

Draft Freight Plan Coordination and Update

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Freight Plan Overview

PURPOSE

To examine existing and projected conditions, build consensus, and identify policy positions, strategies, and freight projects to <u>improve freight movement</u> <u>efficiency and safety</u>

VISION

Freight travels <u>freely</u> and <u>safely</u> through a <u>modern</u>, <u>resilient</u>, and <u>interconnected multimodal</u> network contributing to sustainable <u>economic viability</u> and <u>growth</u> for Maryland businesses and communities.



The Infrastructure Investment and Jobs Act (IIJA) identifies 17 federally required elements for a state freight plan, including 7 new elements (compared to FAST Act) related to: <u>truck parking</u>, <u>supply chains</u>, <u>ports</u>, <u>multi-state</u> <u>compacts</u>, <u>e-commerce</u>, <u>military freight</u>, and <u>resilience and environmental impacts</u>.

Freight Plan Overview

Freight Background

1. Introduction

- Purpose, Vision, and Context
- Recent Freight Actions and Resources
- Stakeholders and Partnerships

2. Strategic Goals and Objectives

- Overview and Alignment with 2040 MTP
- Federal/State Requirements
- Initial Outreach Perspectives

3. Freight Demand and the Economy

- Commodity Flows
- Freight Economic Influences
- Freight Industry Sector Profiles

4. Freight Network and Infrastructure

- Road, Rail, Port/Waterway, and Air
- Energy Infrastructure
- Multimodal Freight Network

Freight Focus Areas

5. Freight Performance, Trends, Needs

- Freight Performance Measures (by goal)
- Agency and Stakeholder Perspectives
- Freight Needs (regional and statewide)

6. Freight Focus Areas and Programs

- Aligned with Federal Requirements
- Aligned with State Freight Needs and Interests

Freight Implementation Plan

- 7. Freight Projects and Investment Plan
 - Freight Project Candidates
 - Funding Opportunities
 - Freight Investment Plan
- 8. Freight Plan Implementation
 - Freight Strategies
 - Implementation Tactics and Next Step Priorities

Outreach Highlights

> 20 coordination meetings, 3 major milestone surveys, as well as monthly Core Team meetings

Calendar Year 2021	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
MDOT Freight Plan Core Team (CT)		СТ	СТ	СТ	СТ	-	СТ	СТ	СТ	СТ	СТ	СТ
MDOT TBUs Freight Roundtable (TBUs)	-	TBUs	-	-	-	TBUs	-	-	-	-	-	-
State Freight Advisory Committee (SFAC)	-	-	SFAC	-	-	-	-	-	SFAC	-	-	-
Maryland MPO Roundtable (MPO)	MPO	-	-	-	-	-	-	-	-	-	-	-
Other MPO/Agency/Stakeholder Outreach	FHWA	-	Balt.	-	-	-	-	-	-	Mont.	-	-
Milestone Surveys (MS)	-	-	-	MS1 Survey		-	-	-	-	-	-	-
Calendar Year 2022	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
MDOT Freight Plan Core Team (CT)	СТ	СТ	СТ	СТ	СТ	СТ	СТ	СТ	СТ	СТ	СТ	СТ
MDOT TBUs Freight Roundtable (TBUs)	-	-	-	-	TBUs	-	-	TBUs	-	-	-	-
State Freight Advisory Committee (SFAC)	-	-	-	SFAC	-	-	-	-	-	SFAC	-	-
Maryland MPO Roundtable (MPO)	-	-	MPO	-	-	МРО	-	-	МРО	-	-	-
Other MPO/Agency/Stakeholder Outreach	-	**	BRTB	-	-	-	-	FHWA	-	FHWA	-	MDOT
Milestone Surveys (MS)	MS2 Survey		-	-	-	-	MS3	Survey	-	-	-	-

** discussion with various MDOT sub-groups (MCD, CAV, Rail), as well as a dedicated survey effort for adjoining state DOTs (DE, VA, PA, WV, DC)

→ Future meetings and Milestone 3 formal draft plan reviews...

Outreach Highlights

STATE FREIGHT ADVISORY COMMITTEE (SFAC) SFAC Goal

Represent the freight community at-large and advise the state on freight-related priorities, policies, issues, projects, and funding needs in order to advance freight goals and objectives in Maryland.

SFAC Objectives

- Support state freight plan update ۰
- Provide feedback on freight project prioritization ۰
- Provide guidance on freight program activities ۲
- Communicate freight experience and bottlenecks ۰
- Advise on next generation supply chain operations and • how the state can support industry
- React to freight performance and advise on solutions to address bottlenecks

SFAC Meeting Summaries: see www.mdot.Maryland.gov/SFAC

SFAC Date **SFAC Discussion Topics**

03/03/2021	 COVID Supply Chains Freight Plan Update, Rail Plan, Truck Parking MD Motor Truck Association Canton Railroad Consumer Brands Association
09/01/2021	 PDD's, CAV's, TETC, Freight Technologies FHWA Freight Data Freight Plan Update, Primary Highway Freight System Freight Workforce and Education Howard Street Tunnel, Seagirt Marine Terminal
04/06/2022	 Efficient Freight Land Uses Freight Workforce Development Transportation Bill (IIJA) Updates Freight Plan Update, Rail Plan

10/05/2022 TBD ٠

Outreach Highlights

Freight needs and focus areas were informed by:

- Stakeholder Outreach
- Background Research
- **Existing Plans/Programs** •
- Performance Data
- Federal Requirements

Regional Needs Maps

Details will be included with Section 5 of the Freight Plan based on truck parking needs, congested routes/areas, truck *bottlenecks, and related content* shared during Milestone <u>#2.</u>

SAFETY, SECURITY, AND RESILIENCE Fatality reduction Injury reduction Incident management Rail crossing safety Truck parking capacity Facility security Cargo security Cyber security Freight system resilience

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SYSTEM PRESERVATION AND MODERNIZATION

- CAV technology
- OS/OW vehicles
- Truck platooning
- State of good repair
- Traffic signal systems
- UAV technology
- PDD technology

ECONOMIC OPPORTUNITY AND EFFICIENCY

- Public-private collaboration
- Multimodal system capacity
- Workforce development
- Congestion and bottleneck reduction
- Supply chain resilience
- Opportunity marketing

QUALITY OF SERVICE. EFFICIENCY. AND CUSTOMER

- Policy coordination
- Program coordination
- Truck route guidance
- Truck parking information
- Real-time information
- System reliability



TRANSPORTATION CHOICES AND CONNECTIONS

- Multimodal accessibility
- Multimodal connectivity
- Urban loading and delivery
- Land use planning
- Technology integration
- Outreach and education

- EXPERIENCE



FISCAL RESPONSIBILITY

ENVIRONMENTAL PROTECTION

AND SENSITIVITY

Dredged material management

Electric vehicle infrastructure

Community engagement

Energy efficiency

Emissions reduction

Quality of life

- Alternative project delivery
- Data driven planning
- Public-private collaboration
- Funding opportunities Innovative programs

O&M cost reduction

S

1. Safety/Security

- Truck crashes
- Highway-rail crossings
- Hazardous materials
- Cybersecurity

2. Technology & Operations

- TSMO, CHART, ITS
- Permitting & monitoring
- CAV, ADAS, truck platooning
- PDD, UAV, modeling/analytics

3. Asset Management

- Bridge conditions
- Pavement conditions
- Dredging
- Incident management







Platooning Vehicle
Maryland

CALENDAR YEAR	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Number of MDTA Bridges in Poor Condition	4	1	1	1	1	1	1	1	1	0
Number of MDOT Sha Bridges in Poor Condition	97	87	81	69	69	67	62	52	36	29
Total Number of Bridges in Poor Condition	101	88	82	70	70	68	63	53	37	29
Percent of Bridges in Poor Conditions	3.5%	3.0%	2.8%	2.4%	2.4%	2.4%	2.2%	1.8%	1.3%	1.0%





4. Congestion

- Truck volumes
- Truck bottlenecks
- Truck reliability
- Multimodal reliability

5. Truck Parking

- Designated truck parking
- Undesignated truck parking
- Challenges and opportunities

MARYLAND STATEWIDE

MOT

Employment by County (Agriculture

277 - 399

800 - 1199

1200 - 1599

1600 - 1774

REPORT

6. Supply Chains

- Cargo flows and key industries
- Multimodal opportunities
- Freight land use
- Freight workforce



7. Ports

- Port infrastructure
- Port access & mobility
- M-95 marine highway
- Inland waterways

8. Multistate Coordination

- Multistate coalitions
- Multistate MPO coordination
- Adjoining state perspectives

9. E-Commerce

- Trade, transportation, & warehousing
- Local planning & zoning
- Local consolidation centers
- Local curb management











Appalachian Regional Commission





10. Military Freight

- Maryland military installations
- Strategic defense networks
- Freight project/program influences

11. Resilience & Environmental

- Climate change vulnerabilities
- Emergency freight access
- Alternative & efficient energy
- Community considerations



Implementation Plan



Freight Projects

- TSMO Strategies
- Major Capital Improvements

Freight Strategies

- Statewide Freight Modeling Capabilities
- Innovative Performance Management
- Real-time Truck Parking Information
- Freight Data Exchange
- Freight EV Considerations
- Freight CAV
- Virtual Weigh Station
- Inspection Equipment Upgrades
- Truck Parking Upgrades

Next Step Priorities

- Expanded CUFC/ CRFC
- Truck Platooning and PDD
- Prioritize other funding opportunities
- Continued stakeholder engagement

Implementation Plan

Formula Funding Opportunities:

- National Highway Freight Program (NHFP)
- Airport Infrastructure Grant Program
- National Highway Performance Program (NHPP)
- Surface Transportation Block Grant Programs
- Highway Safety Improvement Program (HSIP)
- Congestion Mitigation and Air Quality Management program (CMAQ)
- National Electric Vehicle Infrastructure Program (NEVI)
- Railway-Highway Crossing Program

Discretionary Grant Programs:

- Nationally Significant Freight and Highway Projects Grant Program / Infrastructure for Rebuilding America (INFRA)
- National Infrastructure Project Assistance (NIPA) / (Mega projects)
- Reduction of Truck Emissions at Port Facilities Program
- Consolidated Rail Infrastructure and Safety Improvements (CRISI)
- Rural Surface Transportation Grant Program
- Rebuilding American Infrastructure with Sustainability & Equity (RAISE) / Local and Regional Project Assistance Program
- Railroad Crossing Elimination Grant program
- Port Infrastructure Development Program
- Motor Carrier Safety Assistance Program
- Bureau of Transportation Statistics (grants, cooperative agreements, and other contracts)



Plan Completion Schedule





- 1. Are there other **freight focus areas** relevant to ongoing freight needs and programs in Maryland?
- 2. Are there other **implementation priorities** relevant to continuing Maryland freight planning and coordination?

For more information, please contact us at the following:

Project Website: <u>https://mdot.maryland.gov/freightplan</u>

Project Email: <u>MDStateFreightPlan@mdot.maryland.gov</u>



Thank You!

