

# Measuring the Effectiveness of Public Involvement in Transportation Planning and Project Delivery

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# Staff

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# Purpose

- Consultation with the public is not only required, but fundamental to the development of transportation plans and projects.
- In addition to it being required, this outreach is also crucial for securing adequate funding for transportation infrastructure and building public support for transportation projects.
- While there are widespread resources for conducting public outreach and a growing body of literature and experience on how to engage the public, there are few practical methods to gauge the success of these public involvement approaches.
- Our goal was to conduct a review of existing evaluation measures and then to develop (with extensive testing) a tool that could be used by transportation agencies to evaluate the effectiveness of their public involvement efforts.

# Literature Review

- We conducted a systematic literature review and collected 1,247 documents and abstracts in our search, coded and analyzed them based on the project objectives, and then narrowed that down to 35 documents that included frameworks or tools for understanding the effectiveness of public involvement.
- Key findings from this review include:
  - There were common public involvement goals across the frameworks that are seen as important for measuring effective public involvement. These included such goals as representativeness, independence, early involvement, influence, and transparency.
  - Most of the tools were agency “self-assessment” tools and did not include going back to the public (citizens, participants, stakeholders) for their opinions on the public involvement process.
  - Very few of the measurement tools or frameworks offered actual measures or methodologies for collecting the data to measure the indicators.
  - These instruments and methodologies were also not tested for whether they reliably and validly measured the indicators of the framework.

# Creating the Public Involvement Effectiveness Survey

- Our goal was to create the best possible tool that validly measures the effectiveness of public involvement, while also being user-friendly and “do-able” given the typical constraints faced by transportation agencies.
- To create the draft Public Involvement Effectiveness Survey we used the findings from the literature review to inform the creation of specific questions (items), which we categorized based on themes (indicators).
- These questions became the first draft of the survey. PRR then conducted in-depth cognitive interviews with three people from the public who had attended a recent transportation project open house to pretest and refine the survey.
- We ultimately created two versions of the survey:
  - One to be completed by the public, and one to be completed by the agency.
  - The public version was available in paper and online.
  - The agency version was only available online.
  - The public version and the agency version were designed to eventually compare the scoring relative to each other.

# Testing the Public Involvement Effectiveness Survey

- We tested the survey on the following three projects:
  - Washington State Department of Transportation Puget Sound Gateway Program (SR 509 and SR 167 extension), in which we obtained completed surveys from attendees at one in-person open house and one online open house.
  - Washington State Ferries' Long Range Plan Project, in which we obtained completed surveys from attendees at nine in-person open houses and one online open house.
  - Washington State Department of Transportation I-405 Bellevue Widening and Express Toll Lane Project, in which we obtained completed surveys from attendees at one in-person open house.

# Results of Testing the Public Involvement Effectiveness Survey

- The testing highlighted the need to further reduce the number of items in the survey in order to decrease the burden on the public when completing the survey, but also to enhance the validity and reliability of the survey.
- The reduction was informed by several *quantitative* processes (factor analysis, principal components analysis, test of convergent validity, and reliability analysis), and qualitative processes (three focus groups with public involvement participants, an analysis of skipped survey items, and discussions among public involvement professionals). We ultimately reduced the length of the survey from 47 questions to 38 questions.
- Another aspect of our testing involved having the staff who conducted the public involvement complete the agency version of the survey. Overall, they found the survey to be intuitive, straightforward, and easy to move through. They also mentioned that completing the survey planted ideas about issues the agency should be considering for future public involvement.

# Creating and Testing the Index Scoring Tool

- The scoring tool was built in Excel and it automatically calculates the geometric mean for each item and indicator, as well as calculating the overall index score and a measure of discrepancy between public and agency scores. The higher the geometric means, the more effective the public involvement.
- We tested the scoring tool with two public involvement staff connected with two of the transportation projects. This testing covered the scoring tool instruction manual, data entry into the scoring tool, calculation of index scores, and interpretation of scoring results.
- Based on this testing, we made revisions to some of the language used in the instructions and in the scoring tool. These revisions centered mostly on using simple, conversational language, clearly defining all terms, and providing detailed instructions on how to work in Excel and move data between spreadsheets. These detailed instructions can be found in the user guide that accompanies the scoring tool.



# Challenges

- A major challenge was to get transportation projects to agree to be part of the testing process. We approached a total of seven transportation projects in four states – Washington, Oregon, Maryland and Alabama. Eventually, three projects agreed to participate. This speaks to three significant challenges to the eventual use of the survey:
  - Getting all the interested/affected project agencies and consultants to agree to use the evaluation tool. Transportation projects are complex and some agencies may believe that adding a public involvement effectiveness measurement element into their project is too challenging.
  - Fear of exposure to criticism and the effects it could have on the credibility of the agency and their public involvement processes.
  - Critiques of public involvement processes may actually reflect other issues. For example, if a project faces strong public opposition, this may produce a negative bias among respondents, even if the public involvement activities are well executed. Or, because negative perceptions can be very persistent, if a project gets off to a rocky start, using the survey later on may be affected by early missteps.

# Recommendations

- We recommend several key approaches for implementation:
  - Emphasize that the purpose is to improve public involvement, not to highlight deficiencies.
  - Emphasize the ease of using these tools.
  - Emphasize that the use of these tools can make their jobs easier.
  - Use early adopter “champion” transportation agencies to convince other agencies.

# Final Products

- The final products include:
  - A paper version of the survey for use with the public
  - An online version of the survey for use with the public
  - An online version of the survey for use by the agency
  - The Excel scoring tool
  - Guidelines for using and scoring the survey

# Conclusions

- Through this research process, we developed a valid way to measure the effectiveness of public involvement through a user-friendly survey and scoring tool.
- The survey results provide a way to target areas for improvement and to track such improvement over time.
- The use of the survey can serve to improve relationships with affected communities since they now have a means for providing feedback not only on transportation projects, but also on the public involvement processes.
- Finally, the use of the survey allows transportation agencies to demonstrate the seriousness with which they take their responsibilities to conduct effective public involvement.

**For More Information:**