



Final Report

Meaningful Public Involvement in Transportation Decision-Making: A Comparative Analysis of State Policies and Practices

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16. Abstract One of the many responsibilities that State Departments of Transportation (DOTs) have is to offer public involvement opportunities during the planning, design, and delivery of transportation systems. Much has been written about specific public involvement practices, and critiques of their effectiveness are common. Less is known about the official public involvement policies that state DOTs are required to adopt and implement. This research conducts a document analysis of these policies and their implementation in the State Transportation Improvement Program (STIP) across four states in the mid-Atlantic region: Delaware, Maryland, Virginia, and West Virginia. The analysis finds that state policies and their implementation through the STIP process do offer elements of meaningful public involvement, such as the delivery of public meetings, hearings, and workshops. These strategies are often used in tandem with digital tools like websites and social media, which serve to inform residents and gather public input. The analysis also finds that states often fail to deliver more innovative public involvement strategies that enhance the public's agency and generate more useful information. The study's results have implications for state public managers in designing, offering, and communicating their public involvement policies and practices more effectively.				
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Acronyms

ADA	Americans with Disabilities Act of 1990
CRA	Civil Rights Act of 1964
FHWA	Federal Highways Administration, part of the USDOT
FRA	Federal Railroad Administration, part of the USDOT
FTA	Federal Transit Administration, part of the USDOT
LEP	Limited English Proficiency
MPI	Meaningful Public Involvement
NEPA	National Environmental Policy Act of 1969
PIP	Public Involvement Policies (or Process)
SDOT	State Department of Transportation
USDOT	U.S. Department of Transportation
VPI	Virtual Public Involvement

Abstract

One of the many responsibilities that State Departments of Transportation (DOTs) have is to offer public involvement opportunities during the planning, design, and delivery of transportation systems. Much has been written about specific public involvement practices, and critiques of their effectiveness are common. Less is known about the official public involvement policies that state DOTs are required to adopt and implement. This research conducts a document analysis of these policies and their implementation in the State Transportation Improvement Program (STIP) across four states in the mid-Atlantic region: Delaware, Maryland, Virginia, and West Virginia. The analysis finds that state policies and their implementation through the STIP process do offer elements of meaningful public involvement, such as the delivery of public meetings, hearings, and workshops. These strategies are often used in tandem with digital tools like websites and social media, which serve to inform residents and gather public input. The analysis also finds that states often fail to deliver more innovative public involvement strategies that enhance the public's agency and generate more useful information. The study's results have implications for state public managers in designing, offering, and communicating their public involvement policies and practices more effectively.

Introduction

Public participation in governmental decision-making is a core facet of effective public administration in the United States. In transportation planning, state and federal law both require public involvement in all phases of the transportation system lifecycle. Here, the federal public involvement requirements that guide statewide transportation planning are particularly relevant. These policies provide the template for all public involvement strategies used during transportation project planning and delivery. As such, the effectiveness of public participation in transportation decision-making hinges on the language and requirements embedded within federal and state policies.

The effectiveness of formal public participation strategies in transportation planning has been questioned by scholars, administrators, and the public alike. Traditional approaches have sought to provide opportunities for the public to learn about and comment on plans and proposed projects. However, relatively few people participate in these events because the information presented is often highly technical, the opportunities to participate can be inconvenient or impractical, and people may not see the value of volunteering their time to participate. For these reasons and others, interest in improving the “meaningfulness” of public participation conducted by government bodies has become more prominent. As one example, the federal government published a report in 2023 detailing the philosophy and purpose of meaningful public involvement (MPI) in transportation decision-making and recommending strategies that states could implement to improve meaningfulness (U.S. Department of Transportation, 2023).

Surprisingly little is known about the institutionalized policies that state Departments of Transportation (SDOTs) adopt to guide their public involvement practices or whether states are implementing MPI strategies. To address this knowledge gap, this research systematically evaluates public involvement policies and practices reportedly utilized by SDOTs in four mid-Atlantic states: Delaware, Maryland, Virginia, and West Virginia. We ask two research questions: (1) What specific techniques and tools do SDOTs employ to involve the public in transportation decision-making? and (2) To what extent do SDOTs’ public involvement policies and practices incorporate elements of meaningful public involvement?

We employ systematic document analysis to catalog and assess the public involvement policies and plans that SDOTs have used in recent years, benchmarked against the USDOT’s guidance on MPI. We analyze both state public involvement plans (PIPs) and the most recent State Transportation Improvement Programs (STIPs), which presumably implement the practices outlined in the PIPs. This study is not intended to critique state agencies but rather to document engagement processes systematically and constructively, offering insights and facilitating cross-state learning on policy and practice improvements where appropriate.

This report first reviews the relevant literature on public involvement generally and in transportation, then details our research approach before presenting our results, discussing our findings, and examining implications for practice before offering conclusions.

Literature Review

The following sections describe previous research on public involvement, both in a general sense and in the context of transportation. We then describe the research gap that this study aims to address.

General Public Involvement Literature

For our purposes, we consider “public involvement,” “public engagement,” “stakeholder engagement,” and “public participation” as closely connected and chose to use the term “public involvement” throughout. In the context of modern liberal democracies, public involvement is a dialogic process of leveraging the collective voice and values of the public vis-à-vis governing institutions to define and prioritize issues of concern, articulate policy for addressing issues, and support implementation (Rowe & Frewer, 2005). It incorporates the public’s needs, wants, and preferences and administrative decision-making, ensuring that the public has a meaningful influence on decisions that affect them. In democracies, public involvement is viewed as a non-negotiable element of civic life and a pathway to good governance (Dzur, 2015; Fung, 2006). Theories of public involvement posit that it achieves democratic ideals such as improved decision-making, more effective outcomes that maximize the public good, and the establishment of legitimacy for governing bodies and their decisions (Fung, 2015; Innes & Booher, 2004; Nabatchi & Leighninger, 2015). The practice of public involvement requires administrative systems and processes—a “participation infrastructure” that Nabatchi & Leighninger (2015, p. 6)

define as “the laws, processes, institutions, and associations that support regular opportunities for people to connect with each other, solve problems, make decisions, and celebrate community.”

Defining “effective” public involvement can be challenging and is open to a range of viewpoints. As noted above, a primary objective of public involvement is to incorporate the public’s values and preferences into decision-making and implementation systems overseen by public managers. Governance outcomes are, therefore, a key metric used to measure how “effective” a public involvement process truly was. However, correlating public involvement practices to actual outcomes is analytically challenging, so instead, process effectiveness is frequently substituted as a proxy for outcome effectiveness (Rowe & Frewer, 2004). The ideal (i.e., “effective”) public involvement process is open, democratic, representative, dialogical, and responsive (Fung, 2015; Innes & Booher, 2004).

Yet, public involvement practice often fails to reflect theory, and much has been written on why and how public involvement falls short of its ideal. Public managers and administrators responsible for implementing public involvement practices and processes commonly receive criticism (Nabatchi & Leighninger, 2015). Their attitudes may not be aligned with the democratic spirit of public involvement. They may impart, consciously or unconsciously, their personal values, assumptions, interpretations, and socially constructed narratives around public issues that differ markedly from those of the general public (Clark, 2018; Ianniello et al., 2019; Migchelbrink & Van de Walle, 2022). Between public managers and the publics they serve, information asymmetries—for example, around political efficacy—can also hinder effective public involvement (Bryson et al., 2013; Flyvbjerg, 1998; Ianniello et al., 2019; Migchelbrink & Van de Walle, 2022; Rosen & Painter, 2019). Cultural differences between public managers and interested parties, as well as erroneous assumptions about the public’s preferences, can likewise precipitate ineffective public involvement (Clark, 2018; Migchelbrink and Van de Walle, 2023).

The publics who participate in engagement opportunities can also become roadblocks to effective public involvement (Nabatchi & Leighninger, 2015; Stone, 2012). Low-information or irrational participants can influence decisions and outcomes in inefficient and potentially detrimental ways. Individual participants with high levels of political and civic efficacy can have an outsized influence on decisions and outcomes, potentially in ways that privilege themselves at the expense of others. Political differences and incivility between participants—and intransigence among them—can lead to gridlock and policy non-decisions, which may

perpetuate suboptimal status quo situations. The status quo can also be perpetuated when public skepticism and mistrust of government are high, leading participants to question the motives of public managers and their organizations and ultimately stymying progress.

According to the literature, public involvement opportunities should therefore be designed in a way that enables and supports meaningful participation. Practical challenges to effective engagement may include design decisions such as the time of day when events are scheduled, who does (and does not) get targeted invitations, mobility challenges to attending in-person events, constraints to participating in virtual events, an inability to find or afford childcare during scheduled events, or the choice of languages used on promotion materials and during the facilitation of engagement opportunities (Bryson et al., 2013; Epstein et al., 2014; Ianniello et al., 2019; Meléndez & Martinez-Cosio, 2019). Even intentional designs utilizing public involvement “best practices” can be employed as overly prescriptive frameworks that stifle authentic, meaningful, and creative participation (Legacy et al., 2023). Co-designing public involvement, where public managers cede some control over these factors and share authority with interested parties and members of the public, is seen as a strategy to overcome design process challenges (Clark, 2018; K. S. Quick & Feldman, 2011; Rosen & Painter, 2019).

Transportation-Specific Public Involvement Literature

The literature specific to transportation-related public involvement aligns with general public involvement literature. Some scholars critique transportation practitioners and public managers for institutionalizing their expectations and values in public involvement practices and methods (Levine & Karner, 2023; Pira et al., 2020). Others argue that any state-centric approach, regardless of its design and delivery, is inherently structurally flawed and cannot deliver just transportation outcomes (Karner et al., 2020). The academic community is also criticized for not integrating a variety of perspectives into its analyses of transportation-specific public involvement practices, and for lacking the imagination and creativity to extend its analyses beyond disciplinary silos (Cronley et al., 2021; Fields et al., 2020).

In response to these critiques, interest-centric public involvement designs and delivery are viewed as an antidote. Transportation public managers are invited to cede power, authority, and agency to interested parties in specific ways such as forming durable and lasting partnerships that extend well beyond project-specific deadlines, conferring early and often, informing

deliverables by integrating and learning from the experience of interested parties, and using multiple methods of engagement instead of a one-size-fits all approach (Karner et al., 2020; Karner & Marcantonio, 2018; Levine & Karner, 2023; McAndrews & Marcus, 2015; Slotterback, 2010; Van Dort et al., 2019). Equally important is the capacity to evaluate the meaningfulness of public involvement practice by assessing outcomes and the level of satisfaction and impact that participants enjoy. Such self-evaluation is critical for continually improving public involvement and ensuring democratic responsiveness in transportation planning (K. Bailey et al., 2015; K. Quick & Zhirong, 2011).

Data gaps may limit meaningful public involvement (MPI) in transportation planning and implementation. The literature contains suggestions for overcoming this issue (Barajas et al., 2022; Cantilina et al., 2021; Yarbrough & Smith-Colin, 2023). Consistent with the recommendation for public managers to cede some control to interested parties, surveys (which are commonly featured in public involvement practice) can be designed and distributed by stakeholder groups. Evidence suggests this tool improves response rates and generates more valuable and usable information for public managers and decision-makers (Linovski & Baker, 2023). Thus, a reorientation of transportation public management that appropriately integrates communities and interested parties by utilizing their knowledge of and experiences with transportation systems is viewed as a democratizing and meaningful practice. Possible avenues for achieving this include community-led data collection and analysis, participatory mapping, and encouraging interested parties to design transportation and infrastructure plan alternatives (Karner et al., 2020; Levine & Karner, 2023; McAndrews & Marcus, 2015).

The transportation-specific grey and academic literature contain practical design strategies intended to foster MPI. A recent analysis of all 50 state DOT planning and expenditure processes revealed that the state-centric model predominates and lacks transparency and accountability (Tomer & Swedberg, 2024). Key recommendations include updating and digitizing public-facing communications, developing and tracking performance measures, and empowering community partners to have greater control over the design and implementation of public involvement.

Perhaps the most comprehensive catalogue of techniques and recommendations for public managers is the U.S. Department of Transportation's (2023) *Promising Practices for Meaningful Public Involvement in Transportation Decision-Making* report (hereafter referred to

as *Promising Practices*). The report outlines innovative techniques for both informing the public and gathering input, and it provides tools to utilize within the context of various public involvement techniques. Some techniques and tools are further characterized by the amount of time required to implement, the financial costs involved, and the size of the audience that can be reached. The *Promising Practices* report is elaborated upon later in this analysis, as it informs the analysis.

Research Gap

The literature on transportation-related public involvement is situated at disparate levels of analysis. Some literature is vast and theoretical (Karner et al., 2020; Levine & Karner, 2023). Other literature focuses narrowly on project-specific case studies (Griffin & Jiao, 2019; Karner & Marcantonio, 2018; Linovski & Baker, 2023; Majumdar, 2017; K. Quick & Zhirong, 2011; Slotterback, 2010; Triplett, 2015). At a more granular level of analysis, assessment of public managers and research practitioners is featured (Battista & Manaugh, 2019; Cronley et al., 2021; Fields et al., 2020). In between these poles, some of the literature attempts to develop tools and frameworks for conducting and assessing the effectiveness of public involvement processes and practices (J. Bailey & Grossman, 2023; K. Bailey et al., 2015; Karner & Marcantonio, 2018; National Academies of Sciences, Engineering, and Medicine, 2019; Pira et al., 2020; K. Quick & Zhirong, 2011).

The present study aims to fill two distinct gaps in the transportation-related literature. First, the institutionalized public involvement policies that transportation planners and agencies follow (at least in theory) have not been subject to notable analyses or evaluations. Consequently, little is known about the extent to which transportation planning bodies (e.g., SDOTs) formally articulate their expectations for effective public involvement. Second, comparative analyses that evaluate public engagement practices relative to one another are absent from the literature. A comparative study of state-level public involvement policies can illuminate the differences between policy rhetoric and reality, as well as highlight best practice examples. Such an analysis would benefit both researchers and practitioners, as it could inform the selection of case studies for the former and serve as models for future practice for the latter.

Methodology

The following sections detail the research design, data used, analytical approach, and analysis plan. It concludes with some contextual information about the selected states chosen for this study.

Research design

This study examines public involvement processes in statewide transportation decision-making using a systematic comparative policy analysis of four states. For this analysis, transportation decision-making includes both planning and project development activities (U.S. Department of Transportation, 2023, p. C–1).

The research is designed to answer two research questions: (1) What specific techniques and tools do State Departments of Transportation (SDOTs) employ to involve the public in transportation decision-making? and (2) To what extent do SDOTs' public involvement policies and practices incorporate elements of meaningful public involvement?

This research focuses on public involvement processes in four mid-Atlantic states: Delaware, Maryland, Virginia, and West Virginia. These states were selected, in part, due to their close geographic proximity, which facilitates cross-state learning, as well as relationships to knowledgeable partners within the SDOTs affiliated with the SMARTER Center.

The study employs structured document analysis as its primary analytical technique. The analytical approach is divided into two parts, corresponding to the two research questions that it addresses. The document analysis follows systematic procedures and quality control protocols, as detailed below.

The document analysis is supplemented by insights gleaned from informational interviews with representatives from each SDOT, conducted in January and February 2025. These interviews were informational only, aimed at understanding their process at a high level, establishing relevant SDOT contacts, identifying appropriate policy documents, and assessing the potential for data sharing.

Relevant documents

This study analyzes each state DOT's current public involvement policies (PIPs). Particular focus is placed on the state public involvement process documents required by [23 CFR § 450.210](#), which governs public involvement in the development of long-range statewide transportation plans (LRTPs) and state transportation improvement programs (STIPs). States have additional documents outlining their public involvement processes for project development as required by [23 CFR § 771.111](#). To maintain a reasonable project scope, we limited our analysis to statewide policies, rather than including metropolitan planning organization (MPO) policies that also apply within each state. See **Appendix A** for details on the federal legal requirements for public involvement.

We selected the following documents to review systematically:¹

- Delaware: Public Involvement Policy and 2025-2030 STIP (Delaware Department of Transportation, 2019, 2025)
- Maryland: Action Plan and 2025-2028 STIP (Maryland Department of Transportation, 2011, 2025)
- Virginia: Instructional and Information Memorandum and 2024-2027 STIP (Virginia Department of Transportation, 2019, 2023)
- West Virginia: Public Involvement Process Directive and 2023-2028 STIP (West Virginia Department of Transportation, 2015, 2022)

Along with the STIPs, we intended to assess the latest LRTPs. Following an initial review, we found that the reported public involvement information varied substantially across these documents, making a systematic assessment and comparison impractical.

Analytical approach

The structured comparative policy analysis was facilitated through the development and application of a checklist and rubric.

To answer the first question, we developed a checklist to document the engagement techniques and tools referenced explicitly in the PIPs and STIPs. The checklist started with the

¹ The SDOTs are continually updating their documents, especially the STIPs. For our analysis, we selected the most current documents available as of June 1, 2025. More recent updates may be available from the states at the time of this report's release.

“Techniques for Meaningful Involvement” detailed in Appendix B of the USDOT’s *Promising Practices* report (U.S. Department of Transportation, 2023). The USDOT organized Appendix B by engagement techniques to inform, gather input, and provide tools that can be used in conjunction with these techniques.

To answer the second question, we developed a rubric to characterize the extent to which the document aligns with the USDOT’s recommendations for MPI in general and in its specific practices (see **Appendix B**). For instance, a PIP may mention the use of a website, satisfying the checklist item for that tool. With the rubric, we examined the documents more closely to assess whether they aligned with specific MPI recommendations, such as incorporating mobile functionality, adhering to Section 508 guidelines, and translating content into relevant languages (pp. B-57-B-58). The report also made multiple recommendations throughout the main text, which we included separately in a “general” category of the rubric. The recommendations were identified using phrases like “public involvement should...”.

For each recommendation in the rubric, we assigned a score of “1” if the state document explicitly mentioned that the relevant practice, tool, or strategy is being or could be used. A score of “0” was assigned if there was no mention of the practice in the document. This binary approach provides a clear indication of the presence or absence of documented public engagement practices aligned with MPI.

To ensure rigor and reliability in the coding process, a multi-evaluator approach was implemented, drawing on methodologies established in plan evaluation literature and previous research (Barnes et al., 2025; Norton et al., 2018). Three researchers were involved in coding the documents. Each researcher individually coded all documents using the rubric. Comparisons of this independent coding step helped identify initial discrepancies in the interpretation or application of the rubric. Afterward, the three researchers convened to reconcile scores for each document and each rubric item. The reconciliation process involved discussion and consensus-building to produce a single, agreed-upon set of scores and associated text segments for all rubric items across all documents. We then compiled the reconciled data into a central coding sheet for subsequent analysis.

The qualitative coding was completed using an adapted Microsoft Excel-based workbook created by the Centers for Disease Control, which has been used for identifying themes and categories in qualitative data sources, such as interviews, focus groups, and other

written or spoken materials (Nestor, 2023). The adaptability of this previously validated analysis tool enabled the researchers to apply a more granular, three-level coding scheme comprising broad codes, specific codes, and subcodes. Broad codes were identified from the USDOT Promising Practices rubric as “General Practices,” “Techniques to Inform,” “Techniques to Gather Input,” and “Tools.” Three broad codes have associated specific codes and subcodes (i.e., Techniques to Inform, Techniques to Gather Input, and Tools), while the “General Practices” category is two-levels with only specific codes. This process is similar to methods used in other policy or plan evaluation studies to enhance coding consistency and reliability (Norton et al., 2018).

Analysis plan

Identifying patterns and innovative techniques or practices

To answer the first research question, we used the checklist to facilitate cross-state comparisons, identifying the techniques and tools that are more commonly mentioned in the documents of our study states and those that may warrant further elaboration for cross-state learning. To answer the second question, we use the same approach but with the rubric. These analyses were intended to provide indications of the breadth (question 1) and depth (question 2) of public involvement policies and practices within the states.

Modes of engagement

Advances in digital technologies and shifting cultural preferences have enabled the broader dissemination of information to the public through digital options, such as websites and social media. Additionally, the COVID-19 pandemic highlighted the limitations of in-person-based public involvement techniques, such as public meetings and public hearings. SDOTs transitioned to including virtual engagement options, such as virtual meetings. Many of the other engagement practices in the checklist could be used virtually to disseminate information and gather input, such as online surveys. Low-cost tools are available to facilitate these digital and virtual options.

A significant downside of this shift to virtual public involvement (VPI) is the digital divide, which occurs when specific segments of the public lack reliable or convenient access to

digital technologies, potentially hindering their participation (Lythreath et al., 2022). The USDOT (2023) recommends that SDOTs employ multiple modes of engagement, including in-person, digital or virtual, and by mail or phone. Thus, we examine the extent to which each state employs various modes of engagement for informing and gathering input.

We coded each technique to inform or to gather input across three modes: (1) whether the technique can be used in-person; (2) whether the technique can be used virtually; and (3) whether the technique targets mail or phone communication. Each technique was coded as “1” if the technique can be used by [mode], and “0” if not. We can then evaluate the multi-modal potential of the techniques mentioned for each state.

About the States

The four states included in the analysis differ markedly in several ways (see **Table 1**). From a geographic and population standpoint, Virginia is the largest and most populous state in the sample, covering nearly 40,000 square miles with a population of 8.8 million. Delaware is the smallest and least populous state, covering just under 2,000 square miles and home to over 1 million people. Virginia, Maryland, and Delaware all have Hispanic or Latino populations between 10% and 12%, while West Virginia’s Hispanic or Latino population is less than 2% of the state’s total. West Virginia is the third most rural state in the country, with over 55 percent of its population considered rural. In comparison, Maryland is the least rural state among the four, with only 14.4 percent of the population considered rural (Maryland is ranked the 37th most rural state).

From a transportation perspective, Virginia has the most lane miles (approximately 265,000) and the largest transportation budget (\$9.2 billion) among the four states. In comparison, Delaware has the fewest lane miles and the smallest transportation budget (\$1.1 billion). A significant majority (between 80% and 90%) of roadways in Delaware, Virginia, and West Virginia are state-constructed, -maintained, and -owned. In contrast, Maryland’s roadway ownership is split between the state, county, and municipal levels (FHWA, 2024).

All states are serviced by Amtrak and major metro area commuter rail service, with commuter trains in Virginia, Maryland, and West Virginia serving Washington, D.C., and commuter trains in Delaware serving Philadelphia.

Table 1: Key Context Indicators

	Virginia	Maryland	Delaware	West Virginia
Population (2024)	8,810,000	6,260,000	1,050,000	1,770,000
Percent Hispanic or Latino (2020)	10.5	11.8	10.5	1.9
Size (sq. miles of land)	39,449	9,707	1,949	24,038
Counties or county equivalents	95	23	3	55
Percent “Rural” (Census definition)	24.4	14.4	17.4	55.4
Transportation Budget (FY23 \$M)	9.248	5.229	1.131	1.790
Roadway Lane Miles	265,624	115,342	23,178	129,179

Sources: US Census Bureau, NASBO (trans. budgets), FHWA (lane miles)

Findings: Techniques and Tools

The following section describes the findings of this analysis with respect to research question (1): What specific techniques and tools do State Departments of Transportation (SDOTs) employ to involve the public in transportation decision-making? We discuss the overall patterns observed across the states, as well as several insights regarding the dominance of traditional involvement techniques, inconsistencies between state documents, and the limited evidence of intentional multi-model involvement strategies.

Overall patterns across the states

Our analysis revealed wide variation in public involvement techniques and tools specifically noted in the states’ PIPs or STIPs. In terms of prevalence, across the eight documents, the states mentioned two of the six techniques to inform (briefings and social media), eight of the 20 techniques to gather input (public meetings and open houses, public hearings, workshops and retreats, interactive broadcasts, surveys, key partner interviews, partner or community hosted meetings, non-traditional events), and seven of the eight tools that can be used

with the techniques (websites, public information materials, media outreach strategies, virtual presentations and simulations, videos, electronic content management systems) (see **Table 2**). Half of the possible involvement techniques or tools (17 out of 34) described in the *Promising Practices* report were not mentioned in the state documents, including more innovative techniques such as games and contests.

An important caveat: the absence of mention of these techniques or tools does not mean that the state does not employ them in its public involvement activities. Instead, it means that their PIPs or STIPs did not specifically mention using them. It is quite possible that the states employed more techniques or tools that did not make it into their final documents. Further research would be needed to determine if the techniques or tools not mentioned in the documents were in use in each state.

Table 2. Involvement Techniques and Tools Mentioned in State Documents

	In-Person	Virtual	Mail or Phone		MD	WV	DE	VA
Technique to Gather Input								
Public Meetings and Open Houses	Yes	Yes	No	7	2	1	2	2
Public Hearings and Open Forum Hearings	Yes	Yes	No	6	1	1	2	2
Workshops and Retreats	Yes	Yes	No	5	1	2	2	0
Interactive Broadcasts	No	Yes	No	4	1	1	1	1
Surveys	Yes	Yes	Yes	3	1	0	1	1
Key Person Interviews	Yes	Yes	No	1	1	0	0	0
Partner or Community Hosted Meetings	Yes	Yes	No	1	1	0	0	0
Nontraditional Events	Yes	Yes	No	1	1	0	0	0
Technique to Inform								
Briefings	Yes	Yes	No	7	2	1	2	2
Social Media	No	Yes	No	6	2	1	1	2
Tool								
Websites				8	2	2	2	2

Public Information Materials				8	2	1	2	2
Media Outreach Strategies				8	2	2	1	1
Virtual Presentations and Simulations				4	1	1	1	1
Videos				3	0	1	1	1
Geographic Information Systems				2	0	0	1	1
Electronic Contact Management Systems				2	1	1	0	0
<i>Note: * 1 indicates mention in one of the two state documents; 2 indicates mention in both state documents; 0 indicates no specific mention</i>								

Presuming each state could mention each technique or tool in two documents, we calculate the incidence of mentions across the states as an indicator of the breadth of involvement techniques. For the 34 possible techniques and tools, each state could have 68 mentions. According to our analysis, Maryland mentioned 31% of the possible techniques and tools, Delaware mentioned 29%, Virginia mentioned 28%, and West Virginia mentioned 24%. For each type of technique (gathering input and informing), Maryland consistently had the highest incidence of mentions, while West Virginia had the fewest. Delaware and Virginia had similar mentions. This pattern is notable, given the context we provided above. West Virginia has a small state transportation budget and a largely rural population with extensive lane miles, which may translate to fewer resources for conducting its public involvement process compared to other states. Public involvement can be resource-intensive, especially as more techniques or tools are added to the mix.

Traditional approaches

The states are using traditional techniques in their public involvement processes. Of the 34 possible techniques and tools, only websites, public information materials, and media outreach were mentioned in all eight documents. Briefings and public meetings/open houses were mentioned in seven of the eight documents (not in West Virginia's STIP involvement summary). Other common techniques included public hearings, workshops, and social media. Less common were mentions of interactive broadcasts (such as hosting public meetings on Zoom or Teams) and surveys. Key person interviews and partner/community-hosted meetings were only mentioned in Maryland's documents.

These more traditional public involvement techniques (such as state-led hearings and websites) differ from more innovative techniques identified in the literature. Several authors argue that community-led meetings lead to more effective engagements, and stakeholder-administered activities like workshops, surveys, and mapping exercises produce more reliable and usable data (Karner et al., 2020; Levine & Karner, 2023; Linovski & Baker, 2023; McAndrews & Marcus, 2015; Tomer & Swedberg, 2024). Of the two main power-ceding MPI practices identified in the coding scheme—utilizing community representatives to help SDOTs recruit for engagement opportunities and attending partner or community-hosted meetings—only Maryland’s STIP mentioned engagement through partner or community-hosted meetings. The other STIPs or PIPs were not recognized for mentioning power-ceding practices, suggesting that the top-down and state-led approach to public engagement described in the literature review remains dominant within these states.

Notably, Maryland was highlighted explicitly for its involvement techniques in the *Promising Practices* report in the sections on public hearings and non-traditional events (pp. B-38, B-32). The report did not explicitly mention the other three states.

Document consistency

The techniques and tools mentioned were not consistent across the same state’s documents, suggesting a potential lack of policy coherence, although the explanations appear more trivial. For example, Maryland’s PIP outlines how it distinguishes between public meetings, public hearings, and workshops, whereas its STIP only mentions using public meetings. Similarly, West Virginia’s PIP distinguishes public meetings, public hearings, and workshops, but only mentions workshops in its STIP. In these cases, the differences are inconsequential; the states each used some public meeting format to gather input from the public on their STIP.

For another example, Delaware’s PIP mentions interactive broadcasts, virtual presentations/simulations, surveys, and videos as involvement techniques or tools, while they were not mentioned in the STIP. Delaware’s STIP description of its public participation offers only “a brief listing of outreach efforts” (p. 5). Without further documentation, it is unclear what additional steps the state took as part of its public participation process for the STIP. By contrast, Maryland’s STIP had mentions of interactive broadcasts, virtual presentations/simulations,

surveys, key person interviews, and partner/community-hosted meetings, which were not mentioned in its PIP. The differences within each state may reflect states doing less (or more) than planned or inattention to detail in reporting.

Additionally, the variability across documents likely reflects institutional influences during document production. In each case, a substantial amount of time elapsed between the publication of the state's PIP and its latest STIP. VPI and other more innovative techniques are more likely to be mentioned in recent documents, as MPI policy design, professional practices, and evidence of effectiveness have evolved significantly over the past few decades. Different authors prepared the documents, likely bringing different styles and understandings.

Ultimately, the variation within each state's documents reinforces the decision to code multiple state documents to capture the breadth of public involvement opportunities and practices. Again, we acknowledge that our limited data constrains the conclusions that can be drawn without further investigation of the document preparation process.

Modal integration

The states are employing techniques that could be conducted in multiple modes. Each state mentioned both virtual-only options (social media and interactive broadcasts) in at least one of its documents. Each state mentioned several options that could be conducted in-person or virtually, such as briefings and public meetings. Of the five possible techniques that could be conducted by mail or phone (surveys, visual preference surveys, hotlines, telephone outreach, and voting/polling), only surveys were mentioned within the documents. Maryland's STIP mentioned using online surveys. Of the five possible techniques that could be used only in-person, none of the states specifically mentioned using those methods. Thus, we can generously infer that the states intend to conduct their involvement across multiple modes. Yet the closest mention we found to a deliberate multi-modal strategy was from Virginia's STIP: "Since 2019, VDOT has implemented policy requiring enhanced public involvement (which includes virtual components) on all VDOT sponsored planning studies" (p.16).

Findings: Meaningful Public Involvement

Having identified the breadth of techniques and tools mentioned in the state documents, the following section details findings in response to research question (2): To what extent do

SDOTs’ public involvement policies and practices incorporate elements of meaningful public involvement? According to the *Promising Practices* report, “USDOT defines meaningful public involvement as a process that proactively seeks full representation from the community, considers public comments and feedback, and acts on that feedback to incorporate into a project, program, or plan.” (p.11).

In developing our rubric, we identified sixteen general practices described in the main text of the *Promising Practices* report that further underlie MPI. We identified an additional 138 recommended involvement practices that relate to particular techniques and tools discussed in Appendix B of the report. See **Appendix B** at the end of this report for the list of items in our rubric. The following sections describe mentions of general and specific practices aligned with the MPI recommendations in the state documents. The mention of these practices implies depth in public involvement beyond the breadth provided by various techniques and tools.

Use of general MPI practices

Our analysis reveals that states are making some moves towards meaningful public involvement, but they fall short of the ideal (see **Table 3**). All eight documents described processes that sought to avoid the “undesirable outcome” of “one-sided public involvement limited only to taking comments at required public hearings” (PP, p.4) by mentioning two-way communication opportunities, such as those during public meetings and workshops. All four states also had at least one document that avoided “a reliance on one-size-fits-all methods of community engagement [that] is counterproductive to the goals of meaningful public involvement” (p.3) by explaining how and when different techniques and tools might be applied, depending on the circumstances.

Table 3. General MPI Practices Mentioned in State Documents

	Prevalence Across Documents	Mention in State Documents*			
		MD	WV	DE	VA
General MPI Practices					
Avoid one-sided (monologue) public involvement	8	2	2	2	2
Make public aware of how their feedback was used	6	2	1	2	1

Avoid "one size fits all" methods	5	2	1	1	1
Provide virtual public involvement options	5	1	1	1	2
Seek broad community representation	5	2	1	1	1
Provide ADA accommodation	5	1	2	0	2
Convenient meeting times and locations	4	2	0	1	1
Accommodate people with Limited English Proficiency	4	2	1	0	1
Include people who are underserved and understand their needs	3	2	0	0	1
Utilize data and surveys to ensure representativeness	2	0	0	1	1
Develop and Implement a Community Participation Plan	2	1	1	0	0
Public involvement at all stages, including operations and service provision	0	0	0	0	0
Accountability tactics/self-evaluations on public involvement effectiveness	0	0	0	0	0
Utilize community representatives to help recruit participants	0	0	0	0	0
Host forums with underserved communities early in the process	0	0	0	0	0
Develop internal community involvement capacity and culture	0	0	0	0	0
<i>Note: * 1 indicates mention in one of the two state documents; 2 indicates mention in both state documents; 0 indicates no specific mention</i>					

All four states had some mention of the general practices of “making the public aware of how their feedback was used” (PP, p.4), employing virtual public involvement options (p.3), and seeking broad community representation (p.6). Three of the four states had some explicit mention of providing disability accommodations, using convenient times and locations for meetings, and accommodating people with limited English proficiency (which are all legally required). Two of the states explicitly mention how they use data or surveys to determine the relevant “publics” for outreach (pp.6-7), or develop an explicit “Community Participation Plan” that is more tailored than the statewide processes (pp.12-15).

Notably, the studied documents do not explicitly mention five of the 16 general practices identified in the *Promising Practices* report. First, the report begins with the “aim to incorporate meaningful public involvement into each stage of the transportation decision-making process and project lifecycle, including operations and service provision.” (p.2). The selected documents only outline the statewide long-range planning, transportation improvement, and project planning processes, and do not cover the later stages of project implementation. Nevertheless, several of

the state documents express their intention to conduct public involvement throughout the long-range planning, transportation improvement, and project planning processes, which aligns with the FHWA requirements for “early and continuous” involvement opportunities (see **Appendix A**).

Second, none of the states explicitly mentioned the general practice of using community representatives to recruit participants (PP, pp.6 and 9). Third, none of the states explicitly mentioned organizational accountability tactics to review the effectiveness of their involvement processes (pp.4 and 16) or how they are internally developing a culture that fosters community engagement (pp.11-12). As we noted above, the lack of mention does not mean the states are not engaged in these activities in some form; rather, the state documents do not mention what they are doing or might do on these fronts.

As above, Maryland leads by mentioning 57% of the possible general practices, followed by Virginia with 43%, West Virginia with 33%, and Delaware with 30%. Notably, two general practices not mentioned by Delaware are legally required by the USDOT regulations (providing accommodations for persons with disabilities and those with limited English proficiency) (see **Appendix A**). Likewise, one general practice that is legally required by USDOT regulations (holding meetings at convenient times and locations) was not explicitly mentioned in West Virginia’s documents. In those two cases, the practices may have been assumed by their document authors but not expressly stated. Similarly, “convenient” is in the eye of the beholder, and we coded convenience in the documents when the state specifically mentioned some consideration of timing or location.

For this reason and others, we rely less on the seemingly precise frequency counts and instead focus on the language in the text segments we coded for specific MPI practices, as described in the section below.

Mention of specific MPI practices

According to our analysis, only 35 of the 138 specific MPI practice recommendations were mentioned in the studied documents (see **Table 4**). Overall, Maryland’s documents exhibited the most mentions of specific MPI practices at 11% of the possible practices, while Delaware had 4% and Virginia and West Virginia had 5%. In particular, Maryland’s PIP had the most MPI mentions of the eight documents, with 20 of the 138 possible specific practices.

Table 4. Specific MPI Practices Mentioned in State Documents

			Prevalence Across Documents	Mention in State Documents *			
Tech/Tool	ID	Promising Practices		MD	WV	DE	VA
Techniques to Inform							
Briefings	17.2	<i>It should demonstrate consideration of the needs of the group, tailoring the briefing content and presentation accordingly.</i>	2	1	0	1	0
Techniques to Gather Input							
Interactive Broadcasts	28.1	<i>The plan should ensure direct and immediate access for people who cannot attend in-person meetings.</i>	1	1	0	0	0
	28.3	<i>The plan should consider language interpretation and captioning.</i>	1	0	1	0	0
Non-traditional Events	31.1	<i>The plan should identify and participate in events frequented by underrepresented communities.</i>	1	1	0	0	0
Public Hearings/ Open Forum Hearings	34.1	<i>The plan should allow for written comments and private sessions with a transcriber.</i>	3	1	1	1	0
	34.2	<i>It should provide qualified interpreters for people who use languages other than spoken English, including sign language.</i>	1	1	0	0	0
	34.3	<i>The plan should prioritize outreach to underserved communities by advertising in local, culture-specific media (print and online).</i>	1	1	0	0	0
	34.4	<i>It should ensure accessible locations for in-person hearings.</i>	2	1	0	1	0
Public Meetings/ Open Houses	35.1	<i>The plan should emphasize what the project means for the community and why people should attend.</i>	1	0	0	0	1
	35.2	<i>It should schedule events at convenient times for a range of participants (evenings, weekends).</i>	1	1	0	0	0

			Prevalence Across Documents	Mention in State Documents *			
Tech/Tool	ID	Promising Practices		MD	WV	DE	VA
	35.3	<i>The plan should hold meetings at accessible locations.</i>	5	2	0	1	2
	35.5	<i>The plan should provide multilingual staff or interpreters.</i>	1	1	0	0	0
	35.6	<i>It should use multiple formats for announcements, including media for different language and cultural audiences.</i>	4	2	1	0	1
Surveys	38.5	<i>The plan should offer surveys in multiple languages.</i>	1	0	0	0	1
Workshops and Retreats	42.3	<i>The plan should address language needs through interpreters and translated materials.</i>	2	1	1	0	0
	42.4	<i>It should consider readily available locations and timing.</i>	1	0	0	1	0
Tools							
Websites	43.3	<i>The plan should require professional translation of the website into all relevant languages in the project area.</i>	1	1	0	0	0
	43.6	<i>It should clearly provide contact information for appropriate personnel.</i>	1	1	0	0	0
	43.7	<i>The plan should offer materials in downloadable formats.</i>	1	0	0	0	1
	43.8	<i>It should include information on how to get involved, meeting announcements, and timelines.</i>	3	1	0	1	1
	43.9	<i>The plan should consider a comment box with timely responses.</i>	2	0	0	0	2
Virtual Presentations/ Simulations	44.1	<i>The plan should ensure visuals help people with limited reading skills understand content.</i>	1	0	0	1	0
	44.3	<i>The plan should allow viewing at participants' convenience on various devices.</i>	1	0	1	0	0

			Prevalence Across Documents	Mention in State Documents *			
Tech/Tool	ID	Promising Practices		MD	WV	DE	VA
Electronic Contact Management Systems	45.1	<i>The plan should emphasize the importance of including varied community members and interested parties on contact lists.</i>	2	1	1	0	0
	45.2	<i>It should outline how lists will be maintained and updated to reflect changes in the community.</i>	1	1	0	0	0
	45.3	<i>The plan should ensure that contact lists are used to reach out to underrepresented groups for involvement opportunities.</i>	1	0	1	0	0
Geographic Information Systems	46.1	<i>The plan should ensure GIS maps are easily understandable and potentially interactive.</i>	1	0	0	1	0
Public Information Materials	47.1	<i>The plan should require tailoring content to reach specific audiences, including cultural considerations.</i>	2	1	1	0	0
	47.2	<i>It should mandate the translation of materials into relevant languages.</i>	2	1	0	0	1
	47.3	<i>The plan should emphasize distribution through multiple channels to reach a broad audience.</i>	6	2	1	1	2
	47.4	<i>It should prioritize visually appealing materials with minimal text and accessible language.</i>	2	0	0	1	1
Media Outreach Strategies	48.1	<i>The plan should include the use of multiple forms of media to engage people at different times and through various channels.</i>	5	2	2	0	1
	48.2	<i>It should consider low or no-cost media to reach a wider audience.</i>	5	2	2	0	1
	48.3	<i>The plan should specify outreach to ethnic media to reach in-language speakers.</i>	2	2	0	0	0
Note: * 1 indicates mention in one of the two state documents; 2 indicates mention in both state documents; 0 indicates no specific mention							

The most common MPI practices mentioned in the documents are related to communicating with the public. The practice mentioned most frequently, in six documents, referred to public information materials, with five of the six documents noting the use of multiple modes of distribution (see also following paragraph).

Similarly, five of the documents mention MPI in their media outreach strategies, specifically: “Use multiple forms of media to engage people at different times of day, on different media devices, and in different ways such as watching TV at home, reading a newspaper online or in print, listening to the radio in a car, on social media platforms interacting with friends and family, or driving through the project area” and “Include forms of media that are low or no cost to consume, such as billboards, posters, transit ads, radio, and TV” (PP, p.B-69). We coded documents as having the first practice if they mentioned more than one media form. For instance, West Virginia’s PIP mentioned using a wide range of media, including placing “notices in newspapers, mail, radio, television, billboards, road signs and the internet” (p.2). We coded documents as having the second practice if they mentioned using social media for outreach, which is a low- to no-cost medium for the user and is also a stand-alone technique for informing the public.

A similar practice was mentioned for announcing public meetings in four of the documents: “Use multiple formats in print, online, and through electronic communications for event announcements, including using media to advertise for audiences that use languages other than English, and ethnic or cultural media” (PP, p.B-41). Only Maryland’s PIP mentioned using non-English language media for announcements (p.7).

The second most common MPI practices mentioned in the state documents related to the location of public meetings and hearings. Five of the documents (across three states) mentioned this practice with respect to public meetings. For instance, Virginia’s PIP mentioned, “meetings should be held in a school, library or other public building if possible. Other sites such as a community or recreational center may also be suitable for these meetings” (p.5). Similarly, Maryland’s STIP states, “These meetings are hosted by local jurisdictions and held at different local venues, including county buildings, community centers, local boards of education, and public libraries that are transit accessible locations with variable starting times to accommodate varying work schedules” (p.29). Delaware’s STIP also states, “The meetings are held in public places that are accessible by all normal means of travel” (p.47).

The term “accessible” has different meanings throughout the documents. When it comes to public participation at meetings, we initially envisioned location accessibility as a location that accommodates persons with physical disabilities as defined by the Americans with Disabilities Act (ADA). The *Promising Practices* report included a **general practice** stating, “Locations where public involvement takes place must be ADA compliant and accessible to people with disabilities” (p.9). Nevertheless, ADA compliance was not explicitly mentioned in the studied documents, but may have been assumed or implied by the document authors. Instead, five of the documents mentioned having some accommodation or arrangement for “persons with disabilities” at public meetings, which is broader and includes physical and other disabilities, such as vision or hearing. For instance, West Virginia’s STIP mentioned using closed captioning for its virtual public workshops.

We observed multiple mentions of making materials accessible to the public with limited English proficiency, such as through **translation** or other culturally sensitive communication methods. For instance, Maryland’s PIP explained, “brochure and meeting materials will be prepared in languages other than English, depending on the demographics of the study-area communities” (p.18). Likewise, Maryland’s PIP states, “SHA will provide interpreters or translation services at meetings free of charge” (p. 8). West Virginia’s STIP mentioned, “The WVDOT provided, upon request, for reasonable accommodations to provide language interpretation for people with LEP and translations of written materials necessary to access project information” (p.2). Additionally, Virginia’s STIP mentioned, “TMPD [planning division] and VDOT districts conducted nearly 40 online surveys including several second language versions of some surveys.” (p.435). Similarly, Virginia’s STIP states, “TMPD’s public information meeting brochures all include Title VI information, which includes details on how to get more information or special assistance for persons with disabilities or limited English proficiency” (p.435).

Several MPI recommendations in the *Promising Practices* report relate to making materials, events, or activities inviting in other ways. Delaware and Virginia’s PIPs note that public information should include engaging visuals that are accessible to broader audiences that may not appreciate or consume text-heavy materials. Delaware’s PIP (p. 6) states that “video or slide shows with visualizations of [a] project and other graphic tools, such as interactive maps, should be considered to help the public understand the presented information,” while Virginia’s

PIP (p. 6) talks about the importance of project renderings, aerial photography, and 3-D illustrations. Several MPI recommendations related to accessing event materials online, immediately, for mobile devices, or for download were mentioned sporadically.

Another grouping of MPI practices mentioned in the studied documents involves considering the needs of the affected community, including engagement with non-majority groups. For instance, the PP report recommends that engagement should demonstrate consideration of the needs of the group, tailoring the briefing content and presentation accordingly (p.B-4). Maryland’s PIP recommends hosting a “targeted meeting with local help to facilitate (e.g., attending local festivals such as those for Spanish-speaking populations)” (p.8). Similarly, the PP report recommends that agencies ensure contact lists are used to reach out to underrepresented groups for involvement opportunities (p.B-61). West Virginia’s PIP notes “In addition, the public involvement strategy shall consider how to involve any affected person or persons that qualify under Title VI of the CRA, EJ or ADA of 1990” (p.4).

A final grouping of MPI practices mentioned in the documents related to how people can provide comments or otherwise contact the key personnel involved in the engagement process. For instance, Virginia’s PIP advised “As a best practice, public comments may also be received online through the VPI concurrent with the public meeting” (p.5). Similarly, Delaware’s PIP directed that the “website will be updated regularly to include new outreach activities” (p.2) and Maryland’s PIP directed that “Individuals to contact for project information are noted” on its website (p.6).

Discussion

Having established what techniques or tools states employ and how well their practices align with recommendations for MPI, we turn to examining the relationships between the findings and their broader implications for practice.

Technique adoption and MPI alignment

The findings reported above illustrate a complex relationship between a state’s adoption of involvement techniques or tools and its alignment with MPI principles as outlined in the *Promising Practices* report (see **Table 5**), at least as evidenced by mentions in the studied documents.

Table 5. Share of Public Involvement Practices Mentioned in the State Documents

	Share of mentions by state			
	Maryland	West Virginia	Delaware	Virginia
Techniques and tools (n=34)	31%	24%	29%	28%
General MPI practices (n=16)	57%	33%	30%	43%
Specific MPI practices (n=138)	11%	5%	4%	5%

Maryland consistently mentioned more involvement techniques and tools, as well as more general and specific MPI practices, than the other states, reflecting both breadth and depth. Its documents appear more aligned with the principles and practices of MPI than documents in the other three states. This result may reflect a leadership preference or an organizational commitment to enhancing the public involvement experience beyond the legal requirements described in Appendix A. This result may also reflect the state's heterogeneous population, or some other contextual factor distinguishing the state from its peers.

By contrast, the adoption of techniques or tools and alignment of practices with MPI recommendations is not consistent across the other three states. For instance, despite its small size, Delaware made nearly as many mentions of techniques and tools as Maryland, but also had the lowest alignment with MPI practices, both general and specific. By contrast, West Virginia has the fewest mentioned techniques and tools of the four states, but higher alignment with MPI practices than Delaware, despite being the most demographically homogenous and rural state. Virginia appears in the middle range of all indicators, despite being the largest state in population, land area, transportation budget, and roadway lane miles.

Institutional logics

Understanding these patterns requires examining the contextual factors and strategic decisions that shape how states translate federal or state involvement requirements into practice. The specific combinations of techniques, tools, and practices may reflect the presence of institutional logics regarding public involvement in SDOTs. In brief, "An institutional logic is the set of material practices and symbolic systems including assumptions, values, and beliefs by

which individuals and organizations provide meaning to their daily activity, organize time and space, and reproduce their lives and experiences” (Thornton et al., 2012, abstract).

In this study, many of the mentioned practices appear to correspond with the federal legal requirements for public involvement described in Appendix A, suggesting a straightforward “compliance-driven” logic may be operating within the SDOTs. By contrast, the USDOT argued that MPI “should be a core organizational competency integrated into all aspects of your work and transportation decision-making” (U.S. Department of Transportation, 2023, p. 5). In this way, the USDOT has articulated a normative institutional logic around MPI that appears innovative and potentially transformative if widely practiced.

Documenting and analyzing institutional logics are beyond the scope of this study. Nevertheless, we might conceive of a “compliance-innovation” spectrum that spans broad approaches to public involvement, with possible levels as:

1. Minimal compliance: meets basic federal requirements with standard techniques for public involvement. For example, the state might hold required public hearings with conventional notification channels and comment opportunities.
2. Enhanced compliance: exceeds federal requirements through quality improvements to involvement techniques. For example, the state may hold required public hearings with multiple accessibility accommodations, such as accessible locations, language options, visual information, and digital access.
3. Strategic innovation: adapts techniques to address specific state contexts. For example, using information tables in the SDOT’s district offices to address a more rural geography and a less digitally connected population.
4. Transformative practice: reimagines public involvement processes through intentional shifts in power over decision-making from the state to the community, as described in the literature review.

These approaches, along with the associated choice of involvement techniques, tools, or practices, may be influenced by factors such as available resources and administrative capacity. The approaches may also be influenced by social learning (Hall, 1993), considering that state PIPs and STIPs have evolved in response to substantial public interactions within their respective contexts.

The orientation of this study, which focuses on documenting public involvement practices, appears to align with the “practice-centric perspective” on institutional logics recently proposed by Schildt and Kodeih (2025). Future research could extend this study using in-depth interviews and further document analysis to trace the presence, evolution, and effect of institutional logics on public involvement in state transportation decision-making.

Implications for state practice

The states in our sample are offering public involvement opportunities, but the practices they are using are traditional in nature. Mentions of public meetings, hearings, workshops, and announcements in print (and digital) media were present in most, if not all, of the documents (see **Table 2**), and these forms of public engagement have a long history within planning and public administration practice. Where the states are tending to fall short, at least in terms of what they report in their PIPs and STIPs, is in the more innovative and contemporary practices identified in *Promising Practices*, especially those that are self-reflective and those that provide greater agency and control to the public. None of the states mentioned efforts to build internal capacity and an administrative culture of public involvement. None of the states mentioned assessing the effectiveness or the public’s satisfaction with their public involvement opportunities and practices. None of the states mentioned leveraging community or stakeholder contacts to co-design and distribute surveys or other information-gathering methods. None of the states mentioned efforts to deliver scenario planning, visioning exercises, or charrettes.² States could begin to experiment with these more innovative practices and tools, while still retaining their traditional public involvement posture. Doing so could enhance the effectiveness of transportation planning and project development, since the conventional methods are limited in their ability to reach broader populations and elicit more meaningful insights from interested parties (Levine & Karner, 2023; Linovski & Baker, 2023).

There is also a need to revise each state’s PIP and bring it up to date. The most recent PIPs in our sample were from 2019 (DE and VA), while the oldest was from 2011 (MD), indicating that each state’s most up-to-date public involvement policy was created before the

² This is not surprising, since scenario planning, visioning, and charrettes are often project-specific activities and our analysis centered on institutional policies and the larger STIP process. It is quite possible that at the project level, states are implementing these public involvement opportunities.

COVID-19 pandemic. Since then, social and technological changes have amplified the desirability and usefulness of virtual public involvement techniques and strategies. Each state could therefore revisit its PIP and refresh it with the virtual engagement options they were forced to implement in 2020, and continue to implement post-COVID.

Relatedly, we noticed inconsistencies between the scoring of each state's PIP and STIP documents. In theory, the PIP should establish the standard for the types of public involvement practices that will be implemented in transportation planning, such as the development of the STIP. Therefore, the STIP should accurately reflect the policies outlined in each PIP, ensuring alignment between the two. However, our analysis revealed that each state's STIP is not fully aligned with the PIP. This incongruence could be interpreted in several ways. First, the public managers who implement public involvement for a STIP may not faithfully follow the standards outlined in their state's PIP. In some areas, they may go above and beyond what is expected according to the PIP, while in other areas, they may fall short. Second, it is possible that whoever wrote the public involvement section of their state's STIP did not accurately capture and communicate the full breadth and depth of the public involvement implemented during its development. States could audit their implemented public involvement practices for alignment with their official policies, and they could improve reporting by faithfully communicating what they are actually doing in the public involvement space.

Conclusion

Public involvement in government decision-making is a cornerstone of democratic societies, particularly around matters that are expected to have meaningful societal impacts. Transportation and infrastructure investments and initiatives are viewed in this light, as plans and projects involving these systems reach a large and varied set of interested parties, conferring both significant benefits and costs. Indeed, federal statutes require states to implement public involvement practices for transportation planning and project development. Consequently, public involvement in transportation decision-making is a well-researched topic with a deep well of academic literature to draw from. Much of that literature concludes that public involvement in the transportation sector is lacking, that it does not adequately engage with the broad range of system users and interested parties, and ultimately that it does not deliver on the democratic ideal of reflecting the needs, wants, and outcomes desired by the public (Karner et al., 2020; Karner &

Marcantonio, 2018; Levine & Karner, 2023; McAndrews & Marcus, 2015; Pira et al., 2020; Slotterback, 2010; Van Dort et al., 2019).

Given these critiques, little is known about the official policies that state Departments of Transportation adopt and employ to outline their standards and strategies for public involvement. For this research, we aimed to answer two related questions: (1) What specific techniques and tools do SDOTs employ to involve the public in transportation decision-making? and (2) To what extent do SDOTs' public involvement policies and practices incorporate elements of meaningful public involvement? We selected four neighboring states in the Mid-Atlantic region—Delaware, Maryland, Virginia, and West Virginia—and analyzed their public involvement policies and the most recent State Transportation Improvement Plans to help answer these questions. We utilized the USDOT's (2023) *Promising Practices* report to develop a scoring rubric to evaluate each state's PIP and STIP.

Our analysis illuminated several key findings. First, wide variation exists in public involvement techniques and tools specifically noted in the states' PIPs or STIPs. Only half of the public involvement techniques and tools in the rubric received at least one mention across the eight documents reviewed. Second, the states are using traditional techniques in their public involvement processes, including websites, public information materials, (social) media outreach, briefings and public meetings, public hearings, and workshops. Innovative techniques that cede power to the public were absent, such as utilizing community representatives to help recruit for engagement opportunities and attending partner or community-hosted meetings, with one exception: Maryland's STIP mentioned a single community-hosted meeting. Third, the states are employing techniques that can be conducted in multiple modes. However, the mentions and their text segments do not appear to constitute a deliberate multi-modal engagement strategy.

Fourth, our analysis reveals that the studied states are making some moves towards meaningful public involvement, but they fall short of the ideal. All states had at least one mention of general MPI practices, such as avoiding one-sided (monologue) involvement, informing the public how their feedback influenced decision-making, and providing virtual public involvement options. However, no state offered deeper expressions of MPI, such as involving the public at all stages (including operations and service), self-evaluations for public involvement effectiveness, or developing an internal capacity and culture for public involvement. Fifth, the two most common specific MPI practices mentioned in the documents related to

communicating with the public and the location of public meetings and hearings. Additional specific MPI practices mentioned included making materials available in various forms, providing alternative opportunities for public comment, and tailoring content and outreach to non-majority groups.

This study is limited by its focus on specific mentions of practices within the studied documents. We cannot know for sure if a state is using or plans to use a practice unless it is mentioned, revealing a weakness in the document analysis method chosen for this study. Second, our rubric uses binary coding of mentions, which does not account for the quality or extent of the practice in use. Third, the *Promising Practices* report employs overlapping techniques and tools, which makes the coding more challenging and requires more intercoder reconciliation. Additionally, some of the MPI recommendations in the *Promising Practices* report contained double-barreled clauses, such as “early and often” engagement, which required careful parsing to identify the recommendations in the context of the studied documents. Fourth, this study is limited to the public involvement practices within the four states. The selection was intentional to facilitate cross-state learning within a similar regional context. Additional research into public involvement practices in other states would inform the generalizability of the findings, potentially building on recent work examining all states (Tomer & Swedberg, 2024).

Future research could compensate for some of the limitations of this current effort, especially the limitation introduced by the binary coding of the PIP and STIP documents. Interviews with SDOT planners and their consultants could illuminate whether the documents accurately reflect practice, and to what extent. These interviews could also lead to a greater understanding and analysis of project-specific public involvement strategies. Project-specific data could be analyzed to infer the effectiveness of various state strategies at reaching their intended audience. Furthermore, this study made assumptions to explain some of the variability among the states (e.g., funding levels, geography). Interviews could elucidate other possible interpretations, such as administrative cultures, institutional logics, SDOT leadership strategies, or state political orientations. Additionally, collecting information directly from public participants could provide a valuable additional angle from which to understand the implementation and effectiveness of public involvement practices in state-level transportation decision-making.

Appendix A: Legal Requirements

Federally required public involvement in transportation decision-making

According to the *Promising Practices* report, “FTA and FHWA jointly administer the federally required transportation planning processes in metropolitan areas, as set forth in 49 U.S.C. § 5303 and 23 U.S.C. § 134. In rural areas and on a statewide basis, the statutory provisions for transportation planning are set forth in 49 U.S.C. § 5304 and 23 U.S.C. § 135.”

(p.C-1)

For public involvement in statewide transportation planning, the USDOT requires (in [23 CFR 450.210](#), last updated 2016):

“The State's public involvement process at a minimum shall:

(i) Establish early and continuous public involvement opportunities that provide timely information about transportation issues and decisionmaking processes to individuals, affected public agencies, representatives of public transportation employees, public ports, freight shippers, private providers of transportation (including intercity bus operators), representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, providers of freight transportation services, and other interested parties;

(ii) Provide reasonable public access to technical and policy information used in the development of the long-range statewide transportation plan and the STIP;

(iii) Provide adequate public notice of public involvement activities and time for public review and comment at key decision points, including a reasonable opportunity to comment on the proposed long-range statewide transportation plan and STIP;

(iv) To the maximum extent practicable, ensure that public meetings are held at convenient and accessible locations and times;

(v) To the maximum extent practicable, use visualization techniques to describe the proposed long-range statewide transportation plan and supporting studies;

(vi) To the maximum extent practicable, make public information available in electronically accessible format and means, such as the World Wide Web, as appropriate to afford reasonable opportunity for consideration of public information;

(vii) Demonstrate explicit consideration and response to public input during the development of the long-range statewide transportation plan and STIP;

(viii) Include a process for seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services; and

(ix) Provide for the periodic review of the effectiveness of the public involvement process to ensure that the process provides full and open access to all interested parties and revise the process, as appropriate.”

To implement the public involvement requirements of the National Environmental Policy Act (NEPA) of 1969, USDOT requires (in [23 CFR 771.111](#), last updated 2025):

(h) For the Federal-aid highway program:

(1) Each State must have procedures approved by the FHWA to carry out a public involvement/public hearing program pursuant to [23 U.S.C. 128](#) and [139](#).

(2) State public involvement/public hearing procedures must provide for:

(i) Coordination of public involvement activities and public hearings with the entire NEPA process;

(ii) Early and continuing opportunities during project development for the public to be involved in the identification of reasonably foreseeable social, economic, and environmental impacts, as well as impacts associated with relocation of individuals, groups, or institutions;

(iii) One or more public hearings or the opportunity for hearing(s) to be held by the State highway agency at a convenient time and place for any Federal-aid project that requires significant amounts of right-of-way, substantially changes the layout or functions of connecting roadways or of the facility being improved, has a substantial adverse impact on abutting property, otherwise has a significant social, economic, environmental or other effect, or for which the FHWA determines a public hearing is in the public interest;

- (iv) Reasonable notice to the public of either a public hearing or the opportunity for a public hearing. Such notice will indicate the availability of explanatory information. The notice must also provide information required to comply with public involvement requirements of other laws, executive orders, and regulations;
- (v) Explanation at the public hearing of the following information, as appropriate:
- (A) The project's purpose, need, and consistency with the goals and objectives of any local urban planning,
 - (B) The project's alternatives and major design features,
 - (C) The reasonably foreseeable social, economic, environmental, and other impacts of the project,
 - (D) The relocation assistance program and the right-of-way acquisition process, and
 - (E) The State highway agency's procedures for receiving both oral and written statements from the public;
- (vi) Submission to the FHWA of a transcript of each public hearing and a certification that a required hearing or hearing opportunity was offered. The transcript will be accompanied by copies of all written statements from the public, both submitted at the public hearing or during an announced period after the public hearing;
- (vii) An opportunity for public involvement in defining the purpose and need and the reasonable range of alternatives, for any action subject to the project development procedures in [23 U.S.C. 139](#); and
- (viii) Public notice and an opportunity for public review and comment on a Section 4(f) *de minimis* impact finding, in accordance with [23 CFR 774.5\(b\)\(2\)\(i\)](#).
- (i) Applicants for FRA programs or the FTA capital assistance program:

(1) Achieve public participation on proposed actions through activities that engage the public, including public hearings, town meetings, and charrettes, and seek input from the public through scoping for the environmental review process. Project milestones may be announced to the public using electronic or paper media (e.g., newsletters, note cards, or emails). For actions requiring EISs, an early opportunity for public involvement in defining the purpose and need for the action and the range of alternatives must be provided, and a public hearing will be held during the circulation period of the draft EIS.

(2) May participate in early scoping as long as enough project information is known so the public and other agencies can participate effectively. Early scoping constitutes initiation of NEPA scoping while local planning efforts to aid in establishing the purpose and need and in evaluating alternatives and impacts are underway. Notice of early scoping must be made to the public and other agencies. If early scoping is the start of the NEPA process, the early scoping notice must include language to that effect. After development of the proposed action at the conclusion of early scoping, FRA or FTA will publish the notice of intent if it is determined at that time the proposed action requires an EIS. The notice of intent will establish a 30-day period for comments on the purpose and need, alternatives, impacts, and relevant information, studies, or analyses with respect to the proposed agency action.

(3) Are encouraged to post and distribute materials related to the environmental review process, including, environmental documents (e.g., EAs and EISs), environmental studies (e.g., technical reports), public meeting announcements, and meeting minutes, through publicly-accessible electronic means, including project websites. Applicants should keep these materials available to the public electronically until the project is constructed and open for operations.

(4) Should post all FONSI, combined final EISs/RODs, and RODs on a project website until the project is constructed and open for operation.

Other legal requirements

Additional federal requirements govern public involvement processes, including:

“As required by Executive Order 13166 Improving Access to Services for Persons with Limited English Proficiency [2000], programs and activities receiving Federal funding assistance must take reasonable steps to ensure that people with LEP have meaningful access. All agencies that receive Federal assistance must also comply with Title VI of the Civil Rights Act, and to do so, they must ensure access to its programs and activities to persons with LEP.” (U.S. Department of Transportation, 2023, p. 8)

“Similar to communication with people who have LEP, steps to ensure effective communication with people who have disabilities is required. See 28 CFR § 35.160(a) and 49 CFR § 27.7(c).” (p.9)

“Locations where public involvement takes place must be ADA compliant and accessible to people with disabilities, including restrooms. See 28 CFR §§ 35.130(b)(2), 35.150, and 35.151; 49 CFR §§ 27.7, 27.19(a), and 27.71(e). The ADA also requires information must be available to people with vision or hearing disabilities.” (p.9)

“Providing accessible formats and alternate technology that meet requirements for Section 508 of the Rehabilitation Act of 1973 and Section 255 of the Telecommunications Act of 1996.” (p.9)

Appendix B: Rubric to Assess Meaningful Public Involvement Practices

Type	ID	Promising Practices
GENERAL MPI PRACTICES		
	1	Public involvement at all stages, including operations and service provision
	2	Avoid "one size fits all" methods
	3	Convenient meeting times and locations
	4	Provide virtual public involvement options
	5	Avoid one-sided (monologue) public involvement
	6	Make public aware of how their feedback was used
	7	Accountability tactics/self-evaluations on public involvement effectiveness
	8	Seek broad community representation
	9	Utilize community representatives to help recruit
	10	Utilize data and surveys to ensure representativeness
	11	Include people who are underserved and understand their needs
	12	Accommodate people with Limited English Proficiency
	13	Provide ADA accommodation
	14	Host forums with underserved communities early in the process
	15	Develop internal community involvement capacity and culture
	16	Develop and Implement a Community Participation Plan
SPECIFIC MPI PRACTICES: TECHNIQUES TO INFORM		
Briefings	17.1	<i>The plan should ensure interaction in small group settings with key interested parties from varied backgrounds.</i>
	17.2	<i>It should demonstrate consideration of the needs of the group, tailoring the briefing content and presentation accordingly.</i>
	17.3	<i>For online briefings, the plan should address technology limitations, including Wi-Fi access, device limitations, and platform compatibility with screen readers.</i>

Type	ID	Promising Practices
	17.4	<i>For in-person briefings, the plan should consider accessibility for people with disabilities and proximity to public transportation.</i>
Games and Contests	18.1	<i>The plan should indicate how games and contests will be designed to be accessible and engaging for a wide range of participants with varying levels of prior knowledge.</i>
	18.2	<i>It should consider using these techniques in combination with other tactics that bring people together from varied backgrounds.</i>
Site Visits	19.1	<i>The plan should detail how site visits will be made accessible to all participants, considering transportation, weather, health advisories, and physical accessibility for people with disabilities.</i>
	19.2	<i>It should outline how information will be shared with those unable to attend site visits.</i>
	19.3	<i>The plan should encourage informal interaction between organization representatives and a range of community members and experts.</i>
Social Media	20.1	<i>The plan should include research on the demographics of the community to guide the choice of social media platforms used.</i>
	20.2	<i>It should consider using paid boosts and advertising to increase reach to a wide range of populations.</i>
	20.3	<i>The plan should specify the use of alt text for graphics and compliance with Section 508 requirements for people with visual disabilities.</i>
	20.4	<i>It should include creating posts in multiple languages relevant to the community.</i>
	20.5	<i>The plan should tailor messages for cultural appropriateness.</i>
	20.6	<i>It should consider reaching out to community and public “influencers” for specific audiences.</i>
Speaker's Bureaus and Public Involvement Volunteers	21.1	<i>The plan should consider recruiting multi-lingual speakers to assist with inclusive engagement.</i>
	21.2	<i>It should outline how speakers will be trained to be sensitive to a range of community perspectives.</i>
	21.3	<i>The plan should consider compensating volunteers for their time and effort.</i>
Transportation Fairs	22.1	<i>The plan should indicate efforts to hold multiple fairs in different geographic locations to increase participant diversity.</i>
	22.2	<i>It should schedule fairs at times when attendance can be maximized for various community members (e.g., weekends, evenings).</i>
	22.3	<i>The plan should ensure the availability of multilingual staff or interpreters.</i>

Type	ID	Promising Practices
	22.4	<i>It should acknowledge that attendees are self-selected and plan for other methods to reach a representative sample.</i>
SPECIFIC MPI PRACTICES: TECHNIQUES TO GATHER INPUT		
Brainstorming	23.1	<i>The plan should aim to include community representatives who will be directly affected, representing a cross-section of people with differing opinions.</i>
	23.2	<i>It should utilize trained facilitators to engage less vocal participants.</i>
	23.3	<i>The plan should consider holding monolingual brainstorming sessions in multiple languages.</i>
	23.4	<i>It should provide materials in large print, braille, or tactile graphics.</i>
	23.5	<i>The plan should provide materials that allow for visual expression of ideas.</i>
	23.6	<i>It should offer virtual brainstorming sessions with participation options for people who use assistive technology and provide accessible electronic materials.</i>
Charrettes	24.1	<i>The plan should ensure participation of interdisciplinary teams, interested parties, community members, and organization staff with varied knowledge and perspectives.</i>
	24.2	<i>It should be led by facilitators experienced in collaboration techniques who can ensure equitable participation.</i>
Drop-In Centers	25.1	<i>The plan should consider the location and hours of operation to maximize accessibility for community members.</i>
	25.2	<i>It should ensure staff can interact effectively with visitors.</i>
Focus Groups	26.1	<i>The plan should detail the use of multiple focus groups in different languages, including ASL or other sign language, with qualified interpreters when needed.</i>
	26.2	<i>It should provide materials in large print, braille, and tactile graphics.</i>
	26.3	<i>The plan should consider the cultural background and experiences of participants when selecting facilitators and developing discussion guides.</i>
Hotlines	27.1	<i>The plan should include a 24-hour toll-free 800 number.</i>
	27.2	<i>It should program messages in multiple languages.</i>
	27.3	<i>The plan should use technology that can be adapted for people with hearing disabilities.</i>
Interactive Broadcasts	28.1	<i>The plan should ensure direct and immediate access for people who cannot attend in-person meetings.</i>
	28.2	<i>It should provide multiple ways for viewers to participate (e.g., call-in, online questions, polls).</i>

Type	ID	Promising Practices
	28.3	<i>The plan should consider language interpretation and captioning for broader accessibility.</i>
Interactive Displays and Kiosks	29.1	<i>The plan should aim to place displays in accessible and convenient locations for community members (e.g., shopping centers, parks, public events).</i>
	29.2	<i>It should offer choices to view information in languages other than English.</i>
	29.3	<i>The plan should ensure information is at an accessible reading level.</i>
	29.4	<i>It should display information in a way that is easy to navigate for people with low computer-literacy.</i>
	29.5	<i>The plan should follow Section 508 guidelines for all visuals, including alternative text.</i>
Key Person Interviews	30.1	<i>The plan should provide options for conducting interviews (in-person, online, phone) to accommodate different needs.</i>
	30.2	<i>For interviews with people who prefer languages other than English, the plan should engage an interpreter familiar with the program/project.</i>
	30.3	<i>The plan should aim to interview people from a range of viewpoints, including those in opposition.</i>
Non-Traditional Events	31.1	<i>The plan should identify and participate in events frequented by underrepresented communities.</i>
	31.2	<i>It should tailor outreach materials and engagement methods to the specific audience of the event.</i>
	32.1	<i>The plan should emphasize familiarizing with cultural norms when attending these meetings.</i>
	32.2	<i>It should ask the hosting organization about the best way to present information.</i>
	32.3	<i>The plan should provide meeting materials in advance and translate materials as needed.</i>
Telephone Outreach	33.1	<i>The plan should use technology that can be adapted for people with hearing disabilities.</i>
	33.2	<i>It should program recordings and options in multiple languages.</i>
	33.3	<i>The plan should include a 24-hour toll-free 800 number.</i>
Public Hearings and Open Forum Hearings	34.1	<i>The plan should allow for written comments and private sessions with a transcriber.</i>
	34.2	<i>It should provide qualified interpreters for people who use languages other than spoken English, including sign language.</i>
	34.3	<i>The plan should prioritize outreach to underserved communities by advertising in local, culture-specific media (print and online).</i>

Type	ID	Promising Practices
	34.4	<i>It should ensure accessible locations for in-person hearings.</i>
Public Meetings and Open Houses	35.1	<i>The plan should emphasize what the project means for the community and why people should attend.</i>
	35.2	<i>It should schedule events at convenient times for a range of participants (evenings, weekends).</i>
	35.3	<i>The plan should hold meetings at accessible locations, potentially avoiding formal government buildings for underserved communities.</i>
	35.4	<i>It should prioritize intentional outreach to communities who have not participated in the past.</i>
	35.5	<i>The plan should provide multilingual staff or interpreters.</i>
	35.6	<i>It should use multiple formats for announcements, including media for different language and cultural audiences.</i>
Scenario Planning	36.1	<i>The plan should aim for participant selection that maximizes diversity to achieve equitable public involvement.</i>
	36.2	<i>It should hold workshops in different languages with qualified interpreters.</i>
	36.3	<i>The plan should include materials in braille, large print, tactile graphics, or audio recordings.</i>
	36.4	<i>It should consider offering workshops during evening hours and providing compensation and meals to encourage participation.</i>
Small Group Discussion	37.1	<i>The plan should ensure representation in small groups to capture a range of perspectives.</i>
	37.2	<i>It should use facilitators to encourage participation from all members.</i>
	37.3	<i>The plan should consider language needs within the groups.</i>
Surveys	38.1	<i>The plan should distribute surveys in multiple ways to reach a wide array of audiences, including mail, email, online ads, local media, and CBOs.</i>
	38.2	<i>It should include people most likely to be affected by the decisions.</i>
	38.3	<i>The plan should consider oversampling in areas with hard-to-reach populations.</i>
	38.4	<i>It should provide multiple ways to participate (pre-paid mail, online, toll-free phone).</i>
	38.5	<i>The plan should offer surveys in multiple languages.</i>
	38.6	<i>It should ensure information is at an accessible reading level.</i>
	38.7	<i>The plan should generally avoid automated telephone surveys and use real people in multiple languages.</i>

Type	ID	Promising Practices
	38.8	<i>It should pre-test the survey with representatives of the target groups for cultural appropriateness and accessibility.</i>
Visioning	39.1	<i>The plan should aim for widespread public participation, engaging people with varied perspectives.</i>
	39.2	<i>It should hold virtual sessions with options for assistive technology users.</i>
	39.3	<i>For in-person sessions, the plan should choose accessible locations, considering comfort for all participants.</i>
	39.4	<i>It should consider holding sessions over multiple days and evenings for flexibility.</i>
	39.5	<i>The plan should address language needs through interpreters and translated materials.</i>
Visual Preference Surveys	40.1	<i>The plan should ensure broad use and coordination with other outreach to be indicative of community preferences.</i>
	40.2	<i>It should provide accessible formats for visuals and descriptions for people with visual impairments.</i>
	40.3	<i>The plan should offer opportunities for input in multiple languages.</i>
Voting and Polling	41.1	<i>The plan should widely publicize participation information through various channels.</i>
	41.2	<i>It should consider options for anonymous participation.</i>
	41.3	<i>The plan should provide multiple ways to participate (mail, online, phone).</i>
	41.4	<i>It should offer tools in languages other than English.</i>
	41.5	<i>The plan should ensure accessibility of digital and print materials.</i>
	41.6	<i>It should provide information at an accessible reading level.</i>
Workshops and Retreats	42.1	<i>The plan should aim for participation from community members who may not normally participate as much.</i>
	42.2	<i>It should hire a skilled facilitator to ensure all participants are heard without criticism.</i>
	42.3	<i>The plan should address language needs through interpreters and translated materials.</i>
	42.4	<i>It should consider accessible locations and timing.</i>
	42.5	
SPECIFIC MPI PRACTICES: TOOLS		
Websites	43.1	<i>The plan should ensure websites are functional on mobile devices.</i>

Type	ID	Promising Practices
	43.2	<i>It should mandate adherence to Section 508 guidelines, including alternative text for visuals.</i>
	43.3	<i>The plan should require professional translation of the website into all relevant languages in the project area.</i>
	43.4	<i>It should ensure information is at an accessible reading level (e.g., eighth grade or lower).</i>
	43.5	<i>The plan should prioritize easy navigation for individuals with low computer literacy.</i>
	43.6	<i>It should clearly provide contact information for appropriate personnel.</i>
	43.7	<i>The plan should offer materials in downloadable formats.</i>
	43.8	<i>It should include information on how to get involved, meeting announcements, and timelines.</i>
	43.9	<i>The plan should consider a comment box with timely responses.</i>
Virtual Presentations and Simulations	44.1	<i>The plan should ensure visuals help people with limited reading skills understand content.</i>
	44.2	<i>It should promote easy electronic sharing of information.</i>
	44.3	<i>The plan should allow viewing at participants' convenience on various devices.</i>
	44.4	<i>It should include language options through voiceovers and captions, as well as sign language interpretation.</i>
	44.5	<i>The plan should ensure compatibility with assistive technologies.</i>
Electronic Contact Management Systems	45.1	<i>The plan should emphasize the importance of including a wide range of community members and interested parties on contact lists.</i>
	45.2	<i>It should outline how lists will be maintained and updated to reflect changes in the community.</i>
	45.3	<i>The plan should ensure that contact lists are used to reach out to underrepresented groups for involvement opportunities.</i>
Geographic Information Systems	46.1	<i>The plan should ensure GIS maps are easily understandable and potentially interactive.</i>
	46.2	<i>It should require the translation of labels and legends into multiple languages.</i>
	46.3	<i>The plan should mandate the inclusion of alt text and compliance with Section 508 requirements for online or print formats.</i>
	46.4	<i>It should consider providing more than one way to access GIS-based information for those with technology limitations.</i>
Public Information Materials	47.1	<i>The plan should require tailoring content to reach specific audiences, including cultural considerations.</i>

Type	ID	Promising Practices
	47.2	<i>It should mandate the translation of materials into relevant languages.</i>
	47.3	<i>The plan should emphasize distribution through multiple channels to reach a broad audience.</i>
	47.4	<i>It should prioritize visually appealing materials with minimal text and accessible language.</i>
Media Outreach Strategies	48.1	<i>The plan should include the use of multiple forms of media to engage people at different times and through various channels.</i>
	48.2	<i>It should consider low or no-cost media to reach a wider audience.</i>
	48.3	<i>The plan should specify outreach to ethnic media to reach in-language speakers.</i>
	48.4	<i>It should emphasize developing media outreach early and consistently throughout the outreach period.</i>
Remote Sensing	49.1	<i>The plan should prioritize the use of RSAs for topics familiar to the community and with intuitive analysis and visuals.</i>
	49.2	<i>It should ensure that information derived from remote sensing is presented in an accessible format for varied audiences.</i>
Videos	50.1	<i>The plan should encourage the use of videos to reach large geographic areas and people who use languages other than spoken English through translations, captions, and sign language.</i>
	50.2	<i>It should ensure videos are accessible to people with disabilities and those who cannot attend meetings.</i>
	50.3	<i>The plan should encourage community involvement in script development, production, and editing to ensure cultural appropriateness.</i>
	50.4	<i>It should provide ways to access videos for people with limited internet or computer access.</i>
	50.5	<i>The plan should mandate phone and mobile device compatibility.</i>
	50.6	<i>It should require posting transcripts of live recordings that are compatible with accessibility software and translated into relevant languages.</i>

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