

MassMoves

A Vision for the Commonwealth's 21st-Century Transportation System



MASSMOVES

Executive Summary

MassSenate



Transportation Matters

The Commonwealth's transportation system is essential to our state's economic vitality and our citizens' quality of life. Whether we drive, take transit, cycle or walk, we require convenient, safe and reliable mobility to get everywhere we go, including to jobs, schools, doctors' offices, family, friends, shopping centers, entertainment venues and recreational sites. We use our transportation network to ship goods produced in Massachusetts across the country, and to receive goods purchased elsewhere.

Massachusetts does not currently have a transportation infrastructure adequate to support its economy, or economic growth over the long haul. The Massachusetts economy was recently ranked #1 among states by U.S. News and World Report, but our transportation infrastructure ranked 45th. A similar assessment from CNBC ranked Massachusetts 42nd for statewide public infrastructure.

These ratings should come as no surprise to Massachusetts residents. The average Massachusetts driver wastes multiple days each year sitting in traffic. Our public transportation system has been unable to keep pace with increasing demand, and the lack of a sustainable funding mechanism means the system will continue to fall well short of a "state of good repair." Transportation is the single largest energy-using sector contributing to greenhouse gas emissions in the state. Auto emissions and congestion contribute to our state's high incidence of childhood asthma, which affects roughly one out of five Massachusetts children.

MASSMOVES KEY POINTS

- **Nine workshops** held across the Commonwealth, a workshop for business leaders, and an online survey
- Over **700 citizens** engaged
- Members of the State Senate in attendance at each workshop
- Over 80 percent believe the overall transportation system in the Commonwealth is **not in good condition**
- 94 percent of participants agree that transportation needs to be an **even higher priority** for elected officials
- All nine regions strongly support statewide transportation values focused on **economic growth and affordability**
- All nine regions strongly support taking action to improve public transportation, including both **rail and bus**, among other actions
- Overall, participants favor additional investment in transportation, slightly **favoring broad general taxes** over targeted user fees
- All nine regions support allowing **local government to raise revenues** for locally-specified transportation projects



MassMoves Background

To determine how best to tackle these issues, the Massachusetts State Senate sought to hear from citizens across the Commonwealth about their key values and goals regarding transportation. The Senate collaborated with the Barr Foundation, which seeks, as part of its Mobility Program, to advance new solutions for transportation and development. The State Senate conceived of *MassMoves* as a way to engage residents in articulating a statewide vision for a 21st-century transportation system. *MassMoves* hopes to complement other recent transportation-related initiatives from the City of Boston's *Go Boston 2030* to the MBTA's *Focus 40 Investment Plan*. In total, *MassMoves* hosted nine highly interactive workshops with citizens from across the state, an additional workshop with business leaders, and an online poll.

The *MassMoves* workshops were conducted in conjunction with the State Senate's *Commonwealth Conversations* listening tour, a series of statewide forums hosted by state senators within each region. Several senators attended each workshop and heard directly from residents about what matters to them in connection with transportation. Over one third of the Senate was present at many of the workshops. *MassMoves* also solicited input from attendees at other *Commonwealth Conversations* events who could not attend the *MassMoves* workshops by inviting them to complete an online survey. In total, *MassMoves* engaged over 700 Massachusetts residents,



organizations, and business people from every county across the Commonwealth to help catalyze a vision for a 21st-century transportation system.

The data and findings from the workshops and the survey will be presented to state decision makers; we hope that by identifying citizens' shared values, goals, priorities, and general recommendations, we can empower those decision makers to consider and craft legislation to advance a compelling, forward-thinking, 21st-century vision for our state's transportation network.



KEY FINDINGS

Here are key findings from the workshops and the online survey:

Finding #1: Dissatisfaction with the Condition of the Commonwealth's Transportation System

Participants in the *MassMoves* workshops overwhelmingly agreed that the state's current transportation system—including trains, buses, roads, and biking/walking infrastructure—is not up to par. Over 80 percent believe the overall transportation system in the Commonwealth, as well as their regional transportation systems, are not in good condition.

Finding #2: Imperative for Elected Officials

The vast majority of workshop participants—94 percent—urged elected officials to make improving transportation an *even higher* priority than it is today. Despite all the initiatives in the Statehouse around transportation, participants want their representatives to do more.

Finding #3: Consistent Values Across the State, Leading With Growth and Affordability

Participants across the Commonwealth share many of the same transportation values. These values are driven first and foremost by *economic growth: connecting people to work and school, and making public transit affordable to those who need it most*. Other values, from convenience to combatting climate change, also garnered broad support.

Finding #4: Primacy of Public Transportation

Across the state, even outside the MBTA service area, improving public transportation (trains and buses) was seen as a preferred approach for realizing these values. Participants want the public transportation system to be repaired, maintained, *and* expanded. They also demonstrated

an understanding of the relationship between transportation and land use, favoring development around transit hubs and where people can readily ride, walk and bike. The specific rail and bus projects that garnered the most support varied by region, but overall the desire for a system that better connects citizens within and across regions came through loud and clear.

Finding #5: Willingness to Pay

Participants understood and supported the need to pay for this vision. Overall, they slightly favored broad-based taxes paid by all over fees paid only by the users of the transportation system. They also supported letting cities and towns (with voter approval) raise local revenues for transportation projects of their own choosing.

Taken together, these findings underscore participants' strong desire for elected officials to prioritize improving our public transportation system statewide, with an eye towards promoting long-term economic growth and equity, even if these improvements require new revenue sources.

The following sections offer more detail on the top values that emerged from the *MassMoves* workshops, as well as the preferred actions to advance those values both across the state and within specific regions.



Shared Values and Goals for a 21st-Century Transportation System

In advance of the regional workshops, the *MassMoves* team worked with an advisory group and representatives from the state’s regional planning agencies to identify eight commonly held values and goals that could guide policy for

a 21st-century transportation system. At each workshop, we asked participants to discuss these values and goals in small groups and then to use keypad-polling devices to “rate” the importance of each value/goal.

VALUES AND GOALS LISTED IN ORDER FROM THOSE THAT RECEIVED THE MOST SUPPORT TO THOSE THAT RECEIVED THE LEAST

1. Transportation should **help economic growth** by connecting people to jobs and education, and enabling easy transport of goods and services.
2. Public transportation should be **affordable** to those who need it most.
3. It should be **easier and faster to get around**, whether by car, public transportation, walking, or biking.
4. No matter their age, income, race or where they live, residents should have **convenient access** to multiple transportation choices.
5. Transportation should be **cleaner**, producing far fewer greenhouse gases and other types of pollution than it does today.
6. Our transportation network should be **resilient**, meaning it can bounce back from severe weather and changes to the region’s climate.
7. Our transportation network should use the **latest technology** to manage traffic and provide real-time information to help residents plan their trips.
8. Our transportation network should be **flexible** enough to keep up with changes in the economy and how people want to get around.

The top two values—helping economic growth and ensuring transportation is affordable to a range of our citizens—received a strong positive response in all nine workshops, but all eight of the values/goals scored relatively well across the workshops.

These results suggest that it is possible to identify a shared set of transportation values and goals for residents across the state. Massachusetts’ residents care about a range of issues, from convenience to resilience to a clean environment, but economic issues like affordability and growth are at the top of their list.



Actions to Advance a 21st-Century Transportation System

The *MassMoves* team—again working with its advisory group and the regional planning agencies—identified a series of potential actions that could be taken to advance participants’ values and create a 21st-century transportation system. As with the values and goals, we presented these potential actions to participants, provided them with a chance to discuss them in small groups, and again asked them to rate the importance of each action using keypad-polling devices.

The potential actions spanned a variety of issues, including various measures to reduce total vehicles miles traveled across the Commonwealth, support a cleaner transportation system, and repair roads, tunnels and bridges. Participants rated each action positively on average.

THE ELEVEN POTENTIAL ACTIONS, ORDERED FROM HIGHEST- TO LOWEST-AVERAGE RATING

1. Improve and expand **rail transit**, including subways, trolleys, and commuter and intercity trains
2. Improve and expand **bus service** including local and intercity buses, and bus rapid transit (BRT)
3. Encourage **land development** so more people can walk, bike, or take transit to work or run errands
4. Repair **roads, tunnels and bridges** to reduce traffic congestion and wear and tear on cars
5. Build more sidewalks and paths to encourage **walking**
6. Support **tighter fuel efficiency standards** for cars, at the state and national level
7. Build more and safer bike lanes and paths, and promoting shared bike programs to encourage more **bicycling**
8. **Incentivize drivers to purchase more fuel efficient cars**, including hybrids and electric vehicles
9. Encourage more **carpooling and shuttle services**, to reduce driving alone
10. Encourage **ride services** like taxis, ZipCar, Uber, and Lyft, to enable people to live with no or fewer cars
11. Improve and expand **water transportation**, like ferries, along the coast



Residents from all corners of the state strongly support taking action to improve the public transportation system, in particular rail service and to a slightly lesser extent bus service. Notably, improving rail transit was either the highest- or the second highest-scoring action in all nine regional workshops, in the business workshop, and in the online survey of *Commonwealth Conversations* symposia attendees. Improving bus transit also did very well across the regions.

Rail was the top priority of MassMoves participants from across the state to help move us fully into the 21st century, closely followed by bus.

MassMoves participants also demonstrated an interest in using land use to help manage transportation issues: encouraging land development so more people can walk, bike, or take transit to work or run errands came in third overall. In their small group conversations, we heard participants talk about the need for denser, more walkable, transit-friendly neighborhoods where possible, and about ensuring land use and transportation planners coordinate and connect better.

While actions related to driving scored fourth overall, and most participants indicated that they use cars to get around most of the time, participants indicated that they value walking and non-vehicle mobility, too. Actions related to improving walkways, bike paths, and bike features to make non-vehicle transportation more readily available and accessible all rated well. Actions related to shared mobility and fuel efficiency were ranked in the middle, suggesting these are seen as valuable options but not to the same extent as some of the others. Lastly, while not ranking as high across the state as some other actions,



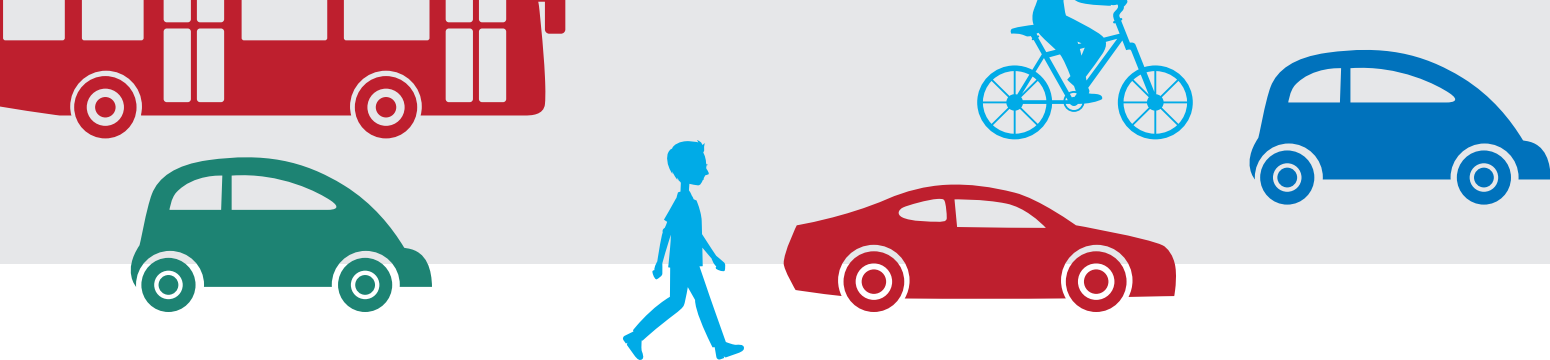
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water transportation was rated well in coastal regions. The ratings suggest that participants along the coast would value the expansion of ferry service into and out of Boston.

Overall, the preference for rail and bus transit, followed by walking and biking, was a notable finding from these workshops.

We also asked participants to rate the importance of the following three strategies for improving our public transit system: 1) repairing and maintaining what we have, 2) making the system we have run more often and with longer hours, and 3) expanding the system to serve more people and places. The results suggest that participants want it all. Overall, they rated all three strategies highly, with “repair and maintain” at the top, followed by “expand geographic coverage,” and then “more frequent and longer hours.”

MassMoves participants believe that we must repair and maintain the system we have and enhance it to offer more service, while also expanding and growing it.



Regional Priorities to Advance a 21st-Century Transportation System

After discussing and polling on values, goals and actions for the state as a whole, we asked participants to focus on the needs of their specific regions. We first asked them to engage in small group discussions on key actions for improving transportation within their region. Then we asked them to vote by selecting up to three transportation-related actions that they considered the most important for their region. As in the statewide discussions, actions to improve public transit—either rail or bus—ranked first

in every single region. While some regions prioritized rail over bus, or water transportation as an important second priority, participants from across the workshops showed remarkable consistency in their support for public transportation. The third priority varied more across regions, with land development, roads, bridges and tunnels, walking infrastructure, ride services, and bicycling infrastructure all mentioned. The regional results are listed in the table below.

REGION	1 st PRIORITY	2 nd PRIORITY	3 rd PRIORITY
Central Mass	Bus service	Rail transit	Ride services
Metro Boston	Rail transit	Bus service	Land development
MetroWest	Bus service	Land development	Rail transit
Northeast	Rail transit	Bus service	Roads, tunnels and bridges
North Shore	Rail transit	Water transportation	Bus service
South Coast	Rail transit	Bus service	Land development / Roads, tunnels and bridges (tie)
Southeast	Bus service	Rail transit	Roads, tunnels and bridges
South Shore	Rail transit	Bus service	Bicycling infrastructure
Western Mass	Rail transit	Bus service	Walking infrastructure



Participants were also provided an opportunity to discuss and recommend specific actions and projects that they would like to see in their region, to record these actions on flipcharts, and to mark their favorite ideas. We provide key highlights from these recommendations below.

Central Mass:

- High-speed rail
- More frequent rail service
- Weekend rail service from Springfield/Worcester to Boston and other regions
- Expand bus frequency and coverage
- Bus rapid transit
- Autonomous mini-vans

Metro Boston:

- Rail transit: Green Line Extension, North-South Rail Link, Red-Blue Connector
- Bike transit: Expand bike lanes and paths, separate bike lanes from car lanes, improving bike lane connections between neighborhoods
- Bus transit: Expand bus service, add circumferential transit and more dedicated bus lanes, Bus Rapid Transit

Metro West:

- Multi-modal interchanges (e.g., for I-495/90) connecting rail to buses
- Smaller on-demand bus and van service
- Bus Rapid Transit
- Make “last-mile” connections between transit hubs and workplaces

Northeast:

- Better maintain and modernize commuter rail system to make it more reliable
- Increase frequency of rail service
- Better coordinate rail transit with other transportation
- Expand bus service (including stops, frequency and hours)
- Apps to track bus timing
- Have buses carry bikes

North Shore:

- Establish North-South Rail Link
- Extend Blue Line to Lynn and beyond
- Add commuter rail stop in Salem
- Water transportation

South Coast:

- Bus transit: Expand geographic coverage (including small towns), hours of service (including Sundays) and frequency
- Rail transit: Reestablish full-service south coast commuter rail line to New Bedford, Fall River and Taunton

Southeast:

- Rail transit: South Coast Rail, provide year-round service to Hyannis via Cape Flyer service
- Bus transit: Improve interconnectivity among regional transit authorities, increase service during evenings and weekends, improve on-time arrivals

South Shore:

- Improve rail transit connectivity to walking and biking
- Improve transit accessibility for people with disabilities and others
- Quincy Center T-station
- South Station expansion
- Improve bicycling infrastructure (for example, through connected network of separated bike lanes)
- Water transportation

Western Mass:

- Rail transit: Establish/improve east/west rail links (connecting Pittsfield, Springfield and Worcester to each other and to Boston and New York State) and north/south rail links (connecting Greenfield and Springfield to points north like Vermont and Canada and south like Connecticut and New York City)
- Bus transit: Expand and improve service, in particular make buses run more frequently and for longer hours, and create more interconnections among Regional Transit Authorities and between buses and other modes of transportation



Funding Massachusetts' 21st-Century Transportation System

The opening presentation for the workshops included a short explanation and description of transportation funding in Massachusetts. At the end of the workshops, participants were polled on their preferred approaches towards funding the transportation changes they highlighted.

The results indicated that participants recognize the importance of increasing funding if we want to improve our transportation system. For example:

- 71 percent agreed with the statement, “Everyone benefits from the transportation system, so everyone should pay their fair share for it, through broad general taxes (e.g., income tax).”
- 63 percent agreed that, “People should pay for transportation based on how much they use the transportation system (e.g., tolls, transit fares).”

Participants also generally supported the idea of letting cities and towns raise local money for transportation projects of their own choosing, with 78 percent of respondents expressing some level of support for this idea. However, some participants stressed that such regionally based funding should not be used to decrease or preclude continued state and federal funding for transportation projects.



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To fund the Commonwealth's transportation system, MassMoves participants indicated support first and foremost for broad general taxes such as income taxes and were also generally supportive of more specific user fees such as transit fares and tolls.

In their small group conversations, participants also expressed support for innovative funding mechanisms, be they public-private partnerships, local gas taxes, capturing the value of future development near transportation infrastructure, or using road pricing to reduce congestion and fund projects. In many regions outside of Metro Boston, participants also specifically recommended increasing funding for their regional transit authorities.



A Vision for Massachusetts' 21st-Century Transportation System

At the end of each regional workshop, we invited participants to write down their own brief "vision statements" for a 21st-century transportation system in Massachusetts. We then collected these visions and analyzed the results.

More than 300 participants submitted individual vision statements, many of which included compelling language calling for a more convenient, affordable, clean, resilient and sustainable multi-modal system. In addition, we observed that certain words and phrases kept reappearing in multiple vision statements, and that these "high-frequency" words largely corresponded with the results of the keypad polling. For example, the word "rail" appeared 73 separate times among the visions, followed closely behind by such words as "accessible," "transit," "affordable," and "bus."

Below is a word cloud based on the language in these 300-plus individual visions. The larger the word, the more frequently it was mentioned.



A statewide vision that reflects the collective wisdom of the workshops might look something like this:

Massachusetts residents envision an affordable, convenient and clean 21st-century transportation system that will spur economic growth and opportunity across the Commonwealth. They believe in a system funded by all, in which all citizens and businesses have access to public transit, roads, bridges and paths that are safe and in good repair. They envision a robust public transit system across the entire Commonwealth: a regional rail system should connect east to west and north to south; buses should run more frequently and to more places, bypassing traffic where feasible; and communities should be walkable, bikable and accessible by public transportation



Recommendations

In light of the findings and data above, we offer the following broad recommendations to state decision makers as they consider how to advance policies to improve transportation in Massachusetts.

Recommendation #1: Focus on actions to spur economic growth and improve affordability

The *MassMoves* workshops suggest that multiple transportation goals and values are important to Massachusetts residents, but promoting economic growth and increasing affordability are the most broadly shared.

Recommendation #2: Improve and expand public transportation, especially rail and bus

While a variety of actions received significant support, there was robust interest in improving and expanding rail transit across every region across the Commonwealth. Improving and expanding bus service also received significant support, as did encouraging land development that promotes walking, biking and transit.

Recommendation #3: Repairing and maintaining public transit alone is not enough

MassMoves participants want to see the public transit system repaired, maintained, and expanded. They are also very supportive of public transit running more frequently and for longer hours.

Recommendation #4: Identify additional revenue to pay for transportation improvements

MassMoves participants favor broad-based taxes for funding a 21st-century transportation system, but are also supportive of user fees. They support legislation that would allow cities and towns to raise their own revenues and prioritize their own local or regional projects.

Recommendation #5: Embrace a statewide vision for a 21st-century transportation system

To know what actions to take today, we need to know where we want to end up down the road. Developing a statewide vision for a 21st-century transportation system is thus essential. Participants in the *MassMoves* workshops share many of the same transportation goals, values, and preferred actions across interests and geographies. It is therefore not only possible but also highly advisable to integrate these ideas, values and goals from across the state into a collective vision. Policymakers should take seriously this aim and continue to support a statewide transportation visioning process for the Commonwealth.

We are encouraged by the positive, informed and lively conversations among citizens and lawmakers that we observed in the workshops, and by the significant number of shared values, goals and actions that emerged across the state. We hope these resources spur further conversation on our statewide vision for a 21st-century transportation system, and provide guidance and inspiration for decision makers in turning this vision into reality.



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Advisory Group

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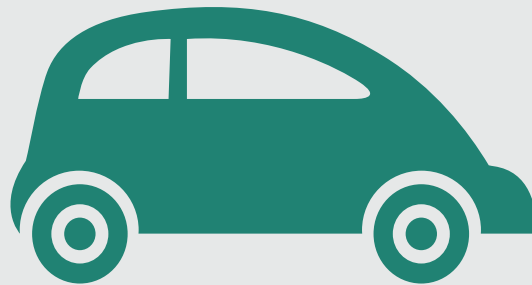
Regional Partners

MassMoves would like to thank the Massachusetts Regional Planning Agencies, Metropolitan Planning Organizations, and regional transportation planners who reviewed this initiative in three different meetings. These organizations also provided a list of their key projects and priorities for each region to inform workshop participant discussion.

State Senate

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