

Performance Measures for Public Participation Methods *Final report*

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Performance Measures for Public Participation Methods

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Performance Measures for Public Participation Methods

It has become increasingly important for public agencies to be transparent in how they meet their customers' needs. The public, their customers, pay for these services through taxes and fees. It stands to reason that they should be sure they are getting a good value for their money. One way to do this is by measuring performance, not only for core duties like planning, programming and investing, but also for more policy-oriented work like public engagement.

Public engagement can be designed to integrate the views, concerns, and issues of the public into the decision-making process. By including the affected public early in the process, agencies can plan, design and build projects and programs that reflect community values and increase citizen ownership and buy-in. The result is increased agency credibility and more efficient and effective implementation.

This study illustrates how strategies of performance measurement can leverage the results of public engagement activities in transportation development and operations. The research identifies eight best practices for evaluating public participation efforts:

- ***Coordinate Expectations*** as to what purpose the public engagement approach should serve.
- ***Designate Resources*** not only to implement public engagement activities, but also to evaluate them.
- ***Aim for Fairness*** to determine if outreach efforts are effective in reaching representative samples of the public.
- ***Stay Flexible*** by designing evaluation techniques that suit the broadest possible range of circumstances.
- ***Distinguish Outputs from Outcomes***, with the former describing the volume of feedback on a particular project (number of participants or comments, for instance), and the latter characterizing how that feedback influenced the project.
- ***Use Quantitative and Qualitative Measures Consistently*** to ensure that each measure supports clear understanding of changes in participation and action supporting desired policies.
- ***Track Results over Time*** to evaluate changes in public sentiment and make adjustments to improve public participation.
- ***Keep It Simple – Start Small***, and recognize that even the most modest efforts can produce meaningful results if those efforts are consistently applied.

Researchers present a set of sample performance measures in three categories: 1) those involving observation of participation by members of the public; 2) those requiring direct dialogue or other

interaction with the public; and 3) those demonstrating how public engagement can affect agency goals and/or project outcomes.

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Executive Summary

Evaluating Engagement, Improving Results

Public engagement is an important part of transportation project development, but measuring its effectiveness is typically piecemealed. Performance measurement—described by the Urban Institute as the *measurement on a regular basis of the results (outcomes) and efficiency of services or programs*—is already widely used in the transportation field. This study illustrates how policy can support continuous improvement of public engagement’s role in transportation development and operations by applying straightforward concepts of performance measurement to the complex interactions between the public, transportation agencies, and the policy makers addressing Texas’ present and future needs. This study offers transportation organizations the tools to create a systematic approach to documenting and managing public engagement processes. This approach can both identify areas for improvement and demonstrate how the public’s engagement in the transportation decision-making process leads to more efficient project or plan development. It can also be a mechanism to show the public how their input is used.

Our Approach

The Texas A&M Transportation Institute (TTI) studied the challenges and opportunities of performance measurement in public engagement through four phases of research. First, TTI conducted a robust literature review of previous studies, in addition to the regulatory requirements and practices for public engagement in Texas transportation. Next, TTI looked at agencies outside of Texas to identify how they used performance measurement of their public engagement practices to improve transportation outcomes, and what requirements they had in place to foster consistent results. Focusing on the agencies with the most detailed and promising approaches, TTI conducted detailed case studies of transportation agencies at the state, regional, and city levels, including interviews with staff and document research. Findings from this research supported the development of a framework for performance measurement of public engagement in Texas. The final report includes eight best practices in evaluating public engagement, and three tiers of performance measures.

Best Practices in Evaluating Public Engagement

This research identified best practices from diverse sources and developed guidelines describing what methods work best and why. These eight best practices for evaluating public participation can be applied throughout a project lifecycle:

- Coordinate Expectations.
- Designate Resources.
- Aim for Fairness.

- Stay Flexible.
- Distinguish Outputs from Outcomes.
- Use Quantitative and Qualitative Measures Consistently.
- Track Results over Time.
- Keep It Simple – Start Small.

Tiers of Performance Measures: Observe, Interact, Incorporate

TTI's three tiers of performance measures for public participation begin with *Observe* measures—these are primarily quantitative measures that can be implemented from staff observation of activities. *Interact* measures involve interaction with the public or stakeholders. They measure how and whether people were engaged, and what kind of experience those participants had. *Incorporate* measures address how the agency used public engagement results to affect transportation planning or services—the outcome of the public's involvement, and evidence of impact.

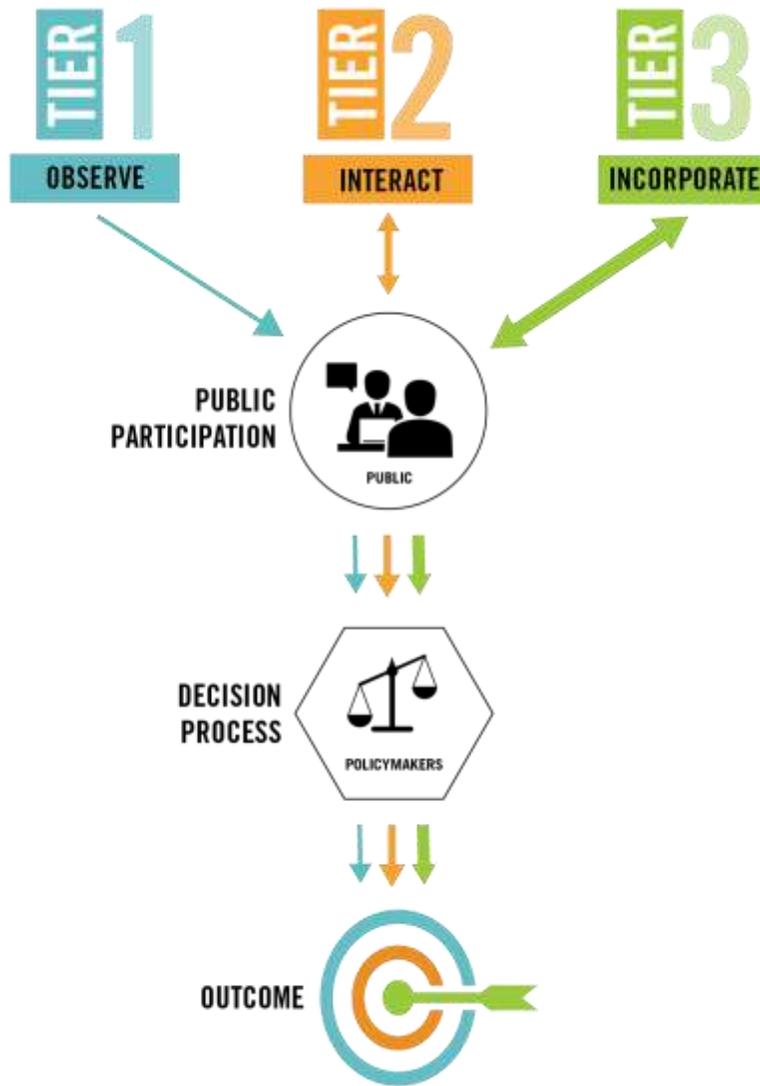


Figure 1. Three Tiers of Performance Measures.

Policy Implications

Performance measures for public engagement provide a new mechanism for understanding the impact of substantial efforts by agency staff and the public to improve transportation. An individual agency can identify which investments in public engagement yield the best results. When multiple agencies implement similar measures, results can be compared to identify which public participation methods were most effective in a wide range of circumstances. Officials can use these performance measures to understand how transportation agencies work with the public and to build policies that reflect the needs and values of Texans.

Introduction

Why Measure Performance?

In recent years, public scrutiny and accountability for public agency performance and spending have steadily increased. Methods of accessing and disseminating information are more available than ever. At the same time, agencies are experiencing ongoing budgetary constraints while demand for public services is increasing. In this context, it has become increasingly important for public agencies to be transparent in how they meet their customers' needs. The public, their customers, pay for these services through taxes and fees. It stands to reason that they should be sure they are getting a good value for their money. One way to do this is by measuring performance. Performance can be measured for core duties like planning, programming and investing. But it can also be effective and important for more policy-oriented work like public engagement.

This report begins with a discussion of recent legislative developments in Texas that signal an increased focus on performance measurement and reporting. In 2015 the 84th Texas Legislature passed House Bill 20, which requires the Texas Department of Transportation (TxDOT) to begin measuring and reporting on the performance of agency functions. The report then provides a discussion of performance measurement in general, and the role of state and federal requirements for public involvement. The report offers a set of eight best practices gleaned from the research and provided in a systematic implementation framework, showing when and where those best practices would come into play in a planning process. Finally, the report provides a set of sample performance measures, presented in tiered levels that span a range of complexity, effort, and expense.

To develop this report, researchers examined the public engagement activities at several transportation agencies to determine what activities those agencies regularly conducted and how well established and robust the programs were. The research also determined whether those activities were regularly evaluated and, if so, how.

The terms “public engagement” and “public involvement” and “public participation” tend to be used interchangeably in this field. This report uses “public engagement” but it should be understood that it applies to discussions that may use either term.

Measuring Transportation Performance in Texas: House Bill 20

In 2015, the 84th Texas Legislature increased the statutory requirements for measuring TxDOT's performance. That year, the Legislature passed House Bill 20, requiring that the Texas Transportation Commission develop and implement a performance-based planning and programming process. The purpose of this legislation was to provide a process for the executive and legislative branches of government to be able to determine whether TxDOT is meeting its

goals and objectives. The legislation requires that the Commission develop and implement performance metrics and measures in support of three of the agency's major activities:

- Strategic planning in the statewide transportation plan (STP), the rural transportation plans (RTPs), and the unified transportation program (UTP).
- The evaluation of decision-making on projects selected for funding in the UTP and statewide transportation improvement program (STIP).
- The evaluation of project delivery for projects in the department's letting schedule.

The legislation also requires that the Commission "periodically" review performance measures and metrics in order to accomplish the following:

- Assess how well the transportation system is performing and operating in accordance with the requirements of 23 USC Section 134 or 135, as applicable.
- Provide the department, Legislature, stakeholders, and the public with information to support decisions in a manner that is accessible and understandable to the public.
- Assess the effectiveness and efficiency of transportation projects and services.
- Demonstrate transparency and accountability.
- Address other issues the Commission considers necessary (*I*).

These actions were important first steps in creating a performance measurement system to guide and align departmental decision-making with strategic goals. Although TxDOT reports a number of system performance measures to the Legislature and the Legislative Budget Board each year, as required by Texas Transportation Code § 456.008 and 43 TAC § 16.203, these measures are not tied to strategic goals and do not include measures for public engagement. The new Texas law provides a rationale and a framework for measuring the performance of project planning, selection, and delivery activities against previously established goals.

The 2015 legislation also requires that TxDOT begin to develop and implement performance reports to assure transparency and accountability. This research found that some of the most effective public engagement programs were housed in states with no statutory requirement to measure or evaluate the performance of these programs, but they did tend to take place in agencies with long-standing cultures of transparent public engagement and policies of accountability. HB20's emphasis on strategic planning, accountability, and transparency offer a foundation upon which to build such a culture.

Transportation Performance Management: A Short History

Over at least the last 10 years, the use of performance measures by transportation agencies has steadily increased, some through their own volition and some by mandate. Typically, transportation agencies have measured and tracked many of the scientific and engineered

elements of transportation including bridge structural integrity, pavement quality, sign maintenance, and other system elements. Often performance of these assets is measured in terms of resources used to build and maintain them. Measuring and tracking performance over time can improve planning, construction, maintenance, and operations. If regularly practiced, this monitoring can, in turn, help to manage resources and improve transparency. The Washington State Department of Transportation has set the standard for accessible and regular performance reporting with its Gray Notebook, a quarterly report of system and agency performance. See Figure 2.

Washington State Department of Transportation's Gray Notebook

In May 2001, following a period of low public confidence for its lack of transparency, the Washington State Department of Transportation (WSDOT) published its first Gray Notebook (GNB), a performance reporting tool which measures and reports agency and transportation system performance. The stated purpose of the GNB is to keep WSDOT accountable to the Governor, the Washington State citizens, legislators, and transportation organizations. Published quarterly, the GNB is credited with bringing about an increased confidence in WSDOT in the form of two major revenue packages in 2003 and 2005 that funded \$16 billion worth of projects, as well as a citizen defeat of a repeal of the 2005 gas tax increase (2). Figure 2 shows one of several performance reports for pavement condition reported in the GNB (3).

Asset Management: Pavement Conditions Annual Report

Motorists experience declining road conditions

WSDOT's percent of good condition pavement declines while that in fair and poor condition increases
 Actual numbers for 2008 and 2012; projected 2018; Percent of lane miles and vehicle miles traveled (VMT) by condition category;
 Characteristics of pavement at each condition



Data source: WSDOT Materials Lab.
 Notes: Percents may not add to 100 due to rounding. Chip seal pavement, also known as Bituminous Surface Treatments, was not measured in 2011 or 2012 due to budget reductions. Chip seal pavement accounts for 29 percent of lane miles on WSDOT's road network, yet because chip seal is used on roads with less traffic than those made of asphalt or concrete, chip seal roads account for 5.5 percent of vehicle miles traveled on WSDOT roads.

Vehicle miles traveled indicates pavement performance from the public's perspective

To better capture how the typical motorist experiences the condition of the state's highway network, WSDOT is transitioning to reporting pavement condition weighted by vehicle miles traveled (VMT). For comparison, this report also includes the former standard of reporting condition by lane miles of pavement. Where pavement condition is shown by VMT, roadways with more traffic are weighted more heavily than less traveled roads. Weighting pavement condition by VMT better accounts for the higher costs to maintain and preserve roads with more traffic.

Figure 2. Pavement Condition Performance Report, from WsDOT's Gray Notebook.

More recently, there have been moves to expand performance management to areas of agency activity beyond technical responsibility and resource allocation. More and more agencies are starting to align performance measures with strategic planning and decision-making. A performance management system that is tied to an organization's strategic goals can identify appropriate measures, set targets, report on the measures, and use those results to make informed decisions that align with agency goals (4). This process can help transportation agencies make the best use of their resources and provide evidence of the need for additional funding. Figure 3

from the National Cooperative Highway Research Program’s (NCHRP) report on *Transportation Performance Measures: Insight from Practitioners* illustrates how a performance management structure aligns the various aspects of project development and delivery.

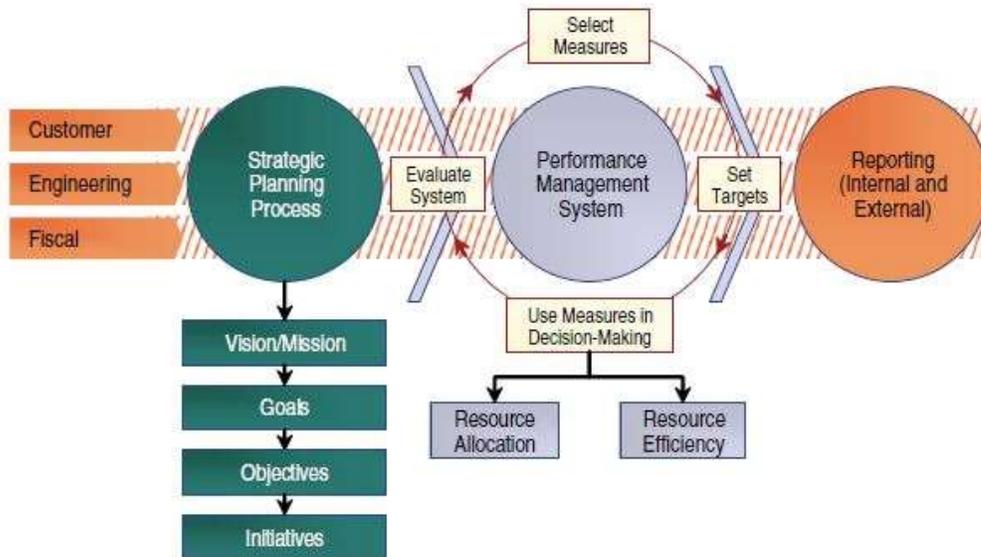


Figure 3. Performance Management Structure.

What about Public Engagement?

Public engagement can also be evaluated, and it is valuable to do so for several reasons. Public perception is one of those reasons. Whether or not the public perceives a state agency as being managed effectively and efficiently can have a considerable impact on support for that agency at the legislative and executive branches. Often, the most direct contact the public has with an agency is through public outreach programs. Yet, these programs are often excluded from performance management systems.

Public perception is not the only reason to value and incorporate engagement into the transportation planning and delivery process, however. Public engagement, defined as two-way communication, can be designed to integrate the views, concerns, and issues of the public into the decision-making process. For decades, it has been a key component in transportation planning, project development, and implementation and occurs at all stages of a project’s cycle, from long-range planning through construction and operations. Since the late 1960s, the federal government has required public engagement as part of the transportation planning and decision-making processes. Yet, those participation requirements are not typically accompanied by measuring or reporting requirements. Absent these evaluative methods, agencies have no way of systematically demonstrating the importance of public participation efforts that they conduct. Lawmakers cannot determine the value of the investment a state or region makes in the public

engagement process. Moreover, the public has no way of knowing whether its input was heard or considered.

Evaluating public engagement activities can bring value beyond improved accountability and transparency. It may also lead to better transportation outcomes. A robust engagement effort provides an opportunity for anyone to contribute in a meaningful way and through a variety of opportunities. By including the affected public early in the process, agencies can plan, design, and build projects and programs that reflect community values and increase citizen ownership and buy-in. The result is increased agency credibility and more efficient and effective implementation. It may also result in transportation options that are better suited to actual community needs and investments with higher returns. The Minnesota Department of Transportation regularly engages the public in major transportation projects and decisions and publishes public preferences and opinions on the DOT website. See Figure 4.

The Minnesota Department of Transportation (MnDOT's) Annual Minnesota Transportation Performance Report.

MnDOT's annual report, which provides an evaluation of the state's physical transportation system, also reports on organizational issues like public trust.

When last measured in 2015, public trust was rated at 85 percent, which MnDOT attributes to its robust communication and engagement practices. Citing a decades-old, statewide culture of civic involvement as a foundation, public engagement staff at MnDOT also note that initiatives of inclusion from the governor's office and a focus on customer satisfaction from their transportation commissioner have strengthened the agency's ongoing commitment to public engagement.

MnDOT feeds public engagement data back into their transportation planning and investment processes and publicly reports on these activities on their user-friendly and interactive public website. By prioritizing public engagement activities and collecting feedback from previously disengaged or new sectors of the population, the agency is able to plan and deliver a higher percentage of projects completed on time and within budget. It is also better able to provide transportation options that respond to changes in society, technology, the environment, and the economy (5). Figure 3, showing a visualization of public input into the state highway investment plan, is from MnDOT's website (6).

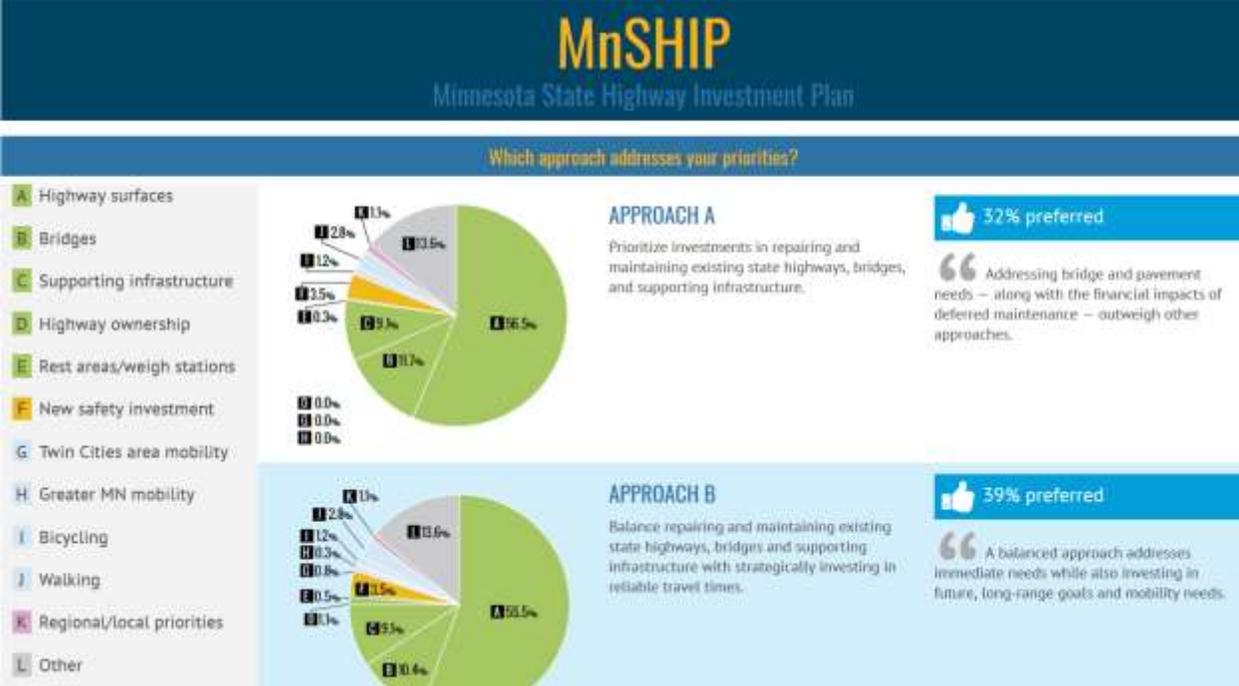


Figure 4. Public Input into Minnesota State Highway Investment Plan, Visualized on the MnDOT Website.

Regularly evaluating their public engagement processes, by assessing how the public feels about their ability to engage with the planning processes and contribute to their transportation systems, will allow agencies to identify which processes are working well and which need improvement. This feedback loop results in continuous process improvement, allowing agencies to target resource allocation more effectively.

State and Federal Requirements for Public Engagement

Federal Rules

Beginning in the late 1960s, federal legislation began to broaden the public's engagement in transportation decision making, calling for early and continuous opportunities for the public to be involved in identifying social, economic, and environmental issues. These laws included the following:

- National Environmental Policy Act (NEPA) of 1969.
- Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).
- Transportation Equity Act for the 21st Century (TEA-21) in 1998.
- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005.

Other federal legislation and executive action help ensure that traditionally underserved populations are actively engaged in the transportation decision-making process. These include:

- The Americans with Disabilities Act (ADA) of 1990.
- Title VI of the Civil Rights Act of 1964.
- Executive Order 12898 on Environmental Justice.
- Executive Order 13166 (addressing requirements for meeting the needs of those with Limited English Proficiency).

This commitment has been reconfirmed in subsequent authorizing federal legislation and orders that guide the transportation planning process, such as Fixing America's Surface Transportation (FAST) act signed in December 2015.

State Rules

Public engagement requirements for TxDOT and transportation-related state agencies are located primarily in several chapters of 43 Texas Administrative Code (7). Specifically, the following actions require public engagement processes:

- Regular business meetings of the Texas Transportation Commission and Department of Motor Vehicles.
- Developing an environmental impact statement for a transportation project.
- Statewide long-range transportation planning.
- Rural transportation plans.

Most substantive performance measures for public engagement are focused on the environmental review process for transportation projects, also referred to as the NEPA process, after the federal law that brought it into being. Key public participation requirements for NEPA process include the following:

- A public Notice of Intent (NOI) to be published in the Texas Register and local newspapers in areas affected by the project (8).
- One public meeting to be held during the development of a Draft Environmental Impact Statement (DEIS) (9).
- A documentation requirement for a public hearing, requiring that the project sponsor is to document the number of positive, neutral, and negative comments received from the public (10).

The last documentation requirement is the only analytic requirement for performance measurement in Texas state regulations that this research reveals.

TxDOT has committed to going beyond the statutory and regulatory requirements for public participation. The TxDOT agency guidance documents recommend several public engagement performance measures to be implemented at public meetings. One such report, the agency's Standard Public Meeting Documentation, recommends documenting the number of attendees and the number of commenters as a regular practice, demonstrating how performance measures can be integrated through agency-led standards. However, most regulatory documents and guidance offer only general recommendations. For example, the state's rules on long-range transportation planning in non-metropolitan areas, compiled in 43 Texas Administrative Code 16.55, encourage the development of processes that "maximize public participation," but do not require or even suggest which aspects or methods of participation to maximize, nor do they specify resources to support public engagement.

These findings reveal an opportunity to improve performance measurement and reporting of public engagement efforts for transportation activities. House Bill 20 provides a model that, if combined with TxDOT's willingness to go above and beyond those statutory minimums, could result in more robust, more transparent, and possibly more effective public engagement activities.

Best Practices in Evaluating Public Engagement

The field of transportation planning and development includes a wide range of guidance on how to incorporate public engagement, but few have pulled best practices from diverse sources into a single discussion to describe what methods work best and why. This section identifies eight best practices for evaluating public participation. These best practices are incorporated into a framework (see Table 2) offering where in a project or planning process these practices can best be applied and how.

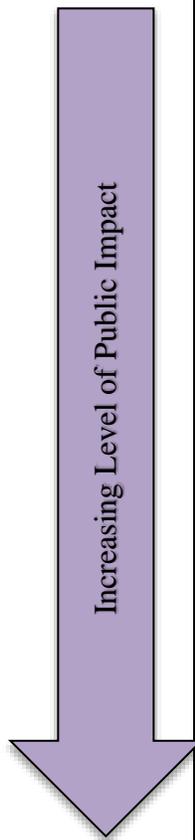
- Coordinate Expectations.
- Designate Resources.
- Aim for Fairness.
- Stay Flexible.
- Distinguish Outputs from Outcomes.
- Use Quantitative and Qualitative Measures Consistently.
- Track Results over Time.
- Keep It Simple – Start Small.

Coordinate Expectations

Part of the challenge of monitoring performance of public participation is that people define what works differently—some may see public engagement as playing a minimal role in their project, whereas others want an engagement process that results in clear direction on how transportation projects are implemented. This range of needs is what makes the International Association for Public Participation (IAP2) Spectrum of Public Involvement (11) (see Table 1) compelling. It aids planners in articulating their public engagement goals before designing a public engagement process or evaluating its performance.

The IAP2 spectrum can also aid planners in one of planning’s fundamental processes: coordinating expectations between staff, organizational leaders, and the public as to what purpose the public engagement plan should serve. Coordination is one of the key processes of planning, and research suggests that a lack of communication between staff, organizational leaders, and the public is a significant cause of planning process failures (12). Establishing these process goals and performance standards at the outset, before the first set of actions, can help to keep expectations aligned with stakeholders, and plans aligned with goals. Knowing, for example, whether a campaign’s ultimate goal is to simply keep the public apprised of construction road closures (inform) or the goal is to implement a transportation design that the public votes on (empower) means that staff can keep the public engagement design within the decided-upon scope of activities.

Table 1. Public Participation Spectrum, adapted from IAP2 (13).



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.

An established goal for public engagement can also support stakeholders when the complex and often non-linear nature of the planning process introduces the need to change or even to reconsider the original goal. Ongoing communication and coordination of expectations for participation between the public, planners, and agency leaders will support all parties in remaining focused yet flexible throughout the entire planning process.

Early coordination of expectations has the added benefit of creating goodwill with the citizens, enabling them to see up front not only what their role in the project will be, but also how the process will be evaluated to impact the project (14).

Goodwill Benefits from Setting Expectations Early

If the public perceives that engagement is an afterthought and an individual's comments will have no bearing on decisions, participation will suffer and cynicism will spread (15).

Designate Resources

Few transportation planning processes start with thinking about how to evaluate the effectiveness of public participation. However, like any other stage of a process, public participation and its associated costs need to be included in project schedules and budgets. This means that a project's scoping phase is the best time to ensure that the right resources are available to plan, implement, and evaluate public engagement. Resources could mean agency staff time, consultant funding, or even volunteered effort from local participants or non-profit organizations. Regardless, research from other cases of evaluating public engagement shows that adequate resources for evaluating public participation need to be in place for any consistent or meaningful measurement to take place. Resources are required not only to implement public engagement activities but also to evaluate them.

Aim for Fairness

From case study analysis of public engagement in this study and others, we see that the public is often concerned with various ideas of fairness. Perceptions of equity between demographics, transportation modes, and locations are influential in the process and important to address. These notions are seldom considered in evaluating public participation, yet are relatively simple to incorporate.

The first priority is to track *who* is involved in public participation efforts. Questions of who participates are not well-answered by sign-in sheets alone. Demographics such as income, gender, and other concerns are best shared via survey. This survey could be as sophisticated as a scientifically-sampled effort, or as simple as emailed questions to individuals who live within a project area or participated in an in-person meeting. Surveys allow people to answer questions about demographics, their transportation choices, and where they live and work in a more private environment.

After that, it is important to know *how* the agency is reaching out and responding to input (16). Survey information enables agencies to compare the demographics, transportation modes, and locations of participants with other data to determine if outreach efforts are effective in reaching representative samples of the public.

Transportation agencies regularly conduct complex environmental justice analyses to assess the benefit or burden of implementing a transportation project. These studies are arguably much more complicated than considering fairness for participation, which is rarely done. Simple surveys, even if completed sporadically across participation projects, can result in valuable information to plan and implement efforts that are fair in their approach to the public.

Stay Flexible

Public engagement needs can change over the course of a project. Sometimes outreach efforts can identify new stakeholders who should be brought to the table for transportation decision

making. Particularly with longer projects, participation metrics should be designed to suit the foreseeable range of public engagement methods, yet maintain flexibility to adapt to changes.

The first key in remaining flexible is to design evaluation techniques that can be broadly applied. Asking participants' opinions about a particular public engagement method in one context might be interesting to the staff working on that particular effort, but may not be comparable to other initiatives—nor help gauge change in public opinions over the course of the project. The key is to design measures to suit the broadest possible range of circumstances. Not only will the results serve the project through its dips and turns, but they are more likely to be useful in comparison with other projects, helping to identify and understand trends over time.

Distinguish Outputs from Outcomes

One of the biggest challenges the research revealed in the evaluation of public participation was confusion caused by not distinguishing between the immediate *outputs* of public engagement efforts and the later *outcomes* that describe actual changes in the planning process as a result of the outputs. Here is a simple way to distinguish the two:

- Outputs – how many people attended or commented during a given participation activity.
- Outcomes – how that participation affected the actual project.

This distinction helps to develop components of public participation evaluation. *Outputs* can be evaluated as soon as a particular engagement method is completed. This might include the number and type of events held, the number of participants or social media posts, and the average response time to inquiries from the public. These are often observable by staff at public meetings, with online tools, or through evaluation of information provided by the public. Content analysis and descriptive statistics are common methods of evaluating outputs of public engagement.

Outcomes result after a public engagement effort is completed, and may reflect either opinions from the public or staff, or they may reveal facts that are observable in project records or on-ground changes. Useful opinion-based outcomes might be whether participants felt they had adequate notice of a public engagement opportunity, or whether they felt like their input would be heeded in developing the final project. Practical fact-based outcomes could include tracking how public input was used in the process, whether public input affected the resulting planning documents and/or funding allocation, and whether public input influenced the ultimate implementation of projects and design-specific changes.

Use Qualitative and Quantitative Measures Consistently

Public participation can be effectively measured using both quantitative methods (numbers) and qualitative ones (words). And because the nature of transportation planning in a public process is both quantitative and qualitative, the evaluation of that public engagement activity should be

evaluated through both types of measures. (See Table 3 for a tiered taxonomy of sample performance measures.)

This distinction might seem obvious. However, researchers found examples where the two types of measures were confused. For example, goals were specified in quantitative terms, but then evaluated using a narrative that seemed to avoid use of specific numbers that would have directly addressed the original goal.

Performance measures can be designed to reflect quantitative, qualitative, or mixed method goals. Consistent use of methods appropriate to each measure supports clear understanding of changes in participation and action supporting desired policies.

Track over Time

Consistent use of the same measures over an extended period can help steer public engagement efforts across different project contexts. Trends of specific measures, such as participant satisfaction, may indicate consistent improvement, or a down-tick can spur further inquiry into changes in either the context of affected projects or recent implementation actions.

Each measurement provides a valuable data point, but not every project has to be evaluated to learn from changes over time. Agencies can follow a strategic sampling plan, such as assessing a specific number or percentage of projects per year, which can provide the benefits of tracking over time without imposing a substantial resource burden.

Among all of the cases reviewed for this project, Missouri DOT's Tracker was the most consistent in tracking performance measurement of public participation gains on an annual basis. However, interviews with staff revealed that despite significant efforts to maintain these measures, budgetary challenges eventually removed some of the measures, including those focused on public participation. This challenge circles back to the best practice of *Designate Resources*. To the extent that an agency would like to evaluate change over time to consistently improve public participation, resources need to be allocated to enable tracking and analysis of these measures.

Keep it Simple—Start Small

This framework suggests that the more resources and attention paid to tracking public participation, the greater potential for improving results in this area—this is true. However, an agency can still start with modest support if consistently applied. A single individual can implement meaningful evaluation of public participation.

For example, one successful public engagement approach began with a simple list of email addresses of state park visitors. Without access to any online survey tools, agency staff implemented a brief email survey based on visitors' perceived importance and performance of several key park features (17). 207 park visitors responded, yielding significant quantitative and

qualitative information to help guide the park’s new development—taken straight from the key population for planning its future.

Table 2 summarizes the findings in this section of the study and provides approaches for applying measures for public participation in four generalized project phases involved in a typical transportation plan. This summary is intended as a starting place to develop performance measures that are appropriate for a wide variety of projects, including long-range transportation plans, transportation improvement programs, environmental documentation, and facility design. Some projects may be able to support implementation of these practices throughout the planning process, and others may need to focus on one or more particular phases. Early evaluation promotes improvement during a planning process.

Table 2. Summary Framework for Public Participation Performance Measurement.

<i>Best Practices</i>	<i>Project or Plan Phases</i>			
	<i>Developing Vision and Goals</i>	<i>Drafting Strategies</i>	<i>Developing Transportation Plan Content</i>	<i>Project Development</i>
Coordinate expectations	Did the public have a role in setting the planned level of involvement?	Percent of public project documents clearly stating planned level of involvement.	Percent of interim public project documents clearly stating level of involvement.	If level of involvement changed, describe in all public project documents.
Designate resources	Identify and budget for level of participation evaluation appropriate for project vision and goals.	Coordinate staffing and consultants for performance management.	Were staff and other resources sufficient to support engagement in developing content?	Were resources consistently available through project development?
Ensure fairness	Do demographics of early participants match the project community?	Are disadvantaged groups represented?	Were interim drafts shared with disadvantaged groups for comment?	How did project changes reflect the needs of local communities?
Stay flexible	Does a planned evaluation allow for measures to be added in the process?	Did staff open discussions about strategies to the public?	Did the number of communities involved increase during the project?	How were new participants incorporated in the process?
Distinguish outputs from outcomes	Record basic participation statistics (outputs), and describe results from initial engagement (outcomes).	Track participation (outputs). Note whose strategies affect plans (outputs).	How much of the plan was developed by the public? (outputs) How did staff use their suggestions? (outcomes)	Track public comments (outputs), and resulting changes to plan (outcomes).
Use qualitative and quantitative measures consistently	Outputs are more often quantitative. Outcomes are more often qualitative.	Are the number of strategy comments representative? (quantitative) Are the suggestions usable? (qualitative)	How many early participants contributed to the plan content? (quantitative) Did their contributions affect substantive changes? (qualitative)	Number of participants (quantitative) Were the changes substantive, or minor? (qualitative)
Track over time	Specific goals with quantitative measures support annual evaluation.	Track strategies from planning through implementation	Record contributions in a consistent manner from one plan to its update.	Number of comments between two or more plan revisions.
Keep it simple—start small	Define a key quantitative goal for early involvement.	Record changes on the key goal during next-phase involvement.	Briefly report initial engagement results during content development.	Share basic results with communication staff for dissemination on a website and public discussions, as applicable.

Sample Performance Measures

Agencies evaluating the performance of their public engagement have evolved their respective programs separately and according to their specific agency needs. Taken together, however, they comprise a fairly robust and representative set of performance measures. After a review of several programs (18, 19, 20, 21, 22), researchers compiled a comprehensive list of measures from which any agency could pick and choose, a la carte style, to measure their activities.

The sample measures, listed below, are grouped into three levels:

- Tier 1: Observe.
- Tier 2: Interact.
- Tier 3: Incorporate.

These categories range from least resource intensive, at the Tier 1 level, to most resource intensive at Tier 3. They also move from purely observational activities that staff can accomplish independent of interaction with the public, to more dialogue-based activities that require collecting public information, analyzing and using it at future stages in a process.

Table 3. Taxonomy of Tiers of Performance Measures: Observe, Interact, Incorporate.

SAMPLE PERFORMANCE MEASURES	
TIER 1: OBSERVE	
	<p>These are primarily quantitative measures that can be implemented from staff observation of activities. Included are counts of events held, participants, public comments, costs, types of attendees, numbers of outreach efforts, etc.</p>
OUTREACH	<ul style="list-style-type: none"> • Number and type of events held • Cost of putting together public engagement plan <ul style="list-style-type: none"> ○ Labor hours, salaries, etc. • Number of documents distributed to the public <ul style="list-style-type: none"> ○ Press releases, emails, flyers, letters, newsletters, etc.
PARTICIPATION	<ul style="list-style-type: none"> • Number of participants at each event • Number of organizations represented at each event • Presence of public officials at each event

RESPONSE

- Number of public comments received
 - Number of positive and/or negative comments
 - Mode of receipt (social media, email, etc.)
- Number of media inquiries
- Number of project website hits
- Average response time to inquiries

TIER 2: INTERACT



These measures require dialogue or interaction with members of the public and other stakeholders, and are both quantitative and qualitative. They measure how and whether members of the public were engaged, and what kind of experience those participants had as a result. Taken together, these objective and subjective measures can be combined to describe how meaningful the public engagement efforts were.

CONVENIENCE

- Did you receive advance notification of the meeting?
- Were you provided with contact information for individuals that would address any questions you had prior to the meeting?
 - If you had questions prior to the meeting, were they adequately addressed?
- Was the event held at a convenient time?
- Was the event held at a convenient place?
- Did you experience any issues accessing the venue?

PARTICIPATION

- Were you given an adequate opportunity to participate?
- Do you feel like your participation made you more involved in the transportation planning process?
- Do you feel like your input will affect the ultimate decision that is made with regard to the projects presented?
- Do you feel like your input was accurately captured?
- Do you feel like your input was considered?
- Do you feel like the feedback you received was adequate?
- Do you feel like the feedback you received was timely?

CLARITY OF INFORMATION

- Was the information you heard beneficial in understanding the project?
- Was the information presented clearly?
- Do you believe the information could have been more easily understood if it was presented differently?

PROJECT SPECIFICS

- Do you feel like the projects discussed offer a good solution to the problem?
- How satisfied are you with the options/solutions presented to you?

The goal is to collect demographic information to help describe the population present at the event. The following is a list of demographic variables for potential inclusion.

DEMOGRAPHIC DISTRIBUTION

- Race/ethnicity
- Income
- Age
- Education
- Employment
- Gender
- Household size
- Household vehicles
- Geographic identifier
 - Address
 - Zip
 - Neighborhood
- Do you have a mobility impairment?

TIER 3: INCORPORATE



These measures help an agency close the loop on their public engagement evaluation, providing guidance for showing how the results of public engagement informed or improved the process, or influenced the outcome. These may be either quantitative or qualitative, and will vary widely depending on the planning process and the agency’s organization and structure.

HOW HAS THE PUBLIC INPUT BEEN CONSIDERED?

- Was demographic data collected from participants at public engagement events to help identify populations who were/were not engaged?
- Were these data then used to help guide the planning for future public engagement activities?
- Did the agency report back to the public about how their input was used?

HOW HAS PUBLIC ENGAGEMENT AFFECTED AGENCY GOALS AND STRATEGIES?

- Did information gleaned through the public engagement process result in modifications to a transportation process, plan or project?
- Have public engagement experiences over time affected policies or strategies?
- Are sufficient resources dedicated to measuring public engagement?

Conclusion

While performance measurement and management programs are finding their way into state statutes, and public engagement activities have been ongoing—and required—in transportation planning activities for years, these engagement activities are rarely measured and reported with any regularity. This research shows that there may be much value to leverage from measuring and reporting this activity—both in terms of increased goodwill and greater public trust. The result can be better transportation outcomes and higher returns on transportation investments.

Review of case studies shows that agency staff can implement performance measures for public involvement without a statutory requirement. However, the presence of a requirement supports consistent measurement of results over time.

This report provides guidelines for effectively measuring public engagement activities, as well as sample performance measures that practitioners can use to do so. If supported by a framework and rationale such as Texas’s House Bill 20, public engagement activities could be conducted and their value leveraged to best effect.

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