

Virtual Public Involvement Technical Assistance Workshop Summary Report

New England States Virtual Workshop

JULY-AUGUST, 2021

Participating Agencies and Organizations:

- Maine Department of Transportation
- Massachusetts Department of Transportation
- Connecticut Department of Transportation
- New Hampshire Department of Transportation
- Vermont Agency of Transportation
- Addison County Regional Planning Commission
- Androscoggin Transportation Research Center
- Bangor Area Comprehensive Transportation System
- Boston Region Metropolitan Planning Organization
- Capitol Region Council of Governments
- Chittenden County Regional Planning Commission
- Connecticut Metropolitan Council of Governments
- Lakes Region Planning Commission
- Mount Ascutney Regional Commission
- Naugatuck Valley Council of Governments
- North Country Council Regional Planning Commission
- Northwest Hills Council of Governments
- Pioneer Valley Planning Commission
- Southeastern Connecticut Council of Governments
- Southwest Region Planning Commission
- Two Rivers Ottauquechee Regional Commission
- Upper Valley Lake Sunapee Regional Planning Commission
- Western Connecticut Council of Governments

Peers

- Jim Talley, FHWA Eastern Federal Lands Highway Division
- Zach Whitney, Utah Department of Transportation



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**Federal Highway
Administration**

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14. ABSTRACT This report summarizes the presentations, activities, and discussions that took place during the Federal Highway Administration (FHWA) Virtual Public Involvement (VPI) Workshop hosted virtually by the Massachusetts Department of Transportation (MassDOT) and Maine Department of Transportation (MaineDOT) on July 13, July 20, August 3, and August 10, 2021. The purpose of the workshop was to provide state departments of transportation (DOTs), metropolitan planning organizations (MPOs), regional transportation planning agencies (RTPAs), and transportation consultants who work in New England states (Connecticut, Massachusetts, New Hampshire, Vermont, and Maine) with information about, and examples of, VPI techniques and tools -- specifically engaging with traditionally underserved communities and making project visualizations.					
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New England States VPI Technical Assistance Workshop Report

Overview

This report summarizes the presentations, activities, and discussions that took place during the Federal Highway Administration's (FHWA) Virtual Public Involvement (VPI) Workshop hosted virtually by the Massachusetts Department of Transportation (MassDOT) and Maine Department of Transportation (MaineDOT) on July 13, July 20, August 3, and August 10, 2021. The workshop was part of FHWA's Every Day Counts 6 (EDC-6) initiative.

The purpose of the workshop was to provide State Departments of Transportation (DOT), Metropolitan Planning Organizations (MPOs), and Regional Planning Commissions (RPCs) in the New England region (Connecticut, Maine, Massachusetts, New Hampshire, and Vermont) with information about, and examples of, VPI techniques and tools. The workshop included presentations and demonstrations from subject matter experts to provide participants with support developing project visualizations, do-it-yourself (DIY) videos, and strategies for engaging with traditionally underserved communities.

Day 1: Virtual Public Involvement Overview

Welcome and Opening Remarks

MaineDOT Deputy Commissioner Nina Fisher provided opening remarks. Ms. Fisher highlighted the manner in which the COVID-19 pandemic has forced agencies to innovate and adapt to rapidly changing circumstances. MaineDOT has implemented a variety of VPI tools and techniques allowing the agency to maintain a record, on-time project delivery rate over the course of the pandemic. Moving forward, VPI will be a critical part of MaineDOT's *new normal* as it lowers the barrier for the public to engage in the transportation planning process, reduces agency costs, and provides environmental benefits.

The workshop continued with opening remarks from Andrea D'Amato who is the Assistant Secretary for Operational Excellence at MassDOT. Ms. D'Amato provided an overview of how MassDOT has transformed its public engagement processes in response to pandemic restrictions in order to maintain the agency's planning, design, and construction work. MassDOT's public engagement goal is to deliver interactive and engaging public meetings across all project phases and to provide a consistent experience across all modes. The agency has invested time and resources to ensure that public meetings are accessible to all members of the public by considering factors such as ADA compliance, broadband connectivity, and potential language barriers. Moving forward, MassDOT is developing VPI trainings for their staff and continuing an existing partnership with the online meeting service Zoom, which fosters the space to test various functionalities and provide feedback on any necessary improvements.

VPI Overview Presentation

Mack Frost of the FHWA Office of Planning continued with an overview presentation of the VPI initiative and relevant VPI tools. Mr. Frost began by describing the challenges inherent in traditional public involvement, which often include:

- Low or inconsistent participation;
- Lack of diverse viewpoints among participants;
- Language and cultural barriers;
- Busy work, family, and social schedules;
- High costs for agencies; and,
- Changing expectations of the 21st century population.

VPI tools help agencies improve the effectiveness and efficiency of public involvement by providing opportunities to engage those who would otherwise be unable to participate in transportation planning and project development, and by making participation more convenient and accessible, more interactive, and more enjoyable for the public. Virtual public involvement activities can sometimes be accomplished at a lower cost than in-person involvement, and in most cases require fewer staff hours to prepare, execute, and document and organize public feedback. The feedback that agencies receive through VPI tools can be more representative of the community because more people can be engaged, reducing the likelihood of discovering unexpected issues that could cause delays late in the planning or project development process.

Mr. Frost then briefly discussed eight types of VPI tools and techniques and provided examples of each:

- [Mobile Applications](#)
- [Do-It-Yourself Videos](#)
- [Project Visualizations](#)
- [Crowdsourcing Tools](#)
- [Virtual Town Halls](#)
- [Online Mapping Tools](#)
- [All-in-One Tools](#)
- [Digital Tools to Enhance In-Person Events](#)

At the end of the presentation, Mr. Frost described the technical assistance opportunities and resources that the FHWA VPI team offers. Available assistance and resources include peer exchange workshops, direct technical assistance, and a variety of other resources including case studies, video demonstrations, and more. Many of these resources can be found on [FHWA's Virtual Public Involvement website](#).

State Department of Transportation Round Table

The workshop continued with presentations from representatives of the participating State DOTs.

Massachusetts Department of Transportation

Derek Krevat from MassDOT's Office of Transportation Planning and co-chair of MassDOT's Virtual Public Involvement Committee presented on the agency's VPI Training series. The series includes 100-level introductory courses covering strategies for engaging the public virtually and ensuring online meetings are accessible, as well as 200-level advanced courses that focus on best practices for using a variety of meeting platforms and VPI tools.

Mr. Krevat continued by discussing the three primary VPI tools used by MassDOT. He first discussed the Engage tool, an online web-based tool that helps project managers identify accessible meeting locations,

language and accessibility needs, and locate community organizations to include in public engagement plans and strategies. He continued by providing an overview of the Real-Time Engagement and Communications Hub (REACH) application, which is an offshoot of the Public Involvement Management Application (PIMA) developed by the Iowa DOT. The REACH application has a similar functionality to PIMA and functions by centralizing all public feedback on a given project or plan, allowing project managers to respond directly to comments and analyze public sentiment on a proposed project. Mr. Krevat concluded by discussing MassDOT's VPI Producer and Facilitator Program which supports project managers with organizing public meetings.

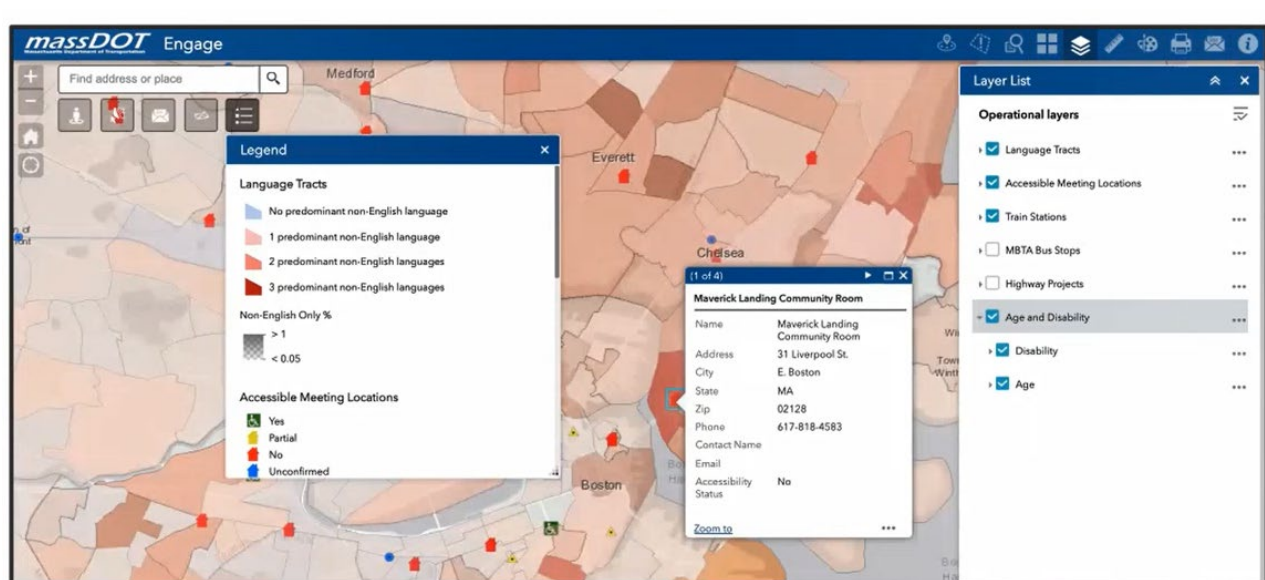


Figure 1. Screenshot of the MassDOT Engage Tool. (Source: MassDOT)

Q&A for MassDOT

- **Question:** Does MassDOT maintain REACH/PIMA comments for the project record?
 - **Answer:** MassDOT tracks comments for projects within REACH and inputs them into the project database. Over time, the agency's goal is to have a central database of comments across all projects.

Maine Department of Transportation

Scott Rollins of MaineDOT presented on the agency's use of VPI throughout the pandemic. In March 2020, MaineDOT began incorporating several VPI tools and techniques into its processes to maintain engagement with the public. Mr. Rollins noted the agency has used MetroQuest, live polling, virtual meetings, updated notices and social media ads, and revamped their website to meet the public's evolving needs. MaineDOT's [new VPI website](#) provides the public with an overview of VPI and allows individuals to view project information and recorded meetings. In addition, the public can subscribe to receive project-specific information, allowing the agency to communicate directly with relevant stakeholders before or following a public meeting. Similarly to MassDOT, MaineDOT uses the Iowa DOT's PIMA tool to track and analyze public responses. The three State DOTs also participate in a consortium to identify and share improvements for the tool. MaineDOT has found success with the use of VPI tools and plans to take a hybrid approach to public involvement going forward.

Q&A for MaineDOT

- **Question:** Is PIMA available to State DOTs or is each state implementing their own tool?

- **Answer:** The Iowa DOT has made the tool available to other State DOTs so long as they sign an agreement that requires them to share any changes or improvements to the tool with Iowa DOT to facilitate the continuous improvement of the tool nationwide.
- **Question:** What tools have you found the most success with?
 - **Answer:** Having a single website for projects has led to increased participation. In addition, our targeted social media ads and increased use of videos have produced higher engagement.

New Hampshire Department of Transportation

Tobey Reynolds of the New Hampshire Department of Transportation (NHDOT) discussed the agency's current use of VPI and plans for the future. At the start of the pandemic, NHDOT purchased a license with MetroQuest to develop an online survey for the state's 10-year transportation plan. The survey saw high levels of engagement and provided the public with the opportunity to share feedback on statewide goals and initiatives. Over the course of the pandemic, NHDOT has seen the ability of VPI to extend the agency's reach by engaging more people in the planning process.

NHDOT also worked to institutionalize the use of VPI throughout the development of a National Environmental Policy Act (NEPA) Public Involvement manual that includes VPI as an approved approach. NHDOT continues to leverage virtual platforms for meetings when appropriate but may add in-person meetings due to requests from several municipalities. In the coming months, Mr. Reynolds noted that the agency plans to hold hybrid public meetings to increase participation, develop videos with project design and schedule updates, and expand their use of visualizations.

Vermont Agency of Transportation

Katharine Otto from the Vermont Agency of Transportation (VTrans) provided an overview of the agency's VPI activities. Ms. Otto noted VPI was essential for the agency's Route 9 Corridor Management Plan by allowing the public to easily review project details and provide feedback. The agency held online meetings for the project and used story maps and online survey tools to collect comments. VTrans has also used project visualizations, most notably a driving simulation to show the public how to drive on a proposed diverging diamond interchange. VTrans has found success with VPI by always having a clear vision for developing a public involvement plan, establishing clear communication with their public information consultant, and strategically determining how to best share resources. Moving forward, VTrans plans to work with peer agencies to share best practices and develop collaborative digital spaces to facilitate the exchange of information.

Q&A for VTrans

- **Question:** What was the learning curve for your staff using Survey123 and other mapping tools?
 - **Answer:** We already had licenses with Esri, so the mapping staff leading the work already had most of the necessary skills. Esri offers useful tutorials and has a number of low and medium cost resources available.

Connecticut Department of Transportation

Maribeth Wojenski from the Connecticut Department of Transportation (CTDOT) presented on the agency's VPI initiatives. In spring 2020, CTDOT developed a plan that guided the agency's transition to VPI by exploring different meeting platforms, options for the public to provide comments, and general roles and responsibilities for the meetings. When planning for a virtual meeting, CTDOT establishes a dedicated webpage with clear directions for participating in the meeting and reviewing relevant project materials. The webpage also provides information for the public to request accommodations, allowing the agency to

prepare in advance. At the beginning of all public meetings, the agency shares a Title VI statement that there will be no discrimination on the basis of race, color, or national origin in the development of the program and a link to a demographic survey the agency encourages participants to complete. After the meeting, CTDOT documents the meeting process and posts the meeting recording online within 7 days. CTDOT primarily uses Microsoft Teams Live to hold its public meetings, but recently purchased Zoom licenses to allow the public to speak during its virtual public meetings. CTDOT is currently researching hybrid meeting options and updating guidelines to include newly developed methods and tools.

Q&A for CTDOT

- **Question:** Do you have any quick takeaways on your demographic survey, like response rate and how it compares in person vs virtual meetings, and if you receive questions from the public about it? What has been the public perception of and reception to the survey?
 - **Answer:** The response rate was not as high as we would have liked it to be. We currently do not have any data on public perception or reception.

Lana Lau from FHWA's Office of Project Development and Environmental Review noted that agencies are permitted to hold NEPA public hearings virtually due to public health emergency guidance from FHWA, but agencies will be required to include an in-person component when it is safe to do so.

Facilitated Discussion: Promoting and Conducting Public Meetings

The group discussed some of the biggest questions and challenges related to promoting and conducting public meetings. Topics include:

- **How are you promoting public meetings? Are you using new methods? What have you found to be effective or ineffective?**
 - Agencies are making use of virtual and traditional techniques to promote public meetings. Agencies are continuing to promote meetings in newspapers, at libraries, on billboards, on public transit digital ad panels, and on public access television. Other methods include radio advertisements, website calendars, local email lists, post cards, and incorporating public meeting notices on social media using Eventbrite.
 - Various agencies have found success using geotargeted social media ads to promote public meetings. This is a relatively low-cost method to reach younger populations who are often more difficult to engage.
 - State DOTs noted they often rely on MPOs for local outreach as they can target their engagement more effectively at the local or regional level.
- **How do you engage your target audience and manage contentious meetings?**
 - MaineDOT uses on-demand meetings due to limited broadband access in many parts of the state. The agency typically reviews the recording before publishing it online to ensure they are communicating the right message and including direct responses to the public.
 - Other agencies suggested taking time to set ground rules at the beginning of a meeting. These may be effective for preventing contentious situations and can include time limits for speaking, designating a staff member to remove or mute rude or combative individuals, and offering an option for an email or phone conversation to follow up on concerns after the meeting.
- **What do you do in the case of zoom bombings?**
 - Many agencies have experienced zoom bombings over the past year. This refers to instances of unwanted and disruptive intrusion during virtual meetings. In some cases,

agencies have chosen to end the meeting. Others recommended having the speaker acknowledge the zoom bombing, apologize for the interruption, provide time for attendees to recover, and issue a follow-up acknowledgement to meeting attendees indicating the behavior was unacceptable and contrary to the organization's mission.

- Other strategies included instructing attendees to disconnect and rejoin the meeting as well as designate roles while setting up the meeting to ensure that only facilitators can share their screen or turn on video. It is typically a best practice to hold a dry run to confirm these roles ahead of time and resolve any issues that may arise.
- **What's the recommended threshold for attendees to utilize breakout groups?**
 - This threshold can vary significantly and is largely dependent on the breakout room activity and facilitation skills of the breakout room leader. With Microsoft Teams, the main meeting room can serve as a breakout room in case of technical issues or for call-in attendees.
- **How do we combine what we've learned about online meetings and VPI with the return to in person/hybrid meetings? What are some of the questions you're struggling with for hybrid meetings?**
 - Many agencies are exploring new technologies to promote engagement with both virtual and in-person participants. Some agencies are using [Owl cameras](#) that rotate to the person talking and include a panoramic component allowing online viewers to see the entire room. Agencies have found that these cameras help make remote participation more engaging.

Day 1 Key Takeaways

Mack Frost from FHWA summarized key takeaways from Day 1 of the workshop:

- There are many ways to promote virtual public meetings, such as geotargeted social media advertising and print advertising in the community.
- Planning for a virtual public meeting is critical for its success, including preparing in case of a zoom bombing, outlining protocols for meeting attendees, and offering accessibility services like meeting translation and closed captioning services.
- A "splash screen" is a very useful tool to communicate information about an online meeting.

Day 2: Using Virtual Tools for Equitable Public Involvement

Using Virtual Tools for Equitable Public Involvement

In advance of Day 2, participants watched the previously recorded webinar titled, "Engaging Traditionally Underserved Communities with VPI." Carolyn Nelson from FHWA's Office of Project Development and Environmental Review began the session by synthesizing the key points from the webinar and discussing how to tailor public involvement techniques to engage traditionally underserved communities.

Facilitated Discussion: Equitable Access to the Decision Making Process

Tina Hooper, a Civil Rights Specialist from the FHWA Massachusetts Division, and Katharine Otto from VTrans continued by facilitating a discussion on equitable access to the decision making process.

- **What are some examples of traditionally underserved groups/communities in your jurisdictions?**
 - Agencies highlighted a wide range of groups and communities they had experience working with including low-income residents, the elderly, youth, persons with disabilities,

new residents, individuals with limited English proficiency, Black, Indigenous and People of Color (BIPOC), carless and/or transit dependent residents, unbanked residents, and single parents.

- **What are some of the most effective strategies for engaging stakeholders of different demographics?**
 - The group noted the importance of deploying a diverse set of virtual and in-person strategies to engage stakeholders of different background. A number of these strategies are listed below.
 - Establish trust by partnering with leaders of community organizations.
 - Utilize text and social media notifications to reach younger populations.
 - Identify traditionally underserved groups in the community and take the time to understand their priorities.
 - Be flexible and adaptable to meet the needs of the community.
 - Identify popular and well-trafficked locations such as a community center or the local transfer station to advertise public involvement opportunities.
- **What is the biggest challenge with engaging underserved populations (virtually or in-person)?**
 - A key challenge that agencies noted was building trust and establishing a connection in the local community. In addition, agencies highlighted time constraints, limited budgets, and shifting agency priorities with new projects as related issues.
- **What are some important considerations to ensure virtual meetings are accessible for those who need special accommodations?**
 - To ensure accessibility, agencies suggested providing a dial-in number to access the meeting, offering closed captioning, including a transcription service, and other language assistance as needed. It is also often helpful to have someone available to resolve any technological issues as they arise during the meeting.
 - Agencies recommended asking participants to request any accommodations in advance of a meeting and ensure that meeting materials are machine-readable.
- **Identify a source, organization, or method that proved to be beneficial in engaging underserved communities. What has been successful or helped you?**
 - Agencies noted they had success in engaging underserved communities by partnering with local organizations such as libraries, advocacy groups, and neighborhood associations. Others recommended using traditional and virtual methods to advertise meetings. Lastly, agencies have found success with offering childcare and/or food during meetings and hosting meetings during the day and evening to capture the public with non-traditional schedules.
- **How can FHWA provide assistance?**
 - Participants suggested continuing to develop webinars and opportunities to facilitate the exchange of information and best practices. Others discussed providing guidance on how Federal funds may be used and whether there may be opportunities to use Federal resources to invest in VPI tools.
 - Agencies requested additional support with targeting engagement and outreach to traditionally underserved population including providing a general list of techniques to consider.

MPO, RPO, and COG Round Table

The workshop continued with presentations from MPOs, RPOs, and COGs located throughout New England.

[Strafford Regional Planning Commission](#)

Shayna Sylvia, the Communications and Outreach Manager from the Strafford Regional Planning Commission in New Hampshire, shared a [Do-It-Yourself video](#) the organization made discussing their work with VPI. The video highlighted the agency's use of VPI, which included breakout rooms in online meetings, online surveys to gather public feedback, and developing videos to share project information. The video served as an example of how agencies can develop low-cost videos to share information with the public.

[Chittenden County Regional Planning Commission](#)

Bryan Davis, a Transportation Planner with the Chittenden County Regional Planning Commission in Vermont, presented on the primary VPI tools the agency has used. Thus far, the agency has found success with mapping and crowdsourcing tools that allow the public to identify issues and leave comments on maps. Staff have also found project visualizations to be successful to show proposed alternatives to corridor plans and demonstrate complex designs such as diverging diamond interchanges. Mr. Davis noted several goals moving forward including gaining experience with hybrid meetings as pandemic restrictions loosen and developing stronger partnerships with the local community.

[Central Massachusetts Regional Planning Commission](#)

Yahaira Graxirena, the Transportation Program Manager from the Central Massachusetts Regional Planning Commission, presented on how the agency's use of VPI has evolved during the pandemic. Prior to the pandemic, the agency had experimented with various VPI tools including collecting drone footage for videos, publishing an online newsletter, and distributing online surveys. Over the course of the past year, the agency has developed protocols and scripts for staff to follow during online meetings, created interactive ArcGIS Online dashboards, and developed street design models online. The agency is planning on expanding its use of VPI and continuing to experiment with new tools and applications to improve engagement with the public.

[Greater Portland Council of Governments](#)

Marcel Ntagora and Kat Violette from the Greater Portland Council of Governments in Maine presented on their agency's work with inclusive virtual public involvement. In 2019, the agency launched a Community Transportation Leaders (CTL) Program to advance the inclusion of underrepresented communities in transportation planning and decision-making. To understand and accommodate the different needs of the CTL members, the team uses personalized approaches for engagement. Before meetings, Mr. Ntagora and Ms. Violette respond to requests for accommodations and proactively eliminate barriers to participation by assuring presentations and documents are accessible to all. To begin meetings, the agency outlines meeting guidelines and has staff available to provide accommodations and respond to any issues that arise. The effort has increased the staff time and resources for each meeting, but has been successful in promoting more inclusive participation from all members of the community.

[Upper Valley Lake Sunapee Regional Planning Commission](#)

Alex Belenz, a planner from the Upper Valley Lake Sunapee Regional Planning Commission in New Hampshire, shared the agency's recent VPI efforts. The agency recently used a MetroQuest survey to collect public input on proposed trail improvements to the Mascoma River Greenway. The platform allowed users to drop pins to mark access point concerns and complete a budgeting exercise to allocate a limited amount of "Greenway Bucks" towards project priorities. The survey also collected demographic information and was shared on agency social media channels and with local organizations. In addition, the

agency recently updated its Regional Transportation Plan and used an ArcGIS Online public input map for users to drop pins with comments on a map.

Day 2 Key Takeaways

Kevin McCoy from the U.S. DOT Volpe Center summarized key takeaways from Day 2 of the workshop:

- There are many great examples and tools of how to include and engage with underserved populations, like advertising at the local transfer station.
- Agencies need to customize their outreach efforts in order to meet the public where they are.
- Public involvement must look as different and diverse as the community does, there is no “one size fits all” approach.
- Using a broad array of VPI tools to supplement traditional in-person outreach can increase meaningful involvement with traditionally underserved communities.

Day 3: Project Visualizations and Do-It-Yourself Videos

The participants reconvened the following week for an agenda that included external presentations from VPI experts on project visualizations and do-it-yourself videos from the Federal Highway Administration Eastern Federal Lands and the Utah Department of Transportation (UDOT).

Presentation: Project Visualizations

Jim Talley gave a presentation on project visualizations. Mr. Talley highlighted his work at the FHWA Eastern Federal Lands Highway Division, which works with public land management agencies to design, build, and maintain roads and bridges located on federal lands across the country. Mr. Talley began by describing his experience working with visualizations. He has no formal training in visualization, but rather developed expertise by consulting online resources, referencing books, and attending conferences. He also noted that workshop attendees should feel empowered to develop visualization skills and that it is useful to have a background understanding of these tools when working with consultants.

Mr. Talley began with an introduction of visualizations, which he defined as any technique for creating images, diagrams, or animations to communicate a message. Project visualizations can be 2D or 3D and can encompass anything from a rendering, to a 3D animation, to a virtual reality simulation. Figure 2 shows a 3D rendering from the Gulf Islands National Seashore simulating how a new bridge would be built in a manner that would minimize the disturbance to the sensitive wetland environment.



Figure 2. This 3D rendering shows what a new bridge would look like in a coastal area. (Source: FHWA EFLHD)

Mr. Talley provided several useful indicators to consider when choosing a project visualization method. He recommended initially looking for signs that visualization might be required, such as locations near sensitive habitats, a likelihood of public concern, or a high cost for the project.

Mr. Talley continued with a series of demonstrations to show workshop participants how to get started with visualizations. Mr. Talley began with a scanned image of a project design for a parking lot and shelter area. Mr. Talley proceeded to use multiple visualization techniques to illustrate how to transform the printed image into an effective visualization tool. He first highlighted how to use GIMP, an open-source image manipulation software, to create a colored rendering of the project design. Mr. Talley continued by using the 3D animation software, Blender, to add 3D images and designs to the rendering. In the demonstration, Mr. Talley added 3D content such as picnic tables, restroom facilities, and a shelter to illustrate what the project design would look like in the relevant environment. This example demonstrated how to easily transition from a 2D design to a 3D design that more effectively communicates project details to the public and relevant stakeholders.

Mr. Talley’s presentation concluded by providing tips on how to get started and describing his own background. Many visualization techniques are open source and there are free online courses and tutorials to get started. FHWA has also developed a working group of visualization professionals from public agencies that collaborate to share knowledge and best practices.

Q&A for Mr. Talley:

- **Question:** How do you present project visualizations to the public?
 - **Answer:** The output from a rendering is a still image or a rendered video that can be uploaded to YouTube. There are also websites that will host the visualizations.
- **Question:** Is free, open-source software a good place to start?
 - **Answer:** The price of the software is not an indication of its features or effectiveness. It is often useful to get started with open-source software to get an idea of what types of visualizations you would like to create.

- **Question:** Is it possible to include people in visualizations?
 - **Answer:** Many software packages allow you to add static or moving individuals to visualizations for free, or at a low cost.
- **Question:** Is there an appropriate level of detail for different visualizations?
 - **Answer:** It's often a judgement call and most important that your visualization is communicating the key components of a project. You don't want the visualization to become cluttered to cover important information, but not overly simple to not include key components. It is helpful to add scale to help visualize the size of things.

Presentation: Do-it-Yourself Videos

Zach Whitney of UDOT provided a presentation on how to effectively produce and disseminate DIY videos for VPI. The presentation began with a highlight of how to use videos in the transportation planning process and a demonstration of several videos that Mr. Whitney has developed. The presentation continued with a focus on strategies for developing DIY videos beginning with how to tell a compelling story. When planning for a video, Mr. Whitney indicated that individuals should focus on answering the following three questions:

- What is my objective?
- Who is my audience?
- How will I tell this story?

These questions will be helpful when developing a story map for the video and help to ensure that the video will meet the needs of a specific audience. Mr. Whitney proceeded by discussing the basic equipment that is needed to create a DIY video. This generally includes a digital camera (which can be a smartphone), a microphone, tripod, and lighting kit. To edit the video, he recommended using software such as iMovie, Lightworks, or Adobe Premiere.

Mr. Whitney continued by introducing a story mapping exercise that encouraged workshop attendees to think critically about a DIY video idea. Participants were split into breakout rooms and collaborated to work through the exercise together. The exercise asked participants to develop a topic for a video and think through the series of questions outlined below.

- What is the objective of the video?
- What aspects of this idea does your organization care about?
- Why is this important to your organization?
- Who is your audience(s)?
- What aspects of this idea does your audience care about?
- What channels will you be using to distribute this video?
- What storytelling format will you be using?
- What visual elements do you want to include?
- What obstacles/challenges will you face and how will you overcome them?

At the end of the activity, a representative from each group presented the results from their DIY video story mapping exercise to the group. The worksheets developed for the exercise are provided in Appendix B.

Facilitated Discussion: Effective Use of Videos and Visualizations in VPI

Following the group activity, Lana Lau from FHWA facilitated a synthesis discussion on how agencies can effectively use videos and visualizations to enhance their public involvement.

- **What steps can MPOs and DOTs take to make DIY videos part of regular public engagement?**
 - Multiple workshop attendees noted the importance of jumping in and getting started with visualizations and videos. Learning a new technology or software may feel intimidating but trying out free tools and watching online tutorials is often the most effective way to get started. Ms. Lau also noted that PowerPoint videos, which allow individuals to easily record a presentation, are a straightforward way to beef up existing presentations and a useful introduction to developing basic videos.
 - Other participants mentioned formalizing the process for using DIY videos. This includes creating standard operating procedures (SOPs) for both making videos as well as distributing them to the community through multiple channels. Documenting processes through an SOP helps to ensure consistency across all materials and facilitates the transfer of knowledge within an agency. This may also include developing a robust internal team and cross-training staff so that multiple personnel can create and edit videos.
- **How do you sell the benefits of using DIY videos or visualizations to others within your organization?**
 - Workshop attendees noted that DIY videos and visualizations help to expand the reach of their organization and include individuals in the transportation planning process that may not otherwise have been included. Similarly, these tools help agencies to increase impact with minimal financial investment. These resources are an effective method for communicating complex information and can break down barriers by increasing trust for the public.
- **What suggestions do you have for ensuring videos will meet standards for accessibility?**
 - Mr. Whitney typically relies on YouTube, which will auto-caption videos. This is an easy way to add captions to videos and allows you to download the .srt file, which can then be added to other platforms. It is also possible to use other applications such as Adobe Premiere.
 - A workshop participant noted that their agency works with an external contractor that offers captioning for a flat fee. This is a good alternative for agencies that do not have the internal capabilities or staffing capacity to caption videos.

Key Takeaways from Day 3

At the conclusion of Day 3, workshop participants identified several key takeaways.

- Just do it. It can be intimidating to get started with creating project visualizations and DIY visualizations. Both peer presenters echoed the importance of jumping in and familiarizing yourself with the technology and software as the best way to gain the necessary experience to create these tools.
- Video and graphic production does not require a major investment to be successful. There is an increasing number of open-source and low-cost tools that are available to individuals getting started with these VPI tools. It is recommended for individuals to make use of online tutorials and other resources to build up their skills and knowledge.
- Videos can help an agency be in charge of telling its own story.
- Simple visualizations can help communicate project designs. The use of color and other basic design techniques can help members of the public better understand potentially complex information.

Day 4: State DOT/MPO Showcase – Institutionalizing VPI

Participant agencies presented examples to demonstrate how their agency has integrated the use of VPI into everyday business practices.

Maine Department of Transportation On-Demand Process

Scott Rollins from MaineDOT presented on the agency's institutionalization of VPI and discussed new tools the agency is using to maximize engagement. The agency has updated its on-demand engagement process, with platforms including Microsoft Teams and PIMA. On-demand engagement methods allow users to view materials on their own schedule and are beneficial for populations with limited broadband access who may not be able to stream a live meeting.

MaineDOT is also launching a VPI flyer in an effort to improve outreach to underserved populations by providing tips and strategies for engaging in the planning process. The agency has a PIMA Guide for virtual meetings, and a [Public Involvement Plan updated in March 2021](#) that institutionalizes VPI. Project managers use PIMA to look at public comments, upload other comments from voicemails and emails, and coordinate with their teams to respond to comments. Mr. Rollins noted it adds more time to review and respond to comments, but the organizational benefits outweigh the time commitment. MaineDOT has used project visualizations, videos, and clickers at in-person meetings to engage the public.

Q&A for MaineDOT

- N/A

Massachusetts Department of Transportation VPI Training Program for Project Managers

Andrea D'Amato from MassDOT discussed how the agency developed their VPI Training Program for project managers. Ms. D'Amato noted that the training is broken down into two components: (1) facilitator training and (2) producer training. Agency staff must participate in the training program before hosting a public meeting. MassDOT is working to train additional staff to take on these roles in order to meet the growing demand for virtual meetings. Over the coming months, the agency is looking to take a hybrid approach to public meetings by holding events in-person and offering online meetings covering the same material.

MassDOT also has developed measures of effectiveness for public engagement and reaching targeted audiences. These measures allow MassDOT to analyze the effectiveness of certain VPI tools and target their outreach to certain populations to maximize engagement. MassDOT is dedicated to institutionalizing VPI through recruitment and training, deploying consistent branding and messaging for VPI activities, and finalizing standard operating procedures for online and hybrid meetings.

Q&A for MassDOT

- **Question:** Is MassDOT planning to include an in-person component for all future meetings?
 - **Answer:** We have had a few requests from localities to have in-person meetings, which is why we have been ramping up our hybrid information. Based on the Governor's guidance we cannot host in-person events at this time, but expect this to evolve over time.
- **Question:** When is it appropriate to use separate online and in-person components for public meetings versus a combined hybrid meeting approach?
 - **Answer:** We have not perfected the combined meeting approach and are continuing to test different technologies to ensure they are fully accessible for all members of the public. We are using separate meetings while we are finalizing the technology.

- **Question:** What is your strategy for staying on top of constantly evolving technology and platforms?
 - **Answer:** We have resources on our learning hub for the VPI Training Program and regularly modify our messaging to ensure it is aligned with the latest public health guidance. We also regularly meet with developers from Zoom to discuss any issues we are seeing and identify solutions.

New Hampshire Department of Transportation's Updated Public Involvement Manual

Tobey Reynolds from NHDOT presented on the agency's [NEPA public involvement manual](#), which was recently updated to include a section on VPI. The new section provides practitioners with guidance on when, where, and how to use VPI, as well as information on using specific tools. This update helps to institutionalize VPI across the agency and will allow NHDOT to implement its use for upcoming projects.

Mr. Reynolds noted that many communities across the state have requested to return to in-person meetings. The agency has heeded this advice and begun to hold more in-person and virtual meetings to meet the needs of the public. The agency is exploring potential hybrid models that would allow for simultaneous participation from virtual and in-person participants. This is a common request throughout the region and NHDOT will look to coordinate with peers to provide updates on progress and successful strategies.

Synthesis Discussion – Institutionalizing VPI

Mack Frost from FHWA facilitated a synthesis discussion among the attendees on how agencies can apply what they have learned at the workshop and strategies to advance the implementation of VPI.

- **How did you get leadership buy-in?**
 - Agencies have found success by demonstrating VPI tools to leadership and highlighting success stories. Demonstrating how certain tools have led to increased engagement allows leadership to see how and why VPI is successful and generates a strong argument for pursuing continued investment in new tools and strategies.
- **What challenges did you encounter when trying to institutionalize VPI, and how did you overcome them?**
 - Some of the challenges agencies said they face are a lack of staff with the availability to work on VPI. In addition, several state agencies noted that they experienced challenges encouraging local planning agencies in their state to invest in and adopt VPI tools.
- **What are some effective practices for remaining in compliance with Title VI, environmental justice, and ADA laws and regulations while implementing VPI?**
 - MassDOT trains project managers for ADA compliance for specific projects as well as ongoing objectives for environmental justice project prioritization. Other agencies have hosted trainings to educate their staff on their shared responsibility to accommodate limited English proficiency individuals or individuals with disabilities. Agencies also shared their public involvement manuals with non-discrimination plans: [NHDOT](#), [BACTS MPO](#), [PVPC](#), [SNHRPC](#), [CCRPC](#), [MassDOT](#) (currently being updated to include VPI), and [Strafford MPO](#).
- **Is there any standard for how long to keep a virtual survey available online?**
 - There is not a standard length of time to keep a virtual survey available online. Some agencies posted surveys online for several months, while others kept them online for a few weeks. To increase engagement, agencies promoted the surveys on social media and through email lists.

Workshop Key Takeaways and Closing Remarks

Mack Frost and Lana Lau from FHWA summarized key takeaways from the workshop:

- Agencies should experiment with VPI tools and strategies. You don't need to be a professional to take the first step and experiment with VPI.
- There are many VPI tools available to incorporate into your public involvement strategy. It is useful to experiment to see which will work best for your agency.
- It was helpful for participating agencies to talk with people from neighboring states who have faced similar barriers and discuss how they have overcome them and what they have learned.

Appendix A: Workshop Agenda

Virtual Public Involvement

New England States Virtual Workshop

Agenda

Dates: Tuesdays, 8:30 a.m. – noon

July 13; July 20; August 3; August 10

Location: Virtual – Microsoft Teams

Attendees: Connecticut DOT
MaineDOT
Massachusetts DOT
New Hampshire DOT
Vermont Agency of Transportation
HNTB
MPOs, RPOs and COGs (maximum of 2 representatives from each agency)

Day 1 Agenda

Time	Topic
8:30 – 9:00 a.m.	Registration and Networking
9:00 – 9:30 a.m.	Welcome and Introductions FHWA, MassDOT, and MaineDOT welcome attendees, do a round of introductions, review the agenda, and establish ground rules for discussions.
9:30 – 9:40 a.m.	Virtual Public Involvement Overview Participants will watch FHWA’s VPI overview recording prior to Day 1. FHWA will present a brief update and there will be an opportunity for Q&A.
9:40 – 10:45 a.m.	State DOT Round Table The State DOTs will provide a brief update of how they have been using VPI, and how they plan to use it going forward. Time for Q&A. (approx. 10 minutes each) <ul style="list-style-type: none"> - Connecticut DOT - MaineDOT - Massachusetts DOT - New Hampshire DOT - Vermont Agency of Transportation
10:45 – 11:00 a.m.	Break
11:00 a.m. – 11:50 p.m.	Facilitated Discussion: Promoting and Conducting Public Meetings FHWA or the Volpe Center will facilitate a discussion among the attendees and peers on ideas and best practices for effectively getting the word out about public meetings. Possible discussion questions include: <ul style="list-style-type: none"> • Are you using new promotional methods? • Which strategies have you found to be effective / ineffective, and why? • How can you efficiently and effectively promote public meetings? • How can you effectively manage a really large virtual/hybrid meeting? • What are best practices for managing potentially contentious meetings?
11:50 a.m. – noon	Day 1 Key Takeaways and Preview of Day 2

Day 2 Agenda

Time	Topic
8:30 – 8:45 a.m.	Recap of Day 1 and Introduction to Day 2 FHWA or the Volpe Center will recap the key discussion points from Day 1 and introduce the topic for Day 2
8:45 – 9:15 a.m.	Using Virtual Tools for Equitable Public Involvement Participants will have watched the recording of FHWA’s webinar titled: [Engaging Traditionally Underserved Communities with VPI] and this session will be for Q&A and a discussion of effective strategies for reaching traditionally underserved communities, including rural communities and communities with limited broadband access, using tools such as: <ul style="list-style-type: none"> - Mobile applications - Telephone town hall Project visualizations

Time	Topic
9:15 – 10:15 a.m.	<p>Facilitated Discussion: Equitable Access to the Decision Making Process</p> <p>FHWA or the Volpe Center will facilitate a discussion among the attendees and peers on providing equitable access to the transportation decision making process. Possible discussion questions include:</p> <ul style="list-style-type: none"> • What strategies are most effective for stakeholders of different demographics? • What are best practices for conducting hybrid public meetings? • What are important considerations to ensure virtual meetings are accessible for people who need special accommodations? <p>What metrics/methods are you using to measure the effectiveness of VPI strategies (also in comparison with traditional)?</p>
10:15 – 10:30 a.m.	Break
10:30 – 11:45 a.m.	<p>MPO, RPO and COG Round Table</p> <p>Approx. 5 – 10 minutes each</p> <p>MPOs who have volunteered will provide a brief update of how they have been using VPI, and how they plan to use it going forward.</p>
11:50 a.m. – noon	Day 2 Key Takeaways and Preview of Day 3

Day 3 Agenda

Time	Topic
8:30 – 8:45 a.m.	<p>Recap of Day 2 and Introduction to Day 3</p> <p>FHWA or the Volpe Center will recap the key discussion points from Day 2 and introduce the topic for Day 3</p>
8:45 – 9:45 a.m.	<p>Presentation: Project Visualizations</p> <p>Presentation by Jim Talley of FHWA-EFL on options for creating and using design visualizations to enhance VPI, including low-cost options for getting started. There will be time for Q&A.</p>
9:45 – 10:00 a.m.	Break
10:00 – 11:15 a.m.	<p>Presentation: Do-It-Yourself Videos</p> <p>Presentation by Zach Whitney of Utah DOT on how to effectively create and use low-cost, do-it-yourself videos for VPI. There will be time for Q&A. Participants will engage in a video brainstorming activity in smaller groups.</p>
11:15 – 11:50 a.m.	<p>Facilitated Discussion: Effective Use of Videos and Visualizations in VPI</p> <p>FHWA or the Volpe Center will facilitate a discussion among the attendees and peers on how agencies can effectively use videos and visualizations to enhance their public involvement.</p> <ul style="list-style-type: none"> • How much time / money does this really entail (Cadillac vs. basic) • How do you sell this to others within the organization? What are the benefits of using videos and visualizations, to justify the resource investment?
11:50 a.m. - noon	Day 3 Key Takeaways and Preview of Day 4

Day 4 Agenda

Time	Topic
8:30 – 8:45 a.m.	<p>Recap of Day 3 and Introduction to Day 4 FHWA or the Volpe Center will recap the key discussion points from Day 3 and introduce the topic for Day 4</p>
8:45 – 10:30 a.m.	<p>State DOT/MPO Showcase – Institutionalizing VPI Participant agencies will discuss / demonstrate examples of what their agency has been doing to integrate the use of VPI into everyday business practices.</p> <ul style="list-style-type: none"> • MassDOT VPI training program for PMs • NHDOT’s updated Public Involvement Manual • MaineDOT On-Demand Process
10:30 – 10:45 a.m.	Break
10:45 – 11:45 a.m.	<p>Synthesis Discussion – Institutionalizing VPI FHWA or the Volpe Center will facilitate a discussion among the attendees and peers on how agencies can apply what they learned at the workshop in their agencies, and how to advance their agencies’ implementation of VPI overall. Possible discussion questions include:</p> <ul style="list-style-type: none"> • Has your agency developed VPI policies, handbooks, or standard operating procedures? • How did you get leadership buy-in? • How have you integrated VPI strategies into your overall communications strategy or public participation plans? • What challenges did you encounter when trying to institutionalize VPI, and how did you overcome them? • What are some effective practices for remaining in compliance with Title VI, EJ, and ADA laws and regulations while implementing VPI? • What plans, projects or initiatives targeted in the next year could implement some of the VPI tools/techniques that we discussed? • Hybrid meetings?
11:45 a.m. – noon	<p>Summary of Future VPI Engagement Opportunities and Closing Remarks FHWA will summarize next steps for the VPI initiative, and the participants will make closing remarks.</p>

Appendix B: DIY Video Story Mapping Worksheet

Video Story Mapping Exercise

Objective: To become familiar with the story mapping process and think critically about a video story idea.

Instructions:

1. Choose a participant (not the facilitator) to share their screen and fill out the worksheet with input from the group. This person should be prepared to discuss what you discovered with the group at the end of the breakouts.
2. As a group, choose one of the video topics listed below (or one of your own) to use in the story mapping exercise. Feel free to use an actual video idea that you would like to implement for your agency or make one up.
3. Fill out the worksheet with this video idea in mind. Pay close attention to the details and specific needs of your group's video topic. It is okay if you do not have enough time to complete the worksheet – do as much as you can!
4. If you complete the worksheet early, review the “What’s Next” bullets on the last page of this document.

Video Topic Ideas:

- Highlight the benefits of a planned project
- Describe the long-range transportation plan
- Educate members of the public about the planning process
- Provide updates about a project that is under construction
- Educate members of the public about how to submit a public comment on a planning document
- Highlight an individual on a team (the “person behind the project/plan”)
- Share a stakeholder’s opinions about a planned project

Story Mapping Worksheet

- Organization:
 - Idea:
 - Slug (brief description):
 - Proposed Length:
 - Brief Description:

Question	Response
What is the objective of this Video?	
What aspects of this idea does your organization care about? (issues, values, expertise)	
Why is this important to your Organization?	
Who is your Audience(s)?	
What aspects of this idea does your audience care about? (issues, values, expertise)	
What channels will you be using to distribute this video? (Facebook, Instagram, YouTube)	
What storytelling format will you be using?	
What visual elements do you want to include? Be detailed and specific.	
What obstacles/challenges will you face and how will you overcome them? (be honest)	