

The Transportation Table (T3)



Overview of Recommendations



Executive Summary

Who We Are

We are a group of leaders across major sectors of the Commonwealth—business, industry, municipalities, and non-profits. Together, we call on us all—elected officials, leaders across sectors, residents—to act now to transform our transportation system into one we need and deserve.

The Problem

Our Commonwealth's transportation system is in crisis. In metro areas, the increase in congestion threatens our economic future and the quality of life while driving up carbon emissions, leaving us woefully unprepared for climate change impacts. Our rural areas face poor roads, crumbling bridges, and chronic underinvestment in transportation choices and regional connectivity. This crisis must not continue unattended. More specifically, the following challenges contribute to this crisis:

- Local road and bridge repairs are underfunded and their conditions are below federal standards, threatening both future mobility and safety.
- Regional transportation services cannot adequately address the travel demands of local residents, limiting economic growth across a broader swath of the Commonwealth.
- As high housing costs, particularly in Metro Boston, force people further away from their jobs to find affordable accommodations, commutes get longer, and these residents' time with family and community decreases, their quality of life lessens, and carbon emissions increase.
- The current transportation agencies, as configured, are not equipped to take on more without reforms, including structural attention to governance, accountability, and transparency.
- Much of our current transportation infrastructure is vulnerable to climate change impacts, such as flooding and extreme heat and even new projects are not designed for climate resilience.

The Transportation Table thanks the Barr Foundation for providing support to convene.



- Greenhouse gas emissions (GHG) from transportation are now the largest source of emissions in Massachusetts. We cannot meet our statutorily mandated goals without making dramatic reductions in transportation emissions, including accelerating transit, walking, and biking, as well use of electric buses, trains, and cars and trucks.
- Existing revenues will not address the above transportation needs to ensure Massachusetts remains livable and competitive.

Our Vision

We envision a 21st century transportation system that no matter where people live, they can get where they need to go. We believe the Commonwealth can and must achieve this goal while reducing transportation emissions. Having good roads, bridges, bike paths, and more sidewalks are a large part of the solution. To get us travelling in low carbon ways and to ensure that our economy remains strong, Massachusetts needs to modernize and connect its public transportation system, and electrify buses, trains, cars, and trucks. We must fully utilize our rail system and dramatically improve bus service. We will also need to weatherize and modernize our system and utilize innovation and technology to improve our travel experience. We deserve a 21st century public transportation system that is accessible, reliable, affordable, resilient to climate change, fueled by clean energy, and encourages people to drive less because their public transit choices are so good.

Our Recommended Approach

To drive toward that vision, we call on the Legislature, the Administration, and the Commonwealth's employers to address:

- 1 **Governance:** Establish a robust governance structure that ensures accountability and transparency;
- 2 **Congestion:** Employ pricing policies to reduce congestion and greenhouse gas (GHG) emissions and invest these funds in more frequent and reliable bus and rail services, Bus Rapid Transit, and greater transit connectivity, especially for underserved populations;
- 3 **Capacity:** Grow the capacity of public entities to become more responsive, flexible, and effective and to deliver capital projects more quickly and efficiently;
- 4 **Climate Change:**
 - a) **Mitigation:** Accelerate GHG emission reductions through more multi-modal transportation options and the electrification of buses, trains, cars, and trucks;
 - b) **Resilience:** Invest in climate resilient infrastructure and projects to protect against the ravages of extreme heat, storms, and floods; and
- 5 **Investment:** Accelerate investment in the Commonwealth's transportation services and infrastructure by dedicating more revenue now—and in the future.



While the measures and proposals that follow are broken into categories such as congestion and capacity, these areas of need overlap. New programs to reduce congestion can also reduce greenhouse gas emissions, for example. Similarly, more reliable and frequent bus service, especially in electric vehicles, benefits congestion, climate, and economic and social equity.

The following brief report provides background on the issues, details the actions needed under our five recommendations, and concludes with a statement of commitment from each of us to support and defend leaders who advance these goals.

Signatories to this document strongly support the five key pillars of these recommendations to advance transportation in the Commonwealth. The recommendations also offer very specific actions and options for action. While signatories have a greater diversity of views on these individual and specific ideas, they stand strongly by the package as a whole to advance their common vision.

Background: A Watershed Moment for Transportation in the Commonwealth

Following train derailments on the Red Line and Commuter Rail, fires on the Orange Line, increased congestion on the Tobin Bridge, and a host of other transportation breaking points, there is widespread acknowledgment that Massachusetts' transportation system is in crisis. Legislators, Governor Baker, advocates, business leaders, and others are searching for solutions. For example, the Baker administration plans to close portions of the T to accelerate repairs to improve its reliability. Speaker of the House DeLeo has asked business leaders and constituents for recommendations. Following a request by Senate President Spilka, Senator Boncore established a transportation working group to advise on important policy issues.

As referenced in the *Future of Transportation Commission's* report, innovation, climate change, and demographic shifts will significantly shape our transportation needs. To effectively address our transportation needs, it will require a comprehensive approach that addresses five chokepoints: governance, congestion, capacity, climate, and investment. We believe that focusing on these five streams positions the Commonwealth to deliver short-term improvements to transportation services that customers will experience, while planning the future transportation system that Massachusetts' residents deserve and keeps our economy strong.

Specific, targeted action should focus the Commonwealth's attention on addressing the transportation challenges highlighted on page one of this document.

In addition, the state will need to spend billions more to make its transportation infrastructure climate resilient and those costs and schedules must be incorporated into the state's capital investment plan. A superstorm hitting our region, as Sandy did in New York, would flood our roads and transit stations in the downtown core, grinding the overall regional economy to a halt.



Further, under the Global Warming Solutions Act, the state committed to reducing greenhouse gas emissions 80 percent below 1990 emission levels by 2050. While Massachusetts has reduced emissions from buildings, transportation-related emissions have increased over the same period of time. Massachusetts cannot achieve its GHG reduction targets without reducing emissions from the transportation sector. This must include more transit use and options, including electrification of the transportation fleet of buses and commuter rail that will cost billions of dollars over an estimated decade or more in development.

Furthermore, to decarbonize, the *Commission on the Future of Transportation* called for ending new sales of state-funded internal combustion-based cars, buses, and light duty trucks by 2030. This will require investments in the electric grid and charging stations—whether publicly or privately funded—that must be added to today's plans.

T3 Recommendations

To reduce congestion, expand mobility choices, improve equity, reduce greenhouse gas emissions, make our system more resilient in the face of climate change's consequences, and make daily commutes more reliable and predictable, The Transportation Table has identified five areas essential to address the Commonwealth's transportation challenges.

- 1 Governance:** Establish a robust governance structure that ensures accountability and transparency;
- 2 Congestion:** Employ pricing policies to reduce congestion and greenhouse gas (GHG) emissions and invest these funds in more frequent and reliable bus and rail services, Bus Rapid Transit, and greater transit connectivity, especially for underserved populations;
- 3 Capacity:** Grow the capacity of public entities to become more responsive, flexible, and effective and to deliver capital projects more quickly and efficiently;
- 4 Climate Change:**
 - a) Mitigation:** Accelerate GHG emission reductions through more multi-modal transportation options and the electrification of buses, trains, cars, and trucks;
 - b) Resilience:** Invest in climate resilient infrastructure and projects to protect against the ravages of extreme heat, storms, and floods; and
- 5 Investment:** Accelerate investment in the Commonwealth's transportation services and infrastructure by dedicating more revenue now—and in the future.



In developing these recommendations, we recognized that these issues intersect and should be addressed concurrently. For example, successful reduction of congestion requires not just a pricing mechanism, but also relies heavily on improving public transit options. And, without the right governance and accountability structures in place, we run the risk of poor implementation and increased public skepticism.

The following tables detail the specific actions and tasks needed from the Legislature, the Administration, and the private sector to enact these recommendations. We ask the

Legislature, the Administration, and other decision makers to prioritize actions that get more people out of their cars, such as roadway pricing, tolling, and reduced parking options in core job centers.

Signatories to this document strongly support the five key pillars of these recommendations to advance transportation in the Commonwealth. The recommendations also offer very specific actions and options for action. While signatories have a greater diversity of views on these individual and specific ideas, they stand strongly by the package as a whole to advance their common vision.

1 Governance

Recommended Actions for Governance, Accountability, and Reforms

For the MBTA

The MBTA's current governance system, the Fiscal and Management Control Board, is set to sunset in June 2020. Install a permanent, independent MBTA governance board that has a clear governing mandate, uses data for decision making, has strong communications capacity, operates with a high level of transparency, has robust public engagement, and its diversity and inclusion are reflective of the population it serves. We additionally recommend:

- a. 5-7 members, appointed by the Governor, and includes Secretary of Transportation, Secretary of EEA, municipal representation, members whose areas of expertise are relevant to maintaining and operating major transit systems, and a regular user of the MBTA
- b. Has sole authority to hire, fire, and direct the work of the MBTA General Manager

MBTA pension reforms

- a. Seek comparable transparency to that provided by the Public Employee Retirement Administration Commission (PERAC)
- b. Transfer management of pension funds to the state's Pension Reserves Investment Management Board (PRIM)

MassDOT

Extend FMCB-like transparency and accountability to MassDOT

Regional Transit Authority (RTA)

Governance should foster a dynamic relationship between MassDOT, the MBTA, and the RTAs that would increase joint planning, purchasing, and sharing of information, experience, and expertise and would improve coordination and regionalization of services.

2 Congestion

Recommended Actions to Reduce Congestion and Incent More Low-Carbon Travel

LEGISLATURE

- Direct that MassDOT seek federal approval to introduce tolling to reduce roadway congestion through FHWA's Value Pricing Pilot Program
- Establish, support, and ensure outcomes from an independent task force to review and approve a congestion tolling plan developed by MassDOT that accounts for disproportionately high and adverse impacts to low-income drivers
- Authorize MassDOT to install gantries and tolls and use variable pricing to increase bicycling, transit, and walking options to promote multimodal access and reduce GHG emissions
- Lift restrictions on funds raised from tolls to invest in transit services and priority roadway chokepoints
- Increase pre-tax commuting benefits so there is parity with federal benefits
- Authorize an increase in Transportation Network Company (TNC) fees that encourages shared rides to reduce emissions if surcharge fees and tolls are passed on to riders
- Ensure that cities and towns can limit areas of drops and pickups of TNCs

ADMINISTRATION

- Provide more frequent and reliable bus and commuter rail services, BRT, dedicated bus lanes, expanded parking at MBTA stations, and reduced fares for lower-income individuals to move commuters out of single-occupancy vehicles
- Accelerate delivery of Orange and Red Line cars into service by at least six months
- Fast track the Green Line Transformation Project
- Ensure implementation of the task force's tolling plan
- Invest in roadway chokepoints to reduce carbon emissions and promote safety
- Implement means tested transit subsidies for MBTA and RTA riders administered and funded by Mass-Health or the Department of Transitional Assistance
- Explore state agencies' abilities to offer and maximize the use of flex time schedules and telecommuting options
- Require the state to offer pre-tax commuting benefits to its employees

PRIVATE SECTOR

Adopt and promote the [MassDEP Rideshare Program](#)

Support programs that:

- Offer pre-tax commuting benefits
- Subsidize transit services
- Subsidize parking at MBTA stations
- Charge for parking in the Downtown Core
- Encourage flex/staggered start and leave times for employees
- Increase access to transit from shuttle, bike, and scooter share services
- Offer carpools/vanpools
- Allocate preferential parking spaces for carpools/vanpools
- Create corporate carshare and rideshare accounts
- Provide secure bicycle parking
- Choose transit-accessible site locations

3 Capacity

Recommended Actions to Grow the Capacity of Public Entities to Deliver Capital Projects

LEGISLATURE

- Authorize MassDOT to create new job titles for highway maintenance work to increase hiring flexibility
- Extend hours of MassDOT work availability (currently 960 hours) for retired personnel
- Allow the T to move ancillary service personnel such as power maintainers and flaggers between the operating and capital budgets in project delivery as consistent with best practices and generally held budgeting procedures

Explore improving current procurement and project delivery laws with one or more approaches listed below to:

- Allow job order contracting for MassDOT and the MBTA. Modeled after DCAM's program, this would allow small jobs under the \$500,000 threshold to be awarded based on best value (highest value considering cost and quality) without going through a lengthy public procurement process

- Permit MassDOT and the MBTA to use a cost-plus-time bidding procurement method ('A+B' bidding), allowing both agencies to consider the value of the time to complete the project in addition to costs when evaluating a bid
- Allow the MBTA to utilize design/build/finance/operate/maintain project delivery alternative, when evaluated and approved by the governing board, which was used in the development of Assembly and Boston Landing stations. This project delivery method could spur multi-use developments of some MBTA facilities including garages
- Redefine public-private partnerships in Chapter 6C Section 62 to expand opportunities while ensuring effectiveness, proper usage, and oversight
- Support the Inspector General's authority and capacity to conduct audits to help ensure the efficient and appropriate use of these contracting methods

ADMINISTRATION

- Conduct a competitive analysis to assess MassDOT and MBTA job descriptions, compensation, benefits, and retention rates as they relate to equivalent private sector jobs; explore ways to make MassDOT compensation packages comparable to those of the MBTA
- Accelerate recruitment/use professional search firms; build recruiting pipeline; and incentivize faster hiring
- Explore benefits and approaches that would encourage younger people to work at MassDOT and the MBTA before transitioning to other employment
- Review and implement best HR practices from other state DOTs (e.g., LA Metro)
- Work with the private and non-profit sector to identify world-best-practices in capital delivery and cost savings
- Explore adopting models such as the Regional Government Services in California that "provides knowledgeable, highly-qualified local government employees for projects and on-going assignments to meet the needs of our client agencies"
- Explore procurement and project delivery tools to municipalities accompanied by appropriate auditing and oversight

4 Climate

4A. Mitigation: Recommended Actions to Accelerate GHG Emission Reductions

LEGISLATURE

- Establish a stable funding mechanism for rebates for the purchase of electric cars targeted towards moderate- and lower-income consumers with appropriate limitations on luxury vehicle purchases
- Provide tax incentives to expand electric vehicle (EV) charging stations in areas of low penetration and high need
- Incentivize conversion of public and private vehicle fleets to electric, hydrogen, or other low-emission vehicles
- Include rebates for EV charging stations in MassSave audits
- Coordinate and consolidate the various state and MassSave programs that address EVs
- Leverage the private sector with key programs to foster innovation in smart infrastructure and emerging EV charging technologies
- Separate the Massachusetts Tax Code from Federal Income Tax Code for Qualified Transportation Fringe Benefits to allow for deductions of transportation expenses incurred for commuting

ADMINISTRATION

- As noted in #2 (Congestion), increase frequent and reliable bus service, build BRT, and accelerate purchase of Red and Orange Line cars, as well as fast track the Green Line Transformation Project
- Help cities and towns and the private sector buy at least 200 new electric buses and build new bus maintenance facilities that are equipped for these electric buses and a fully electrified fleet
- Build bicycling, transit, and walking options to promote multimodal access and reduce GHG emissions
- Pilot electric bus program to assess how best to overcome operational challenges that have been identified
- Lease additional buses through FTA's [Low or No Emission Vehicle Program - 5339\(c\)](#) (see for example [MTA's initiative](#) leasing EV buses)
- Establish a stable funding mechanism to defray the higher capital costs of electric buses
- Establish and fund group purchasing programs for electric vehicles, drawing upon models such as the Green Energy Consumers Alliance's Drive Green program and the Braintree Drives Electric program
- Analyze and select optimal all electrified regional rail option; and provide cost estimates and accelerated design and construction schedules
- Electrify fleets of state and municipal vehicles and provide the necessary infrastructure for doing so
- Work with ISO New England to prepare for high levels of electrification of vehicles

PRIVATE SECTOR

- Accelerate conversion of vehicle fleets to electric, hydrogen, or other low-emission vehicles
- Work with utilities to install EV charging stations at garages, work sites, and low penetration and high need areas

4 Climate

4B. Resilience: Recommended Actions to Invest in Climate Resilient Infrastructure

LEGISLATURE

- Monitor state capital spending plans to ensure that climate resiliency requirements and recommendations from the State Hazard Mitigation and Climate Adaptation Plan (SHMCAP) required under Executive Order 569 are included in project costs and delivery for all (state of good repair) MassDOT, MBTA, RTA, port/ferry and rail projects, and any new transportation projects
- Develop a transportation-specific program targeting climate resilient municipal roads, small bridges, and culverts similar to the GreenWorks proposal and based on the recommendations of the SHMCAP and the report of the Small Bridges and Culverts Working Group
- Ensure that GreenWorks and MassWorks are aligned, complementary, and coordinated
- As new fleet types and technologies are considered (electric, hydrogen, etc.) understand implications on climate resiliency and modify laws accordingly

ADMINISTRATION

- Calculate and publish climate resilient vulnerabilities with associated costs of repair and maintenance schedules for MBTA and MassDOT infrastructure by year end 2020
- Fund and develop design standards for infrastructure to ensure State of Good Repair (SGR) and future projects address climate resiliency: Start by funding climate resilient infrastructure for all projects in the FY 21 – FY 25 Capital Improvement Plan including ongoing SGR projects
- Develop plans to secure rolling assets from the impacts of climate change
- Relocate MBTA operation centers to climate resilient locations
- Ensure that climate resilient programs seek the most efficient action at the appropriate scale (parcel, district, watershed, or regional) and incentivize municipalities to work together on joint efforts where appropriate
- Update existing rules and regulations, engineering standards and permitting processes to make improvements in storm resiliency and natural resource connectivity that consider risk, ecological value, cost and efficient permitting
- Ensure that green and resilient infrastructure is built, operated and maintained properly by providing a training program for municipal employees and a workforce development program in underserved communities
- Prioritize infrastructure that meets resiliency standards and facilitates the mobility impaired

PRIVATE SECTOR

- Use green infrastructure and nature-based solutions to enhance safety, avoid costs, and conserve natural resources on private assets—such as large developments and parking lots—to reduce impacts on roads, bridges, and culverts
- Provide all means of mobility such as walking and bicycling under an approach similar to Complete Streets
- Ensure that green and resilient infrastructure is built, operated, and maintained properly by providing a training and certification program for employees and client
- Make public and private fleets more resilient

5 Investment

Accelerate Investments Now—And in the Future—To Improve Peoples’ Commutes and Reduce Transportation Emissions Across the State

5A. ADDITIONAL ANNUAL INVESTMENTS IN THE NEXT FIVE (5) YEARS

We must accelerate investments to improve mobility, mitigate congestion, and reduce emissions so the state can deliver notable improvements in the next few years. There are too many warning signals of commuters’ exasperation with the state’s transportation system and the potential impact on the state’s economy to ignore.¹

We collectively recognize that the system currently **does not have sufficient funds** to address the needs of today and tomorrow. We must do better now.

The following table identifies the key areas where there are current investment gaps and the range of dollars we believe are needed annually to fill these gaps.

Table 1 – Additional Annual Investments in the Next Five (5) Years²

Agency	New Investments to Accelerate Improvements	Range of Investments (\$ millions)	
MassHighway	Statewide road and bridge program—asset conditions to FHWA targets; add bus and cycling lanes where possible	100	150
RTAs and Regional Services	Support innovative programs that align with employer and other community needs; increase annual state support by same percentage as MBTA sales tax certification	25	50
Municipalities	Increase Chapter 90 funding	100	100
MBTA	Expand bus and commuter rail services, electrification of vehicles, dedicated bus lanes, BRT, transit signal priority, accelerate a regional rail expansion program	200	300
Transportation Electrification	Increase support for electric cars, trucks, and buses to meet Massachusetts’ 2025 zero electric vehicle standard and reduce greenhouse gas emissions from the transportation sector	120	150
Climate Resiliency	Include climate resiliency in capital spending plan	unknown	
Range of Additional New Investments		545	750
FY20 State Dollars Invested (capital and operating)		\$3.25 billion	

¹ See for example *MassBio’s 2019 Transportation Survey finds 60% of respondents would change jobs for a better commute*. Two key findings from the survey—nearly one-quarter of respondents (23%) have considered moving to another state for a better commute and 82% do not think the Massachusetts government is doing enough to improve the state’s transportation system.

² This list does not include revenues that will be needed for climate resilience. More analysis is needed to determine costs associated with making the transportation system more resilient to the impacts of climate change.

5B. ACTIONS TO FUND INVESTMENTS IN THE NEXT FIVE (5) YEARS (2020-2024)

The T3 participants identified numerous transportation funding sources that would cover the costs of the investments. These are described below. T3 participants may have different views on the line items suggested below and the precise packaging of funding sources to fill the gap named above, but all T3 participants agree **the gap must be filled** to help secure the Commonwealth's economy and well-being in the face of climate change.

Potential Financing Sources to Pay for Investments in the Next Five (5) Years

Larger Scale Revenue Options—each of these options could yield at least \$100 million and some could generate \$300 million or more depending on the scale and implementation. Total new revenue from multiple sources could range from \$500 million to as much as \$1 billion per year.

- Introduce congestion tolling at most severely impacted corridors and times of day
- Expand road pricing beyond congestion plan
- Increase gas tax (would generate \$28 million per 1 cent increase)
- Dedicate a substantial percentage of Transportation and Climate Initiative (TCI) revenues to reduce GHG emissions from the transportation sector
- Close vehicle trade-in sales tax loophole

Smaller Scale Revenue Options—while each would generate varying amounts of revenue depending on choices made, some could generate as much as \$50 million per year

- Support FY 2019 supplemental budget—MBTA
- Support FY 2019 supplemental budget—Ch. 90/Complete Streets
- Add roadway access pricing to Logan Airport
- Add TNC surcharge to single occupancy rides
- Increase RMV fees and tolls at same time and rate as MBTA
- Add commercial parking space surcharge
- Authorize new value capture/district based assessments
- Authorize municipal and regional ballot initiatives

Large Scale Financing Options—could yield in total up to \$600 million per year

- Change \$127 million MBTA annual appropriation to contract assistance to provide \$1.3 billion in new capital availability
- Authorize GANs for 'next generation' accelerated bridge program to add \$1.25 billion in MassDOT capital availability for immediate bridge repairs
- Use \$500 million uncommitted MBTA capital in FY 20 - 24 Capital Improvement Plan (CIP) to make infrastructure resilient to climate change

5C. ACTIONS FOR INCREASING CAPITAL INVESTMENTS FROM 2025-2040

Starting in FY 2025, the MBTA will confront a \$1 billion capital gap in its ability to maintain and modernize its existing infrastructure because state and federal support for programs that include purchase of Red and Orange Line cars, the Green Line Extension, and South Coast Rail will be complete, and those funds will be exhausted. Figure 1 shows the existing capital sources of funds, the precipitous drop in those funds as of 2025, and the necessary on-going spending needed to maintain the infrastructure built and operating by 2025.

The figure below is focused on the fact that the MBTA will not have sufficient capital dollars to maintain and modernize the infrastructure it has built. What makes matters worse is that this figure does not account for inflation and the MBTA also lacks capital sources needed to address climate resilient

infrastructure, decarbonization, regional rail, electrification/ power grid/charging stations, IT and cybersecurity matters, and more. Thus, to close this long-term capital funding gap, which includes both supporting the existing system in 2025 as well as preparing it for the future, the state must prepare to explore and implement at least the following:

- Dedicate TCI funds to public transit—a preliminary estimate of \$300 million in 2025. The MBTA will need at least \$700 million more to pay for maintenance and modernization of its existing infrastructure. TCI funds might cover at least half of this need.
- Raise \$1.5 billion from dependable and dedicated sources by 2025. MassDOT and the MBTA would have approximately \$75 billion in available capital for years 2025 - 2040—an average of \$5 billion per year to pay for future investments.

Figure 1—MBTA capital sources and uses to maintain and modernize existing infrastructure

