STRATEGIES FOR ENVIRONMENTAL OUTREACH AND ENGAGEMENT

BOSTON REGION
MPO
METROPOLITAN PLANNING ORGANIZATION

Strategies for Environmental Outreach and Engagement

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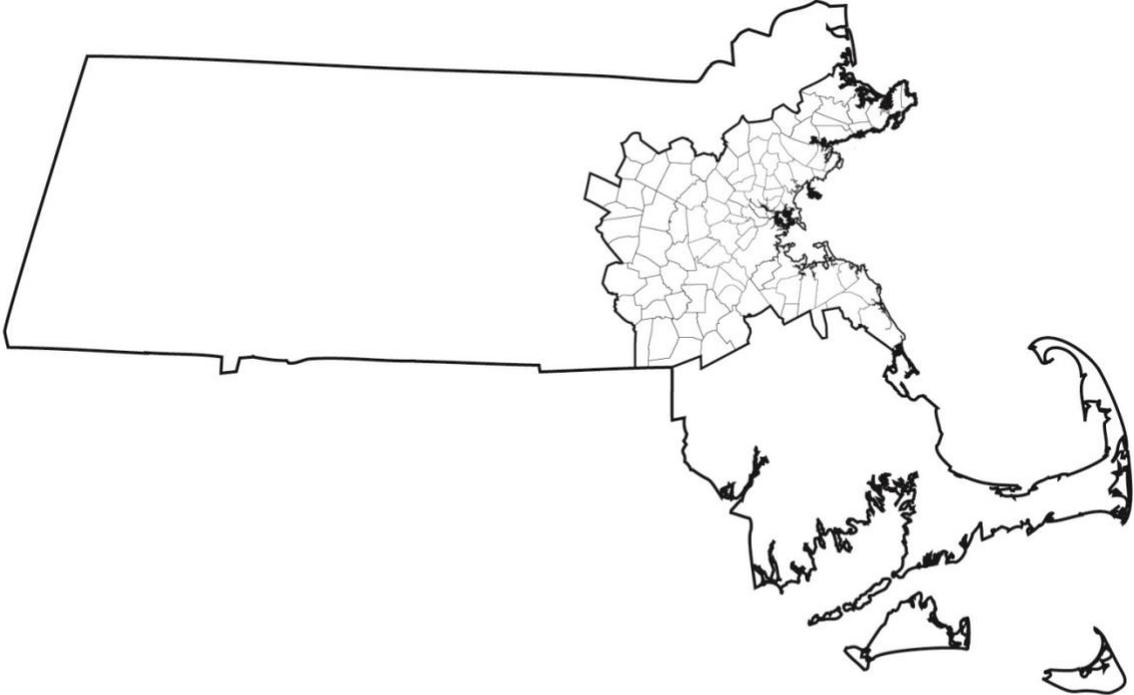Contributors
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Abstract

The Boston Region Metropolitan Planning Organization (MPO) is responsible for carrying out the federally required transportation planning process in the Boston area through long-range planning, investing in local projects, and studying transportation issues and needs. The MPO's planning process is focused on reducing the environmental impacts of transportation infrastructure and increasing its resilience to climate hazards in response to changing environmental pressures. Recognizing the need for strong working relationships with the region's many environmental organizations and stakeholders, the MPO staff undertook this study to guide initial outreach with environmental stakeholders who are unfamiliar with the MPO to create a foundation for meaningful interactions and trust.

Stakeholders engaged through this study included advocates and municipal staff focusing on climate resilience, air quality, greenhouse gas emissions, open space preservation, and other environmental topics. Interviews with peer agencies and a literature review allowed staff to establish best practices in climate and environmental communication. A survey was sent to regional stakeholders to better understand local environmental priorities and gauge their initial interest in engaging with the MPO. The survey was followed by targeted one-on-one meetings and in-person events to learn more about stakeholder projects and priorities, and to make connections to the MPO and transportation planning.

This study taught us to change our approach to environmental engagement in the following ways: create new platforms for environmental engagement with the MPO; disseminate information specific to the MPO's environmentally relevant planning activities; operationalize best practices in environmental communication; continue engaging in other environmental stakeholders' work; and explore ways to use stakeholders feedback in the MPO's long-range planning activities. Having stronger relationships with environmental advocates and municipal environmental staff will improve the efficacy and transparency of the MPO's planning work as it relates to the environment, bring a wider variety of voices to the MPO's transportation planning and capital investment processes, and enable the MPO to be more connected to regional environmental conversations and initiatives.

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Chapter 1—Introduction

The Boston Region Metropolitan Planning Organization (MPO) has expanded its environmental and public engagement work over the past few years through dedicated programs, such as the Climate Resilience Program established in federal fiscal year (FFY) 2022 and an evolution and expansion of the Public Engagement Program beginning in FFY 2021. Through these programs, staff have identified a need for more intentional engagement and coordination with environmental stakeholders in the Boston region to better inform the development of MPO work.

Staff undertook this study in FFY 2024 to build relationships with practitioners and advocates working on climate resilience and environmental issues in the region, and to develop recommendations for how the MPO can more effectively incorporate environmental perspectives into transportation planning work. This study involved a literature review of environmental engagement strategies and best practices; interviews with peer agencies; a survey of municipal staff, advocacy groups, and community-based organizations; one-on-one interviews to discuss survey results and build relationships; and an in-person public event. The information gathered through these activities informed the development of several recommendations for the MPO to continue meaningfully engaging environmental stakeholders and incorporating their perspectives into regional transportation planning and policymaking.

Much of the MPO's planning and programming work has connections to the environment that necessitates engagement with regional advocates and local stakeholders focused on environmental issues. Transportation both impacts and is impacted by the environment in several ways:

- Climate change and natural hazards pose increasing risk to safe and reliable transportation in the region.
- The transportation sector produces the highest share of greenhouse gasses of any sector in Massachusetts.
- Pollutant runoff from impervious surfaces associated with transportation causes harm to ecosystems and wildlife.

The MPO should address these issues in collaboration with other stakeholders in the region to more effectively consider local needs and priorities, use local knowledge, and avoid duplicating efforts. More engagement with regional environmental stakeholders will improve the MPO's ability to reduce harm to the environment and safeguard the transportation system through its planning and programming processes.

There are numerous community-based organizations and advocacy groups focused on environmental initiatives in the Boston region as well as existing platforms and forums for communication. Municipalities are increasingly hiring staff focused on climate change and sustainability or are having existing staff factor these topics into ongoing work. The MPO, with its unique perspective and regional position, could contribute by being more engaged in these conversations.

Chapter 2—Literature Review

Staff conducted a literature review to understand how other MPOs and planning agencies have engaged with environmental advocacy groups and stakeholders. The literature review included research into peer agencies' resilience work and environmental engagement practices, interviews with peer agencies, and research on effective strategies and tactics for climate change-related communication and engagement. As a result, staff identified best practices for communicating with stakeholders about climate resilience and adaptation, and meaningfully engaging environmental justice communities in planning and decision-making. References can be found in Appendix E.

2.1   BEST PRACTICES IN ENVIRONMENTAL COMMUNICATION

Best practices and strategies for effective communication and engagement on environmental and climate issues highlighted the importance of centering personal connections, considering stakeholders' environmental priorities and values, and developing processes that allow members of the public to take an active role in climate action on the issues that are most salient to them.

Figure 1
Best Practices for Effective Communication on Environmental Topics

Create trusting relationships
- Build reciprocal relationships to support effective, productive communication and engagement
- Partner with local leaders and trusted community members to help deliver messages directly when possible
- Actively listen to the audience you are engaging, and adapt strategies and programs in response to local feedback

Make the work outcomes-focused
- Begin engagement with clearly defined goals to help set expectations and build trust
- Develop transparent, achievable metrics for success
- Focus engagement on proactive, actionable solutions rather than problems
- Connect climate action and engagement to achieving specific community goals

Local contexts
- Focus engagement for meaningful participation
- Meet communities' cultural and language needs
- Listen and adapt strategies and programs
- Connect with peoples' experiences and local environmental assets
- Use environmental justice analyses to inform engagement

Lead with shared values
- Connect to the values and emotions of the intended audiences to make communication more effective
- Tailor messaging and framing to specific audiences

Prioritize storytelling
- Connect with peoples' lived experiences
- Avoid technical jargon

Source: Boston Region MPO staff.

Findings from the literature review and interviews with peer agencies suggest linking communications about environmental issues and transportation planning to more tangible themes or frames.

Common communication frames include the following:

Public Health Frame: Prioritize connections between the environment and human health. For example, better access to green space improves mental and physical health.

Geographical Identity Frame: Emphasize concern for specific local issues and place value on individuals' and communities' relationships with the environment.

Economic Frame: Consider economic angles of environmental issues such as the costs and benefits of adaptation and mitigation, savings from energy efficiency, and green jobs.

Conservation and Preservation Frame: Consider impacts of human activities on wildlife and ecosystems.

Morality and Ethics Frame: Consider values such as stewardship and preservation of the environment for future generations.[1]

Communicating the impacts of the MPO's transportation planning work through such frames will help a wider range of stakeholders engage in the MPO's work and better understand its connections to their own goals and initiatives. In the survey released for this study, participants were asked to select frames their organizations are interested in. The results are discussed further in Chapter 3.

Staff also used the communication frames to inform strategies for initiating contact and building new relationships with stakeholders. Internal guidance was developed to match specific communication and engagement activities to different engagement goals relevant to the context and timing of a project or process.

Figure 2 represents increasing levels of meaningful engagement with environmental stakeholders: inform, consult, involve, collaborate, and empower.

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[1] Nan Li and Leona Yi-Fan Su, "Message Framing and Climate Change Communication: A Meta-Analytical Review," Journal of Applied Communications, Association for Communication Excellence (Volume 102, Issue 3, 2018). https://newprairiepress.org/cgi/viewcontent.cgi?article=2189&context=jac#:~:text=Based%20on%20the%20literature%20review,%2C%20public%20health%2C%20and%20economy.

These levels are based upon the International Association for Public Participation's (IAP2) Spectrum of Public Participation. A more comprehensive matrix of engagement strategies, including descriptions of the strategies and recommendations for how and at what stage of a project lifecycle to deploy them, can be found in Appendix A.

Figure 2
Relevant Strategies for Engaging Environmental Stakeholders

INCREASING IMPACT ON THE DECISION

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Source: International Association for Public Participation's (IAP2) Spectrum of Public Participation.

2.2 INTERVIEWS WITH PEER AGENCIES

Conversations with peer agencies including the Metropolitan Area Planning Council (MAPC, the regional planning agency for the Boston region and a member of the Boston Region MPO) and other MPOs across the country provided insight into effective engagement strategies for environmental stakeholders. Peers recommended avoiding engagement that may appear transactional or extractive, and focusing instead on building meaningful, mutually beneficial relationships. For example, conducting general outreach on an ongoing basis can be more effective at building trusting relationships and encouraging participation with the MPO than project-specific, sporadic engagement. This way, stakeholders' input can shape the foundation of a project or plan instead of being a reaction to material that has already been developed.

The Chicago Metropolitan Agency for Planning (CMAP) convenes a Climate Committee which meets quarterly to advise on environmental issues related to

planning work. To more intentionally and effectively engage environmental justice communities and groups, CMAP also convenes the Community Alliance for Regional Equity (CARE). The 14-member group is composed of community-based organizations whose members contribute their expertise and lived experiences to help develop and support CMAP's work. This involvement focuses on addressing transportation equity and resilience issues, contributing to the decision-making process, collaborating on the development of new engagement and planning tools, and providing input into projects and focus groups, including work on specific climate issues. Each member organization receives a $10,000 honorarium as compensation for their time and expertise.

The Broward Metropolitan Planning Organization (Broward MPO) in the Fort Lauderdale, Florida region collaborated on a broad regional vulnerability assessment in 2022, which informed the development of a framework to holistically evaluate the impact of climate change on Hollywood Boulevard (a climate-vulnerable transportation priority corridor for the region) and its surrounding neighborhoods. The framework was developed in collaboration with state and local government and community-based stakeholders. It emphasizes the significance of public engagement in shaping resilience and adaptation planning and creating sustainable solutions to address ongoing and future climate change risks. Continuous stakeholder engagement supported Broward MPO staff in identifying vulnerable areas to prioritize for future infrastructure improvement projects, and more broadly incorporate resilience into project planning.

The North Front Range Metropolitan Planning Organization (NFRMPO) in the Fort Collins, Colorado region developed an Environmental Justice Plan to proactively address environmental justice concerns and incorporate them into the planning process. NFRMPO staff highlighted the importance of intentional communication, meeting people in their communities, and tailoring presentations to people's level of understanding during the development of the Plan, which was adopted in April 2021. The Plan guides local engagement, project prioritization, and long-range planning activities. Air quality is a top environmental concern in the region, so NFRMPO staff collaborated with stakeholders including the Public Health Department, Regional Air Quality Council, and the Community Champions regional engagement group to develop materials for members of the public to stay engaged with NFRMPO's work. For example, NFRMPO staff collaborated with the Community Champions group to go beyond simply translating material and to create culturally meaningful messages for the communities they serve.

Chapter 3—Stakeholder Surveys

3.1 PURPOSE OF THE SURVEYS

Staff released two surveys to collect detailed data on the current priorities, perceptions, and preferences of environmental stakeholders in the Boston region regarding climate resilience planning and engagement with the MPO. One survey targeted municipalities (particularly municipal staff involved in environmental work), while the other targeted advocacy and community-based organizations.

Both surveys asked respondents about the top environmental concerns and priorities for their communities, the strategies they use to communicate and engage with stakeholders about environmental and climate resilience topics, how they currently connect and collaborate with peers on these topics, and their familiarity with the MPO and interest in engaging with the MPO on environmental topics related to transportation in the future. The full list of survey questions can be found in Appendices B and C.

The goal of these surveys was to better understand the existing environmental efforts stakeholders in the region are involved in and develop effective strategies and messaging to different communities. The survey also helped MPO staff understand the ideal role for the MPO to play in ongoing environmental and climate conversations and collaboration in the region.

3.2 SURVEY RESULTS

The surveys were sent to 97 municipalities and 73 advocacy and community-based organizations. Thirty-eight municipalities (40 percent of all municipalities

contacted) and 33 advocacy groups and community-based organizations (45 percent of all groups and organizations contacted) responded to their respective surveys. A variety of stakeholders from across the region and representing local, regional, and state interests participated in the survey.
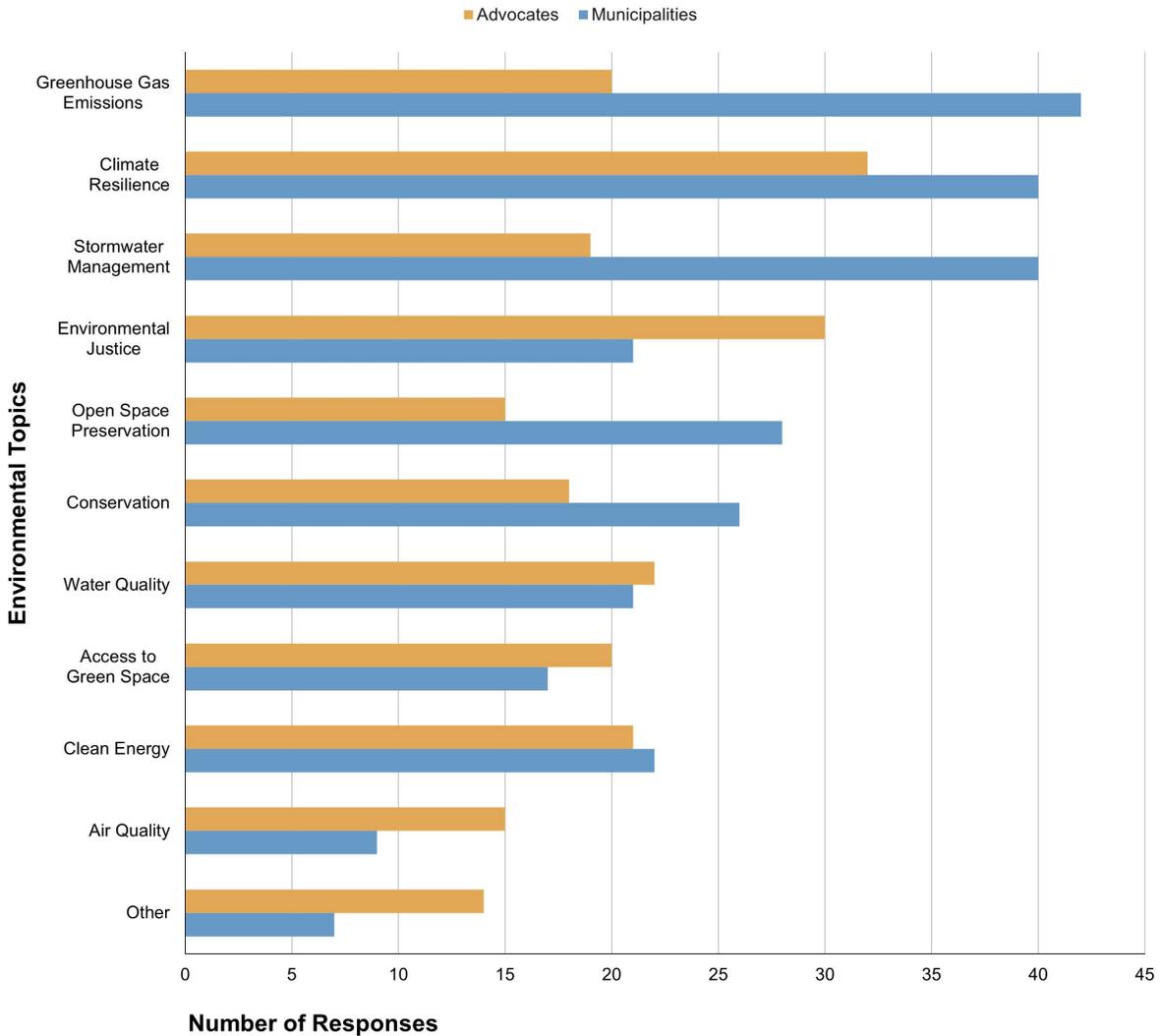
Figure 3
Municipalities and Advocacy Groups that Responded to the Survey
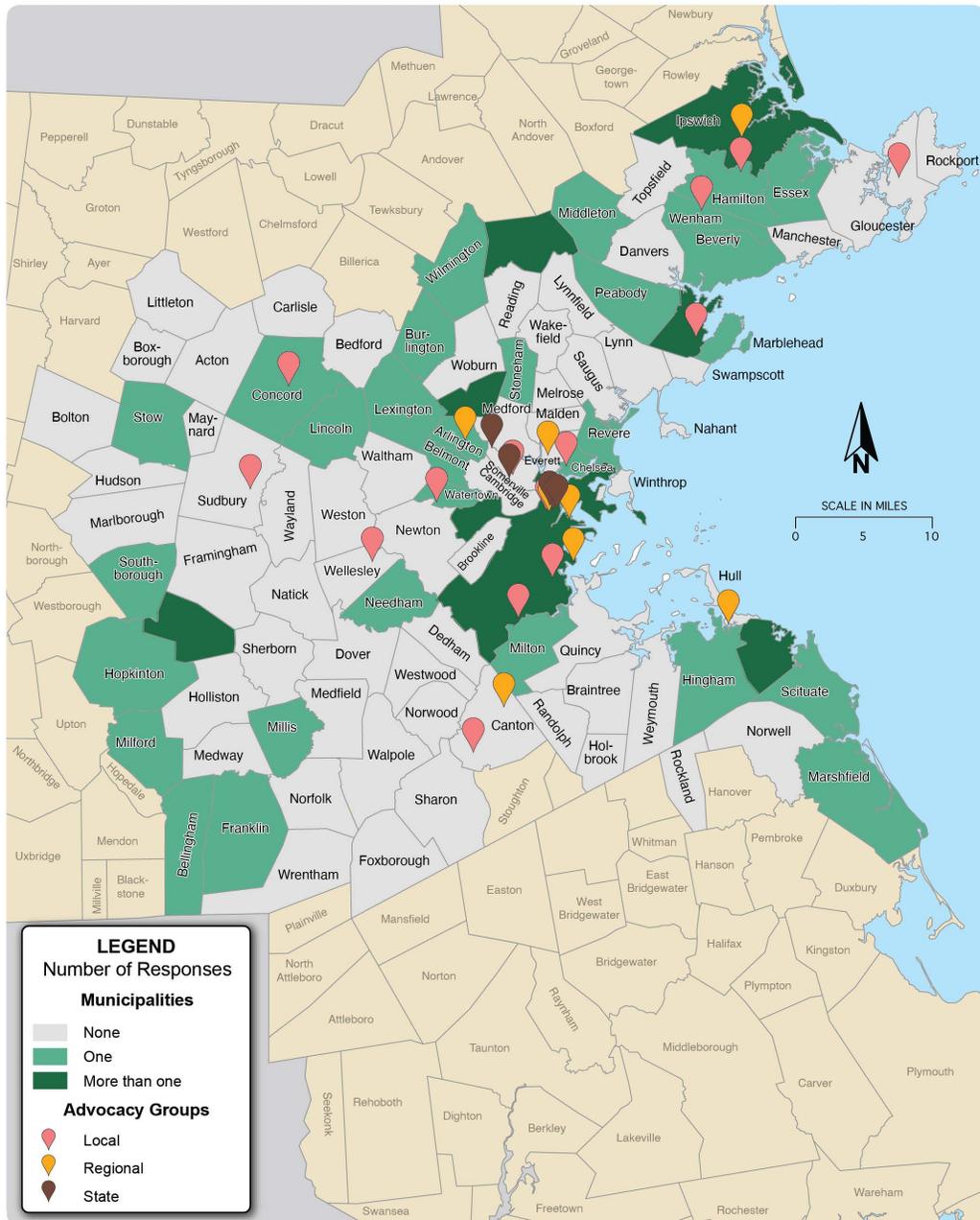
Source: Boston Region MPO staff.

Figures 4 through 11 summarize the results from the survey questions.
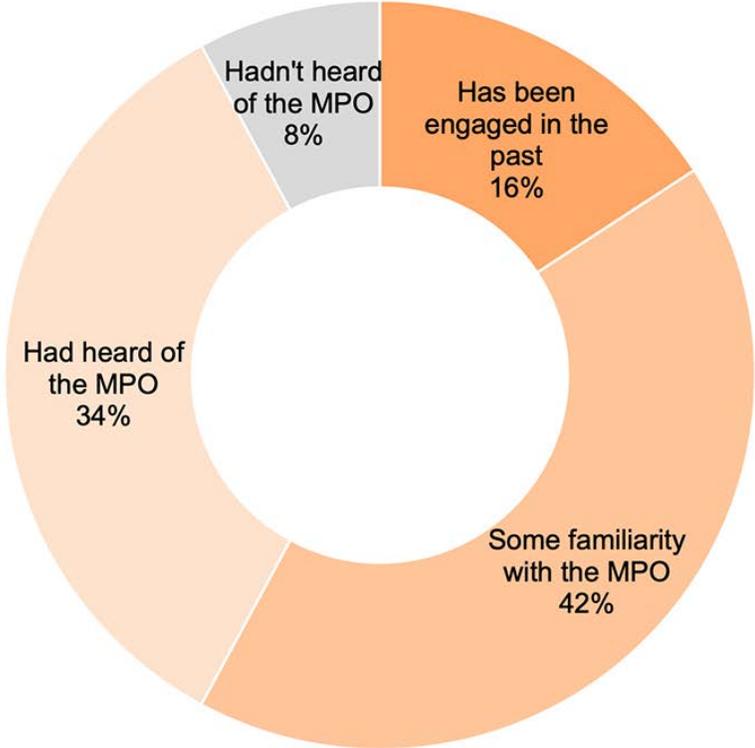
**Figure 4
Survey Results: What environmental topics are priorities for your town/organization?**

Source: Boston Region MPO staff.

Advocates who responded to the survey were most interested in climate resilience and environmental justice, while municipal representatives who responded were most interested in greenhouse gas emissions, climate resilience, and stormwater management.

Figure 5
Survey Results: Advocate Groups' Familiarity with the MPO

Advocates n = 38

Source: Boston Region MPO staff.

Most advocates who responded to the survey had some familiarity with the MPO or had heard the name, but very few had engaged with the MPO in the past.

Figure 6
Survey Results: What challenges do you face in participating in regional environmental coordination?
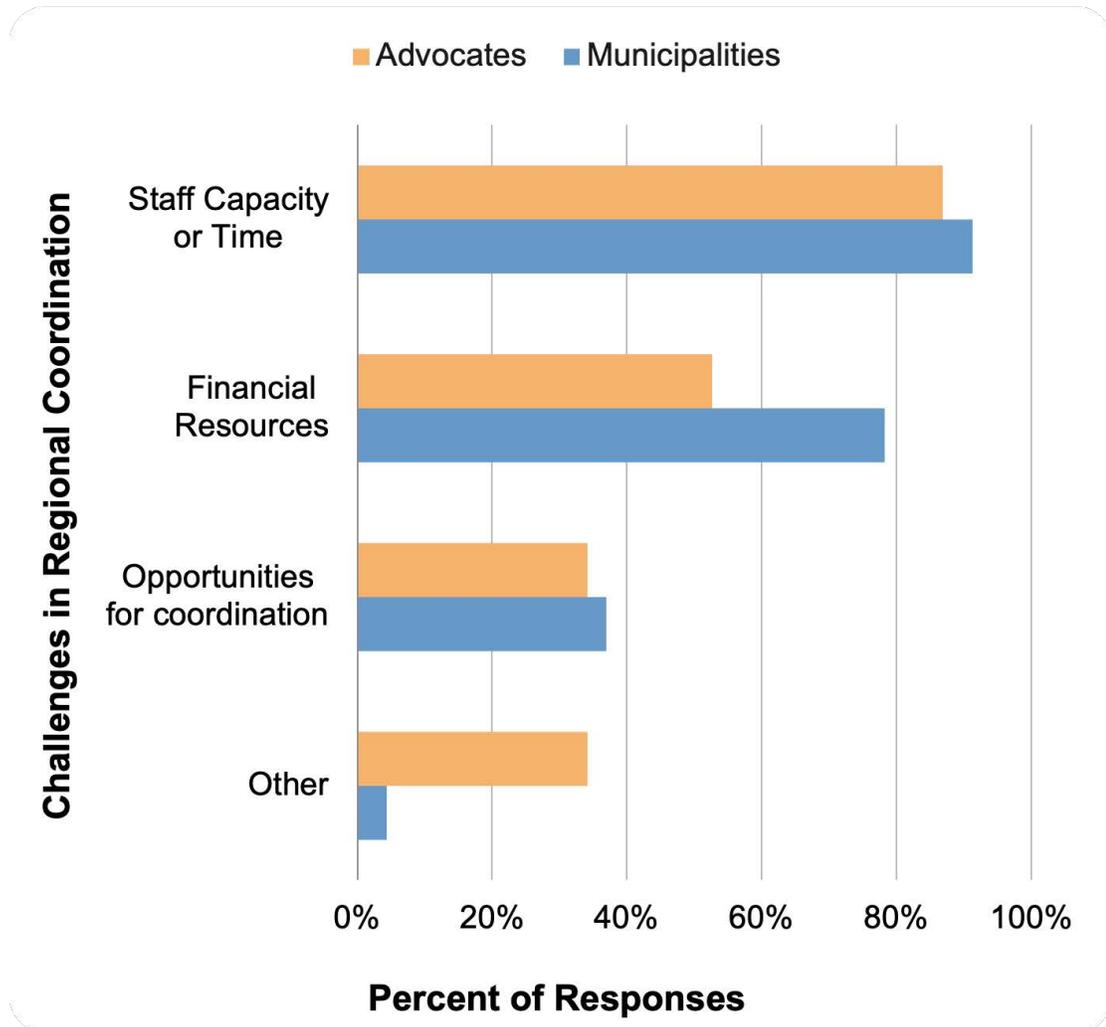
Source: Boston Region MPO staff.

Survey respondents indicated staff capacity or time and financial resources as the main challenges in being able to participate in regional environmental coordination.

Figure 7
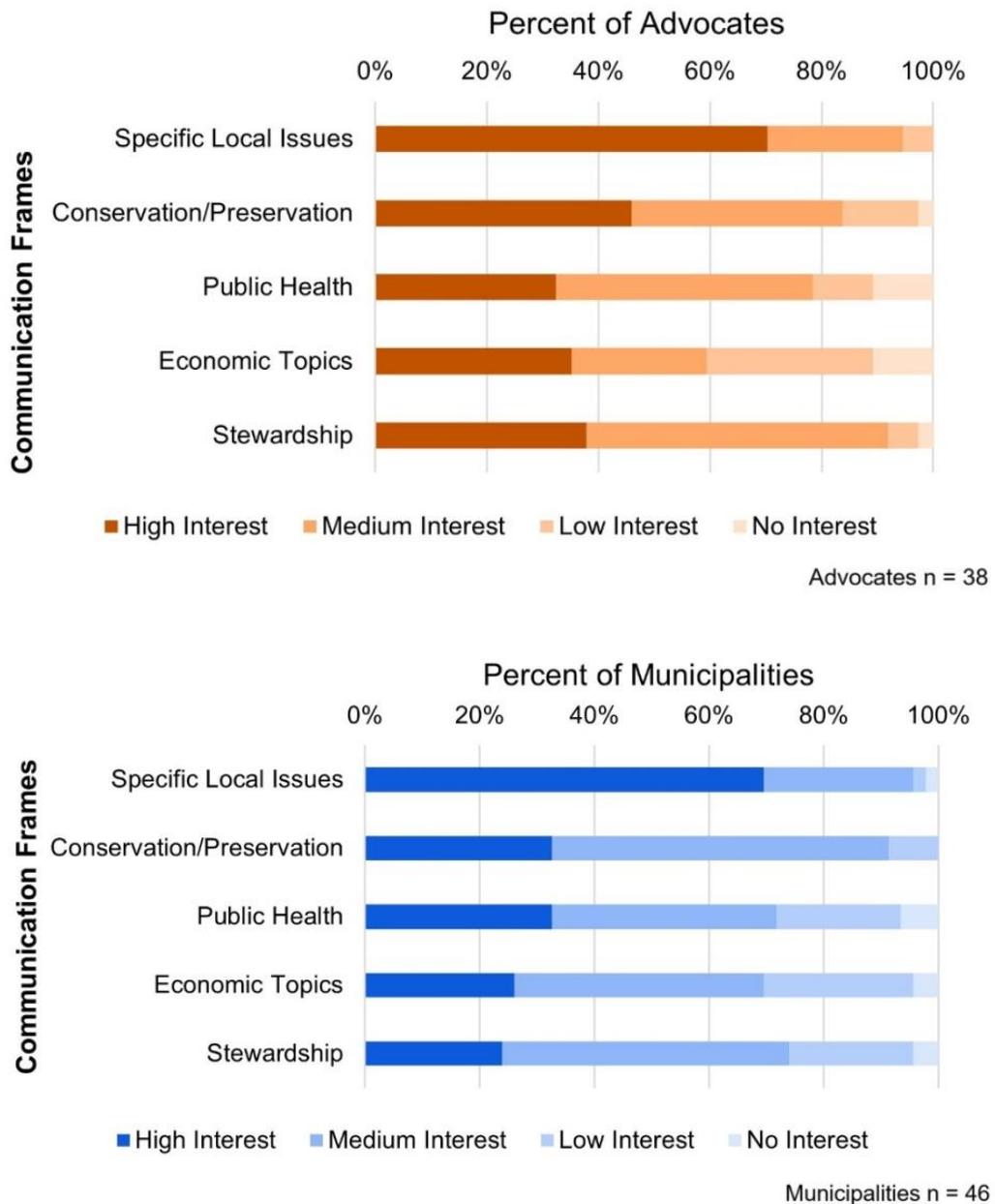**Survey Results: Which of the following themes are of interest to your town/organization?**

Percent of Advocates

Advocates n = 38

Percent of Municipalities

Municipalities n = 46

Source: Boston Region MPO staff.

Both municipalities and advocates indicated high interest in communications surrounding a specific local issue, which matches with the Geographical Identity frame. The other themes are of relatively equal interest, with Conservation and Preservation as the next highest of interest to stakeholders. This indicates the need to frame communications to more clearly connect transportation planning to specific local impacts and conservation.

Figure 8
Survey Results: What engagement strategies do you use?

Source: Boston Region MPO staff.
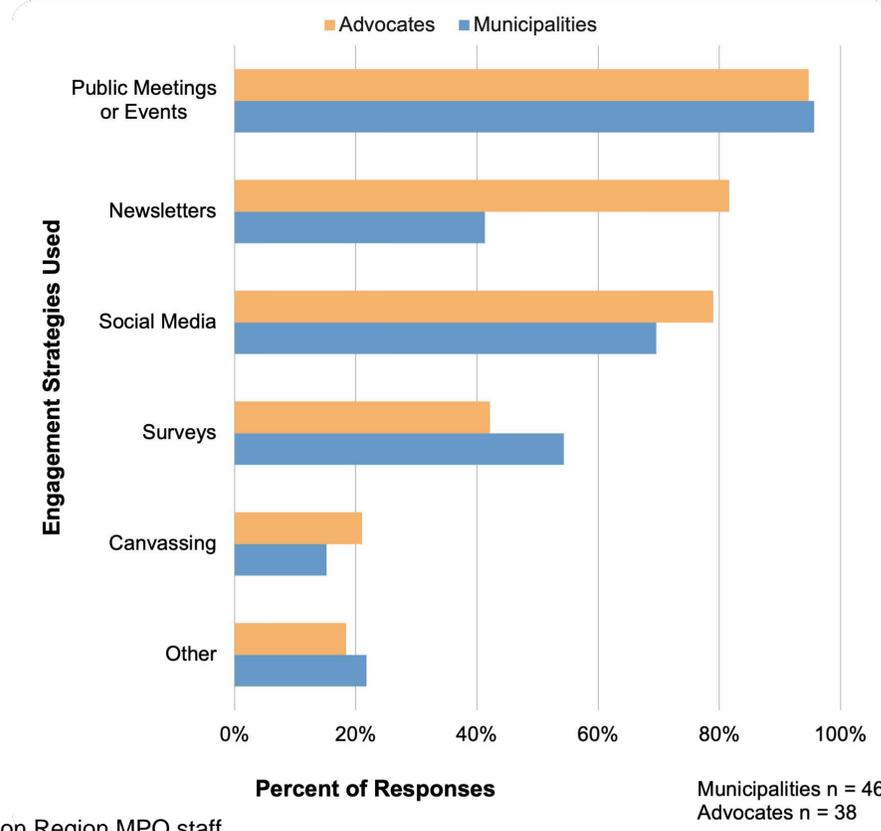
Respondents indicated the engagement strategies they use most are public meetings and events, social media, newsletters, and surveys. This gives MPO staff insight into which strategies stakeholders may be most receptive to, as well as which strategies have been successful for others.

Figure 9
Survey Results: Do you want to be more involved with the MPO's work as it relates to the environment?
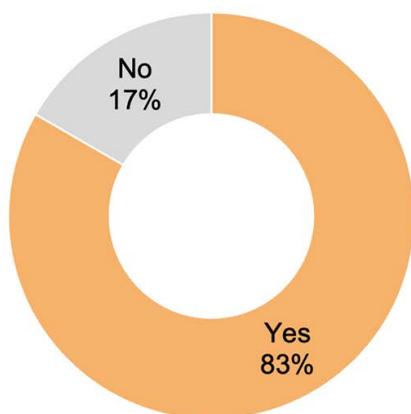
Source: Boston Region MPO staff.   Advocates n = 36   Municipalities n = 46

Most survey respondents (approximately 80 percent of both municipalities and advocates) indicated an interest in being more involved in the MPO's work as it relates to the environment, which is encouraging for future engagement opportunities.

Figure 10
Survey Results: How would you prefer to coordinate with MPO staff?
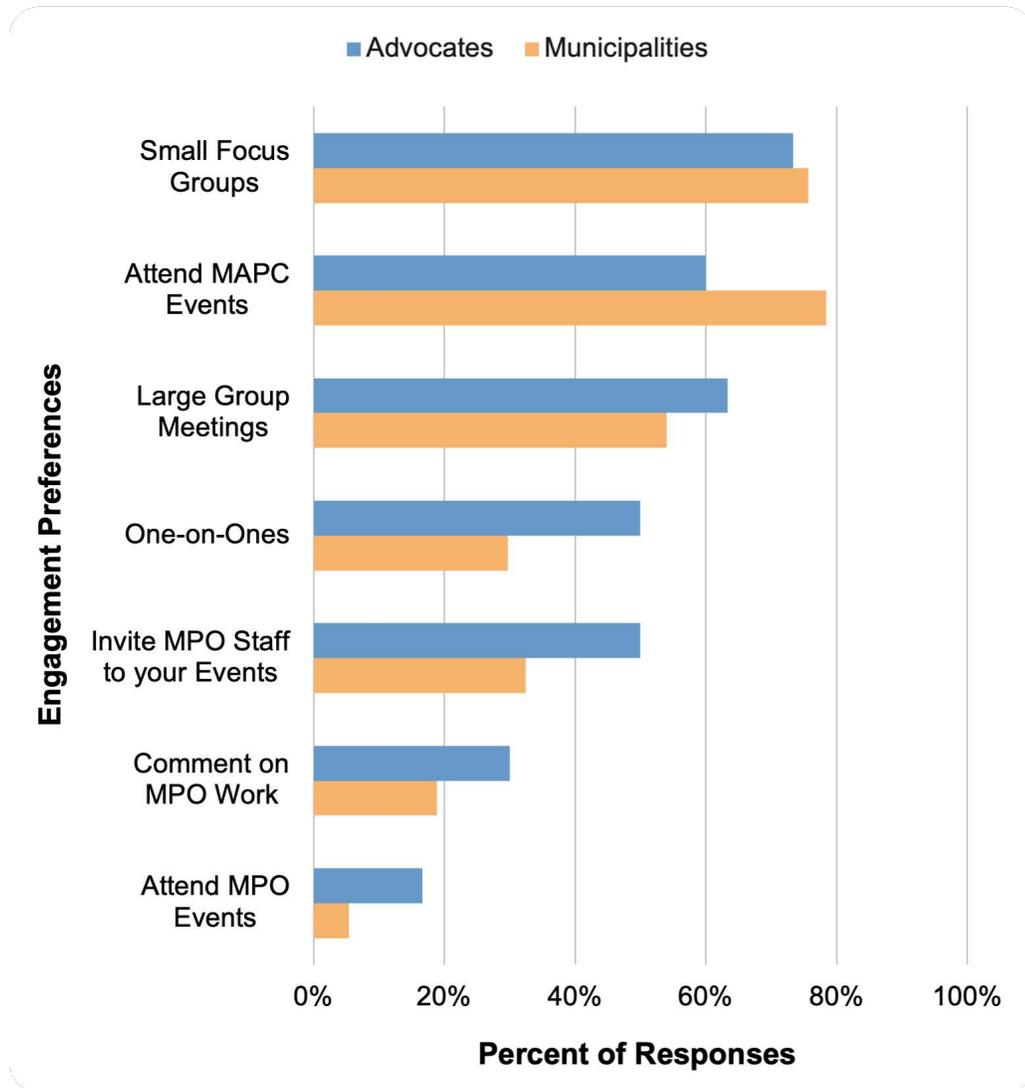
Source: Boston Region MPO staff.

Respondents indicated an interest in a variety of engagement platforms to continue coordinating with the MPO, including small focus groups, large group meetings, and attending events held by MAPC.

Figure 11
Survey Results: How do you feel MPO staff can support your work?

Source: Boston Region MPO staff.

Advocates indicated interest in all options for MPO staff support, while municipalities appeared especially interested in support for getting a project funded and collaborating on a study or project. The MPO can explore ways to provide this type of support by connecting advocates and municipalities early in the project design process to improve coordination on project initiation and environmental elements of projects, and by expanding the scope of the MPO's technical assistance offerings to include climate and environmental topics.
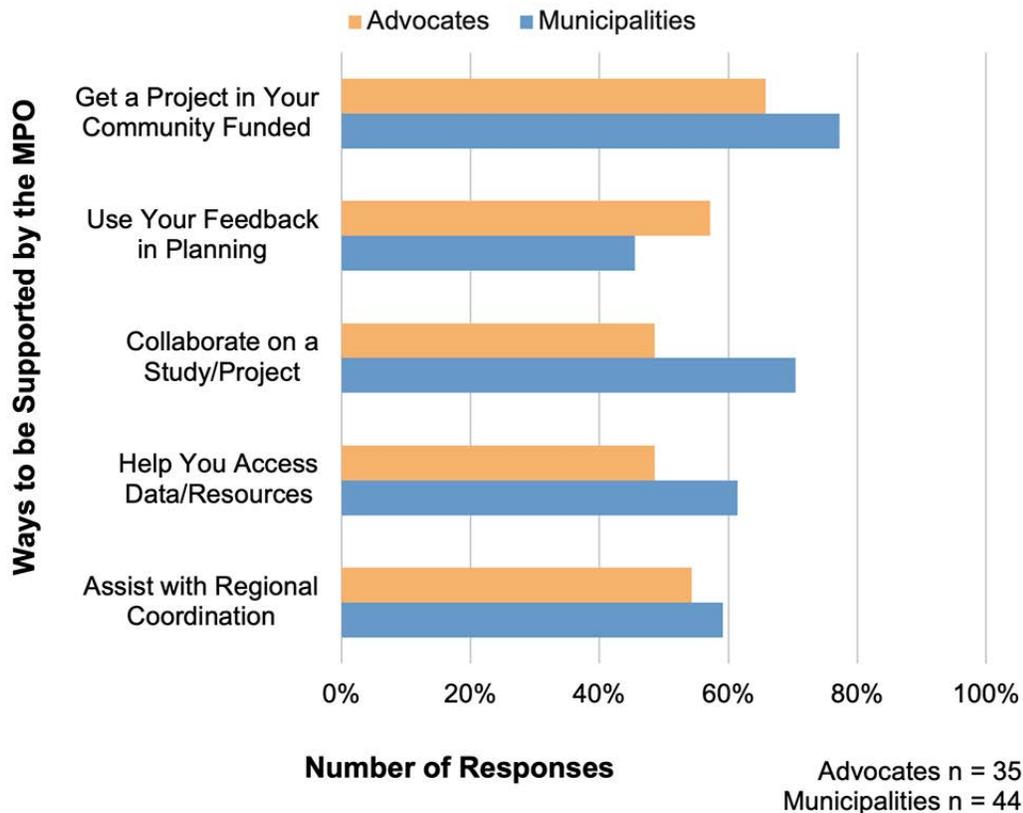
To better understand the barriers and challenges municipal staff and advocates face in engaging with the Boston Region MPO, staff asked respondents what information they needed to better engage in the MPO's planning process. In general, respondents stated the need for more information about the MPO's funding process and opportunities. Municipal staff were interested in learning more about available resources to support their climate resilience efforts and address vulnerability concerns. Advocates and community-based organizations were interested in how the MPO's goals and efforts align with their work and ways to stay involved with the MPO's planning processes. Both groups highlighted the need for coordination between local organizations, municipalities, and public and government agencies to address increasing resilience and transportation-related issues.

Chapter 4—Interviews

4.1   PURPOSE OF THE INTERVIEWS

Staff conducted informal interviews with stakeholders who had responded to the surveys and indicated their interest in discussing their responses one-on-one. The interviews allowed staff and stakeholders to build a foundation for a more meaningful working relationship, dive deeper into survey responses, and begin addressing their communities' needs and concerns.

Of the 40 municipalities that responded to the survey, 20 percent (eight municipal staff) participated in a post-survey interview. Of the 33 advocacy or community-based organizations that responded, 30 percent (10 people) engaged in an interview about the survey. Representatives of advocacy and community-based organizations were compensated for their expertise and time spent participating in interviews, which helped reduce burdens on smaller and less-resourced organizations as well as build trust and foster partnerships.

4.2   INTERVIEW RESULTS

The interviews allowed staff to deepen relationships with municipal and advocacy stakeholders, identify concrete actions to advance projects or partnerships, and assess interest in follow-up engagement activities. Staff solicited input on the ideal role of the MPO in connecting climate resilience to transportation planning.

Participants expressed strong support for the MPO acting as a convener for a broad range of environmental stakeholders and interests throughout the region, and facilitating communication, collaboration, and resource sharing.

Several themes emerged from the interviews. Participants expressed a need for

- more education about the MPO, the regional transportation planning process, and project funding opportunities more broadly and through the lens of climate resilience and environmental issues;
- more spaces and opportunities for environmental stakeholders to connect and collaborate;
- strong advocate involvement in municipal project identification and project conception and design, which can help reduce municipal capacity constraints and lead to successful outcomes;
- more collaboration between advocates, municipalities, and state and regional agencies such as the MPO and the Massachusetts Department of Transportation (MassDOT) in particular (especially in project development and engagement processes);
- partnerships with advocates and community-based organizations to build and demonstrate community support for projects and initiatives when interests and objectives align; and
- more support from the MPO in advancing key environmental initiatives such as access to green space and climate adaptation.

Many stakeholders interviewed connected resilience to mode shift, highlighting the need for more active transportation infrastructure, particularly bicycle accommodations, as well as for better first- and last-mile connections to public transit. Stakeholders in communities with commuter rail service also discussed the need for electrification and emissions reduction efforts. Several stakeholders noted the collaboration necessary to advance these conversations and efforts, including collaboration between municipalities, transit providers, and MassDOT to address resilience concerns related to local infrastructure that is owned and maintained by various entities.

Several interviews also focused on climate change adaptation strategies. Stakeholders (particularly those in coastal communities) emphasized the vulnerability of key infrastructure, including transportation infrastructure such as critical roadways and rails, to flooding and sea level rise. Discussions underscored the need for a collaborative, multi-sectoral approach (that intersects with public health, equity, and land use issues in particular) to address these risks.

In addition to collecting a broad range of input from the interviews regarding continued relationship-building and the MPO's ongoing involvement in environmental conversations, staff identified concrete next steps and follow-up activities during the interviews:

- Identify specific project needs, including one new technical assistance project staff will undertake in Essex in FFY 2025 to assess coastal flooding along a major town roadway.
- Better define and communicate project development or technical assistance needs more broadly, such as by providing resources and guidance regarding project initiation and how to navigate regional and state design requirements.
- Provide organized, comprehensive information about transportation resilience project funding opportunities from the MPO, MassDOT, and discretionary grants from federal and state sources.

Other outcomes included invitations to connect with existing, established coordination groups and forums that interviewees were involved in, and invitations to participate in upcoming events, workshops, and webinars to share more information about the MPO and expand visibility and relationships.
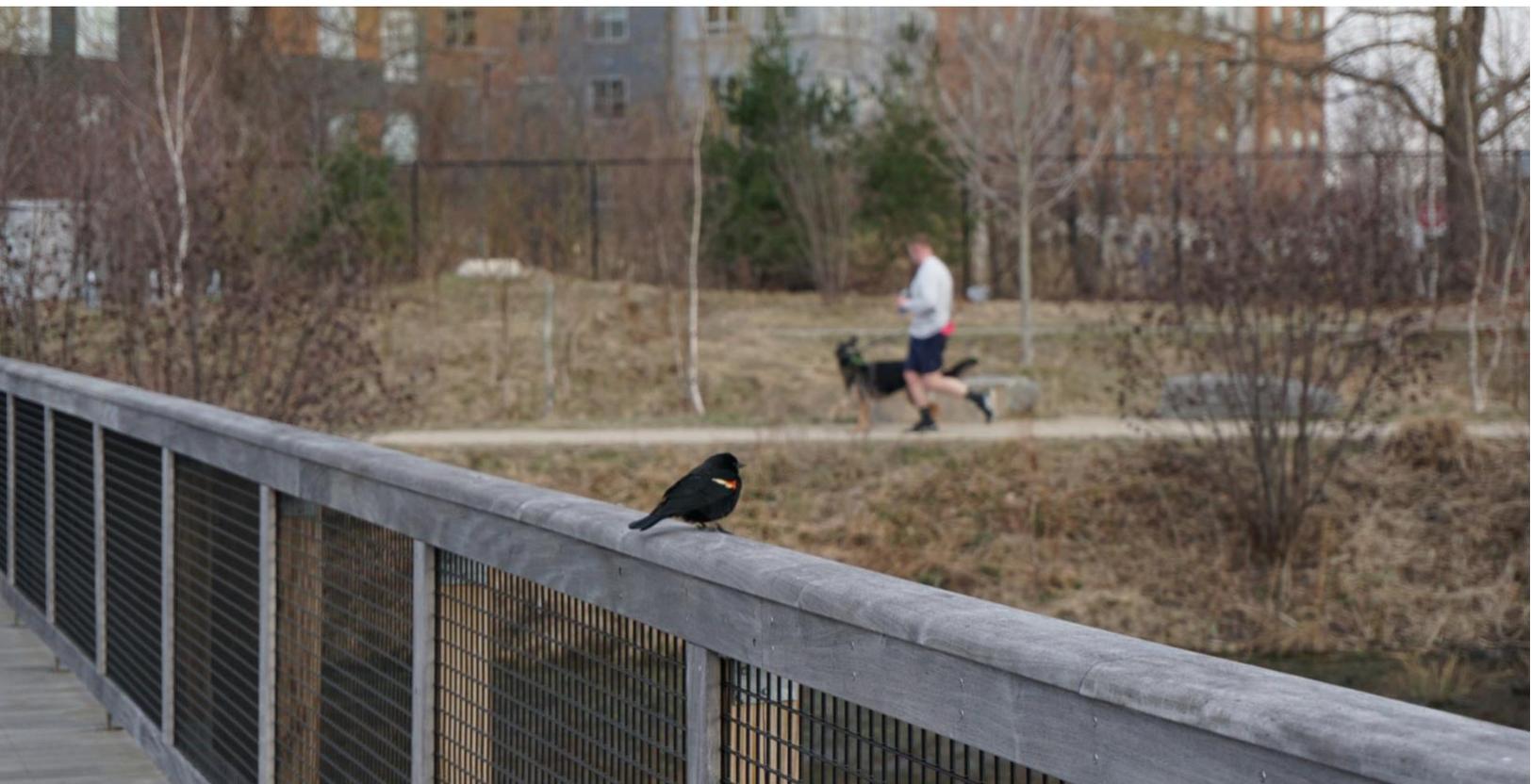
Chapter 5—Events

5.1   EVENTS HELD BY STAKEHOLDERS

Attending events held by stakeholders in the region is an important way for MPO staff to stay engaged and maintain trust and relationships with advocates and community organizations. By attending stakeholder events and offering to speak about the MPO, staff can be more informed about regional environmental work and can build connections on an ongoing basis.

At events where staff hosted an MPO table, staff shared information about the MPO and its resilience work; conducted interactive engagement activities, including a street design game where staff asked participants how they would design a street to be resilient to flooding or extreme heat; and made new direct connections, including via an email sign-up sheet for those interested in resilience. Staff also participated in discussions about resilience and environmental topics in transportation planning at events such as river clean-ups and walking tours. Attending events hosted by advocacy and community-based organizations provided key opportunities for staff to deepen relationships and

elevate the MPO's resilience work, which often sparked follow-up discussions and post-event connections.

Figure 12
Timeline of External Events MPO Staff Attended during This Study

March 15
Environmental Business Council's and University of Massachusetts Boston Sustainable Solutions Lab's Climate Adaptation Forum

April 6
Massachusetts Institute of Technology's Youth Climate Action Conference

April 20
Charles River Watershed Association's Earth Day Clean-up

May 4
Wake Up the Earth Festival

April 22
City of Boston's Earth Day Extravaganza

May 5
City of Boston's Dorchester Open Streets

May 21
Mystic River Watershed's Mystic Greenways Walking Tour

July 21
City of Boston's Jamaica Plain Open Streets

August 6
WalkMassachusetts' and GreenRoots' East Boston Environmental Justice Walking Tour

August 11
City of Boston's Hyde Park Open Streets

August 23
Charles, Mystic, and Neponset River Watershed Associations' Three Rivers Report Card Event

September 15
City of Boston's East Boston Open Streets

Source: Boston Region MPO staff.

Figure 13
MPO Staff at External Events

Photos by Boston Region MPO staff.

5.2   MPO-SPONSORED EVENT

MPO staff co-hosted an in-person event with the Neponset River Watershed Association to bring together stakeholders involved in the study and discuss themes related to the environment, transportation, and regional coordination. The event took place on the Neponset Greenway in Dorchester and included a short walk, discussion stops, and a ride on the Mattapan trolley (for which staff provided single-ride MBTA tickets to avoid a financial barrier for participants). Attendees represented a variety of organizations including advocacy groups, municipalities, and community groups. The event led to discussions highlighting the importance of connections between community paths, bikeshare, and quality transit; the need for better communication with state agencies to pursue greenway improvements; and a desire for more opportunities to connect with others involved in transportation and environmental work in the region.

Figure 14
Photos from MPO/NepRWA Neponset Greenway Walking Tour

Photos by Boston Region MPO staff.

Chapter 6—Discussion

A central goal of this study was to build and strengthen relationships with environmental stakeholders in the Boston region. Engaging stakeholders on an ad-hoc basis regarding specific discrete projects and initiatives may be confusing or overburden stakeholders who are repeatedly engaged in seemingly disconnected and duplicative initiatives. However, developing meaningful relationships creates a foundation for ongoing and holistic engagement that is built around long-term shared goals. This facilitates better-informed and more impactful participation in specific initiatives. Relationships with advocacy and community-based organizations in particular help broaden the reach of engagement into new communities, highlight specific community needs and priorities, and build transparency for the MPO's work.

The MPO's long-range transportation planning work must engage a variety of stakeholders and, considering the many ways transportation both impacts and is impacted by the environment, it is essential for environmental stakeholders to be informed and involved. This study demonstrates that meeting people in their communities and actively inviting them to participate in the MPO's public planning process can reduce barriers that keep them from being more fully engaged, such as knowledge gaps or time constraints. Increased participation from environmental advocates will enable MPO plans and projects to be more connected to the regional network of environmental initiatives and conversations. This in turn will improve the way the MPO talks about and plans for its goals for a climate resilient, pollution-free transportation system in the Boston region.

Increased participation from municipal staff focused specifically on environmental topics will help connect cities and towns to the MPO's technical assistance programs and resources. Municipal participation may also help the MPO and state partners address barriers that cities and towns face to initiating projects and considering climate resilience and environmental improvements in project design and development.

Increasing the MPO's involvement in regional initiatives and with other stakeholders will not only enhance the quality of its planning work but also enable the MPO to become a more integral part of the broader regional environmental network. This will strengthen the MPO's ability to collaborate towards goals such as climate resilience, pollution reduction, green space protection, and other environmental improvements, including those specific to the transportation system. Advancing these initiatives will require a coordinated approach across sectors and jurisdictions. The MPO is well positioned to build on relationships developed through this study and continue exploring its role in regional environmental action and conversations.

Chapter 7—Recommendations

In light of the stakeholder engagement and peer research conducted in this study, the MPO staff recommend updating the MPO's approach to engaging with regional environmental stakeholders and addressing environmental topics. Continuing to explore and expand relationships and outreach in these areas beyond this discrete study will be important for ongoing trust-building and involvement of environmental stakeholders in the transportation planning process. Staff's recommendations are as follows:

1. Create Spaces for Continued Environmental Engagement

Stakeholders expressed interest in being more engaged with the MPO and other regional stakeholders in a variety of ways. A few potential strategies for staff to create space for environmental stakeholders to stay engaged with the MPO, share knowledge, and provide more ongoing feedback are as follows:

- Convene a recurring forum for advocates, municipalities, MPO staff, and other stakeholders in the region to share knowledge and experiences of broad topics such as environmental planning and climate resilience.
- Convene small focus group meetings about specific topics such as goal setting for the Long-Range Transportation Plan (LRTP), technical assistance, project initiation, or development of the Transportation

Improvement Program (TIP), and enable more interactions between advocates and municipal stakeholders.

- Host one or two in-person engagement events per year (such as walking tours or site visits, ideally in collaboration with municipal and/or advocacy stakeholders) to create space for MPO staff and board members to engage face-to-face with regional stakeholders and interested members of the public.

2. Disseminate Information

Stakeholders mentioned it can be difficult to find information relevant to environmental topics or specific projects of interest, and they may not know when or how to engage with the MPO. A newsletter specific to environmental elements of the MPO's planning and programming work can help stakeholders stay engaged and informed, and may include the following:

- Reminders for engagement events
- Opportunities to comment on MPO documents such as the TIP and LRTP
- Updates on projects selected for TIP funding that have environmental elements
- Highlights of regional environmental work taking place at other agencies and organizations
- Funding opportunities for environmental projects
- Opportunities to provide public comments and feedback

3. Operationalize Best Practices in Environmental Communication

This study included research into best practices for climate and environmental communication. Staff recommend incorporating these best practices into ongoing MPO engagement activities:

- Use specific communication frames (public health, geographical identity, etc.) to frame the MPO's transportation planning work in ways that various stakeholders and communities can better understand and relate to.
- Ensure language used in communications and publications is widely accessible and easy to understand.

4. Continue Engaging in Others' Work

Attending stakeholders' events increases the MPO's visibility and helps build strong relationships. MPO staff should continue to proactively seek out opportunities to attend other environmental groups' events, offer to share more information about the MPO's work, and make connections between stakeholders'

work and the MPO's planning and programming work. Staff recommend developing a calendar of relevant environmental events, with rotating staff and board member attendance to ensure consistent MPO representation and participation. To complement this, staff would develop internal processes for MPO representatives who participate in external environmental engagement to report back on insights gained and identify collaboration opportunities.

It is also important to continue seeking out new engagement opportunities and connections to regional environmental stakeholders who were not as deeply engaged during this study, particularly environmental justice groups and communities. In addition to regularly planned and ongoing engagement activities, staff recommend setting aside dedicated time throughout the year (possibly each quarter) to connect with environmental justice groups.

5. Use Stakeholder Feedback in Planning

Finding ways to meaningfully incorporate stakeholder feedback into the MPO's programs and planning work will improve the efficacy and quality of the MPO's studies, plans, and investments, as well as the public perception and reach of our work. This also means that engagement strategies must be tailored to the intended audiences and the intended outcomes of engagement. As outlined in Figure 2 and Appendix A, very different approaches are required when informing stakeholders about the MPO's work versus meaningfully collaborating with stakeholders to develop the work. Moving further along the spectrum towards collaboration and empowerment requires a deeper commitment to shaping decisions and outcomes based on stakeholder input. Making this commitment will help demonstrate to stakeholders that their time, expertise, and ideas are valued and that engaging with the MPO is worth their effort and leads to better outcomes for their communities. Staff recommend developing and implementing several processes to streamline and strengthen the incorporation of stakeholder input into planning and decision-making:

- Develop a stakeholder feedback matrix (complementary to the engagement strategy matrix in Appendix A) to categorize the feedback collected through engagement activities, such as those listed in Recommendation 1, by theme, urgency, and feasibility. Each feedback item should have an assigned MPO staff member responsible for follow-up, making it easier to track and address input in ongoing and future projects, as well as strengthen follow-through with stakeholders.
- Regularly update MPO programs (such as the LRTP and TIP) based on feedback from environmental stakeholders, particularly advocates and community-based organizations. Present quarterly summaries of these changes at board meetings to showcase how stakeholder insights are shaping MPO decisions.

- Develop an annual report on the environmental impact of planning decisions, detailing how environmental feedback from stakeholders has influenced key program developments, investment choices, and planning decisions. Share these findings with stakeholders to reinforce the value and tangible impact of their engagement with the MPO.

Continuing the engagement that this study laid the foundation for will ensure a strong environmental perspective is present in the MPO's work products and planning process. It is strongly recommended that staff and MPO board members take feedback from environmental advocates and community-based organizations into account in all planning and decision-making surrounding the LRTP, TIP, and program work. Staff will continue to collect, analyze, and share stakeholder feedback to inform these connections through regular engagement updates to the board and staff. Staff will also continue to develop and expand projects and activities conducted through the Public Engagement and Climate Resilience programs to assess regional needs, vulnerabilities, priorities, and stakeholder perspectives that can be incorporated into long-range and capital investment planning.

Appendix A—Engagement Strategies Matrix

Techniques	Description	Considerations	Participation Size	Effort Needed	When to Use
Inform					
Website	- General information - Fact sheets and downloadable resources - Repository for meeting calendar and information	- Website address should be visible on all project materials - Website is kept up to date regularly and at project milestones - Display project highlights on homepage - Consider accessibility	No limit	Low	Throughout the project lifecycle to provide project updates
General information channels	- Email - Phone line - Voicemail commenting	- Set up a dedicated phone line for projects - Ensure voicemail is available for missed calls - Be clear on hours of operation and target response times for calls and email inquiries - Inform callers how their comments are being recorded, considered, and used	No limit	Low	Throughout the project lifecycle to provide project updates

Videos	Digital video	- Convey messages quickly and succinctly - Consider videos to launch an engagement activity, encourage participation, or give an update on a project - Videos should be short and include a variety of presentation styles - Add closed captioning	No limit	Low	Beginning of project lifecycle; use in combination with other engagement strategies
Infographics	- Visual images - Charts - Diagrams	- Visually engaging and containing subject matter and data - Simplify complex information - Fun and easy way to learn about a topic or issue - Useful for documenting progress and reporting back during engagement process	No limit	Low	Throughout the project lifecycle, especially during beginning and end to share information and findings
Social media	- Facebook - Twitter - LinkedIn - Instagram	- Great way to communicate with a large audience - Choose relevant social media tools based on your target audience -Rule of thirds when posting (one-third of content promotes projects, one-third shares relevant content of other stakeholders, and one-	No limit	Low	Throughout the project lifecycle to provide project updates

		third should be engaging and interacting with others)			
Media coverage	- Advertisements on radio, newspapers, television, or online - Press releases and conferences	- Engaging visuals of project - Have a designated media spokesperson and ensure the spokesperson is appropriately trained	No limit	Low	Throughout the project lifecycle, especially during the end to share findings
Printed material	- Newsletters - Posters - Fact sheets - Brochures - Reports	- Key stages include drafting content, graphic design, printing, and distribution - When drafting content use plain language and consider readers' knowledge and understanding of the project scope - Consider a distribution strategy - Print extra quantities to hand out at in-person events or for requests	No limit	Low	Throughout the project lifecycle to share information

Presentations	Informational presentations	- Effective way to disseminate information to a large group of people - Set the tone right away (communication style) - Do not use slides only, be engaging - Avoid using jargon - Consider live-streaming or video recording for accessibility	No limit	Low	Before or at the start of the project lifecycle to share details about the project
Expert panel	Variety of experts are engaged to debate and discuss various courses of action and recommendations	- Allow community to hear a variety of informed viewpoints - Often used in highly complex and contentious issues - Useful where conflict exists to provide opinions which may have more credibility	No limit	Low	Throughout the project lifecycle to share information on topics related to the project
Displays and exhibits	Community event to provide project information and spread awareness of specific topics or issues	- Bring project to public spaces to involve groups that would not normally engage - Consider when the community will be able to get involved - Displays can be interactive such as "post-it" idea boards and maps - Include feedback opportunities for participants	No limit	Low	Early in the process and as a part of a larger outreach program

Site Visits	Open project site for public to visit	- Good for large infrastructure projects - Gives the community a chance to see the project in action - Offer guided tours where attendees can ask questions - Can help create a sense of openness and transparency	Medium (4-8)	Low	All phases of decision-making; especially useful as a first step of engagement
Public meetings	- Coming together of people for a specific purpose - Opportunity for people within the community to meet each other and project team	- Provides the opportunity to relay information and gather feedback - Ensure meeting place and time is accessible for the representative community - Facilitators can encourage two-way communication - Recorder can record suggestions and issues discussed at meeting	No limit	Low	Throughout the project lifecycle to provide project updates
Consult					
Polling and voting	- Allows anonymous visitors to choose from a list of options and track responses - Offers the community the opportunity to decide or have an influence on a decision from a list of predetermined choices	- Fast and easy way to gauge public opinion about topics of interest or support for an initiative, or to get to know an audience - Be sure voters are informed - Provide backgrounder with key facts, resources, and project timeline	No limit	Low	Throughout the project lifecycle to understand community perception

		- Be clear about the influence the vote will have on the outcome of the project			
Surveys	- Structured form or questionnaire distributed to a relevant population group within the community - Used to gather data, assess needs, gain feedback, and/or collect community opinions	- Gauge the level of public information about an issue and provide a "snapshot" of attitudes and ideas - Can be carried out in a number of ways depending on purpose, scope, and stakeholders involved - Keep it simple, avoid leading and ambiguous questions, balance open and closed questions, give time, and provide options to opt out or clarify	No limit	Medium	Throughout the project lifecycle to understand community perception

Interviews	- A conversation with an intended goal - Some methods include a face-to-face or telephone conversation, or a focus group	- One of the best ways to have an accurate and thorough communication of ideas - Can be helpful to get information about assumptions and perceptions - Consider suitability, such as time, population size, and cooperation before using this strategy - Carefully consider questions and avoid ones that will put people on the defensive or look for two answers in one question, and avoid questions that or are too long, involved, or intricate - Record and take notes during interviews, noting verbatim quotes with quotation marks	Small (1-3)	Medium	At the start of the process and before decision-making of the project lifecycle

Focus groups	- Involves a small group of people to learn about their opinions on a topic that can help plan future actions - Should be guided by a trained facilitator or leader	- Good technique to find out what issues are of the most concern for a community or group - Participants should have some understanding of the topic - Smaller groups allow for deeper conversations and the recorder can take more detailed notes - Begin with open-ended questions but also allow for iterative engagement - Issues that emerged can be developed into a questionnaire to verify findings - Can provide fairly dependable data within a short time frame	Medium (4-8)	Medium	As a part of an outreach effort for evaluation and to understand community perception
Online forums	- A part of a website where expression of viewpoints and discussion can take place - Open to postings for a set period of time	- Useful for generating interest and feedback from the public during a period of time with relatively little physical investment - Can be open to anyone and can be anonymous or open only to members - Make it easy to participate and use multiple entry points	No limit	Low	Throughout the project lifecycle to understand community perception

		- Welcome and encourage users and provide instructions for participation - Ask questions that matter using actionable language			
Online commenting	- Opportunity to comment on online platforms - Could be integrated into the release of information, stories, materials, announcements, etc.	- Ensure you have the ability to approve comments before they are published - Filter out inappropriate comments, but remain open to a diversity of perspectives reflected in comments - Engage with the commenters and respond to them in a timely manner	No limit	Low	Throughout the project lifecycle to understand community perception
Social Media Listening/ Monitoring	- The process of identifying and assessing what is being said about a particular organization, individual, topic, or project on the internet	- Find out where potential and current audiences carry out conversations or share their opinions - Define the goals and scope for social media listening - Offers an insight into the natural conversation that is surrounding the topic and provides opportunities to get involved	No limit	Medium	Throughout the project lifecycle to understand community perception

		- Monitoring looks at social mentions but listening requires analysis and reflection			
Town halls	Convening a group to engage in discussing questions, ideas, and solutions related to a particular issue	- Unique form of regular messaging and posting since issues and topics are addressed by the main parties involved - Concerned public can directly delve into related issues and get answers	No limit	Low	Throughout the project lifecycle to understand community perception
Workshops	- Involves a group of people who meet to work through an issue and/or develop solutions - More interactive and involves larger and smaller group exercises - May take place over a period of time	- Generate discussion and broader thinking regarding an issue or topic - Provide a space where participants can genuinely be involved in identifying and solving issues - Selection of participants depends on the intention of workshops and is based on participants' knowledge of topic or group affiliation	Large (8+)	High	Before and throughout project lifecycle to understand community perception

Door-to-door	In-person outreach where individuals are engaged at their doorstep	- Can be used as a "check-in" with residents to better understand their needs, priorities, or thoughts - A way to reestablish, create, or strengthen social connections within the community - Removes barriers for people who may not normally participate - Consider timing of visits, coordinate different times throughout day to increase chances of reaching people - Have dedicated resources and partners to respond to the cultural and language needs	No limit	Low	Throughout the project lifecycle to understand community perception
Kitchen table talks	- Small informal meeting that takes place at someone's home or a café - Often used in conjunction with other methods as a part of a wider engagement process	- Participants can discuss issues related to a broader project or topic - They may be provided with a guide or set of questions from interest groups - The aim is to enable dialogue within the community that is informal and relaxed - Aim to build and deepen a sense of community and	Small (1-3)	Low	Throughout the project lifecycle to understand community perception

		explore the range of opinions on an issue - Fosters community organizing and can stimulate and nurture public debate			
Open houses/ pop-ups	- Organizers are present at a busy public location and offer simple and fun ways for people to learn about a project - Provide information, a forum for understanding people's concerns, and opportunities for follow-up or feedback	- Involves people who would not normally engage or attend a public meeting - Allows people to contribute or obtain information at their own convenience - Host pop-ups at different times to ensure a variety of people can participate	No limit	Low	Throughout the project lifecycle to understand community perception
Comment boxes	Boxes placed in strategic locations within a community or posted online for community members to voice their opinions around particular topic or provide feedback	- Use clear, concise, and simple language to outline what types of comments you are hoping to receive - If the comment box is online, think about its location on the web and make it easy to find - If seeking comments specific to a project, place	No limit	Low	Throughout the project lifecycle to understand community perception

		the comment box on the project page			

Involve

Crowdsourcing ideas	Participants engage in an online activity with varying skills, experiences, and perspectives to contribute information	- Obtain ideas from a large group of people quickly - Interactive way to engage communities and provide the opportunity to network, hear new ideas, and problem-solve together - Be clear and specific in outlining your purpose, timeline, and achievable outcomes - Build a relationship with the crowd to identify who are invested	No limit	Low	During project development to collect ideas and engage community on project
Community mapping	- A participatory process that enables the public to map elements that can help project development - Useful for initiating dialogue and planning - A way to learn about people's perceptions of place	- Can be used to document certain aspects of a project: strengths, weaknesses, locations of services, etc. - Useful to break a large group into 3-6 people - Use an enlarged map and colored markers to locate various things on the map	Large (8+)	Medium	Before and during project development to collect ideas and engage community on project

	- Can be useful in the visioning process	- Interactive and fun, and can also be used with youth			
Digital storytelling	- Practice of using digital tools to tell stories - Multimedia tool that uses photographs, video, sound, music, text, and narrative voices	- Empowers community members and educates stakeholders and the public - Community members are invited to a workshop-like setting and a facilitator guides them through the process of creating a digital story - Participants are invited to bring photographs, clips, music, etc. to help tell their story - The process can be empowering and participants may have the opportunity to work with people with similar experiences	No limit	Medium	Before and during project development to collect ideas and engage community on project

Design charrette	-Intensive planning sessions where participants collaborate on a vision for development - Provides a forum for ideas and offers unique advantage of giving immediate feedback to designers - Allows participants to be mutual authors of the plan	- Organized to encourage the participation of all - Everyone has a stake in the project as they develop a vested interest in the vision - Design team works together to produce a set of finished documents that address all aspects of design - Finished result is produced more efficiently and cost-effectively because the process is collaborative - The purpose is to give all participants enough information to make good decisions	Large (8+)	Medium	During project development to collect ideas and engage community on project
Mind mapping	- Diagram used to visually organize information hierarchically and show relationships among pieces of the whole - Created around a single concept, drawn as an image in the center, and associated representations of ideas are added	- Can be useful for creating and devising approaches for handling issues, capturing information that is relevant and compressing large amounts of information - Utilize words, symbols, pictures and include at least three different colors	Large (8+)	Medium	During project development to collect ideas and engage community on project

Visioning	- Participatory tool that brings the public together to develop a shared vision of the future - The goal is to develop written and visualized statements of a community's long-term goals and strategic objectives	- Can be used for activity planning, organizational change, and formulating a development vision or strategy - The outcome is a long-term plan which provides a frame for a strategy to achieve the vision - Used to promote thought and encourage discussion of the future	Large (8+)	Medium	Before and during project development to collect ideas and engage community on project
Scenario testing	- A way of developing alternative future scenarios based on different combinations of assumptions, facts and trends, and areas where more understanding is needed - Once participants have seen several scenarios, they may have a better understanding of options or possibilities	- Useful for developing an understanding of a situation, rather than predicting the future - Typically deliver 3 scenarios, positive, negative, and neutral - Participants are able to identify general driving forces, a variety of plausible trends, and combine trends	Large (8+)	Medium	Before and during project development to collect ideas and engage community on project

Hackathons	- Originated in the tech industry as a design sprint event - Used to bring together diverse individuals to collaborate on finding innovative solutions to a particular issue	- Consider bringing in speakers to guide thought leadership throughout the event - Include participants from different fields and experiences - Participants will form groups of 4-6 people and are challenged to work together to come up with solutions	Large (8+)	High	During project development to collect ideas and engage community on project
Collaborate					
Large group meetings	Convening a large group focused on a particular issue with an intended goal	- Consider inviting diverse groups of people who can offer different perspectives - Ensure that all participants have a chance to be heard - Consider ways to break up the group into smaller groups for discussions and activities, and to allow for more opportunities for people to share their perspectives	Large (8+)	Low	Throughout the project lifecycle; especially before the start of decision-making processes
Document co-creation	Ability to co-own a document where a number of people can view and/or have to ability to edit and contribute	- Allows individuals to collaborate on a project in real time from different locations - Provides the opportunity to contribute and build upon a document at a convenient	No limit	Low	During project development to collect ideas and engage community on project

		time - Co-creation document gives the ability to chat and add comments			
Online communities	Group of people with common interests communicate, work together, and pursue their interests over time	- Encourage users to interact with one another using comments in forums - Make it easy to participate and provide multiple entry points - Create a "water-cooler" environment where people can engage in light-hearted conversations - Be clear on the purpose and desired response to posted content and conversations	No limit	Low	Throughout the project lifecycle; especially during public comment periods

Open space	- Participants create and manage their own agenda of parallel working sessions around a central theme - Participants devote a certain amount of time in designing their own meeting and when a topic is brought up everyone provides their views and opinions - There is no limit to the number of participants and the meeting lasts as long as necessary	- The theory behind this strategy is to encourage people to take ownership of the issues they wish to address - Works best for issues that are complex, when people and ideas involved are diverse, and when there is a passion for resolution - A weakness is that only a small population of representatives are likely to be involved	Large (8+)	Medium	Throughout the project lifecycle; especially during public comment periods
Working groups	- Committee of 10-15 people who meet regularly during a period of time to address critical public issues in a democratic and collaborative way to make recommendations based on their findings - Facilitated by a person who is there not to act as an expert but to serve the group by keeping the discussion focused, helping the group consider a variety of views, and	- Groups should be formed to maximize diversity, balance, and complementary skills - Each member should add something unique to the team: expertise, perspective, or skill set - Essential that the tasks assigned are appropriate for cross-functional groups as all members need to know what they are responsible for	Large (8+)	Medium	Throughout the project lifecycle; especially before and during project development to collect ideas and engage community on project

	processing difficult questions				
Advisory committees	- Consists of a group of representatives from a particular community or set of interests appointed to provide comments and advice on an issue - Members meet regularly to provide ongoing input and advice during the duration of the project	- Should be formed based on diverse representation of the community, expertise or interest in an issue, or topic area - Great opportunity for the community to share ideas, have a voice in decision-making, and learn more - Committees can offer specialized, practical expertise - Committees can lend legitimacy and credibility to ultimate decisions made by officials	Large (8+)	Medium	Throughout the project lifecycle; especially before and during project development to collect ideas and engage community on project

Empower

Public juries	- Comprised of a group who are representative of the general public and who are briefed in detail on the background and current thinking related to a project - The issue they are asked to consider will have an effect on the community and will require a democratic decision-making process	- Requires both time and a high level of skills as participants are required to analyze complex issues - Jurors can "cross examine" various stakeholders providing differing perspectives on the issue or subject matter - An advisory panel with expertise in the area considers the jury's findings and determines what recommendations should be taken forward	Large (8+)	High	Throughout project lifecycle; especially before key decision-making periods
Community indicator projects	- Projects where communities have a vision for a sustainable future and have established ways of tracking their progress through the use of indicators - Indicators are selected either across topical domains or with a focus to collectively track trends in community well-being and quality of life	- Offers the opportunity to discuss what is important, systematically review outcomes, and establish priorities for policy response - Measures what the community cares about and tracks if there is movement in the right direction - Metrics provide guidance for action and tools for engagement - Successful projects typically include a community vision incorporating the views of a wide cross-section of	No limit	High	Throughout project lifecycle; especially before key decision-making periods

		populations, and the community decides how to track progress			
Asset-based community development (ABCD)	- A methodology for sustainable development of communities based on strengths and potentials - Involves assessing resources, skills, and experiences available in the community, organizing the community around issues that move people into action, and determining and taking the appropriate actions - Uses the community's own assets and resources as the bases for development - Empowers people of the community by encouraging	Key principles include: - Relationships build a community - The people at the center - Leaders involve others - Care about the community's needs and interests - Listen to what people are saying they want - Ask for ideas rather than give solutions	No limit	High	Throughout project lifecycle; especially before key decision-making periods

	them to utilize what they already possess			

Appendix B—Survey Questions for Municipalities

What is your name?

What municipality do you represent?

What is your position/title?

Does your municipality have a staff position(s) dedicated to resilience or environmental planning?
- Yes
- No

What environmental issues and/or concerns are top priorities for your municipality?
- Climate resilience
- Environmental justice
- Greenhouse gas emissions
- Natural resource and/or wildlife conservation
- Open space preservation
- Air quality
- Water quality
- Stormwater management
- Clean energy
- Access to green space
- Other (Please describe)

Has your municipality engaged with the MPO and its transportation planning process in the past?
- Has never or has rarely engaged
- Has been engaged

What information about the MPO and its processes do you want/need in order to engage with our transportation planning work?

In what ways has your municipality engaged with the MPO?
- Had a transportation project funded (Please describe)
- Received technical support (Please describe)
- Collaborated on a study (Please describe)

- Engaged with the MPO via a group or event led by our partner agency, the Metropolitan Area Planning Council (MAPC)
- Other (Please describe)

How do you currently receive news or collaborate with peers on regional environmental issues?

What platforms or strategies does your municipality use to engage with the public and other stakeholders on environmental issues and/or concerns? (Select all that apply)
- Newsletters
- Social media
- Public meetings or events
- Surveys
- Canvassing
- Other (Please describe)

What themes or topics are members of your community most interested in when you engage with them about environmental topics? (Select the level of interest for each topic from low, moderate, or high).
- Public health
- Concern for a specific local environmental issue
- Economic topics like funding, employment, etc.
- Values such as stewardship, planning for future generations, ethical considerations, etc.
- Environmental conservation/ preservation and biodiversity

Are there any other themes that your community is interested in engaging in?

What are the challenges your municipality is facing in regional environmental coordination? (Select all that apply)
- Staff capacity/time
- Financial resources
- Platforms/opportunities for coordination
- Other (Please describe)

Would you like to be more involved in the MPO's planning work as it relates to the environment?
- Yes
- No

How would you prefer to coordinate with MPO staff? (Select all that apply)

- One-on-one meetings
- Large group meetings with other municipalities and/or environmental stakeholders in the region
- Small focus group meetings with other municipalities and/or environmental stakeholders in the region with similar aims/areas of focus
- Attend existing MPO events such as board meetings or committee meetings
- Invite MPO staff to your meetings or events
- Attend events held by our partner agency, the Metropolitan Area Planning Council (MAPC)
- Comment on the MPO's planning documents and other bodies of work
- Other (Please describe)

How do you feel MPO staff can support your work and help you achieve your municipality's environmental/resilience goals? (Select all that apply)
- Collaborate on a study or project
- Help you get a transportation project in your community funded (see examples of types of projects the MPO typically funds here)
- Use your feedback in planning
- Help with regional coordination/connecting with other municipalities/organizations
- Help you access data and other resources
- Other (Please describe)

What would make you feel like your feedback is being heard and utilized?

Are there other environmental organizations, initiatives, or topics in your municipality or the region that you think the MPO should be engaged with? Would you be interested in participating in a follow-up discussion about this survey and your responses with MPO staff?
- Yes (Please write in your email)
- No

Demographic Questions: The following questions help us to understand whether our surveys are reaching a diverse audience.

How do you self-identify by race and/or ethnicity? (Check all that apply)
- American Indian or Alaskan Native
- Asian
- Black or African American
- Hispanic, Spanish origin or Latino/a/x
- Native Hawaiian or other Pacific Islander
- White

- Prefer not to answer
- Other (please specify)

How many people are in your household? Include yourself.

What is your annual household income?

Do you have a disability?
- Yes
- No
- Prefer not to answer

What is your age?
- Under 18
- 18 - 21
- 22 - 34
- 35 - 44
- 45 - 64
- 65 - 74
- 75 and older
- Prefer not to answer

How do you identify by gender?
- Man
- Woman
- Non-binary
- Prefer to self-describe
- Prefer not to answer

What is your home zipcode?

Appendix C—Survey Questions for Advocates

What organization do you represent?

What is your name?

What is your position/title?

What approximate geography are you most interested in?
- Local (Please describe)
- Regional (Please describe)
- State
- Federal
- International
- Other (Please describe)

Does your organization represent environmental justice communities or other disadvantaged populations? (Please describe)

What environmental issues and/or concerns are top priorities for your organization? (Check all that apply)
- Climate resilience
- Environmental justice
- Greenhouse gas emissions
- Natural resources and/or wildlife conservation
- Open space preservation
- Air quality
- Water quality
- Stormwater management
- Clean energy
- Access to green space
- Other

How familiar are you with the Boston Region MPO and its transportation planning process?
- Never heard of the MPO before this survey
- Have heard the name but unsure what it does
- Some familiarity with the MPO's work and/or planning process
- Very familiar and have engaged with the MPO in the past

What information about the MPO and its processes do you want/need in order to more fully engage with our transportation planning work?

How have you engaged with the MPO and its work in the past?

How do you currently receive news or collaborate with peers on regional environmental issues?

What platforms or strategies does your organization use to engage with the public on environmental issues and/or concerns? (Select all that apply)
- Newsletters
- Social media
- Public meetings or events
- Surveys
- Canvassing
- Other (Please describe)

What themes or topics is your community most interested in when you engage with them about environmental topics? (Select the level of interest for each topic from low, medium, or high)
- Public health
- Concern for a specific local environmental issue
- Economic topics like funding, employment, etc.
- Values such as stewardship, planning for future generations, ethical considerations, etc.
- Conservation/ Preservation

Are there any other environmental topics that your community is interested in engaging in?

What are the challenges your organization is facing in regional environmental coordination? (Select all that apply)
- Staff capacity/Time
- Financial resources
- Platforms/opportunities for coordination
- Other (Please describe)

Would you like to be more involved in the MPO's planning work as it relates to the environment?
- Yes
- No

How would you prefer to coordinate with MPO staff? (Select all that apply)
- One-on-one meetings

- Large group meetings with other environmental organizations in the region
- Small focus group meetings with environmental organizations in the region with similar aims/areas of focus
- Attend existing MPO events such as board meetings or committee meetings
- Invite MPO staff to your meetings or events
- Attend events held by our partner agency, the Metropolitan Area Planning Council (MAPC)
- Comment on the MPO's planning documents and other bodies of work
- Other (Please describe)

How do you feel MPO staff can support your work and help you achieve the goals of your organization? (Select all that apply)
- Collaborate on a study or project
- Help you get a transportation project in your community funded (See examples of types of projects the MPO typically funds here)
- Use your feedback in planning
- Help with regional coordination/ connecting with other organizations/agencies
- Help you access data and other resources
- Other (Please describe)

Are there other environmental organizations, initiatives, or topics you think we should be engaged with?

Would you be interested in participating in a follow-up discussion about this survey and your responses with MPO staff? You will be compensated for your time.
- Yes (Please write in your email)
- No

Demographic Questions: The following questions help us to understand whether our surveys are reaching a diverse audience.

How do you self-identify by race and/or ethnicity? (Check all that apply)
- American Indian or Alaskan Native
- Asian
- Black or African American
- Hispanic, Spanish origin or Latino/a/x
- Native Hawaiian or other Pacific Islander
- White
- Prefer not to answer

- Other (please specify)

How many people are in your household? Include yourself.

What is your annual household income?

Do you have a disability?
- Yes
- No
- Prefer not to answer

What is your age?
- Under 18
- 18 - 21
- 22 - 34
- 35 - 44
- 45 - 64
- 65 - 74
- 75 and older
- Prefer not to answer

How do you identify by gender?
- Man
- Woman
- Non-binary
- Prefer to self-describe
- Prefer not to answer

What is your home zipcode?

Appendix D—Materials Shared

The following materials were shared during one-on-one conversations with study participants and are documented here for future reference:

- [Massachusetts Municipal Association's Climate Webinar Series](#)
- [Massachusetts Municipal Association's Climate Change Resolution](#)
- [Mattapan Food and Fitness Coalition's Annual Report](#)
- [Neponset River Watershed Association's Watershed Flood Model](#)
- [South Bay Harbor Trail Project](#) (shared by Save the Harbor)
- [Project Maple Gas Pipeline](#) (shared by Canton Residents for a Sustainable Equitable Future)
- [Massachusetts Society of Municipal Conservation Professionals](#) (shared by Town of Lincoln Conservation Department)

Appendix E—Literature Review References

The following materials were reviewed during this study's literature review:

American Association of State Highway and Transportation Officials (website), *Environmental Justice Community of Practice Resources*, accessed November 15, 2023. https://environment.transportation.org/state-of-the-practice/communities-of-practice/past-communities-of-practice/environmental-justice-community-of-practice.

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