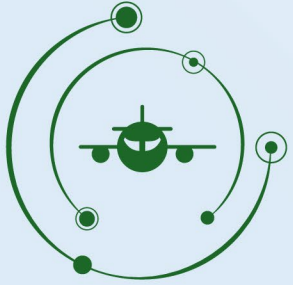


2023 Massachusetts State Freight Plan

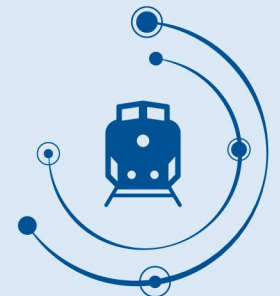
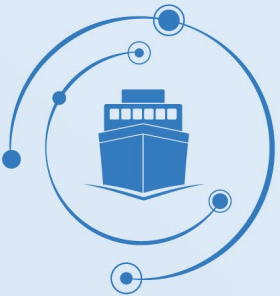


Freight Advisory Committee #2

presented to
Freight Advisory Committee Members

presented by
Cambridge Systematics, Inc.
City Point Partners
Toole Design

February 23, 2023



Zoom Webinar Controls for Meeting



- Ask a question and share comments



- Drop down menu to check microphone and speakers



- Raise your hand - *9 for users dialing in and Alt + Y to raise your hand



- If you are unable to access the internet or are having technical problems, please call into the meeting at 646-931-3860, Webinar ID: 841 5835 5806



- Closed captioning automatically generated by Zoom



If you have trouble with the meeting technology during the presentation, please call:

866-799-9666

Audio Settings ^



Raise Hand



Q&A



Interpretation



Live Transcript

Leave

Public Meeting Notes and Procedures

Notification of Recording

- This virtual public meeting will be recorded. The Massachusetts Department of Transportation may choose to retain and distribute the video, still images, audio, and/or transcript. All parts of this meeting are considered public record.
- By continuing attendance with this virtual public meeting, you consent to participate in a recorded event.
- If you are not comfortable being recorded, please turn off your camera, and keep your microphone muted, or you may choose to excuse yourself from the meeting.
- **Other Important Notes**
- Your microphone and webcam are automatically disabled upon entering this meeting.
- The meeting will be open to questions and answers at the end of the formal presentation.

Notice of MassDOT's policy on Diversity and Civil Rights

- All MassDOT activities, including public meetings, are free of discrimination.
- MassDOT complies with all federal and state civil rights requirements preventing discrimination based on sex, race, color, ancestry, national origin (limited English proficiency), religion, creed, gender, sexual orientation, gender identity or expression, or veteran's status.
- We welcome the diversity from across our entire service area. If you have any questions or concerns, please visit <https://www.mass.gov/nondiscrimination-in-transportation-program> to reach the Office of Diversity and Civil Rights.

Thank you for joining our meeting. We appreciate your participation!

Agenda

- **Welcome**
- ***Beyond Mobility* Statewide Long Range Transportation Plan**
- **Recap of FAC Meeting #1**
- **Scenario Planning: Futures for Freight in Massachusetts**
- **Recommendations Framework & Discussion**
- **Freight Performance Measures**
- **Next Steps**

About Beyond Mobility

<https://beyond-mobility-massdot.hub.arcgis.com/>

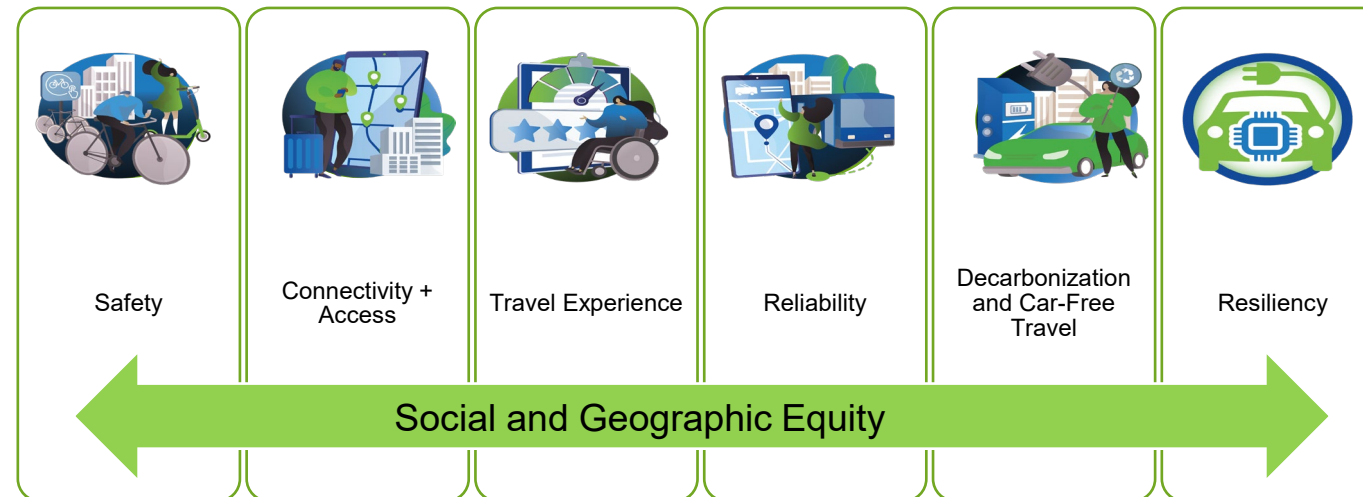


What is Beyond Mobility?

- Beyond Mobility is MassDOT's 2050 Statewide Long Range Transportation Plan. The Plan will document the most pressing transportation priorities for Massachusetts to address between now and 2050, organized by priority areas.
- Watch the short video at [this link](#) and view the [plan website](#) to learn more about it.

Areas We Would Like the Freight Community's Input On

- MassDOT has established six priority areas (included in the graphic below) and is currently soliciting stakeholder input on these. Each priority area will include a vision statement, values statements, goals, problem statements, metrics, and actions.
- Priority areas will also have sections on each mode. For example, we need to make sure that when we discuss issues like safety, reliability, and decarbonization, we are including the important perspective of **freight** in addition to other modes.
- To ensure the Freight Advisory Committee's perspective is captured, please use our [comment form](#) to provide input on these areas or any other input you'd like to share.



Recap of FAC Meeting #1

Recap of FAC Meeting #1

Discussed role of the FAC, background on 2017 Freight Plan, and key findings from COVID-19 Freight Study

Discussed federal requirements for state freight plans and goals of the 2023 Freight Plan

Presented proposed vision and goals for 2023 Freight Plan for FAC member feedback

Q&A covered freight rail, new federal formula funding programs, targeted outreach, and truck parking

Scenario Planning: Futures for Freight in Massachusetts

Instructions for Using Menti

Go to

www.menti.com

Enter the code

6861 8689



Or use QR code

Scenario Planning

- Brings awareness of **uncertainty** and **risk** into decision-making
- 2023 Freight Plan ensures continuity with scenario planning results from *Beyond Mobility* and findings of the COVID-19 Freight Study

TRENDS MAY



ACCELERATE



MAINTAIN



**PLATEAU/
REVERSE**

What will impact the way people and goods move in the future?

Climate Change:

Massachusetts will experience more extreme weather, including heat, rain, and flooding.

Technology:

Automation, e-commerce, and renewable energy will change how we travel, buy, and live.

Freight-specific considerations include...

- Damage to freight system facilities & infrastructure
- Threats to the well-being of freight workforce
- Limitations on future development
- Changing supply & demand patterns
- Increased vehicle miles traveled results in more congestion and wear and tear on roadway infrastructure
- New vehicle types have different energy usage, size & weight, safety considerations, and costs
- New technology offerings could result in unintended outcomes

People & Places:

How Massachusetts communities develop will depend on where residents live and work.

Prosperity:

The growth or decline of Massachusetts' knowledge economy will influence the racial wealth gap and innovation.

Freight-specific considerations include...

- Increased freight and residential land use conflicts
- Present and growing need to reduce size of delivery vehicles and centralize distribution
- Continued expectation of same-day or next-day e-commerce delivery
- Impacts are not uniform across industries
- Unpredictable product shortages and freight transportation services hurt businesses & workers
- Slow wage growth continues to burden freight-intensive workers

Future of Work:

Flexible schedules and remote work will change how, when, and where we work, but benefits are not distributed equally across industries.

Freight-specific considerations include...

- **Continued labor shortages in freight-intensive sectors**
- **Need to broaden labor pool recruitment**
- **Unresolved barriers to job access – including childcare, affordable housing, transportation, and workforce readiness**



Scenarios

Hybrid and Diverse | Increased automation, telework, and flexible scheduling transform work in Massachusetts. At the same time, we see more international in-migration and domestic out-migration due to rapid technological innovation and climate change.

Ahead as Before | A strong knowledge economy is challenged by high cost-of-living and a racial wealth and income gap in the Boston Area, while new opportunities arise in manufacturing and energy in other regions of Massachusetts.

Close and Connected | Employment largely resumes in-person. Substantial growth in manufacturing – spurred in part by 3D printing and micromanufacture – and a weakening information sector spread housing demand more evenly in a divided economy.

Hybrid and Diverse: Freight Angle

- Shifting industry and commerce may both relieve and complicate freight movement and access to freight-intensive jobs
- More capacity is available for freight on roads near greater Boston seaports/airports, but hubs are not equally accessible by highway or rail
- Substantial investments in Intelligent Transportation Systems and curb demand management are necessary to manage automated freight movement



FUTURE-OF-WORK



Flexible work schedules

Labor shortage

Telepresence



PEOPLE



Aging population

Household size

Migration to Massachusetts



PLACES



Housing

Workplaces



PROSPERITY

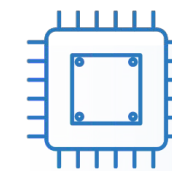


Cost of transportation

Income inequality

Knowledge economy

Racial wealth gap



TECHNOLOGY



Automation

Distributed logistics and manufacturing

Electricity and alternative energy

New mobility



What are some other freight-related impacts that you envision in the *Hybrid and Diverse* scenario?

Residents will do more errands in personal vehicles at times of the day outside rush hour, which may influence how freight moves over shared roads.

Many communities may not be prepared for potential new distribution centers

Despite the change in the workplace the need to continue to focus on freight mobility is more important than ever. We have to start by reducing bottleneck locations.

Competition between delivery zones and short-term parking for pick up will increase

Safety-related issues with hazardous cargo like vinyl chloride, especially in light of the catastrophic derailment at East Palestine, Ohio, and the resulting fire.

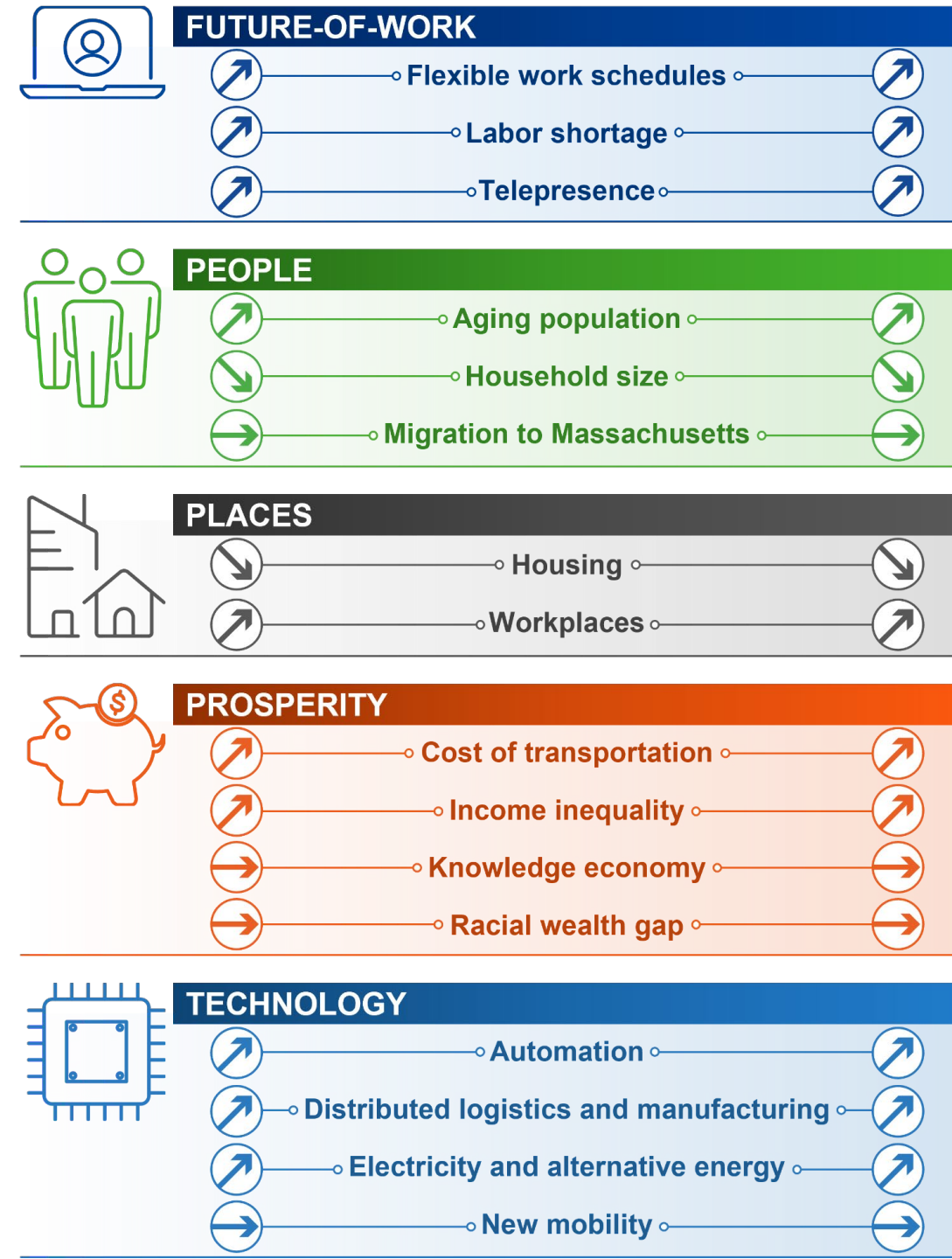
Curb space management, for all types of users including the increasing share of expedited delivery, is a thorny puzzle. Delivery vehicles making quick stops block bike lanes, handicapped parking, etc

In addition to the need for parking there is the need for proper amenities for these parking areas - power, safety, lighting

lack of proper loading/unloading areas in urban areas

Ahead as Before: Freight Angle

- Unique biotechnology freight needs become more prominent, such as large-scale manufacturing facilities for RNA vaccines
- Needs increase for truck parking, freight workforce development, driver assistance and automation, asset management, and congestion/bottleneck improvement



What are some other freight-related impacts that you envision in the *Ahead as Before* scenario?

Will there be a stronger need for cold warehousing?

Bottlenecks will get worse on major arterials as development along these arterials in suburbs continues.

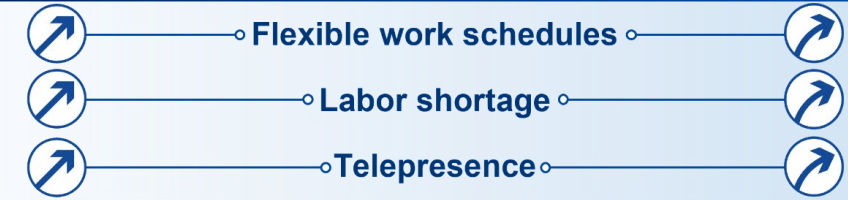
Not sure where this fits in your scenarios but one of the biggest changes will be reduction in petroleum shipments as we transition to carbon free energy

Close and Connected: Freight Angle

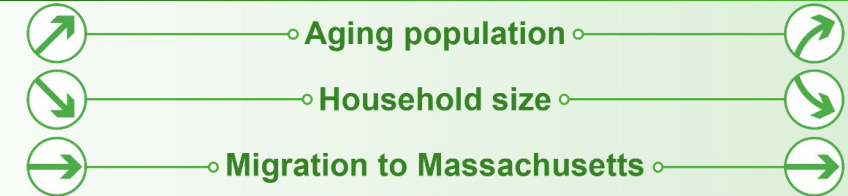
- The concentration of residential and business activities in greater Boston strains the current freight system, last-mile deliveries, and curb management. Congestion threatens to choke off critical freight nodes
- The freight workforce becomes a critical concern as jobs are not automated and demand for long-haul trucking demand increases



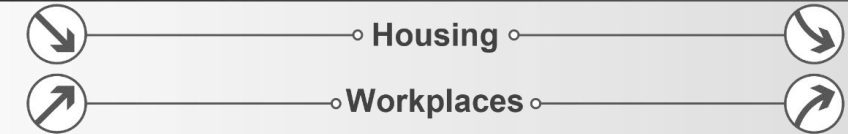
FUTURE-OF-WORK



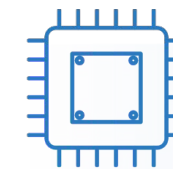
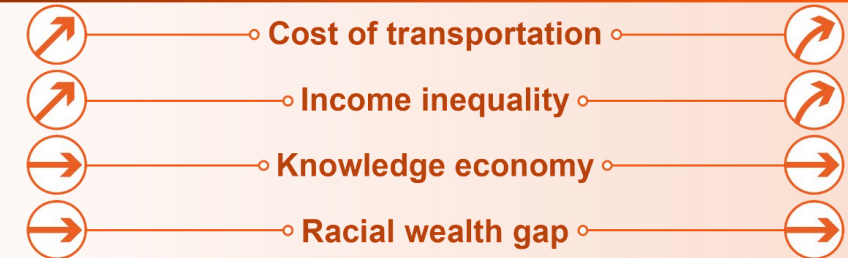
PEOPLE



PLACES



PROSPERITY



TECHNOLOGY



What are some other freight-related impacts that you envision in the *Close and Connected* scenario?

The need to build housing for freight workers near their workplaces.

Traffic will snarl if people don't revert to transit.

Continued conflict with other modes - bike, pedals etc and loss of dedicated freight/truck routes.

A type of solution? Multi-Family Zoning Requirement for MBTA Communities <https://www.mass.gov/info-details/multi-family-zoning-requirement-for-mbta-communities>

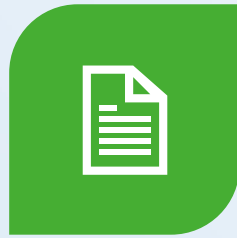
We have 21st century trucks on road networks laid out in the 19th and 20th century. Radii constraints and low bridge constraints remain a problem for truck routes in cities.

Recommendations Framework and Discussion

Sources for Plan Recommendations



Findings from research and technical analysis



MassDOT priorities, as documented in ongoing or recent prior studies, such as the COVID-19 Freight Study



Priorities for other Massachusetts agencies and organizations engaged in freight, including Commonwealth agencies, Massport, RPAs, and municipalities



Industry priorities as gathered through stakeholder interviews and engagement with the Freight Advisory Committee



Best practices from FHWA, other states, municipalities, and academia



Recommendations Framework

- **Immediate Strategies** address a current or near-term need. They are worthwhile ideas today, no matter what the future holds.
- **Robust Strategies** address issues that are expected to arise in the future but should be appropriate no matter what the future holds.
- **Hedging Strategies** might not be needed, but if they are, we need to start implementing them now.
- **Shaping Strategies** allow Massachusetts agencies to influence – and hopefully direct – trends for the future.
- **Deferred Strategies** might not be necessary, and it is safe to wait and see what happens.

Types of Recommendations



Infrastructure improvements – specific freight projects and investments



Operational innovations – planning, engineering, and public works improvements



Policies and people – programming, coordination, initiatives, and policies

What do you think are some *immediate strategies* for freight in Massachusetts?

more long term freight parking areas

Bicycle truck guard requirements

There are important investments that are needed in South Boston related to the MTT and Summer to the Bypass Road

More parking along interstates to get the trucks off the roadside overnight

Financial incentives for companies to ship FTL or use electric vehicles

Greater overall awareness of the importance of freight movements. Prioritize, don't constrain.

Consider the impact of shift to carbon free economy and reduction in petroleum movements

Is there a way to encourage multi-tenant DCs and warehouses, rather than company-specific standalone facilities?

better advance warning systems for low clearance structures

What do you think are some *robust strategies* for freight in Massachusetts?

What are doing to prepare for electrification or other alternative fuels

Understanding opportunities for trucking and transit priority to co-exist

Look to get details about congestion and work zones out to truck drivers so they can plan their route, or change based on what is happening

Make sure MassDOT is familiar with the practical work of NACFE:
<https://nacfe.org/research/electric-trucks/>

Eliminating rail corridors as inundation pathways

more advance warning systems for low clearance structures

What do you think are some *hedging/shaping strategies* for freight in Massachusetts?

Protecting and enhancing the ability to move freight by water

Because new TRUs are hybrid by default, revise state building standards to require that new refrigerated warehouses and retail facilities build in "shore power" at loading docks.

Agree, East-West mobility is a challenge

What do you think are some *deferred strategies* for freight in Massachusetts?

Congestion pricing to discourage optional private vehicle passenger vehicle trips, as opposed to mass transit and freight. Would like it near-term, but should be somewhere on the menu.

Freight Performance Measures

Freight Performance Measures in State Freight Plans



Evaluate the level of accountability, efficiency, and effectiveness of various freight modes



Assist with the prioritization and selection of freight improvement projects and programs



Monitor the performance of the transportation system using timely and reliable data



Help ensure objectives and goals are met



Identify potential freight bottlenecks

2023 Freight Plan Performance Measures

- Measures will be identified under each goal area
- Will incorporate relevant metrics already tracked by MassDOT

System Condition

Support an efficient and reliable supply chain through investments in existing infrastructure and supporting technologies to maintain and preserve the existing system.

Safety and Resiliency

Improve statewide safety by funding projects that reduce injuries and fatalities, reduce vulnerability, and improve the resiliency of the system.

Mobility and Reliability

Invest in the multimodal transportation system to improve mobility, connectivity, accessibility, and reliability for people and goods.

Economic Competitiveness

Support multimodal transportation system connectivity, efficiency, and mobility to support businesses and residents and increase national and regional economic competitiveness.

Equity and Environmental Sustainability

Support initiatives and investments that improve equity across the multimodal system, improve local air quality, and minimize impacts to natural, historic, and cultural resources.

Questions and Answers



- “Raise your hand” to be unmuted for verbal questions (Alt + Y if using a phone)



- Submit your questions and comments using the Q&A button



- Please state your name before your question



- Please share only 1 question or comment at a time, limited to 2 minutes, to allow others to participate



- To ask a question via phone, dial *9 and the moderator will call out the last 4-digits of your phone number and unmute your audio when it is your turn

All questions and comments are subject to disclosure for public records. Please use these functions for project related business only.

Next Steps

Schedule and Key Milestones





Focus Groups



Survey

Focus Groups & Survey

MassDOT is seeking perspectives on how freight moves and how it impacts communities and industries

Special focus on truck drivers, port/warehouse workers, e-commerce/gig delivery workers, small business owners, people living near truck routes, and community advocates for walking, bicycling, and traffic safety

Interested participants may volunteer to join a focus group discussion and/or complete a brief survey:

Focus Groups: <https://www.surveymonkey.com/r/V8Y7GVM>

Survey: <https://www.surveymonkey.com/r/V8JJ9FW>

Next 30 Days



**Draft Recommendations,
Implementation Plan, and
Freight Investment Plan**



**Hold FAC Meeting #3 and Public
Informational Meeting #2**



**Initiate 30-Day Public Review
Period of Draft 2023
Massachusetts Freight Plan**

Thank you!



For more information on the Freight Plan,
please visit our website

Makaela Niles, MassDOT

Multimodal Planning, Office of Transportation Planning

makaela.niles@dot.state.ma.us