

PUBLIC INVOLVEMENT GUIDEBOOK

PUBLIC INVOLVEMENT SECTION,
TRANSPORTATION PLANNING AND
PROGRAMMING DIVISION

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CHAPTER 1.

Communication with the Public

Public involvement is mandatory, beneficial, and integral to successful projects and programs.



Key Concepts

KEY PUBLIC INVOLVEMENT PRINCIPLES:	BENEFITS OF PUBLIC INVOLVEMENT INCLUDE:	WHERE TO FIND PUBLIC INVOLVEMENT GUIDANCE:
Make events accessible to all.	Citizen ownership.	TPP/PI Section.
Facilitate engaging interactions.	Community values reflected.	Environmental Affairs Division.
Provide multiplatform strategies to engage.	Efficient implementation.	Federal and state law.
Ensure the process is outcome-oriented.	Agency credibility.	Texas Transportation Commission.

Introduction

Technology makes PI more accessible, efficient, and effective, and allows participants to create their own solutions and comment on the collective experience.

Public involvement (PI) processes and approaches:

- Are varied and complex depending on the project or program.
- Occur across a continuum ranging from providing information about projects or programs to collaborating with participants in the decision making to empowering participants to vote on the outcome.
- Have evolved over time.

Technology makes PI more accessible, efficient, and effective, and allows participants to create their own solutions and comment on the collective experience. These advances include the use of social media, technology-enhanced public meetings, online mapping tools, and other software.

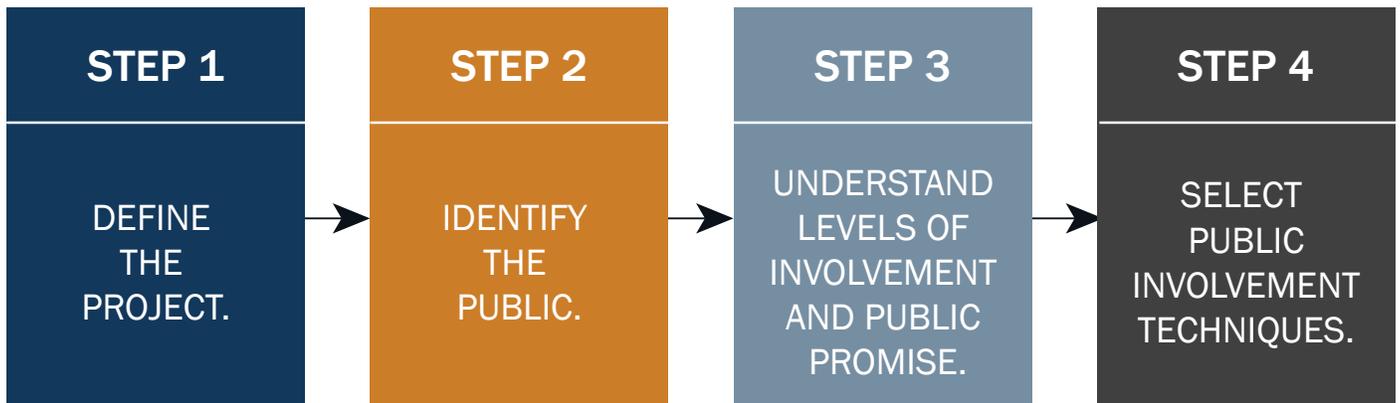
This guidebook:

- Provides guidance to Texas Department of Transportation (TxDOT) employees on the best practices of PI.
- Identifies high-quality methods of engaging the public, improving both transportation decisions and trust in the agency.
- Reviews emerging technologies and new methods for improving the impact and managing costs of PI.

How to Use This Guidebook

This guidebook provides guidance for TxDOT employees on best practices of PI. It includes a review of emerging technologies and new methods for improving the impact and managing the costs of PI. Beginning with a background discussion of existing and required PI practices, at both the national and statewide levels, this guidebook introduces the work of the relatively new Public Involvement Section of the Transportation Planning and Programming Division (TPP/PI Section) and discusses how to collaborate with TPP/PI Section staff in planning and implementing successful PI efforts.

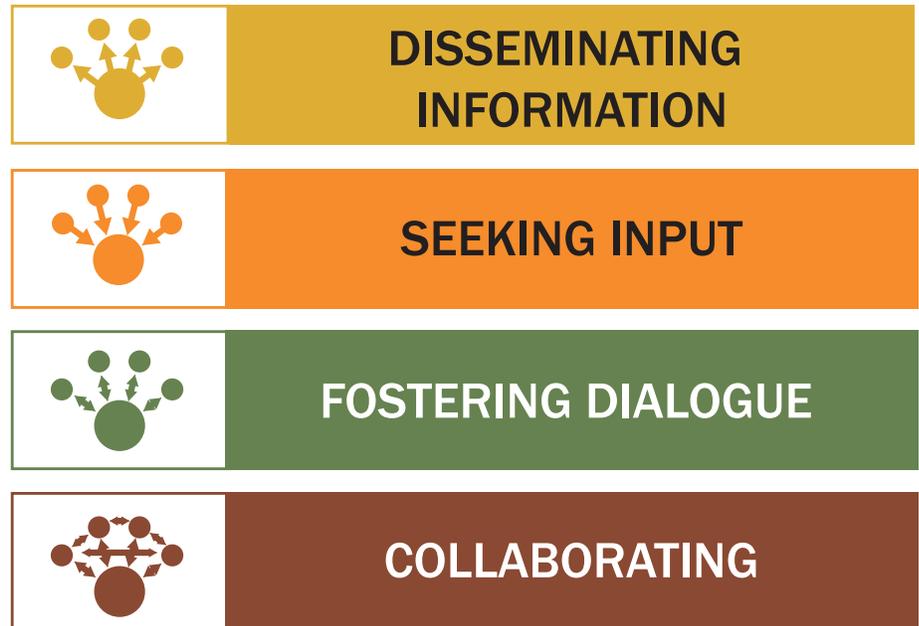
Perhaps the most important step of a PI plan is the early thinking that goes into it. Chapter 3 is designed to help you walk through your process. This section breaks that process down into four steps:



After considering the scope, size, and complexity of the project, who will be affected by it, and what you are really seeking from the public, you can make narrowly tailored, effective selections about what techniques will be the best fit for your project.

The guidebook uses a color-coding system designed to quickly associate a technique with four different levels of communication and public involvement.

This section breaks that process down into four steps:



This guidebook will help you understand your PI project goals and prepare to collaborate with the Public Involvement Section in designing your PI plan.

The system indicates the least-to-most levels of public involvement (see the graph, p. 35) and least-to-most levels of complexity of communication of a given technique. These colors are used throughout the document where the techniques are discussed as reminders of how much involvement or communication comes with a technique. Each technique is summarized and coded in a chart beginning on page 36, and each is also described in greater detail in Appendix B of this guidebook, also coded by color.

This guidebook will help you understand your PI project goals and how to collaborate with the TPP/PI Section in designing your PI plan. This guidebook will enable you to articulate your PI needs and identify high-quality methods of connecting with the public in ways that improve transportation decisions and increase trust in the agency.

TITLE	SUMMARY
<p>CHAPTER 1. Engaging with the Public</p>	<p>Public involvement is mandatory, beneficial, and integral to successful projects and programs.</p>
<p>CHAPTER 2. Support from the Public Involvement Section</p>	<p>Partner with TPP/PI Section early in your project planning for maximum PI benefits.</p>
<p>CHAPTER 3. Public Involvement Strategies</p>	<p>Tailor your process to your goals.</p>
<p>CHAPTER 4. How to Use Public Involvement Results</p>	<p>Communicate, inform, understand, and measure PI results to improve the PI effort.</p>
<p>CHAPTER 5. The Next Generation of Public Involvement</p>	<p>Use emerging technologies to expand the potential and impact of PI.</p>
<p>APPENDIX A: Best Practices within TxDOT</p>	<p>Review PI best practices from TxDOT.</p>
<p>APPENDIX B: PI Strategies</p>	<p>Learn more about PI strategies.</p>
<p>APPENDIX C: Outputs and Outcomes</p>	<p>Learn how to make PI meaningful.</p>

The Texas Department of Transportation (TxDOT) commits to purposefully involve the public in planning and project implementation by providing for early, continuous, transparent and effective access to information and decision-making processes. TxDOT will regularly update public involvement methods to include best practices in public involvement and incorporate a range of strategies to encourage broad participation reflective of the needs of the state's population.

TxDOT Minute Order 112555

PUBLIC INVOLVEMENT 101

PI is mandatory. Table 1 lists by year the federal laws that have required and emphasized PI as part of transportation policy. Additional laws and executive orders reinforce the principles that everyone affected or potentially affected by a decision should have an opportunity to be involved in the decision-making process.

Table 1. Federal Laws with PI Requirements.

YEAR	FEDERAL LAW
1969	National Environmental Policy Act (NEPA)
1991	Intermodal Surface Transportation Equity Act (ISTEA)
1998	Transportation Equity Act for the 21st Century (TEA-21)
2005	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)
2012	Moving Ahead for Progress in the 21st Century Act (MAP-21)
2015	Fixing America's Surface Transportation Act (FAST Act)



Where to Find TxDOT Requirements for Public Involvement

Public Involvement is mandatory.

Federal and State Law

Public involvement activities are conducted in accordance with the requirements codified in the Texas Administrative Code (TAC) at [43 TAC 2.101 to 2.110](#), as well as in the Code of Federal Regulations (CFR) at 23 CFR Part 771 for federal projects.

In addition, TxDOT complies with the following federal and state requirements:

- [Section 6002](#) of the Safe, Accountable, Flexible, Efficient Transportation Equality Act—A Legacy for Users (SAFETEA-LU).
- [23 USC 128: Public Hearings](#).
- [Executive Order 13166](#): Improving Access to Services for Persons with Limited English Proficiency.
- Title VI of the Civil Rights Act of 1964, as codified at [42 USC 2000d\(1-7\)](#).
- Council on Environmental Quality NEPA regulations, as codified at [40 CFR 1500 – 1508](#).
- Section 106 of the National Historic Preservation Act at 16 USC 470 and [36 CFR 800](#).
- Section 4(f) of the U.S. Department of Transportation Act as codified at [23 USC 138](#) and [49 USC 303](#); de minimis impact determinations under [23 CFR 774.5\(b\)](#).
- [Memorandum of Understanding between FHWA and TxDOT Concerning State of Texas' Participation in the Project Delivery Program Pursuant to 23 U.S.C. 327](#). (Assignment MOU).
- [Chapter 26 of the Texas Parks and Wildlife Code \(PWC\)](#).
- [Chapter 183 of the Texas Natural Resources Code \(NRC\)](#).
- Texas Transportation Code §§[201.811](#), [203.021](#), and [203.022](#).

As a recipient of federal assistance, TxDOT is required to comply with various nondiscrimination laws and regulations, including Title VI of the Civil Rights Act of 1964 and Executive Order 13166: Improving Access to Services for Persons with Limited English Proficiency, to promote inclusive public involvement. Refer to the TxDOT [Community Impacts Assessment Toolkit](#) for additional guidance on complying with these requirements.



Federal assistance requirements also mandate that TxDOT undertake public involvement specific to historic properties potentially affected by a project. References and appropriate information regarding historic properties are integrated into the standard NEPA public involvement actions outlined in this handbook. Such integration may include the need to accommodate Section 106 consulting parties, such as Tribes, into the schedule created for the project. Refer to the [TxDOT Archeological Sites and Cemeteries Toolkit](#) and [Historic Resources Toolkit](#) for additional guidance on complying with Section 106.

Effective December 16, 2014, FHWA assigned and TxDOT assumed, subject to the terms and conditions in [23 USC 327](#) and the Assignment MOU, select U.S. Department of Transportation Secretary's responsibilities for NEPA compliance with respect to highway projects. As such, TxDOT now acts as FHWA in making NEPA decisions for assigned projects. The Assignment MOU requires specific language as part of public involvement communication materials. This language is noted in later sections of this handbook.

TxDOT may collaborate with local governments, metropolitan planning organizations (MPOs), or other transportation entities to conduct joint public involvement activities. Public involvement activities hosted by local governments designated as project sponsors ([43 TAC 2.14](#)) can satisfy TxDOT public involvement requirements provided the project sponsor follows all TxDOT requirements.

Chapter 26 of the Parks and Wildlife Code outlines public hearing notice requirements for projects that take public lands designated and used as parklands, recreational areas, scientific areas, wildlife refuges, or historic sites ([3 PWC 26.001](#)). Absent unusual circumstances, the hearing should be completed prior to NEPA approval. For additional guidance, refer to the [Chapter 26 Parks and Wildlife Code Toolkit](#).

TxDOT is committed to going beyond minimum requirements for public involvement.

Texas Transportation Commission

TxDOT is committed to going beyond minimum requirements for PI. TxDOT embraces strategies and procedures that actively involve the public in the decision making for transportation projects and investments that impact their lives and communities. On January 27, 2011, the Texas Transportation Commission adopted Minute Order 112555:

The Texas Department of Transportation (TxDOT) commits to purposefully involve the public in planning and project implementation by providing for early, continuous, transparent and effective access to information and decision-making processes. TxDOT will regularly update public involvement methods to include best practices in public involvement and incorporate a range of strategies to encourage broad participation reflective of the needs of the state's population.

Additionally, the commission adopted eight key objectives to implement PI more effectively:

- Ensure continued adherence to all regulatory guidelines that can be fully integrated into the planning process and sound PI practice.
- Solicit and encourage proactive PI that can be fully integrated into the planning process and incorporated in the various planning activities.
- Provide opportunities for accurate, timely information upon which Texas residents can rely.
- Establish and maintain a TxDOT reputation as a trusted source of information.
- Proactively seek early and continuing public input and involvement and be responsive to inquiries and suggestions.
- Listen to stakeholders when comments are provided; be responsive and accountable to all stakeholders.
- Energetically adhere to or exceed all applicable TxDOT, state, and federal PI requirements for planning and project implementation.
- Use multiple methods to explain TxDOT processes, priorities, and procedures so the public will have a solid foundation upon which to make requests, inquiries, and suggestions.

TPP/PI Section

TxDOT's TPP/PI Section:

- Assists districts, divisions, and offices with a myriad of public engagement strategies, which can occur anytime during or throughout the project life cycle.
- Serves TxDOT employees with all PI needs and serves as a repository and an idea generator to find the most appropriate strategy for a particular need.
- Ensures that Minute Order 112555's eight objectives are considered and acted upon when considering PI activities.

Specific support by this section includes:

- Develop custom PI strategies.
- Create PI plans; review consultant plans.
- Create project fact sheets and web pages.
- Brainstorm appropriate notification techniques: postcards, newsletters, email blasts.
- Review or improve map schematics; improve language for the public.
- Build or revise leadership presentations.



Key public involvement principles:

- Make events accessible to all.
- Facilitate engaging interactions.
- Provide multiplatform strategies to engage.
- Ensure the process is outcome-oriented.



- Write and review public meeting scripts, presentations, and materials.
- Post materials to the TxDOT website, such as exhibits, fact sheets, maps, and meeting summary reports.
- Facilitate and coordinate public meetings.
- Create public event displays.
- Provide on-site public event support.
- Translate public materials into other languages.
- Facilitate techniques for reaching out to limited English proficient (LEP) and Title VI populations.
- Facilitate online public engagement, including virtual open houses and surveys.

The large impact of transportation improvements creates an imperative for engaging the public in the decision-making process.

TPP/PI Section staff have been trained in the principles of successful public participation. They have the knowledge to use specific skills, strategies, techniques, and tools, in the appropriate situations, with the appropriate audiences, to yield a meaningful process that not only satisfies statutory requirements but fosters trust and accountability with the public they are serving.

Why Go Beyond the Minimum?

Involving the public can be a difficult task. Some people may feel as if their opinions do not make a difference. Others may feel that they cannot afford the time. Long-term transportation planning can be especially difficult since projects are considered and approved many years before they open.

The large impact of transportation improvements creates an imperative for engaging the public in the decision-making process. Attracting participants, keeping the participants interested, and providing the appropriate mediums for engagement are all challenges. It is important to understand who should be engaged, when they should be engaged, what the role is for engagement, and how the engagement will affect or impact the decision to be made.

CASE STUDY: Going Beyond the Minimum

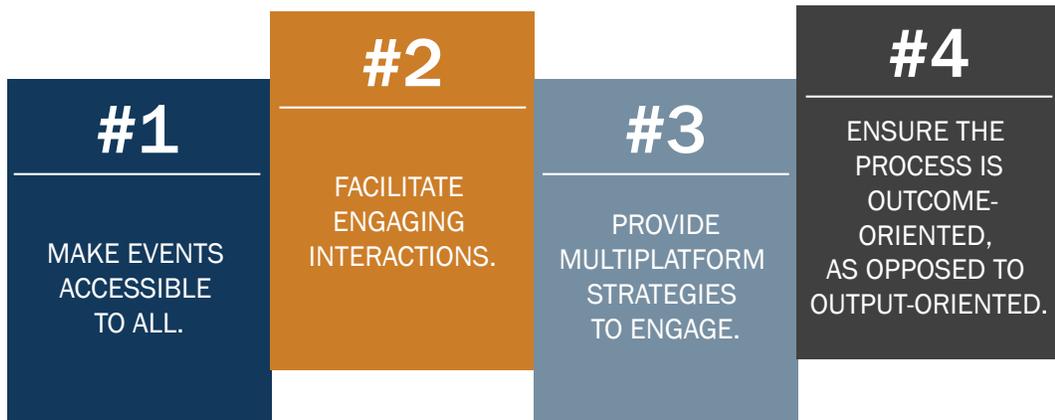


Figure 1. Agency Staff Interacting with the Public Online at a Virtual Open House.

Virtual open houses (VOHs) are used to recreate the experience of attending an open house in person. Many of the displays available at a traditional open house are uploaded to a website where visitors can view them at their leisure. There may also be a recorded video message to describe the project and/or alternatives. In some cases, visitors can indicate their preferences by liking a concept or design, or they may leave comments about it.

VOHs may also provide an opportunity to interact with project sponsors in real time. The Oak Hill Parkway VOH was a TxDOT pilot project that created a synchronous (real-time) and asynchronous (before-or-after) online portal to provide additional opportunities for engagement. The VOH mimicked the in-person open house, providing an additional opportunity for people to experience the same materials and interact with project staff, without having to be physically present. The VOH included an online landing page, registration, real-time chat, and detailed exhibits including project videos, maps, and narrative. Upon completing their visit, online participants were offered an evaluation survey about their experience.

Successful PI efforts typically adhere to four key principles:



When achieving just the minimum is a challenge, why is it necessary to go beyond? It is not necessary just because it is the right thing to do but because it leads to better decisions.

Specific benefits include:

- **Citizen ownership**—By being involved in the process, the public is more likely to take ownership of the solution, be it project or policy. An informed public is more likely to accept the outcome regardless of their agreement or disagreement with it. They have been involved in the identification of the need, they understand the limitations and other affecting factors, and they participated in the development of options and have democratically and collectively arrived at a conclusion.
- **Community values reflected**—A broad and encompassing public involvement process will ensure that all segments of the community are engaged. This engagement means that project, program, and policy decisions reflect the values of the impacted community. Greater buy-in at this stage can minimize project delays due to protests and litigation.
- **Efficient implementation**—A proactive public participation process highlights the public's concerns so they may be addressed early in the process, which expedites implementation and often reduces costs. This cost savings is a benefit to the public and the agency.
- **Agency credibility**—Meaningful public engagement increases agency transparency and accountability, which builds public trust. As agency culture changes to be more inclusive, public involvement activities are seen not as a burden but as an opportunity to learn from the public. At the same time, it is an opportunity for TxDOT to educate and enlighten the public about its responsibilities. It can provide understanding to the public about the agency's operations. These exchanges can foster mutual understanding, which can lead to greater public trust.

Putting Together the Right Team

Public participation professionals have the knowledge and skills to offer advice on the best ways to engage the public. TxDOT's PI Section has a team of dedicated individuals that stand ready to offer assistance in a number of ways.

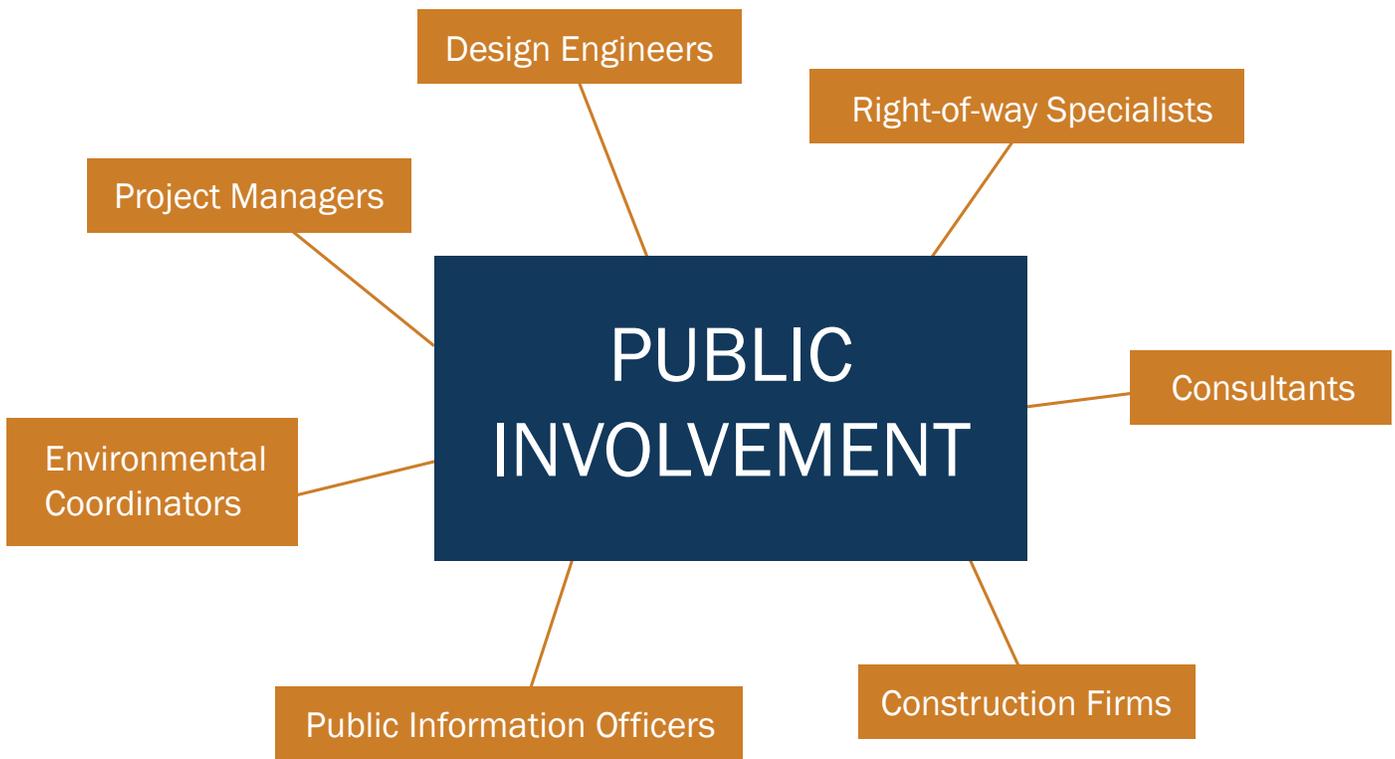
Good ideas for transportation projects can start from agency staff, a member of the public, or a local official. Using a wide range of individuals from start to finish in project development helps identify the best ideas and allows for the broader project team and community to take ownership over the process. PI is a continuous process that does not start at project development and end at implementation—it is an ongoing opportunity for the agency to engage with its customers.

Project managers, design engineers, right-of-way specialists, environmental coordinators, public information officers, consultants, and construction firms all have a responsibility to facilitate successful PI.

TxDOT's PI Section has a team of dedicated individuals that stand ready to offer assistance in a number of ways.



Figure 2. Public Involvement Teamwork.



The project team should:

- Be broad and interdisciplinary. Ideally, a diverse team of disciplinary specialists allows the public to reach a variety of persons that might best be able to answer their questions, whether they are in policy development, long-range planning, funding, design, construction, operation, or maintenance.
- Understand the principles of meaningful PI.
- Have some training in PI. TPP/PI Section can provide this, and TxDOT's Effective Public Involvement training course is a great starting point.
- Be equipped with basic communication tools to interact effectively.
- Be assembled early in project scoping.
- Understand the ultimate goal and what is required to achieve it.

CHAPTER 2.

Support from the Public Involvement Section

Partner with TPP/PI Section early in your project planning for maximum PI benefits.



Key Concepts

PI IS:	PI RESOURCES	TPP/PI SECTION AVAILABLE SERVICES
<p>Critically important.</p> <p>Proactive.</p> <p>Legally required.</p> <p>Valuable for planning and community ownership.</p>	<p>TPP/PI Section.</p> <p>TxDOT’s Public Involvement Toolkit by the Environmental Affairs Division.</p> <p>This guidebook.</p> <p>The Unified Transportation Program (UTP), Statewide Transportation Improvement Program (STIP), and rural transportation improvement programs (RTIPs).</p>	<p>Training.</p> <p>Federal and state legal compliance.</p> <p>Public meeting accessibility.</p> <p>Consistent, strategic guidance.</p> <p>Best practices.</p>

Introduction

TxDOT’s planning and programming processes cover many transportation topics, and PI is an integral portion of every one. TxDOT works with the public in a broad range of activities, including:

- Long-range planning.
- Project programming.
- Environmental processes.
- Construction and maintenance activities.

TPP/PI Section can help with the outreach aspects of any of these activities, and there are many ways to work together. Whether supporting TxDOT staff by participating directly in a project or by supporting consultants, TPP/PI Section works throughout the project life cycle to improve PI.

Long-Range Planning

TxDOT partners with metropolitan planning organizations (MPOs) and other groups concerning transportation issues that could be 20 years or more into the future. PI is a key part of these plans because they translate policies into action. The Texas Transportation Plan is one example of long-range planning.

During preparation for a long-range plan of any kind is an appropriate time to review a project team's training for a variety of PI methods. Use TPP/PI Section as a resource for proper training and techniques.

Engage TPP/PI Section in the early stages of planning to ensure broad participation at the right time on the right issues in long-range planning. TxDOT's PI process also addresses the federal requirements for PI (found in [Title 23, §134 and USC §5301](#) and [Texas Administrative Code §16.54, Statewide Long-Range Transportation Plan](#)).

See Chapter 3 for techniques that are useful for long-range transportation project development.

Engage TPP/PI Section in the early stages of planning to ensure broad participation at the right time on the right issues in long-range planning.

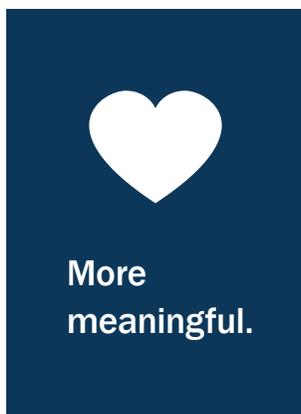


Project Programming

Fully forming concepts and ideas from long-range plans into individual projects to be prioritized and funded is known as project programming. The complexity of the statewide planning process can be a challenge to informed public input. Educating the public and using effective outreach strategies are critical to improving the public involvement process for the [UTP](#), STIP, and RTIP

TPP/PI Section is a valuable resource for the legal requirements of the project programming processes, such as helping get notices in the local newspaper on time for RTIP or UTP meetings.

TPP/PI Section can help make the PI strategy and efforts for project programming:



Environmental Processes

PI is a critical part of the required environmental processes for projects under development. TPP/PI Section can provide templates and other outreach resources, such as advertisements and fact sheets, as well as help tailor the PI approach for local communities.

TxDOT's [Public Involvement Toolkit](#) is a valuable resource developed by the Environmental Affairs Division, in partnership with TPP/PI Section. TPP/PI Section can help districts implement civic engagement strategies effectively.

TxDOT has been proactive in making constant improvement in PI, such as:

- The recent completion of the Public Involvement Self-Assessment: A Review of TxDOT's NEPA Public Involvement Practices & Procedures, which was an extensive audit conducted by the Environmental Affairs Division, in partnership with TPP/PI Section, of TxDOT's public involvement activities such as outreach methods, conducting meetings and hearings, and documentation.
- This Public Involvement Guidebook.

Two critical issues with PI in environmental processes that are not always intuitive are how to best comply with the Americans with Disabilities Act (ADA) and Limited English Proficiency (LEP).

PI is a critical part of the required environmental processes for projects under development.

Two critical issues with public involvement in environmental processes: ADA and LEP.

ADA

Because ADA compliance is usually required for the facilities chosen for public meetings, it should not be an afterthought when choosing locations. TPP/PI Section can devote the time and resources necessary to ensure that public meetings are accessible to all persons under this act, including ensuring that access is available at your event.

LEP

Texas is a diverse state, and many communities have high levels of persons with limited proficiency in English. TPP/PI Section should be consulted to help identify when a community reaches an appropriate threshold to secure an interpreter for a public meeting—providing crucial communication when needed by some populations. TPP/PI Section can also help with researching the demographics of the community, determining an overall strategy for reaching the underserved populations, and translating meeting materials.

Finally, the TPP/PI Section can also help develop the resources for both standardizing the process, through templates, advertisements, and other resources, and tailoring the public involvement approach for local communities.



Construction and Maintenance Activities

Though not always required by law, effective communication with the public about construction activities is a proactive way to improve outreach on building and maintaining transportation facilities. Construction and maintenance efforts are most often the face of TxDOT, and the public engagement around these activities can be very effective in portraying TxDOT as a transparent and customer-focused agency.

Projects may require temporary construction easements and other changes in the right of way that will affect the public. **TPP/PI Section can support activities to:**

- Communicate effectively with those impacted.
- Develop outreach strategies and materials with District staff, including public information officers (PIOs).
- Partner with PIOs to ensure the message gets to the appropriate audience (Figure 3).

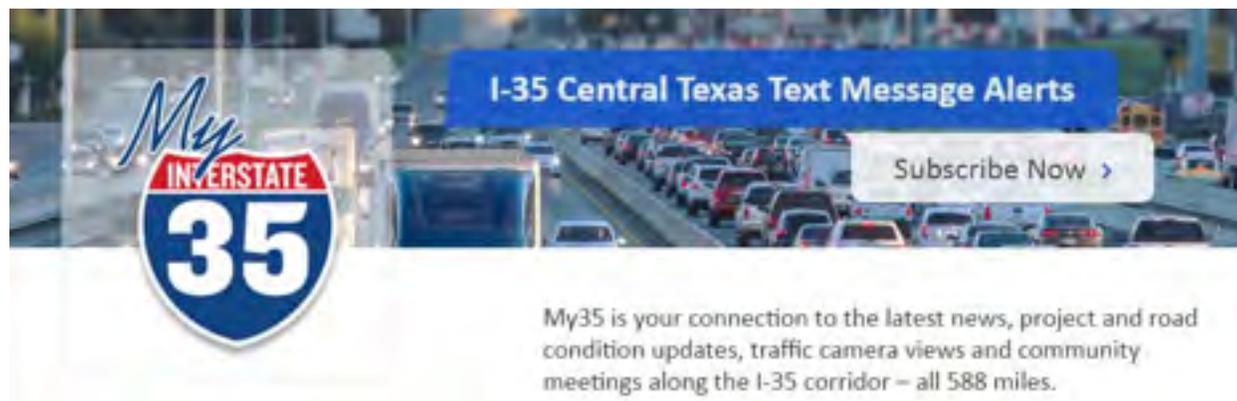


Figure 3. My35 Users Can Subscribe to Construction Alerts.

CHAPTER 3.

Public Involvement Strategies

Tailor your process to your goals.



Key Concepts

Figure 4 illustrates the steps in the PI process as a framework to develop strategies.

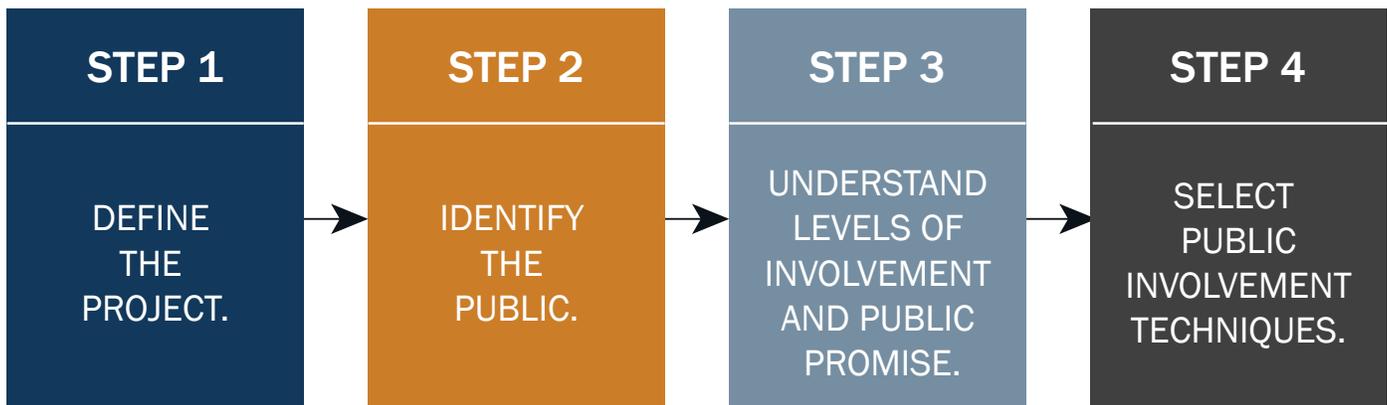


Figure 4. Level of PI Flowchart.

Introduction

While it is tempting to start the development of a PI process by choosing activities to conduct, it is important to start by considering a range of factors. The goals of the PI process and project goals are important considerations that should be addressed before developing any plan or activity. These are determined by project complexity and public expectation.

This chapter provides several questions for you to think about regarding your process and the approach to engaging stakeholders. Considering these questions will help you determine how complex your project is and guide you in choosing the level of PI that is appropriate for your project.

The level of involvement that you decide is right for your project will inform the PI goals and subsequent expectations that you will have for your process.

This guide will provide a framework for you to use to decide what PI techniques are right for your project.

This guide will provide a framework for you to use to decide what PI techniques are right for your project.

STEP 1.

DEFINE THE PROJECT GOALS

STEP 1. Define the Project Goals: What? When?

What Is the Action, Program or Project You Need to Engage the Public In?

Your project might be a large-scale, years-long construction project to build a new highway interchange or a minor maintenance project. Large or small, short or long term, many projects can affect the public and, as such, should include some level of PI.

What Is the Goal of the Project?

Begin with a clear statement of the goal of the project, which can be taken from the scope and can serve to galvanize the stakeholders as the PI process begins. Is the goal safety, mobility, congestion relief, or something else?

What Are the Best Strategies for Keeping Decision Makers Informed?

Decision makers need to be informed about the PI activities throughout the process so that they are prepared at any point for conversations they might have with stakeholders.

Apprise the final decision makers and their staff of the project as it develops.

Build your PI plan into the time frame for the approval process. For example, if there is a specific time when decision makers will make a final determination, put that on your calendar and schedule backwards from there.

When Does Outreach Need to Happen?

PI should be conducted early and often. While it is fair to say that there is no incorrect time to conduct PI, it is important to consider how and when your project will benefit most from PI activities.

STEP 1.

DEFINE THE PROJECT GOALS

Consider Each Project Milestone for PI

Think about the major milestones of your project and consider if PI activities will improve the project if they are conducted before, during, or after these points:

- Are there moments during your project where a decision must be made and public input may affect that decision?
- Are there issues that you may not be aware of that will impact the decision-making process?

Ensuring that PI activities are conducted in advance of some of these milestones can help shine a light on and perhaps positively influence the outcome of the decision-making process. Assessing when PI activities will have the most positive impact on your project may be time consuming, but it is important to give careful consideration to when they occur to ensure the best project outcomes.

Plan in Enough Time for PI to Meet the Milestones of the Project

Provide ample time to plan for your PI activities. Set your PI strategy up for success by being aware of the time you have and the time your chosen PI activities require.

Consider:

- How much time do you have?
- Have you identified PI techniques that might be appropriate for this project? Are you familiar with them?

Physical locations need booking, surveys need to be programmed and advertised, and social media campaigns need careful scheduling and orchestrating. Check in with TPP/PI Section or PIOs so that they can help you plan it most effectively. Figure 5 shows a press conference, which takes scheduling.

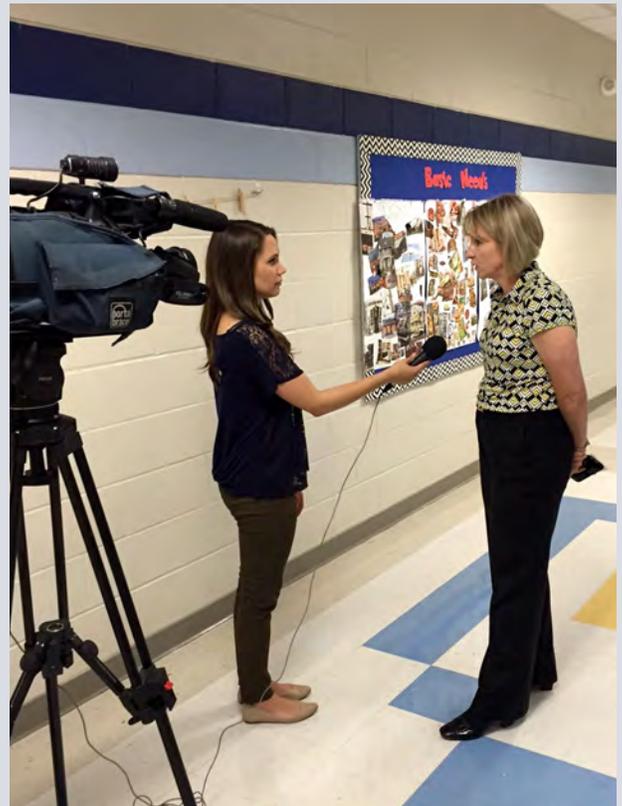
Provide ample time to plan for your PI activities.

STEP 1.

DEFINE THE PROJECT GOALS



Figure 5. Press Conferences



STEP 2.

IDENTIFY THE PUBLIC

Who Is the Public?

Texas is a big place, and your project may affect many different communities. It may also have different effects on different people at different points in the process. To identify who your target audience is, ask:

- Who will be affected?
- Who benefits?
- Who will be negatively impacted?
- Where are they?
- Do they live or work near your project area?
- Are there affected property owners?
- Who will be impacted by a change in service?
- Besides the general public, who else needs to be part of the conversation?
- Should other state agencies, local governments, or private entities such as developers be involved?
- Are there disadvantaged populations?

During your project, one group of people may end up with better mobility at the end of the process, but another may be inconvenienced during its construction. Project development and construction will affect people differently with regard to access. Your project might facilitate pass-through freight traffic that benefits connections at ports or rail yards elsewhere.

Trace the impact of your project as far out as you can, both in time and space, to help make you aware of whom you need to talk to and when.

STEP 2.

Who Is the Public:

- Who is the target audience?
- How do you reach them?
- Who are your project champions?
- Do you have any underserved stakeholders?

STEP 2.

IDENTIFY THE PUBLIC



How Do You Reach Them?

Once you have identified affected stakeholders, start answering questions that will help you reach them:

- What are their ages?
- What languages are they most comfortable with?
- What cultural considerations will affect your efforts to reach or hear from them?
- Are they likely to attend local events such as a farmer's market, or an arts fair (Figure 6), or go to the local library?
- What are their income levels?
- Is there a popular gathering place near the project where you might meet stakeholders?
- Would they prefer traditional mail, physical flyers, email, websites, and/or social media?
- Should the public meetings be held during business hours, after business hours, and/or virtually?
- Should the PI include small face-to-face discussions?
- Do your existing stakeholders have suggestions to expand the list?

It is likely that your project will affect a range of stakeholders. Thinking about who they are and how you can best reach them before you design your PI process will help ensure the success of your project.

STEP 2.

IDENTIFY THE PUBLIC



Figure 6.
PI at a Fair.

Who Are Your Project Champions?

Project champions sitting around the same table might help planners talk through pros, cons, and options that they might not see separately.

When brought early on to a project, project champions can:

- Be instrumental in securing support for your project.
- Act as a conduit to hard-to-reach populations.
- Diffuse volatile situations with project opponents, especially if they are respected in the community.

STEP 2.

IDENTIFY THE PUBLIC



Potential project champions are:

- Elected officials.
- Special interest groups.
- Long-time residents that have historical ties to the neighborhood.

These groups often come with their own communications channels and attentive memberships. Inviting these entities to participate early in the process can lead to their championing of your project, even if you do not always see eye to eye.

Are Any of Your Stakeholder Groups Traditionally Underserved?

Sometimes stakeholder groups are underserved because they are hard to reach, and they may continue to be hard for you to reach. Barriers to participation like having to work more than full time, not speaking the dominant language, and not having access to common communications tools or technologies can all contribute to communities being left out of public conversations and decision making. These same issues may also require more of your time to ascertain the best way to communicate with them.

Identify a local community activist or leader who can help you:

- Determine the best ways to reach this segment of the community.
- Understand what their concerns are.
- Determine what harms of past exclusion may need to be acknowledged.

STEP 3.

UNDERSTAND LEVELS OF INVOLVEMENT AND PUBLIC PROMISE

Now that you have defined your project and identified your public, you have a sense of the complexity of the PI component of your project. You may have a very small project that is so constrained by statute or regulation that you have only one option, and all you can offer the public in terms of participation is that you will inform them about the project. Or your project may be large and long term, with numerous impacted stakeholders and many elements undecided.

The IAP2 Public Participation Spectrum (Table 2) presents a set of involvement levels from least to most involved.

Note:

- The spectrum provides a number of clearly defined choices of involvement levels, but also provides the promise you will make to the public about their participation. The promise sets clear expectations for the public about how much influence their input will have in your project. You may rarely promise that you will do what the public decides (Empower), but you may want to be sure you address their needs (Involve) or even incorporate public advice or recommendations (Collaborate) into the project.
- No level is inherently more desirable than another; where it makes sense, according to direction from the administration, move the public engagement efforts toward greater involvement. The complexity level of your PI effort and the project needs will inform your choice of the level of PI.
- Whatever level your project calls for, the spectrum will help you and decision makers agree to the level of public participation on the same terms, as well as talk to the public about it on the same terms.

STEP 3.

Understand Levels of PI

- Inform
- Consult
- Involve
- Collaborate
- Empower

STEP 3.

UNDERSTAND LEVELS OF INVOLVEMENT AND PUBLIC PROMISE

Table 2. IAP2 Public Participation Spectrum.



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

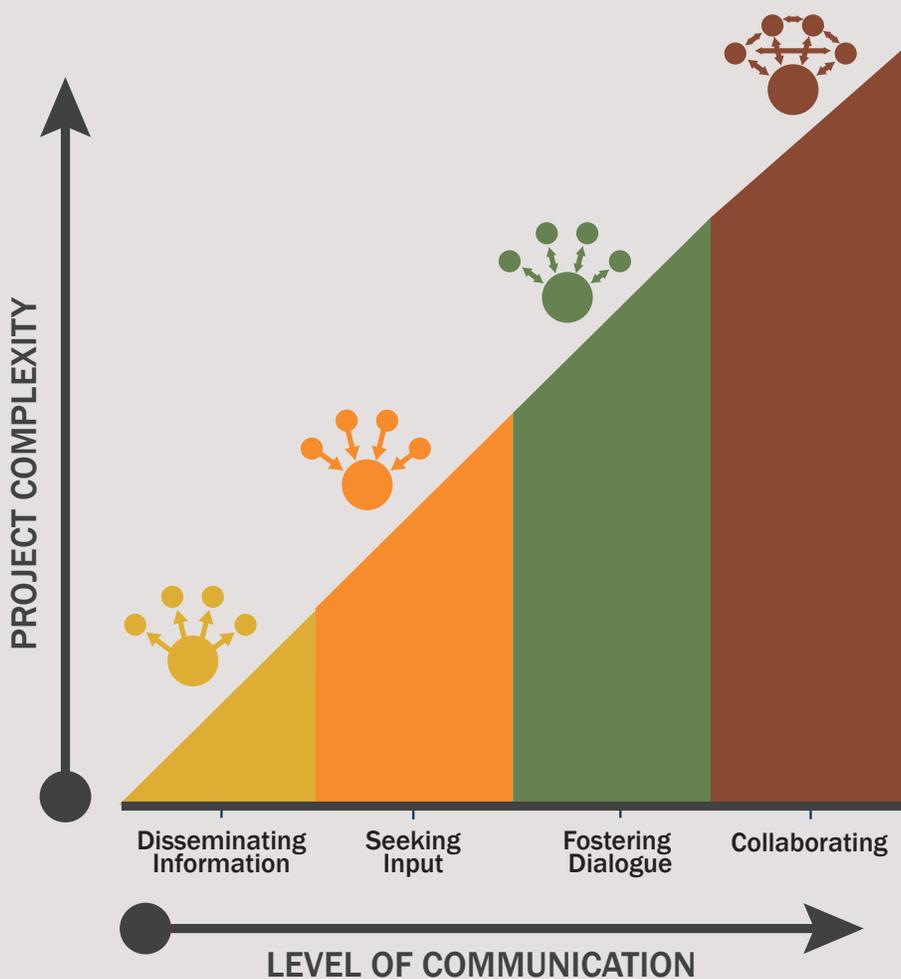
Source: 1

Now that you have explored the levels of the spectrum and the related promise to the public, you are ready to consider which techniques are best suited to your PI goals. If you are unsure, TPP/PI Section is trained to help you develop your to your PI plan.

STEP 4.

SELECT PUBLIC INVOLVEMENT TECHNIQUES

One way to discern one technique from another is by the level of communication that each technique fosters and requires. Generally speaking, as project complexity increases, so does the level of communication (Figure 7).



STEP 4.

Select PI

Techniques

- Disseminating Information
- Seeking Input
- Fostering Dialogue
- Collaborating

Figure 7. Project Complexity versus Level of Communication.

STEP 4.

SELECT PUBLIC INVOLVEMENT TECHNIQUES

Table 3 and Table 4 list techniques that are coded by level of communication. This system will help to ensure that the communication level of your chosen technique matches your chosen level of involvement.

Table 3. Communication Levels and Techniques.

	<p>Disseminating Information:</p> <p>Defines PI activities where information flows one way, from the agency to members of the public. These techniques are useful when the goal is to disseminate information, but no opportunity is provided for the public to provide feedback or input.</p>
	<p>Seeking Input:</p> <p>Defines PI activities where information flows one way, from the public to the agency. These techniques provide members of the public with the opportunity to give feedback or input but do not always result in a direct response from the agency.</p>
	<p>Fostering Dialogue:</p> <p>Defines PI activities where information flows two ways, both from the public and the agency. These techniques provide the ability for dissemination of information to the public and direct feedback from the agency. These techniques provide a consistent feedback loop between the public and the agency.</p>
	<p>Collaborating:</p> <p>Defines PI activities where information flows three ways: both from the public and the agency (like “Fostering Dialogue”) and also between members of the public. These techniques provide opportunities for open dialogue among stakeholders as well as agency representatives. Open dialogue among stakeholders can produce greater understanding of individual stakeholder positions and interests; can lead to new solutions for projects; and can create greater acceptance for project outcomes.</p>

STEP 4.

SELECT PUBLIC INVOLVEMENT TECHNIQUES

Table 4. Techniques for Communication.

TECHNIQUE	LEVEL OF COMMUNICATION			
	Disseminating	Seeking Input	Fostering Dialogue	Collaborating
<p>FACT SHEETS</p> <p>Fact sheets are printed sheets that can contain a range of information including project details, answers to common questions, or project contact information (see page 83).</p>	■			
<p>PROJECT WEB PAGES</p> <p>Project websites are dynamic PI tools to disseminate information about details related to project schedule, benefits, and other relevant material (see page 86).</p>	■			
<p>COMMENT SECTION ON WEBSITE</p> <p>Project websites that incorporate the ability to ask questions or make comments about a project provide the public with an easy-to-access tool to provide input on a project.</p>		■		
<p>WORKING GROUPS</p> <p>Working groups are helpful approaches for complex or controversial projects to vet, identify, and/or prioritize issues before going to the general public.</p>	■	■	■	■

STEP 4.

SELECT PUBLIC INVOLVEMENT TECHNIQUES

TECHNIQUE	LEVEL OF COMMUNICATION			
	Disseminating	Seeking Input	Fostering Dialogue	Collaborating
<p>WORKSHOPS</p> <p>Workshops are informal events that can be used in a variety of ways to provide information and get input from the public. This technique is most effective as a way to get a specific group of subject matter experts together to provide input on a specific topic (e.g., transit experts attending a workshop about future transit stations).</p>	■	■	■	■
<p>ADVISORY COMMITTEES</p> <p>An advisory committee is a group of public stakeholders that meets regularly to closely collaborate with agency partners on an issue or project (see page 80).</p>	■	■	■	■
<p>CROWDSOURCING</p> <p>Crowdsourcing engages the public in an online discussion to generate ideas, thoughts, and opinions and solve problems based on the collective wisdom. Many individuals act as the crowd to collect and broadcast information to solve problems that normally are handled by specific individuals (see page 81).</p>		■	■	■

STEP 4.

SELECT PUBLIC INVOLVEMENT TECHNIQUES

TECHNIQUE	LEVEL OF COMMUNICATION			
	Disseminating	Seeking Input	Fostering Dialogue	Collaborating
<p>ELECTRONIC UPDATES</p> <p>Project updates in the form of email alerts and text messages are a helpful technique to keep individuals informed about issues that are important to them (see page 82).</p>	■			
<p>PROJECT NEWSLETTERS</p> <p>Project newsletters are paper or electronic documents that use text and visual images to convey information about transportation plans, programs, or projects (see page 85).</p>	■			
<p>SOCIAL MEDIA</p> <p>Using social media platforms such as Facebook pages, Twitter feeds, YouTube channels, Instagram photo sharing, and others is an innovative approach to inform audiences of all ages about transportation projects and programs (see page 88).</p>	■	■	■	■

STEP 4.

SELECT PUBLIC INVOLVEMENT TECHNIQUES



CHAPTER 4.

How to Use Public Involvement Results

Communicate, inform, understand, and measure PI results to improve the PI effort.



Key Concepts

USING PI:	PI EFFORTS ARE UNDERSTOOD THROUGH:	FOR MEANINGFUL PI:
<ol style="list-style-type: none"> 1. Communicate PI results with the decision makers. 2. Inform the public on how input is used. 3. Understand and measure the PI efforts. 	<ul style="list-style-type: none"> • Outputs. • Outcomes. 	<ul style="list-style-type: none"> • Use specific indicators over a period of time (in different places and projects) to identify how differences in PI techniques or in population groups may be more effective. • Assess these results with local understanding about issues. • Systematically track and evaluate PI efforts and results to support local and statewide staff in delivering best-in-class results.

Introduction

The public and agency officials have an interest in understanding PI effectiveness.

The public is focused on the results of planning efforts. The actual outcomes of a given project are most likely the reason they choose to volunteer time to help with the process.

Transportation agencies, elected officials, and project sponsors want to ensure that the funded projects also have effective outcomes. They want to see how PI efforts are related to the goals and objectives of the agencies as well as reflected in the decisions regarding the individual projects, ensuring that public funds are used fairly and efficiently.

There are three main tasks that need to be considered to ensure PI efforts are productive and helpful:

1. Communicate PI results with the decision makers.

2. Inform the public on how their input was used.

3. Understand and measure the PI efforts.

Communicate PI Results with Decision Makers

PI results are important to share with TxDOT project staff and external decision makers, such as agency heads and elected officials. Many of them may have roles on metropolitan or rural planning organization boards and technical committees. They communicate both the technical aspects of a plan or project, the public sentiment, and important issues. TxDOT already does this regularly through individual briefings and emails.

Many of the best practices for communicating PI results with decision makers are locally determined, based on management style and preferences. Table 5 shows two examples of appropriate methods and the benefits of their use.

PI results are important to share with TxDOT project staff and external decision makers, such as agency heads and elected officials.

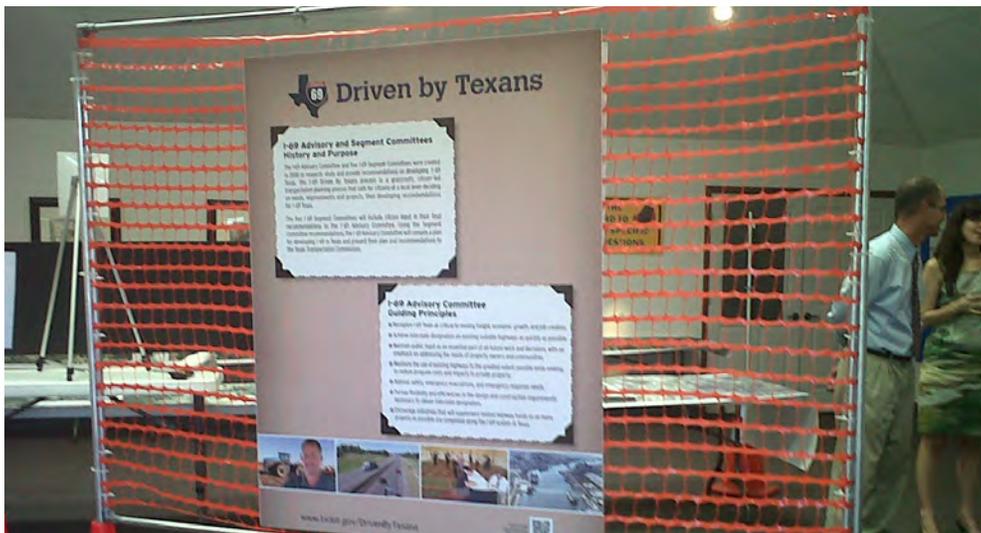


Table 5. PI Communication Methods with Decision Makers.

PI BRIEFS BENEFITS	QUICK-RESPONSE CALLS BENEFITS
<p>TAILORED SUMMARIES—For instance, a transit agency head may want to know more about how the public is reacting to a proposed park-and-ride connected to a highway project.</p>	<p>QUICK RESOLUTION—If the public brings up specific issues that could affect the critical path of a project, staff should work with project managers to notify key staff or officials about the issue.</p>
<p>TIMELY—Timely information to decision makers helps them respond to inquiries from the press or others about a project.</p>	<p>PROACTIVE—For example, finding out about a feature such as an unmarked cemetery in the vicinity of a planned project later in the project could cost additional time and money.</p>

Inform the Public on How Their Input Is Used

Informing the public on how their input is used demonstrates that their effort really does matter and that TxDOT is listening to the public’s ideas and working to implement the improvements that serve the needs of Texans. Table 6 shows examples of techniques that can be leveraged to show the public how their input is reflected in transportation decisions.



Table 6. PI Communication Techniques for the Public.



Social Media Example

Work with district PIO or social media staff to show pictures of PI events and provide links to the outcomes and impacts of PI on the project.



Project Newsletters

Share information with the public. Electronic mailing lists for these often include participants at public meetings. Newsletters help interested stakeholders know more than just the technical details of a project's progress—showing how TxDOT is listening is important as well.



News Releases Example

Include information about the PI completed to date on press releases that inform the public about TxDOT projects. This helps leverage media coverage to help demonstrate TxDOT's commitment to listening and working with the public.



PI Summaries on Web Pages Example

Draft a brief summary of PI efforts, perhaps including selected performance measures and a synopsis of how PI was used in the project.

Understand and Measure the PI Efforts

PI efforts are understood through:

- **Outputs**—for example, many people attended or commented in a given participation venue.
- **Outcomes**—for example, the actual results of how participation affected the actual project.

Both techniques can be useful to TxDOT to ensure that PI efforts are both meaningful and efficient in terms of costs and results. In performance measurement, separate the results of PI related to outputs—measuring the work that was performed—and outcomes, which are concerned with actual changes resulting from the involvement and can be evaluated directly or via questioning those involved. For more details, see Appendix C.



CASE STUDY: Using PI for Improving Outcome



Figure 8. Pop-Up Public Participation Site in Washington, D.C.

Temporary events located in surprising spaces, called pop-ups, were used in Washington, D.C., as part of the district transit planning effort. In an effort to identify the best locations for transit stops along a neighborhood circulator route, planners took to the sidewalks and street corners in two locations along planned routes to gather the opinions of regular and potential transit riders. The planners brought with them information designed to educate riders and then asked them to complete surveys. In the Georgetown effort, planners reached 97 people, whereas at the Georgetown public meeting, only 25 attended. At the Eastern Market location, planners reached 130 people, while only 29 attended the meeting there.

CHAPTER 5.

The Next Generation of Public Involvement

Use emerging technologies to expand the potential and impact of PI.



Key Concepts

AUGMENTED REALITY	VIRTUAL REALITY	MOBILE INTERNET	INTERNET OF THINGS
Computer generation and projection of information that is presented directly in the user's real-world environment.	Completely computer-generated environments.	Internet capability to mobile devices such as tablets and smartphones.	Extension of the Internet to include physical objects by embedding sensors and sensor-connected motors (or actuators).

Introduction

Most PI is relatively simple and straightforward, with the public meeting in a physical location for a set period of time. Advances in innovative technologies will expand the possibilities of engaging with the public. Specifically, augmented reality (AR) and virtual reality (VR), the Mobile Internet (MI), and the Internet of Things (IoT) will impact the need for physical meeting space and set times.

Keep current with these technologies and how they might be used for PI. TPP/PI Section staff can assist districts in developing a planning strategy to use these innovative techniques. Use AR/VR to showcase a project that includes new-to-the-public, innovative designs for maximum impact.

Emerging Technologies

Augmented and Virtual Reality

Visual mediums have a stronger positive impact on the public in PI activities. In the past, transportation agencies have relied on maps, illustrations, renderings, and videos. These methods still have value and will continue to be used, but technology such as VR- or AR-generated environments allows the public to get an even deeper understanding on how transportation projects impact their lives.

EMERGING TECHNOLOGIES AND APPLICATIONS

- Augmented reality
- Virtual reality
- Crowdsourcing
- Gamification

Users access the VR and AR environments through immersive interfaces such as wearable VR equipment that may provide information to users in one of three ways:



visual,



auditory,
and



tactile.

While AR and VR are similar, they have slight differences in how they work:

- **AR**—computer generation and projection of information that is presented directly in the user’s real-world environment, such as holograms or overlays over the user’s visual world.
- **VR**—completely computer-generated environments.

How AR/VR Works

Users access the VR and AR environments through immersive interfaces such as wearable VR equipment that may provide information to users in one of three ways: visual, auditory, and tactile. Tactile interfaces generally operate within VR environments and allow users to interact with virtual objects using special equipment that give the sensation of touching that object.

PI Application Possibilities

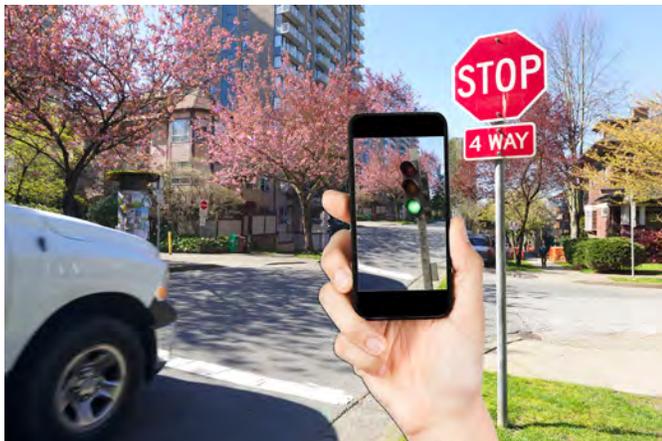
From a public engagement perspective, these applications can be used in scenario planning and 3D visualization software such as City Engine and AR/VR headsets. Using these tools, transportation agencies can make planning decisions, such as transportation prioritizations and land use variations, and formulate planning alternatives that incorporate detailed visualizations with geo-coded input from the public.

As AR and VR devices become more available on the commercial market, public participation in the transportation planning and development process could see significant increases through home use of these devices. Table 7 shows examples of future PI applications. Table 8 shows specific examples of immersive AR and VR applications.

The City of Fremont, California, used a VR viewfinder to demonstrate a redevelopment project. In introducing the viewfinder (Figure 9), City of Fremont Mayor Bill Harrison was quoted as saying, “If you’re like me and you’re a visual person, and you just can’t imagine how this empty lot will look someday—we’ve provided you a new tool. The OWL will allow you to see what Capitol Avenue will look like once it’s complete...you’ll get a full 360 view of what’s planned...it’s very exciting” (2).

Table 7. Future PI Applications.

In the future, potential PI applications include:



Seeing planned transportation assets on a location-specific basis layered on top of a picture from a cell phone.



Interacting with 3D rendered visualizations of complex projects.



Driving along a new corridor or through a new interchange, or experiencing the maneuvers for a new intersection.



Participating in virtual town halls through high-quality video conferencing and eliminating the need to travel to a specific location.

CASE STUDY: Working with Technology



Figure 9. VR Viewfinder and Rendering Showing Proposed Development.

VR video is an emerging tool of visualization that organizations began using to help citizens envision a proposed project or policy. In support of a proposed downtown redevelopment planning process, the City of Fremont, California, developed a portable, interactive, visual presentation that integrated 3D panoramic visualizations and audio clips with an old-fashioned-looking viewfinder, reminiscent of the kind that used to be found at scenic overlooks. Tilting or panning the viewfinder provided users with a 360 degree view of the project site as imagined by planners. Focusing on a key feature in the frame triggered an explanatory audio clip describing that feature. Planners brought the portable viewfinder to the Fremont Festival of the Arts, where 500 people experienced it, considerably more than the five residents who attended the official public hearing for the Downtown Master Plan project.

Table 8. AR/VR Applications.

TECHNOLOGY	PI USE POTENTIAL	EXAMPLE
<p>GESTURE RECOGNITION</p> <p>Sensors detect body movement (such as hands or eyes) and interpret that movement as input into the device.</p>	<p>In a public engagement setting, gesture recognition might be used within virtual or augmented environments so that the public can use gestures (such as pointing) in order to highlight issues or otherwise provide input on the project presented within the virtual environment.</p>	
<p>BRAIN-COMPUTER INTERFACE</p> <p>Sensors interpret brain activity to carry out functions.</p>	<p>This application is mostly used in medical settings by patients with severe loss of motor control or other disabilities. However, there is the potential for these types of interfaces to open new opportunities for PI by the disabled.</p>	

TECHNOLOGY

PI USE POTENTIAL

EXAMPLE

SPEECH RECOGNITION

Audio input is received directly from users and interpreted to execute commands.

If used as part of a public engagement program, speech recognition can be used by the public within a virtually rendered environment to quickly and (depending on the technology platform) accurately provide input on projects.



OMNIDIRECTIONAL TREADMILL

A specialized treadmill translates movement in the real world to movement through a virtual world.

These types of applications could be used to allow the public to walk through planned redevelopments, new sidewalk facilities, hike and bike trails, or similar projects that might benefit from the public having the ability to experience moving through the project.



Mobile Internet and the Internet of Things

The Mobile Internet refers to the expansion of Internet capability to mobile devices such as tablets and smartphones. The continued expansion of the MI is supported by the nation's growing high-speed cellular 4G network, growing coverage of wireless radio-based telecommunications mediums (such as Wi-Fi) in urban areas, and continued growth in the popularity of smartphones.

The Internet of Things is the further extension of the Internet to include physical objects by embedding sensors and sensor-connected motors (or actuators). Objects equipped with these components are assigned an Internet protocol address, which brings them online and allows them to be remotely monitored, accessed, or even controlled.

Through the MI and IoT:

- Homeowners can remotely monitor and control household systems such as heating and air conditioning or home security systems.
- Drivers can remotely monitor vehicle diagnostics.
- Transportation agencies use data collected from smartphones for new and innovative transportation systems management and operations activities.

There are currently an estimated 9 billion devices around the world connected to the Internet through the IoT and it is estimated that by 2025, that number will grow to between 50 billion and 1 trillion. The continued growth of the MI and IoT is already having a significant impact on how transportation agencies provide services, even outside of public engagement. With the growing availability of open data and associated third-party apps that use those services, citizens increasingly expect more government services to be provided through the Internet.

There are currently an estimated 9 billion devices around the world connected to the Internet through the IoT. By 2025, that number will grow to between 50 billion and 1 trillion.

Government Services

Governments have responded by launching e-government initiatives that make public data more widely available for app development and enhance the ability to provide services through the Internet.

For example:

- The City of Chicago recently saw the appointment of its first chief data officer, who was tasked with leading a citywide open data reorganization (3).
- One news service that was developed was an Open311 mobile phone app that provides access for citizens and city departments to a simplified system for submitting and tracking work requests (4).
- The City of Wichita, Kansas, recently equipped its fleet of snowplows with GPS-based transponders, which allows residents to view a map that shows where snowplows are active and their future routes.



Transit Services

The MI and IoT have also had a significant impact on transit operations. Transit service providers are equipping their fleets with technologies that allow users to monitor their location and speed in real time. The MI is allowing rural transit providers the ability to more efficiently plan and manage routes through flex routing—a combination of traditional fixed-route service but with an on-demand component. The City of Houston will be using flex routes that allow transit users to request a point-to-point service within designated flex zones (5).

Cities are also providing enhanced parking services through sensing and communications technologies (Figure 10). In the future, parking garages and parking lots will monitor available parking spaces and relay that information through mobile devices and websites. ParkPGH (Pittsburgh, Pennsylvania) and SFpark (San Francisco, California) are two parking apps that provide users with information on available parking. ParkPGH estimates available spaces using historical parking garage usage rates and an algorithm (6), while SFpark relies on sensors in certain areas to detect the presence of vehicles in city parking spaces (7).

In the future, parking garages and parking lots will monitor available parking spaces and relay that information through mobile devices and websites.



Figure 10. Parking App.

Personal Vehicle Ownership

In urban areas, the need to own and use a personal vehicle for mobility has been reduced by the growth in transportation networking corporations (TNCs) that provide on-demand mobility through MI-enabled apps. Users of these apps (such as Uber and Lyft) select their location and/or destination and the app finds a nearby driver, who is then directed by the app to the user (with location being determined by GPS data generated by the driver and user's smartphones) (Figure 11).

Other types of MI and IoT enabled mobility services that reduce the need to own a vehicle include Zipcar and Flightcar, which are app-based services that direct people to nearby vehicles that are available to rent.



Figure 11. TNC App Alerts a Nearby Driver.

Implications for Public Engagement

The MI and IoT are likely to significantly increase the ability of transportation agencies to conduct public outreach efforts through crowdsourcing and gamification:

- **Crowdsourcing**—the collection of data from or the completion of tasks by numerous people, usually through some sort of Internet-based activity.
- **Gamification**—the engagement of the public using game elements to address public policy issues.

Crowdsourcing

Crowdsourced transportation data can be collected through many means and used by transportation agencies in operating and maintaining infrastructure and providing transportation-related services.

WAZE (Figure 12) is a crowdsourcing app that collects GPS data and traffic information (such as incident locations or congestion conditions) directly from users. The app calculates travel times and suggests routes for users. Users can also report incident and construction information.



Figure 12.
WAZE App.

Gamification

Gamification is another potential public engagement strategy that could be facilitated through the MI and IoT (Figure 13). The WAZE app gives badges and awards that users can earn by providing information. Participatory budgeting is an example of combining budgeting exercises with game features. For example, the San Francisco County Transportation Agency launched a website and app that invited users to act as the city's budget czar and allocate funding for transportation services and projects. Users were limited in the amount of money that could be allocated and were provided with potential impacts based on their allocations. The game provided valuable public input on how investments should be prioritized.

The TPP/PI Section will support district efforts at integrating emerging technologies into their public involvement planning strategy.



Figure 13.
Games and
Rewards
Encourage
Citizens to
Provide Input.

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APPENDIX A:

Best Practices within TxDOT

Review PI best practices from TxDOT.



PLANNING AND GUIDANCE

Coldspring ADA Project (Lufkin District)

1. Description of the Project:

Construct a series of Americans with Disabilities Act (ADA) ramps and pavement improvements within the historic downtown area of Coldspring, in San Jacinto County. This project is under consideration to ensure safety and compliance with ADA guidelines, increase mobility and improve pavement conditions to level various inclines/declines along these downtown walkway areas.

2. Public Involvement Objectives:

- Establish an ongoing two-way communications approach: Strive to maintain proactive communication and information flow during the project development process and beyond.
- Underscore the opportunities for meaningful public input and transparency with the decision making process: Create engaging and collaborative public input opportunities, and communicate how and when decisions are finalized.
- Collaborate with the community on project's needs and priorities: Create meaningful ways to obtain input from the public on their needs, potential design options and priorities for the ADA Coldspring project.

- Ensure citizens are notified about public feedback opportunities: Go above and beyond to notify the public about feedback methods and meeting opportunities.

3. Best Practice Techniques:

- Pre-Open House Workshop: OPI recommended hosting, in partnership with the city, a stakeholder workshop that included Coldspring business owners, city/county officials and ADA advocates/activists to share information/research data, and solicit input on identifying potential problems as well as possible approaches to improving safety. This workshop helped identify stakeholders' concerns, identified goals and prioritized concerns. OPI facilitated the discussion using focused questions, and used engaging techniques such as flip chart brainstorming. Key activities included developing an invitation letter, agenda development and facilitation/meeting materials preparation. Another stakeholder workshop and formal public meeting will be conducted in fall 2015.

- Stakeholder Analysis: Prior to the stakeholder workshop, OPI conducted stakeholder analysis, and outlined some preliminary stakeholder concerns regarding protecting the historical integrity of the city, as well as potential loss of parking and business access.

4. Results and Benefits:

Although not all of the community members that participated in the stakeholder workshop were in favor of the project, stakeholders appreciated the public involvement process and workshop opportunity – in that TxDOT took the time to ask for their opinions, listen to their concerns and, most importantly, involve them in the decision making process. Based on the stakeholder workshop, TxDOT improved community relationships and the project team is currently working on revising design plans as a result of public input, prior to hosting a more formal public meeting.

5. Resources:

Julie Beaubien, (512) 416-2031 and Jimmy Thompson, Transportation Engineering Supervisor for the Lufkin District, (936) 633-4397.

PLANNING AND GUIDANCE

I-369 Marshall Route Study (Atlanta District)

1. Description of the Project:

To determine options for the development of I-369 in the Marshall area related to traffic safety, connectivity and community impacts via a robust public engagement plan to ensure community acceptance.

2. Public Involvement

Objective:

To engage the public effectively so that decisions made regarding the options reflected the community's input and preferences.

3. Best Practice Techniques:

Created a working

stakeholder group comprising 15 volunteers representing city and county elected officials and technical staff, private business interests, and other community members who met regularly to review information. This group began sharing information widely with citizens and requesting feedback from their community, which led from 13 initial route options to a recommended option.

4. Results and Benefits:

Following the public meeting, the stakeholder group was asked to review input from the public. A total

of 122 comments were received (57 via comment forms and emails and 65 via online survey input box), and the preferred route was reflective of the community. The majority of the public who participated in this public outreach effort supported the Working Group Interstate route option preliminary recommendation.

5. Resources.

Susan Howard, OPI (512.416.2030), Deanne Simmons, APD for Atlanta District (903.799.1308) <http://www.dot.state.tx.us/drivenbytexans/us59-harrison.htm>

PLANNING AND GUIDANCE

Outer Route, Lubbock (LBB District)

1. Description of the Project:

Determination of a preferred route for a new road around the city of Lubbock, based on projected growth patterns. With a new roadway, public involvement challenge centered on perceptions of right-of-way.

2. Public Involvement

Objective: To engage the public, beginning with a stakeholder working group, effectively so that decisions made regarding the preferred route reflect the community's input and preferences.

3. Best Practice Techniques

4. Transparency:

District staff and the consultant approached the feasibility study (Phase 1) and the identification of a specific route (Phase 2) open to input. Traffic data

and projections, schematics and environmental research results were presented to the stakeholders group and ultimately the community in a manner where the general public could witness the decision making process.

5. Engagement:

The stakeholder committee was a true working group, influencing the preferred route options that ultimately would be taken to the community and advocating for the process.

6. Accessibility:

District staff hosted public meetings following each stakeholder committee meeting at a nearby high school, which was ADA accessible, offered plenty of parking and an auditorium that featured sound, projection and comfortable seating for the large crowd.

7. Results and Benefits:

Following each public meeting, the stakeholder committee was called back to review input from the public. Each time, route options were modified based on the public input and corresponding stakeholder support. The route options were again taken to the general public. This occurred three times, so that the preferred route was truly reflective of community input.

8. Resources:

Julie Jerome, OPI (512.416.2032), Steve Warren, TPD for Lubbock District (806.748.4490) and <http://www.txdot.gov/inside-txdot/projects/studies/lubbock/outer-route.html>.

EVALUATION

US 87 Railroad Underpass, Dalhart (AMA District)

1. Description of the Project:

Improvements to US 87 in Dalhart, which include lowering US 87 under the Union Pacific Railroad bridge, adding a detention facility and lowering and realigning Denrock Avenue and US 385 to provide a new four-way intersection at US 87. Public involvement challenge was to engage the public to drive decisions surrounding a project that is predominately used by long haul 18-wheelers.

2. Public Involvement

Objective:

To identify and engage stakeholders, identify and prioritize their issues using a working group format, present their recommendations to the community of Dalhart and use public input to drive the decisions surrounding the project.

3. Best Practice Techniques:

4. Early Engagement:

A working group was gathered in February 2013 and met throughout the study, providing valuable feedback and direction that reflected community values.

5. Empowerment of Working Group:

Working group members served in a consulting role throughout the decision making process to the extent that TxDOT was viewed positively as a partner in the project.

6. Effective Communication

Tactics: District staff and members of the working group, as ambassadors for the study, met early with city, county and business officials before the public meetings and hearing to answer questions, gather input and build support for the project. District staff, through the Public Information Officer, kept the

general public informed and encouraged to give input at the public meetings and public hearing.

7. Results and Benefits:

Overwhelming community support for an important and necessary project for the residents of Dalhart and for the thousands of 18-wheelers that travel through the city. The chair of the working group was elected mayor of Dalhart. Attendance at the public hearing was high with near unanimous support for the project and for TxDOT's public involvement process.

8. Resources:

Julie Jerome, OPI, (512.416.2032), Gus Khankarli, TPD for Amarillo District (806.356.3240) and Terry Nix, Planner for AMA District (806-356-3273) <http://www.txdot.gov/inside-txdot/get-involved/about/hearings-meetings/amarillo/012015.html>.

EVALUATION

I-69, Nacogdoches (Lufkin District)

1. Description of the Project:

In 2014, TxDOT performed additional studies and conducted public outreach to determine how TxDOT should proceed with advancing I-69 in the Nacogdoches area. The Lufkin District proposed two alignment options – upgrade the current US 59 roadway to interstate standards (future I-69), or to build a new I-69 roadway on new location, which was presented at a public meeting.

2. Public involvement

Objective:

To inform the community about the project, understand the public's opinion about the alignment options and then choose the alignment option based on public input.

3. Best Practice Techniques:

- Opportunity to engage citizens – The Lufkin District created a SurveyMonkey asking the public about their alignment preference and comments, and posted the survey on the I-69 Driven by Texas website prior to and during the comment period. More than 200 comments were received and more than 100 completed the online survey. The public was also able to fill out the online survey during the open house.
- Proactive communication and outreach – Postcards, web promotions, water bill advertising, media outreach and cable channel promotions encouraged the public to complete the online survey.

4. Results and Benefits:

More than 200 comments were received and more than 100 survey responses were received. The public input indicated 70 percent of survey participants supported the US 59 upgrade option, vs. building on a new location. Based on this, TxDOT recommended advancing I-69 in the Nacogdoches area as a system of upgrades to the existing US 59 alignment.

5. Resources:

Julie Beaubien, (512) 416-2031 and Kelly Morris, Director of Transportation Planning & Development, (936) 633-4349. See the I-69 Nacogdoches page for more information at: <http://www.dot.state.tx.us/driven-bytexans/us59-nacogdoches.htm>.

LOGISTICS AND SUPPORT

El Paso Roundabout (ELP District)

1. Description of the Project:

Creation of a video to explain the proper approach to roundabouts. Public sentiment regarding roundabouts in El Paso tended toward the negative, primarily from anxiety about navigating this type of intersection.

2. Public Involvement

Objective:

To enhance communication between the district and the general public by removing misconceptions about roundabouts.

3. Best Practice Techniques:

In a collaboration among OPI, creative services, media and district staff, a script for the roundabouts was written, images of vehicles and pedestrians maneuvering a roundabout were filmed, the script was audiotaped in English and Spanish, the video was created and posted on www.txdot.gov as well as presented at public meetings and open houses for one particular roundabout project. The video is preserved on the agency website for future roundabout projects.

4. Results and Benefits:

By presenting information about roundabouts visually, in English and Spanish, the district created an environment so that public input was informed, relevant and valuable. The effort was an attempt to change public opinion about roundabouts from negative to positive, through education.

5. Resources:

Julie Jerome, OPI (512.416.2032), Eddie Valtier, TPD for El Paso District (915.790.4240) and <http://www.txdot.gov/inside-txdot/projects/studies/el-paso/sh20.html>.

LOGISTICS AND SUPPORT

Loy Lake Bridge Improvement Project (Paris District)

1. Description of the Project:

The bridge had met capacity and traffic often stalled causing motorists delays. The District widened the bridge to improve safety and relieve congestion. In this heavily trafficked corridor with abundant retail, restaurant and small business interests, it was critical to alert the stakeholders to the project and keep them informed throughout construction.

2. Public Involvement

Objective:

To ensure consistent communication prior to and throughout construction between the district and the general public, as well as

adjacent affected business owners via a broad public involvement strategy.

3. Best Practice Techniques:

OPI, in conjunction with the Sherman Area Office, the district PIO and the Contractor, developed a communications strategy, which included media releases, two Construction Open Houses, a project web page, a fact sheet in English and Spanish hand delivered to adjacent businesses prior to the start of construction, and a special pre-Thanksgiving briefing targeted to businesses to share information about holiday shopping access.

4. Results and Benefits:

By proactively distributing information prior to and throughout construction and continually 'checking in' with businesses and the public, the district successfully kept the public informed about detours, closures and completion and business complaints to a minimum.

5. Resources:

Susan Howard, OPI (512.416.2030), Aaron Bloom, Area Engineer (903.868.9251) <http://www.txdot.gov/inside-txdot/projects/studies/paris/loy-lake-bridge.html>.

LOGISTICS AND SUPPORT

I-35 Northeast (San Antonio District)

1. Description of the Project:

The I-35 Northeast project proposes adding two elevated managed lanes in each direction to I-35 from I-410 south to FM 1103 in Bexar, Comal, and Guadalupe counties. The proposed project also includes interchange and operational improvements within the study limits.

2. Public Involvement

Objectives: To supplement the in-person open house and public hearing, a virtual public hearing was created with the goal of providing an additional opportunity for the public to learn about and comment on the project.

3. Best Practice Techniques:

The virtual public [hearing](#) was linked off the [I-35 Northeast project page](#) on TxDOT.gov. The virtual public hearing included all material of the in-person experience including [brochure](#), [display boards and schematics](#),

[video visualization](#), [hearing presentation](#), and [commenting](#). The hearing presentation recorded audio in PowerPoint to accompany the slides, was saved as an MP4 file, then placed on the TxDOT YouTube channel. The video visualization was also placed on the TxDOT YouTube channel for easy linking and user viewing. The VPH was advertised in newspaper ads and online so the public knew they could also participate online if they were unable to attend in person.

4. Results and Benefits: The virtual public hearing was well attended as shown by the Google analytics for the web page hits. There were 421 unique users, over twice as many as signed in for the in-person meeting. There were also more than 1,700 page views, showing users were clicking between pages to look at the various

information presented online. Users also made use of the online commenting provided through the virtual public hearing. Nearly 20 percent of comments received during the hearing comment period were received online.

5. Resources: Amy Redmond, OPI, (512.416.3096); TPP, (512.486.5032); Jonathan Bean, SAT, (210.615.5825); Clayton Ripps, SAT, (210.615.6075).

NOTIFICATION TECHNIQUES

I-35 Central PEL (San Antonio District)

1. Description of the Project:

The I-35 Central Planning and Environmental Linkage (PEL) study is looking at needs and potential high-level projects to improve I-35 congestion.

2. Public Involvement Strategy

Specific to Technique: Notify the public about the I-35 Central PEL open house using online banner ads and drive users to the project web page to learn more about the study to participate and leave comments through the virtual open house.

3. Best Practice Techniques:

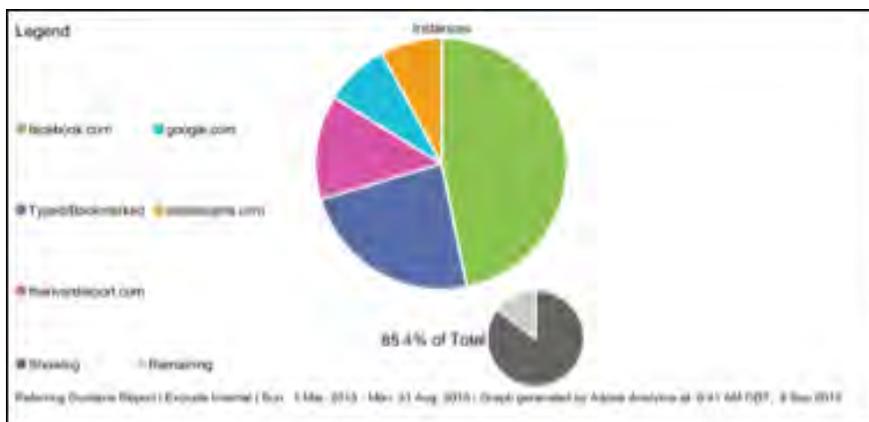
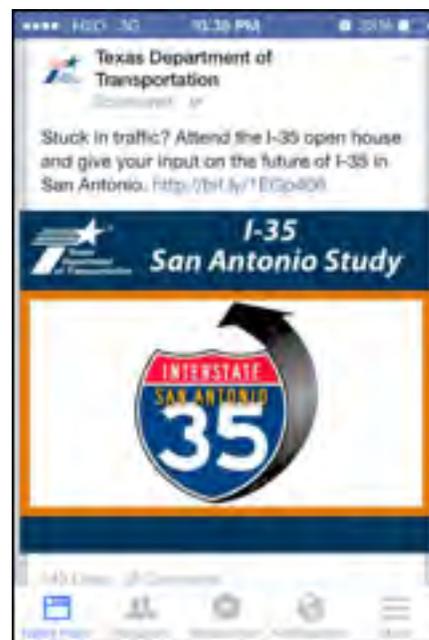
Because of costs associated with advertising in the print newspaper, this open house was advertised using sponsored [Facebook ads](#) that [targeted users](#) in San Antonio. OPI worked with the district, the study consultants, and CMD to create and post the Facebook ad that directed users to the online meeting notice and study web page. The ad used [TxDOT's Facebook account](#) so the public knew it was generated by TxDOT. To accomplish the FB ad, OPI supplied TxDOT's social media administrator with the artwork and text for the ad; the consultant supplied the credit card for payment, since Facebook ads only accept credit cards. The social media administrator was instructed much money was to be dedicated to the ad, the dates

that it would run, the city and demographics that were to be targeted.

4. Results and Benefits:

The Facebook ad provided a better return on investment than advertising in the print newspaper. The budget for this notification method was set at \$100. The benefit of Facebook ads is the advertiser decides the budget and can spend as little as \$5 for this notification method. The ad for this open house was seen by over 12,000 Facebook users and drew over 500 users to the meeting and project web page. The Google Analytics for the I-35 Central PEL web page reflect an increase in web traffic during this time. The data show that about 40 percent of visits to the open house meeting web page originated from facebook.com.

5. Resources: Amy Redmond, OPI, (512.416.3096); TPP, (512.486.5032); Jonathan Bean, SAT, (210.615.5825); Clayton Ripps, SAT, (210.615.6075).



NOTIFICATION TECHNIQUES

I-35 Central PEL (San Antonio District)

1. Description of the Project:

The I-35 Central Planning and Environmental Linkage (PEL) study is looking at needs and potential high-level projects to improve I-35 congestion.

2. Public Involvement

Objectives: Notify the public about the I-35 Central PEL open house using online banner ads in San Antonio. The second objective, was to drive users to the project web page to learn more about the study, participate, and leave comments through the virtual open house.

3. Best Practice Techniques:

Because of costs associated with advertising in the print newspaper, this open house was advertised using banner ads on the local newspaper's website and on a San Antonio-centric online news site. OPI worked with the

district and the study consultants to create and post the banner ads directing users to the online meeting notice and study web page.

4. Results and Benefits: The online banner ads provided a better return on investment than advertising in the print newspaper. The banner ads for both news sites cost about \$1,500. In addition to the banner ads, one site sent the information out via their Facebook and Twitter feeds, boosting the number of citizens informed about the open house. The Google Analytics for the I-35 Central PEL web page reflected an increase in web traffic during this time.

5. Resources: Amy Redmond, OPI, (512.416.3096); TPP, (512.486.5032); Jonathan Bean, SAT, (210.615.5825); Clayton Ripps, SAT, (210.615.6075).



NOTIFICATION TECHNIQUES

I-35 Gainesville (Wichita Falls District)

1. Description of the Project:

Improvements for the widening of I-35 in Cooke County from four lanes to six lanes to update the roadway to current design standards and provide congestion relief for expected future traffic increases. TxDOT is conducting an environmental assessment (EA) for the proposed widening and realignment of I-35 from the south Cooke County line to mile marker 3 in Oklahoma.

2. Public Involvement

Objective:

To ensure community-wide awareness of the EA and to encourage public input into the process.

3. Best Practice Techniques:

a. Proactive communication—OPI hand-delivered fliers about the project to adjacent business owners. A project web page was established with detailed information and periodic project

updated. An open house was scheduled to inform citizens about the project and staff had Google Earth set up at the meeting so participants using this application could determine the proximity of the project to their property.

b. Effective outreach tactics—Postcards in English and Spanish were sent to approximately 11,000 citizens, flyers distributed to 50+locations, including LEP and underserved stakeholder groups, project newsletter, email blasts, social media, postings on community and civic website, outreach to city/county/chamber personnel, and a virtual open house for those unable to attend in person with the same information and opportunity to comment. This provided project information and helped encourage higher meeting attendance.

4. Results and Benefits:

More than 400 attendees at the open house, 38 comment forms received from the open house and the virtual open house was downloaded 69 times.

5. Resources:

Susan Howard, OPI, 512.416.2030, Stephanie Manry, Environmental Specialist, 940.720.7733. <http://www.txdot.gov/inside-txdot/projects/studies/wichita-falls/i35-cooke-county.html>.

MEETING IMPLEMENTATION

US 190 Bridge Replacement, Jasper (BMT District)

1. Description of the project:

Replacement of the US 190 East Relief Bridge, an approved construction project near the Jasper County Neches River relief bridge approximately 11 miles west of Jasper on US 190, which spans the B.A. Steinhagen Reservoir.

2. Public involvement

Objective: To inform the community about project information, and understand the public's opinion about the alignment options and then choose the alignment option based on public input.

3. Best Practice Techniques:

- **Proactive construction communication** — The open house format for a construction project was designed to inform citizens about the upcoming bridge replacement construction project, construction process and share a 3D animation video showing construction phases and futuristic view of the new bridge. Interested citizens were also able to

subscribe for ongoing email updates through the online construction project page.

- **Opportunity to engage citizens** – A blue idea wall was displayed during the open house that encouraged citizens to post their concerns, questions and also suggestions for future construction projects. In addition, the district team requested feedback about the meeting effectiveness through a survey, asking feedback about the meeting materials, 3D animation video and suggestions for future communication methods.
- **Effective outreach tactics** — Postcards sent to approximately 9,000 citizens, flyers distributed to 30 locations, online information and emails to key stakeholders provided project information and helped encourage higher meeting attendance.
- 4. **Results and Benefits:** Positive community support for the project, and an appreciation expressed for

the hosting the meeting and sending information from area residents.

Positive working relationship established with the Martin Dies, Jr. State Park officials serving as a communication ambassador and project advisor. Approximately 140 citizens attended the meeting, 50 surveys completed with nearly 90% indicating the meeting was informative and 30 ideas and comments from the blue idea wall. The public genuinely appreciated the outreach and meeting opportunity, and many requested that a similar approach be used for future construction projects. Received invitation for presentation opportunity at the local Rotary Club.

- 5. **Resources:** Julie Beaubien, (512) 416-2031 and Diana Griffith, Environmental Specialist (409) 898-5792. See the US 190 construction page for more information at: <http://www.txdot.gov/inside-txdot/projects/studies/beamont/us190-bridge.html>.

CORRIDOR PLANNING

US 83/84 Abilene (Abilene District)

Corridor studies address specific needs and challenges of a roadway or area, identify environmental impacts and define possible improvements. Public involvement strategies for corridor planning feature working groups that involve partnerships among TxDOT districts, regional planning organizations and city and county elected officials. Stakeholder working groups assist district staff in initially identifying and prioritizing issues that are then taken to the general public for input.

1. Description of the Project:

Considerable growth in the southern portion of Abilene and into Taylor County has affected the safety and efficiency of US 83/US 84, in particular, the six-plus miles from Iberis Road S. to the US 83/US 84 split. A safety study was embarked upon because of these initial issues:

- A high number of at-grade crossovers (33 total).
- An expanding number of residences and growing neighborhoods.
- An increasing number of vehicles traveling into and out of Abilene at peak hours.
- The speed limit in relation to the number of crossovers and transition to city limits.

- Projected growth over the next 20 years (business and residential).

2. Public Involvement Objective:

Involve the community in issue identification and prioritization, beginning with a stakeholder committee and continuing with the entire community.

3. Best Practice Techniques:

- Informed public through sharing of information, such as traffic study.
- Stakeholder committee and general public identified and prioritized the issues through stakeholder identification and prioritization exercises (Context Sensitive Solutions).
- Climate of the open houses was designed for full public input. Tactics included:
 - o Two-way communication—close attention to members of the public by TxDOT staff to answer questions understand concerns.
 - o One-way communication—aggressive outreach (postcards, media, project web page, church and MPO calendars, changeable message signs) resulting in high attendance

- o Accessibility—three, four-hour open houses located at a large church positioned on the roadway under study.
- o Input informs decisions—blank schematics and comment cards for public to express input.

- Input informs decisions—results of public input were compiled, grouped and reflected in project discussion.

4. Results and Benefits:

Informed public input was reflected in decisions made regarding future improvements to the roadway. In fact initial decisions were modified based on input from the public. Turnout at the open houses averaged 100. The demeanor and approach of TxDOT staff was so positive and open that the public was overwhelmingly supportive of the improvements proposed.

5. Resources: Julie Jerome, (512) 416-2032 and Michael Haithcock, Director of Transportation Planning & Development, (325) 676-6810. Project studies web page is located at: <http://www.txdot.gov/inside-txdot/projects/studies/abilene/us83-us84.html>.

APPENDIX B:

PI Strategies

Learn more about PI strategies.



The following pages include examples of Public Involvement Techniques. Each example includes a graphical representation of cost, time, impact, and other things to consider.

The authors offer the following explanation of the iconography:

<p>COST</p> 	<p>refers to the relative expense of implementing this particular strategy. Costs are considered not in terms of actual dollars but relative to other strategies.</p>
<p>TIME</p> 	<p>refers to how long a strategy might be used and also considers initial implementation time. Strategies can range from one-time events that still may require significant lead time to ongoing activities that may last the duration of a project. Some activities may continue indefinitely.</p>
<p>IMPACT</p> 	<p>refers to the geographic scale that might be impacted by a particular strategy. In many cases, strategies can be scaled to accommodate a need at whatever geography is desired.</p>
<p>THINGS TO CONSIDER</p> 	<p>refers to specific issues or hurdles that should be considered when contemplating a specific strategy.</p>

These pages offer a description of the strategies and the specific strengths along with a concise success story for each.

Finally, the strategy is depicted where it would fall on the International Association of Public Participation (IAP2) Spectrum of Involvement. The spectrum is discussed in more detail in the guidebook on Page 35.



CITIZEN ADVISORY COMMITTEES



More Information: <http://crossroads/org/opi/>

Description

A citizen advisory committee is a group of public stakeholders that meets regularly with transportation planners to closely collaborate on an issue or project. A citizen advisory committee represents the public by participating and providing input on transportation planning issues to agency partners.

Citizen advisory committees should include:

- Local stakeholders like business owners, residents, and interested organizations.
- Local transportation agencies.
- Other decision-making entities like school boards.

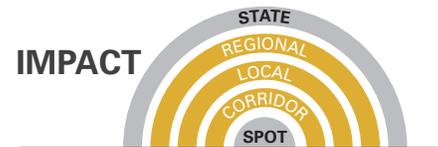
Target Market

Citizen advisory committees are useful

in the earliest stages of transportation projects. The committee makeup should ensure that all interests are properly represented. Agencies should be available to advise committee members on a project without interfering with their function.

How Will This Help?

- **Builds working relationships and promotes collaboration** between agencies and committee members.
- **Allows for in-depth and technical discussions.**
- **Educates the public** on local transportation issues.
- **Ensures that the feedback** considered in the decision-making process of a transportation project **represents community interests.**



THINGS TO CONSIDER



EQUITABLE REPRESENTATION

SUCCESS STORIES

TriMet, in Portland, Oregon, has developed a strong committee structure for each major capital project. This structure bridges changes in leadership when projects move from the planning phases at Metro (the metropolitan planning organization) to the design and construction phases at TriMet (the transit agency).

Implementation Checklist

The primary issue with an advisory committee is ensuring that all interested parties are represented without making the group so large that it cannot function (generally no more than 20 to 30 members). Group dynamics may also hinder successful use. Stakeholders with opposing points of view may refuse to consider each other's ideas. When inviting stakeholders, pay attention to exclusivity and who you're not inviting. Committees must also ensure that they are transparent, providing an open and clear process to the public, and that they are resourced properly.

CITIZEN ADVISORY COMMITTEES ON THE SPECTRUM OF PUBLIC ENGAGEMENT

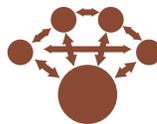
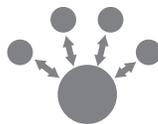
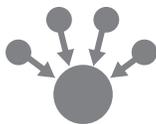
Inform

Consult

Involve

Collaborate

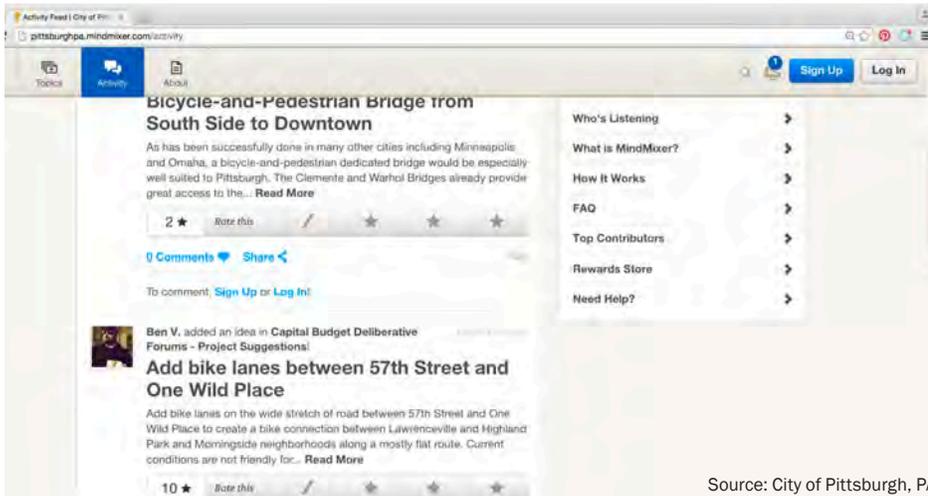
Empower



IAP2 Spectrum of Public Engagement (Source: IAP2)



CROWDSOURCING



Source: City of Pittsburgh, PA

More Information: <http://crossroads.org/opi/>

Description

Crowdsourcing engages the public in an online discussion to generate ideas, thoughts, and opinions about a particular issue or project. It allows many individuals online “in the crowd” to gather information and broadcast to others in the crowd. Through a call for solutions, the crowd’s collective intelligence tackles a problem or issue usually performed by specific individuals. For example, agencies can invite the public to help develop a new technology or refine steps of a process.

In transportation planning, crowdsourcing offers an opportunity for many people to comment on different parts of the project. It raises unique issues and provides chances for progressive solutions. It is most effective when participants include a mix of stakeholders who provide different perspectives. The use of specialized web tools makes this technique especially affordable. Online crowdsourcing

promotes involvement by people who might not otherwise be able to participate.

Target Market

Agencies can use crowdsourcing for initial phases of a project to discuss possible solutions that are mutually agreeable to all stakeholders. They can also use it to find alternative plans for roadway projects or leverage a new technique or technology.

How Will This Help?

- **Leverages the collective intellect of the crowd**, which may eclipse the knowledge of any one individual.
- **Provides relevant input** for local and regional transportation projects.
- **Contributes non-expert knowledge** that can lead to new ideas.
- **Brings together diverse individuals** to develop solutions and engages



THINGS TO CONSIDER



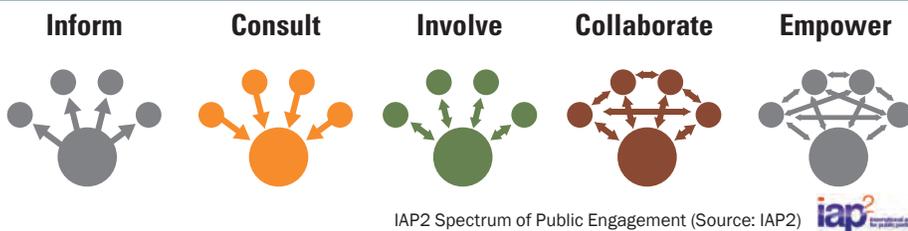
SUCCESS STORIES

The City of Pittsburgh uses a MindMixer web page to crowdsource ideas for all government activities, including transportation. In 2009, then-Mayor Peduto launched the MindMixer site as a platform to connect problem-solving citizens with civic challenges. Either citizens or city officials can initiate topics. Citizens can leave comments, pin ideas to a map, vote in a poll, or participate in discussions. City officials and community leaders monitor the feedback and use it to inform their decision making. The City of Pittsburgh’s MindMixer webpage is at <http://pittsburghpa.mindmixer.com>.

individuals outside of the sponsoring agency who often identify issues unknown to the implementing agency.

- **Potentially reaches a wider audience**, providing more people with the opportunity to participate.

CROWDSOURCING ON THE SPECTRUM OF PUBLIC ENGAGEMENT

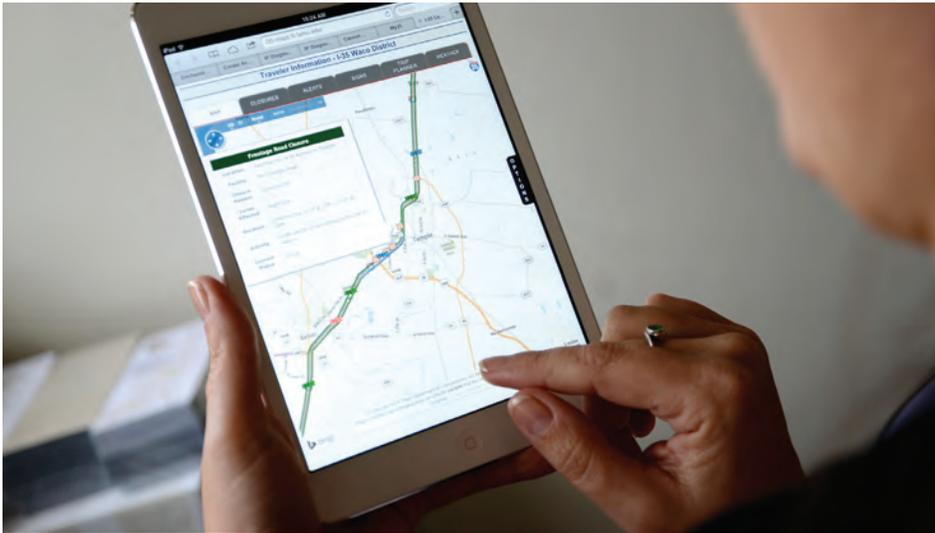


Implementation Checklist

Crowdsourcing is best employed by staff members experienced in productively using the information. It may require substantial resources and technical knowledge to build the collaborative community, and monitor the discussion. The digital divide is also a concern because not all citizens have equal Internet access.



ELECTRONIC UPDATES



More Information: <http://crossroads/org/opi/>

Description

Electronic updates (email, text, or voice) inform interested individuals about transportation project updates using any electronic format. These electronic updates promote broader public participation and offer a cost-effective way to communicate information. Like other outreach strategies, the effectiveness of electronic updates depends on the quality, timeliness, and accuracy of the information.

Target Market

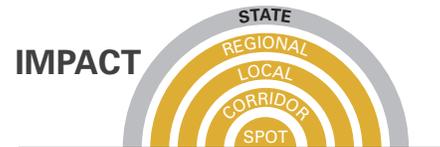
Electronic updates should be used throughout the life of a project—from project development through construction—or program to update interested parties of upcoming meetings, traffic alerts, new information alerts, input opportunities, project status, or other timely information. Providing informative, short, and relevant messages increases the updates' effectiveness.

How Will This Help?

- Distributes current, accurate, and relevant project-specific information to travelers, community members, and other interested parties.
- Allows interested parties to self-identify and become informed on matters important to them.

Implementation Checklist

Small portions of the population do not have access to email or text messaging. As of 2015, 90 percent of U.S. adults own a cell phone, and of those, 81 percent send or receive text messages. In 2014, 84 percent of U.S. households owned a computer. While access to these technologies continues to increase, it is important to also consider traditional approaches, such as a mailer or newspaper announcement, to reach those who do not use these devices.



THINGS TO CONSIDER



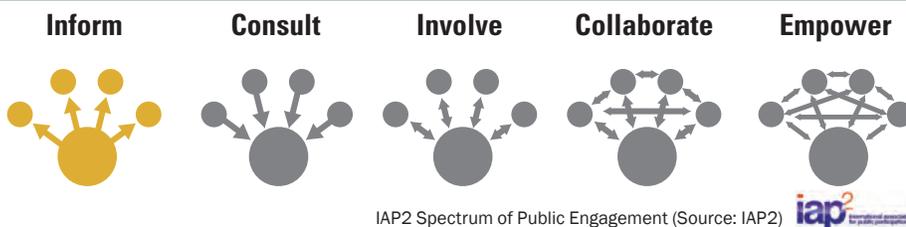
SUCCESS STORIES

MoPac Improvement Project, Austin, Texas

The MoPac Expressway is one of Austin's busiest arterials, carrying over 180,000 cars and trucks each day. When construction on managed lanes for the corridor began, the Central Texas Regional Mobility Authority engaged the public in a variety of ways using mobile, electronic, and social media platforms, including updates via email or text message, by signing up on the web page. Messages may include information on public forums, closures, and construction updates.

Gathering data such as email addresses and phone numbers can also be challenging. Many people may be hesitant to sign up for a list for fear of receiving too many or unimportant updates. Advertising ways to get involved on a project web page or mailer can improve public awareness of how to receive updates and alerts.

ELECTRONIC UPDATES ON THE SPECTRUM OF PUBLIC ENGAGEMENT

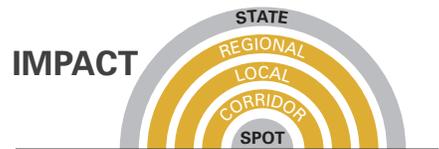


IAP2 Spectrum of Public Engagement (Source: IAP2)





FACT SHEETS



THINGS TO CONSIDER



DISTRIBUTION TO ALL POTENTIAL PARTIES

SUCCESS STORIES

Texas Department of Transportation districts frequently use fact sheets to provide valuable information about the different phases of large projects in the region. These sheets include a map of the affected area, project cost, duration, phasing schedule, benefits, and contact information.

Implementation Checklist

Fact sheets should include a date and the most up-to-date, factual information at the time. Dating the sheet can help avoid misunderstandings, and incorrect information can fuel public distrust. Fact sheets should also be available in additional languages, if necessary, to meet the needs of a particular population.

Fact sheets can be limiting as a public involvement strategy because they only distribute information. They may also be limited in their effectiveness to reach stakeholders. Fact sheets should include contact information and should be used with other public involvement strategies to incorporate public feedback into the process.



More Information: <http://crossroads.org/opi/>

Description

Fact sheets provide relevant information about a project. Fact sheets may detail planning efforts, communicate project schedules, provide information on potential alternatives or impacts, and answer common questions.

A good fact sheet:

- Breaks complex information into pieces to make it easier to understand.
- Is well organized.
- Provides enough information for the reader to understand the topic but not so much that the reader is overwhelmed.
- Displays data in easy-to-read charts or graphs.

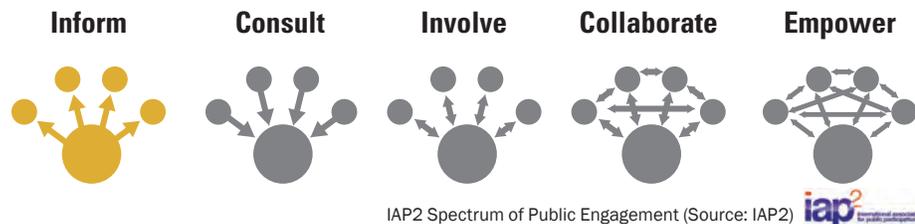
Target Market

Fact sheets can be tailored to address any group, such as citizens affected by a transportation project or members of a special interest group. Graphics can help communicate complicated ideas. A series of fact sheets can be used for large projects with multiple phases. Fact sheets can include a variety of information on a project and focus on the entire project or each individual phase of the project, from planning through construction.

How Will This Help?

- Provides a clear, concise way to share project information and key contacts with the public that is current, accurate, and relevant.

FACT SHEETS ON THE SPECTRUM OF PUBLIC ENGAGEMENT





WORKING GROUPS



More Information: <http://crossroads/org/opi/>

Description

The best way to know where the public stands on a project or policy is to ask them. Opinion/market research uses a variety of techniques, both qualitative and quantitative, to assess public opinion. These techniques can include opinion polls, focus groups, and interviews. These techniques denote the opinions of an entire population by measuring the opinion of a small and significant sample.

Public engagement in a transportation project or for broader policies requires a complete understanding of the opinions of all citizens affected by the project or proposed policy. Before the public supports a transportation improvement project or policy, people want assurance that:

- The project/policy is needed.
- The project/policy represents the best available option.
- The responsible agency will spend money wisely and effectively.
- The project/policy directly benefits them and is worth the cost.

Focus groups go beyond a reading of what people think to gain a better understanding of why they believe as they do.

Target Market

Public opinion research is useful to understand both *what* people's opinions are and *why* they may have those opinions. The first is accomplished through quantitative research such as polling. The second is more qualitative in nature and can be achieved through focus groups or interviews. Market research can help an agency connect issues to specific groups. Also, opinion research can serve as before/after studies or a snapshot in time, or can show how opinions have changed.

How Will This Help?

- Offers insight that will help agencies shape messages and determine specific engagement and communication methods.
- Identifies any beliefs, concerns, support, or opposition of the audience.

COST



TIME



IMPACT



THINGS TO CONSIDER



REPRESENTATIVE SAMPLES

SUCCESS STORIES

Texas: In 2014, Texas A&M Transportation Institute researchers conducted focus groups to test various outreach and education materials. Research had shown that the public lacks knowledge about transportation funding. By conducting in-depth focus groups, researchers were able to create messages that built awareness and elicited greater interest in transportation funding among the public.

- Provides information that can correct misinformation.

Implementation Checklist

Conducting public opinion research can be time consuming and expensive. For example, an agency may be required to engage a subcontractor to conduct a telephone poll, and it may take several weeks to reach the appropriate sample size. Focus groups require a great deal of logistical support and require an experienced facilitator to conduct.

OPINION RESEARCH ON THE SPECTRUM OF PUBLIC ENGAGEMENT

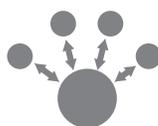
Inform



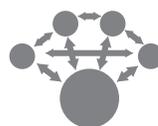
Consult



Involve



Collaborate



Empower



IAP2 Spectrum of Public Engagement (Source: IAP2)





LUFKIN DISTRICT

DISTRICT NEWS



IN THIS ISSUE | SUMMER 2016

DE CORNER 1

Project Spotlight:
US 84 at Sabine River..... 2

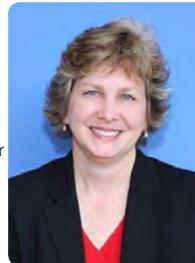
Upcoming Construction Projects:
Livingston Area Office 3
Lufkin Area Office..... 4
Nacogdoches Area Office...5

D.E. CORNER

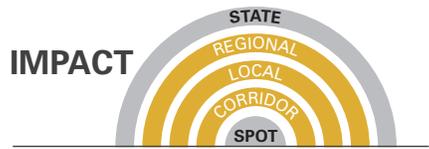
Welcome to the Lufkin District's inaugural quarterly newsletter. I hope you find it informative and useful.

Our goals are simple, but accomplishing them takes a great team. We strive to deliver the right projects, focus on the customer, foster stewardship, optimize system performance, preserve our assets, promote safety and value our employees. To accomplish these goals, our team is vested in TxDOT values: People, Accountability, Trust and Honesty.

Safety is our first and foremost goal each day. Our TxDOT team works to implement safe practices into everything we do. In FY 2015, the Lufkin District was successful in achieving all four safety goals - no injuries, lost time, lost days or vehicle incidents. I



Cheryl P. Flood, P.E.



THINGS TO CONSIDER



LANGUAGE BARRIERS, TIME, COST

More Information: <http://crossroads/org/opi/>

Description

Project newsletters provide information to the public about transportation plans, programs, or projects. Project newsletters describe all aspects of a project and can be in both print and electronic format. Information that might be communicated by a newsletter includes:

- Design.
- Schedules.
- Upcoming work in the area.
- Opportunities for engagement.
- Contact information.

Project newsletter effectiveness depends on its accuracy and timeliness. If necessary, the newsletter should be available in multiple languages. Efforts should be made to translate the newsletter into languages reflective of the community surrounding the project.

Target Market

Project newsletters aid those directly affected by a proposed project and anyone else who wishes to receive information about the project. People can view project newsletters in a variety of locations and times (e.g., physical copies at a local grocery store or digital copies on a project web page).

How Will This Help?

- **Provides basic information to the public** that is current, accurate, and relevant.
- **Presents information visually** through diagrams, models, cartoons, and other imagery in a way that can be widely distributed through multiple channels.
- **Reaches the public or broad audiences** beyond those who attend public meetings and hearings.

SUCCESS STORIES

Both TxDOT and FHWA publish monthly newsletters on various topics. TxDOT's The Lufkin District News spotlights projects in the planning stages as well as upcoming construction projects. FHWA's *Success in Stewardship* newsletter highlights environmental process streamlining efforts from around the nation.

Implementation Checklist

Newsletter distribution relies on the mailing list or distribution network, and that can be limiting. By including QR codes or survey links on the newsletter, you can enhance the two-way communication. Newsletters encourage additional public involvement by including contact information and information about upcoming events such as public meetings, hearings, or virtual public meetings. Staff time to create and distribute newsletters can be intensive, so plan accordingly.

PROJECT NEWSLETTERS ON THE SPECTRUM OF PUBLIC ENGAGEMENT

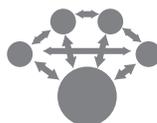
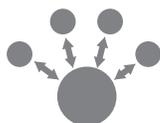
Inform

Consult

Involve

Collaborate

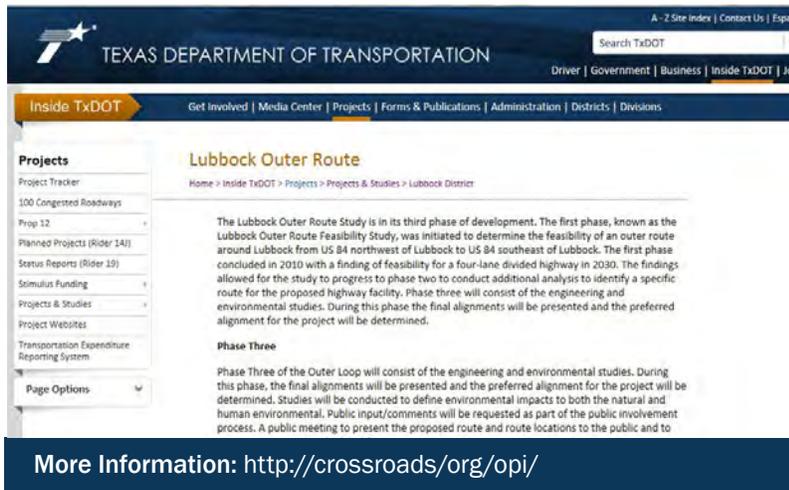
Empower



IAP2 Spectrum of Public Engagement (Source: IAP2)



PROJECT WEB PAGES



More Information: <http://crossroads.org/opi/>

Description

Project web pages communicate information to the public about transportation projects and programs throughout project development and through construction. A project web page can present information on the planning process, alternatives being considered, schedules, benefits, and other relevant material. A project web page also provides an inexpensive way to gather comments and answer questions from the public. As with other outreach methods, a project web page's effectiveness depends upon timeliness and accuracy.

Project web pages typically have the following:

- Information about the project and information about how to get involved.
- Project materials (reports, newsletters, presentations, and minutes or videos of public meetings).
- Options for the public to comment, add themselves to a contact list, or connect with project staff. Agencies should have a privacy policy for any

personally identifying information collected and cybersecurity precautions for the site.

- Someone to maintain, update, and monitor the web page regularly.

Target Market

Web pages are available to anyone with access to the Internet. It may be necessary to translate the web page into appropriate languages, if needed. Project web pages should be mobile friendly and accessible to people with disabilities.

How Will This Help?

- Provides accurate and relevant information to the public.
- Connects the public with agency staff.
- Allows lead agencies to update or change information quickly and easily.
- Collects feedback from web page visitors.

COST



TIME

INDEFINITE

IMPACT



THINGS TO CONSIDER



STAFF RESOURCES

SUCCESS STORIES

Virginia Mega Projects, the Virginia Department of Transportation's project web page, highlights several specific projects and includes a clickable map of the region. The web page discusses all upcoming public hearings, meetings, events, and comment opportunities. It also records and archives information from past public meetings. Photographs and videos help depict the information. For more information, visit www.vamegaprojects.com.

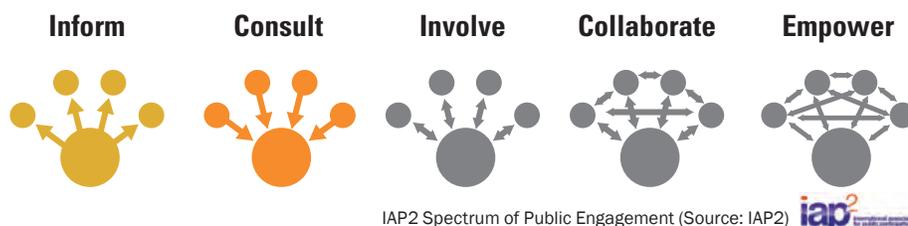
Implementation Checklist

Project web pages present many challenges, such as:

- Web pages only reach those who use the Internet.
- People who communicate online may not be representative of the entire community.
- Web pages must be maintained regularly with up-to-date information.
- Web pages must be linked to txdot.gov.

A public engagement plan needs to incorporate both online and traditional tools as part of the overall outreach effort.

PROJECT WEB PAGES ON THE SPECTRUM OF PUBLIC ENGAGEMENT



IAP2 Spectrum of Public Engagement (Source: IAP2)





PUBLIC HEARINGS AND MEETINGS



More Information: <http://crossroads.org/opi/>

Description

Public hearings and meetings help the public understand a project or proposal. They provide project details and allow the public to ask questions and make comments. Anyone can attend, as an individual or as a representative of a certain interest group. Public hearings and meetings have different functions:

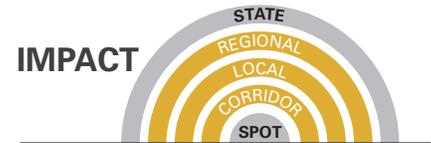
- Public hearings are more formal than public meetings. They occur after the development of project location and design studies, but prior to a decision. Officials gather community comments for the official public record.
- Public meetings are held throughout the planning process, from project development and planning through construction, and can be formal or informal. Officials present information, exchange ideas, and gather input from the public. The meetings usually focus on a specific issue, project, or planning document and can be adapted to specific audiences or community groups.

Target Market

Public hearings and meetings are open to all. These types of meetings in practice do not reach all members or groups of the public forum. This type of engagement favors those who are familiar with the existing process, those who have the time and resources to attend, and those who do not feel alienated by this particular public engagement technique. This can be overcome by scheduling meetings at flexible times, days of the week, and convenient locations.

How Will This Help?

- Provides accurate and relevant project information.
- Allows officials to receive community comments.
- Fulfills regulations for public involvement (public hearings).
- Can be formatted to fit agency or community needs (public meetings).
- Creates relationships between the agency and the community.



THINGS TO CONSIDER



TIMING AND LOCATION

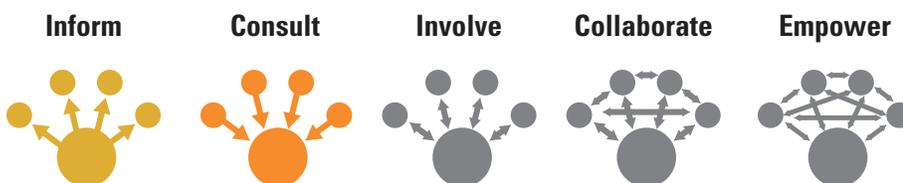
SUCCESS STORIES

Beaumont District—US 190—The Beaumont District hosted an open house at the Martin Dies, Jr. State Park on a Saturday, in partnership with the Texas Parks & Wildlife Department. The open house format was designed to inform citizens about the upcoming US 190 bridge replacement construction project, and the construction process, and share a 3D animation video showing a futuristic view of the new bridge. The weekend timing, location, and opportunity for a free state park day pass helped increase interest and attendance.

Implementation Checklist

Federal regulations call for early and continuing public involvement. Public hearings that come at the end of a process do not offer enough chances to participate and can make community members feel that they have no influence. Large meetings and formal hearings may intimidate participants from commenting. Public meetings/hearings often have low attendance, so they should be one part of a larger public involvement program.

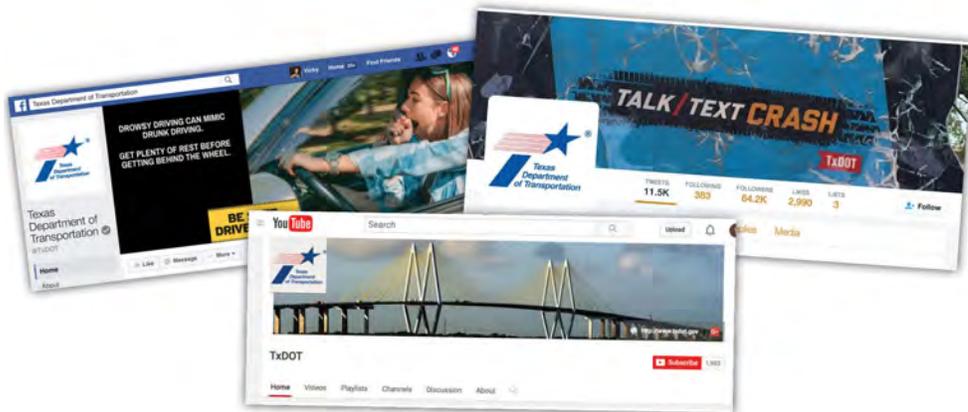
PUBLIC HEARINGS & MEETINGS ON THE SPECTRUM OF PUBLIC ENGAGEMENT



IAP2 Spectrum of Public Engagement (Source: IAP2)



SOCIAL MEDIA



More Information: <http://crossroads/org/opi/>

Description

Transportation agencies are increasingly adopting social media such as Facebook, Twitter, YouTube, and Instagram to engage the public on transportation projects and programs. State agencies exchange project details (scheduling, benefits, operations, planning, etc.) and feedback with the public. Social media can also reach a part of the population that otherwise might not participate in traditional outreach methods at a fraction of the cost.

Target Market

Social media allows people to engage on their own time and in their own way. For example, busy professionals, parents, or individuals who work nontraditional schedules may not be able to attend public meetings during normal business hours. Additionally, using social media attracts people from younger generations to actively engage or comment on transportation projects, policies, and ideas.

As of 2015, 76 percent of all Internet users used social media sites, and 52 percent of online adults used more than one social media site.

How Will This Help?

- Informs travelers of accurate and relevant developments in real time.
- Delivers customized information to a target (e.g., regional) audience.
- Reaches audiences that might not otherwise participate.
- Improves interaction with the public.

Implementation Checklist

Transit agencies reported that resources are a primary concern. Although most social media tools and platforms are free, they require staff time and resources to monitor and maintain. Staff availability and training are some of the greatest barriers to adopting social media. Agencies must provide training and adopt a social media policy at the agency level.

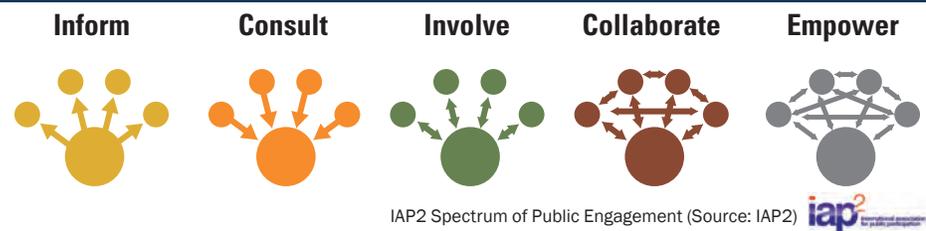


SUCCESS STORIES

TxDOT began using social media in 2009 to support public engagement and improve responses to public feedback. TxDOT adopted a social media policy that evaluates its success in terms of the quality and quantity of exchanges with the public. TxDOT's social media activities help the agency meet its public engagement objectives. Public information officers are responsible for social media efforts.

Online criticism and negative feedback can increase because of user anonymity. Some agencies have found that responding directly to negative feedback online helps lessen the issue.

SOCIAL MEDIA ON THE SPECTRUM OF PUBLIC ENGAGEMENT





VIRTUAL PUBLIC MEETINGS



More Information: <http://crossroads/org/opi/>

Description

Virtual public meetings use web and chat services to supplement traditional, in-person meetings or open houses on transportation projects. They allow the public to participate, give feedback, provide comments, and in some instances engage in real-time, live-chat sessions with project agents. Virtual public meetings also display project information on a web page and allow users to comment. This format allows for as much or as little participation as one may desire.

Target Market

A primary advantage to citizens who engage in virtual public meetings is that they can participate based on their

schedule. This flexibility increases participation from citizens who cannot attend in-person public meetings because of work or issues with childcare. Virtual public meetings can also increase participation from citizens who cite traffic and parking as nuisances that curb interest in attending in-person meetings.

How Will This Help?

- Allows an unlimited number of citizens to participate at the same time.
- Can allow real-time interaction.
- Increases the number of engaged citizens in the transportation planning process, which may increase public support for final decisions.

COST



TIME



IMPACT



THINGS TO CONSIDER



MAY EXCLUDE SOME

SUCCESS STORIES



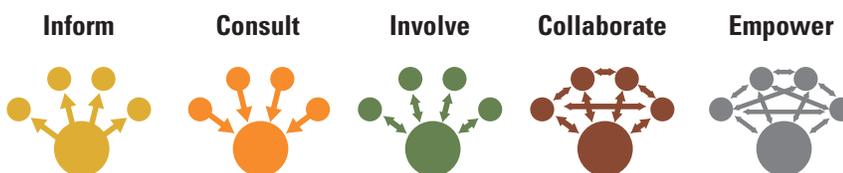
Oak Hill Parkway Project, Austin, Texas (2013): Provides an early example of a

virtual public meeting with live-chat opportunities. The virtual open house increased public engagement in the environmental review process for proposed improvements to the Oak Hill Parkway project. The virtual open house provided an interactive experience designed to mimic the project's traditional open houses and featured two real-time chat sessions with agents. The web page also featured a landing page, registration page, project materials, and an exit survey.

Implementation Checklist

Project staff must closely monitor virtual public meetings to ensure that comments received are acknowledged and that staff answer questions in a timely manner. Participants need to feel their comments are valid and heard. Current FHWA rules prohibit the inclusion of comments received through a virtual public meeting into the administrative record. This requires online access to participate and should be part of a broader outreach plan.

VIRTUAL PUBLIC MEETINGS ON THE SPECTRUM OF PUBLIC ENGAGEMENT



IAP2 Spectrum of Public Engagement (Source: IAP2)



APPENDIX C:

Outputs and Outcomes

Learn how to make PI meaningful.



Outputs—Measuring Methods

In addition to recording the number of participants, time, and efforts involved in PI, TxDOT can also periodically survey participants about their experiences to help understand their perception of the PI effort. By including questionnaires at public meetings, or online surveys for web-based participation, TxDOT can assess methods over time to improve public engagement.

There are several specific measures included in a study of this topic for the Florida Department of Transportation that are particularly helpful (9):

- Access to information and participation opportunities by persons with disabilities.
- Convenience of meetings and events to public transportation, where available.
- Geographic dispersion of involvement opportunities.
- Convenience of meeting or event time.
- Convenience of meeting or event location.
- Diversity of participants in PI events.
- Diversity of project committee representation.
- Availability of information in languages other than English.

For meaningful PI:

- Use specific indicators over a period of time (in different places and projects) to identify how differences in PI techniques or in population groups may be more effective.
- Assess these results with local understanding about issues.
- Systematically track and evaluate PI efforts and results.

Outcomes—Evaluating Meaningful Public Involvement

Questionnaires and staff assessments of project outcomes are valuable for evaluating actual results of PI. Identify specific indicators for performance measurement that should be tailored for each district or planning process.

Table 9 defines the terms involved in assessing the outputs and outcomes of program or district PI, and how each PI target can be described for a summary report.



Table 9. Indicator Definitions and Performance Measurement Examples.

	TYPE	DEFINITION	EXAMPLE PI TARGETS Note: these examples may help develop targets that are appropriate for given projects. Numbers in [brackets] are replaced with your chosen target
Output indicators	Outreach	Measures of the quality of data, information, and analysis	<ul style="list-style-type: none"> • At least [75%] agree that the information provided by the department was adequate. • [75%] of the agency's information meets the media's expectations.
	Product	Measures of the direct planning products, such as plans, policies, and project descriptions	<ul style="list-style-type: none"> • Simplify the reading level of documents, publications, and web pages (readability at 8th–10th grade levels). • [75%] of individuals feel that their input was considered.
Outcome indicators	Process	Benchmarks of the planning process and planning steps	<ul style="list-style-type: none"> • At least [75%] of participants and invitees felt the meeting or event was held at a convenient location. • Percent of customers who are satisfied with feedback they receive from the agency after offering comments.
	Project	Performance measures of specific plans and policies	<ul style="list-style-type: none"> • Customer satisfaction with completed projects at < 5 years after completion. • Customer satisfaction with completed projects [5 or more] years after completion.