



Our Vision

A customer-driven leader working to provide safe, efficient, and innovative transportation solutions that meet or exceed customer expectations.



Our Purpose

Implement a sustainable, organization-wide TSMO Program at MDOT SHA that fully maximizes the ability of Maryland's transportation system to consistently move people and goods.

GOAL 1

Business Processes & Collaboration

- Objective 1.1**
Incorporate TSMO in MDOT SHA policies, programs and standard practices
- Objective 1.2**
Implement and institutionalize a TSMO Master Plan within and outside MDOT SHA at all levels
- Objective 1.3**
Promote a culture to mainstream TSMO within and outside MDOT SHA at all levels

- Strategy 1.1a**
Develop TSMO policy and procedures to establish organizational structure and institutional framework
- Strategy 1.1b**
Align TSMO strategies to existing business processes/ practices at all MDOT SHA Offices/ Districts and program areas
- Strategy 1.1c**
Include TSMO projects/ strategies in the traditional planning, project development and programming process
- Strategy 1.1d**
Develop project development protocols/ processes for various types of TSMO strategies/ projects
- Strategy 1.2a**
Develop and maintain a consolidated list of potential TSMO strategies/ projects with inputs from CHART, OPPE, OOTS, OHD and Districts
- Strategy 1.2b**
Develop and implement business processes and technologies to maintain and mainstream the TSMO Master plan
- Strategy 1.2c**
Develop a business case to secure dedicated funding to implement TSMO strategies/ projects
- Strategy 1.2d**
Leverage other program scopes and funding opportunities to implement TSMO strategies/ projects
- Strategy 1.3a**
Identify staffing resources for various MDOT Offices and Districts to support the TSMO Program
- Strategy 1.3b**
Develop relevant TSMO education and training resources for MDOT Offices and District staff at all levels of organization
- Strategy 1.3c**
Develop TSMO education, communication and outreach resources to raise TSMO awareness with MDOT TBUs, MPOs, FHWA, local agencies, other partners and stakeholders
- Strategy 1.3d**
Continue participation in research and collaboration efforts to advance TSMO practices through TRB, FHWA, AASHTO, ITS America, University Research Centers etc

GOAL 2

Systems & Technology

- Objective 2.1**
Develop and implement Advanced Traffic Management Systems (ATMS) with Active Traffic Management (ATM) capabilities
- Objective 2.2**
Develop Integrated Corridor Management (ICM) capabilities for multimodal passenger and freight movement
- Objective 2.3**
Develop and apply technological foundations for Connected and Automated Vehicles (CAV)

- Strategy 2.1a**
Launch the first set of TSMO Active Traffic Management (ATM) capabilities as part of the I-270 Innovative Congestion Management Project
- Strategy 2.1b**
Complete an assessment of MDOT and MDOT SHA communications assets and incorporate enhancements into future projects
- Strategy 2.1c**
Implement integrated traffic management projects including Traffic Relief Program (TRP) projects like I-695 TSMO and Smart Signals projects
- Strategy 2.1d**
Develop Asset Management Systems for ITS devices and TSMO infrastructure
- Strategy 2.2a**
Use the existing I-95 ICM Concept of Operations to identify opportunities for freeway and arterial management integrated operations
- Strategy 2.2b**
Bring operations data regarding various transportation modes into a single platform in order to develop a Common Operating Picture (COP)
- Strategy 2.2c**
Identify opportunities to improve coordinated transportation management including highway, transit, and freight operations
- Strategy 2.2d**
Implement a Decision Support System that incorporates real-time data from existing systems and develops appropriate response strategies
- Strategy 2.3a**
Align and coordinate TSMO Planning efforts with the MDOT SHA CAV Strategic Action Plan implementation
- Strategy 2.3b**
Implement CAV technology deployment pilots on MDOT transportation infrastructure and develop a Maryland owned traffic management and CAV testing facility
- Strategy 2.3c**
Collaborate with private sector and research community for CAV testing on MDOT infrastructure (roadways and facilities)

GOAL 3

Data, Analysis & Performance Management

- Objective 3.1**
Implement a comprehensive data driven performance management program to support TSMO
- Objective 3.2**
Advance data governance, analysis and modeling capabilities to inform planning, operational and TSMO decisions

- Strategy 3.1a**
Monitor corridor and system level performance of Maryland highways and arterials from a mobility, reliability and access standpoint
- Strategy 3.1b**
Advance communication and visualization tools to assess performance, progress, benefits and challenges
- Strategy 3.1c**
Monitor work zone performance measures at a project, corridor and system level to improve work zone management
- Strategy 3.1d**
Develop next generation customer facing performance measures using big data innovations and advanced technologies
- Strategy 3.2a**
Formalize a data governance plan that supports the MDOT SHA Program
- Strategy 3.2b**
Advance data analysis, methods and application tools to support TSMO decision-making at strategic, tactical and operational levels
- Strategy 3.2c**
Advance travel and traffic modeling applications to support multi-modal passenger and freight related TSMO strategies and projects
- Strategy 3.2d**
Develop and mainstream methods and tools that incorporate travel time reliability, accessibility, life-cycle planning and project development/ prioritization

List of Acronyms

- AASHTO:** American Association of State Highway and Transportation Officials
- ATM:** Active Traffic Management
- ATMS:** Advanced Traffic Management System
- CAV:** Connected and Automated Vehicle
- CHART:** Coordinated Highways Action Response Team
- FHWA:** Federal Highway Administration
- ICM:** Integrated Corridor Management

GOAL 4

Customer Experience & Engagement

- Objective 4.1**
Provide reliable and accessible real-time modal choice information to our customers
- Objective 4.2**
Raise awareness of TSMO and its general understanding by the traveling public

- Strategy 4.1a**
Continue to improve CHART's capabilities for providing traffic information to regional integrated transportation data collection and distribution systems
- Strategy 4.1b**
Launch a One-MDOT traveler information application in partnership with other MDOT TBUs
- Strategy 4.1c**
Work in partnership with private-sector information providers, to share data on real-time operational conditions on the transportation network
- Strategy 4.1d**
Collaborate with other modes, MPOs, local agencies, major employers and businesses for active travel demand management including incentivization of travel choices and Mobility on Demand services
- Strategy 4.2a**
Develop education and outreach tools, including use of public-facing websites, social media applications etc.
- Strategy 4.2b**
Conduct market research to determine customer level of satisfaction with MDOT SHA TSMO Program implementation
- Strategy 4.2c**
Develop user groups, focus groups and charettes to foster continued engagement with customers on various TSMO focus areas
- Strategy 4.2d**
Develop tools and interfaces to seek customer perspectives and inputs

- ITS:** Intelligent Transportation Systems
- MDOT SHA:** Maryland Department of Transportation State Highway Administration
- MDOT TBU:** Maryland Department of Transportation Business Unit
- MPO:** Metropolitan Planning Organization
- OHD:** Office of Highway Development
- OOTS:** Office of Traffic and Safety
- OPPE:** Office of Planning and Preliminary Engineering