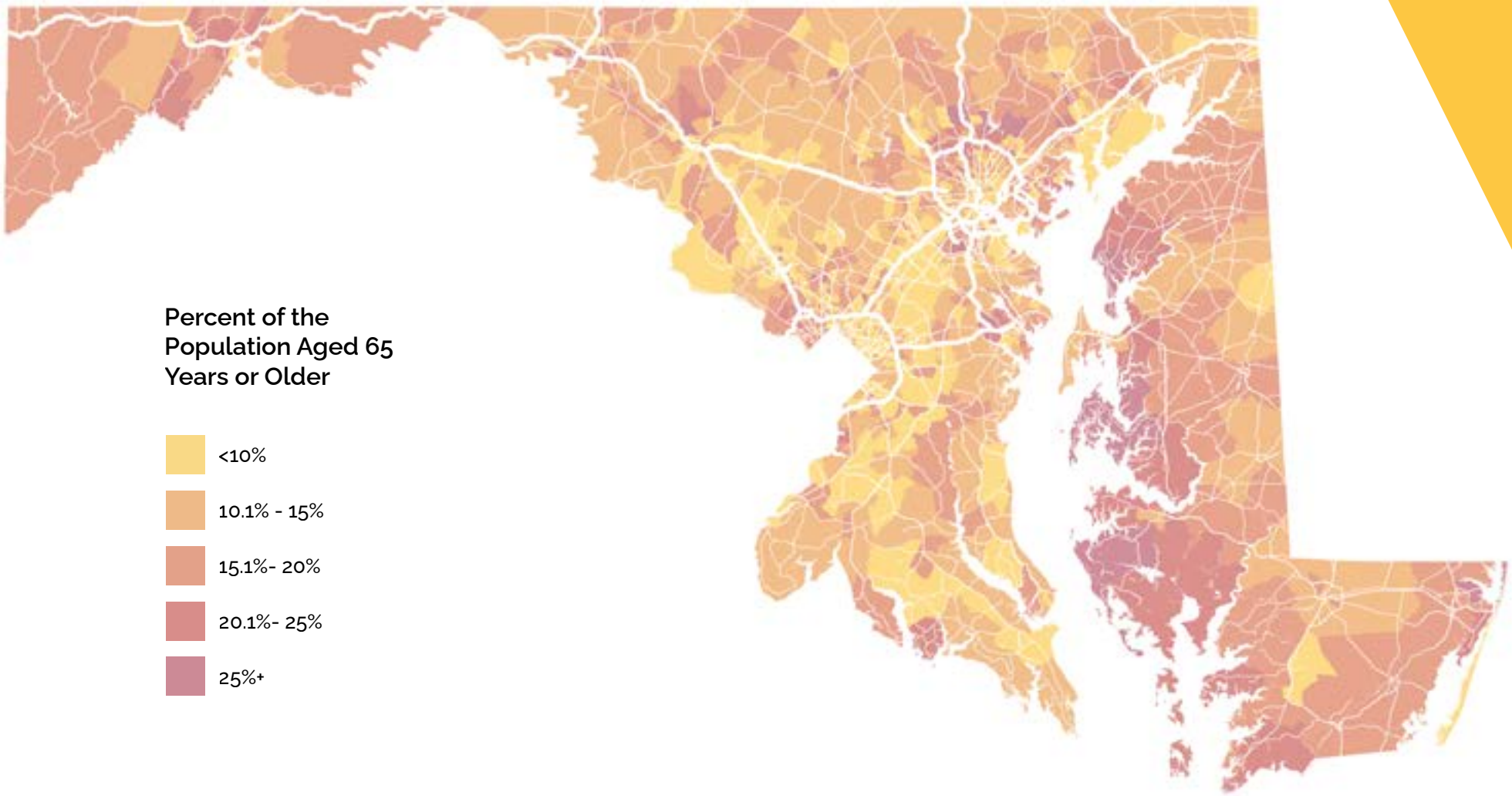
The working age population is concentrated in areas of high employment density in and around the Baltimore and Washington D.C. metropolitan areas. Working age populations are least concentrated on the Eastern Shore and in Western Maryland. Baltimore City faces a poverty rate (20.0%) more than double the statewide average of 9.0 percent. Outside of Baltimore City, poverty in Maryland tends to be concentrated in Western Maryland and the Eastern Shore.





DEMOGRAPHICS

Maryland has experienced an aging population increase in line with national trends. In 2020, the population age 65 and over equaled 16.3 percent of the total population, compared to just 12.3 percent in 2010. This growth is expected to continue as the Baby Boomer generation ages, presenting new transportation challenges for Maryland. Aging residents often require alternative modes of transportation to help meet their needs. Improved pedestrian infrastructure and transit service are two ways the State can address this challenge.



EQUITY

The 2023 Equity in Transportation Sector Law requires that equity be considered when State transportation plans, reports, and goals are developed. Further, the Climate Solutions Now Act (CSNA) (2022) is a State law with provisions to reduce negative environmental impacts on overburdened and underserved communities. Overburdened communities are defined as any census tract for which three or more of 21 environmental health indicators are above the 75th percentile. Underserved communities are defined as any census tract where the most recent census survey shows:

- » At least 25% of the residents qualify as low-income;
- » At least 50% of the residents identify as non-white; or
- » At least 15% of the residents have limited English proficiency

MDOT is deeply committed to equity in its transportation policies and initiatives. Recognizing the historical inequities in transportation access and outcomes, MDOT strives to ensure that all communities, particularly those that have been historically marginalized or underserved, have equitable access to safe, reliable, and efficient transportation options. By prioritizing equity, MDOT aims to reduce disparities, improve accessibility, and enhance the overall quality of life for all Marylanders.

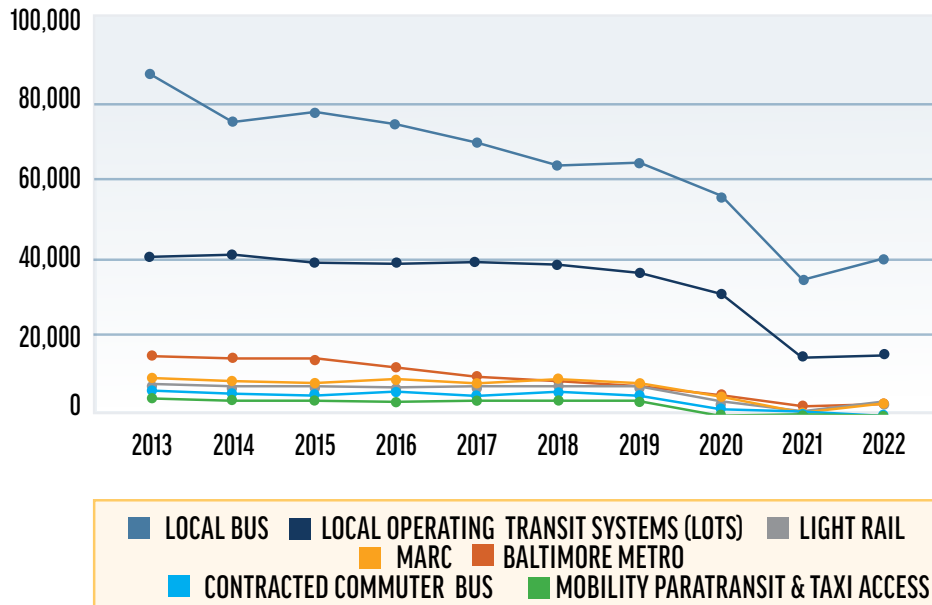
Inequities in active transportation are also present. People and communities of color suffer from higher fatality and injury rates due to dangerous roadways through their neighborhoods. Additionally, pollution burdens fall most heavily on black and brown neighborhoods.

Transit plays a critical role in providing affordable and accessible transportation options, especially for individuals who rely on it as their primary means of travel. MTA's transit ridership trends generally mirror national trends. By improving service quality, enhancing connectivity, and reducing barriers to access, MDOT aims to ensure that transit will be a viable and equitable mode of transportation for all residents.

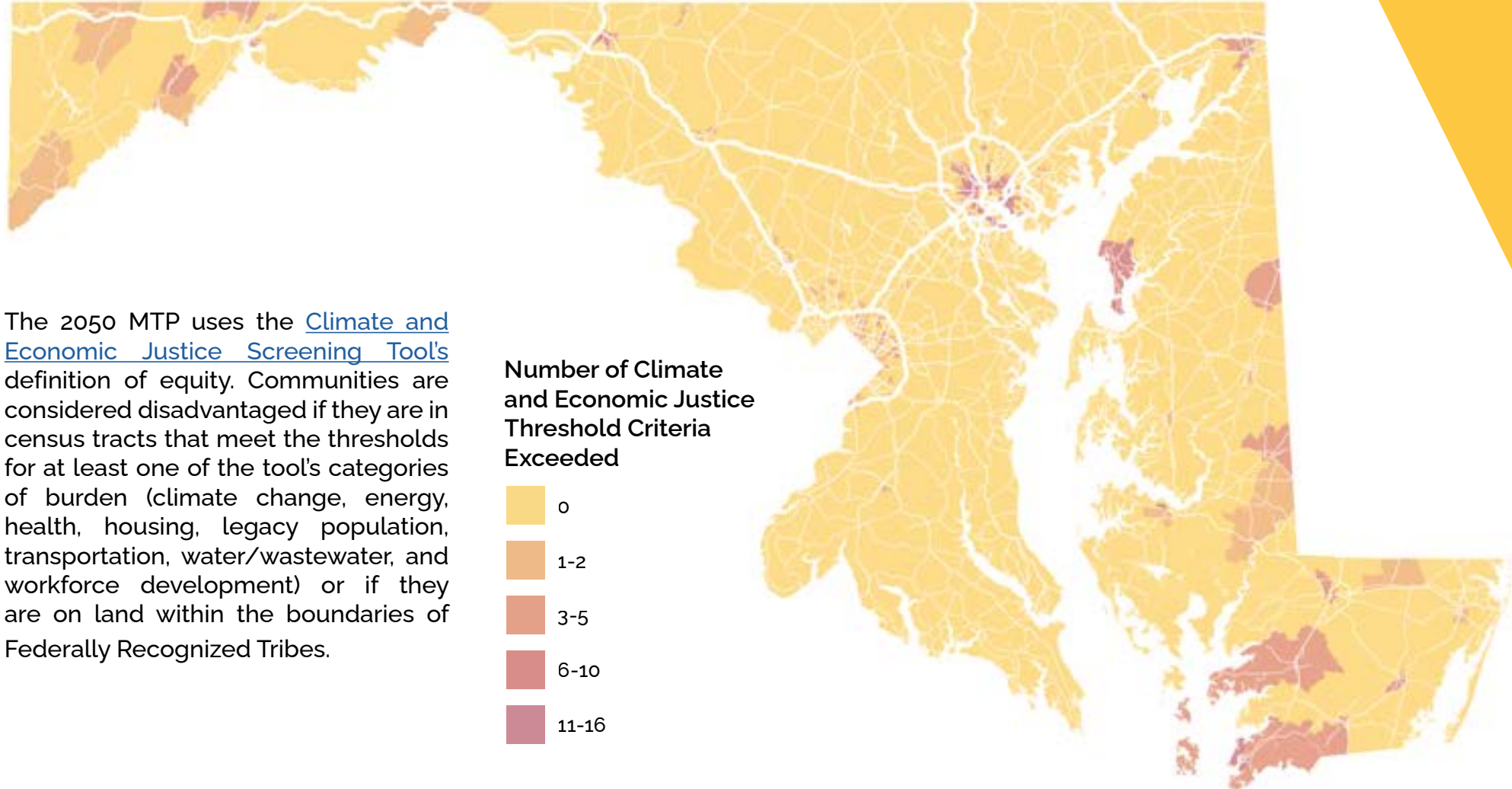
Transit Oriented Development (TOD) and the Transportation Alternatives Program are crucial in meeting the housing and community development needs of communities of color, aging populations, and the working population.

We can also make meaningful change through our investment strategy by thoughtfully examining how transportation improvements, when focused in marginalized and underserved areas, can have large impacts on economic opportunity and mobility.

MARYLAND TRANSIT SERVICE RIDERSHIP (FY 2013-2022)

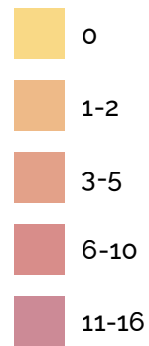


Mirroring nationwide trends, local transit options have been less favorable post-COVID-19.



The 2050 MTP uses the [Climate and Economic Justice Screening Tool's](#) definition of equity. Communities are considered disadvantaged if they are in census tracts that meet the thresholds for at least one of the tool's categories of burden (climate change, energy, health, housing, legacy population, transportation, water/wastewater, and workforce development) or if they are on land within the boundaries of Federally Recognized Tribes.

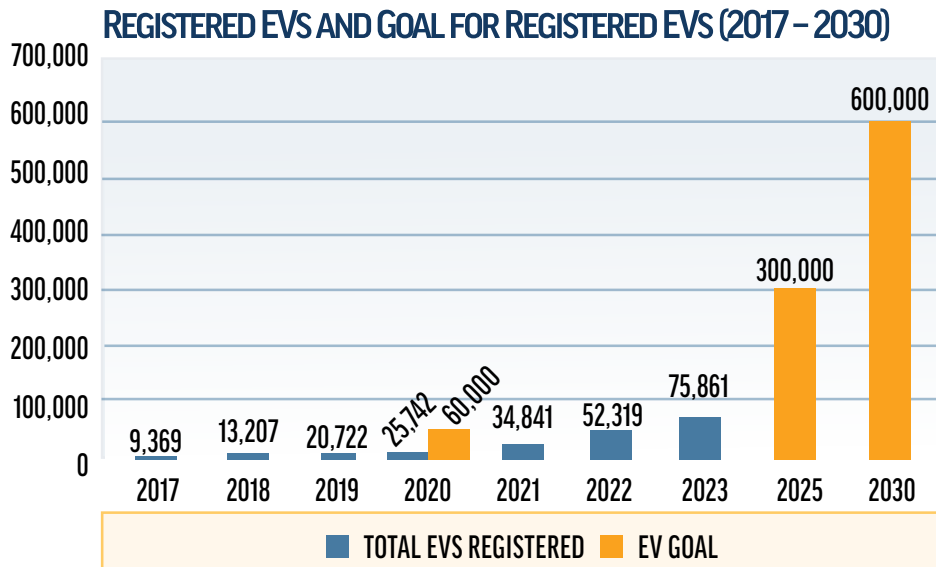
Number of Climate and Economic Justice Threshold Criteria Exceeded



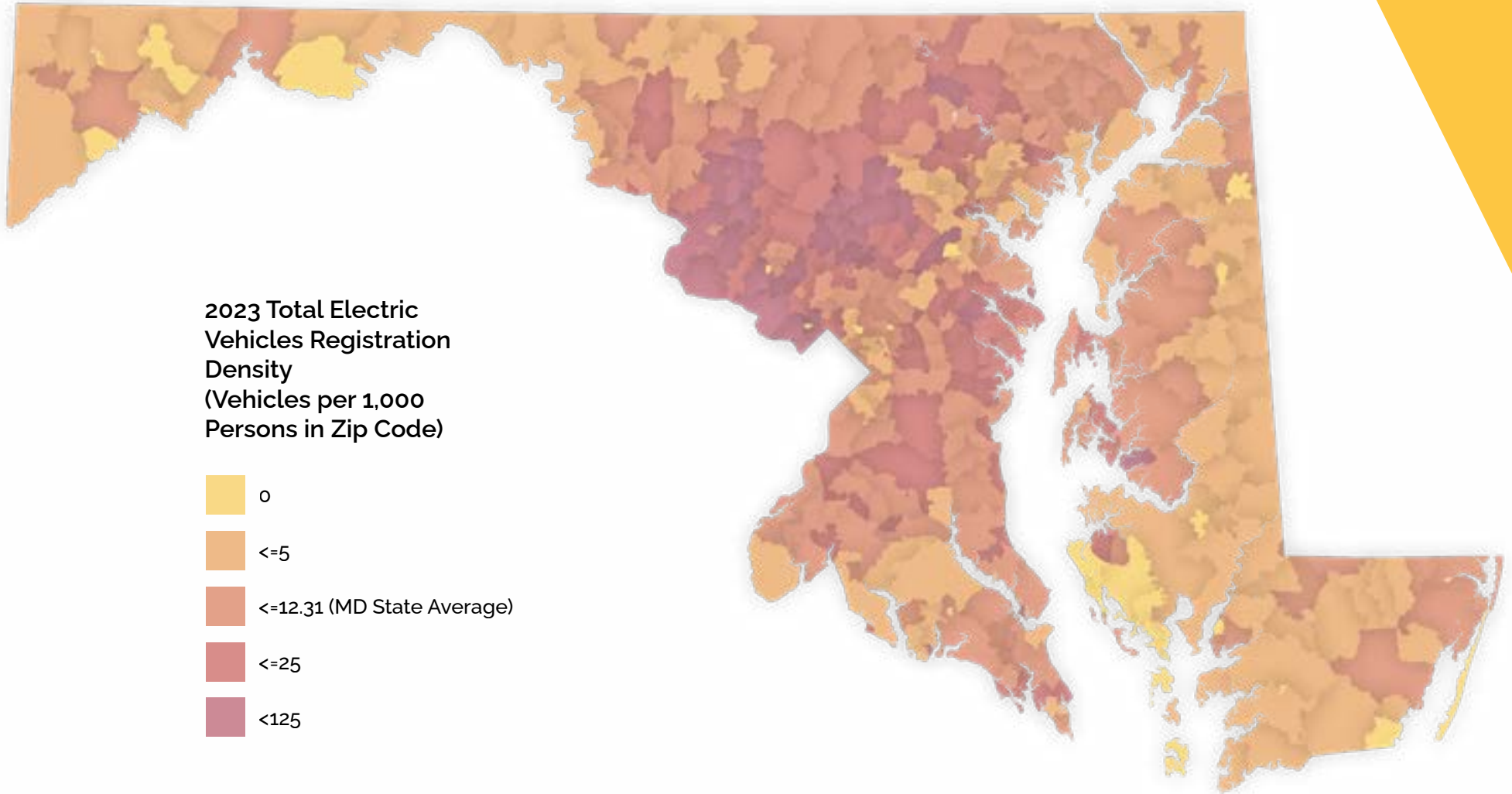
ZERO EMISSION VEHICLES

Zero Emission Vehicles (ZEVs) are a crucial tool in the effort to reduce transportation-related greenhouse gas (GHG) emissions. They encompass a wide range of vehicle types, including battery electric vehicles (EVs), fuel cell EVs, and hybrid models. The Maryland Zero Emissions and Electric Vehicle Infrastructure Council (ZEEVIC) develops policies, recommendations, and incentives that increase awareness of ZEVs, support ZEV ownership and encourage private sector investments in ZEVs.

Increased use of ZEVs will help contribute to Maryland's goal of a 60 percent reduction in GHG emissions by 2031. MDOT's ZEEVIC has set ambitious goals for registered ZEV adoption, which passed 50,000 in 2022. By 2030, we aim to have 600,000 ZEVs on the road. To incentivize Maryland residents to switch to ZEVs, MVA is offering Excise Tax Credits for electric or plug-in hybrid vehicles.

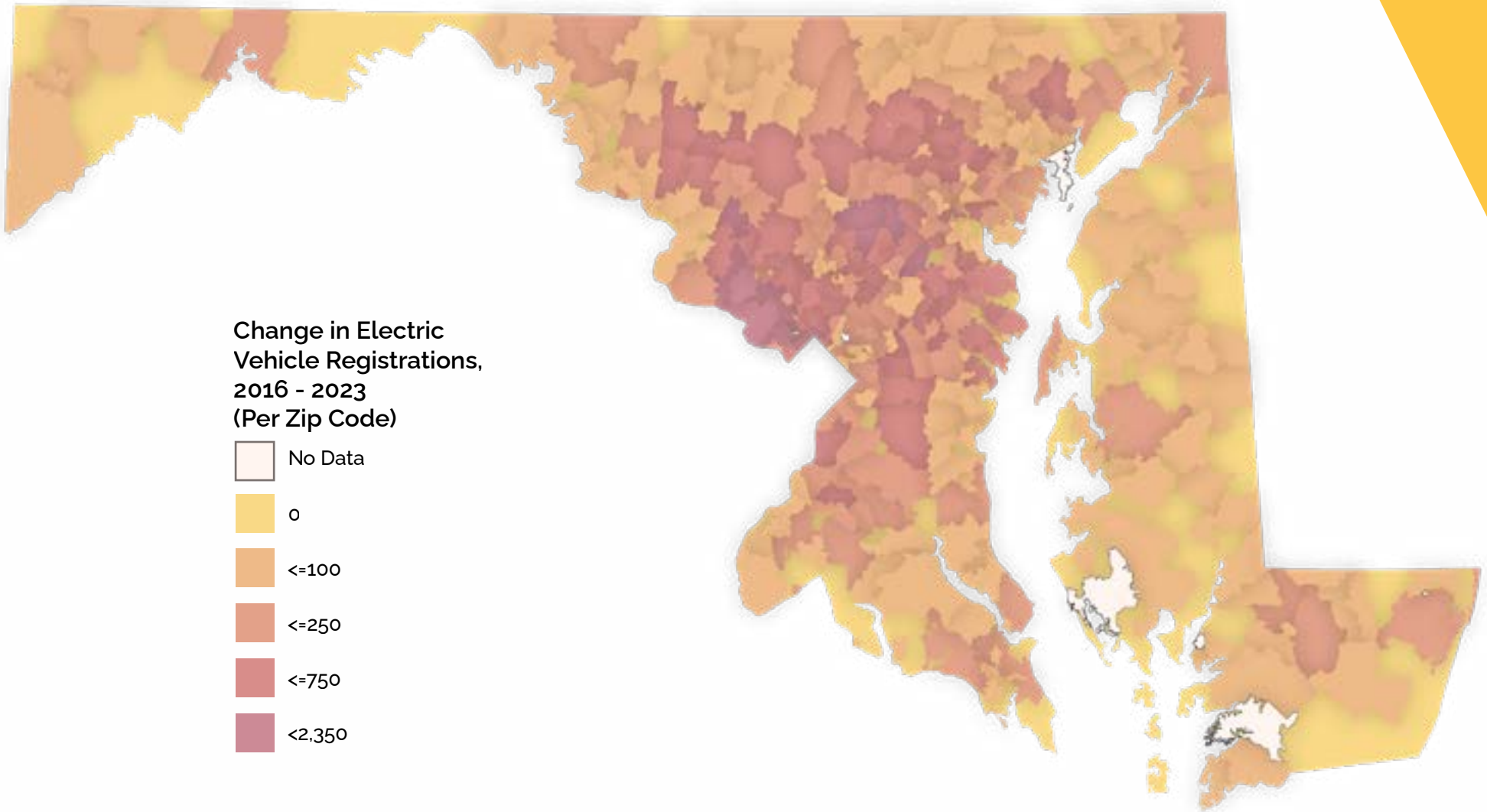


Maryland is seeing a rise in registered EVs and has set an ambitious goal for registered EVs by 2030.



ZERO EMISSION VEHICLES





ECONOMICS

 **31,343**
Public road miles

 **1,152**
Rail miles

 **530**
Inland waterway miles

 **52,568**
Feet of air cargo runways

Goods Movement Network

The health of an economy is dependent upon the performance of the transportation system and its ability to transport goods. A reliable and cost-effective transportation network is integral to facilitating the needs of the supply chain. Simply put, the freight transportation network keeps commerce flowing.

2020 Values

\$376B

Value of freight transported into, within and out of Maryland



281M tons

of freight transported into, within and out of Maryland



2050 Projections

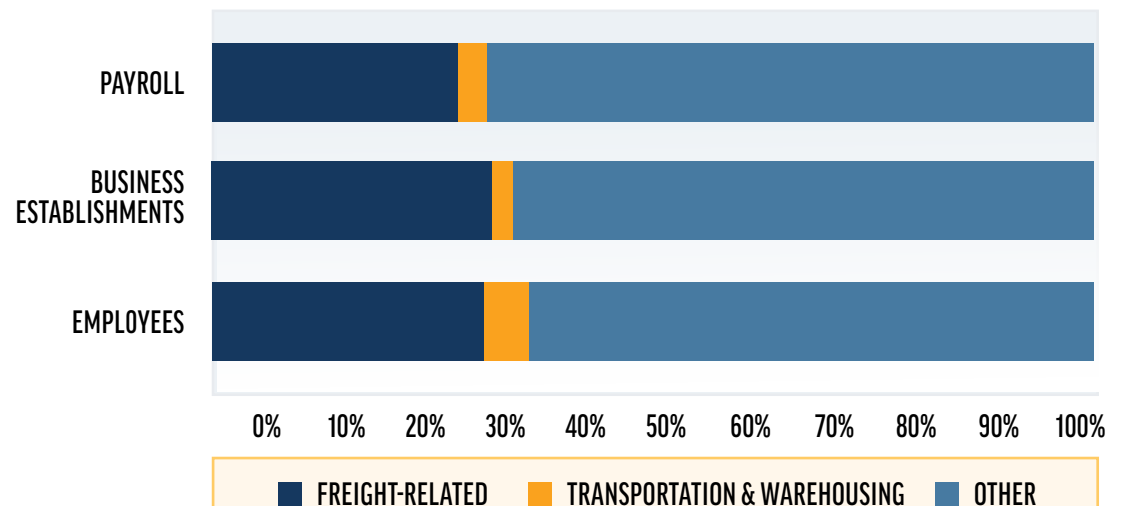
\$781B

Value of freight transported into, within and out of Maryland

429M tons

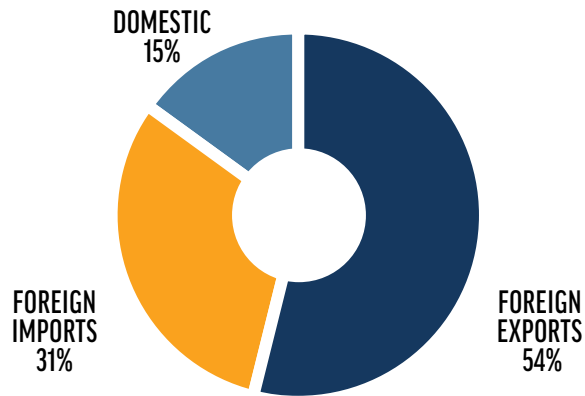
of freight transported into, within and out of Maryland

ROLE OF FREIGHT TRANSPORTATION AND WAREHOUSING AND FREIGHT-DEPENDENT INDUSTRIES ON MARYLAND'S ECONOMY (2019)

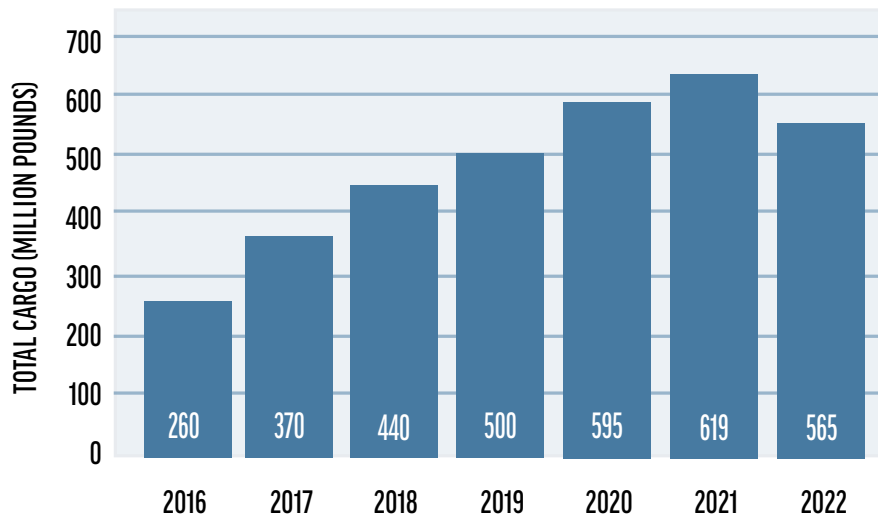


Freight-related industries assumed North American Industry Classification System (NAICS) codes that encompass agriculture, forestry, fishing, and hunting (NAICS 11); mining, quarrying, and oil and gas extraction (NAICS 21); construction (NAICS 23); manufacturing (NAICS 31-33); wholesale trade (NAICS 42); retail trade (NAICS 44-45); and transportation and warehousing (NAICS 48-49).

PORT OF BALTIMORE TONNAGE (2019)



ANNUAL CARGO AT BWI MARSHALL AIRPORT (2016-2022)



Since 2016, BWI Marshall has experienced an increase in total cargo each year aside from 2022. The growth since 2020 has been fueled by e-commerce industry growth during the pandemic. A 200,000 square foot expansion in 2019 has helped to accommodate the growth.



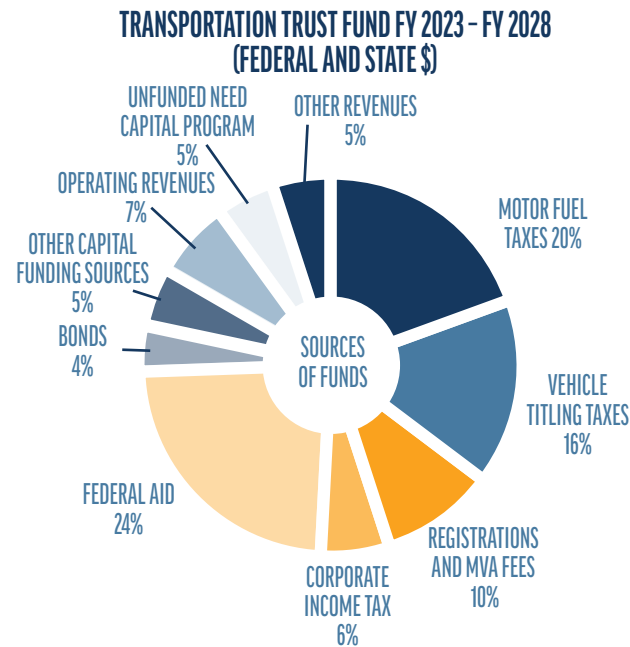
The Helen Delich Bentley Port of Baltimore is located in Baltimore along the tidal basins of the Patapsco River on the upper northwest shore of the Chesapeake Bay, offering the deepest harbor in Maryland's Chesapeake Bay. It has a unique geographic advantage by being the closest East Coast port to the Midwest. The Port of Baltimore generates about 15,300 direct jobs, with almost 140,000 jobs overall linked to Port activities. The Port ranks 1st among the nation's ports for volume of autos and light trucks, roll on/roll off heavy farm and construction machinery, and imported gypsum. It ranks 11th among major U.S. ports for foreign cargo handled and 9th for total foreign cargo value. Overall, it is one of the most diverse cargo ports in the U.S. and a top port in terms of total cargo tonnage and overall, in dollar value of cargo.

The Baltimore/Washington Thurgood Marshall International Airport (BWI) is an international airport in Anne Arundel County, Maryland. It is located 9 miles south of downtown Baltimore and 32 miles northeast of Washington, D.C. It is the busiest airport in the region, serving over 27 million passengers. BWI has approximately 10,000 badged employees.



Transportation System Revenues

Maintaining and operating Maryland's transportation system involves a variety of expenses. These costs include operation and maintenance (O&M) expenses, capital needs of each of MDOT's modal administrations, and Maryland's share of the Washington Metropolitan Area Transit Authority's (WMATA) system. O&M expenses include the costs of service for approximately 100 million annual transit trips, maintenance of highways and bridges, dredging for the Port of Baltimore, and operations for BWI Marshall and Martin State Airport. Capital needs include preservation and modernization of existing assets and strategic expansion.



Funding for these transportation needs is provided through a variety of sources, which are deposited in the Transportation Trust Fund (TTF). Funds from the TTF are not necessarily earmarked for specific agencies or programs. This flexibility is critical for allowing Maryland to meet the varying service and infrastructure needs to support its diverse transportation system. Except for MDTA, which is funded primarily through tolls and concessions revenues, all activities of MDOT are supported by the TTF. This includes debt service, maintenance, operations, administration, and capital projects. Unexpended funds remaining in the TTF at the close of the fiscal year are carried over and do not revert to the State's General Fund. Disbursements for all MDOT programs and projects are made from the TTF.

New revenue and prioritization approaches will be needed to deliver this program, focusing our work on critical and meaningful investments for Marylanders. Working with our partners in and outside of government, including the [Commission on Transportation Revenue and Infrastructure Needs](#), MDOT will identify strategies to meet the goals and objectives defined in this plan.

Submit your comments here: <https://arcg.is/119TfL>
Or e-mail us at MDOTMTP@mdot.maryland.gov



Future Seasons

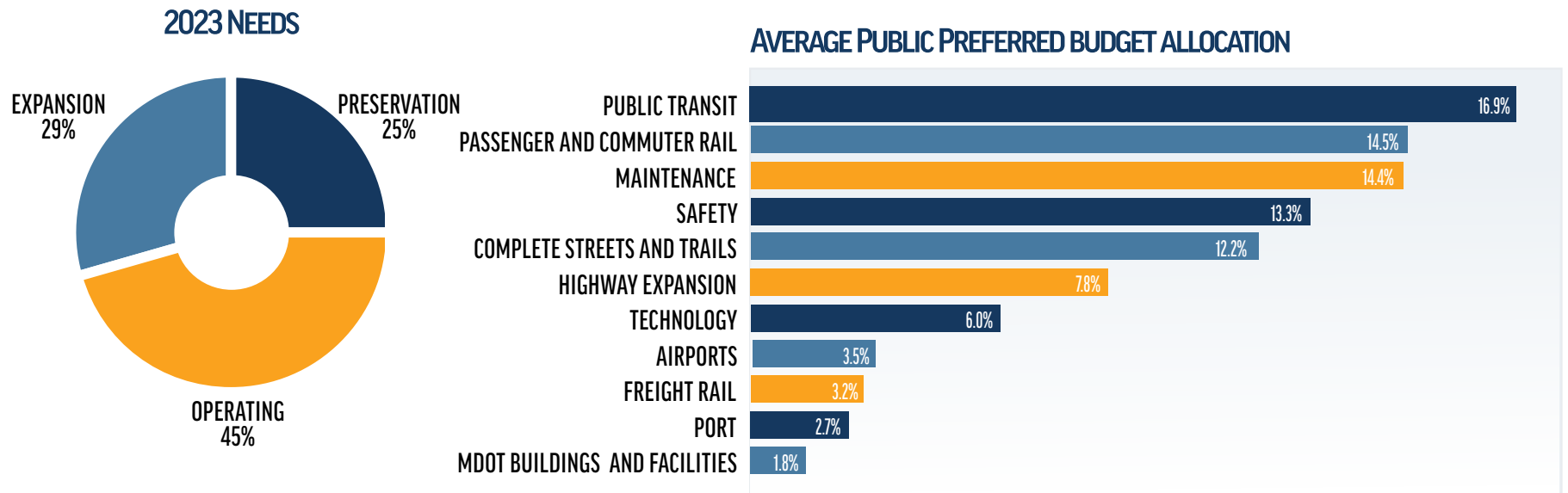
Maryland has capital expansion, operations, and preservation needs across all modes that exceed existing revenue projections. It is critical for Maryland to generate greater efficiencies through innovation and capitalize on new funding opportunities in order to address as many transportation needs as possible. Doing so will allow us to overcome today's financial constraints to implement a vision over the long-term.

Maryland transportation will receive additional federal funding from the Infrastructure Investment and Jobs Act (IIJA), which spans from fiscal years 2022 through 2026, provides more dollars for traditional surface transportation and modal programs as well as a significant increase in discretionary grant programs.

Since the passage of the IIJA, MDOT has been awarded more than 20 IIJA discretionary grants for a variety of multimodal needs. In the coming years, MDOT will continue to seek opportunities to earn more federal dollars to address essential transportation needs and implement critical mega-projects throughout the State.

Transportation System Needs

The needs of MDOT and its modal administrations can be categorized in three ways: the preservation of the existing system, daily operation needs of the agency, and capital expansion across all modes. The approximate distribution of the total MDOT needs by category is illustrated below. In 2023, operating needs are approximately 45 percent of the total MDOT needs (including funded and unfunded needs).



As part of the public engagement effort to inform this plan, Marylanders were given the opportunity via an online survey to suggest the appropriate percent of funding allocation for a variety of transportation improvements. Public transit, passenger and commuter rail, and maintenance were the improvements receiving the most support. More than 1,300 people submitted their allocations and the resulting average percentages are shown in the graphic above.

How Trends Inform Transportation Needs and Revenues

Transportation investments last for decades. To deliver lasting investments that transform the transportation system for the better, MDOT will consider how transportation needs may change in coming decades, as well as the revenue sources required to meet those needs.

Here are several ways that key trends are reshaping our prioritization of needs:

- » The population of Southern Maryland is projected to grow by more than 25 percent in the next two decades. MDOT must plan for a substantial increase in demand on the transportation system in that region and identify strategies to meet these demands while still serving the needs of the other regions of the State.
- » Climate change will influence transportation investment needs in the coming decades, given projected sea-level rise, increased extreme weather events, and flooding.
- » Motor fuel taxes account for more than 20 percent of all TTF revenues. These tax dollars may decrease significantly as more Marylanders switch to electric and more efficient vehicles. Without new revenue sources, this could diminish MDOT's ability to meet transportation needs.
- » Vehicle electrification requires quality charging infrastructure statewide and new facilities for MDOT's fleet of cars, trucks, buses, and heavy equipment. Transitioning to new technology may require additional up-front purchase and long-term maintenance costs.
- » The reshaped commute post-pandemic has reduced transit ridership and created severe pressure on transit operating budgets. Rebuilding ridership and finances will require reconsidering how transit serves a new set of needs.
- » The cost of construction has grown considerably due to inflation and supply chain issues. It will cost more to deliver the same program in the future.
- » A renewed focus on transit investment will require us to invest where we have not previously. New transformative capital projects, like the Baltimore Red Line, will involve substantial State contribution.

THE GAME PLAN

The strategic direction sets the **vision** for Maryland's Transportation System to **provide safe, reliable, accessible, equitable, and sustainable transportation options across the State.**

Guiding Principles

PG. **38**

Goals

PG. **40**

Objectives and Strategies

PG. **42**

Strengthening Our Team

PG. **50**

Building on what we learned through scouting our existing system and forecasting future trends, it's time to develop a game plan for how we shore up our weaknesses and use our strengths to capitalize on opportunities. Our game plan consists of a series of guiding principles, goals, and objectives for what we're trying to achieve and a series of strategies for how we will attain them.

Guiding Principles are concepts that will guide the Department in our decision making to support the goals.

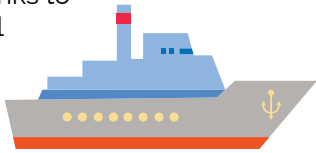
Goals show, at the highest level, what MDOT plans to do in the next five (5) years, twenty (20) years, and beyond. Together with the guiding principles they produce a vision of how the transportation system will serve Maryland.

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.



Anita and her friends have more opportunities to travel thanks to additional cruise ships serving Maryland.



Cora uses the CharmPass mobile ticketing app to save her and her children time when they transfer between the MARC train and local Baltimore buses.



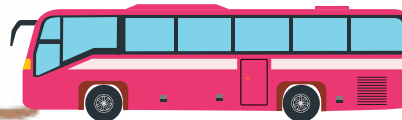
Marcus's deliveries are more reliable because of improvements to cargo operations at BWI Marshall Airport and the Port of Baltimore.



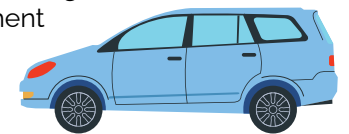
Kelley's fleet drivers have improved efficiency thanks to new truck parking information systems and virtual weigh stations, increasing his profitability.



Curtis's travel options and independence have increased because of ADA/pedestrian safety improvements in the Baltimore Red Line Corridor.



Becky can reach distressed motorists faster than ever due to the I-270 Innovative Congestion Management Program.



Guiding Principles

Guiding principles are concepts that will guide the Department in our decision making to support the goals.

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

The goals show, at the highest level, what MDOT plans to do in the next five years and beyond. Together they produce a vision of how the transportation system will serve Maryland. The following sections illustrate the relationship between each of the goals, the associated actionable objectives, the strategies MDOT will implement to achieve those goals, and the guiding principles that are addressed by meeting each objective.

Enhance Safety and Security:

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



Promote Environmental Stewardship:

Minimize and mitigate the environmental effects of transportation.



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.



ENHANCE SAFETY AND SECURITY

OUTCOMES

The 4 objectives and 13 strategies outlined here will enhance safety and security.

By protecting the safety of all residents, workers, and visitors, we will achieve zero traffic-related fatalities and serious injuries.

Objectives	Strategies
Reduce the number of lives lost and injuries sustained on Maryland's transportation system	<ul style="list-style-type: none"> » 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.
Minimize disparities in Safety across Maryland's diverse communities	<ul style="list-style-type: none"> » 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.).
Address multimodal safety needs to support a safe, secure, and low stress transportation system	<ul style="list-style-type: none"> » 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.
Maintain a safe system during adverse weather events, man-made threats, and other system disruptions	<ul style="list-style-type: none"> » Standardize operations, response, and scene safety practices with first responders and other key partners. » Implement unified incident command with first responders.



Guiding principles

Equity Resilience Preservation Experience Modernization



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

OUTCOMES

The 4 objectives and 15 strategies outlined here will deliver system quality.

By investing to achieve system quality, we will create an infrastructure program that is financially sustainable, environmentally resilient, and in a state of good repair.

Objectives	Strategies
Increase the percentage of State-owned or funded facilities and assets in a State of good repair	<ul style="list-style-type: none"> » 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.
Minimize travel delays and improve reliability and quality	<ul style="list-style-type: none"> » 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.
Provide a multimodal system resilient to changing conditions and hazards	<ul style="list-style-type: none"> » 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.
Accelerate project completion through improved project delivery	<ul style="list-style-type: none"> » 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.



Guiding principles

Equity Resilience Preservation Experience Modernization



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 all traffic hours of delay in full report
- » 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 AND SUPPORT THE ECONOMY

OUTCOMES

The 6 objectives and 24 strategies outlined here will serve communities and support the economy.

By expanding transportation options to allow Maryland's diverse communities to access opportunities and to support the movement of goods, we will expand transit and active transportation use, and bolster the regional economy.

Submit your comments here:

<https://arcg.is/119TfL>

Or e-mail us at

MDOTMTP@mdot.maryland.gov

Objectives	Strategies
Enhance Marylanders' satisfaction with the transportation system and MDOT services	<ul style="list-style-type: none"> » 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).
Apply enhanced technologies to improve communication and relay real-time information	<ul style="list-style-type: none"> » 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.
Increase transit use, active transportation, and transit-oriented development (TOD)	<ul style="list-style-type: none"> » 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.
Improve quality of life by providing active transportation and transit access to jobs and opportunities	<ul style="list-style-type: none"> » 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.
Prioritize the transportation needs of underserved and overburdened communities in project selection	<ul style="list-style-type: none"> » 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.
Improve the efficiency and competitiveness of the Port of Baltimore and BWI Marshall Airport	<ul style="list-style-type: none"> » 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.



Guiding principles

Equity Resilience Preservation Experience Modernization

✓	✓	✓	✓	✓
			✓	✓
✓			✓	
✓			✓	
✓				
✓	✓	✓	✓	✓

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

OUTCOMES

The 4 objectives and 12 strategies outlined here will promote environmental stewardship.

By minimizing and mitigating the environmental effects of transportation, we will achieve a 20 percent reduction in vehicle-miles traveled per capita, a 40 percent reduction in transportation sector greenhouse gas (GHG) emissions by 2031, and move towards net-zero by 2045.

Objectives	Strategies
Minimize fossil fuel consumption, reduce greenhouse gas emissions, and improve air quality	<ul style="list-style-type: none"> » 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.
Support the widespread adoption of alternative fuels, electric vehicles and innovative technologies	<ul style="list-style-type: none"> » Increase electric vehicle charging infrastructure, including in rural areas and overburdened and underserved areas. » Convert the MDOT fleet to EVs and alternative fuels.
Protect and enhance the natural environment through avoidance, minimization, and mitigation Adverse impacts related to transportation infrastructure	<ul style="list-style-type: none"> » 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.
Employ resource protection and conservation practices in project development, construction, operations, and maintenance of transportation assets	<ul style="list-style-type: none"> » 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.



Guiding principles

Equity Resilience Preservation Experience Modernization



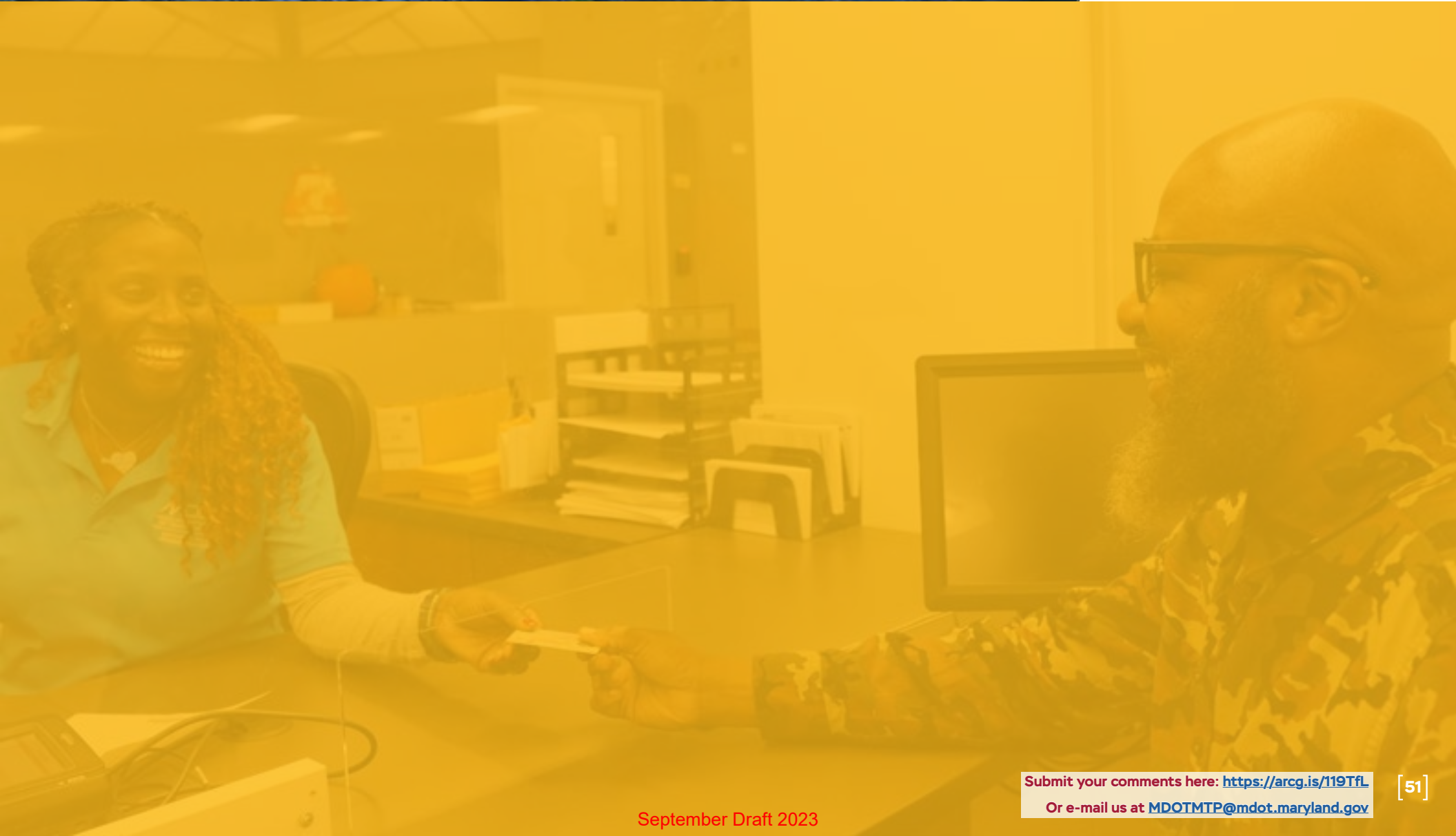
KEY PERFORMANCE MEASURES

- » 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

STRENGTHENING OUR TEAM

In addition to the goal-oriented strategies outlined above, MDOT will employ the following internal strategies to ensure that it is the best agency it can be. These focus on exemplary customer service, increasing our sustainable funding and leveraging our federal dollars, as well as ensuring that we have the necessary workforce to deliver projects on time and within budget.

CUSTOMER SERVICE	FUNDING	PARTNERSHIPS
<ul style="list-style-type: none"> » Expand One-Stop Shop services at MVA in partnership with local jurisdictions. » Enhance customer experience with DriveEzMD Maryland and at MDTA Customer Services Centers. » Deliver on-time transit service at MTA. 	<ul style="list-style-type: none"> » Increase State capital program levels by leveraging federal funds and partnerships. » Leverage the unprecedented federal investments in infrastructure to help State dollars go further. » Assess and define new revenue needs that allow for the implementation of a transformative transportation agenda. 	<ul style="list-style-type: none"> » Transition the MTA transit and MDOT public fleets to zero emission vehicles. » Strengthen our partnerships with small, disadvantaged, minority-owned, and veteran-owned business. » Enhance our federal grant strategy and execution to leverage State dollars. » Partner with local jurisdictions to prioritize key infrastructure needs and improvements. » Improve our community engagement processes.
PROJECT DELIVERY	WORKPLACE CULTURE	WORKFORCE DEVELOPMENT
<ul style="list-style-type: none"> » Create a transparent scoring and prioritization system that advances better projects quickly, builds trust with local jurisdictions, and ensures that MDOT's values are advanced in every dollar spent. » Strengthen our partnerships with small businesses and disadvantaged and minority-owned businesses. » Improve our program to deliver results for communities. » Rebuild State capacity through a more resilient MDOT workforce and through stronger policies that create more efficient Statewide planning, project development, and delivery. 	<ul style="list-style-type: none"> » Adopt knowledge management strategies to maintain institutional knowledge. » Foster a culture of teamwork, collaboration, innovation, and exemplary traveler service within MDOT. » Strengthen the diversity, equity, and inclusion program at MDOT. » Promote diversity, equity, and inclusion throughout the transportation industry. » Recognize employees through awards or speaking at conferences on behalf of MDOT. » Improve job satisfaction and performance of our MDOT frontline employees. » Ensure that our MDOT workforce earns a living wage. 	<ul style="list-style-type: none"> » Attract, promote, and retain talented employees who are representative of Maryland's population. » Recruit effectively and decrease the MDOT vacancy rate. » Develop and maintain workforce development programs that enhance the skills of transportation professionals and support career advancement. » Build and sustain pipelines to create long-term, family sustaining, stable opportunities for newly trained workers. » Create a model to connect interns and apprentices to opportunities for full-time employment in operations, trades, and professional services. » Ensure that our projects create a pipeline of training, local hiring, and opportunity for low-income communities.



Submit your comments here: <https://arcg.is/119TfL>
Or e-mail us at MDOTMTP@mdot.maryland.gov

GAME CHANGERS

In addition to the strategies MDOT will implement toward the PlayBook goals, MDOT is committed to funding and completing key multimodal transportation projects across Maryland. These projects represent priority projects that MDOT and its modal administrations have identified as critical to the implementation of the MTP 2050 in order to transform transportation in Maryland. The selection of these key projects is informed by public and stakeholder input gathered throughout the 2050 MTP planning process.

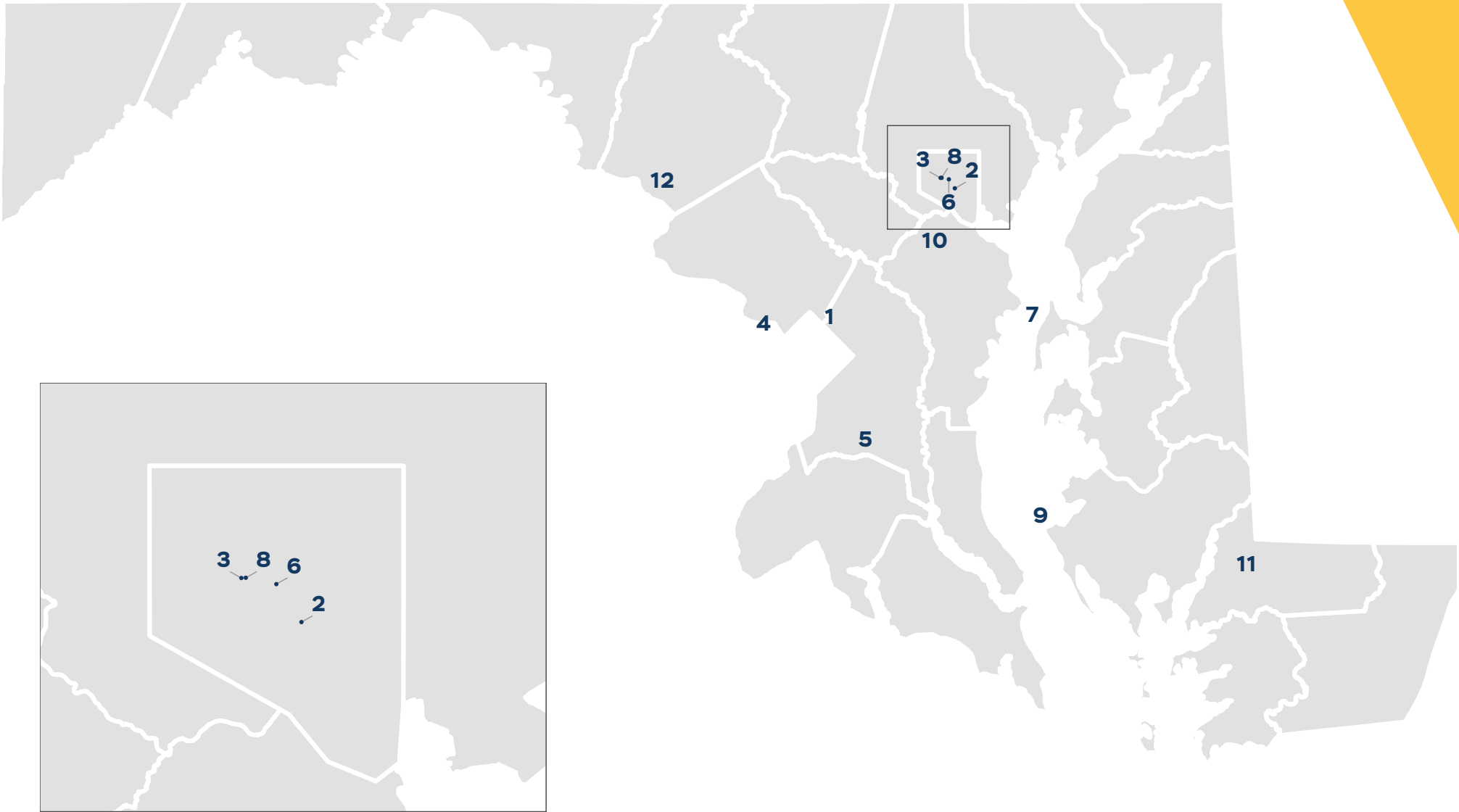
NOTABLE PLAYS

- » The Purple Line received a commitment of funding totaling \$900 million from the Federal Transit Administration New Starts Program
- » In February 2022, MPA was awarded \$1.8 million grant from the U.S. Environmental Protection Agency Port's Diesel Equipment Upgrade Program to help MPA further reduce
- » MDOT is implementing asset criticality frameworks and scoring processes to ensure a risk-based approach to directing funding for the most critical highway asset management needs.

1. Purple Line (MTA)
2. Baltimore Red Line (MTA)
3. Frederick Douglass Tunnel (MTA)
4. American Legion Bridge (SHA)
5. Southern Maryland Rapid Transit (MTA)
6. Howard Street Tunnel (MPA)
7. Bay Crossing NEPA (MDTA)
8. Baltimore Penn Station Redevelopment (MTA)
9. Mid-Bay Dredge Placement Project
10. BWI Marshall Terminal A/B Connector Project (MAA)
11. ROUTE on U.S. 50 (SHA)
12. Brunswick Line (MTA)

Statewide

- Complete Streets Program (SHA)
- Pedstrian Safety Action Plan Implementation (SHA)
- Statewide Trail Network (SHA/TSO)
- Transit-Oriented Development Program (TSO)
- EV Charging Infrastructure
- Carbon Reduction Strategy
- Resilience Improvement Plan



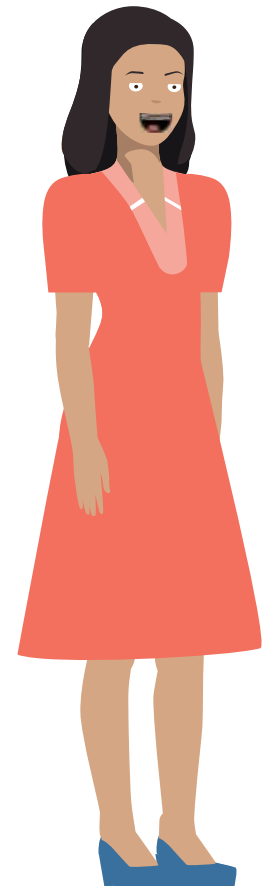
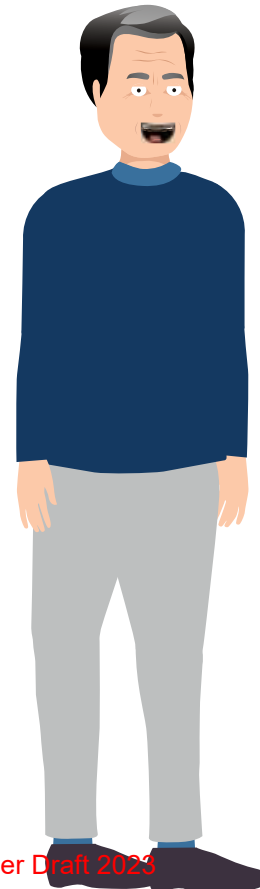
Team Record and Player Stats

Team successes are determined by a win-loss record and players performances are evaluated by multiple stats that indicate their effectiveness. Similarly, MDOT has established performance targets to measure its effectiveness in achieving its goals and objectives. This includes metrics focused on safety, conditions of highway infrastructure and transit assets, and travel time reliability. You can learn more about these targets and how MDOT is performing in the System Performance Report and Attainment Report available in the Appendix of the MTP.

With improved travel time reliability I'm able to avoid wasting time sitting in traffic.
- Anita

Checking the condition of bridges is critical to keep my trucks moving.
- Kelley

Watching the availability of the buses helps me and my children avoid experiencing delays in our day.
- Cora



Submit your comments here:

<https://arcg.is/19TfL>

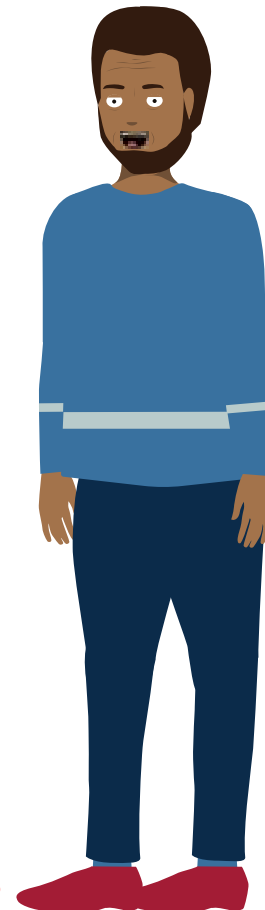
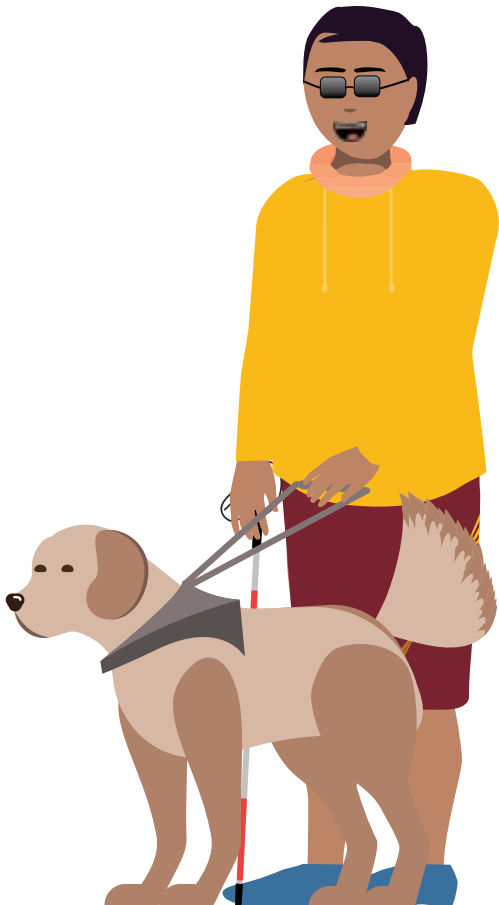
Or e-mail us at MDOTMTP@mdot.maryland.gov

How do we measure wins? What are the best indicators of our performance?

Air quality will improve in my neighborhood, thanks to reduced car emissions.
- Curtis

I'm able to drive smoothly and safely thanks to the great highway conditions.
- Becky

My customers get to save money with more reliable shipping.
- Marcus



Attainment Report

As part of Transportation Performance Management, State DOTs are required to establish performance targets for national performance measures related to safety, infrastructure condition, and system performance. Performance measures, which are aligned with the 2050 Playbook strategic direction, were developed by the ARAC and are outlined in the Annual Attainment Report on Transportation System Performance (Appendix A). We are grateful for all of the time and energy that the [ARAC members](#) put into developing thoughtful performance measures.

[The Attainment Report](#) provides information about the federal targets and identifies how this plan will help achieve those goals. The Attainment Report will be used to track progress toward the 2050 Playbook goals and evaluate the success of 2050 MTP implementation. MDOT utilizes these measures to guide investment decisions for the Consolidated Transportation Program and reevaluates performance in each cycle of the MTP development.

System Performance Report

State long-range transportation plans are required to include a System Performance Report (SPR) and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in §450.206(c), including progress achieved by the MPO(s) in meeting the performance targets in comparison with system performance recorded in previous reports." (23 CFR §450.216(f)). Furthermore, 23 CFR §450.206(c)(4) requires integration of transit asset management performance measures and targets as required by Title 49 CFR, Chapter 53, Public Transportation.

Appendix A: System Performance Report, focuses on national performance program measures, reflecting current conditions and targets for the respective performance period.

Conclusion

We continue to make bold calls and make strategic moves by implementing safety improvements, promoting environment stewardship and advancing alternative transportation options. We have taken action and put into play the Red Line study, the Purple Line transitway, and improvements to I-270 to name a few. As revenues grow, we want to implement the game changer projects and advance the policies and programs outlined in the strategies of the MTP in order to achieve effective results throughout the transportation system.

The goals and anticipated results identified in this plan are the long-term visionary outcomes for the future. MDOT will implement the strategies identified in this 2050 Playbook over the next five years in order to:

- » enhance the safety and security of transportation system users,
- » deliver a reliable and high-quality multimodal transportation system,
- » serve our diverse communities and businesses with expanded and improved transportation options, and
- » mitigate the environmental impacts of transportation across the State.

MDOT will continue to adjust its project selection and programming through development of the Consolidated Transportation Plan utilizing the data and measures tracked through the Annual Attainment Report to inform agency decision making.

Appendices

The Appendix includes technical memos and reports that provide further detail on the trends analysis, plan development process, and performance measures.

- » Appendix A: System Performance Report
- » Appendix B: Attainment Report
- » Appendix C: Conditions, Trends, and Challenges Technical Memo
- » Appendix D: Engagement Technical Memo
- » Appendix E: Strategic Direction Technical Memo

Glossary of terms

Active Transportation: Active Transportation is using human-powered means of travel, which includes walking and bicycling with or without the use of mobility aids and may also include using other human-scaled or micro-mobility devices that may be electric-powered or electric-assisted, such as e-bikes and e-scooters.

Alternative Fuel Corridor: As designated by the FHWA, alternative fuel corridors support the installation of EV charging, hydrogen, propane, and natural gas fueling infrastructure at strategic locations along major national highways.

Annual Attainment Report on Transportation System Performance (AR): Pursuant to Transportation Article Section 2-103.1 of the Annotated Code of Maryland, the State is required to develop or update an annual performance report on the attainment of transportation goals and benchmarks in the MTP and Consolidated Transportation Program (CTP). The Attainment Report must be presented annually to the Governor and General Assembly before they may consider the MTP and CTP.

Attainment Report Advisory Committee (ARAC): Pursuant to Transportation Article 2-103.1(j), the ARAC is convened each time MDOT develops a new long-range transportation plan. The ARAC serves as an advisory group with a focus on reviewing the plan goals, benchmarks, and indicators in order to advise MDOT on the selection of appropriate performance measures and targets.

Automated Vehicles (AV): AV have numerous driving automation features, these features allow the vehicle to operate at different levels of automation depending upon the feature(s) that are in place.

Climate Solutions Now Act (CSNA): The CSNA was passed into law in 2022 and provides Maryland emissions reduction targets. The 2031 target is to reduce emissions by 60 percent and "net zero" by 2045.

Commuter Choice Maryland: An incentive program designed primarily to encourage Maryland employees to consider switching to alternative transportation choices, like transit, vanpool/ carpool, telework, or alternative work hours. www.commuterchoicemaryland.com

Coordinated Highways Action Response Team (CHART): CHART is an incident management system aimed at improving real-time travel conditions on Maryland's highway system. CHART is a joint effort of MDOT SHA, MDTA, and the Maryland State Police (MSP), in cooperation with other federal, State, and local agencies.

Consolidated Transportation Program (CTP): A six-year program of capital projects, which is updated annually to add new projects and reflect changes in financial commitments.

COVID-19 Pandemic: On March 5, 2020, a "Declaration of State of Emergency and Existence of Catastrophic Health Emergency – COVID-19" proclamation was issued in Maryland due to the outbreak of disease (COVID-19) caused by the novel coronavirus that occurred in Hubei province, China, in late 2019. There were subsequent orders from the Maryland Governor related to the ongoing pandemic, implementing closures of services and stay at home restrictions in an effort to slow/stop spread of the virus. As of 2021-07-01, all COVID-19 related orders by the Maryland Governor had been lifted. The Center for Disease Control (CDC) and Maryland Department of Health (MDH) continue to monitor the spread of the original virus and variants thereof to issue guidance in the ongoing pandemic.

Electric Vehicle (EV): Cars that are capable of traveling only on electric power supplied by a battery. There are two main types of EV currently on the market: Battery Electric Vehicles (BEV), powered solely by electricity stored in a battery pack in the car and Plug-in Hybrid Electric Vehicles (PHEV), vehicles where the battery pack lets them travel several miles on electricity before a range-extending gasoline engine takes over.

Equity: The 2050 MTP uses the Climate and Economic Justice Screening Tool's definition of equity. Communities are considered disadvantaged if they are in census tracts that meet the thresholds for at least one of the tool's categories of burden (climate change, energy, health, housing, legacy population, transportation, water/wastewater, and workforce development) or if they are on land within the boundaries of Federally Recognized Tribes.

Federally Recognized Tribe: As defined by the U.S. Bureau of Indian Affairs (BIA), a federally recognized tribe is an American Indian or Alaska Native tribal entity that is recognized as having a government-to-government relationship with the United States, with the responsibilities, powers, limitations, and obligations attached to that designation, and is eligible for funding and services from the BIA.

Fiscal Year (FY)/ Federal Fiscal Year (FFY): A yearly accounting period covering the period between July 1 and June 30 of each reporting year (FFY: October 1 to September 30).

Greenhouse Gas (GHG): Any of various gaseous compounds (such as carbon dioxide or methane) that absorb infrared radiation, trap heat in the atmosphere, and contribute to the greenhouse effect. The transportation sector is one of the largest contributors to U.S. GHG emissions.

Locally Operated Transit Systems (LOTS): Transit systems that provide primarily bus service and demand response within the local areas in which they operate. They are funded through a combination of federal, State, and local money. MDOT provides financial, technical, and operating support for these services.

Infrastructure Investment and Jobs Act (IIJA): The IIJA (also known as the Bipartisan Infrastructure Law, or BIL) was signed into law by President Biden on November 15, 2021, authorizing \$1.2 trillion for transportation and infrastructure spending with \$550 billion of that total going toward “new” investments and programs.

Maryland Commission on Transportation Revenue and Infrastructure Needs: Maryland, as directed by the General Assembly, Provisions of Chapter 455, Acts of 2023, has established the Maryland Commission on Transportation Revenue and Infrastructure Needs (the Commission) to review and make recommendations to improve existing transportation revenues, investment decisions, MDOT operations, among others. The 31 members are required to submit an interim report due to the Governor and legislature by January 1, 2024, and a final report by January 1, 2025. To learn more about the Commission, visit <https://www.mdot.maryland.gov/tso/Pages/Index.aspx?PagelId=205>

Metropolitan Planning Organizations (MPOs): An MPO is the policy board of an organization created and designated to carry out the metropolitan transportation planning process. MPOs are required to represent localities in all urbanized areas (UZAs) with populations over 50,000, as determined by the U.S. Census. MPOs are designated by agreement between the governor and local governments that together represent at least 75 percent of the affected population (including the largest incorporated city, based on population) or in accordance with procedures established by applicable State or local law.

Shared Mobility: Shared mobility refers to a transportation strategy by which users can access various types of services or products, including bicycles, scooters, or ride-sharing on-demand. These offerings provide flexibility in transportation choice.

State Report on Transportation (SRT): The SRT is prepared annually and distributed to the General Assembly, local elected officials, and interested citizens. It consists of two documents, the MTP and the CTP.

Strategic Highway Safety Plan (SHSP): A SHSP is a federally required statewide-coordinated safety plan that provides a framework for reducing highway fatalities and serious injuries on roadways.

Transit-Oriented Development (TOD): In 2008, the legislature adopted a definition of TOD. As defined in statute, a TOD is: “a dense, mixed-use deliberately planned development within a half-mile of transit stations that is designed to increase transit ridership.”

Travel Demand Management (TDM): TDM strategies support the use of alternatives to the traditional single-occupant vehicle through a variety of programs and incentives (e.g., carpooling, car sharing, transit, Park-and-Ride facilities, teleworking, and flexible work hours).

Vehicle Miles Traveled (VMT): A measurement of the total miles traveled by all vehicles.

Zero Emissions Electric Vehicle Infrastructure Council (ZEEVIC): ZEEVIC was established by State legislation in 2011 (and expanded in 2019 to include zero emission vehicles). ZEEVIC is charged with development of policies, recommendations, and incentives that increase awareness, support ownership, and promote investment by the private sector of and in ZEVs. ZEEVIC also develops recommendations for a statewide EV charting and hydrogen refueling infrastructure plan and other potential policies to promote and facilitate successful integration of ZEVs into Maryland's transportation network.

Zero Emissions Vehicle (ZEV): A ZEV is a vehicle that does not emit harmful emissions from the engine. ZEVs include, but are not limited to, BEVs which are 100% zero emissions, PHEVs, and hydrogen fuel cell electric vehicles (FCEVs).

THE 2050 MARYLAND TRANSPORTATION PLAN (MTP)

The MTP informs, and is informed by, various multimodal plans and reports across MOOT, which is the MDOT "Family of Plans." The list below includes some, but not all plans and reports, that are part of the MTP development.



MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND AVIATION ADMINISTRATION



- MDOT MAA Strategic Plan



Maryland Transportation Authority



- Strategic Plan



MARYLAND DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY ADMINISTRATION



- Transportation Asset Management Plan
- Transportation Systems Management and Operations (TSMO) Strategic Plan
- Pedestrian Safety Plan



MARYLAND DEPARTMENT OF TRANSPORTATION

MOTOR VEHICLE ADMINISTRATION



- MDOT MVA Strategic Plan
- Maryland Strategic Highway Safety Plan
- Maryland Connected and Automated Vehicle Strategic Framework



MARYLAND DEPARTMENT OF TRANSPORTATION



- Maryland Consolidated Transportation Program
- Maryland's Annual Attainment Report on Transportation System Performance
- State Freight Plan
- Maryland State Rail Plan
- Maryland Strategic Asset Management Plan
- Maryland Bicycle and Pedestrian Master Plan
- Carbon Reduction Strategy
- MDOT PROTECT PLAN under development (2023)



MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION



- Maryland Statewide Transit Plan
- Central Maryland Regional Transit Plan
- MDOT MTA Draft Transit Plan (2022)
- MDOT MTA Strategic Plan (2020)



- WMATA Strategic Transformation Plan (2023)



MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND PORT ADMINISTRATION



- MDOT MPA Strategic Plan

[60]

Submit your comments here: <https://arccg.is/119TfL>

Or e-mail us at MDOTMTP@dot.maryland.gov

September Draft 2023

Not all plans represented

THE PLAYBOOK

Bold Calls. Strategic Moves. Effective Results.



7201 Corporate Center Drive
Hanover, MD 21076

Wes Moore
Governor

Aruna Miller
Lt Governor

Paul J. Wiedefeld
Secretary

Submit your comments here: <https://arcg.is/119TfL>

Or e-mail us at MDOTMTP@mdot.maryland.gov

September Draft 2023

