

# **Beyond Mobility**

## ***Massachusetts 2050 Statewide Transportation Plan***

*March 28, 2024*



# Background

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- MassDOT is required by federal law to develop a Statewide Long Range Transportation Plan (SLRTP) on a regular basis.
- The last plan update (***WeMoveMassachusetts***) was in 2014.
- The current plan is called ***Beyond Mobility***, which reflects the plan's aim to think beyond traditional transportation planning paradigms and center people and transportation outcomes at the heart of our strategic planning framework.
- The 5-week public comment period will begin on Monday, April 1<sup>st</sup>. MassDOT aims to release the final version of the plan in Spring 2024.

# Draft Plan Schedule (Subject to Change)

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- **January 17<sup>th</sup>**: MassDOT Board meeting initial presentation
- **March 15<sup>th</sup>**: Post all plan materials online and prepare for public comment period
- **March 20<sup>th</sup>**: MassDOT Board meeting updated presentation
- **March 28<sup>th</sup>**: MBTA Board meeting presentation
- **April 1<sup>st</sup>**: Public comment period begins
- **May 5<sup>th</sup>**: Public comment period closes
- **May 15<sup>th</sup>**: (tentative) MassDOT Board meeting final presentation

# Beyond Mobility Development

- For the past **18 months**, the Beyond Mobility project team has done **extensive public\* and internal outreach, data analyses, and analyses of prior plans** to define a vision for transportation in 2050, the values MassDOT should maintain in this approach, and the key challenges that characterize the Commonwealth's transportation network.
- The project development team worked with **MassDOT and MBTA staff and subject matter experts** to define key action items that are responsive to the key challenges, and are consistent with the vision and values clarified through the outreach and analysis process.

\*Inclusive of public surveys with over 3,500 responses as well as focus groups, stakeholder interviews, and workshops with a focus on EJ communities



# Beyond Mobility Relationship to Other Plans

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The following reports were critical to the development of *Beyond Mobility*. This Plan will also inform future planning efforts, including the MBTA's upcoming Program for Mass Transportation (PMT), the scope of which will include a review of MBTA-specific Beyond Mobility Action Items to document additional work needed on these items.

- The 2023 MBTA Strategic Plan (consulted as part of the development of Beyond Mobility's values statements and priorities)
- The MBTA's most recent Capital Needs Assessment and Inventory (CNAI) (2023)
- ResilientMass / State Hazard Mitigation and Climate Adaptation Plan (SHMCAP) (2023)
- Recommendations of the Climate Chief. Massachusetts Office of Climate Innovation and Resilience (2023)
- Comprehensive Economic Development Plan. Massachusetts Executive Office of Housing and Livable Communities (EOHLC) (2023)
- Massachusetts Clean Energy and Climate Plan for 2025 and 2030. Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA) (2022)
- Prior MassDOT modal plans including the Freight Plan (2023), the Bicycle Plan and Pedestrian Plan (2019) and the Bicycle and Pedestrian Update (2021), and the State Rail Plan (2018)
- Prior MassDOT policy reports including Congestion in the Commonwealth (2019) and the Report of the Commission on the Future of Transportation in the Commonwealth (2018)

# Beyond Mobility Priority Areas





# Safety

**HIGHLIGHTED PROBLEM:** Residents perceive an unsafe environment on public transportation due to a combination of high-profile crashes and other safety events, as well as personal experience.

**HIGHLIGHTED ACTION:** MassDOT, in collaboration with the MBTA and the Massachusetts Association of Regional Transit Authorities (MARTA), will consistently present updates to safety data to the public and other stakeholders on progress made in addressing safety concerns such as escalators and other stop or station facility improvements, disabled trains and buses, and the expansion of positive train control (PTC).



# Reliability

**HIGHLIGHTED PROBLEM:** People traveling in the Commonwealth must be prepared for the possibility of their commute taking up to 8 times longer than free-flowing traffic conditions during the most vital daily travel times.

**HIGHLIGHTED ACTIONS:**

- MassDOT will continue to coordinate with transit providers, municipalities, and partner agencies during project development to identify and support potential roadway investments that will improve transit reliability. At the MBTA, this work will build upon existing Bus Priority Vision and Toolkit initiative.
  
- MassDOT will study roadway pricing with a focus on the transit capacity needed for success as well as the implications of roadway pricing on vehicle miles traveled (VMT), while accounting for social and geographic equity.





# Supporting Clean Transportation

**HIGHLIGHTED PROBLEM:** Transportation is the largest contributor of Massachusetts' carbon emissions and transportation-related emissions are disproportionately concentrated in Environmental Justice communities.

**HIGHLIGHTED ACTIONS:**

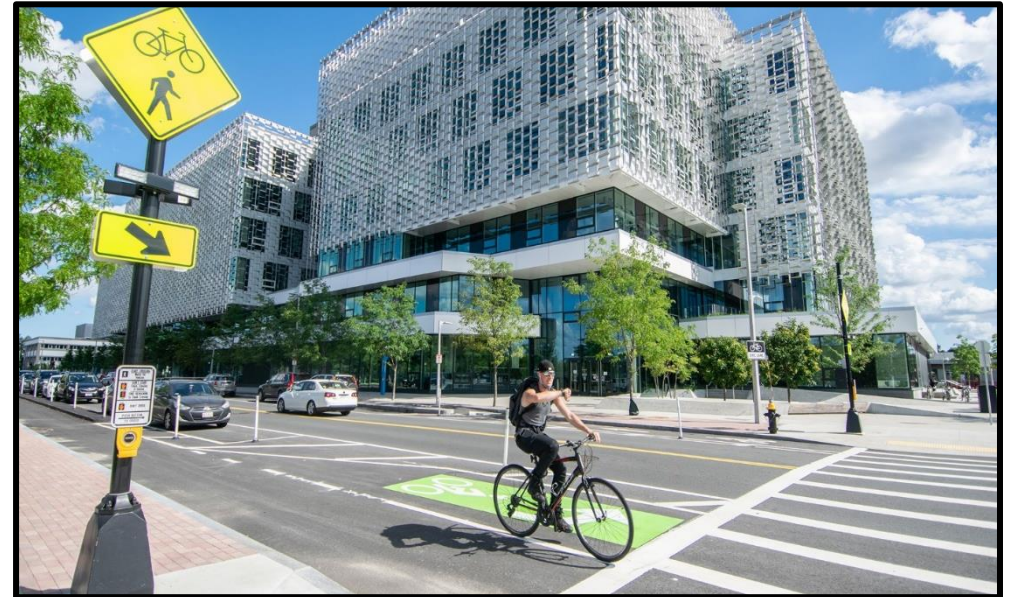
- MassDOT and the MBTA will support the electrification of public transit buses to work toward existing state electrification targets.
- Through geospatial analysis, MassDOT will identify locations that contain high concentrations of households with no vehicle access and high demand for transit in order to prioritize investments and service delivery as well as better coordinate transportation with housing production goals.



# Destination Connectivity

**HIGHLIGHTED PROBLEM:** Despite having more areas with high potential for biking, Environmental Justice communities have fewer existing and planned bike facilities per capita than all other communities.

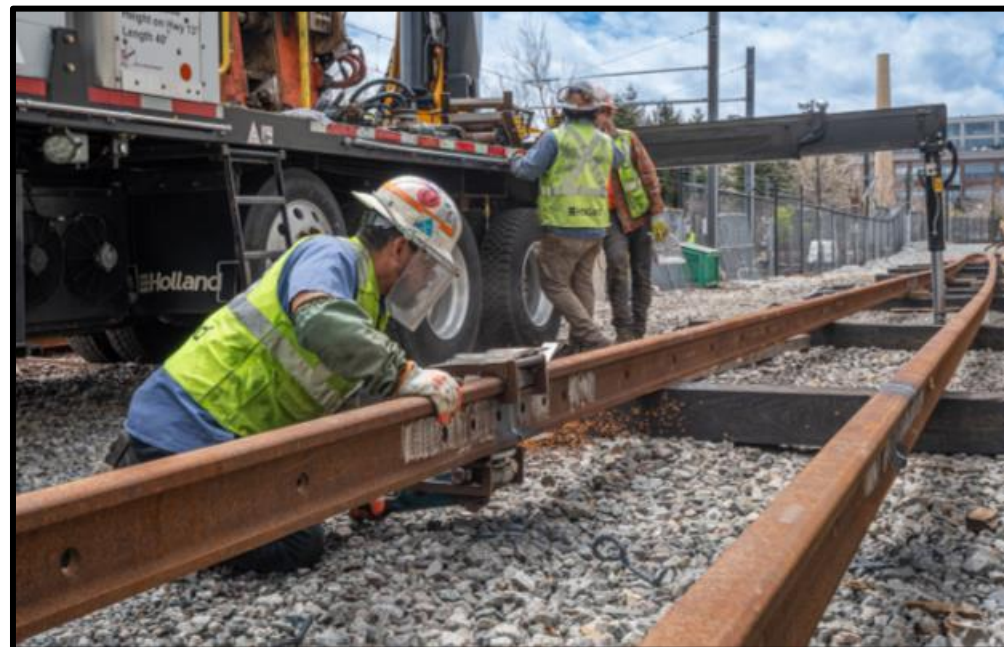
**HIGHLIGHTED ACTION:** MassDOT will create a new program (either as part of the Capital Investment Plan or as a state-funded grant program) intentionally prioritizing a list of non-vehicular modernization projects. This program could potentially start with projects on state-owned roadways that contain MBTA or RTA stops (including flag stops) or stations, to promote access to transit and ADA accessibility. Environmental Justice communities where there are network gaps referenced in the NextGen Bike/Pedestrian Vision initiative, high potential for everyday walking and bicycling and that contain transit stops, and that receive less investment dollars than other places, will be prioritized as part of this framework.



# Resiliency

**HIGHLIGHTED PROBLEM:** Significant transportation infrastructure in Massachusetts is exposed to natural hazards.

**HIGHLIGHTED ACTION:** Complete a vulnerability assessment of critical locations across the Commuter Rail system (especially in historic flood locations), and assess the vulnerability of all three major Commuter Rail facilities as well as assets used as part of the RIDE paratransit program. Finish conducting the Cabot Yard Vulnerability Assessment, and complete additional bus facility vulnerability assessments (in coordination with the Bus Modernization Program).





# Travel Experience

**HIGHLIGHTED PROBLEM:** People with disabilities and those with lower incomes and who do not speak English as a first language report a need for improved wayfinding signage and information to assist travelers far more than other groups.

**HIGHLIGHTED ACTION:** MassDOT, in coordination with regional planning partners and municipalities, the MBTA, and the RTAs, will develop an inventory of bus stops and transit stations that lack sufficient wayfinding signage and the translation of information into appropriate languages to inform a capital funding program targeting improved wayfinding for critical locations.



Thank You





# Appendix

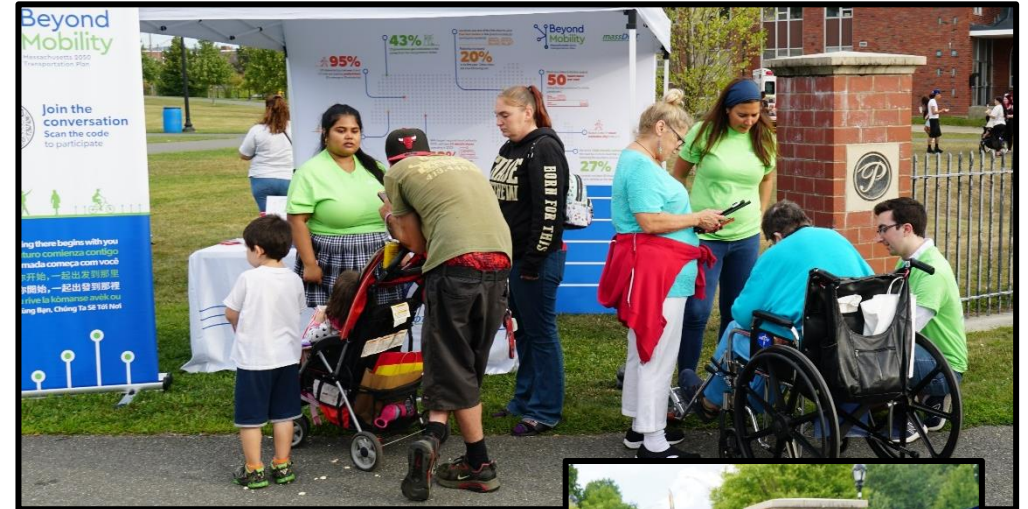
# Public Engagement Highlights

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community activations

soliciting survey responses in historically underrepresented communities:

- Roxbury
- Lynn
- Mattapan
- Lowell
- Lawrence
- New Bedford
- Brockton
- Worcester
- Springfield
- Framingham
- Pittsfield



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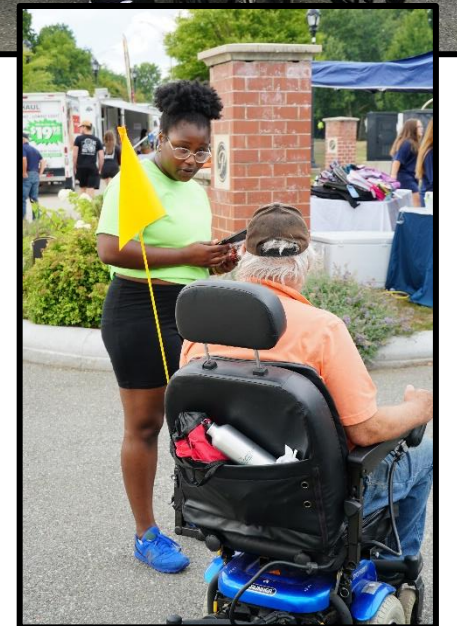
meetings-in-a-box

hosted by community groups to provide input into the plan

3,543

**responses to surveys** made available in Chinese, French, Haitian Creole, Portuguese, Spanish, Vietnamese, and English

Other activities have included multilingual focus groups, stakeholder interviews, a virtual public meeting with over 60 participants, and stakeholder presentations



# Safety



**VISION:** By 2050, Massachusetts will have made significant progress toward advancing a future without transportation-related serious injuries and fatalities and will have eliminated the disparity in crash rates between Environmental Justice communities and all other groups. Residents will experience no infrastructure-related safety risks when walking, bicycling, rolling, driving, and riding transit within any community in Massachusetts.



**HIGHLIGHTED VALUE:** MassDOT is committed to addressing safety risks through a human-centered lens and a Safe System Approach.



**HIGHLIGHTED PROBLEM STATEMENT:** Environmental Justice communities are disproportionately burdened by transportation-related injuries and deaths, particularly those involving pedestrians and people on bicycles.



**HIGHLIGHTED ACTION ITEM:** MassDOT will prioritize current projects and build a bench of future projects to address safety concerns throughout the state and in communities most disproportionately burdened by unsafe conditions. This bench of projects will culminate in a formal Capital Investment Plan (CIP) program dedicated to addressing safety issues for vulnerable road users.

# Reliability



**VISION:** By 2050, people traveling by any mode or for any trip purpose in Massachusetts will be able to expect consistent travel times at any time of day.



**HIGHLIGHTED VALUE:** MassDOT does not believe in roadway expansion as a means to reduce congestion. Additionally, MassDOT is committed to prioritizing reduced car travel and reliance on single-occupancy vehicles as the priority strategy for reducing the recurring congestion that contributes to unreliable travel times.



**HIGHLIGHTED PROBLEM STATEMENT:** Massachusetts travelers by any mode experience congestion and travel delay, resulting in low confidence about the conditions they will encounter and diminished access to everyday needs.



**HIGHLIGHTED ACTION ITEM:** MassDOT will work with the MBTA, RTAs, and municipalities to expand access to transit-priority infrastructure that reduces delay due to congestion for the state's transit riders. Additionally, MassDOT will explore the potential to further study the implications of roadway pricing on mode shift, vehicle miles traveled (VMT) reduction, and transit ridership while accounting for social and geographic equity.

# Supporting Clean Transportation



**VISION:** By 2050, MassDOT will have made significant progress in electrifying public transit and investing in other low or no-emission technology, strategically leveraged assets to address critical electric vehicle charging infrastructure gaps, and made investments in infrastructure and initiatives to promote significantly more trips using carbon-free modes such as walking and bicycling.



**HIGHLIGHTED VALUE:** MassDOT believes that fully achieving decarbonization goals must involve a multi-pronged and systems thinking approach that goes beyond electrification to emphasize the importance of moving more people with fewer vehicles and cross-disciplinary problem solving.



**HIGHLIGHTED PROBLEM STATEMENT:** Transportation is the largest contributor of Massachusetts' carbon emissions and transportation-related emissions are disproportionately concentrated in Environmental Justice communities.



**HIGHLIGHTED ACTION ITEMS:**

- Consistent with both MassDOT's Carbon Reduction Strategy and Phase II of the Zero-Emission Bus/Battery Electric Bus Implementation Plan, MassDOT and the MBTA will support the electrification of public transit buses to work toward existing state electrification targets.
- Through geospatial analysis, MassDOT will identify locations that contain high concentrations of households with no vehicle access and high demand for transit in order to prioritize investments and service delivery as well as better coordinate transportation with housing production goals.



# Destination Connectivity



**VISION:** By 2050, due to targeted investments that have expanded access to everyday destinations for transit-critical and traditionally underserved communities statewide, there will be significantly more modal options, more equitable travel times, increased transportation choices, and far fewer first- and last-mile gaps for these communities.



**HIGHLIGHTED VALUE:** MassDOT believes in the importance of measuring how people, rather than just vehicles, move through the transportation system.



**HIGHLIGHTED PROBLEM STATEMENT:** The lack of contiguous, safe, high-comfort bike or pedestrian pathways connecting existing bicycle facilities limits the ability of people walking, biking, and using other non-motorized modes, including mobility-assistive devices, to access critical destinations.



**HIGHLIGHTED ACTION ITEM:** MassDOT will intentionally prioritize a list of non-vehicular modernization projects to initiate, starting with those on state-owned roadways that contain MBTA or RTA stops (including flag stops) or stations, to promote access to transit and ADA accessibility. Environmental Justice communities where there is a high potential for everyday walking and bicycling and contain transit stops will be prioritized as part of this framework.

# Resiliency



**VISION:** By 2050, significant investments to mitigate climate threats have protected transportation assets against natural hazards and climate change impacts.



**HIGHLIGHTED VALUE:** Acknowledging that a whole-of-government approach is needed to tackle the climate crisis, MassDOT will collaborate on resiliency efforts across the government and ensure resiliency efforts are consistent with other state agencies' efforts.



**HIGHLIGHTED PROBLEM STATEMENT:** Significant transportation infrastructure in Massachusetts is potentially exposed to natural hazards. For example, approximately 81 MBTA rapid transit stops, 15 commuter rail stops, and 1,249 bus stops would be inundated by 10 feet of sea level rise according to MBTA vulnerability assessment data.



**HIGHLIGHTED ACTION ITEM:** MassDOT will explore the creation of a state-managed discretionary capital improvements program focused on soliciting resiliency projects from communities based upon vulnerability assessments performed as part of planning grants through the Municipal Vulnerability Preparedness (MVP) program.

# Travel Experience



**VISION:** By 2050, equitable access to a high-quality and well-maintained transportation network will be expanded throughout the Commonwealth, with special attention to Environmental Justice and rural communities. The system's state of good repair will be routinely positive and maintenance backlogs will be minimal. Enhanced wayfinding and information will support systemwide navigation for users of all ages, abilities, and languages. Transit facilities will be safe, clean, and comfortable with modern seating, lighting, and features that improve users' experience.



**HIGHLIGHTED VALUE:** MassDOT believes that all travelers in the state deserve a transportation system that is easy to understand, ADA accessible, inclusive of signage and wayfinding on transit and roadways, and contains dynamic traveler information services and resources.



**HIGHLIGHTED PROBLEM STATEMENT:** Transit riders, people with disabilities, and limited English proficient (LEP) community members find it challenging to understand and navigate the transit options available to them.



**HIGHLIGHTED ACTION ITEM:** MassDOT, in coordination with regional planning partners and municipalities, the MBTA, and the RTAs, will develop an inventory of bus stops and transit stations that lack sufficient wayfinding signage and the translation of information into appropriate languages to inform a capital funding program targeting improved wayfinding for critical locations.