

Beyond Mobility

Massachusetts 2050 Statewide Transportation Plan

April 2024



Background

- 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 plan is currently out for public comment until May 5th. The plan and comment form are available at www.mass.gov/beyond-mobility

MassDOT@15 and 2024

Who we are, What we do, How we pay for it

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Kick off “MassDOT@15”

MassDOT’s 15th anniversary is November 1, 2024. To commemorate this, 2024 will be focused on three Policy and Strategy Efforts titled “MassDOT@15”

1) MassDOT’s Long Range Transportation Plan “Beyond Mobility” (what we do)

This is the federally mandated planning process that will result in a blueprint for the transportation decision-making process and investments in Massachusetts in a way that advances the State’s transportation goals and maximizes the equity and resiliency of the transportation system

2) MassDOT Strategic Business Plan (who we are)

MassDOT has not released a strategic plan reflecting its organizational goals, vision and values since 2013. Many state DOTs update their organization’s strategic plans every 3-5 years. In advance of the 15th anniversary of MassDOT, we will issue a Strategic Business Plan that will align MassDOT’s organizational resources to fulfill our operational goals and meet commitments that we set forth in our STIP, CIP and in plans such as Beyond Mobility

MassDOT@15 and 2024

Who we are, What we do, How we pay for it

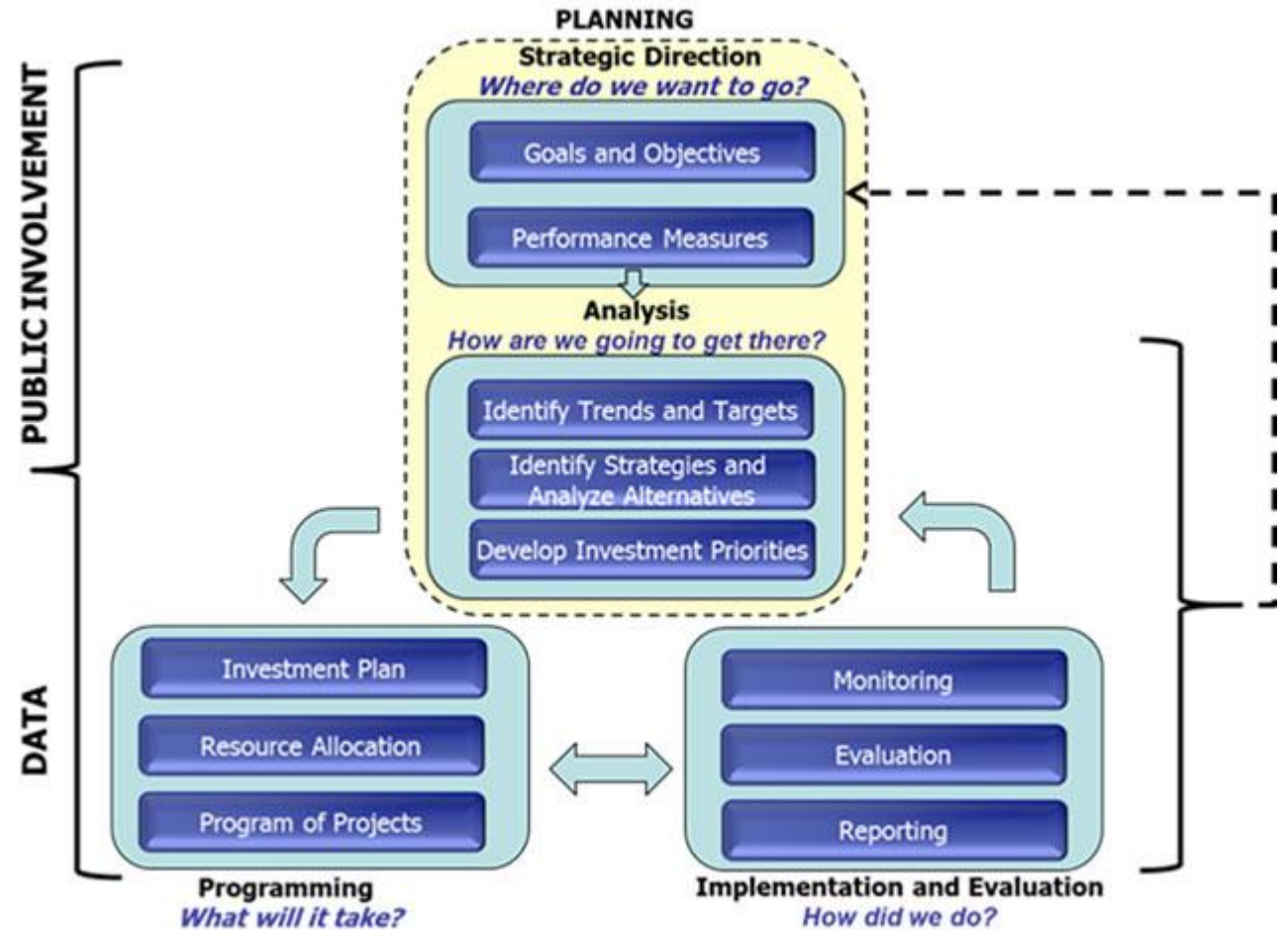
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3) Transportation Funding Task Force (how we pay for it)

As the Healey/Driscoll Administration ends year one having handled several key issues mentioned in the transition report – hiring new MBTA leadership, successful completion of the Administration’s first construction season, and the shutdown of the Sumner Tunnel – now is the time to advance and strategize the funding of the next generation of transportation projects and policies

Link to Other Plans and the MPO 3C Process

- Beyond Mobility sets a framework for strategic planning at the state level but does not exist in a vacuum
- Many of the new programs and initiatives that are being proposed will be implemented in coordination with municipalities and MPOs



Source: <https://safety.fhwa.dot.gov/tsp/fhwasa16116/mod2.cfm>

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



Public Engagement Summary

- The top response for what makes a “great transportation system” was **car-free connectivity**, followed closely by **the ability to reach destinations more easily**.
- When asked to assign tokens to a variety of alternatives, **bicycle and pedestrian infrastructure** received the most. However, equity groups invested more in **transit** than responses overall.
- Respondents overall placed a high value on **improved bike/ped connections to transit stations**, and non-English responses, people with disabilities, and low-income respondents all placed a relatively high value on **wayfinding** near transit stations.
- When asked to assign value to various different kinds of transit improvements, respondents ranked **more frequent bus and commuter rail service** and more **passenger rail options** the highest

Beyond Mobility Priority Areas



Safety

HIGHLIGHTED PROBLEM: 142 of the top 200 pedestrian crash cluster locations are in Environmental Justice communities.

HIGHLIGHTED ACTION: 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

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:

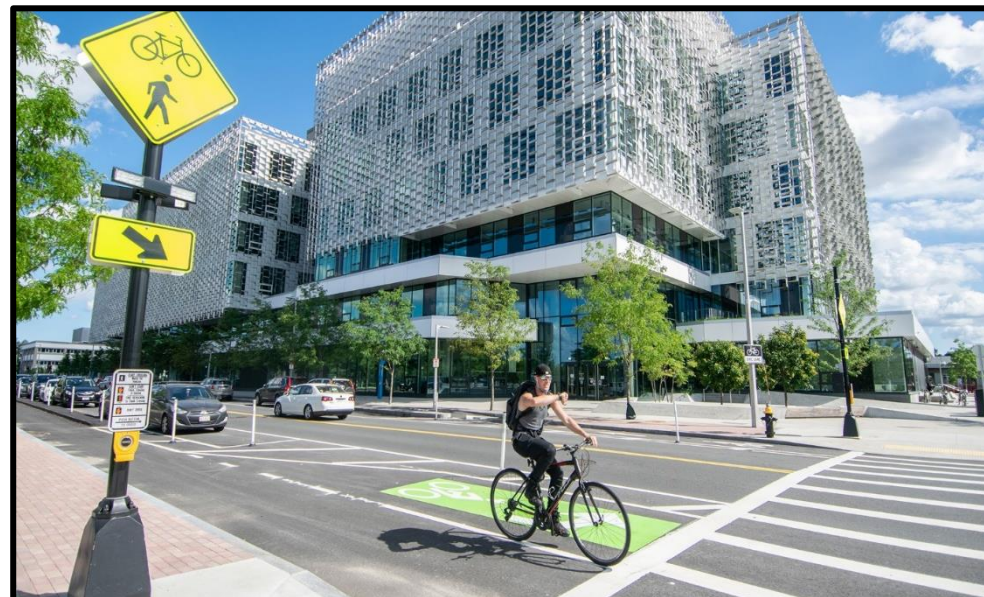
- MassDOT and the MBTA will support the electrification of public transit buses to work toward existing state electrification targets.
- Through geospatial analysis, MassDOT will identify locations that contain high concentrations of households with no vehicle access and high demand for transit in order 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: 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

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

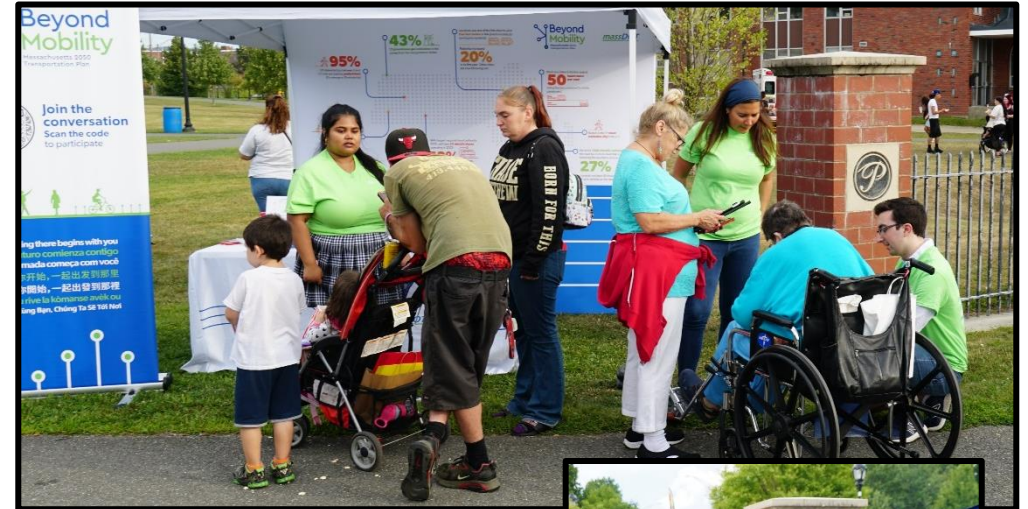
Public Engagement Highlights

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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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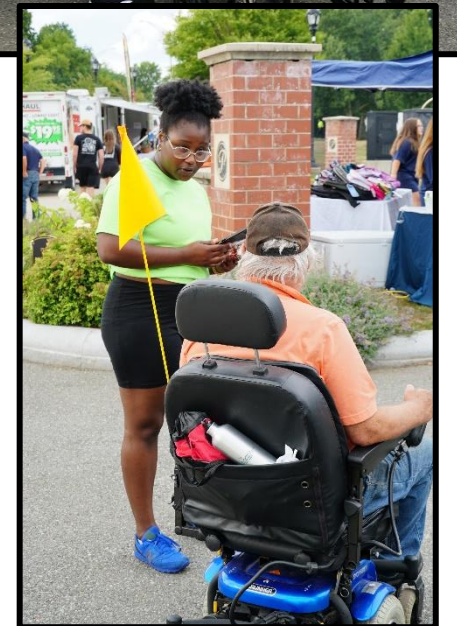
meetings-in-a-box

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.