

Merrimack Valley Metropolitan Planning Organization Public Participation Plan As Amended December 4, 2024

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I. Front Matter

Funding Disclaimer

This work program was funded in part through grants from the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), United States Department of Transportation (USDOT). The views and opinions of the Merrimack Valley Metropolitan Planning Organization (MVMPO) expressed herein do not necessarily state or reflect those of the USDOT.

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MVPC is committed to nondiscrimination in all activities. Individuals who believe they have been discriminated against may file a complaint with MVPC at:

Attn: Title VI Specialist Merrimack Valley Planning Commission 160 Main Street Haverhill, MA 01830

Email: transportation@mvpc.org

Complaints may also be filed directly with the United State Department of Transportation at:

U.S. Department of Transportation Office of Civil Rights 1200 New Jersey Avenue, SE Washington, DC 20590 Website: civilrights.justice.gov

For additional information, language service requests, or reasonable accommodations visit https://mvpc.org/title-vi

Open Meeting Law

MVMPO is subject to the Massachusetts Open Meeting Law. This law ensures that regional business is conducted publicly and transparently. Current laws, including temporary provisions related to virtual engagement practices, can be accessed by visiting https://www.mass.gov/the-open-meeting-law.

To file a complaint regarding a potential violation of Open Meeting Law, an individual should follow the instructions included on the complaint form accessible at https://www.mass.gov/the-open-meeting-law. This form directs an individual to fill out the complaint form for submission to the chair of the MVMPO, which is MassDOT's Secretary of Transportation. Following the reception of the complaint, MVMPO has 14 business days to respond to the complaint, and must include a copy of the response to the Massachusetts Attorney General's Office.

Title VI Notice Translations

Spanish

Si necesita esta información en otro idioma, por favor contacte al coordinador de MVMPO del Título VI/Contra la Discriminación al 978-374-0519 ext. 15.

Portuguese

Caso estas informações sejam necessárias em outro idioma, por favor, contate o Coordenador de Título VI e de Não Discriminação da MVMPO pelo telefone 978-374-0519, Ramal 15.

Chinese Simple

如果需要使用其它语言了解信息·请联系Merrimack Valley大都会规划组织(MVMPO)《民权法案》第六章协调员·电话978-374-0519、转15。

Chinese Traditional

如果需要使用其他語言瞭解資訊,請聯繫Merrimack Valley大都會規劃組織(MVMPO)《民權法案》第六章協調員,電話978-374-0519,轉15。

Vietnamese

Nếu quý vị cần thông tin này bằng tiếng khác, vui lòng liên hệ Điều phối viên Luật VI/Chống phân biệt đối xử của MVMPO theo số điện thoại 978-374-0519, số máy nhánh 15.

French Creole

Si yon moun vle genyen enfòmasyon sa yo nan yon lòt lang, tanpri kontakte Kowòdinatè kont Diskriminasyon/MVMPO Title VI la nan nimewo 978-374-0519, ekstansyon 15.

Russian

Если Вам необходима данная информация на любом другом языке, пожалуйста, свяжитесь с Координатором Титула VI/Защита от дескриминации в MVMPO по тел: 978-374-0519, добавочный 15.

French

Si vous avez besoin d'obtenir une copie de la présente dans une autre langue, veuillez contacter le coordinateur du Titre VI/anti-discrimination de MVMPO en composant le 978-374-0519, poste 15.

Italian

Se ha bisogno di ricevere queste informazioni in un'altra lingua si prega di contattare il coordinatore del MVMPO del Titolo VI e dell'ufficio contro la discriminazione al 978-374-0519 interno 15.

Mon-Khmer, Cambodian

ប្រសិនបើលោក-អ្នកត្រូវការបកប្រែព័ត៌មាននេះ

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Arabic

في الحضري التخطيط لمنظمة التابع التمييز لمنع السادسة الفقرة بمنسق الاتصال يُرجى ،أخرى بلغة المعلومات هذه إلى بحاجة كنت إذا 51 الأرقام اضغط وثم 751-378 الهاتف على فالى ميريماك

Contents

I. Introduction	8
II. Participation Values and Goals	12
III. Public Participation Strategies	14
IV. Public Participation Methods	16
V. Performance Measures	44
VI. Meeting Access Policies and Access Compliance Policies	46
VIII. Appendices	53
Figures	
Figure 1: MVMPO Member Communities	10
Figure 2: Adaptation of Gardenswartz, Lee and Rowe. Four Layers of Diversity (2021)	12
Figure 3: This flowchart depicts different options for obtaining meaningful public participation	
Figure 4: Creighton, James L. Continuum of participation, 2005	
Figure 5: Screenshot of how to effectively use keywords to bring traffic to the MVPC website	
Figure 6 Back side of the MV Moves Abutters Survey, MVPC 2023	
Figure 7: Slide from presentation about MVPC Transportation Program	
Figure 8: MVMPO staff at the Feaster Five Vision Zero Display, 2023	
Figure 9: Flyers advertising walk audit in Lawrence	3 /
Figure 10: Comparison between ISO DOT Pictograms, the original and proposed accessible icon. Sara Hendren, 2016	30
Figure 11: Union Street Corridor redesigned during the Lawrence charrette event	
Figure 12: This figure demonstrates the breadth of work covered by the MVMPO	
Figure 13: MVPC Active Transportation Engagement Module, 2024	
Figure 14: Language Translation Decision Tree	

I. Introduction

Background & Context

Public Participation Plan Purpose

This federally required Public Participation Plan (PPP) details how the Merrimack Valley Metropolitan Planning Organization (MVMPO) solicits public involvement and interest in regional transportation planning. MVMPO strives to create accessible, comfortable, inclusive, and inviting forums to share information and collaborate in service of improved transportation outcomes. In accordance with state and federal requirements¹, MVMPO's public processes must provide equal opportunity and access to all. MVMPO's public processes must also provide assurances that there will be no discrimination on the basis of race, color, national origin, or other protected classes. The MVMPO uses its PPP to shape public participation for its projects, processes, and products by selecting appropriate methods based on context and scale.

The plan is based on federal and state requirements for encouraging community involvement. It states MVMPO's participation values and goals and lists concrete strategies that further elucidate each goal's intent. The plan also includes different participation approaches and details policies related to access for people with disabilities and persons from historically marginalized communities, including those with limited English proficiency.

About MVMPO, Its Role, and Key Planning Products

MVMPO fulfills two primary functions. First, MVMPO coordinates with its fifteen member communities (see map, Figure 1) to program apportioned and discretionary federal aid (i.e. obligate the use of federal funds to support local transportation needs). MVMPO also advances transportation studies, plans, toolkits, and concepts to improve regional accessibility. In total, MVMPO manages the region's federally required continuing, cooperative, and comprehensive (3C) transportation planning process with federal, state, and local partners. In doing so, MVMPO considers all modes of transportation and considers the input of impacted parties, emphasizing the needs of historically marginalized communities.

To remain eligible to program federal aid, MVMPO—like all MPOs—must produce and endorse four certification documents: the Unified Planning Work Program (UPWP), the Transportation Improvement Program (TIP), the Metropolitan Transportation Plan (MTP), and—the subject document—the Public Participation Plan (PPP). Table 1 describes the role of the certification documents in the 3C funding process.

Both formal certification documents and yearly programmed tasks benefit from public input and involvement. Feedback from the public ensures that public resources are directed efficiently and appropriately.

¹ See Appendix – Relevant Legislation and Guidance for a list and brief description of relevant legislation.

Table 1 - 3C Certification Documents

Document	Purpose	Horizon	Update Timeline
Unified Planning	Establishes the annual work program	One Year	Annually, endorsed in spring
Work Program	for MVMPO staff, including studies		
(UPWP)	and tasks that support member		
	communities.		
Transportation	Programs federal and state aid	Five Years	Annually, endorsed in spring
Improvement	funding for specific transportation		
Program (TIP)	projects.		
Metropolitan	Establishes the long-range vision for	Twenty to	Updated every four to five years,
Transportation Plan	the region, including goals and	Twenty-Five	depending on current surface
(MTP)	objectives. Identifies projects and	Years	transportation legislation; typically
	strategies to realize the vision.		endorsed in summer.
Public Participation	Establishes standards and policies for	Continuous	As warranted, typically every five
Plan (PPP – subject	engaging communities in the 3C		years
document)	transportation planning process.		

MVMPO Structure

Currently, MVMPO's board is comprised of ten voting members, as detailed in Table 2.

Table 2 - MVMPO Composition

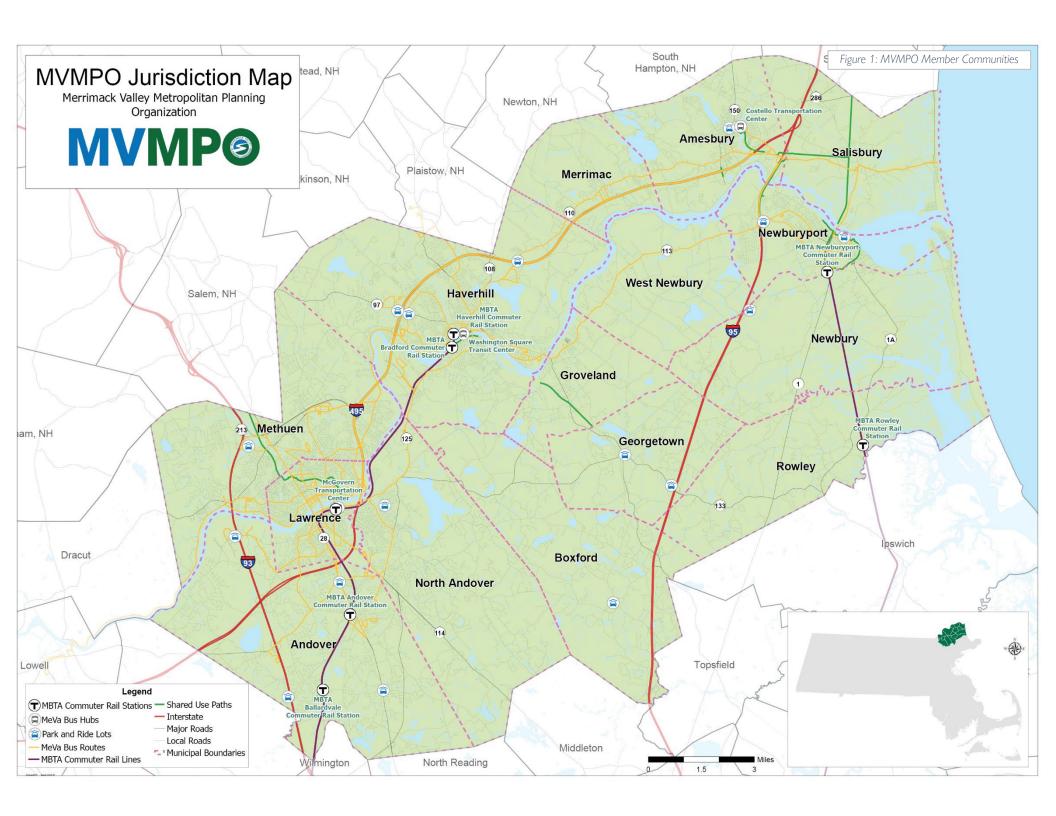
Agency	Signatory ¹
Massachusetts Department of Transportation, Secretary's Office	Secretary of Transportation
Massachusetts Department of Transportation, Highway Division	Administrator
Merrimack Valley Planning Commission	Board Chairperson
Merrimack Valley Transit	Board Chairperson
City of Haverhill	Mayor
City of Lawrence	Mayor
Region 1: Amesbury, Newburyport, and Salisbury	Cooperatively Selected Appointee
Region 2: Newbury, Rowley, and West Newbury	Cooperatively Selected Appointee
Region 3: Boxford, Georgetown, Groveland, and Merrimac	Cooperatively Selected Appointee
Region 4: Andover, Methuen, and North Andover	Cooperatively Selected Appointee

¹Meetings may be attended by signatories or alternates designated by the signatory in writing prior to a meeting.

The MVMPO anticipates potential revisions to its composition in FFY2025 based on its FFY2025 Unified Planning Work Program.

MVMPO Meeting Actions

During a typical MVMPO meeting, the Board reviews actions related to MVPC's Transportation Improvement Program and ongoing work program. This often entails reviewing study findings and recommendations, but also includes acting on specific budget changes for construction projects or the staff's work program. For more information about the MVMPO meetings, please refer to the MVMPO Meeting Norms & Typical Meeting Procedures in the appendix.



Public Participation Plan Amendments

The PPP is intended to be a living document that may be amended. The document is typically amended at least every five years; however, MVPC's last update occurred in 2017—prior to the global coronavirus pandemic. Since 2020, the employment of virtual engagement platforms has become a standard practice of connecting the public with its government. While virtual public engagement offers convenience and increased access, it is not a panacea and there are some drawbacks to its usage (see the discussion of virtual public engagement in the Meeting Access Policies and Access Compliance Policies chapter). This stated, the subject 2024 amendment is warranted to address virtual public engagement and several other participation developments and needs, including a review of Limited English Proficiency (LEP) practices.

Since 2022 MassDOT has been in the process of updating its own PPP. Generally, policies and practices included in the state's PPP inform regional bodies' PPP documents. As such, MVMPO staff have programmed PPP updates in their 2022, 2023, and 2024 UPWPs. As the state's PPP remains forthcoming, MVMPO staff have elected to undertake the subject amendment and anticipate further amendments following the endorsement of MassDOT's PPP.

MVMPO typically releases 3C amendments for a 21-day comment period. Amendments to the PPP, however, require a 45-day comment period, in which the first day is considered the day of release by the MPO Board. During this period, MVMPO staff seek input from stakeholders on revisions, edits, and proposed updates.

Plan Adherence

There may be occasions where circumstances or planning context do not allow for absolute adherence to the protocols and policies stated in this PPP. It is important to note that some locations and organizations served by MVMPO have pre-existing and approved policies for public engagement that are unique to the functions they perform. Additionally, some departures may be necessary to serve target audiences or address unexpected emergencies. In such cases, departures are legitimate and reasonable. Questions or comments regarding departures may be directed to transportation@mvpc.org. Additionally, the Front Matter of this PPP includes the procedures and contact information to file formal Title VI, ADA, and Open Meeting Law complaints in the event concerns arise.

3C Amendment, Adjustment, and Modification Procedures

Beyond engagement on projects and studies, the PPP dictates the formal public participation approach to actions that change the region's 3C certification documents. Changes can be amendments, adjustments, and administrative modifications. The thresholds for such changes depend on the magnitude of the change, as described the appendix.

II. Participation Values and Goals

Values vs. Goals

MVMPO staff are responsible for ensuring robust, inclusive, and contextually appropriate participation. To accomplish this end, MVMPO has established participation values and goals. Values inform MVMPO's process—how staff and the Board undertake their work—while goals reflect the participation ends that the MVMPO strives to achieve.

MVMPO Participation Values

- 1. SAFETY AND WELL-BEING for all participants
- 2. DIVERSITY of experience see Figure 2
- 3. COLLABORATION between stakeholders
- 4. INNOVATION with intention
- 5. FLEXIBILITY of process and mindset
- 6. EFFICIENCY with community resources

Four Layers of Diversity adapted from Gardenswartz, Lee and Rowe (2021)

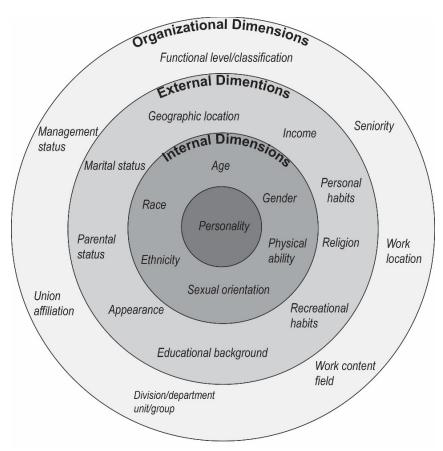


Figure 2: Adaptation of Gardenswartz, Lee and Rowe. Four Layers of Diversity (2021)

MVMPO Participation Goals

1. Remove barriers

Intellectual, emotional, physical, cultural, linguistic, and/or socioeconomic barriers impact an individual's ability or inclination to participate in MVMPO's transportation planning processes. For example, lack of internet access, unreliable transportation, or limited English proficiency can all inhibit participation. This plan identifies and eliminates barriers by outlining community-informed methods and strategies for designing meaningful public participation.

2. Educate about MVMPO's transportation planning role

Building awareness and knowledge of MVMPO's transportation planning work improves final products, but understanding and fluency is often built over time. The activities listed in thelll. Public Participation Strategies section of this plan can facilitate education and training opportunities to affirm MVMPO voting members' roles. The activities can also be used to develop partnerships with trusted community organizations to better reach new stakeholder groups. This goal includes innovating 'in-the-field' opportunities to advance MVMPO's general visibility within the region and adapting engagement media to the ever-changing technological landscape.

3. Clarify the spheres of influence of participants, MVMPO, and other stakeholders during the transportation planning and decision-making process

Depending on project context, there will be different needs for public participation and decision-making in the planning process. MVMPO staff must provide clear, concise information about how transportation decisions are made, who has what authority, and how appeals can be made following a decision when warranted and permissible. This goal encompasses the process for providing and documenting feedback and how participants' feedback, responses, input, etc. will be used in planning and decision-making processes.

4. Produce equitable, relevant, and meaningful input.

All constituents have the right to voice their opinions, provided that input does not promote hate, violence or discriminate. MVMPO staff can promote safety and wellbeing for all participants by setting a standard of professionalism and maintaining respectful discourse throughout engagement events. MVMPO staff aim to act as moderators and establish a clear mission or statement of purpose at the opening of each participatory activity to establish a tone of respect and thoughtfulness throughout engagement opportunities, clarifying how perspectives, positions, hopes, desires and concerns will or will not inform projects, processes, and products.

5. Balance resources.

As a small organization MVMPO staff recognize opportunity costs. Staff do their best to minimize so-called 'box-checking' activities so resources and efforts can be optimized for more meaningful engagement. To support members of the public who wish to participate, MVMPO staff will refer to the methods and strategies in this plan, executing the most streamlined and relevant methods for public participation based on context. MVMPO staff strive to set shared goals and objectives early in the planning process. Doing this drives the selection of engagement techniques in a manner that expends resources thoughtfully with equity and relevance in mind.

III. Public Participation Strategies

Goal 1: Remove barriers

- Frame technical content and issues in simple, clear, digestible manners using multiple media forms (visual, quantitative, narrative, etc.) where appropriate and possible.
- Invite and encourage representation that reflects the full demographic and cultural spectrum of parties impacted by a given project, process, and/or product.
- Emphasize the perspectives of communities who have been historically marginalized in the planning process, including—but not limited to—minorities, low-income persons, and persons with limited English proficiency.
- Ensure in-person participation opportunities are physically accessible to those with mobility impairments; offer
 alternatives and/or accommodations where appropriate. See Locations for Public Meetings section of the
 appendix.
- Ensure participation opportunities are geographically appropriate and relevant to their respective project, process, and/or product.
- Ensure in-person participation opportunities are accessible by various modes of transportation, including transit, bicycling, walking, and driving, to the greatest extent possible.
- Recognize that different participation methods may be necessary to reach different communities or groups interested in the same project, process, or product.
- Maximize opportunities to 'meet people where they are' to improve participants' convenience and reach wider audiences.
- Remain dispassionate and unbiased during facilitation, referencing research and factual information to educate all parties; actively listen and respond to the feedback of participants.

Goal 2: Educate about MVMPO's transportation planning role

- Continue to advocate the public benefits of simple processes and terminology to state and federal partners involved in federal aid programming.
- Seek 'in-the-field' and non-traditional branding opportunities to advance MVMPO's general visibility within the region.
- Maintain an up-to-date website with information about MVMPO and how to be involved.
- Develop a standard schedule for office hours with municipal staffs for the purposes of education, collaboration, and rapport-building.
- Develop a 'permanent notice' for member communities directing potential participants to MVPC's website and resources; encourage municipal partners to link to MVMPO's web content directly from their own.
- Create education/training opportunities for board members; facilitate coordination between board members and their constituents in locations where board members serve more than one community.

Goal 3: Make clear the spheres of influence of participants, MVMPO, and other stakeholders during the transportation planning and decision-making process

- Provide clear, concise information about how transportation decisions are made, who has what authority, and how appeals can be made following a decision if warranted and permissible.
- Provide clear, concise information about how participants' feedback, responses, input, etc. will be used in planning and decision-making processes.
- Document feedback received and allow such feedback to easily accessible by members of the public.

- Where possible, detail previous public feedback/feedback to date received in other public settings to ground-truth perspectives, positions, hopes, desires, and concerns.
- Inform projects, processes, and products with relevant feedback; when/where possible, demonstrate how public input has improved projects, processes, and products to encourage more involvement.

Goal 4: Produce equitable, relevant, and meaningful input

- Provide flexible, diverse methods for input throughout a public participation strategy, so input may be gathered by people with all levels of intellectual development and experience with the planning process.
- Consult with members of a target group for preference of in-person, hybrid, or virtual meetings.
- Refer to Figure 14: Language Translation Decision Tree for determining language translation service needs to ensure that language barriers will not be prohibitive of all voices being heard.
- Coordinate with trusted partners and be open to building trust with new partners with historically underrepresented groups for example; BIPOC, people with limited English proficiency, and immigrants.
- When hiring new MVMPO staff, aim to identify and remove barriers to diversify applicant pool.
- Ensure that MVMPO staff or other representatives of authority over a decision-making process do not outnumber members of the public at a participatory event.
- If translation services are unavailable, make use of language resources, like I Speak Flashcard (lep.gov)

Goal 5: Balance resources

- Where possible, develop shared goals and objectives early to reference as projects, plans, and products progress.
- Create forums that limit 'grandstanding' to ensure the loudest voice(s) do not discourage others from providing input on a project, process, or product.
- Practice de-escalation techniques during group discussions.
- Recognize the opportunity costs associated with token-participation activities and strive to replace these opportunities with meaningful alternatives or other meaningful work.
- When necessary, assess controversy and establish a transparent decision-making process so no one is caught off guard when decisions are made.
- When possible, be present and active participants in the Merrimack Valley community.
- Provide opportunities for participants to evaluate and provide feedback about the decision-making process or initiative.

IV. Public Participation Methods

Public Participation Methods & Strategies Selection Process

Before selecting a participation format, MVMPO staff must first identify if public participation is necessary and distinguish the role of staff and the MVMPO Board in any necessary participation process.

Public involvement in the transportation decision-making process falls across a broad spectrum. This means that different projects will require different activities based on factors such as public awareness, working relationships with partners, potential for controversy, and legal requirements. In its *Promising Practices for Meaningful Public Involvement in Transportation Decision-Making* (2023), the Federal Highway Administration (FHWA) provides the following questions to assist with participation goal setting for a particular project:

- Why is a public involvement process needed?
- Who is the "public" for this effort?
- How will the information obtained from the public be used to make decisions?
- What information does the organization need to learn from the public?
- When in the process will this information be most timely?
- In what ways will the information gathered be used?
- What metrics will be used for measuring success?
- What are the demographics of the affected community?
- How will effective engagement techniques be selected specific to the community?
- How will the engagement strategy promote an equitable process?
- · Who are the communities and stakeholder groups that need to be engaged to ensure
- an equitable process?

MVMPO staff may be called upon to act as supporter, participant, or lead in a project. This role should be clarified with the project collaborators at the onset of a project. A project scope should define all participation tasks and identify each responsible parties' roles.

Once the need for public participation and roles of each collaborative body are determined, the flowchart shown in Figure 3 may be used to select appropriate methods to obtain meaningful participation from the public.

The labels on the four circles in Figure 4 are adapted from Creighton's *Continuum of Participation* (2005) and identify frequent stages of public engagement initiatives. Creighton's continuum presents the process in a linear format (see Figure 4), however Figure 3 adapts the continuum to show the circular nature of planning that may loop from developing agreements and making decisions back to informing the public about the decision or the next steps in the project or planning process. Informing the public is not necessarily public participation but is often a necessary vehicle by which meaningful, equitable public participation can occur.

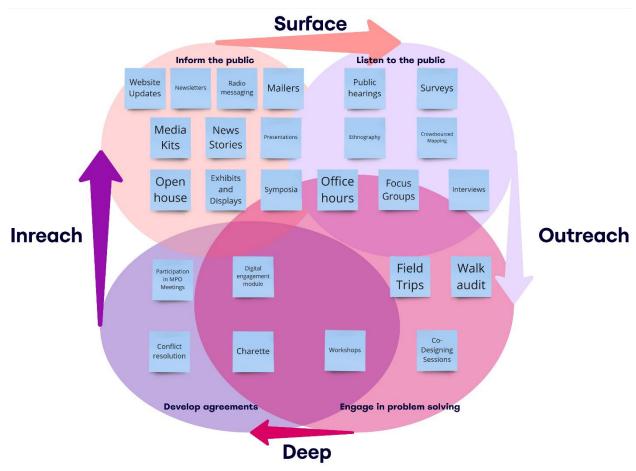


Figure 3: This flowchart depicts different options for obtaining meaningful public participation.

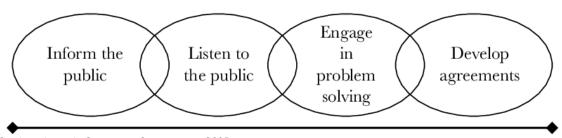


Figure 4: Creighton, James L. Continuum of participation, 2005.

In this chart, methods listed closer to the *inreach* label are best suited to engage members of the community who already have some awareness of the project or of the MVPC program, in other words, those who are already *included* within a project's envelope or context. In the case of MVMPO, these stakeholders may be members of the MVMPO board, municipal staff, or transportation advocates.

Methods more closely aligned on the *outreach* side of the spectrum are best suited for expanding the participant pool and diversifying perspectives. These methods are suited towards people who are stakeholders in a project area, but may not be aware of, trust, or have a lot of free time to give to the decision-making process that concerns their interest—for example a transit rider, families with school-aged children, and immigrants with limited English proficiency.

The *surface* to *deep* spectrum refers to methods suited to different stages of project planning and decision making. Surface level engagement produces explicit and observable insight into what the public might say, think, or do while deep engagement methods are targeted at understanding the tacit or latent knowledge which reveals what the public feels, knows, or desires.

Public Participation Methods

Possible Methods to Inform the Public

Informing the public does not necessarily involve participation but is often a necessary vehicle by which further meaningful, equitable participation can occur. These methods may be combined with others to obtain participation.

1. MVPC Website Update

Description The MVPC website is an essential, centralized place for MVMPO activities. Regular updates to the MVMPO web page should be maintained per the agency's MVMPO preparation checklist (see MVMPO's meeting checklist). The larger Commission website may also host or push social media posts that combine text and graphics to provide an update of a project, event, or discussion relevant to current initiatives undertaken by MVMPO. Individual, multifaceted projects like MV Moves—the region's Active Transportation Plan—and the region's Vision Zero Plan require a digital presence on the MVPC site to distribute information. Such projects may have their own specific pages.

Expected participants: This method generally reaches MVMPO's board, commissioners, municipal staff, and special interest groups who have already been involved in MVPC initiatives and projects.

When to use this method: The website is a useful tool for communication when used in tandem with other participatory tools that are interactive—like a crowdsourcing map or online poll—or to promote an event by providing a central link for project collaborators to share with their networks.

Template/Example Figure 5 demonstrates how to optimize SEO to guide members of the public to the MVPC website.

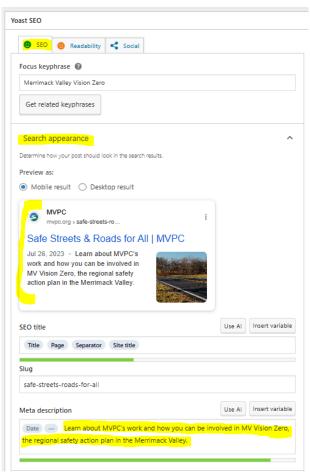


Figure 5: Screenshot of how to effectively use keywords to bring traffic to the MVPC website.

2. Media Kit

Description: A media kit is a collection of shareable graphics, text, videos, and flyers related to an MVMPO initiative that is readily accessible to the public. Media is usually adapted to different social media and news media platforms making it easier for stakeholders to share along different channels. This selection of media is likely hosted on the project's webpage or linked from a collaborator's page depending on roles and opportunities for visibility.

Expected participants: This method targets individuals or groups with whom MVMPO staff have already built trust and who have committed time. Such groups will extend media kit materials to secondary audiences in their networks. Such audiences may have an interest in a topic but would not generally seek out information or be involved without an introduction or invitation included in the media kit materials.

When to use this method: Media kits encourage peer-to-peer learning and can bring members of the public into spheres of influence at an early stage in the planning process. Stakeholders can add value to the production of kits by contributing design, video editing, and copywriting skills.

Template/Example: This Vision Zero Outreach Kit produced by the Cape Cod Planning Commission is a great example of easily accessible media to promote their work on their Regional Safety Action Plan. Communications - Vision Zero Communications Kit - All Documents

(https://bamstablecounty.sharepoint.com/dept/commission/team/comm/Shared%20Documents/Forms/All/tems.aspx?id=%2Fdept%2Fcommission%2Fteam%2Fcomm%2FShared%20Documents%2FTranspo%2FVision%20Zero%2FVision%20Zero%20Communications%20Kit&p=true&ga=1)

3. Newsletter

Description: A newsletter is typically a recurring, mailed narrative that includes short updates relating to a topic or project. The newsletter can be adapted to email, posted format, or both. This method usually includes a combination of text and graphics. Typically, members of the public will opt-in to receive a newsletter and therefore likely already have awareness and interest in the topic to which the newsletter speaks.

Expected participants: Since this method requires an opt-in by recipients, it is ideal for members of the public who are interested in the topic and want to have access to updates, but are otherwise too busy to commit additional time. Municipal planning boards, neighborhood organizations, and local advocates may all be willing recipients of a newsletter about a transportation project or initiative.

When to use this method: This method is best suited to keep members of the public who may have interest in becoming co-decision makers, active participants, technical reviewers, or commenters in the loop of ongoing work around a particular issue.

Template/Example: MVPC's *The Current* newsletter provides updates on Commission happenings across all programs, including transportation. Participants receive updates on items including funding opportunities and current work program initiatives.

4. Radio messaging

Description: A press release sent to local radio stations supports building public awareness and narrative around a project or initiative. Due to the nature of radio, messages should be concise with clear directives for listeners to find out more and engage. Radio press releases that cite project-based URL should use a tool like Rebrandly to create an easily remembered link. This method may also stimulate the interest of the media to do a feature news story.

Expected participants: Municipal staff in the City of Lawrence have explicitly recommended this method to reach Spanish-speaking populations, especially those with limited English proficiency (LEP). Haverhill additionally has its own local radio station, WHAV.

When to use this method: This method is ideal to promote an engagement event at the onset of a planning initiative or critical decision about a transportation project. Radio messaging can also be used to generate interest from the subject media platform, as well as other new outlets.

Template/Example: Win for Breakfast on WHAV is a Merrimack Valley-based radio station hosted by Win Damon who covers local issues, such as MVMPO's Fare Free Evaluation and MBTA Communities legislation. Short segments have also covered transportation plans in the Merrimack Valley.

5. Press Messaging Kit

Description: Press messaging kits ensure clear and consistent messaging is delivered to the public on various media and news platforms. These kits can be used to release information to targeted news outlets. Depending on the intended audience, a newspaper with statewide coverage such as The Boston Globe may be best suited to raise awareness about a regional topic like traffic safety or federally funded projects happening in the region. Meanwhile, several local newspapers are read by the public. These publications can build local awareness and public participation. The Andover Townsman, Eagle Tribune, Newburyport News, and Haverhill Gazette are some of region's English-language newspapers. Rumbo, based in Lawrence, is bilingual in Spanish and English. News stories may be initiated by sending a press release to the newspaper or contacting a journalist directly if a relationship has been previously established. Materials for such releases can be developed in the initial messaging kit.

Expected participants: A news story, when published in a local paper such as the ones listed above, can reach members of the public who wish to be informed about local initiatives, but who may not be directly involved in the process. This method is effective to draw potential active participants and to promote an initiative that may require public support.

When to use this method: News stories are typically best adapted to promote a single initiative instead of an ongoing event. To keep the narrative consistent, messaging for the news story should be coordinated between all project collaborators to the best extent possible.

Template/Example: Staff developed messaging materials to assist individuals who were not fluent in the lexicon of federal process with the process as part of the annual Transportation Improvement Program update. This resulted in conversations with a journalist from the Eagle Tribune and a <u>TIP</u> 101 social media post (https://mvpc.org/2024/03/05/transportation-funding-101-and-2025-2029-tip/).

6. Open House

Description: An open house is an invitation to members of the public to drop-in at a set location with kiosks, tables, or displays that are staffed by technical experts who are available to discuss a topic. Open houses create opportunities for the public to speak with experts in a one-on-one format. A large flip chart or map may be used to track questions, responses, or locations of interest. Such tools adapt this method to promote listening rather than simply informing. Depending on the goal of the open house, MVPC can act as the host and invite known, synergistic groups to join, or MVPC may join an externally led open house that is hosted by complementary groups. The open house method can be well adapted to house engagement activities, but it is not a requirement.

Expected participants: This method lends itself to a spectrum of potential participants. Due to the inperson nature of an open house, this event is likely to bring together participants who have self-selected, are interested in the topic, and are willing to dedicate time to travel to and attend the event. New participants may be exposed to a transportation planning initiative if the open house features more than one topic.

When to use this method: The open house method can be suited to any step in the decision-making process but is most helpful at the onset of an initiative since its primary function is to introduce a topic and field questions from the public.

Template/Example: MVMPO staff participated in the West Newbury Town Projects Fair and Forum in the fall of 2023. MVPC had a table dedicated to the Vision Zero Plan, which had just launched. During the event, staff distributed FAQ flyers, invited members of the public to mark locations of concern on a map of West Newbury streets, and had a sign-up sheet to receive updates during the planning process. Because the topics discussed at other tables pertained to affordable housing, safety improvements on 113, tree planting, and vulnerability preparedness, attendees could easily connect transportation safety as a part of their town's interwoven infrastructure. For more information, please see this link to the Town Fair web page. (https://www.wnewbury.org/home/town-projects/pages2023projectsfair)

7. Mailer

Description: This method is a one-off notification, around the size of a postcard or slightly larger, that is mailed to a target audience. Mailers are designed in eye-catching manners that immediately demonstrate how an initiative is relevant to the intended recipient. The main purpose of a mailer is to alert target stakeholders about an initiative and to direct them to participate (via a website or by sharing contact information or information about an event or project). This method may also direct recipients to take a survey or fill in a crowdsourcing map, or the mailer itself may be formatted as a survey that may be mailed back to project coordinators. This method may also be adapted to a door hanger flyer in place of mailed material.

Expected participants: This method is well suited to reach specific audiences, such as abutters of a particular project or study, or individuals and groups identified as beneficiaries or impacted parties.

When to use this method: This method is best for:

- notifying potential stakeholders of one-off events and projects;
- providing a quick overview of an initiative in multiple languages, and;
- building interest at the onset of a plan or project.

Template/Example The sample mailer in Figure 6 aims to engage abutters of active transportation paths to notify them of the development of Merrimack Valley's Active Transportation Plan, MV Moves. The mailer also directs recipients to a targeted survey about the experience of living adjacent to a paved path.



English

The Merrimack Valley Planning Commission (MVPC) is conducting public engagement for the region's Active Transportation Plan. The Active Transportation Plan will explore opportunities to expand and improve paved paths and trails in the region.

We want to know the impact of living next to the _____ has on you and your household. Your responses to the following questions will help MVPC understand the experience of living along a paved path or trail to inform path planning. Please scan the QR code or visit survey.mvpc.org/atp_abutters_survey.

MVPC welcomes your input beyond these questions and encourages you to visit the Commission's website (www. mvpc.org/atp) or email atpfeedback@mvpc.orgto further enage with our active transportation planning work.

Español

La comisión de planificación de Merrimack Valley (MVPC por sus siglas en inglés) está llevando a cabo la participación pública para el plan de transporte activo de la región. El plan de transporte activo explorará oportunidades para ampliar y mejorar caminos y senderos pavimentados en la región.

Queremos saber el impacto que tiene vivir al lado de
___________sobre usted y su hogar. Sus
respuestas a las siguientes preguntas ayudarán a MVPC a
comprender la experiencia de vivir a lo largo de un camino o
sendero pavimentado para informar la planificación del camino.
Escanee el código QR o visite survey.mvpc.org/atpabutters-survey.

MVPC agradece sus comentarios más allá de estas preguntas
 y lo anima a visitar el sitio web de la comisión (www.mvpc.org/atp) o enviar un correo electrónico a tcollins@mvpc.org para participar aún más en nuestro trabajo activo de planificación del transporte.

Figure 6 Back side of the MV Moves Abutters Survey, MVPC 2023

8. Presentation

Description: A presentation may be done in-person or virtually. It typically consists of a slide deck and accompanying narrative that the presenter(s) will use to share work about a specific topic or project for an audience. In the context of public participation, the presenter will likely take questions at predetermined moments during or at the conclusion of a presentation. Unlike a symposium or office hours, a presentation is unilateral communication: information is shared by a facilitator and received by an audience. Best practices include incorporating an agenda at the beginning of the presentation, employing consistent branding, using legible typography, and using accessible, concise language on each slide. Additional information about how to make accessible presentations can be found here (https://accessibledigitallearning.org/content/uploads/2021/09/Accessibility_Toolkit_Powerpoint_150921.pdf

Expected Participants: Presentation audiences can vary in size and demographics. If it is likely that stakeholders with limited English proficiency will be in attendance, staff may consider partnering with a trusted community advocate who speaks the preferred language of those in attendance. If this is not possible, live language translations should be offered.

When to use this method: Presentations are frequently used by MVMPO staff to provide updates about transportation planning initiatives, funding opportunities, technical advancements, and data analyses. A presentation is ideal for communicating technical information that the public may not be familiar with and packages images and concise language into a short and digestible format. Level of familiarity about a topic, potential for controversy, and spoken language may all influence the layout of a presentation.

About the Merrimack Valley Planning Commission Community and Environment Transportation Geographic Information System Merrimack Valley Safe Securas Y Conectadas en Lawrence Safe & Connected Streets in Lawrence About the Merrimack Valley Planning Commission Community and Environment Transportation Geographic Information System Merrimack Valley Planning Commission

Figure 7: Slide from presentation about MVPC Transportation Program

9. Exhibit, Installation, and/or Display

Description: An exhibit, installation, and/or display is an effective tool to bring information to the public about an initiative and encourage future engagement in a planning process. Someone who is involved with a given project may attend an exhibit, but often this method stands alone without continuous staffing. This method can be a single poster on a wall or an entire room arranged in a museum-type context. This method is ideal for using multimedia to educate an audience because the combination of tables, posters, books, and other items offer participants a variety of ways to interact with information at their own speed and interest.

Expected participants: This method works well when the target audience is confined to a single community or specific interest group. Due to the physical presentation of materials, audience members will need to commit time to attend the exhibit/display even if it is placed in a location that they already frequent. Unless the exhibit, installation, or display is set-up in an area with a high level of foot traffic, it is likely that participants in this method will be self-selected and may not reflect a larger community demographic.

When to use this method: This method is an excellent way to bring information to the public because it can be continuous and provides an opportunity for one-on-one communication and collaboration with synergistic groups when staffed. Participants may inform other potential participants about the ongoing exhibit/display, creating a snowballing impact.

Template/Example: The image below shows an exhibit at the Annual Feaster Five race registration event at the YMCA where MVMPO staff hosted a table dedicated to the Vision Zero Plan. MV Vision Zero FAQs were handed out, NACTO street design guides were available for browsing, an iPad with the High Injury Network, and engagement tools were placed on the table so when race participants arrived to collect their tags, they could visit the MV Vision Zero Display.



Figure 8: MVMPO staff at the Feaster Five Vision Zero Display, 2023

10. Symposium

Description: A symposium is a way to bring people who are highly interested in a topic together to listen to discussions by professionals in the field. This method differs from a roundtable or consensus-building discussion because there is an audience whose primary function at the event is to learn versus participate. A symposium may have multiple panels with fireside chat style discussions or may feature a single discussion. The length of a symposium may also be varied in duration. Sometimes, longer events are referred to as summits.

Expected participants: Symposium participants are individuals who are highly interested in the issues being discussed. These may be technical advisors, participants on a task force, MVMPO members, or others who expect to be impacted by a particular issue.

When to use this method: A symposium should not take place close to a decision because it is not intended to be a forum for decision-making but is rather for exploration and learning. This method is ideal at the beginning of an initiative.

Template/Example: The Andover Climate Summit in 2022, brought policymakers, businesses, municipal leaders, and youth leaders to discuss climate issues facing Andover and surrounding areas through panel discussions. The summit lasted two days and aligned with the hiring of a Sustainability Coordinator and the launching of the Town's first Climate Action and Sustainability Plan. *More information can be found on the event webpage here (.https://andoverma.gov/1020/Climate-Summit-2022)*

Possible Methods to Listen to the Public

This section contains techniques to receive information from the public without the requirement of visioning, designing, or producing solutions. These methods are important steps to build trust with the public. Insight collected during this stage should be used to propel content included in the problem-solving and consensus building stages of participation.

11. Public hearing

Description: A public hearing is an opportunity to provide a time for members of the public to comment on projects. Most typically, MVMPO hold public hearings on projects and studies that are funded, even partially, by federal aid to fulfil legal obligations. Public hearings may take place inperson, virtually, or a hybrid of both. MVMPO staff are available during the hearings to record and respond to public comments and can also provide additional information about a project as needed. While staff typically use office-hour methods for hearings, complex or extensive topics warrant presentations, which are packaged into the public hearing format.

Expected participants: Municipal staff, residents, business owners and other stakeholders who may be directly impacted by a project or study are the most likely to attend. This method may pose cultural and linguistic barriers for some or stakeholders who will be impacted by the project but may not trust or understand the purpose and logistics of a hearing. Staff can mitigate this by asking organizations trusted by the public to post about public hearings and use the language decision tree (see Figure 14 in the appendix) to identify languages best suited for potential stakeholders.

When to use this method: Public hearings are required as part of the MVMPO decision-making process. The 2023 edition of FHWA document Promising Practices for Meaningful Public Involvement in Transportation Decision-Making notes:

Title 23, Chapter 1, § 128(a) "Any State transportation department which submits plans for a Federal-aid highway project involving the by passing of or, going through any city, town, or village, either incorporated or unincorporated, shall certify to the Secretary that it has had public hearings, or has afforded the opportunity for such hearings..."

Template/Example: See the appendix for

MVMPO Public Hearing Template for Web Noticing.

12. Questionnaires and Surveys

Description: Surveys and questionnaires include questions about transportation-related issues that participants may respond to offer insight into their wishes, preferences, perspectives, and beliefs. The difference between the two methods involves intent. The sample pool for questionnaires is not representative or driven by research principles, while surveys are designed to elicit responses from a particular pre-determined representative sample. Despite their differences, the terms are commonly used interchangeably. Staff analyze responses to understand the broader public opinion on a topic or proposed decision. Questions may be multiple choice, open-ended, or may employ a rating system such as a Likert Scale. Digital platforms offer efficient opportunities for release, however, digital methods are not always accessible to all. In some cases, a physical survey may gather more participation if provided in a confined forum or when an incentive is offered.

Expected participants: Surveys are most likely to be filled in by members of the public who have some trust in the transportation decision-making process, or who believe they personally will receive some benefit to taking the survey, either through financial compensation or because the issues they are responding to have direct or personal impacts. While surveys and questionnaires need not necessarily be anonymous, the response rate to such opportunities may be higher if respondents are provided the ability to respond anonymously.

When to use this method: If a community does not trust the transportation planning process, then they will not take the time to complete a survey or questionnaire especially if they believe the survey contains biased language or does not provide an opportunity for criticism. Surveys and questionnaires are good methods to collect input from people with limited English proficiency if such tools can be translated, however, survey administrators should discuss cultural and/or educational barriers for a target group with community partners prior to administration.

Template/Example: In the FHWA guide to *Promising Practices for Meaningful Public Involvement in Transportation Decision-Making* (2023), FHWA highlights the following Promising Practice:

"The National Aging and Disability Transportation Center (NADTC) commissioned a survey in 2021 to learn opinions and obtain information from older adults, younger adults with disabilities, and caregivers from historically marginalized and underserved communities. They fielded the survey both online and by telephone in both English and Spanish, and by telephone in other languages upon request. The survey yielded responses from a total of 2,435 people in those priority groups in every US state and the District of Columbia. The survey found that both diverse older adults and diverse younger adults with disabilities need public transportation to get to critical destinations."

13. Ethnography

Description. Ethnography is a qualitative research technique. It is different than a walk audit because participants stay in one location and observe how others move through or use a particular location of study. The goal of ethnography is to build empathy for the values and cultural norms of people in a designated public area. An ethnographic study may include:

- Field notes taken during a pre-determined observation period that includes descriptions and inferences drawn of what was observed;
- Maps of observed behaviors and movements through the space;
- Descriptions of interactions that the ethnographer witnessed while conducting the survey;
- Documentation of how the space was previously used based on oral histories from people who have resided in the area for some time; and,
- Analysis of observed behavior that can be combined with other ethnographic studies of the area.

Expected participants: Staff can use ethnography to study a specific area or provide materials for a user group to do a self-ethnography of that area. Support from a trusted partner who may have a strong relationship with the study's target population is beneficial and encouraged.

When to use this method: In transportation planning, understanding how a community values and uses its transportation network can guide the decision-making process. To avoid tokenization and surface-level observation, trust and relationships should be built prior to initiating an ethnographic study. This method is best used mid-project and is best executed in partnership with a community advocate.

Template/Example: The City University of New York Toolkit for the Ethnographic Study of Space includes templates and additional information about ethnographic studies, which can be found here: The Toolkit for the Ethnographic Study of Space — The Public Space Research Group (https://psrg.commons.gc.cuny.edu/).

14. Crowdsourcing Map

Description: A crowdsourcing map creates opportunities for communities to participate in the by marking community assets, opportunities, and concerns either on a physical map or through a Geographic Information Systems (GIS) based format. By combining a crowdsourcing map layer with other GIS layers, transportation planners can weave community insight with existing data to ground-truth or generate additional insight about community perceptions.

Expected participants: Participation in the crowdsourcing map should be designed for user to provide input in under two minutes. Participants will likely be people who are interested in a given issue but may prefer a straightforward way to add their input. Some highly motivated participants can be expected to spend significant time recording observations on a map if they perceive local action or benefits may be leveraged from the format.

When to use this method: The crowdsourcing map is ideal for placement in a location with significant foot traffic that will catch the eye of a diverse pool of potential participants. This method is best used when a decision-making process has a strong mapping component and requires local insight for implementation.

Template/Example Crowdsourcing Tools - VPI Toolkit - Virtual Public Involvement - Public Involvement - Planning - FHWA (dot.gov)

(https://www.fhwa.dot.gov/planning/public_involvement/vpi/vpi_toolkit/crowdsourcing.cfm)

15. Office Hours

Description: Office hours are pre-scheduled, open periods where staff are available to field questions, provide information, and discuss ideas. Office hours typically generate conversations between staff and individuals, however, there are occasions where multiple parties attend simultaneously. Staff generally share an agenda or discussion topic ahead of scheduling office hours, so participants can prepare questions and comments or invite additional participants; however, the office hours method may also be used to support rapport building and open dialogue when topics are not determined in advance. MVMPO staff may plan multiple office hours for different participants around the same topic, for example, meeting with each municipality to discuss TIP projects and local transportation goals. In this case, staff may use a scheduling service like Calendly, a free online scheduling tool.

Expected participants: Office hours participants are likely to be people who already have a high level of awareness of a relevant issue, such as municipal staff or special interest groups who want their opinion or experience to be heard. Participants typically have time to dedicate to staff and may or may not have direct authority to influence a decision (i.e. be on the board or be an elected official in a municipality).

When to use this method: The office hours method is best used after a project has been initiated and some assessment has taken place. The method affords an opportunity to gather thoughts and comments from stakeholders who self-select to participate. This method may also be used for regional planning processes where there are many stakeholder groups with divergent priorities.

Template/Example: MVMPO staff employed office hours during the development of the region's Metropolitan Transportation Plan, *MV Vision 2050*. During meetings with municipal stakeholders, staff provided information about the federal aid programming process and responded to community-specific problems and proposals. These meetings helped MVMPO staff acquire additional insight into the transportation goals and values of each community that may not be shared during larger, regional meetings.

16. Focus Group

Description: Guidance from FHWA identifies a focus group as a "small group conversation led by a skilled facilitator [that gauges] public opinion and listen[s] to concerns, needs, wants, and expectations." Focus groups are useful for identifying major points of agreement and/or divergence of opinions. MVMPO staff may elect to hire a skilled facilitator who can act as third-party moderator for focus group discussions or may function as a facilitator. The purpose of this method is not to solve problems, but to instead identify shared and divergent perspectives at a human-level.

Expected participants: Participants may be self-selected, active, and informed or may be randomly selected from a stakeholder pool. Compensation or accommodations like child-care may be considered for participation in focus groups when a target group whose perspectives are valuable to the planning process are unable to otherwise make the time to participate.

Application: This method tends to be engaging and stimulates genuine interaction. The method can be used to gather insight from communities who are otherwise disenfranchised by the public planning process, provided that the facilitator creates an environment where participants feel safe expressing different opinions and lived experiences.

Template/Example: MVMPO's Fare Free Business Case Evaluation included focus groups, generating conversations about riding the bus free of charge, operating a fare free bus system, and riding with a disability. Selected participants answered initial questions from facilitators, which then stimulated unmediated conversation and qualitative data.

17. Interview

Description: An interview can be conducted with a key person who is identified as a community spokesperson, elected official, head of a community-based organization, advocate, etc. The interview method is a one-on-one discussion where the interviewer may prepare questions ahead of time or let the conversation flow freely to gather understanding of the interviewee's opinion or knowledge about an issue.

Expected Participant: This method may be used with a variety of participants. Interviews are appropriate for stakeholders who have busy schedules or who may prefer a private space or special accommodation to express their perspective. People with disabilities who can participate remotely or those of limited English proficiency who may need more discussion and processing time may prefer this participation option.

When to use this method: The one-on-one method supports relationship-building and credibility between MVMPO staff, other project collaborators, and the interviewee. Interviews can occur at any point during the planning and decision-making process but are especially helpful at the beginning of the process to inform scope and public participation process. The interview may also be used just before a decision is made to collect additional testimonials in support of the decision.

Template/Example: Interviews were held at multiple points during the Vision Zero Planning process specifically with victims of traffic violence, either those who themselves had been injured, or family and friends of victims. The one-on-one nature of these interviews provided an intimate space for interviewees to share their experiences.

Possible Methods to Engage the Public in Problem Solving

Methods in this section provide opportunities for participants to transition from abstract discussions to making the issues tangible and defining parameters for possible solutions. In the problem solving stage, it is important to emphasize equity. This can be supported through partnerships with community advocates central to an impacted area so that novel ideas are not missed due to barriers in the participatory process.

18. Field Trip/ Site Visit

Description: The field trip and site visit follow the same format, but have distinctly separate locations and outcomes. In the field trip, participants travel to a location that has comparable characteristics of a proposed project. In a site visit, participants visit a location where a project is proposed to identify existing characteristics, issues, and opportunities.

Expected participants: Participants will likely be local to the proposed project, technical consultants, or political leaders. MVMPO staff may contact local and state agencies responsible for executing decisions or managing policies relevant to an impact area to ensure direct collaboration with local communities may occur. MVMPO staff may function as a facilitator, but in some cases, will function as a participant that stands to learn from a local facilitator.

When to use this method: Field trips and site visits are both appropriate to plan at the design or problem-solving stage of an initiative.

Template/Example: In December of 2023, MVPC transportation staff gathered with Newburyport's MVPC Commissioner for a tour of the Clipper City Rail Trail, Ghost Trail and Amesbury Riverwalk. This tour helped MVPC imagine how active transportation networks could be expanded throughout the region and make observations about surface maintenance, wayfinding, and level of comfort from the vulnerable road user experience.

19. Walk Audit

Description: A walk audit is a variation of the site visit but with a walking component in which a small to medium sized group of participants walk along a predetermined path and make observations regarding challenges and opportunities for nonmotorists (from the perspective of vulnerable road users, transit riders, etc.).

Expected participants: The walk audit will likely be attended by users and advocates who are already empathetic to nonmotorists' experiences. It is essential that MVMPO staff advocate for participation from non-advocate vulnerable road user groups, like people who use transit in the subject area, families in zero vehicle households, members of the immigrant population, women, people of color and others who stand to be negatively impacted when left out of the decision-making process. Municipal staff, elected officials, and other voices of authority are valuable participants since they may not have had the opportunity to build empathy from a nonmotorist perspective. In past walk audits led by MVMPO staff, people passing by a walk audit in session have spontaneously joined and added valuable insight into discussions.

When to use this method: Walk audits are most effective when they occur close to a decision. Decisions could be related to grant applications, including plan recommendations, implementation, or quick-build designs.

Template/Example:

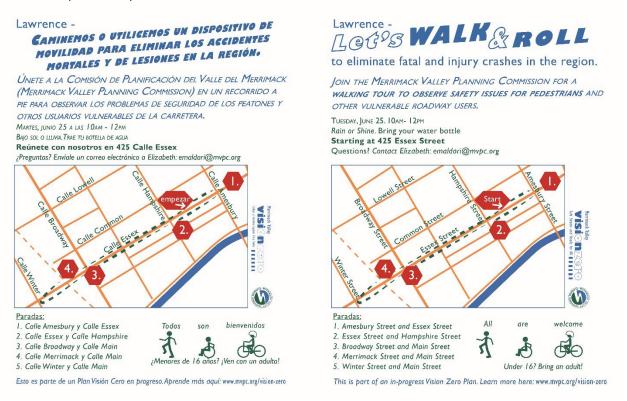


Figure 9: Flyers advertising walk audit in Lawrence.

20. Workshop

Description: Workshops gather a small group of participants for several hours or full-day activity sessions aimed at generating ideas and exchanging information. A workshop will use tools such as scenario building, brainstorming, charettes, or mapping where collaboration and problem solving are the anticipated outcomes.

Expected participants: Participants in a workshop must be able to dedicate time and have an interest in actively engaging with the topic. Workshops must be advertised widely to ensure a representative sample of perspectives is available to influence the development of ideas.

When to use this method: Workshops are the most effective after robust information sharing among stakeholders. Due to the task-oriented method (as opposed to a discussion-based format), a workshop is a good tool to obtain representation from the public sphere, professional sphere, and political sphere. MVMPO staff may expand the participant pool by offering food and/or childcare, by providing trusted facilitators who can lead workshops in other languages, and by considering accessibility accommodations to ensure equitable opportunities to participate (e.g. large print, large and accessible facilitation spaces).

Template/Example: FHWA Promising Practices for Meaningful Public Involvement in Transportation Decision-Making cited a workshop where "Georgia DOT held a 2-day retreat with 40 representatives of transportation users, operators, customers and groups to guide the agency in how to mold their public involvement process. The retreat was facilitated by an outside party and resulted in recommendations that have been implemented by the Georgia DOT."

21. Co-Designing Sessions

Description: A co-designing session is similar to a workshop—and could potentially be a component of a workshop—where the intended outcome is to create a final or nearly-final concept design of a space, facility, or policy. Unlike participatory design processes, co-designing elevates all participants to co-decision making status by valuing lived experience, lived expertise, and professional experience equally. Co-designing requires removal of all barriers and agreement between participants to collaborate and build consensus.

Expected participants: Stakeholder groups who are closest to the issues and solutions will be the most valuable participants in co-designing. Representation must be carefully considered. An individual's perspective should not overshadow others' needs. Co-designing requires intentional listening and responding by all participants.

When to use this method: Co-designing is only possible when rapport and trust are strong between stakeholders. Co-designing should occur without hierarchal systems and with non-partial facilitators.

Template/Example:

Figure 10 demonstrates the transformative potential for co-design. The process to redesign the universal symbol for access is outlined on the Accessible Icon Project website. Redesigning the icon was a collaborative effort where people with disabilities were elevated to co-designers and worked in partnership with artists, activists, graphic designers and ultimately policymakers to introduce a new icon that has had influence on changing public perception about disability.

ISO DOT 50 Pictogram examples

Original accessible icon

Proposed accessible icon





Figure 10: Comparison between ISO DOT Pictograms, the original and proposed accessible icon. Sara Hendren, 2016

22. Charrette

Description: A charrette is a creative way to stimulate creativity in the problem-solving stage. Typically, participants are broken into groups and given an assignment to illustrate, map, or otherwise contribute to the development of a shared vision within a limited timeframe. The benefit of a visual method of a charrette is that it draws out ideas for areas of public interest, local aesthetics, preferred activities and systems that may otherwise be unknown.

Expected participants: Technical consultants and stakeholders who are willing to dedicate time to the charrette are among the most valuable because they will each illuminate what is preferred, possible, and practicable together. Like the workshop, accommodations that remove barriers to participation will enable a diversity of perspectives. Given the visually-oriented medium, facilitators should be aware of accessibility barriers and participants' own willingness to engage in drawing, marking, coloring, and designing. Reducing the barriers to entry should carefully assessed when planning charette opportunities.

Application A charrette may be used to envision numerous improvements to the built environment, including the alignment of a shared-use pathway, the design of a new bus stop, or the creation of pedestrian improvements at an intersection. This method tends to be effective at a mid-to-late stage of the planning or decision-making process but can also be used for initial visioning.

Template/Example: MVPC hosted a bilingual event in Lawrence, employing the charrette method to allow for participants of all skill level and knowledge to participate in designing the Union Street Corridor.



Figure 11: Union Street Corridor redesigned during the Lawrence charrette event.

Possible Methods to Engage the Public in Developing Agreements

These methods will have the most impact when they occur near the end of the decision-making or planning process because at this stage, all ideas and opinions will have been stated and final selection or ranking processes can begin.

23. Participation in MPO Meetings

Description: Participation in MPO meetings is guided by state requirements with a higher barrier of entry for user groups who are historically marginalized. MVMPO members join monthly meetings to receive updates and vote on transportation decisions that involve federal funding. MVMPO meetings follow a specific format and use highly technical language. While there is opportunity for public comment, voting members—who are typically elected officials and state or municipal professionals—generally guide discussion and initiate action. The MVMPO board has a high level of decision-making authority over transportation projects and initiatives.

Expected participants: MVMPO board members are required to attend meetings or to send an alternate in their place to achieve quorum. Members of the public may attend meetings and are typically allowed to make comments, but must be recognized by the chair, which is at her/his discretion.

When to use this method: MVMPO meetings are required to facilitate a continuing, comprehensive, and cooperative transportation planning process. Meetings typically occur monthly, but are adjusted occasionally during the holiday season and summer.

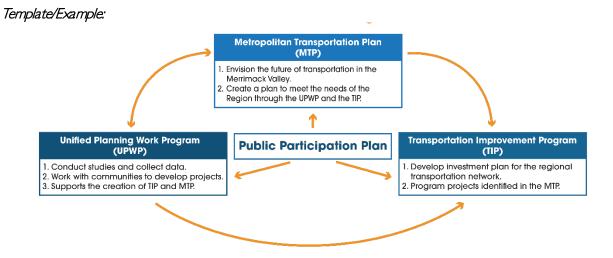


Figure 12: This figure demonstrates the breadth of work covered by the MVMPO.

24. Conflict Resolution

Description: Some projects will be controversial where the public is unable to immediately agree on community priorities. Conflict resolution is a tool to facilitate agreement or compromise between diverging perspectives through a panel representing all interests. This method is like a symposium, but the explicit goals of this method are to resolve the diverging perspectives and advance compromises, where warranted. During a conflict resolution event, the pathway to an outcome should be transparent and should outline the level of influence participants will have on a final decision—especially if they are not the ultimate decision-making body.

Expected participants: Participants vary depending on the context and may be frustrated, mistrusting, and hostile when entering a consensus building discussion.

When to use this method: Controversy emerges when stakeholders who feel a sense of ownership or relation to a project feel their concerns have not been addressed. This reduces trust between stakeholder groups. Organizing a panel, where each divergent opinion is allocated equal time and accommodation establishes a baseline of respect and offers a path toward compromise.

Template/Example: MVMPO functioned as a facilitator regarding the Border to Boston alignment through Newbury between Byfield and Newburyport's Commuter Rail Station. The original alignment was slated to traverse the Martin Burns Wildlife Conservation Area managed by Massachusetts Wildlife, which did not agree with the alignment. MVMPO staff convened local advocates, Mass Wildlife representatives, and MassDOT to identify spheres of influence, elucidate potential outcomes, and work toward agreeable solutions. While MVMPO and advocates' preferred alignment was not advanced due to MassDOT's alternate plans and Mass Wildlife's concerns, the opportunity helped connect stakeholders and acknowledge viable paths to ensure the project could move forward.

25. Digital Engagement Module

Description: A self-directed, digital engagement module is a tool that can be embedded on a project website. The digital nature of the module makes it possible to engage multiple parties at their own pace. Some opportunities may go so far as to gamify participation while tracking input and creating live analysis and visualizations of input.

Expected participants: A digital engagement module will likely be used by stakeholders who are well-informed and actively engaged in a particular project or initiative.

When to use this method: This method is suited to gather insight about a specific topic and provide information via a data-dashboard. Since a module is self-directed, the module may only be accessible to a limited audience who are confident in using digital tools and have access to a secure internet connection. In many cases, a module is open to all public audiences.

Template/Example: MVPC Transportation staff created an engagement module to track progress and share updates about the planning process.

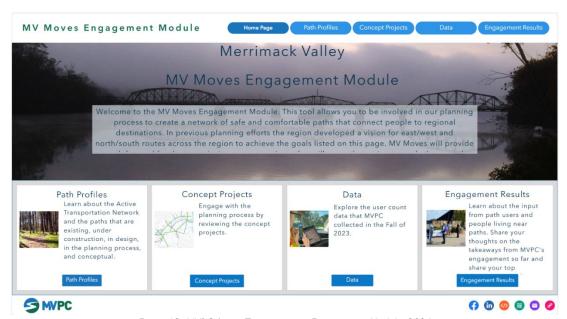


Figure 13: MVPC Active Transportation Engagement Module, 2024

V. Performance Measures

Performance Measures

Establishing participation performance measures is a way to monitor and evaluate the efficacy of participatory methods employed by MVMPO staff. Tracking performance measures enables MVMPO staff and other project partners to right-size public participation strategies and processes to be efficient, avoid tokenism, and ensure equitable access to all stakeholders.

This section adapts guidelines for measuring effectiveness of public participation strategies from FHVVA's *Promising Practices for Meaningful Public Involvement in Transportation Decisions* (2023). MVMPO staff may select from the list of measures below based on the stated goals of a specific public participation strategy.

OUTPUTs of an engagement activity can be assessed as soon as the activity is complete. Outputs are often evaluated through descriptive statistics or content analysis. These metrics are easily observable, but it is helpful to have a project coordinator assigned to recording metrics such as:

- Counting the number of people who attend an event;
- Noting the presence of public officials at each event;
- Counting the number of project website hits, and;
- Assessing the costs (including staffing, direct costs, and indirect costs) of putting together a public engagement plan.

OUTCOMES describe the changes in the planning process resulting from the outputs of an engagement activity. Outcomes can be evaluated using a combination of both opinions and facts possibly using a post-event questionnaire or debrief. Outcome metrics include:

- Assessing whether the participants felt they had adequate notice of a public engagement activity;
- Determining whether participants felt their input was valued in the process;
- Tracking how public input was used, and;
- Assessing whether public input impacted the resulting planning products.

MVMPO staff and project partners may additionally use performance metrics to monitor the inclusion of people who are traditionally underserved and often disproportionately burdened by changes to the transportation system, such as people in designated regional environmental justice plus communities (see the appendix for more information on designation). Such metrics may include:

- Collecting demographic data specifically to show representation by communities most likely impacted by a project or decision;
- Determining the overall retention of participation by members of state-designated REJ+ Communities;
- Determining rates of new participation by user groups previously unrepresented in the transportation planning process;
- Determining whether participants used supplied language translation services;
- Determining whether participants used supplied accessibility accommodations, and;
- Assessing the mode of transportation taken to arrive at engagement opportunity.

Further metrics may be used to evaluate effectiveness of a public participation strategy. A Transportation Research Board (TRB) project for the National Cooperative Highway Research Program (NCHRP) on Measuring the Effectiveness of Public Involvement found that there are six key indicators important to the success of a community engagement effort (Brown et al., 20192). These are:

Influence and Impact: Public feedback has an impact on project decisions and ensures that organizations are not just eliciting feedback from the public as part of a "checklist."

Transparency and Clarity: Trust of government agencies has increased or improved because of the public involvement processes, and agencies were appropriately transparent about the project.

Timing: Public involvement started early enough and was of sufficient length and frequency to be valuable. Inclusion: Public involvement was inclusive and representative of all targeted and affected populations. Targeted Engagement: Public involvement included locations relevant to the targeted and affected populations.

Accessibility: Public involvement activities used multiple methods for participation.

Measuring Innovative and Novel Methods of Engagement

From time to time, MVMPO staff consider and implement novel methods and/or approaches to advance engagement. While such is consistent with the stated *innovation* value of the PPP, such approaches must be intentional, qualitatively justifiable, and quantitatively measurable. Assessing benefits against costs helps staff determine if the use of resources on novel practices continues to be justifiable.

Examples of novel uses of resources to improve engagement include, but are not limited to:

- Funding language training for MVMPO staff to encourage rapport at local events;
- Providing financial incentives to members of the public for participation, where participation may be otherwise limited;
- Providing childcare to encourage participation;
- Engaging artistic and/or academic communities to support engagement in new manners and forms, and;
- Funding training and training programs for citizens who wish to become more involved in the transportation planning process.

Prior to engaging in new or novel practices, MVMPO staff define measures of success relevant to the context of the application.

VI. Meeting Access Policies and Access Compliance Policies

Meeting Access Policies

Physical Access, including ADA Compliance

MVMPO and its staff make every effort to hold engagement opportunities in locations that provide appropriate accommodations for those with physical disabilities. Where possible, MVMPO and its staff also strive to select engagement locations that are accessible by transit, walking, biking, and rolling. Staff review meeting locations prior to selection and employ an accessibility checklist to ensure access:

☐ Has the opportunity been publicized with sufficient time to request accommodation (ideally two weeks in advance for major engagement opportunities)?
☐ Has the opportunity been publicized in relevant languages, based on the Language Decision Tree?
□ Does the opportunity's advertisement or notice include accessibility information about how to request accommodations?
□ Where relevant and applicable, is the opportunity accessible by public transportation?
□ Where relevant and applicable, can the opportunity be accessed by walking, biking, or rolling?
□ Are accessible parking spaces available and sufficient in number to support the opportunity?
□ Is the route of travel between the entryway and accessible parking or the main ROW accessible?
□ If the accessible entry differs from the main entry, is it clearly marked and unlocked (i.e. available to be used independent from the main entryway)?
□ Are separate accessible restrooms available within close proximity of the opportunity?
☐ Are aisles and travelways between tables, any comment area, and any main presentation area at least three feet wide, clear of obstacles and tripping hazards?
□ Within the event space, will a stage, platform, or podium be used? Are these items accessible? If not, can
alternative physical furniture be used, such as a level floor (instead of a stage) and a table (instead of a podium)?
☐ Are microphones reachable for those in seated positions? Are staff available to assist with passing microphones and other materials?
□ Have any of the following accommodations been requested, and if so, reserved?
□ Live language interpretation?
□ CART services?
☐ Assistive listening devices?
□ Large print copies of printed materials?
□ Captioned film/movies (as relevant)?
□ Integrated seating for wheeled mobility devices?
□ Well lit and visible space for live translation and American Sign Language?
□ Reserved seating for those requesting accommodation?

Staff also maintain a list of accessible meeting locations, which available in the appendix.

In some limited circumstances, staff support engagement at others' events, or in project-specific locations, such as in the field. Staff cannot control such environments, but work with those requiring accommodations to ensure that participation can be made available by technology or other alternative means.

Virtual Access

Digital technology advancements have expanded the potential for equitable access to information, virtual meetings, public hearings, and other digital engagement tools. These digital tools are referred to by FHWA as *Virtual Public Involvement* (VPI). Before VPI was allowable in the Metropolitan Planning transportation decision-making process, stakeholder groups who were unable to attend an in-person meeting due to limitations on transportation, childcare, or other constraints would have simply been left out.

While VPI is generally understood to have expanded to potential for engagement, it is not without its own drawbacks. Often, the quality of engagement during a virtual opportunity may not be as rich as in-person engagement. This can be due to numerous factors, including multitasking (be it for professional or personal needs), increased anonymity, and a reduced sense of shared humanity between participants who are mediated through screens. Additionally, VPI reduces opportunities for informal collaboration that can occur in the margins of a formal engagement event (i.e. informal conversations and rapport building before the event, after the event, and/or during breaks).

When considering the use of VPI, MVMPO staff exercise their best judgment, often in collaboration with community partners, to determine whether the benefits of VPI outweigh its drawbacks for a given context. Dependent on the project and context, MVMPO may choose to pursue an in-person format, a VPI-format, a hybrid format, or a combination of separate in-person and virtual formats. The selection of a format for a given opportunity must be made with the understanding that allowing comparable virtual access to an in-person event may offer the appeal of convenience but could decrease the quantity of in-person participants, potentially reducing the overall quality of engagement.

MVMPO holds the following participation policies related to VPI events and opportunities:

- All public-facing engagement events are advertised on the MVPC Commission on the Events Calendar OR the MVMPO's page, OR a project specific-web page OR a combination of the three (for example, MVMPO staff advertise MVMPO meetings on the MVMPO page and the Events Calendar).
- Where contextually possible, access links to VPI events that involve discussions are included with
 agendas and links in attachments to the aforementioned pages and Events Calendar. Staff do not directly
 post access links to the website itself to reduce opportunities for so-called Zoom bombing. Some
 VPI opportunities that are not discussion based such as Digital Engagement Modules or
 Crowdsourcing Maps are directly linked on relevant web pages and do not require a separate
 meeting link.
- Per Massachusetts Open Meeting Law, advance registration to a public meeting can be required if and only if a member of the public can contact staff through the duration of meeting to receive access (i.e. a member of the public must be able to call or email staff for an access link up to and through the duration of a meeting and must be afforded a reply with a link, even if the meeting has

already begun). Generally, staff do not require advance notice but will defer to Open Meeting Law requirements if such a case requires advance registration.

- MVPC's website includes embedded content translation to the region's most commonly requested languages (those that are required per Title VI). These include Spanish, Simplified Chinese, Haitian Creole, Portuguese, and Vietnamese. The embedded tool will not translate attachments added to MVMPO's page. Staff make every effort to promptly translate public notices included in attachments, and solicit a translation contractor to ensure the best translated notices are available to those who need them. MVMPO use the language access decision tree to determine when and how such notices are translated (see the Language Decision Tree later in the chapter).
- MVPC's website includes an "accessibility profile" selection tool to enable those with particular disability needs to better access content. Users can access these tools by selecting the floating Universal Access Icon on MVPC's website.
- Public engagement opportunities hosted on online platforms such as Zoom and Microsoft Teams allow access to those without broadband via telephone. All agenda and access link notices include directions for how to participate by alternative means.

For all formal engagement opportunities, MVMPO staff include information about participation norms and alternative means to participate. This includes noting phone participation, offering written comment in place of verbal testimony, and providing guidance about how the event will be executed.

Language Access for those of Limited English Proficiency

MVMPO strives to ensure the transportation planning decision making process is accessible and welcoming to those of limited English proficiency. To ensure resources are used efficiently for translations, staff use the decision tree in Figure 14 to determine which languages are necessary. Notices for regional opportunities receive translation in Spanish, Simplified Chinese, Haitian Creole, Vietnamese and Portuguese. Where appropriate, staff may choose to translate materials or solicit external live translations to support an event. Maps following the decision tree support determination of which languages should be pursued.

Real-Time Language Accommodations for those of Limited English Proficiency

If requested and not already provided per the Language Decision Tree, foreign language interpretation will be available upon request.

Real-Time Accommodations for the Hard of Hearing

Communication Access Realtime Translation (CART) services are available upon request for those who are hard of hearing and would like to access transliteration services for captioning. CART services may be live, or may be through the use of a remote service provider. Assistive listening devices may also be available to those who are hard of hearing if requested prior to the meeting.

Real-Time Accommodations for Deaf Persons

American Sign Language live-translation is available upon request by those who are deaf.

Translation and Transliteration Service Policies

The cost of interpretation and/or transliteration (CART) services will be covered by MVPC. In the event a request cannot be accommodated (e.g. due to late requests, unavailability of interpreters, etc.), MVMPO staff will work directly with the person making a request to find a comparable alternative manner to engage or may choose to reschedule the event to accommodate the individual's needs in real-time. If rescheduling an event, MVPC reserves the right to exercise its discretion over the revised date and time, allowing for at least two weeks between the original and revised date.

Alternative Hard-Copy Materials

Large print, electronic, audible, and/or Braille versions of materials may be requested prior to a meeting or following the completion of a meeting. Requests made prior to a meeting should be made no later than one week in advance of the meeting. Requests made following shall be responded to within seven business days of the request.

Translation Decision Tree

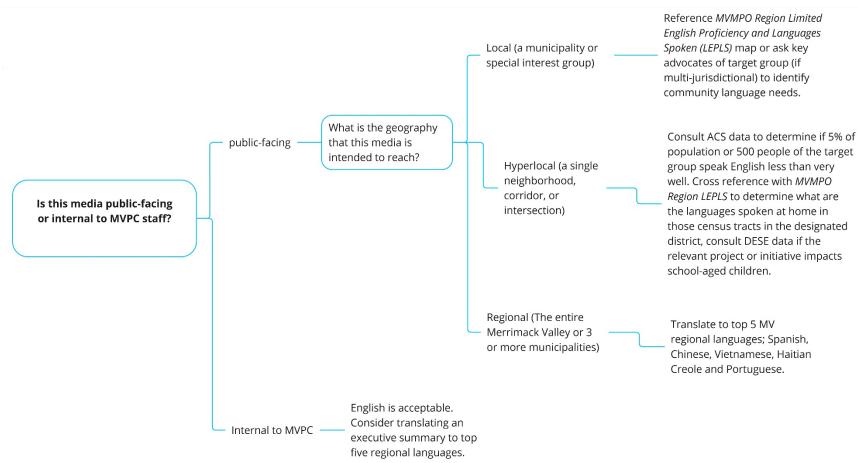
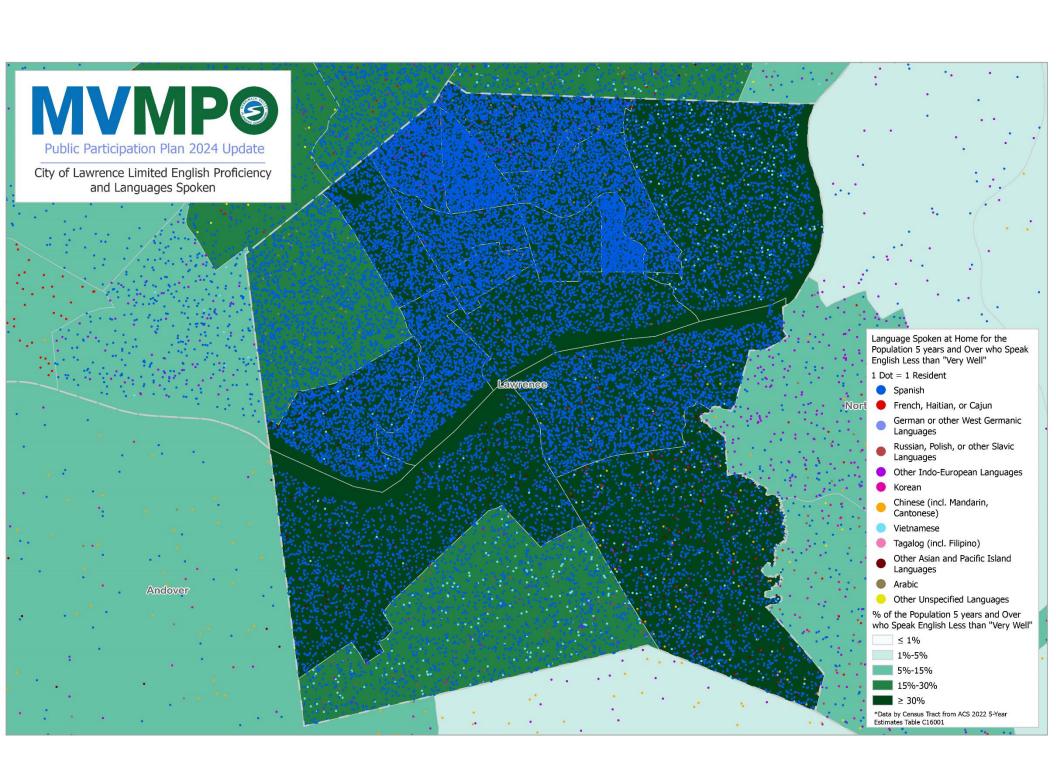
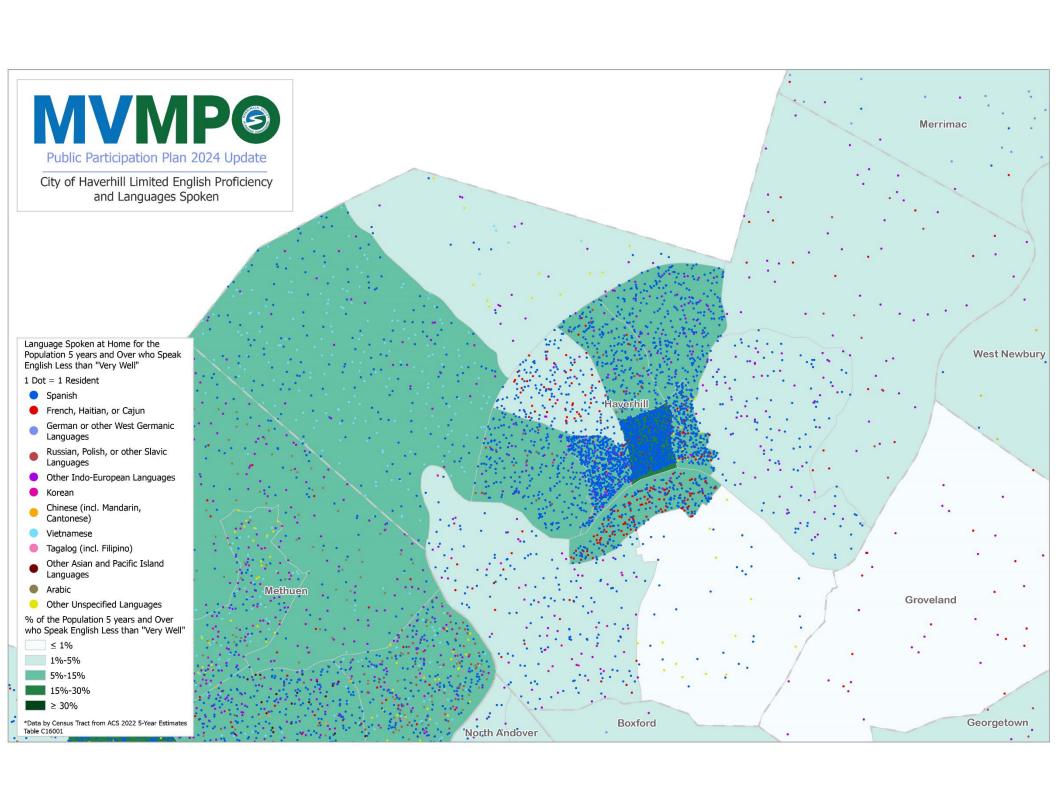


Figure 14: Language Translation Decision Tree





VIII. Appendices

Relevant Legislation and Guidance

The following summary is adapted from the Central Massachusetts Metropolitan Planning Organization's Public Participation Plan (2022).

- Title VI of the Civil Rights Act of 1964 (Title VI), 42 U.S.C. § 2000d et seq (which prohibits discrimination on the basis of race, color, national origin)
 - o States that "no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving federal financial assistance."
- Department of Transportation Title VI regulations at 49 CFR Part 21 (entitled Non-discrimination in Federally-Assisted Programs of the Department of Transportation-Effectuation of the Title VI of the Civil Rights Act of 1964)
 - o Prohibits discrimination in programs and activities that receive federal financial assistance from the United States Department of Transportation.
- 28 CFR section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964); Civil Rights Restoration Act of 1987
 - o Outlines the Department of Justice's guidelines for enforcing Title VI. The guidelines state that the heads of agencies with Title VI responsibilities should work to ensure prompt compliance with the law.
 - o Prohibits agencies and organizations that receive federal funding from discrimination per Title VI, in all operations, regardless of whether a program or division is funded with federal aid.
- Executive Order 12250, Leadership and Coordination of Nondiscrimination Laws (November 2, 1980), 28 C.F.R. Part 42, Subpart F)
 - o Ensures that federal agencies effectively enforce nondiscrimination laws in programs receiving federal funding by centralizing coordination under the Department of Justice.
- Americans with Disabilities Act of 1990 (ADA)
 - o States that "no qualified individual with a disability shall, by no reason of such disability, be excluded from participation in or be denied the benefits of services, programs or activities of a public entity."
 - o Locations for public participation and the information provided must be accessible to persons with disabilities.
- Executive Order 12898, Federal Actions to Address Environmental Justice In Minority Populations And Low-Income Populations (February 11, 1994)
 - o Emphasizes in the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

- o Directed federal agencies to develop environmental justice strategies to help address disproportionately high and adverse human health or environmental effects of their programs on marginalized minorities and low income populations.
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency (August 11, 2000)
 - o Requires that federal agencies publish guidance to clarify LEP obligations for their recipients.
 - o Prohibits conduct that has a disproportionate effect on LEP persons, meaning different treatment based upon an individual's inability to speak, read, write or understand English as it may constitute a type of national origin discrimination.
- Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (January 20, 2021)
 - o Advances racial equity and support for marginalized and underserved communities by allocating resources to advance fairness and opportunity by promoting equitable delivery of government benefits and opportunities, including advancing meaningful engagement with all communities.
- Executive Order 14008, Tackling the Climate Crisis at Home and Abroad (February 1, 2021)
 - o Created the first-ever White House Environmental Justice Advisory Council
 - o Charges the Council with providing independent advice and recommendations on how to address current and historic environmental injustice.
- Infrastructure Investment and Jobs Act (2021)
 - o Current transportation enabling regulation
 - o Emphasizes the importance of public involvement of all sectors and users of the transportation network in the transportation planning process.

MVMPO Meeting Norms & Typical Meeting Procedures

MVMPO Meetings typically follow an agenda that is distributed to voting members and posted to the MVMPO page on the MVPC website.

Listed below is a breakdown of a sample MVMPO agenda with a short explanation for each item.

- 1. Call to Order, this is the initial greeting and rollcall to ensure that there is adequate representation from board members to vote on agenda items.
- 2. Opportunity for Public Comment; time reserved for members of the public to speak about topics or decisions covered by the MVMPO.
- 3. Adoption of Previous Meeting's Minutes; voting members will have received notes from the previous meeting and vote to approve the minutes have been transcribed accurately.
- 4. Updates and Discussion Items; may occur at any time after the meeting minutes have been adopted. These items do not typically require a vote but could influence a decision at a later date. Updates may be short status reports of ongoing plans or initiatives. Discussions are often open-ended in format and help MVMPO staff gain insight into Board opinions or priorities on a topic.

- 5. Action Items; require a vote. May include TIP amendments, plan endorsements, performance measure targets, and other significant transportation decisions.
- 6. Status of Ongoing and FFY TIP Projects; updates specific to two main categories;
 - a. Status of Transit Projects; an update is typically provided by a MeVa staff member. Does not require a vote.
 - b. Status of TIP Roadway and Bridge Projects; updates are typically provided by a MassDOT District 4 Planner. Does not require a vote.
- 7. Other Business; Any other administrative items, like reminders about TIP office hours, upcoming events, or initiatives.
- 8. Adjourn; MVMPO members vote to end the meeting.

Courtesy Norms for Public Engagement

MVMPO engagement events employ the norms below to maintain courteous and generative discussions during meetings and other participatory events. MVMPO staff may act in accordance with Federal and State law if a participant acts in a manner that is either not consistent with the listed norms or violates Title VI or other's civil rights.

- Meet controversy with civility.
- Own your intentions and impact.
- Focus on the topic or ideas being discussed rather than the people discussing the topic or ideas.
- Use concise and approachable language.
- Be aware of your participation and yield to others whose voices may not have been heard.
- Be mindful of pacing; let other participants reflect and take time to ask thoughtful questions.

Privacy Policy

MVPC, where possible, supports the use of privacy agreements with third-party contractors to protect individuals. MVMPO staff also avoid using data collection methods that may be used to identify individuals. Personally Identifiable Information (PII) like full names, email addresses, phone numbers, gender, race, age, etc. are generally optional for participants to provide. If a survey or questionnaire requests participants to provide PII, MVPC provides an explanation of the purpose for gathering that data and provides an accessible opt-out choice.

The Use of Artificial and Automated Intelligence in Virtual Meetings

Considering the rapid advancement of Artificial Intelligence/Automated Intelligence (AI) technology, MVMPO staff reserve the right to develop and enforce norms related to the use of AI technology. In all cases, such norms will be stated prior to or at the beginning of an engagement opportunity. Restrictions or requirements may involve the removal of the chat feature in virtual sessions, strict facilitation methods that limit individuals' ability to interrupt the engagement opportunity, or—if/when allowable by the Open Meeting Law—use of identity verification. Staff's use of such tools and methods will be employed with the intent of protecting the safety and wellbeing of all participants. Such methods are also intended to ensure participants interact with actual people rather than code.

3C Document Amendment, Adjustment, and Modification Tables

The MVMPO Board is charged with amending, adjusting, and modifying the region's certification documents. The tables below detail the thresholds for amendments, adjustments, and modifications based on current federal and MassDOT guidance for Federal Highway Administration and Federal Transit Administration funded programs and projects. The flow charts that follow the tables show when comment periods and public hearings are required, and when required, the duration of comment periods.

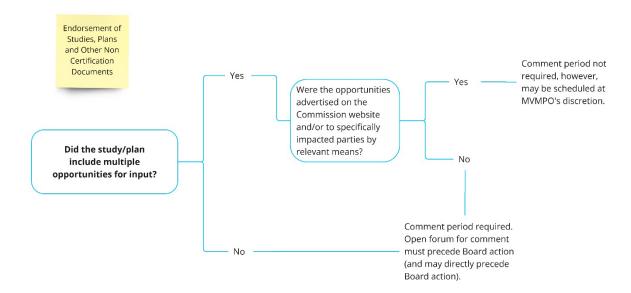
Federal Highway Side Amendments, Adjustments, and Modifications Table

Type of Revision	Definition	Procedure	Notes
Major Project Cost Change	Increase or decrease of \$500,000 or greater for projects programmed under \$5,000,000 and greater than 10% of the total cost for projects programmed over \$5,000,000.	Amendment	The "increase" or "decrease" in cost is relative to the Total Federal Participating Cost (TFPC) of a project.
Minor Project Cost Change	Increase or decrease of \$499,999 or less for projects programmed under \$5,000,000 and less than 10% of the total cost for projects programmed over \$5,000,000.	Adjustment	See above.
Project Description Change	Change in the description of the project as it is listed in the STIP.	Administrative Modification	Project description changes are treated as administrative modifications for minor changes (e.g. spelling errors, more detailed descriptions, adding mile-markers, etc.).
Major Project Scope Change	A revision to the project scope large enough to necessitate an additional review by MassDOT's Project Review Committee (PRC) – typically accompanied by major project cost change.	Amendment	In some cases, a major scope change will require the initiation of a new project through MassDOT's Project Initiation Form (PIF), and review/approval by PRC. This would require deactivation and removal of the currently programmed project.
Minor Project Scope Change	A minor revision to the project scope that does not significantly alter the original PRC- approved scope of work.	Adjustment	In many cases, changes in this category will also include a minor cost change.
Project Addition	The programming of a new project in any federal fiscal year of the active TIP.	Amendment or Adjustment	Project additions are treated as amendments if the project was not part of any previously approved STIP that has been vetted through the public process.
Project Removal	The removal of a project in any federal fiscal year of the active TIP.	Amendment	Exception: if a project is removed from an active TIP or the STIP due to it being previously advanced/advertised or is moved to the statewide list from a regional TIP, the action would be considered an adjustment.
Change in Funding Source	A change in the project's funding source, including federal and nonfederal sources which fall within the project cost change revisions listed above.	Adjustment	Changes in funding sources for projects are permissible for advertisement purposes if the FHWA Division Office has been consulted.
Change in Additional Information	A change in any item listed in the "Additional Information" column of the STIP not covered in any other item listed here (e.g. earmark details, project proponent, etc.).	Administrative Modification	None
Change in Program Year	Moving a currently programmed project earlier or later than an originally programmed year.	Amendment	Changes to a project delivery schedule (advancement or delay) requires an amendment for the change in programmed FFY.

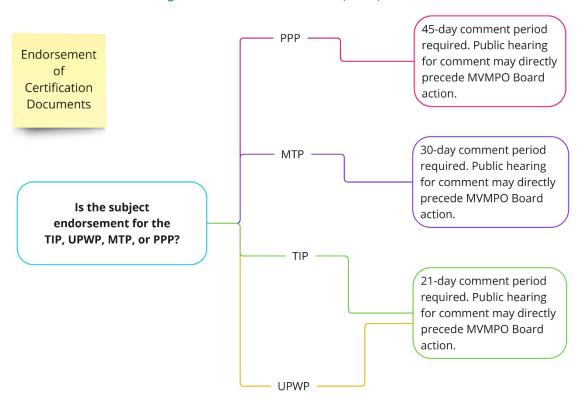
Federal Transit Administration Side Amendments, Adjustments, and Modification Table

Type of Revision	t Administration Side Amendmen Definition	Procedure	Notes
Major Project Cost Change	Increase or decrease of \$500,000 or greater for projects under \$5,000,000 and greater than 10% of the total cost for projects exceeding \$5,000,000.	Amendment	The "increase" or "decrease" in cost is relative to the combined federal and non- federal aid participating cost of the project.
Minor Project Cost Change	Increase or decrease of \$499,999 or less for projects under \$5,000,000 and less than 10% of the total cost for projects exceeding \$5,000,000.	Adjustment	See above.
Project Description Change	Change in the description of the project as it is listed in the STIP.	Adjustment or Administrative Modification	Project description changes are treated as administrative modifications for minor changes (e.g. spelling errors, more detailed descriptions, etc.).
Major Project Scope Change	A revision to the project scope deemed large enough to require public review and comment (e.g. changing the number of stations for a new line).	Amendment	In many cases, changes in this category will also include a major cost change.
Minor Project Scope Change	A minor revision to the project scope that does not significantly alter the original scope of work (e.g. changes to the bus model for vehicle replacement projects).	Adjustment	In many cases, changes in this category will also include a minor cost change.
Project Addition	The programming of a new project in any federal fiscal year of the current TIP.	Amendment or Adjustment	Project additions are treated as amendments if the project was not part of any previously approved STIP that has been vetted through the public process.
Project Removal	The removal of a project in any federal fiscal year of the current TIP.	Amendment	Exception: if a project is removed from a TIP or the STIP due to it being previously advanced/advertised or is moved to the statewide list from a regional TIP, the action would be considered an adjustment.
Change in Funding Source	Change in the funding source, including federal and non-federal sources that fall within project cost change revisions listed in the first two rows.	Adjustment	Changes in funding sources for projects are permissible for obligation purposes with written notice from the FTA region office.
Change in Program Year	Moving a currently programmed project earlier or later than the originally programmed year.	Amendment or Adjustment	Note: Federal funds shall be programmed in the federal fiscal year in which the award will occur. Changes in year of programming are only treated as adjustments if they involve advancing federal funds to align with the year of the grant award.

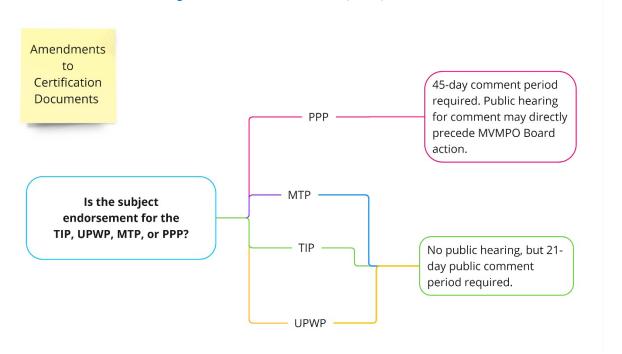
MVMPO Public Comment & Hearing Decision Tree: Studies, Plans, and Other Non-Certification Documents



MVMPO Public Comment & Hearing Decision Tree: Endorsement of Certification Documents



MVMPO Public Comment & Hearing Decision Tree: Amendment of Certification Documents



MVMPO Meeting Checklist

Post-Meeting Prep (Next Steps after Action Opened)

Last Month's Meeting Week Four – Thursday and Friday

- 1. If action items open a comment period and require public hearings:
- 2. Create the Zoom link for public hearings (1pm and 6pm on the Wednesday before the next MVMPO meeting
- 3. Prepare English Language notice (with meeting 1pm and 6pm meeting links) and summaries for posting and translation (as necessary) for any amendments requiring the 21-day comment period.
- 4. Send the notice to municipal clerks and/or notify them of updates to MVMPO's website.
- 5. Post notices and summaries to the MVMPO website in the "What's New" section (and remove any old notice content). Include placeholders for translated material.
- 6. Create abbreviated notice for newspaper publication that does not include meeting links, but instead a link to MVPC's events page.
- 7. Send abbreviated notices and any summaries translation requests to language link: Quotes@language.link
 - Request Simplified Chinese, Latin American Spanish, Vietnamese, Haitian Creole and Portuguese or other languages as relevant per the Language Translations Decision Tree.
- 8. Send abbreviated English Language Notice with request to publish to Lawrence Eagle Tribune and Haverhill Gazette (combined: etlegals@northofboston.com) and Newburyport News (NTLegals@newburyportnews.com), as relevant;
 - Ask Program Manager for template email for invoicing

Week One, New Month

- 9. Approve translation quotes.
- 10. Once translations are completed post translations in where translation placeholders are located on the MVMPO website.
- 11. Send request to publish Spanish Notice to RUMBO (<u>daliadiaz@rumbonews.com</u>)
 - Ask Program Manager for template email for invoicing

Week Three, New Month

12. Host public hearings – add any comments received into the appropriate "Comments Received" folder. Pre-Meeting Prep

Meeting Month Week One

- 13. Create MVMPO Meeting Folder for the month in shared drive
- 14. Create MVMPO Zoom Link and post event to website "EVENTS" section
- 15. Create draft MVMPO agenda; use same Zoom link from MVMPO Zoom
- 16. Send draft agenda to Miranda Briseño (or other MassDOT liaison) for approval

Meeting Month Week Two

- 17. Following approval, we post meetings:
 - Post in window of building
 - Add agenda to the event posted online
 - Send to clerks of each town

- Send Outlook invite to MVMPO members
- Send email to MVMPO members with agenda attached

Meeting Month Week Three

- 18. Create last month's meeting minutes based on recording
- 19. Prepare docket
 - Include action items or items that need explanation. Not every item requires a write-up.
- 20. Send minutes, docket, docket attachments, and agenda (again) to MVMPO members, Opt-in members and Transportation Staff in BCC noting the date and time of meeting in the email
- 21. Create presentation files for monthly meeting
 - Ideally populate meeting with recent work/event photos, captioning locations
 - Integrate Tim Paris' MVMPO MassDOT Project Update slides

Meeting Day

Meeting Month Week Four - Wednesday

- 22. Double check presentation prior to facilitating meeting (okay to get second set of eyes from Patrick/another team member)
- 23. Facilitate Meeting
 - Be sure to hit record when meeting begins
 - Take initial role and document members present
 - If helpful, use vote sheet to record:
 - Time meeting starts
 - Time meeting ends
 - Attendees note that common alternates are italicized
 - Action Items record motions (M) and seconds (2)
- 24. Take post meeting clean-up actions:
 - Move meeting recording to shared drive for future meeting minutes/reference
 - Scan and upload vote sheet (if used) to meeting folder
 - Create a PDF of presentation used for the website



160 Main Street, Haverhill, Massachusetts 01830 | P: 978.374.0519 | F: 978.372.4890 | mvpc.org

MVMPO Public Hearing Template for Web Noticing

If you need this information in another language, please contact the MVMPO Title VI/Anti-Discrimination Coordinator at 978-374-0519. Si necesita esta información en otro idioma, por favor contacte al coordinador de MVMPO del Título VI/Contra la Discriminación al 978-374-0519. 如果需要使用其它语言了解信息,请联系Merrimack Valley大都会规划组织(MVMPO)《民权法案》第六章协调员,电话978-374-0519

Nếu quý vị cần thông tin bằng một ngôn ngữ khác, vui lòng liên hệ Điều Phối Viên Tiêu Đề VI/Chống Phân Biệt Đối Xử của MVMPO theo số 978-374-0519.

Si w bezwen enfòmasyon nan lòt lang, tanpri kontakte Kowòdinatè Tit VI/Kont Diskriminasyon an nan 978-374-0519.

Public Notice: Merrimack Valley Metropolitan Planning Organization Proposed Action, Public Hearings, and Comment Period

The Merrimack Valley Planning Organization (MVMPO) hereby gives notice of the availability of the following proposed action(s) for public review and comment:

INSERT ACTION HERE

The above referenced action(s) are available for review on the Merrimack Valley Planning Commission (MVPC) website (www.mvpc.org/mvmpo) and are described below. The Merrimack Valley Metropolitan Planning Organization (MVMPO) invites the public to discuss the proposed action(s) and provide comments.

- Location:
- Date:
- Time:
- Format:
- Alternative ways to Participate:

Proposed Action(s):

DESCRIBE PROPOSED ACTION

Join Us:

DESCRIBE HOW THE MEETING MAY BE JOINED

For language or disability accommodations, please contact the MVMPO Title VI/Anti-Discrimination Coordinator at 978-374-0519, ideally a week in advance of the hearing date.

Locations for Public Meetings Compliant with the American with Disabilities Act

Location	Address		Within .25 miles of transit	Accessible Path of Travel from Public Transit to Location	Accessible Parking Spaces at Location	Accessible Path of Travel from Parking Spaces to Location	Signage at Main Entrance showing Path to Accessible Entrance	Accessible Entrance Unlocked/ Can be Accessed Independently	Entrance and Pathway Are Well Lit
MVPC Offices	160 Main Street, Haverhill		У	у	у				
Haverhill City Hall	4 Summer Street		у	у	Υ	Υ	Υ	Υ	Υ
North Andover Council Chambers	120 Main St.		у	у	Υ	Υ		Υ	Υ
Lawrence Senior Center	155 Haverhill St.		у	у	Υ	Υ		Υ	Υ
Methuen Senior Center	77 Lowell St.		у	у					
Haverhill Library	99 Main St.	Johnson Aud.; Cavallaro Rm; Milhender Rm.	у	у	Y			Y	
Lawrence Library	51 Lawrence St.		у	У	Υ	Υ		Υ	Υ
Andover Senior Center	36 Bartlet St.		у	у	Υ	Υ		Υ	Υ
Newburyport Senior Center	331 High St.		у	у	Υ	Υ		Υ	Υ
Salisbury Senior Center	42 Lafayette Rd.		N	N	Υ	Υ			
Costello Transportation Center	Railroad St.		у	у	Υ	Υ		Υ	Υ
North Andover Library	345 Main St.		у	у	Υ	Υ		Υ	
NECCO Haverhill	100 Elliot St.	Hartleb Techonology Building	у	у	Υ	Υ		Υ	
NECCO Lawrence	414 Common St.	Dr. Ibrahim El-Hefni Allied Health & Technology Center	у	у					
Groundwork Lawrence	50 Island St.		у						
Methuen Public Library	305 Broadway		у						

Location	Address	Within .25 miles of transit	Accessible Path of Travel from Public Transit to Location	Accessible Parking Spaces at Location	Accessible Path of Travel from Parking Spaces to Location	Signage at Main Entrance showing Path to Accessible Entrance	Accessible Entrance Unlocked/ Can be Accessed Independently	Entrance and Pathway Are Well Lit
Haverhill Senior	10 Welcome							
Center	Street	у	у	Υ	Υ		Υ	Υ
Salisbury Town Hall	5 Beach Road	у	у	Υ	Υ		Υ	Υ
Newburyport City Hall	60 Pleasant St.	у	у	Υ	Υ	Υ	Υ	Υ
Phoenix Row	22 Phoenix Row	у	у					
Merrimac Town Hall	4 School Street	у						
Northeast Independent Living	20 Ballard St	Υ	Y, ramps require support	у	v		v	v
			,,,	,	,		,	

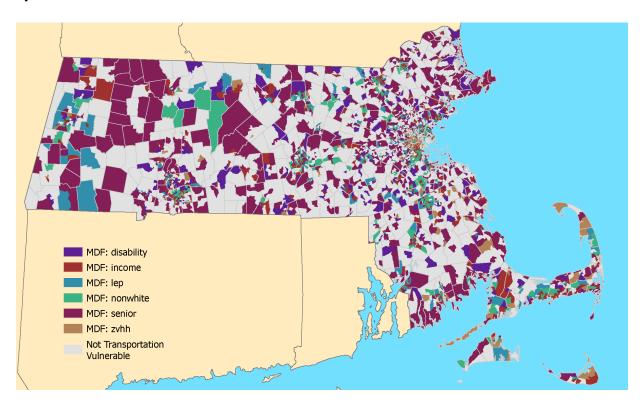
ADA Locations for Public Meetings – continued

Location	Address	Accessible Bathrooms for Both Genders	Phone Available at Accessible Height	Podium Height Adjustable	High Speed Internet Connection is Available	Meeting Room Can Accommodate a Wheeled Mobility Device	Isles at least 3 feet wide and Free of Tripping Hazards	Assisted Listening Devices Available (MICORPHONE)
MVPC Offices	160 Main Street, Haverhill							
Haverhill City Hall	4 Summer Street	Υ				Υ	Υ	
North Andover Council Chambers	120 Main St.	Υ				Υ	Υ	
Lawrence Senior Center	155 Haverhill St.	Υ				Υ	Υ	
Methuen Senior Center	77 Lowell St.							
Haverhill Library	99 Main St.	Υ				Υ	Υ	
Lawrence Library	51 Lawrence St.	Υ				Υ	Υ	Υ
Andover Senior Center	36 Bartlet St.	Υ				Υ	Υ	

Location	Address	Accessible Bathrooms for Both Genders	Phone Available at Accessible Height	Podium Height Adjustable	High Speed Internet Connection is Available	Meeting Room Can Accommodate a Wheeled Mobility Device	Isles at least 3 feet wide and Free of Tripping Hazards	Assisted Listening Devices Available (MICORPHONE)
Newburyport Senior Center	331 High St.	Υ	Υ			Υ	Υ	Υ
Salisbury Senior Center	42 Lafayette Rd.							
Costello Transportation Center	Railroad St.	Υ				Υ	Υ	
North Andover Library	345 Main St.	Υ				Υ	Υ	
NECCO Haverhill	100 Elliot St.	Υ			Υ	Υ	Υ	Υ
NECCO Lawrence	414 Common St.							
Groundwork Lawrence	50 Island St.							
Methuen Public Library	305 Broadway							
Haverhill Senior Center	10 Welcome Street	Υ				Υ	Υ	Υ
Salisbury Town Hall	5 Beach Road	Υ			Υ	Υ	Υ	Υ
Newburyport City Hall	60 Pleasant St.	Υ		Υ		Υ	Υ	Υ
Phoenix Row	22 Phoenix Row							
Merrimac Town Hall	4 School Street							
Northeast Independent Living	20 Ballard St	У				у	У	

Regional Environmental Justice "Plus" Communities

updated June 2024



About the Project

A Regional Environmental Justice "Plus" (REJ+) Community is a designation assigned to block groups with relatively high shares of residents that are especially impacted by changes in or to transportation networks.

Massachusetts is a relatively small state by total land area, but there are distinctions with respect to the community characteristics and land uses that can be found across the Commonwealth. It is important that we recognize and account for these variations when we consider the types of transportation investments and services that are provided. This designation is 'regional' in nature because the socioeconomic characteristics that define REJ+ status are evaluated in the context of regional variations in the distribution and concentration of various population groups.

We call this method of identifying various populations 'plus' because we have included more population characteristics than traditionally define 'environmental justice'

communities. The standard environmental justice and Title VI community types based on income, race and ethnicity, and English proficiency do not capture other community attributes that indicate high need or vulnerability with respect to transportation decisions and policies. Therefore, as we are seeking to identify communities that are subject to transportation, mobility, and accessibility burdens, we also account for communities with high shares of older populations, people with disabilities, and households without access to a private vehicle.

<u>Therefore, to qualify as an REJ+ community</u>, a block group must meet at least one of the following thresholds that correspond to traditional environmental justice criteria.

- **Income:** Annual median household income ≤ MPO 25th percentile
- Race and ethnicity: Percent of individuals that identify as Hispanic or Latino; Black or African American; American Indian or Alaska Native; Asian; Native Hawaiian or Other Pacific Islander; Some other race; or Two or more races and do not identify as White alone ≥ MPO 75th percentile
- **Limited English proficiency (LEP):** Percent of households with limited English-speaking members ≥ MPO 75th percentile
- **Car ownership:** Percent of households without an available vehicle ≥ MPO 75th percentile
- Disability: Percent of households with one or more persons with a disability ≥ MPO 75th percentile
- Age: Percent of individuals aged 65 or older ≥ MPO 75th percentile

Block groups that do not meet the above thresholds but that are still considered Environmental Justice communities per <u>Chapter 8 of the Session Laws of 2021</u> ("An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy") are specially included and designated as REJ+ communities, in order to ensure that all places considered EJ by official definitions are also designated as REJ+.

Data Preparation

All data used for this analysis was retrieved from the U.S. Census at <u>data.census.gov</u>. The unit of analysis is census block groups (ACS 2022 5-year estimates).

ACS Tables Used

- B19013 Median Income
- B03002 Hispanic or Latino, and Not Hispanic or Latino by Race
- C16002 Household Language by Household Limited English-Speaking Status
- B25044 Tenure by Vehicles Available

- B22010- Receipt of Food Stamps/SNAP in the Past 12 Months by Disability Status for Households
- B01001 Age

Median income: For each block group, identify the median household income (001E). Please note that where incomes exceeded \$250,000, the Census bureau enters a text value of "250,000+". We re-coded these as the numeric value \$250,001. The same is true for incomes of less than \$2,500, which the Census bureau enters as "2,500-", and we recoded as \$2,499.

Race and ethnicity: For each block group, identify the total number of people who do not identify as White by subtracting the estimated number of people included in the "Not Hispanic or Latino, White Alone" category (003E) from the total number of individuals in the block group (001E). To calculate the percent of individuals who are not white in each block group, divide this number by the total population of the block group (001E).

Limited English proficiency (LEP): For each block group, calculate the percent of households with members of limited English proficiency by adding the number of households with limited English proficiency for each language group (004E, 007E, 010E, 013E) and dividing by the total number of households in each block group (001E). **Car ownership:** For each block group, add the number of owner-occupied (003E) and renter occupied (010E) households without access to a vehicle. Divide this total by the

renter occupied (010E) households without access to a vehicle. Divide this total by the total number of households in each block group (001E) to calculate the percent of zero-vehicle households (ZVHH).

Disability: For each block group, add the number of households with 1 or more persons with a disability (003E, 006E) and divide this by the total number of households in each block group (001E) to calculate the percentage of households with individuals with disabilities.

Age: For each block group, add the number of males and females aged 65 and over and divide this total by the block group population (001E) to calculate the percent of seniors.

Calculate Thresholds

As noted, Massachusetts is home to an array of community types, from high density urban centers that feature robust transit services, to more rural landscapes that are characteristic of strong agricultural economies. Part of the task of identifying communities that may be overburdened and underserved involves determining what constitutes a "high" share of households or people that have a certain sociodemographic characteristic. Relying on statewide averages or thresholds ignores the reality of the variety of community types across the state, and that what might

qualify as a "high share" of households in one part of the state may not qualify as such elsewhere. For example, in the Berkshires, a community with even 1% of households with limited English proficiency is considered anomalistic, while in the Merrimack Valley, this is far more commonplace. And with respect to income, the statewide standard of '65% of median household income' - or at present, roughly \$54,850 - ignores the reality that across the state, the threshold of the *lowest quartile* of earnings in each MPO is still higher than this figure. That means that the current state threshold to indicate poverty status leaves out many households that are among the lowest-earning in their region.

Therefore, we developed unique thresholds for each MPO region that localizes our understanding of who may be overburdened and underserved, and controls for the regional differences in socioeconomic and demographic characteristics across the Commonwealth. These thresholds are highlighted below. To calculate the thresholds, we used the QUARTILE function in Excel to determine each MPO-specific threshold value within each 'environmental justice' or 'plus' category. Block group-level values for each characteristic are then compared to their respective MPO threshold to determine if the block group meets the criteria for REJ+ designation.

МРО		Income	Nonwhite	LEP	Disability	Zero-Vehicle	Senior
Berkshire	Maximum Value	\$175,030.00	82.4%	9.7%	78.4%	55.0%	72.0%
	Third Quartile, 75th percentile	\$92,956.50	<mark>16.5%</mark>	<mark>0.0%</mark>	<mark>34.5%</mark>	<mark>11.7%</mark>	<mark>30.9%</mark>
	Median Value, 50th percentile	\$74,079.00	9.7%	0.0%	24.0%	4.1%	24.0%
	First Quartile, 25th percentile	<mark>\$55,794.50</mark>	5.0%	0.0%	17.8%	0.7%	17.3%
	Maximum Value	\$250,000.00	100.0%	73.2%	100.0%	100.0%	100.0%
Boston	Third Quartile, 75th percentile	\$162,985.00	<mark>49.6%</mark>	<mark>9.8%</mark>	<mark>27.5%</mark>	<mark>22.1%</mark>	<mark>21.6%</mark>
Region	Median Value, 50th percentile	\$119,585.00	29.3%	2.9%	18.6%	7.9%	14.9%
	First Quartile, 25th percentile	\$85,815.00	14.4%	0.0%	11.2%	1.2%	9.4%
	Maximum Value	\$250,000.00	70.4%	36.2%	69.5%	36.1%	83.8%
Cama Cad	Third Quartile, 75th percentile	\$112,789.50	<mark>16.2%</mark>	<mark>1.6%</mark>	<mark>32.4%</mark>	<mark>6.7%</mark>	<mark>43.8%</mark>
Cape Cod	Median Value, 50th percentile	\$92,587.00	8.6%	0.0%	24.9%	2.8%	34.8%
	First Quartile, 25th percentile	<mark>\$74,667.75</mark>	3.0%	0.0%	16.9%	0.0%	24.0%
	Maximum Value	\$248,250.00	97.3%	66.9%	63.3%	62.1%	52.2%
Central	Third Quartile, 75th percentile	\$121,742.00	<mark>45.4%</mark>	<mark>7.7%</mark>	<mark>33.8%</mark>	<mark>14.1%</mark>	<mark>21.2%</mark>
Massachuset	ts Median Value, 50th percentile	\$91,250.00	22.2%	1.1%	25.2%	5.2%	15.0%
	First Quartile, 25th percentile	<mark>\$64,677.00</mark>	10.2%	0.0%	18.3%	1.1%	9.8%
	Maximum Value	\$106,035.00	34.5%	13.6%	69.2%	35.2%	42.4%
Franklin	Third Quartile, 75th percentile	\$85,294.00	<mark>13.5%</mark>	<mark>1.3%</mark>	<mark>36.8%</mark>	<mark>10.2%</mark>	<mark>28.5%</mark>
rrankiin	Median Value, 50th percentile	\$68,333.00	9.5%	0.0%	30.0%	2.9%	22.0%
	First Quartile, 25th percentile	<mark>\$58,925.00</mark>	5.8%	0.0%	24.9%	1.4%	18.2%
	Maximum Value	\$240,031.00	40.5%	14.8%	56.0%	45.8%	51.7%
Martha's	Third Quartile, 75th percentile	\$142,469.00	<mark>30.4%</mark>	<mark>3.9%</mark>	<mark>25.3%</mark>	<mark>3.0%</mark>	<mark>33.2%</mark>
Vineyard	Median Value, 50th percentile	\$98,477.00	15.0%	0.0%	18.6%	0.0%	26.5%
	First Quartile, 25th percentile	<mark>\$68,855.00</mark>	8.5%	0.0%	12.0%	0.0%	20.9%

	Maximum Value	\$250,000.00	100.0%	63.6%	63.8%	79.6%	53.9%
Merrimack	Third Quartile, 75th percentile	\$137,820.50	<mark>65.9%</mark>	<mark>9.9%</mark>	<mark>33.8%</mark>	<mark>12.4%</mark>	<mark>20.4%</mark>
Valley	Median Value, 50th percentile	\$99,779.00	29.1%	1.5%	25.4%	3.7%	14.6%
	First Quartile, 25th percentile	\$70,208.00	11.9%	0.0%	17.3%	0.0%	9.8%
	Maximum Value	\$250,000.00	88.9%	39.5%	61.7%	54.9%	55.1%
Montachusett	Third Quartile, 75th percentile	\$115,320.00	<mark>31.3%</mark>	<mark>3.1%</mark>	<mark>33.7%</mark>	<mark>10.7%</mark>	<mark>20.5%</mark>
wontachusett	Median Value, 50th percentile	\$90,312.50	18.9%	0.0%	24.3%	3.8%	16.6%
	First Quartile, 25th percentile	<mark>\$63,489.75</mark>	9.0%	0.0%	17.8%	0.0%	12.1%
	Maximum Value	\$215,066.00	42.5%	7.8%	37.4%	21.9%	38.8%
Nantucket	Third Quartile, 75th percentile	\$174,278.50	<mark>34.9%</mark>	<mark>1.1%</mark>	<mark>24.5%</mark>	<mark>5.7%</mark>	<mark>29.6%</mark>
Nantucket	Median Value, 50th percentile	\$123,482.00	27.9%	0.0%	22.2%	1.6%	14.4%
	First Quartile, 25th percentile	<mark>\$97,671.75</mark>	10.5%	0.0%	18.6%	0.0%	11.5%
	Maximum Value	\$235,688.00	88.8%	50.2%	67.9%	50.9%	46.4%
Northern	Third Quartile, 75th percentile	\$142,544.00	<mark>48.7%</mark>	<mark>7.3%</mark>	<mark>33.2%</mark>	<mark>11.7%</mark>	<mark>18.7%</mark>
Middlesex	Median Value, 50th percentile	\$107,923.00	28.2%	2.1%	24.5%	3.2%	13.9%
	First Quartile, 25th percentile	<mark>\$81,358.00</mark>	13.8%	0.0%	17.6%	0.0%	9.5%
	Maximum Value	\$249,375.00	100.0%	41.6%	70.7%	67.9%	60.1%
Old Colony	Third Quartile, 75th percentile	\$133,583.00	<mark>51.2%</mark>	<mark>5.9%</mark>	<mark>30.1%</mark>	<mark>9.5%</mark>	<mark>22.7%</mark>
Old Colony	Median Value, 50th percentile	\$111,806.00	17.4%	0.0%	23.6%	3.2%	16.1%
	First Quartile, 25th percentile	<mark>\$81,667.00</mark>	8.5%	0.0%	16.6%	0.0%	11.2%
	Maximum Value	\$220,701.00	100.0%	70.9%	100.0%	73.3%	53.4%
Pioneer Valley	Third Quartile, 75th percentile	\$97,096.50	<mark>58.6%</mark>	<mark>8.7%</mark>	<mark>39.1%</mark>	<mark>16.6%</mark>	<mark>24.5%</mark>
Pioneer valley	Median Value, 50th percentile	\$72,950.50	24.5%	1.9%	29.7%	6.8%	17.8%
	First Quartile, 25th percentile	<mark>\$51,260.00</mark>	10.7%	0.0%	20.8%	1.7%	11.2%
	Maximum Value	\$210,746.00	94.1%	41.9%	75.9%	74.3%	64.3%
Southeastern	Third Quartile, 75th percentile	\$111,774.00	<mark>32.5%</mark>	<mark>8.6%</mark>	<mark>36.7%</mark>	<mark>14.1%</mark>	<mark>23.3%</mark>
Massachusetts	Median Value, 50th percentile	\$84,085.50	16.3%	2.2%	27.8%	5.3%	16.5%
	First Quartile, 25th percentile	<mark>\$58,999.50</mark>	7.0%	0.0%	20.7%	0.0%	12.2%

Most Dominant Factor

For block groups that are designated as REJ+ communities, we have identified which of the six characteristics is the 'most dominant' in terms of the greatest transportation vulnerability; this is determined by calculating the dissimilarity or 'distance' from the MPO threshold. This identification gives us a deeper sense of the social contexts that shape local transportation needs. Knowing if an REJ+ community's most dominant factor is a lack of automobile access, or a high proportion of individuals with physical disabilities, or a high share of older individuals, gives us greater insight into the programs, initiatives, or investments that we can make to promote accessibility and mobility for those who may need extra support.

To calculate the 'most dominant factor' for each characteristic, we calculated the difference between the value for each block group and the MPO threshold via an INDEX, MATCH, MAX function in Excel.

Because several block groups in the state do not have income information available via the US Census, a modified formula that pulls on just the remaining five characteristics was used in these cases.

The most dominant factor of block groups that are included due to their designation as Environmental Justice communities per the data maintained by the Executive Office of Energy and Environmental Affairs (EEA) is determined based on unique examination of each block group's data as measured by EEA.