NCHRP
SYNTHESIS 407

NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

Effective Public Involvement Using Limited Resources

A Synthesis of Highway Practice

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NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

Systematic, well-designed research provides the most effective approach to the solution of many problems facing highway administrators and engineers. Often, highway problems are of local interest and can best be studied by highway departments individually or in cooperation with their state universities and others. However, the accelerating growth of highway transportation develops increasingly complex problems of wide interest to highway authorities. These problems are best studied through a coordinated program of cooperative research.

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FOREWORD

Highway administrators, engineers, and researchers often face problems for which information already exists, either in documented form or as undocumented experience and practice. This information may be fragmented, scattered, and unevaluated. As a consequence, full knowledge of what has been learned about a problem may not be brought to bear on its solution. Costly research findings may go unused, valuable experience may be overlooked, and due consideration may not be given to recommended practices for solving or alleviating the problem.

There is information on nearly every subject of concern to highway administrators and engineers. Much of it derives from research or from the work of practitioners faced with problems in their day-to-day work. To provide a systematic means for assembling and evaluating such useful information and to make it available to the entire highway community, the American Association of State Highway and Transportation Officials—through the mechanism of the National Cooperative Highway Research Program—authorized the Transportation Research Board to undertake a continuing study. This study, NCHRP Project 20-5, "Synthesis of Information Related to Highway Problems," searches out and synthesizes useful knowledge from all available sources and prepares concise, documented reports on specific topics. Reports from this endeavor constitute an NCHRP report series, *Synthesis of Highway Practice.*

This synthesis series reports on current knowledge and practice, in a compact format, without the detailed directions usually found in handbooks or design manuals. Each report in the series provides a compendium of the best knowledge available on those measures found to be the most successful in resolving specific problems.

PREFACE

By Donna L. Vlasak
Senior Program Officer
Transportation
Research Board

This synthesis was prepared to report on the state of the practice and to identify effective public involvement using limited resources. Basic information is offered here for transportation agencies to further their efforts in this area. This synthesis provides information about staff and agency experiences in the application of effective and cost-effective strategies and implementation techniques used to engage the public in the development of transportation plans and projects, as well as strategies found to be ineffective. It captures respondents' definitions of successful, effective, and cost-effective public involvement and reveals a rudimentary state of the practice in the areas of costs and measures of effectiveness. Although there appeared to be no clear cut definitions of responsibilities or implementation strategies, similarities and differences were identified in four areas—organizational structure, staffing, cost quantification, and process. Detailed appendices provide abstracts of the literature reviewed and document survey questionnaire interview responses

The report, accomplished by means of detailed telephone interviews, documents the experiences of staff at 26 agencies (100% response rate) that included departments of transportation, metropolitan planning organizations/area development districts, a council of governments, a regional planning commission, a metropolitan council, transit agencies, and local governments, among others.

Anne C. Morris, PBS&J, South Carolina, and Louise Fragala, Lakeland, Florida, collected and synthesized the information and wrote the report. The members of the topic panel are acknowledged on the preceding page. This synthesis is an immediately useful document that records the practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As progress in research and practice continues, new knowledge will be added to that now at hand.

CONTENTS

EFFECTIVE PUBLIC INVOLVEMENT USING LIMITED RESOURCES

SUMMARY

The purpose of this synthesis is to document the state of the practice and identify effective public involvement using limited resources. A survey instrument with 40 open-ended questions was created that addressed the project, additional panel concerns, and potential factors that influenced the quality of public involvement. The survey was conducted during detailed telephone interviews with 31 individuals (100% survey response rate) from 26 agencies that included 11 departments of transportation (DOTs), 11 metropolitan planning organizations (MPOs) (also known as an area development district, a council of governments, a regional planning commission, a metropolitan council, an area council, and a regional commission), 2 transit agencies, and 2 local governments. The interviews were conducted between October 2008 and April 2009 and took 35 to 90 min to complete. The agencies were located in 19 states and had service areas with populations that ranged from 82,000 to 33,000,000.

This study documents the experiences of these individuals and their agencies in the application of effective and cost-effective strategies and implementation techniques used to engage the public in the development of transportation plans and projects, as well as strategies that were found to be ineffective. It also captures each respondent's own definition of successful, effective, and cost-effective public involvement. As using limited resources was a major consideration, the respondents were also queried on how they quantified the cost of public involvement and what measures of effectiveness they employed. Synthesis responses revealed a general state of the practice. Although there appeared to be no clear-cut definition of public involvement responsibilities nor how these were to be carried out, interviews revealed similarities and differences in how DOTs, MPOs, transit agencies, and local governments conducted public involvement. Four public involvement subareas stood out:

- Organizational structure,
- Staffing,
- Cost quantification, and
- Process.

A summary of the findings relative to these topics is provided here. More detailed responses on these questions and others that address contributing factors can be found in chapter three.

- The literature review of publications and websites highlights processes and provides examples for identifying the public, tailoring an approach to that public, and implementing a plan that reflects the abilities and constraints of that public to participate in public involvement.
- The surveys showed that there are similarities and differences in conducting public involvement among DOT respondents, among MPO respondents, and between DOT and MPO respondents. However, most respondents agreed that the definition of successful public involvement implied reaching a typical set of the population, acquiring informed consent from the public, providing equitable access to decision making and offering opportunities to provide input that is carefully considered when the transportation decisions are made, acquiring a better decision than what you set out to do, and getting mean-

ingful input that results in a plan that reflects the priorities of the community. However, there are some differences in opinion as to the definition of effective public involvement, where DOT respondents noted that it cost whatever was necessary, and MPO respondents reported that it is money spent on human resources.
- Best practices reported (tools, techniques, and examples of their use) show that some agencies are creatively engaging in effective public involvement using limited resources, and many of the examples cited the processes and examples that the literature review identified, including:
  - Utilizing the Internet and intranet;
  - Using visualizations;
  - Holding the meeting in the right place, on the right day, at the right time;
  - Leveraging relationships;
  - Playing interactive games;
  - Taking the time to sit and listen; and
  - Using public involvement programs.

Based on the literature review and survey responses, the following several areas can be highlighted as among those needing to be addressed to achieve, maintain, and improve successful, effective, and cost-effective public involvement:

- Public involvement is a continuing process that is a continuing part of every project and more than simply the logistical requirements that surround a public hearing.
- A public involvement specialist who has the appropriate professional background and/or work experience necessary to identify the demographic characteristics of the population, understand the implication of those characteristics on the public's abilities and constraints to participate in public involvement activities, design a public involvement plan tailored to that population, and estimate the cost of implementing that public involvement plan, as an integral part of the process.
- Measures of effectiveness that focus on outcomes such as reflecting the community characteristics and values as opposed to process issues such as the distribution of a certain number of newsletters.
- Staff training needs, both internal and external, attendance at conferences, use of webinars, in-house mentoring on a continuing basis, and building a library with publications, guidance, plans, and manuals that foster best practices.
- The capacity to create and utilize visualizations, videos, the Internet, the intranet, and social networking.
- Relationships with community-based organizations, faith-based organizations, citizen advisory committees, and related type organizations to improve piggybacking opportunities.
- Transferability of programs that have been created, tested, and used by others.

The following topics were identified for future study:

- Skill set necessary for a public involvement professional.
- Skill set necessary for consultants to be certified or prequalified to perform public involvement outreach.
- Internal and external training needs for public involvement staff members.
- Process to quantify the cost of public involvement.
- Ways for agencies to adapt to emerging changes and continuing trends in socioeconomic demographic characteristics and communication technologies.
- Public involvement process to identify, understand, and accommodate the public or publics within a given study area.
- Transferability of "successful" processes and strategies used by others, such as effective transportation decision making and a community characteristics program.
- Consequences of not defining effective and cost-effective public involvement.

CHAPTER ONE

INTRODUCTION

INTRODUCTION

The purpose of this synthesis is to document the experiences of transportation agencies and other relevant entities in the application of techniques used to involve the public in the development of transportation plans and projects. This section provides the project background, discusses the technical approach, and describes the organization of this report.

PROJECT BACKGROUND

The Federal-Aid Highway Act of 1950 was the first piece of legislation that required "public involvement." This legislation required states to hold public hearings for projects bypassing cities and towns. It provided notification to the public that a project would be constructed, and advertised that a public hearing would be held where information about the project would be available to the public. The demographic of the times gave rise to minimal "public involvement plans" that mirrored narrow life and work styles. Notification consisted primarily of placing advertisements in the local morning and/or evening newspapers and on local radio, as television was still in its infancy.

Since the passage of the Federal-Aid Highway Act of 1950 and the federal transit laws originally enacted in 1964, interested parties have been given important opportunities to voice their perspectives in the development of transportation solutions. Title VI of the Civil Rights Act of 1964 ensured that individuals would not be denied an equal right to participate on the basis of race, color, or national origin in all programs receiving federal-aid assistance. This was followed by passage of the National Environmental Policy Act in 1969 and the Federal-Aid Highway Act of 1970, which decisively established the opportunity for public involvement throughout the location and design processes.

The passage of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) extended the opportunity for public involvement in the transportation planning process. It was followed by the signing of the Executive Order on Environmental Justice in 1994, which sought to ensure the full and fair participation by all potentially affected communities in the transportation decision-making process. Within two years, the FHWA released its *Community Impact Assessment, A Quick Reference for Transportation,* and, by 1998, Community Impact Assessment and Context Sensitive Solutions had been adopted as formal processes that would help to identify community characteristics and values, and facilitate public involvement in the decision-making process. In 2000, the Executive Order on Limited English Proficiency was signed, which placed increased emphasis on providing meaningful access to decision-making information. The Executive Order was followed by the release of FHWA's 2002 publication *Public Involvement Techniques for Transportation Decision-Making.* More recently, the 2005 transportation re-authorization legislation placed emphasis on improved community quality of life through exercising flexibility in solving transportation problems. Each of these successive steps has sought to effectively engage all of "many" publics in our society in transportation decision making to integrate their issues, values, and preferences in the process.

Since 1950 there also have been dramatic changes in the ways and instruments used to receive and send information. Newspaper circulation has declined as some newspapers have folded and others have been reduced to on-line news. Radio's focus has changed from a primary source of information to entertainment. Television has come of age and gone from black and white to color and from free to subscription. Telephones have changed from multi-party operator-assisted lines to individual multi-line wireless cell units. All media has been overshadowed by the power of the Internet with streaming video, Skype, and the advent of social networking vehicles such as Flickr, Facebook, My Space, and YouTube.

Change has also come to the face of America, as it has gone from a nation dominated by European immigrants to a nation of immigrants from all countries. As such, it is estimated that "Caucasians" in America will be the minority before mid-century. Other demographic changes such as increases in those with longer life expectancies, those more than 65 years old, those with low literacy, those living in poverty, and those speaking a non-English language continue to occur. In addition, more of the nation's population now lives in urban rather than rural areas.

These changes, and others yet to be defined, create even more social, technological, and financial challenges for agencies as they attempt to provide effective public involvement and ensure equity and inclusiveness for all in public involvement.

TECHNICAL APPROACH

The technical approach used in preparing this synthesis consisted of conducting a literature review, designing a telephone survey instrument, conducting detailed telephone interviews, and summarizing the results of these two efforts to identify where agencies creatively have used low-cost tools and techniques.

Literature Search

A literature review was conducted that predominately utilized a Transportation Research Information Services (TRIS) search. This resulted in the identification of 57 publications, 16 websites, 4 metropolitan planning organization (MPO) websites, four DOT websites, 6 poverty and cultural publications, and 2 poverty and cultural websites that were thought to be relevant to this project. An abstract of each publication and website has been provided so that the reader will have a clearer idea of the publication's and website's focus. The results of the literature search can be found in the References.

Survey Design

A survey instrument with 40 open-ended questions was created that addressed the direct focus of the project, additional panel concerns, and potential factors that influenced the quality of public involvement. The complete 40 question survey can be found in Appendix A. The survey questions were divided into the following 11 areas of interest:

- Organizational structure
- Staffing
- Cost quantification
- Public involvement process (social/community issues, studies, and reports)
- Public involvement process (level of effort, education, and documentation)
- Public involvement process (goals)
- Public involvement process (communicating public input and commitments)
- Definitions of successful, effective, and cost-effective public involvement
- Measures of effectiveness
- Effective, cost-effective, and ineffective techniques
- Leveraging relationships.

Survey Beta Test Participants

In October 2008, individuals at three DOTs were contacted and sent a copy of the initial survey. These individuals held various positions of responsibility and authority within their agencies and were from a variety of professional disciplines. A follow-up telephone call was made to each to see if they would be willing to participate in beta testing the survey. Each agreed and appointments were made with each to conduct the survey by telephone. At the appointed time, each was contacted and four agency representatives from the three agencies participated in the detailed telephone interviews. Minor adjustments were made to the survey as a result of their participation.

Revised Survey Participants

Following the beta testing of the survey and its revision individuals at 8 state DOTs, 11 MPOs (also known as an area development district, a council of governments, a regional planning commission, a metropolitan council, an area council, and a regional planning commission), 2 transit agencies, and 2 local governments were contacted between November 2008 and April 2009 and sent a copy of the survey. Appointments were made to conduct the survey by telephone at this time, and 27 agency representatives from 23 agencies participated in the telephone interviews. The 26 agencies that participated in the beta test and the revised survey were located in 19 states, served constituencies that ranged in size from 82,000 to more than 33,000,000 people, had constituencies that were demographically homogeneous and diverse, and were located in areas that were rural and urban, as shown in Figure 1. These agencies can be found in Appendix B.

Survey Results

The 26 responses to the 40 question survey are summarized and presented by question and agency type. Under each agency type, an individual summary of each agency's response is provided, which can be found in Appendix C. In addition, examples of where agencies provided effective public involvement using limited resources have been documented in Appendix D.

ORGANIZATION OF THE REPORT

Chapter one provides information relative to the project background, technical approach, and organization of the report. Chapter two summarizes the findings of the literature review and identifies publications and websites that are thought to provide insight into achieving better public involvement. Chapter three presents a summary of the survey results by each of the 11 areas of interest. Chapter four provides examples where agencies have provided effective public involvement using limited resources. Chapter five presents conclusions from the synthesis project and suggestions for further research.

The References contain an annotated list of the publications and websites that address the focus of this study. A list of key acronyms is also supplied. Appendix A is the survey instrument, Appendix B provides a list of the agencies surveyed and the agencies' geographic locations, Appendix C provides a summary of the survey responses by question and agency type, and Appendix D provides examples of how agencies creatively used low-cost tools and techniques to achieve effective public involvement using limited resources.

FIGURE 1 Geographic location of the participating transportation agencies.

CHAPTER TWO

LITERATURE REVIEW

INTRODUCTION

This section summarizes findings from a literature review of public involvement that was conducted predominately through a TRIS search. This resulted in the identification of 57 TRIS publications, 16 websites, 4 MPO websites, 4 DOT websites, 6 poverty and cultural publications, and 2 poverty and cultural websites that were thought to be relevant to this project. A complete listing of publications and websites can be found in the Annotated References. Although there is no comprehensive synthesis of national practices of public involvement for transportation programs, a number of published studies consistently describe a number of factors contributing to effective approaches for engaging the public in the decision-making process. Historically, public involvement efforts have focused on full disclosure of agency decisions and providing opportunities for the public to comment on those decisions. The historical approaches have given way over time to more collaborative approaches to decision making and the introduction of alternative dispute resolution concepts.

FINDINGS

A search of the literature identified the following five primary purposes for conducting public involvement:

1. Discovering the preferences of the public to help make informed decisions,
2. Improving decisions by incorporating input from the public,
3. Advancing fairness and justice in agency decisions by ensuring that the concerns of traditionally underserved groups are addressed,
4. Ensuring the legitimacy of agency decisions, and
5. Complying with laws and regulations that require public involvement.

In *Public Participation in Environmental Assessment and Decision Making,* the 2008 study edited by Dietz and Stern for the National Academy of Sciences*,* the essence of research cited in the bibliography is captured when they identify the goal of participation as ". . . to improve the quality, legitimacy, and capacity of . . . decisions." Their description of those characteristics is as follows:

- *Quality* refers to assessments or decisions that
  - Identify the values, interests, and concerns of all who are interested in or might be affected by the . . . decision;
  - Identify the range of actions that might be taken;
  - Identify and systematically consider the effects that might follow and uncertainties about them;
  - Use the best available knowledge and methods relevant to the above tasks, particularly identify and systematically consider the effects that might follow and uncertainties about them; and
  - Incorporate new information, methods, and concerns that arise over time.
- *Legitimacy* refers to a process that is seen by the interested and affected parties as fair and competent and that follows the governing laws and regulations.
- *Capacity* refers to participants, including agency officials and scientists [or other professionals], becoming better informed and more skilled at effective participation; becoming better able to engage the best [technical] knowledge and information about diverse values, interests, and concerns; and developing a more widely shared understanding of the issues and decision challenges and a reservoir of communication and mediation skills and mutual trust.

The primary conclusion from their research is that:

> When well done, public participation improves the quality and legitimacy of a decision and builds the capacity of all involved to engage in the policy process. It can lead to better results in terms of environmental quality and other social objectives. It also can enhance trust and understanding among parties. Achieving these results depends on using practices that address difficulties that specific aspects of the context can present.

The FHWA and FTA provide the following guidelines for designing a public involvement program in their 2002 publication *Public Involvement Techniques for Transportation Decision-Making:*

- Act in accord with basic democratic principles by providing opportunities to debate issues, frame alternative solutions, and affect final decisions. Agencies accomplish this by sharing the details about their plans, attempting to reflect the goals of the community, and engaging the entire community.
- Begin public involvement as early as possible and conduct it continuously throughout the decision-making process.
- Use a variety of techniques to engage the public tailored to the unique needs of the various groups in the project

area, particularly those that have traditionally been underserved or disenfranchised.
- Take the initiative to seek out and actively engage these groups in creative ways where they are located.

FHWA and FTA guidance also provided the following five steps to "systematically setting up and implementing a public involvement program for a specific plan, program, or project:"

1. Set goals and objectives for the public involvement program,
2. Identify the people to be reached,
3. Develop a general approach or set of general strategies,
4. Flesh out the approach with specific techniques, and
5. Ensure that proposed strategies and techniques aid decision making to close the loop.

Researchers consistently identify a number of factors that contribute to the effectiveness of public involvement efforts:

- The culture of the organization matters. Credibility and trust are established over time when the public perceives that the agency is not just "going through the motions or doing the minimum required by the laws and regulations that govern them," but are demonstrating a genuine commitment to collaborative decision making.
- The staff conducting public involvement matters. Proper skills and training are critical to successfully engaging the public.
- It is important to understand your public. There is no one-size-fits-all approach to public involvement. Census data can help identify the socioeconomic characteristics of each community; however, it is important to talk to people to really understand their issues and concerns.
- The methods used to engage people could be tailored to the unique characteristics of each group.
- People need to be taught how to provide the most useful feedback to the agency; it is not enough to disclose technical data about the decision to be made. Outline the decision-making process and describe the input needed from the public at each phase of the process.
- Public involvement is an ongoing process and involves building long-term working relationships. People need to know that they have meaningful opportunities to influence decisions before they are made by the decision maker.
- Reaching agreement on relevant information needed to make decisions is not easy. Data come with bias and assumed values and it is important that it be presented in clear, nontechnical terms. The goal is mutually shared information flows between the public and the agency.
- Dialogue has transformational power. "When an inclusive set of citizens can engage in authentic dialogue where all are equally empowered and informed and where they listen and are heard respectfully, and when they are working on a task of interest to all, following their own agendas, everyone is changed. They learn new ideas and they often come to recognize that others' views are legitimate. They can work through issues and create shared meanings as well as the possibility of joint action. They can learn new heuristics" (Innes and Booher 2005).
- Decision making works best when built on a series of agreements that ultimately lead to a comprehensive consensus on the final program or project decision.

In 1996, the FHWA published *Community Impact Assessment, A Quick Reference for Transportation,* or as it is better known "the little purple book." It was "written as a quick primer for transportation professionals and analysts who assess the impacts of proposed transportation actions on communities" by doing the following:

- Outlining the community impact assessment process,
- Highlighting critical areas to be examined,
- Identifying basic tools and information sources, and
- Stimulating the thought process related to individuals projects.

It was prepared because the consequences of transportation investments on communities had often been ignored or introduced near the end of a planning process. At best, this reduced them to reactive consideration. The goals of this booklet were to do the following:

- Increase awareness of the effects of transportation actions on the human environment,
- Emphasize that community impacts deserve serious attention in project planning and development commensurate with that given the natural environment, and
- Provide some tips for facilitating public involvement in the decision-making process.

It provides "nuts and bolts" guidance and instruction in accomplishing the following objectives:

- Defining the project,
- Developing a community profile,
- Collecting data,
- Analyzing community impacts,
- Selecting analysis tools,
- Identifying solutions,
- Using public involvement, and
- Documenting findings.

Once the project has been defined, the community profile developed, and the data collected, then the proper analysis tool or techniques can be selected to engage that specifically identified community. For those publics that are low-literate or have limited English proficiency, the FHWA's 2006 publication *How to Engage Low-Literacy and Limited-English-Proficiency Populations in Transportation Decisionmaking* provides guidance on what special approaches are needed to outreach to low-literacy and engage limited-English-proficiency populations.

In addition to publications found through a search of the TRIS database, there were several non-transportation publications that directly addressed gaining an understanding of living in poverty. This distinction is important because most consultants and the public involvement professionals employed by transportation agencies have never lived in poverty and may not be the same race or ethnicity of the public that they seek to engage. As a result, they may have little or no understanding of life from the public's perspective, as they lack any frame of reference. This disconnect often causes public involvement plans and activities to be designed and constructed that do not address the public's life and work schedule, cultural background, religious beliefs, or other social or economic norms. *A Framework for Understanding Poverty* (Payne 2005)*, Bridges Out of Poverty: Strategies for Professionals and Communities* (Payne et al. 2001), and *Hidden Rules of Class* (Payne and Krabill 2002) were found to provide insight into the effect poverty can have on public involvement strategies. In addition, several business and travel books on cultural taboos are provided including *Kiss, Bow, or Shake Hands* (Morrison and Conaway 2006)*, Gestures, the Do's and Taboo's of Body Language Around the World* (Axtell 1998), and *Do's and Taboo's Around the World* (Axtell 1993). Also, websites from the University of Washington, Harborview Medical Center in Seattle (http://ethnomed.org/) and the United Kingdom Department of Transport on social exclusion (http://www.dft.gov.uk/pgr/inclusion/) are included.

SUMMARY

The literature review provided insight into the state of the practice of public involvement, continuing challenges for public involvement in transportation, and potential performance measures. The following is a summary of the key conclusions:

- Define the project. Discover the public preferences to assist in making informed decisions. Outline community impact assessment process.
- Identify the people to be reached. Develop a community profile and begin public involvement as early as possible. Actively seek out and engage all groups in creative ways where they are located. Address the concerns of the traditionally underserved to advance fairness and justice in agency decisions.
- Identify basic tools and information sources, and ensure that staff conducting public involvement has the proper skills and training. Outline the decision-making process and describe the output needed from the public at each stage of the process.
- Collect data and analyze community impacts. For those groups that are low literate and have limited English proficiency, provide special guidance. Ensure that the concerns of the traditionally underserved are addressed.
- Maintain a systematic public involvement evaluation and feedback process for planning and project outreach activities. Ensure continuity in addressing public concerns.
- Incorporate input from the public to improve decision making. Decision making works best when built on a series of agreements.
- Document and publicize the findings.
- The goal of public participation, when well done, can improve the quality, legitimacy, and capacity of all involved in the policy process.

CHAPTER THREE

SURVEY RESULTS

INTRODUCTION

This section summarizes findings from the 26 interviews. A copy of the 40 question survey can be found in Appendix A, a listing of the participating agencies in Appendix B, and a summary of the responses by question, agency type, and respondent in Appendix C. Although there appeared to be no clear-cut definition of public involvement responsibilities nor how responsibilities were to be undertaken, the interviews revealed similarities and differences in how public involvement was conducted by DOTs, MPOs, transit agencies, and local governments. More often than not respondents from MPOs, transit agencies, and local governments tended to respond in a similar way and their responses have been grouped under MPO. These similarities and differences are highlighted here by 11 areas of interest. Under each area of interest are numbered paragraphs that represent a summary of the responses to Questions 1–40. Individual summarized responses from each agency for Questions 1–40 can be found in Appendix C.

ORGANIZATIONAL STRUCTURE

1. Meeting citizen needs, preserving the quality of communities, improving the quality of life, providing transportation experiences that delight their customers, and creating opportunities for public input were mentioned as goals related to the public and public concerns in the mission statements of approximately two-thirds of the 26 respondents.
2. Respondents from all of the MPOs, transit agencies, and local governments, and 8 of the 11 DOTs stated that their agencies were centralized rather than decentralized.
3. Respondents from all of the MPOs, transit agencies, and local governments, and 8 of the 11 DOTs reported that within their agency the authority for public involvement activities was centralized at headquarters. Respondents at the three decentralized DOTs said their district offices had the authority to provide full-service public involvement activities.
4. DOT respondents said there was no clear-cut definition of public involvement responsibilities or how these responsibilities were to be undertaken except in terms of organizing a public hearing and specific plans, programs, or documents (National Environmental Policy Act, Statewide Transportation Improvement Program, etc.). MPO respondents stated that they were mandated to prepare a Public Participation Plan and it identified specific public involvement requirements for them to undertake in terms of a public involvement process that was continuous.
5. In general, DOT respondents reported that they had public involvement components in the phases from policy development to operations and maintenance, whereas MPO respondents said they had public involvement components in the phases from policy development through systems planning and project planning.

STAFFING

6. Most DOT respondents said they had a staff member(s) assigned to public involvement efforts related to customer services and holding public hearings. Other staff members performed as needed public involvement functions, although they had full-time job responsibilities that were not public hearing related. All MPO respondents reported that they had full-time staff members dedicated to public involvement.
7. Most DOT respondents stated that those who conducted public involvement did not have any academic background in the social sciences or specific experience in social work, marketing, or customer service, and few were members of professional organizations that had public involvement tracks. Instead, they noted that the preconstruction engineer was ultimately responsible for the public involvement effort. Many MPO respondents said that members of their staffs had academic backgrounds or specific experience in education, marketing, media relations, public relations, communications, community outreach, volunteering, facilitation, conflict resolution, and customer service, and many were active in professional organizations that had public involvement tracks.
8. Almost all of the DOT and MPO respondents noted that their staffs received internal and external training at some time in community impact assessment, public involvement, environmental justice, or context-sensitive solutions, although it was not on a consistent basis.
9. Both DOT and MPO respondents said that very few staff members had more than 20 years experience; with most having zero to six years experience.
10. DOT respondents reported that many of their staff members came up through the ranks and had limited

exposure as to how other state DOTs conducted public involvement. MPO respondents said that their staffs tended to come from other agencies and had broad experience.

11. Within the DOTs, respondents reported that there were very few staff members that were dedicated part time or full time to public involvement efforts, as opposed to the MPOs who said they generally had one or more full-time staff members dedicated to public involvement.
12. Almost all of the DOT and MPO respondents reported that they used consultants.
13. Very few DOT or MPO respondents required their consultants to be certified or prequalified to conduct public involvement.

COST QUANTIFICATION

14. Almost all DOT and MPO respondents replied that they had never quantified the costs of doing public involvement. Some said they had never been asked to do this, others that they had not been able to do this, and still others noted they had not quantified the cost of doing public involvement.
15. Almost all DOT and MPO respondents reported that they had not allocated the cost of doing public involvement, did not know how these costs were allocated, did not allocate cost this way, or did not break out cost allocations.
16. Almost all DOT and MPO respondents said they did not know how public involvement costs were quantified (percent of project cost, cost per person in the project area, or other).

PUBLIC INVOLVEMENT PROCESS (SOCIAL/ COMMUNITY ISSUES, STUDIES, AND REPORTS)

17. DOT respondents replied that consultants or their own planners generally provided technical studies or reports that addressed social, economic, and community issues as part of an environmental document. MPO respondents stated that they prepared Environmental Justice/Title VI and community background reports, as well as periodic population and economic forecasts in house.
18. A few DOT respondents mentioned they had formal processes on how to prepare a community impact assessment or equivalent for each specific project. MPO respondents tended to continuously collect and update socioeconomic information as part of their ongoing forecasts.
19. DOT respondents said they identified various segments of the populations through their site assessments and during field visits, whereas MPO respondents stated that they identify segments of the populations as part of their mandated Public Participation Plans, through the use of their citizens' advisory committees, and their relationships with community-based organizations.
20. DOT and MPO respondents reported that they worked with a mixture of groups, including citizens' advisory committees, the community, elected officials, census data, churches, nonprofit organizations, and Title VI coordinators to help them make decisions about how to tailor public involvement to a specific group.
21. DOT respondents identified multiple ways to develop a public involvement plan, whereas MPO respondents by and large followed their mandated Public Participation Plans and Environmental Justice/Title VI Plans.

PUBLIC INVOLVEMENT PROCESS (LEVEL OF EFFORT, EDUCATION, AND DOCUMENTATION)

22. Most DOT and MPO respondents said that the scope of the project and the type of environmental document most often determined the amount of effort that would be devoted to public involvement.
23. DOT and MPO respondents replied that they provided education to the public at a variety of types of meetings, using visualizations, writing documents in "plain speak," posting information on the website, playing interactive games, publishing monthly newsletters, and going door-to-door and personally contacting people. Some respondents were beginning to use photographs and videos and placing visualizations on Flickr, Facebook, and YouTube.
24. Most DOT respondents noted they had access to some but not all of the manuals, policies, guidance, and plans related to community impact assessment, environmental justice, public involvement, and context-sensitive solutions. Most of the MPO respondents referred to their Environmental Justice/Title VI Plan, which may or may not have been a part of their Public Participation Plan, guidance on environmental justice and limited English proficiency, and other compliance requirements.

PUBLIC INVOLVEMENT PROCESS (GOALS)

25. Most DOT and MPO respondents reported that their agency had public involvement goals that included ensuring that all interested parties had an opportunity to participate fully in the transportation decision-making process, making the public aware and providing an opportunity for meaningful involvement in the process, and involving as broad an audience as possible.
26. Both the DOT and MPO respondents said that their goals were developed by working groups, agency leaders, public affairs managers, elected officials, citizen advisory committees, regional transportation committees, and through their Public Participation Plans. Some of the respondents had not been with their agency when the goals were established and could not provide any insight into how these goals had been developed or who developed them.

PUBLIC INVOLVEMENT PROCESS (COMMUNICATING PUBLIC INPUT AND COMMITMENTS)

27. Most of the MPO respondents noted their agency had a well-defined process for communicating public input internally and externally, whereas many DOT respondents said they received comments and responded to them but beyond that, their process appeared to be less well-defined.
28. Many of the DOT respondents were using sheets of green colored paper attached to their environmental documents or placed inside their documents to identify their commitments, others were using more formalized web-based tracking, whereas MPO respondents mentioned that they track them as outlined in their Public Participation Plan, on their website, through a database, with meeting minutes, and through interactive games.

DEFINITIONS OF SUCCESSFUL, EFFECTIVE, AND COST-EFFECTIVE PUBLIC INVOLVEMENT

29. Both DOT and MPO respondents defined successful public involvement similarly—getting informed consent from the public, providing equitable access to decision making and offering opportunities to provide input that is carefully considered when the transportation decisions are made, getting a better decision than what you set out to do, reaching a representative set of the population, and acquiring meaningful input that results in a plan that reflects the priorities of the community.
30. DOT respondents reported that effective public involvement was getting people to show up and voice their opinions, providing everyone with timely opportunities to comment and a variety of ways to get involved, getting buy-in into the problems and solutions, and everyone having an understanding of how the agency arrived at its solution and being in agreement with that solution. MPO respondents most frequently noted that successful public involvement and effective public involvement was the same thing. Others believed it was not only when the agency got information from the public that helped the agency understand the public's issues, but also when the agency was able to provide information to the public that helped the public understand the agency's concerns. Some defined effective public involvement as being when everyone (planners, public, lawmakers, and decision makers) was engaged, all were on the same page, everyone was working for the common good, and the process was transparent.
31. The most frequent response from DOTs was that they had not or did not define cost-effective public involvement, and had never tied public involvement back to cost—it simply cost whatever was necessary. Others stated it was engaging a sufficient number of stakeholders to reveal the pertinent issues and receive meaningful input that could affect the project's outcome. MPO respondents said spending money on human resources to go out and talk to people, not having a huge budget but having staff resources, and an ongoing process to build knowledge, understanding, and relationships.

MEASURES OF EFFECTIVENESS

32. DOT and MPO respondents expected similar outcomes from their public involvement efforts. These ranged from all citizens having an opportunity to comment in an equitable manner early, clearly, and continuously; having somebody who gets involved that was not involved before; better public awareness of a project as a result of public involvement efforts; and a more knowledgeable public, improved communication between the public and the planning process, the planners, and a better substantiation of the plan that results from the process.
33. Almost all DOT and MPO respondents said that their agency had not developed quantitative or qualitative measures of effectiveness or that they were in a specific area such as air quality. Those attempting to do this responded that they considered their efforts to be unsophisticated and rudimentary—counting heads, number of meetings, number of newsletters, etc.
34. Because most DOT and MPO respondents noted that their agencies had not developed quantitative or qualitative measures of effectiveness, they could not respond to the question of do these measures include measures of the equity or inclusiveness of their public involvement to ensure that their efforts targeted groups that were traditionally underrepresented in the decision-making process and underserved by transportation facilities.
35. Most DOT and MPO respondents reported that their agency did not measure the cost-effectiveness of their public involvement.

EFFECTIVE, COST-EFFECTIVE, AND INEFFECTIVE TECHNIQUES

36. Most DOT and MPO respondents identified their most effective techniques as being a mixture of personal, face-to-face encounters with the public by piggybacking on events sponsored by other organizations, going to other organizations and making presentations, and holding a variety of small or one-on-one meetings. A mixture of print and electronic media, on-line activities, and visualizations was also mentioned. All respondents stated their agencies had a website and that some of them had individual project-specific websites. When asked if they thought their websites were effective, most respondents replied in the affirmative, but were unable explain how they measured their effectiveness. Most respondents did not know whether or not

their website had a counter. Those who knew their website had a counter were unaware if it could tell how many unique hits it received. Similarly, many respondents noted that they prepared and provided press releases to print and electronic media, but did not track them to see if they were picked up by local media.

37. Most DOT and MPO respondents stated that their most cost-effective techniques were very similar to those they had identified as effective techniques—a mixture of meeting types such as open houses, piggybacking on other meetings, workshops, focus groups, sending information home with students, and small meetings. Similarly, a mixture of print and electronic media, and websites were also mentioned.
38. The most frequently mentioned ineffective technique by both DOT and MPO respondents was newspaper advertisements. This was followed by a mixture of errors such as holding meetings in locations outside the project area, at inconvenient times, and in difficult places to find, as well as basing the mailing lists on tax assessor information, and holding a meeting with the plan already decided upon.
39. Almost every DOT and MPO respondent was familiar with some technique to engage at least one of the traditionally underserved groups—racial and ethnic minorities; those of low income, limited English proficiency, and low literacy; the elderly or disabled; those without access to transportation, second and third shift workers, single mothers with children, and others. Many respondents had used bi-lingual interpreters and translated printed materials, held meetings during the daylight hours in accessible buildings, provided transportation or held the meetings in the community, and held meetings in the morning or at midday, but few respondents had any experience in engaging those with low literacy by using oral media and the pulpit, or engaging single parents and their children by providing food and a licensed and bonded child care provider at their meetings.

LEVERAGING RELATIONSHIPS

40. Almost all DOT and MPO respondents reported that their agencies had been and were continuing to be proactive in forming relationships with the media, neighborhood associations, school groups, community-based organizations, faith-based organizations, non-governmental organizations, nonprofit organizations, and piggybacking on these organizations.

SUMMARY

The surveys revealed that there were both similarities and differences in how DOT and MPO respondents conducted public involvement.

Similarities Among Agencies

- How the human element was mentioned in mission statements and public involvement goals were set.
- That the organization was centralized, rather than decentralized.
- The types and frequency of training received by staff members.
- Consultants were used to conduct public involvement tasks.
- Costs of doing public involvement had not been quantified.
- The scope of the project and the type of the environmental document determine the amount of effort expended on public involvement.
- A variety of types of meetings, using visualizations, writing documents in "plain speak," posting information on the website, playing interactive games, publishing a monthly newsletter, and going door-to-door and talking to people were commonly used ways to educate the public.
- Public involvement goals were frequently identified and developed with the assistance of working groups, agency leaders, public affairs managers, and others.
- The definition of successful public involvement was similar, but few agencies had developed quantitative or qualitative measures of effectiveness except for specific areas such as air quality.
- Quantitative measures of effectiveness had not been developed to measure equity, inclusiveness, or cost-effectiveness of public involvement efforts.
- Generally, the most effective public involvement techniques were a mixture of personal and face-to-face encounters and the most *ineffective* technique was advertising in the newspaper. Although websites were considered effective, there was little evidence to support this.

Differences Among Agencies

- Distribution of public involvement responsibilities.
- Phases of transportation decision making that have public involvement components.
- Number of staff allocated part-time or full-time to conduct public involvement.
- The qualifications, professional designations, and memberships in professional organizations of staff members doing public involvement.
- The technical studies and reports conducted to address social and community issues, and the subjects addressed by these technical studies/reports.
- Ways in which segments of the population were identified.
- The structure of public involvement plans.
- The integration of public input into decision making.
- Methods used to document and track commitments through each phase of the process.
- Definitions of effective and cost-effective public involvement.

CHAPTER FOUR

TOOLS, TECHNIQUES, AND EXAMPLES OF THEIR USE

INTRODUCTION

This section highlights a variety of tools and techniques identified by respondents that used limited resources. These tools and techniques fall into the following seven categories:

1. Utilizing the Internet and intranet;
2. Using visualizations;
3. Holding meetings in the right place, on the right day, at the right time;
4. Leveraging relationships;
5. Playing interactive games;
6. Taking the time to sit and listen; and
7. Using public involvement programs.

Expanded versions of the summaries described here can be found in Appendix D.

UTILIZING THE INTERNET AND INTRANET

- The Missouri DOT used the Internet to advertise an online, corridor-wide meeting for its 200-mile-long I-70 project by buying an ad on MapQuest that would pop-up every time anyone searched for an address within a defined distance from I-70. This cost approximately $100 and had the potential to reach an audience of 140,000.
- Georgia DOT's Southwest Interstate Study used public school intranets to embed a hyperlink to a transportation survey that had the potential to reach students of all races, ethnicities, and income groups within a 32-county study area. The purpose of the survey was to collect information about how people used the existing transportation system and what problems they encountered in their daily travels. It cost approximately $300 to design the hyperlink, which returned the completed survey directly to the consultant.
- In North Carolina DOT's I-40 Business Improvements project, the intranets of individual businesses were used to embed a hyperlink to a transportation study that had the potential to reach employers and their employees who were both local residents and commuters without having to leave their desks. Information from this survey and others conducted as part of the project found that approximately 70% of the more than 12,000 residents and commuters surveyed were willing to close I-40 completely during construction for a period of two years, rather than partially close I-40 during construction for a period of six years—a reduction of four years of being under construction. It cost approximately $300 to design the hyperlink, which returned the completed survey from more than 1,000 employees to the consultant.

USING VISUALIZATIONS

- As a pilot project, the Volusia County MPO asked the Florida DOT to create a video of the existing conditions on Clyde Morris Boulevard morphing into the proposed improvements so that the elected officials could visualize the changes. This led to the redesign of Clyde Morris Boulevard and the production of videos for 14 other projects by the Florida DOT. The 15 videos cost $100,000 or approximately $6,700 each.
- Missouri DOT's multi-media unit created a video of the proposed reconstruction and widening of truck-only lanes on its I-70 project, which was a new concept in Missouri. The video was shown at its meetings and posted on YouTube, where it has been seen more than 10,000 times.
- The Atlanta Regional Commission held a photo contest and asked residents to take pictures, bring them to its offices, and talk to staff members about what the images represented. The pictures provided a way for residents to identify what they treasured and what they wanted changed and were all placed on Flickr.

HOLDING MEETINGS IN THE RIGHT PLACE, ON THE RIGHT DAY, AT THE RIGHT TIME

- The Sacramento Area Council of Governments in California was having problems engaging the business community. It consulted with the Chamber of Commerce and discovered that the business owners and operators preferred morning meetings. The business community's participation has now increased by having breakfast meetings.
- The Tennessee DOT attached stamped, self-addressed postcards to their first newsletter and asked residents to identify a meeting location, day of the week or weekend, and time of day or night that would be convenient for them to attend a SR-126 project meeting. The first shift workers identified Tuesday from 7:00 to 9:00 p.m. at a church outside of Kingsport, and the retirees, soccer moms, and second-shift workers identified Wednesday

from 11:00 a.m. to 1:00 p.m. at the Civic Center in downtown Kingsport. Approximately 200 attended the evening meetings and approximately 100 attended the midday meetings. Information obtained from citizens attending these meetings was used to create a citizen's alternative, which was carried into the environmental document to be analyzed.
- The Georgia DOT's Buford Highway citizens advisory committee recommended that Hispanic residents be engaged at Plaza Fiesta, the area's largest shopping center, and Mercado del Pueblo, the area's largest grocery store, from 4:00 to 8:00 p.m. on a Sunday, and that the Asian (Korean, Chinese, and Vietnamese) business owners and operators be engaged from 10:00 a.m. to 7:00 p.m. on a Thursday at the Center for Pan Asian Community Services. More than 400 Hispanic residents and 100 Asian merchants participated and more than 500 surveys were completed in English, Spanish, Korean, Chinese, and Vietnamese. The survey results were incorporated into the preliminary and final designs for improvements on Buford Highway in Atlanta.
- The California DOT (Caltrans) provided transportation for elderly study area residents from their apartment complexes to and from the public hearing location.
- Caltrans has nine staffers attend its project open house meetings and locates each staffer at a table dedicated to a different aspect of the project. By bringing together these individuals, the public gets all of its questions answered in one place and it only takes approximately 45 minutes to visit all of the tables.

LEVERAGING RELATIONSHIPS

- During its State Long Range Plan, the Michigan DOT partnered with the state library of Michigan to help increase its outreach to traditionally underserved populations that frequented libraries and used their computers.
- Caltrans reached the public by piggybacking on weekly high school football games. It set up information booths in the stadium during the games and was able to reach large numbers of people.
- Caltrans increased the participation of Hmong residents at public meetings by using school teachers and the clergy, whom the Hmongs trusted, to contact them and invite them to a public meeting.

PLAYING INTERACTIVE GAMES

- The Charlotte County/Punta Gorda, Florida, MPO created an interactive game called "strings and ribbons" to increase the number and diversity of participants in its regional planning process, make the process more interesting and enjoyable for its staff and the public, transfer complicated information more easily between staff and the public, and identify specific needs in the context of cost and available revenue.
- The Center for Neighborhood Technology in Chicago created Transopoly, Neighborhood Transopoly, and eTransopoly and uses these interactive games as part of their Long Range Transportation Plan, which supports the Chicago Metropolitan Agency for Planning.
- The Volusia County, Florida, MPO used a variation of "strings and ribbons" to promote public involvement in its 2025 Long Range Plan. It played the game at more than 30 different location, engaged more than 690 people, identified more than 1,900 projects for consideration, and prioritized its transportation needs within budget constraints. The result of the "citizen plans" was presented to the county council for its information.
- The Bluegrass Area Development District in Lexington, Kentucky, used "Bluegrass Monopoly" to prioritize 330 unscheduled needs projects valued at $4.8 billion when they only had $1.6 billion. In almost three hours, more than 80 representatives from the 17-county area identified their first priority projects, which were sent to the state for funding.
- The Miami–Dade County MPO created "blocks and ribbons," a multimodal transportation/land use game as part of their regional planning process.

TAKING THE TIME TO SIT AND LISTEN

- The Indiana DOT held a public involvement meeting for a resurfacing project in a small rural area. It started the meeting as an open forum, but found that very few residents spoke up. In an attempt to generate conversation, they placed a staffer and a few residents at different tables. The Indiana DOT discovered that because the residents knew each other, they were uncomfortable speaking up in front of each other. Once the public was divided into smaller groups, they became comfortable, began talking to each other and the DOT, and provided the DOT with valuable information.

USING PUBLIC INVOLVEMENT PROGRAMS

- The Miami–Dade County MPO created a three-component Community Characteristics Program; an interactive, web-based geographic information system designed for city planners and project managers to use in generating customized demographics for project-related reports of any selected area within Miami–Dade County. In addition, it helps users determine appropriate public involvement strategies for identified targeted populations. The first component is the interactive mapping and production of census-based data about the different demographics in the community being queried. The second component is a community background report that provides information about the community's development history, the boundary of the community, the attitudes in the community toward transportation, the transporta-

tion projects that have been implemented in that community, and whether or not there were favorable or unfavorable attitudes toward those projects. The third component is public involvement strategies for seven different demographic groups.

- The Delaware Valley Regional Planning Commission (DVRPC) in Philadelphia, Pennsylvania, created ". . . and Justice for All," as a strategy for the fair treatment and meaningful involvement of all people. Demographic overlays for six demographic characteristics were created at the census block group level, and the agency's Regional Multimodal Transportation Plan and Transportation Improvement Program were superimposed over the demographic characteristics. The maps were evaluated from a geographic perspective and then incorporated service and quality-of-life factors to identify gaps or areas of low service. These areas became the focus of additional actions or mitigation efforts through future DVRPC planning and implementation activities, and served as an early warning of the need to undertake additional local area environmental justice assessments of individual projects.

SUMMARY

The respondents reported that they have used a variety of successful, effective, and cost-effective tools and techniques to identify, understand, accommodate, and communicate with the public. Public involvement programs have processes that can be replicated and strategies that are widely applicable including:

- School intranets that have been used to reach a broad cross section of income groups of different races and ethnicities.
- Two-dimensional, three-dimensional, and four-dimensional visualizations and videos that have been used to transcend language barriers, translate technical terms, educate, and explain.
- Successful engagement that has been accomplished by asking the public when and where they would like to meet and accommodating them, as well as piggybacking on existing events.
- Interactive games that have been used to increase the number and diversity of participants, explain project costs, transfer complicated technical information, identify specific needs, and be an enjoyable experience.

CHAPTER FIVE

CONCLUSIONS

INTRODUCTION

This section provides a summary of synthesis findings and is organized as follows:

- Context
- Findings
- Conclusions
- Suggestions for Research.

CONTEXT

The passage of the Federal-Aid Highway Act of 1950 created formally defined "public involvement," albeit limited to notification and information. Over the past 59 years, this narrow definition has been expanded legislatively to increase emphasis on effectively engaging the public in all phases of transportation decision making to integrate their issues, values, and preferences. Just as the process has changed, so have the racial, cultural, language, age, income, mobility, and other demographic characteristics of the public, and the information access provided by a myriad of communication technologies and social networks. These changes and continuing trends will challenge the abilities of large and small transportation agencies to provide a level of public involvement that ensures equity and inclusiveness for all. As the respondents in this survey showed, many have found what they consider to be creative ways to provide successful, effective, and cost-effective public involvement using limited resources.

FINDINGS

Based on the literature review, the 26 interviews conducted, and the best practices that respondents identified, there are several key findings:

- The literature review of publications and websites highlight processes and provide examples for identifying the public, tailoring an approach to that public, and implementing a plan that reflects the abilities and constraints of that public to participate in public involvement.
- Included as among the most effective were:
  - A mixture of personal, face-to-face encounters with the public by piggybacking on events sponsored by other organizations;
  - Going to other organizations and making presentations;
  - Holding a variety of small or one-on-one meetings;
  - Utilizing a mixture of print and electronic media, online activities, and visualizations; and
  - A mixture of print, electronic media, and websites.
- The surveys show that there are similarities and differences in conducting public involvement among department of transportation (DOT) respondents, among metropolitan planning organization (MPO) respondents, and between DOT and MPO respondents; however, most agree that the definition of successful public involvement means getting informed consent from the public, providing equitable access to decision making and offering opportunities to provide input that is carefully considered when the transportation decisions are made, acquiring a better decision than what you set out to do, touching a typical set of the population, and getting meaningful input that results in a plan that reflects the priorities of the community. As to the definition of effective public involvement there is some difference; however, on the definition of cost-effective public involvement there is substantial difference, as DOT respondents noted that it cost whatever was necessary, and MPO respondents reported that it is money spent on human resources. The survey also shows that few of the respondents quantify the cost of doing public involvement or develop measures of effectiveness for public involvement.
- The best practices (tools, techniques, and examples of their use) show that some agencies are creatively engaging in effective public involvement using limited resources, and many of the examples identify the processes and examples that the literature review identifies, including:
  - Utilizing the Internet and intranet;
  - Using visualizations;
  - Holding the meeting in the right place, on the right day, at the right time;
  - Leveraging relationships;
  - Playing interactive games;
  - Taking the time to sit and listen; and,
  - Using public involvement programs.

CONCLUSIONS

Based on the literature review and survey responses from the 26 agencies interviewed, the following areas stood out as

being among those needing to be addressed to achieve, maintain, and improve successful, effective, and cost-effective public involvement. These included:

- Approaching public involvement as more than the logistical requirements that surround a public hearing and as a continuing process that is woven throughout every project.
- Adding a public involvement specialist who has the appropriate professional background and/or work experience necessary to identify the demographic characteristics of the population, understand the implication of those characteristics on the public's abilities and constraints to participate in public involvement activities, design a public involvement plan tailored to that population, and estimate the cost of implementing that public involvement plan.
- Designing measures of effectiveness that focus on outcomes such as reflecting the community characteristics and values as opposed to process issues such as sending out a certain number of newsletters.
- Outlining staff training needs and including them through internal and external training, attendance at conferences, utilization of webinars, in-house mentoring on a continuing basis, and building a library with publications, guidance, plans, and manuals that foster best practices.
- Adding the capacity to create and utilize visualizations, videos, the Internet, the intranet, and social networking.
- Developing and coordinating relationships with community-based organizations, faith-based organizations, citizen advisory committees, etc., to improve piggybacking opportunities.
- Developing industry standards for public involvement consultants.
- Implementing public involvement activities to help aid decision making and ensure the best use of resources.
- Evaluating the transferability of programs that have been created, tested, and used by others.

SUGGESTIONS FOR RESEARCH

The following topics were identified for future study:

- Skill set necessary for a public involvement professional.
- Skill set necessary for consultants to be certified or prequalified to perform public involvement outreach.
- Internal and external training needs for public involvement staff members.
- Process to quantify the cost of public involvement.
- Ways for agencies to adapt to emerging changes and continuing trends in socioeconomic demographic characteristics and communication technologies.
- Public involvement process to identify, understand, and accommodate the public or publics within a given study area.
- Transferability of "successful" processes and strategies used by others such as Effective Transportation Decision Making and Community Characteristics Program.
- Consequences of not defining effective and cost-effective public involvement.

ACRONYMS

ADA	Americans with Disabilities Act
AICP	American Institute of Certified Planners
AMPO	Association of Metropolitan Planning Organizations
APA	American Planning Association
Caltrans	California Department of Transportation
COG	Council of Governments
CSS	Context-sensitive solutions
DBE	Disadvantaged Business Enterprise
DOT	Department of Transportation
DVRPC	Delaware Valley Regional Planning Commission
EJ	Environmental Justice
ETDM	Effective Transportation Decision Making
FDOT	Florida Department of Transportation
GIS	Geographic information system
IAP2	International Association for Public Participation
LEP	Limited English proficiency
LRTP	Long Range Transportation Plan
MDOT	Michigan Department of Transportation
MoDOT	Missouri Department of Transportation
MPO	Metropolitan planning organization
NARC	National Association of Regional Councils
NHI	National Highway Institute
NTI	National Transit Institute
PD&E	Planning, Development and Environmental
PDF	Portable Document Format
PE	Professional Engineer
PI	Public Involvement
PSA	Public service announcement
PIC	Public Information Center
TIP	Transportation Improvement Program
Title VI	Title VI of the Civil Rights Act of 1964
TTY	Teletypewriter (a telecommunicating device for the deaf)

ANNOTATED REFERENCES

TRIS PUBLICATIONS

AASHTO Task Force on Environmental Design, *Visualization in Transportation: A Guide for Transportation Agencies,* July 2003

Visualization is a simulated representation of proposed transportation improvements and their associated impacts on the surroundings in a manner sufficient to convey to the layperson the full extent of the improvement. http://www.trbvis.org/MAIN/RESOURCES_files/AASHTOVisGuideJuly2003_1.pdf.

Alter, R., M. Lewiecki, M. Renz-Whitmore, and D.W. Albright, "Accountable Public Involvement: Partnership Approach to Proposed Transportation Project," *Transportation Research Record: Journal of the Transportation Research Board No. 2077,* Transportation Research Board of the National Academies, Washington, D.C., 2008, pp. 46–53.

Bernalillo County, New Mexico, undertook an initiative to improve public involvement in guiding transportation and recreation decision making through quantitative tracking of participation among stakeholder groups. A methodology was developed and a demonstration project selected to implement the methodology. The proposed methodology was to identify the demographic characteristics of the community affected by the proposed project. Outreach program performance would be measured by ascertaining whether persons who commented on the proposed project were representative of the population served. For the purpose of the demonstration, three demographic characteristics were identified as represented in the community affected by the demonstration project but historically underrepresented in Bernalillo County public meetings. Public involvement of persons whose primary language was Spanish, persons with disabilities, and youths were tracked. Successfully engaging persons with these characteristics required partner organizations that could engage them. A partnership approach was adopted to reach out to the community served. The public involvement partnership was formed with a variety of governmental, private, and nongovernmental organizations. There was an increase in the diversity of the public involved in discussing the demonstration project. A benchmark was established for public involvement in future phases of the demonstration project. Building accountability into public outreach can improve the level of community participation in proposed transportation projects. An effective means of delivering an accountable outreach program is through partnerships. In the Bernalillo County experience, partner organizations should be as diverse as the public to be served. http://dx.doi.org/10.3141/2077-07.

Aparicio, A., *Assessing Public Involvement Effectiveness in Long-Term Planning,* Paper #07-0728, presented at the 86th Annual Meeting of the Transportation Research Board, Jan. 21–25, 2007, Washington, D.C.

The recent experience of the Spanish Ministry of Transportation in developing a new Transportation Plan intended to use public involvement as a key element to recover legitimacy for long-term planning and to gain support to sustainable transportation objectives. The public involvement procedure reinforced the role of planning; however, ironically, also resulted in a more conservative document in terms of the relevance of environmental goals and the emphasis on management versus infrastructure development policies. Conservationist groups were particularly disappointed about the outcome of the process. Although there was a strong emphasis in creating multiple, well-balanced panels for discussion, consensus building lacked the time to reinforce the position of more progressive approaches compared with "business as usual" positions. Furthermore, it proved to be impossible for key environmental questions to be carefully examined at this stage, and they were postponed to modal plans. Overall, the process served to legitimate and reinforce long-term planning as a useful tool for transportation policy development. However, there is a significant way ahead for making public involvement more influential. Linking goals to clearly specified and regularly monitored objectives would keep public involvement alive along the planning cycle. A more clear link between general transportation policy goals and stakeholders' daily interests, such as quality of service, environmental quality, or access to development opportunities should keep alive and improve the dialog among technicians, decision makers, and the public, and put additional pressure in the transportation sector to gather further evidence and develop a better understanding about these complex links.

Barnes, G. and S. Erickson, *Developing a Simple System for Public Involvement Conflict Management,* University of Minnesota, Minneapolis, Minnesota Department of Transportation, 2006

This report describes a project to develop a simple system for managing conflict in transportation project public involvement. This work was focused on finding simple methods for managing less challenging projects and was aimed toward those who may do public involvement only occasionally. The conflict management framework is derived from a distillation of expert opinion, based on discussions of specific projects by Minnesota transportation public involvement experts. The framework is comprised of two components. The first is a simple organizational scheme for categorizing conflict to assist in determining the appropriate management strategy. The second part is

the management strategies themselves. Key among these are principles for managing stakeholder relations so as to preclude the occurrence of conflict to the extent possible. http://www.lrrb.org/PDF/200624.pdf.

Barnes, G. and P. Langworthy, *Increasing the Value of Public Involvement in Transportation Project Planning,* University of Minnesota, Minneapolis, Minnesota Department of Transportation, 2004

The purpose of this project was to understand why public involvement in transportation project planning goes badly, and to determine how the process could be modified to reduce negative outcomes. The project examines these issues by studying public involvement efforts. It examines how the potential for conflict can be anticipated. A local project had characteristics of having been well run with good intentions, of having been plagued by conflict, and of being documented in a neighborhood newspaper. It was the primary source of reasons why public involvement can turn out badly and was contrasted with three other projects that were more successful with their public involvement. A new model is proposed in this report. It proposes that conflict can derive from any or all of five independent dimensions, each with its own level of intensity or intractability: size and distribution of local benefits or costs; disagreement about the nature and importance of local impacts; ability to accurately define and engage relevant stakeholders; perceived legitimacy of the project; and degree of ideological issues. There are two key conclusions. First, situations with serious conflict are different from the typical public involvement effort; they require different tools and tactics built around the specific nature of the conflict. The second major finding is that "conflict" is not a standard problem to answer with a single solution, but each conflict does not have to be approached individually. http://www.lrrb.gen.mn.us/PDF/200420.pdf.

Black, R.N., *Public Participation in Diverse Communities: Tools for Consensus Building,* Paper #06-2580, presented at the 85th Annual Meeting of the Transportation Research Board, Jan. 22–26, 2006, Washington, D.C.

Transportation departments typically follow a traditional model for public participation that includes public notices; open house meetings to present the project, design, and timeline; and a complement of fact sheets and color-coded maps to inform the message. This one-size-fits-all approach to public participation is ineffective in culturally diverse communities. What makes diverse communities unique to transportation departments' public participation efforts? Culturally diverse communities have a different history with transportation policies. In the 1960s, before transportation policies emphasized public participation and context-sensitive solutions, many culturally diverse communities experienced public works projects such as highway construction that physically divided low-income communities and displaced homes. For instance, when the Dan Ryan Expressway was built in Chicago in 1968, hundreds of homes and churches were demolished to make way for the new interstate. The surrounding communities were not involved in the planning of the design and viewed the new highway as a segregation tool. Although transportation planning efforts have come a long way since the 1960s, many culturally diverse communities remember the impact of highway construction on their neighborhoods, and have developed resentment and distrust toward transportation officials. Therefore, transportation departments with projects affecting culturally diverse communities need to develop different, more proactive approaches to public participation. This paper discusses innovative approaches to public participation in culturally diverse communities that have proven effective. It provides a roadmap for project success by exploring a major highway construction project in Illinois that was initially opposed by the community and then, after significant retooling, gained support from the community. The tools for successful public involvement in culturally diverse communities include forming a project team that is diverse in ideas and culture, involving an expert in public and community relations, creating user-friendly project information materials, forming a community taskforce to provide feedback on your ideas and demonstrate your commitment to involvement, engaging local community papers as a valuable resource to reach diverse communities, and addressing the need for jobs and contracts early in the planning stages to establish realistic expectations.

Bryson, J.M. and A.R. Carroll, *Public Participation Fieldbook,* Regents of the University of Minnesota, 2007

This *Fieldbook* introduces the theory and practice of working with others in intra-organizational, inter-organizational, and community settings. The general focus is on how an organization or community can use participation to achieve the common good or create public value as a result of a change effort. Examples include a policy change or a new or modified program, project, service, or other initiative. The idea for the *Fieldbook* emerged from the desires of communities and students to learn how to engage people in decision making. The literature on participation tends to be either theoretical or nuts-and-bolts, but not both, and is often inadequate for our purposes. The authors are great fans of both the power and practicality of good theory. The great philosopher Bertrand Russell said, "Abstraction is the source of all power." Also, psychologist Kurt Lewin said, "There is nothing quite so practical as a good theory." (Many regard Lewin as the founder of small-group research and inventor of action research.) But theory without guidance on how to apply it to specific situations can be impotent. In other words, if one cannot figure out how to apply the theory, it cannot be very powerful or practical. The question that kept being asked was, "What should a practitioner do—and why, with whom, how, when, and where?" Little in the literature provides satisfactory answers to all of the questions. Although individual practitioners bring slices of

personal experience and preferences that provide anecdotal guidance, it is not clear how and why to apply the advice to other situations. These valuable bits and pieces of theory and practical advice need a useful synthesis or integration. This *Fieldbook* provides a synthesis of much of the theory, concepts, design guidance, tools, and other resources it is believed that participation process designers and implementers need to succeed. Practitioners will not need everything in the *Fieldbook* all the time, but they will have a resource that covers the bases and will help them think through what they need in specific circumstances. The *Fieldbook* is not meant to be a substitute for important works from the scholarly literature or for years of experience; it is meant to be a bridge between theory and practice. http://www.extension.umn.edu/distribution/resourcesandtourism/DB8422.html.

Burbidge, S.K., T. Knowlton, and A. Matheson, Jr., *Wasatch Choices 2040: A New Paradigm for Public Involvement and Scenario Development in Transportation Planning,* 2007

Wasatch Choices 2040 was a partnership between Envision Utah and the two major metropolitan planning organizations (MPOs) along Utah's Wasatch Front. The purpose of the partnership was to involve the public through a scenario planning process and to consider the role of land use in developing the region's long-range transportation plan. Through 13 public workshops and 5 open houses held in 2005, members of the public expressed their preferences for transportation and land use in their communities. The input from the public informed the development of regional growth principles that have since been adopted by elected officials and will guide transportation and land use decisions in Wasatch Front communities. In addition, results from the public process were used to create four regional transportation and land use scenarios that ultimately led to the creation of a regional vision. Each scenario was tested by using the CentreSim forecasting model, and a vision scenario was created to depict one version of how the Wasatch Front could develop if guided by regional growth principles. Modeling of the regional vision demonstrates that it performs significantly better than the existing long-range plan for several quality-of-life measures, including traffic congestion. This process proved groundbreaking by reminding both land use and transportation professionals that futures cannot be planned in isolation. Transportation affects land use just as much as land use affects transportation. It is a circular relationship that must be accounted for. This process focuses on bringing all interests to the table concurrently to plan for a better future. http://dx.doi.org/10.3141/1994-19.

Byrd, L. and S. David, *Public Involvement in Long-Range Transportation Planning: Benchmarking Study Identifies Best Practices, TR News,* No. 220, Transportation Research Board, Washington, D.C., 2002

This publication features articles on innovative and timely research and development activities in all modes of transportation. Brief news items of interest to the transportation community are also included, along with profiles of transportation professionals, meeting announcements, summaries of new publications, and news of TRB activities. http://gulliver.trb.org/publications/trnews/trnews220.pdf.

Casper, C.T. and F. Orr, *Metropolitan Planning Organization Use of Google Earth as a Visualization Tool to Aid Public Involvement and Integration of NEPA with Transportation Planning,* Paper #07-0678, presented at the 86th Annual Meeting of the Transportation Research Board, Jan. 21–25, 2007, Washington, D.C.

The Pikes Peak Area Council of Governments (PPACG) is responsible for preparing a long-range regional transportation plan, carrying out short-range transportation planning activities, and prioritizing and approving, through the transportation improvement program, expenditure of federal funds for transportation-related projects in the region. The 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) mandates that MPOs both utilize the Internet to publish their plans along with using visualization techniques to distribute data and information more effectively. Public involvement is a vital component of the transportation planning process. To make information more easily available to the general public, PPACG, with CH2M HILL, is planning on providing long-range regional transportation plan and transportation improvement program data in Google Earth® format on the PPACG website. A free, easy-to-use interface and access to high-resolution aerial imagery have made Google Earth® the most successful of the "virtual globe" viewing applications. Its popularity and ease of use make Google Earth® a natural medium for communicating transportation information to the public. The data and information are divided into four general categories: projects, roadway and traffic information, environmental constraints, and demographics. Topics discussed include the methodologies employed, technical obstacles and how they were overcome, the final delivery model, agency and public receptivity, and lessons learned. The overall conclusion is that Google Earth® is a powerful data visualization and data access application and can serve as an unparalleled information dissemination tool.

Creighton, J.L., *The Public Participation Handbook: Making Better Decisions Through Citizen Involvement,* March 2005

Internationally renowned facilitator and public participation consultant Creighton offers a practical guide to designing and facilitating public participation in environmental and public policy decision making. Written for government officials, public and community leaders, and professional facilitators, *The Public Participation Handbook* is a toolkit for designing a participation process, selecting techniques to encourage participation, facilitating successful public meetings, working with the media, and evaluating the program. The book is also filled with practical advice, checklists, worksheets, and illustrative examples.

http://www.amazon.com/gp/product/product-description/0787973076/ref=dp_proddesc_0?ie=UTF8&n=283155&s=books

Dalton, D. and P.J. Harter, *Better Decisions through Consultation and Collaboration*

Involving the public in government decision making makes sense for three key reasons: This guide will help you answer these questions. The Conflict Prevention and Resolution Center developed this manual to assist EPA managers and staff who are developing or managing policies, plans, regulations, or programs at the national, regional, or local levels to achieve EPA's Public Involvement Policy goals. Although not specifically aimed at facility-level permitting, enforcement, or remediation, many lessons are transferable to these situations. This document is a resource guide on public involvement best practices and strategies for EPA staff who are tasked with designing and/or implementing public involvement processes for various EPA activities. The discussions and advice in this document are intended solely as guidance. As indicated by the use of nonmandatory language such as "may" and "should," it offers recommendations and suggestions for EPA staff. This document does not substitute for any statutory authorities or regulations. This document is not an EPA regulation and therefore cannot impose legally binding requirements on EPA, states, or the regulated community. EPA retains the discretion to adopt approaches that differ from this guidance. Interested parties are free to raise questions about this guidance and the appropriateness of applying it in a particular situation. EPA may change this document in the future, as appropriate. This manual focuses on the preparation for involving stakeholders in decision-making processes because, in our experience, building a strong foundation at the outset ensures a more productive and efficient outcome. Indeed, a 2008 National Academy of Sciences study concluded that stakeholder involvement processes can improve the quality of policies and help them become implemented. "Public participation should be fully incorporated into environmental assessment and decision-making processes, and it should be recognized by government agencies and other organizers of the processes as a requisite of effective action, not merely a formal procedural requirement." Involving stakeholders takes time and planning to produce meaningful results. Without this commitment, you may waste time and money and the stakeholders may end up more alienated than if you had not consulted them at all. A stakeholder involvement process is *not* an end in itself: it is a means to a better, more widely accepted decision. http://www.epa.gov/ncei/collaboration/betterdecisions.pdf.

Dietz, T. and P.C. Stern, *Public Participation in Environmental Assessment and Decision Making,* The National Academies Press, Washington, D.C., 2008

Federal agencies have taken steps to include the public in a wide range of environmental decisions. Although some form of public participation is often required by law, agencies usually have broad discretion about the extent of that involvement. Approaches vary widely, from holding public information gathering meetings, to forming advisory groups, to actively including citizens in making and implementing decisions. Proponents of public participation argue that those who must live with the outcome of an environmental decision should have some influence on it. Critics maintain that public participation slows decision making and can lower its quality by including people unfamiliar with the science involved. This book concludes that, when done correctly, public participation improves the quality of federal agencies' decisions about the environment. Well-managed public involvement also increases the legitimacy of decisions in the eyes of those affected by them, which makes it more likely that the decisions will be implemented effectively. This book recommends that agencies recognize public participation as valuable to their objectives, not just as a formality required by the law. It details principles and approaches agencies can use to successfully involve the public. http://www.nap.edu/catalog.php?record_id=12434.

Done, R.S. and J. Semmens, *Making a Good First Impression: Improving Predesign and Environmental Public Information and Public Involvement,* presented at the 87th Annual Meeting of the Transportation Research Board, Jan. 13–17, 2008, Washington, D.C.

Current federal transportation legislation creates considerable responsibility for state departments of transportation (DOTs) and MPOs to provide public information and public involvement to a diverse community and to obtain feedback that satisfies legal mandate and results in improved planning and project development. The four main domains of public participation are informing people, involving people, getting feedback, and applying special techniques. The growing population in Arizona requires a constant roadway construction and maintenance effort that naturally includes public participation during planning and implementation. Using data collected from internal and external respondents, this study examines the current public information and public involvement structures and functions as well as opportunities for improving these structures and functions.

Eagle, K. and B. Stich, "Planning to Include the Public. Transportation Policy Implementation with Effective Citizen Involvement," *Public Works Management & Policy,* Vol. 9, No. 4, 2005

The following research is a Virginia case study evaluating planning processes as they implement the following legislation: NEPA (the National Environmental Policy Act), 1969; ISTEA (Intermodal Surface Transportation Efficiency Act), 1991; and TEA-21 (Transportation Equity Act for the 21st Century), 1998. Specifically, the implementation of the legislation requiring citizen participation will be reviewed in an effort to evaluate how the policy process and citizen participation relate to each other and to the legislation to

determine how the process relates to the desired outcomes for involvement.

Federal Highway Administration, *A Citizen's Guide to Transportation Decisionmaking,* Washington, D.C.

The FHWA and FTA wrote this guide to provide answers to these and other transportation-related questions. This guide will help you understand how transportation decisions are made at the local, state, and national levels, and that the better citizens understand the transportation decision-making process, the more certain it is that the transportation system will be safe, efficient, and responsive to public needs and concerns about their communities and the natural environment. http://www.fhwa.dot.gov/planning/citizen/.

Federal Highway Administration, *Community Impact Assessment, A Quick Reference for Transportation,* Washington, D.C., 1996

It was "written as a quick primer for transportation professionals and analysts who assess the impacts of proposed transportation actions on communities" by doing the following:

- Outlining the community impact assessment process,
- Highlighting critical areas that must be examined,
- Identifying basic tools and information sources, and
- Stimulating the thought process related to individuals projects.

It was prepared because the consequences of transportation investments on communities had often been ignored or introduced near the end of a planning process. At best, this reduced them to reactive consideration. The goals of this booklet were to do the following:

- Increase awareness of the effects of transportation actions on the human environment,
- Emphasize that community impacts deserve serious attention in project planning and development commensurate with that given the natural environment, and
- Provide some tips for facilitating public involvement in the decision-making process.

It provides "nuts and bolts" guidance and instruction in accomplishing the following objectives:

- Defining the project,
- Developing a community profile,
- Collecting data,
- Analyzing community impacts,
- Selecting analysis tools,
- Identifying solutions,
- Using public involvement, and
- Documenting findings.

Federal Highway Administration, *How to Engage Low-Literacy and Limited-English-Proficiency Populations in Transportation Decisionmaking,* Washington, D.C., 2006

This publication provides guidance on what special approaches are needed to outreach to low-literacy and limited-English-proficiency populations, and what are the best ways to contact low-literacy and limited-English-proficiency populations. www.fhwa.dot.gov/hep/lowlim/webbook.pdf.

Federal Highway Administration, Federal Transit Administration, *Public Involvement Techniques for Transportation Decision-Making,* Washington, D.C., 2002

This is a reference that makes a wide variety of public involvement techniques available to transportation agencies. It includes the 14 techniques originally published in *Innovations in Public Involvement for Transportation Planning.* There are four chapters with subsections that group techniques thematically by function. Each chapter ends with a final subsection called "Taking Initial Steps." To assist practitioners in coordinating a full public involvement program, each technique is cross-referenced to other related techniques. The organizing principle for each technique is a series of questions, such as "Why is it useful?" or"What are the drawbacks?" For the transportation community, involving the public in planning and project development poses a major challenge. Many people are skeptical about whether they can truly influence the outcome of a transportation project, whether highway or transit. Others feel that transportation plans, whether at the statewide or metropolitan level, are too abstract and long-term to warrant attention. Often the public finds both metropolitan and statewide transportation improvement programs incomprehensible. How then does a transportation agency grab and hold people's interest in a project or plan, convince them that active involvement is worthwhile, and provide the means for them to have direct and meaningful impact on its decisions? This guide gives agencies access to a wide variety of tools to involve the public in developing specific plans, programs, or projects through their public involvement processes. http://www.planning.dot.gov/Pitool/tocforeword.asp.

Federal Highway Administration, Federal Transit Administration, *Transportation & Environmental Justice, Case Studies,* Washington, D.C., 2000

This report presents 10 case studies that illuminate effective practices on how to better promote environmental justice principles. They profile how various transportation agencies have integrated environmental justice considerations in their activities to improve transportation decision making. The case studies detail both analytical and procedural issues relevant to a diverse community including FHWA, FTA, state DOTs, MPOs, transit providers, other partnering government agencies, community organizations, environmental interest, and environmental justice advocacy groups, businesses, academic institutions, and the public. http://www.fhwa.dot.gov/environment/ejustice/case/index.htm.

Federal Highway Administration, Federal Transit Administration, *Transportation & Environmental Justice, Effective Practices,* Washington, D.C., 2002

This report provides 38 effective practices that were used successfully by state DOTs, MPOs, and transit service providers to engage Environmental Justice populations. Many of the examples illustrate that successful initiatives often promote public participation, partnerships, and collaborative relationships with other governmental agencies, as well as interested advocacy groups or community-based organizations. The effective practices highlight efforts that were undertaken during planning, public involvement, project development, right-of-way, construction, and operations and maintenance phases of projects. http://ntl.bts.gov/lib/12000/12100/12173/booklet.pdf.

Florida DOT, *Public Involvement Handbook,* Oct. 2003

For the transportation community, involving the public in planning and project development poses a major challenge. Many people are skeptical about their ability to influence the transportation decision-making process. Others may feel that transportation plans are too abstract and so far into the future that participating now yields little affect. The challenge to the transportation agency and public involvement practitioners is to devise a way to interest the public in the decision-making process. The challenge also is to convince the public that their active involvement and participation in the transportation decision-making process provides them with an opportunity to have meaningful impacts on decisions affecting their communities. The Florida DOT (FDOT) *Public Involvement Handbook* provides public involvement practitioners with techniques and methods to encourage meaningful public participation in the development of a transportation system that meets the needs of Florida residents and visitors. This *Handbook* is compliant with the FDOT public involvement policy and all other legal foundations for public involvement as a means of providing access to the transportation decision-making process. This *Handbook* is intended to provide clear guidance for developing and implementing effective public involvement activities that meet and may exceed federal and state requirements to involve the public in transportation decision making. It describes a variety of methods and techniques to involve the public in the development of transportation plans, programs, and projects, and helps public involvement practitioners design effective public involvement plans that become roadmaps to reach those affected by transportation actions. http://www.dot.state.fl.us/EMO/pubs/public_involvement/pubinvolve.htm.

Garrick, N.W., P. Miniutti, M. Westa, J. Luo, and M. Bishop, *Effective Visualization Techniques for the Public Presentation of Transportation Projects,* New England Transportation Consortium, University of Connecticut, Storrs, 2005

The purpose of this project was to look at ways to develop more coherent and effective approaches for presenting transportation projects to the public. A detailed review of recent research on visual perception and visualization was conducted. Site visits to two consulting firms and one state DOT were also conducted. Mail-in surveys were sent to the six New England DOTs and these survey results were compared with a previous nationwide survey conducted in 1998. The study results showed that image composite continues to be the most popular visualization technique used by both DOTs and consulting firms. Animation, which is the most effective visualization technique, is expected to be used more frequently as the cost and time of production are reduced. It was also found that visualization techniques are mainly used in the public involvement process in the New England DOTs; they are rarely used in design and design development. This is expected to change as Context-Sensitive Design takes hold in the DOTs. As this occurs, expect that visualization will be more frequently incorporated, not only in the public involvement stage but also at all stages of design. Because transportation design and public involvement are parallel processes, DOTs will find that the usage of visualization in design will be invaluable in helping transportation designers evaluate and refine their design. http://docs.trb.org/01005985.pdf.

Gifford, G.L., *Meaningful Participation: An Activist's Guide to Collaborative Policy-Making,* C Effects Publications, Jan. 2002

The adversarial model of policymaking—where some interests win and some lose—has stopped many a bad decision and a number of good ones. Yet, who really wins if a controversial ruling leaves a community divided and bitter? Costly legal battles often follow controversy, consuming precious human and financial resources. Across the country and around the world, government officials and even private businesses are exploring ways to engage both supporters and critics. They are flocking to a new policymaking approach called citizen engagement or public participation. Workshops and handbooks have been written to train professionals in public participation. Consultants are advising business and government. This handbook is designed for the public, or at least that segment of the public that engages in policymaking as volunteers or staff of non-governmental organizations. It may also be of value to individual citizens acting alone, although these unaffiliated individuals are not the primary audience. This handbook does not teach how to organize. It does not discuss media campaigns or the best lobbying techniques. It does not seek to provide an answer to every situation that might arise. Instead, it outlines a few basic principals that underlie effective public participation. With these tools, you will be able to recognize and advocate for meaningful engagement. If you are already experienced in collaborative policymaking, this handbook can serve as a vehicle for reflection on your current practice. In the handbook, you will find a few useful "process" tools to improve your participation. You will also find questions to help you negotiate the thorny spaces of when to col-

laborate and when not. Underlying this handbook is a belief that if you have a better understanding of the principals of collaborative policymaking you will be more effective and able to adapt more rapidly to changing situations. Its goal is to help you become an equal partner with government and business in creating a meaningful process of public deliberation—to which we all aspire. http://www.amazon.com/Meaningful-Participation-Activists-Collaborative-Policy-Making/dp/0970785704/ref=sr_1_41?ie=UTF8&s=books&qid=1233432761&sr=1-41.

Hartell, A.M., *Is Inadequate Transportation a Barrier to Community Involvement?* Evidence from the Social Capital Benchmark Survey, Transportation Research Board of the National Academies, Washington, D.C., 2008

Since the publication of Robert Putnam's influential "Bowling Alone," the concept of social capital has captured the attention of researchers in many disciplines. Policymakers and community advocates have pressed to include social capital in discussions about public policy, including transportation policy and planning. Using data from a national survey conducted in 2000, the study described in this paper investigated whether inadequate transportation is a barrier to people's involvement in their communities. The analysis uses a binary logistical model and finds that respondents who were female, who were nonwhite, who had household incomes less than $30,000, and who had long commutes to work had increased odds of citing transportation as a barrier. However, only 17% of the sample analyzed reported that transportation was a barrier. Most respondents cited other barriers along with transportation, most commonly inflexible work schedules or inadequate child care. Although some types of improvements to transportation systems and transit service could improve access to community activities, the overall results suggest that if transportation improvements seek to dismantle barriers to community involvement they will need to be combined with policies and programs that address other types of barriers to achieve a measurable positive effect. Travel demand management programs and better coordinated transit service programs are two approaches to dismantling transportation barriers to community involvement.

Innes, J.E. and D.E. Booher, *Reframing Public Participation: Strategies for the 21st Century,* University of California at Berkeley, March 2005

This article makes the case that legally required participation methods in the United States not only do not meet most basic goals for public participation, but are also counterproductive, causing anger and mistrust. Both theory and practice are dominated by ambivalence about the idea of participation itself. Both struggle with dilemmas that make the problems seem insoluble, such as the conflict between the individual and collective interest or between the ideal of democracy and the reality that many voices are never heard. Cases are used to draw on an emerging set of practices of collaborative public engagement from around the world to demonstrate how alternative methods can better meet public participation goals and how they make moot most of the dilemmas of more conventional practice. Research shows that collaborative participation can solve complex, contentious problems such as budget decision making and create an improved climate for future action when bitter disputes divide a community. Authentic dialogue, networks, and institutional capacity are the key elements. The authors propose that participation be understood as a multi-way set of interactions among citizens and other players who together produce outcomes. Next steps involve developing an alternative practice framework, creating forums and arenas, adapting agency decision processes, and providing training and financial support. http://repositories.cdlib.org/iurd/rs/RP-2005-01/.

Kobza, K.P., *Public Involvement in Transportation: How Web-based Systems Can Make Your Next Experience More Constructive*

So, you have been charged with widening a road. Or you plan on designing a new rail system. Or you have been hired to oversee the building of a monumental bridge. After months (or even years) of preparation, careful analysis, and painstaking details, you are ready. Your plans and dreams have culminated into the perfect solution, and you are certain that everyone will be delighted with the long-term improvements. It sounds so great on paper . . . And then you tell the public. Those grand plans that appeared so perfect on paper are oftentimes met with resistance from the public, and that resistance is typically the result of misconceptions, inaccurate information, and a lack of communication. What if you could change all that? What if you had a simple means of engaging citizens, of involving them in your decisions, of soliciting and receiving feedback; of educating the public . . . of actually building trust and creating an environment of true collaboration? Help is available with web-based technologies. These systems present real opportunities to both constructively engage citizens and efficiently manage the process. Most importantly, these systems help you achieve results. http://www.publiccomment.com/docs/Transportation2005.pdf.

Kramer, J., K.M. Williams, and K.E. Seggerman, *Assessing the Public Involvement Practices of the Florida Department of Transportation,* 2008

This paper presents findings of a comprehensive assessment of public involvement practices of FDOT. Objectives of the study were to document the current state of the practice and any best practices, identify training needs in public involvement, and identify considerations for the future development of public involvement performance measures. The assessment was conducted through a combination of in-depth personal interviews with FDOT staff and a review of agency documents. Findings are presented regarding the public involvement practices of FDOT at all phases of transportation decision making and across the various divisions of the FDOT Central Office,

and each FDOT District—including each functional unit within the District and its role in public involvement. The study indicates that FDOT has made significant strides in its public involvement practices and is committed to involving the public in a meaningful way. Most of those interviewed viewed public involvement as an integral part of their job. There was evidence that methods other than formal meetings are being applied to more effectively involve the public and to convey project information. It was also clear that there are several continuing challenges and training needs. The paper concludes with an overview of suggestions aimed at further strengthening FDOT's public involvement process, such as expanding opportunities for information sharing on public involvement practices across the FDOT districts, creating formal public involvement evaluation methods, and steps to increase communication and coordination across functional units and agencies on issues of importance to the public.

Lorenz, J., M. DeMent, R. Arthur, and S. Tolleson, *Helping Stakeholders Understand Transportation Impacts and Trade-offs in Highway Planning: Lessons Learned from Developing Simulation-Based Public Involvement Tool,* Paper #06-2090, presented at the 85th Annual Meeting of the Transportation Research Board, Jan. 22–25, 2006, Washington, D.C.

In 2004, the Kansas DOT (KDOT) began long-range planning for a rapidly developing 30-mile highway corridor along the western edge of metropolitan Kansas City. The K7 Corridor Management Plan will determine future facility types and locations; address access and right-of-way issues and preservation; and produce memoranda of understanding between KDOT and local governments about future actions and investments each will undertake to improve the corridor. One KDOT challenge involved reconciling divergent agendas of two counties and seven cities to build consensus for long-term, coordinated state and local decisions and investments. Consequently, KDOT and its consultant team created the Right Turns Transportation Planning Exercise to help local decision makers "see" the effects and consequences of their differing visions for corridor land use and transportation needs. This planning simulation enables stakeholders to explore trade-offs and constraints that planners wrestle with every day through planning education; facilitated values/needs discussions; and simulated planning sessions using aerial maps and game pieces that show costs, capacity, and real-world examples of facility types. Valuable in itself, Right Turns also provided important lessons regarding how public involvement practitioners can better open a dialog about local transportation needs and values; identify actionable stakeholder transportation preferences; help stakeholders see the relationship between their preferences and impacts on local communities and transportation networks; and create a realistic understanding of costs, benefits, and trade-offs.

Lowry, M.B. and T.L. Nyerges, "Internet Portal for Participation of Large Groups in Transportation Programming Decisions," *Transportation Research Record: Journal of the Transportation Research Board, No. 2077,* Transportation Research Board of the National Academies, Washington, D.C., 2008, pp. 156–165

An Internet portal for public participation in transportation programming decisions is described. The Internet portal supports participation of large groups (e.g., 100 or more people) through cutting-edge online deliberation tools and a strategic process that fosters meaningful public involvement. The portal is described in the context of a five-step process that has been designed for a particular programming decision situation called a local option transportation tax. A transportation agency could develop a similar process for other programming decisions, such as the creation of a transportation improvement program. The portal can be used by an agency to create a program or merely as a focus-group activity or polling exercise. Various tools used by the portal and the five-step process are described with the help of selected screenshots of the user interface. http://dx.doi.org/10.3141/2077-20.

Lowry, M.B., R.K. Young, P.E. Rutherford, G. Scott, and T. Zhong, *New Model for Public Involvement in Transportation Improvement Programming,* Paper #07-0665, presented at the 86th Annual Meeting of the Transportation Research Board, Jan. 21–25, Washington, D.C.

Public involvement in transportation improvement programming is an increasing trend as well as a recommendation of federal legislation. Although most transportation planning agencies have not actively involved the public during this stage of the planning process, there are many benefits to doing so, such as gaining support from the public for the funded project list, increasing the credibility of agencies, reducing project costs, and avoiding construction delays. Effective public involvement during the programming step incorporates inclusive participation, two-way communications, transparent processes, and serious treatment of the public's input. This paper presents a model for public involvement in the programming process with all these features. The model uses a web-based portal application with a Public Participation Geographic Information System (PPGIS) and is composed of five steps: describing values and concerns, determining criteria, reviewing projects, evaluating scenarios, and creating reports. Challenges agencies may encounter in implementing such a system are also covered in this paper.

McAndrews, C., J.M. Florez-Diaz, and E. Deakin, "Views of the Street: Using Community Surveys and Focus Groups to Inform Context-Sensitive Design," *Transportation Research Record: Journal of the Transportation Research Board, No. 1981,* Transportation Research Board of the National Academies, Washington, D.C., 2006

Urban transportation planners need community involvement to design the urban transportation system for its users

and for those who experience its spillovers and externalities, positive and negative. The people in the urban transportation system include travelers, residents of nearby neighborhoods, transit service providers, and others. These groups often overlap. This paper discusses methods and findings from an effort to involve residents in the planning for the redesign and revitalization of San Pablo Avenue, an urban arterial running along the eastern edge of the San Francisco Bay, California. The viewpoints of residents of neighborhoods of Oakland, Emeryville, Berkeley, Albany, Richmond, and El Cerrito, California, the six cities along the southern portion of the avenue, were gathered through resident surveys and focus groups. These residents experience the avenue as travelers and also as its neighbors, whose everyday lives are influenced by activities on the street. Resident surveys and focus groups show that even on a major arterial serving multiple jurisdictions, local residents account for a major share of shopping and personal business along the arterial, and local trips are a major portion of the pedestrian traffic, transit ridership, and auto use in the corridor. Further, residents have intimate knowledge of the way the street functions and malfunctions and can offer useful suggestions for street redesign, operational improvements, land use changes, and related social programs. The paper shows that context-sensitive design needs to respond not only to the physical environment but also to social and economic conditions, including neighborhood concerns and aspirations. http://dx.doi.org/10.3141/1981-15.

Meyers, J., C. Dulic, C. Luz, and S. Warren, *Spending Resources to Maximize Participation: Using an Innovative Media Campaign as a Substitute for an Initial Public Meeting,* Seventh Transportation Research Board Conference on the Application of Transportation Planning Methods, 2002

This volume contains papers and abstracts presented during the Seventh TRB Conference on the Application of Transportation Planning Methods, held at the Park Plaza Hotel in Boston, Massachusetts, on March 7–11, 1999. The conference was organized and sponsored by the Transportation Planning Applications Committee (A1C07) of TRB, the Executive Office of Transportation and Construction of the Commonwealth of Massachusetts, and the Boston MPO. Richard Marshment of the University of Oklahoma served as Conference Chair, and Karl Quackenbush of the Central Transportation Planning Staff chaired the Local Arrangements Committee. http://docs.trb.org/00939750.pdf.

Minnesota DOT, *Increasing the Value of Public Involvement in Transportation Project Planning,* March 2004

The purpose of this project was to understand why public involvement in transportation project planning goes badly, and to determine how the process could be modified to reduce negative outcomes. The project examines these issues by studying public involvement efforts. The project reviews how the potential for conflict can be anticipated. A local project had characteristics of having been well run with good intentions, of having been plagued by conflict, and of being documented in a neighborhood newspaper. It was the primary source of reasons why public involvement can turn out badly and was contrasted with three other projects that were more successful with their public involvement. A new model is proposed in this report, proposing that conflict can derive from any or all of five independent dimensions, each with its own level of intensity or intractability:

- Size and distribution of local benefits or costs
- Disagreement about the nature and importance of local impacts
- Ability to accurately define and engage relevant stakeholders
- Perceived legitimacy of the project
- Degree of ideological issues.

There are two key conclusions. First, situations with serious conflict are different from the typical public involvement effort; they require different tools and tactics built around the specific nature of the conflict. The second major finding is that "conflict" is not a standard problem to answer with a single solution, but each conflict does not have to be approached individually. http://www.lrrb.org/pdf/200420.pdf.

Minnesota DOT, *Developing a Simple System for Public Involvement Conflict Management*

This report describes a project to develop a simple system for managing conflict in transportation project public involvement. This work was focused on finding simple methods for managing less challenging projects and was aimed toward those who may do public involvement only occasionally. The conflict management framework is derived from a distillation of expert opinion, based on discussions of specific projects by Minnesota transportation public involvement experts. The framework is comprised of two components. The first is a simple organizational scheme for categorizing conflict to assist in determining the appropriate management strategy. The second part is the management strategies themselves. Key among these are principles for managing stakeholder relations so as to preclude the occurrence of conflict to the extent possible. http://www.lrrb.org/pdf/200624.pdf.

Mullen, J., *Getting the Message Out: Outreach Techniques that Enlighten and Enliven Today's Smaller Communities,* Eighth National Conference on Transportation Planning for Small and Medium-Sized Communities, Transportation Research Board, Washington, D.C., 2002

Today's smaller communities require dynamic and cost-effective outreach techniques that allow for a tailored community approach while keeping pace with new or changing methods of communication. A one-size-fits-all approach does not work. A plan is required that employs flexible, expandable, and adaptable outreach techniques with

information presented in a way that is both distinctive and easy to understand. Conventional outreach techniques for smaller communities have usually included rather simple, streamlined methods of communication. During a public outreach program, advisory committees, newsletters and websites set the stage for delivering the desired message. These forums and tools establish the basis for more advanced methods of communication. Using innovation and a flexible approach, smaller communities will be able to take advantage of a plethora of outreach opportunities that go beyond the norm. Designing and implementing public information, education, and involvement programs for today's transportation planning process can be done in several ways—all independent of, and complementary to, each other. Forums for creating consistent community outreach range from establishing on-site information centers that encourage the participation of various public groups, to identifying potential conflict and bringing key players to the table to proactively resolve any issues. With the recently adopted Year 2025 Regional Transportation Plan, the South Jersey Transportation Planning Organization (SJTPO) continues to place an importance on meaningful community outreach and public involvement for smaller communities around southern New Jersey. The success resulting from these efforts will become apparent once communities have developed an appreciation of not only the message that is being communicated, but also of the method in which that message is received. This paper documents the public outreach process, provides interesting examples of outreach techniques, tools, and approaches; and suggests procedural methods that are expected to have similar successful applications in other small to mid-sized communities. The following cites examples of successful outreach techniques established during the SJTPO Public Outreach Program, and includes a discussion of how the program will generate both local awareness and cooperation among smaller communities for years to come.

Municipal Research and Services Center of Washington, *Governments are from Saturn . . . Citizens are from Jupiter: Strategies for Reconnecting Citizens and Government,* June 1998

In recent years, the work of local government has been handicapped by declining citizen confidence and involvement in government. Whether the lost trust has resulted primarily from government's own failures, or is a reflection of dramatically changing times, action is needed. It is time to remind ourselves and others about what government is, what it does for us, and what our mutual responsibilities are to make government work for all of us. Word about government successes must be heralded without whitewashing the problems that must be addressed. What changes are needed to reconnect citizens with government and to make government work in the new information age must be honestly looked at. This publication briefly explores evidence and sources of this growing distrust, and highlights valuable benefits that government provides. The publication focuses on examples of a variety of successful strategies that communities have used to reconnect citizens with government, to rehabilitate government's tarnished image, and to restore civility to the ongoing debate on public policy. Special acknowledgment is given to Susan Enger, MRSC Planning Consultant, who researched and wrote this publication. http://www.mrsc.org/Publications/textsrcg.aspx#E22E10.

Municipal Research and Services Center of Washington: *Effective Public Participation and Communication,* Sept. 2000

In Washington State's culture of open government, the process of policymaking is every bit as important as the product of that process. Effective policymaking cannot occur without solid public participation. Open communications are essential to making that process work. This report contains a collection of tips acquired through experience while participating in both successful and unsuccessful processes. http://www.mrsc.org/Subjects/Governance/legislative/communication.aspx.

O'Connor, R., M. Schwartz, J. Schaad, and D. Boyd, *State of the Practice: White Paper on Public Involvement,* Transportation Research Board, Transportation in the New Millennium, Washington, D.C., 2000

This white paper, authored by members of the TRB Committee on Public Involvement, provides an overview of developments in the evolution of the process of two-way communication between citizens and government by which transportation agencies and other officials give notice and information to the public and use public input as a factor in decision making. In the past decade, a radical transformation has occurred in the way transportation decisions are made. A new decision model has emerged and continues to be refined. The model assumes that public input into the assessment of transportation needs and solutions is a key factor in most transportation decision making. This paradigm shift, and several factors that have contributed to it, are discussed including the Intermodal Surface Transportation Efficiency Act of 1991. http://www.nationalacademies.org/trb/publications/millennium/00108.pdf.

Ostlund, S. and K. Brown, *Guidelines for Graphic Representation to Facilitate Public Involvement,* Mississippi State University, Mississippi State Research and Special Programs Administration, 2003

The goal of this research is to develop a methodology for displaying and combining different aspects of intermodal thought so that laypersons may be able to partake in the discussion in a meaningful way. To meet this goal, we gathered research and developed step-by-step guidelines for creating and organizing a web-based forum (Part Two) and designed accompanying graphics to increase the levels of public involvement and understanding of intermodal issues in a community; in particular, the integration of pedestrian and bicycle paths with other modes of transportation (Part One). To achieve the goal of devel-

oping the graphics, the city of Starkville, Mississippi, was studied; however, the website and its application can be applied to other towns, hence it serves as a prototypical site. http://www.ie.msstate.edu/ncit/Research/Ostlund%20final%20report.htm.

Prevost, D.L., "Geography of Public Participation: Using Geographic Information Systems to Evaluate Public Outreach Program of Transportation Planning Studies," *Transportation Research Record: Journal of the Transportation Research Board No. 1981,* Transportation Research Board of the National Academies, Washington, D.C., 2006, pp. 84–91

How effective are public involvement programs in reaching a representative and sufficient sampling of public input for a planning study? Although evaluations of public involvement programs are traditionally qualitative, this paper shows how geographic information systems (GIS) can provide an appropriate and productive means of quantitatively evaluating the effectiveness of an agency's outreach program. This study used both mailing list and comment data from the Dulles Corridor Rapid Transit Project Environmental Impact Statement of the Virginia Department of Rail and Public Transportation to evaluate the agency's outreach program. The data were analyzed to determine the project's effectiveness in informing and receiving feedback from potential stakeholders. The analysis showed that 50% of the mailing list members lived within ½ mi of the proposed project. "Inclusion rates" were calculated, with household participation rates in census block groups near the project ranging from 0 to 82%. The Tyson's Corner segment of the project, where the proposed rail line would be closest to residences, on average had the highest inclusion rates, with 16.5% of households within ½ mi of the proposed stations participating. Of the six block groups meeting the project's environmental justice thresholds, half had an inclusion rate below 5%. Analysis of those commenting showed that those closest to the project were most likely to comment on the study and to express opposition to the project in their comments. This study reinforces many traditional stereotypes in public participation; however, more importantly, it demonstrates a method by which deficiencies in outreach efforts can be identified and measures taken to improve participation. By using the GIS-generated maps, agencies can readily identify geographic areas that may be affected by the project, yet have low participation rates, and use this information to develop additional outreach tools to target these populations. http://dx.doi.org/10.3141/1981-14.

Puentes, R. and L. Bailey, *Improving Metropolitan Decision Making in Transportation,* The Brookings Institute, Oct. 2003

Metropolitan areas, the engines of the American economy, require greater control over the transportation spending so crucial to their dynamism. As Congress debates the reauthorization of the federal transportation spending bill (TEA-21), the reforms of previous bills—devolving decision making to metropolitan areas and away from statewide agencies—need to be broadened. This brief examines recent metropolitan-level spending and finds that local control produces a more balanced and holistic transportation network. It also argues for specific policy recommendations to boost that performance while increasing accountability. http://www.brookings.edu/reports/2003/10transportation_puentes.aspx.

Reed, J. and M. Bosley, *Public Involvement: Do You Have a 'Policy' or a 'Plan'?* Eighth Transportation Research Board Conference on the Application of Transportation Planning Methods, 2002

This paper outlines the difference between meeting the requirement to have a Public Involvement Policy and having a Public Involvement Plan. In light of the increased emphasis on Public Involvement and Environmental Justice it is becoming more and more important for agencies to be proactive with regard to Public Involvement. Webster's defines the verb "plan" as "to devise or project the realization or achievement of a program." If we as transportation professionals are really interested in achieving the goal of public involvement, then we had better devise public involvement plans, not just policies. The goal of this paper is to stimulate discussion and illustrate the process of self-assessment, goal setting, and benchmarking as well as best practices in the area of public involvement. It discusses the cyclical pattern of reassessment that can annually shape the direction of future plans with regard to how they better address the needs of an area by assessing what techniques have been successful and unsuccessful in the past year.

Sanoff, H., *Community Participation Methods in Design and Planning,* Wiley, Dec. 1999.

Offers professionals coverage of the basic principles and methods of community participation coupled with incisive case studies illustrating how each principle and method is applied and executed. http://www.amazon.com/Community-Participation-Methods-Design-Planning/dp/0471355453/ref=sr_1_13?ie=UTF8&s=books&qid=1233432320&sr=1-13.

Schively, C., M. Beekman, C. Carlson, and J. Reed, *Enhancing Transportation: The Effects of Public Involvement in Planning and Design Processes,* University of Minnesota, Sept. 2007

This research examines the nature and effects of inclusive and effective participation in the planning and design of transportation facilities. http://www.cts.umn.edu/Publications/ResearchReports/reportdetail.html?id=1532.

Schreiber, K., G. Binger, and D. Church, *Higher-Density Plans: Tools for Community Engagement,* Norman Y. Mineta International Institute for Surface Transportation Policy

Studies, Department of Transportation Research and Special Programs Administration, California Department of Transportation, Sacramento, 2004.

Provides information that local, regional, and state agencies, planning professionals, and project and plan proponents can use to develop and implement the type of collaborative efforts that involve residents in planning the futures of their communities. http://transweb.sjsu.edu/mtiportal/research/publications/documents/03-02/mti_03-02.pdf

Schutz, J.B., *Use of Public Input to Develop Measures of Effectiveness,* Transportation Research Board, Seventh National Conference on Transportation Planning for Small and Medium-Sized Communities, Washington, D.C., 2000

It is no longer the job of the planner just to get input from the public on their reactions to work done by technical staffs. Instead the public must be involved at the earliest stages of a project or study and the involvement must be meaningful. This paper describes how an extensive list of questions was developed and presented to members of the public to get their input into the development of measures of effectiveness for use on four planning studies conducted in rural and small communities. The list of questions was originally developed from a longer list of Measures of Effectiveness used in urban planning studies and was reduced in size to leave only those Measures of Effectiveness that were applicable to rural and small communities. The Measures of Effectiveness are classified into five categories, transportation performance, financial/economic performance, social impacts, land use/economic development impacts, and environmental impacts. The paper will describe how the list of questions was modified during subsequent applications, how input from the public was merged with input from public officials, and how the Measures of Effectiveness were used in distinctly different studies. Those studies include a corridor study on an Interstate, a national pilot project for merging NEPA and planning, a feasibility study, and a regional plan update. The use of this method of developing Measures of Effectiveness will be compared with other methods. Those filling out the questionnaire included local and state elected officials. Many people expressed appreciation for being asked what their 'values' were at the beginning of the studies. The reader of this paper will benefit by learning of what kinds of Measures of Effectiveness are appropriate for studies in rural and small urban communities, how public input can be collected at an early stage in the study to help develop study criteria, and how this information can be applied in a variety of situations. http://pubsindex.trb.org/view.aspx?id=803634.

Sierra Club, *The Road to Better Transportation Projects: Public Involvement and the NEPA Process*

This report is about a landmark law requiring the federal government to examine alternatives and seek to minimize harmful effects of federally funded projects, such as highways, which have the potential to damage our health, environment, and quality of life. http://www.sierraclub.org/sprawl/nepa/sprawl_report.pdf.

Sinha, K.C. and S. Labi, *Transportation Decision Making: Principles of Project Evaluation and Programming,* Wiley, May 2007

This book provides a holistic approach to decision making in transportation project development and programming, which can help transportation professionals to optimize their investment choices. http://www.amazon.com/Transportation-Decision-Making-Principles-Programming/dp/0471747327/ref=sr_1_8?ie=UTF8&s=books&qid=1233433240&sr=1-8.

The Harwood Institute, *Standards of Excellence in Civic Engagement, How Public Agencies Can Learn from the Community, Use What They Learn, and Demonstrate that Public Knowledge Matters,* 2005

Standards of Excellence in Civic Engagement is a roadmap for public agency practitioners to ensure that their agency is truly in the business of civic engagement. This tool provides the four key standards every agency must meet to achieve excellence in civic engagement; benchmarks for knowing these standards are being met; and pay-offs for why it is worth achieving them. This tool will also help agencies answer key questions such as:

- Have staff been properly prepared for what they might learn through civic engagement, and are they prepared to deal with the implications?
- Have the appropriate conversations been framed, given the position in the policy process?
- Have realistic public expectations been set, given the capacities that exist to take action?
- Are the necessary voices around the table to gain useful knowledge and make discoveries?
- Has it been decided how to use what is learned and make sure people know their voices are useful?

http://www.theharwoodinstitute.org/ht/a/GetDocumentAction/i/6131.

Transportation/Land Use Connections Program: Foster Public Involvement in Transportation Choices and Great Places, TLC Clearinghouse, Washington, D.C.

Transportation initiatives, land use planning, and development projects benefit significantly from meaningful community input and support. Every land use and transportation decision has a range of stakeholders, including property owners, residents, business owners, and government staff and elected officials. Some stakeholders are already actively involved in decision making, while others need to be invited into the process. Involving stakeholders early in the planning process helps to identify community concerns and

opportunities that can help shape the project, and discuss the goals and strategies being advanced through the project. Successfully integrating public involvement into a project can be challenging. There is no hard and fast solution for public involvement. Examples of public involvement can include charrettes and visioning exercises that can help residents provide input, visualize different scenarios, and shape the end project. This Clearinghouse highlights resources on public involvement techniques and examples of projects that successfully engaged the public. These resources are intended to provide a model for successful efforts and pitfalls to avoid while undertaking transportation and land use planning projects. http://www.mwcog.org/transportation/activities/tlc/clearinghouse/strategies/involvement.asp.

U.S. Government Accountability Office, *Highway Public-Private Partnerships: Securing Potential Benefits and Protecting the Public Interest Could Result from More Rigorous Up-front Analysis. Testimony,* Washington, D.C., July 24, 2008.

This is a testimony by JayEtta Z. Hecker, Director of Physical Infrastructure Issues, before the U.S. Senate Subcommittee on Energy. http://www.gao.gov/cgi-bin/getrpt?GAO-08-1052T.

U.S. EPA Office of Policy, Economics and Innovation, *Shareholder Involvement & Public Participation at the USEPA,* Washington, D.C., Jan. 2001.

This report has taken a fresh look at EPA public involvement initiatives by reviewing formal evaluations and informal summaries from across the Agency that identify, describe, and/or evaluate agency stakeholder involvement and public participation activities. http://www.epa.gov/publicinvolvement/pdf/sipp.pdf.

Ward, B.G., *Measuring the Effectiveness of Community Impact Assessment: Recommended Core Measures,* University of South Florida, Tampa; Florida Department of Transportation; Federal Highway Administration, 2005

Summarizes research findings, suggests methods for evaluating Community Impact Assessment (CIA), how these measures may be applied, and provides recommendations on how CIA may be incorporated into environmental streamlining. http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_PTO/FDOT_BC353_28_rpt.pdf.

Wisconsin DOT Transportation Synthesis Report, *Best Practices for Public Involvement in Transportation Projects*

This report reviews the practices of several states recognized for effective public involvement campaigns, looks at articles and websites devoted to various traditional and high technology tools, and identifies guidelines and tips found on transportation sites and in journal articles. http://on.dot.wi.gov/wisdotresearch/database/tsrs/tsrpublicinvolvement.pdf.

Zetlin, A. and S. Ojar, "The Public: Key to Successful Projects," *Public Roads,* Vol. 67, No. 3, 2003.

Over the past 20 years, something amazing has happened in the New York metropolitan area—and across the country. Stakeholders are being asked to become partners with government agencies in developing and conducting transportation projects. This level of public involvement was not always the case. Until the early 1970s, federal, state, and municipal agencies planned roadway construction with little input from the communities affected by the work. But today all that has changed. By involving stakeholders in the decision-making process, New York City has emerged as a national leader in conducting public involvement programs. The city plans and constructs transportation projects from start to finish with the public's input. The result? Everyone can live with and be proud of the roads in New York.

How does the outreach process really work? An effective public involvement program requires a strategic outreach plan and lots of teamwork. Before the program can begin, the outreach plan needs to include the following steps: identifying the target audience(s), determining what information is needed and when, and deciding on the communication methods that will be used to deliver the information. In 2001, to rehabilitate the Williamsburg and Manhattan bridges, the New York City DOT fielded a team consisting of an engineering consultant and a communications firm. Together, the two companies were tasked with reconstructing the Williamsburg and Manhattan bridges, educating the public about how the project would affect them, and addressing stakeholders' concerns. http://www.tfhrc.gov/pubrds/03nov/08.htm.

Zhong, T., R.K. Young, and G.S. Rutherford, *A Model for Public Involvement in Transportation Improvement Programming Using Participatory Geographic Information Systems,* Aug. 25, 2007

Effective public involvement during the programming step incorporates inclusive participation, two-way communications, transparent processes, and serious treatment of the public's input. This paper presents a model for public involvement in the programming process with all these features using a web-based portal application with a Public Participation Geographic Information System. The process is composed of the following five steps: describing values and concerns, determining criteria, reviewing projects, evaluating scenarios, and creating reports. Challenges agencies may encounter in implementing such a system are also covered in this paper. http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V9K-4RWHX5V-1&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=a319f19bbcb6b7efff2a14d27bd0e037.

WEBSITES

City of Portland, Oregon, Office of Neighborhood Involvement: Public Involvement Task Force Report.
In the spring of 2003, Commissioners Francesconi, Saltzman, and Leonard commissioned the Public Involvement Standards Task Force to review and revise, as appropriate, the city's adopted Public Involvement Principles and identify gaps and inconsistencies in the implementation of the city government's public involvement processes. http://www.portlandonline.com/oni/index.cfm?c=29118.

Education for Sustainable Development Toolkit.
Public Involvement Article by Marianne Chrystalbridge with Tools and Case Studies. http://www.esdtoolkit.org/discussion/participation.htm.

Environmental Protection Agency: Analyzing Environmental Evaluations.
Stakeholder Involvement Evaluation and Research and Evaluating the Use of Partnerships to Address Environmental Justice Issues. http://www.epa.gov/evaluate/about_innovations3.htm.

Environmental Protection Agency: Public Involvement Activities Questionnaires
http://www.epa.gov/publicinvolvement/feedback/index.html.

Environmental Protection Agency: Public Involvement Techniques.
Links page to descriptions for techniques in Public Involvement. http://www.epa.gov/publicinvolvement/techniques.htm.

Federal Highway Administration/Federal Transit Administration: *Public Involvement Techniques.*
This is a reference work that makes a wide variety of public involvement techniques available to transportation agencies. It includes the 14 techniques originally published in *Innovations in Public Involvement for Transportation Planning*. http://www.planning.dot.gov/Pitool/toc-foreword.asp.

International Association for Public Participation: Knowledge Network.
Resource Database. http://www.iap2.civicore.com/index.cfm?fuseaction=resources.main.

International Association for Public Participation: Public Participation Toolkit.
Techniques to Share Information. http://iap2.org/associations/4748/files/06Dec_Toolbox.pdf.

International Association for Public Participation: Spectrum of Public Participation.
Levels of Public Impact. http://iap2.org/associations/4748/files/IAP2%20Spectrum_vertical.pdf.

Local Government Commission: Public Involvement.
Provides a guidebook discussing techniques and case studies to improve participation in land use planning that discusses the importance of public involvement in the planning process and offers a variety of visual/graphic techniques for facilitating such involvement. http://www.lgc.org/issues/communitydesign/public_participation.html.

National Charrette Institute: Resources.
NCI Tools and Resources Free for Download. http://www.charretteinstitute.org/resources/.

Sacramento State Center for Collaborative Policy: Collaborative Public Involvement.
Outline to effective Collaborative Public Involvement. http://www.csus.edu/ccp/publicinvolvement/.

The Harwood Institute for Public Innovation.
A non-profit, non-partisan organization that seeks nothing less than to spark fundamental change and authentic hope in American public life. http://www.theharwoodinstitute.org/ht/d/Home/pid/176.

Transportation Research Board: Visualization in Transportation Committee.
The scope of the Committee is to foster and disseminate collaborative exchange and research that enhances the useable knowledge of visualization methods and technologies for their potential in addressing critical transportation issues of today, as well as promoting innovative approaches to society's transportation needs of the future. http://www.trbvis.org/MAIN/TRBVIS_HOME.html.

U.S. Census Bureau: American FactFinder.
This provides a search feature of the Census Bureau's website that helps users locate data quickly and easily from the 1997 Economic Census, the ACS, the 1990 Census, the Census 2000 Dress Rehearsal, and Census 2000. Access to thematic maps and reference maps that include roads and boundary information is available via FactFinder. http://factfinder.census.gov/home/saff/main.html?_lang=en.

U.S. Department of Transportation: Useful Online Publications and Websites for Community Impact Assessment.
This website provides useful Online Publications and Websites for Community Impact Assessment. http://www.planning.dot.gov/Documents/Resources/usefulOnline.htm#publicInvolve.

METROPOLITAN PLANNING ORGANIZATION WEBSITES

Brevard MPO: Public Involvement.
Public Involvement Website. Guideline for public involvement activities to be conducted by the Brevard MPO. The PIP contains the goals and policies of the MPO for actively engaging the public in the transportation planning process. The PIP is reviewed and updated at least every three years. http://www.brevardmpo.com/PIP.htm.

Delaware Valley Regional Planning Commission: Public Involvement.

Public Involvement Website. Our goal is to satisfy the broadest constituency possible by fostering cooperation among member governments, private sector organizations, and the general public. To do so, we work closely with a wide variety of groups, including the Pennsylvania and New Jersey DOTs, community affairs and environmental protection agencies in these two states, the federal government, and regional transportation providers. http://www.dvrpc.org/publicaffairs/publicinvolvement.htm.

Metropolitan Washington COG: Public Involvement.

Public Involvement Process. On December 19, 2007, TRB adopted a new Participation Plan that outlines public involvement activities for constituencies with different levels of understanding and interest in the TRB process. The new Participation Plan calls for TRB to be more strategic in targeting its activities to serve the needs of three different constituencies. The Participation Plan focuses on tailoring outreach and involvement activities to the "involved" public, the "informed" public, and the "interested" public. http://www.mwcog.org/transportation/involved/process.asp.

New York Metropolitan Transportation Council.

NYMTC Website. The New York Metropolitan Transportation Council (NYMTC) is an association of governments, transportation providers, and environmental agencies that is the MPO for New York City, Long Island, and the lower Hudson River Valley. http://www.nymtc.org/.

STATE DEPARTMENTS OF TRANSPORTATION WEBSITES

FDOT: Efficient Transportation Decision Making.

As part of the Efficient Transportation Decision Making (ETDM) process, FDOT has implemented an Internet-accessible interactive database tool called the Environmental Screening Tool (EST). EST provides data for project analysis and assists in conducting more detailed public involvement activities. http://etdmpub.fla-etat.org/est/.

Idaho DOT: A Guide to Public Involvement for Programs, Planning and Projects.

The knowledge generated through the public involvement process is vital if the Idaho Transportation Department (ITD) is to develop effective and efficient transportation projects. ITD can make better decisions by attending to public involvement planning, integrating public involvement activities into the development process, and documenting these activities. http://itd.idaho.gov/manuals/Online_Manuals/Current_Manuals/PIG/Guidebook.pdf.

Minnesota DOT: Public & Stakeholder Participation—Hear Every Voice.

Guidance to involving and engaging the public. http://www.dot.state.mn.us/planning/publicinvolvement/.

Montana DOT: MDT's Guide to Public Involvement.

The Transportation Planning Division of the Montana DOT (MDT) is involved in a variety of programs and efforts that require constant interaction with our customers. This guide describes the various methods the Division uses to involve the public in Division activities, and also includes a chart that provides the names of staff people responsible for various Division programs. It should also be noted that the Division develops customized public involvement methods for special efforts. http://ntl.bts.gov/lib/6000/6400/6456/pubinvhb.pdf.

POVERTY AND CULTURAL PUBLICATIONS

Payne, R., *A Framework for Understanding Poverty,* aha! Process, Inc., Highlands, Tex., 2005

People in poverty face challenges virtually unknown to those in middle class or wealth—challenges from both obvious and hidden sources. The reality of being poor brings out a survival mentality and turns attention away from opportunities taken for granted by everyone else. If you work with people in poverty, some understanding of how different their world is from yours will be invaluable. Whatever your background, this book gives you practical, real-world support and guidance to improve your effectiveness in working with people from all socioeconomic backgrounds.

Payne, R., P.E. Devol, T.D. Smith, and T. Dreussi, *Bridges Out of Poverty: Strategies for Professionals and Communities,* aha! Process, Inc., Highlands, Tex., 2001

If you did not grow up in poverty, you may be unaware of the "hidden rules" that govern many aspects of life for the poor. People in poverty are often in survival mode, where the future holds no promise, and support systems taken for granted in middle class and wealth are nonexistent. If you work with people from poverty, only a deeper understanding of their challenges and strengths will help you partner with them to create opportunities for success.

Payne, R. and D. Krabill, *Hidden Rules of Class,* aha! Process, Inc., Highlands, Tex., 2002

Individuals and organizations bring three things to the table: resources, connection (relationships), and hidden rules. The successful fit of the individual into the organization is largely determined by how well these three elements from the individual mesh with those of the organization. This book identifies and articulates a number of issues that are alive in the workplace, but are seldom articulated. It looks at how issues of class determine one's ability to survive or move to a different level in the workplace.

Morrison, T. and W. Conaway, *Kiss, Bow, or Shake Hands,* Adams Media, Avon, Mass., 2006

Most experts in cultural orientation consider U.S. citizens to be close minded. This book was designed as a guide to doing business in more than 60 countries. Each country is described in terms of the following sections:

- What is your cultural IQ (cultural knowledge);
- Tips on doing business (business-related highlights);
- Country background (history, type of government, language, and the perspectives from the country's viewpoint);
- Know before you go (natural and human hazards);
- Cultural orientation (cognitive styles, negotiation strategies, and value systems);
- Business practices (punctuality, appointments, local time, negotiating, and business entertaining); and
- Protocol (greetings, titles/forms of address, gestures, gifts, and dress).

Axtell, R.E., *Gestures, the Do's and Taboos of Body Language Around the World,* John Wiley & Sons, Inc., White Plains, N.Y., 1998

This book addresses gestures and cross-cultural communications and discusses the following topics:

- The power of gestures,
- The most popular gestures,
- Special types of gestures,
- Gestures head to toe,
- The ultimate gesture,
- The innocent abroad's shortlist, and
- Country by country listings.

Axtell, R.E., *Do's and Taboos Around the World,* John Wiley & Sons, Inc., White Plains, N.Y., 1994

This book was created for American businessmen and businesswomen who regularly venture abroad seeking new commerce. It provides information relative to the following:

- Protocol, customs, and etiquette;
- Hand gestures and body language;
- A quick guide to the ways of the world;
- Gift giving and receiving;
- American jargon and baffling idioms; and
- Tips for incoming visitors to the United States.

POVERTY AND CULTURAL WEBSITES

United Kingdom Department of Transport, Social Inclusion—Minority, Ethnic and Faith Communities' Transport Issues

This website addresses the specific travel needs of minority, ethnic, and faith community groups. The Department of Transport identified specific problems that were being experienced by minority, ethnic, and faith groups when using the public transportation system. They examined ways in which these problems could be addressed by discussing the problems with hundreds of people and organizations that had an interest in public transport. The outcome of the work was a guidance pack and an accompanying video that are intended to be used by transport planners and operators to improve accessibility of transport for all. http://www.dft.gov.uk/pgr/inclusion/.

University of Washington, Harborview Medical Center in Seattle, Washington

This website provides culture-specific pages on 13 different African, Asian, and Hispanic ethnic groups. It has prepared a cultural profile of each ethnic group that includes information about country of origin, language, interpersonal relationships, marriage, family, kinship, religious beliefs and practices, and community structure, in additional to medical considerations. http://ethnomed.org/.

APPENDIX A

Interview Guide

TRB NCHRP 20-05/TOPIC 40-05

EFFECTIVE PUBLIC INVOLVEMENT USING LIMITED RESOURCES

SURVEY QUESTIONNAIRE

Contact Information:

Date of the interview

Who is being interviewed (name/title)?

Address/Phone number/Fax number/E-mail address/Agency's website URL?

Organizational Structure:

1. What is the mission statement for your organization?
2. Is the agency centralized/decentralized?
3. Is authority for public involvement held at headquarters, the regions, the districts, or all?
4. How are public involvement responsibilities distributed throughout the agency?
5. What phases of transportation decision making in the agency have public involvement components (policy development, systems planning, project planning, environment, design, ROW, construction, operations and maintenance)?

Staffing:

6. How many staff in your organization conducts public involvement?
7. What are their qualifications (academic training and work experience), professional designations (e.g., registered engineer), or memberships in professional organizations (AICP, APA, IAP2)?
8. What training have these staff received in Community Impact Assessment, Environmental Justice, Public Involvement, and Context Sensitive Solutions?
9. How long has each of these staff members been in their current position?
10. What was their previous position in this agency or another organization?
11. What is the total full-time equivalent staff positions devoted to public involvement?
12. Do you use consultants to conduct public involvement?
13. What certifications or pre-qualification requirements do you have for consultants that conduct public involvement?

Cost Quantification:

14. Have you quantified the cost of doing public involvement in your agency?
15. How are those costs allocated (staff salaries/benefits, consultant costs, marketing expenses, website development/maintenance, etc.)?
16. How do you quantify public involvement costs (% of project cost, cost per person in the project study area, others)?

Public Involvement Process (Social/Community Issues, Studies, and Report):

17. What technical studies/reports are conducted to address social and community issues?
18. What subjects do these studies address?
19. How do you identify the segments of the various "publics" you will target for public involvement?
20. How do you make decisions about how to do public involvement and tailor it to the various segments you have identified?
21. What process do you use to develop a public involvement plan?

Public Involvement Process (Level of Effort, Education, and Documentation):

22. How are decisions made about the level of effort to devote to public involvement at each level of decision making (number of staff and time, use of consultants, budgets for publications, websites, marketing, etc.)?
23. How do you provide education to the public to better equip them to provide meaningful input to the agency (e.g., strings and ribbons)?
24. What written documentation do you have related to the following topics (public involvement, environmental justice, community impact assessment, and context sensitive solutions)?

Public Involvement Process (Goals):

25. What are your agency goals for public involvement?
26. How were those goals developed?

Public Involvement Process (Communicating Public Input and Commitments):

27. How is input from the public integrated into the agency decision-making process?
28. How are public input/agency commitments/permit requirements/etc., tracked by the agency through each phase of the project?

Definitions of Successful, Effective, and Cost-Effective Public Involvement:

29. How do you define ***successful public involvement?***
30. How do you define ***effective public involvement?***
31. How do you define ***cost-effective public involvement?***

Measures for Effectiveness:

32. What are the ***outcomes*** you expect from your public involvement efforts?
33. Have you developed quantitative/qualitative measures for the effectiveness of your public involvement?
34. Do those measures include measures of the equity or inclusiveness of your public involvement to assure that your efforts target groups that are traditionally underrepresented in the decision-making process and underserved by transportation facilities?
35. How do you measure the ***cost-effectiveness*** of your public involvement activities?

Effective, Cost-Effective, and Ineffective Techniques:

36. What specific techniques have been most **effective?**
37. What specific techniques have been most **cost-effective?**

38. What specific techniques have been **ineffective?**

39. Distinguish these by segments of the public you target (Limited English proficiency, Low literacy, Elderly/Disabled, those without access to public transportation, Second/Third shift workers, Single mothers with children, other underrepresented groups)?

Leveraging Relationships:

40. How do you leverage your public involvement efforts to make them more effective or cost-effective [e.g., partnering with community organizations (NGOs), other public agencies, the media or others]?

Best Practices/Case Study Candidates:

Other thoughts offered by the interviewee:

APPENDIX B

List of Participating Transportation Agencies

DEPARTMENTS OF TRANSPORTATION

Alabama DOT
California DOT
Florida DOT (2)
Georgia DOT (2)
Indiana DOT
Kansas DOT
Michigan DOT
Missouri DOT
New Hampshire DOT
New Jersey DOT (3)
Tennessee DOT

METROPOLITAN PLANNING ORGANIZATIONS

Sacramento Area Council of Governments (Sacramento, California)
Miami–Dade County MPO (Miami, Florida)
Volusia County MPO (Daytona Beach, Florida)
Atlanta Regional Commission (Atlanta, Georgia)
Bluegrass Area Development District (Lexington, Kentucky)
Baltimore Metropolitan Council (Baltimore, Maryland)
Mississippi Gulf Coast MPO (Gulfport, Mississippi)
Oklahoma City MPO (Oklahoma City, Oklahoma)
Delaware Valley Regional Planning Commission (Philadelphia, Pennsylvania)
Memphis Urban Area MPO (Memphis, Tennessee)
Houston–Galveston Area Council (Houston, Texas)

TRANSIT AGENCIES

Tri-County Metropolitan Transit District (Portland, Oregon)
Metro Transit Authority (Houston, Texas)

LOCAL GOVERNMENTS

Jersey City (New Jersey)
City of Federal Way (Washington)

APPENDIX C

Summarized Survey Results

ORGANIZATIONAL STRUCTURE QUESTION 1: What is the mission statement for your organization?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• To provide a safe, efficient, environmentally sound multimodal transportation system for all users especially the taxpayers of the state. • Improving mobility across the state. • To provide a safe transportation system that insures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities. • Provides a safe, seamless, and sustainable transportation system that supports the state's economy and is sensitive to its citizens and environment. • Plan, build, maintain, and operate a superior transportation system enhancing safety, mobility, and economic growth. • Provide a statewide transportation system to meet the needs of our citizens. • Providing the highest quality integrated transportation services for economic benefit and improved quality of life. • Provide a world-class transportation experience that delights our customers and promotes a prosperous state. • Yes, it's a DOT one. • Improving lives by improving transportation.	• Delivering transportation projects, providing public information and serving as a dynamic forum for regional planning and collaboration in the greater MPO area. • Planning efficient transportation for the community. • No. • On the website. • On the website. • Improve the quality of life and the economic vitality in the region by working collaboratively together. (We don't have any mention of humans but we are all working to improve the quality of life here). • We serve the governments of the Mississippi Gulf Coast, including Hancock, Harrison, and Jackson County as the Metropolitan Planning Organizations for the programming for federal transportation funds within the urbanized areas and perform various urban and regional land use and comprehensive planning activities. • Build a stronger regional community through cooperation, leadership, and planning. • Uniting the region's elected officials, planning professionals, and the public with a common vision of making a great region even greater; shaping the way we live, work, and play; building	• To build and operate the total transit system. • Will send it.	• No. • Is not aware of one.

ORGANIZATIONAL STRUCTURE QUESTION 1: What is the mission statement for your organization?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Provide leadership in the protection, preservation, and enhancement of the natural, social, historic, and visual environment while actively involving the public, resource agencies, and other interested parties in planning, developing, and maintaining the state's transportation system.	consensus on improving transportation, promoting smart growth, protecting the environment, and enhancing the economy. • On the web page. • To ensure that our transportation tax dollars are spent effectively to improve mobility, support economic progress and safeguard the environment and provide opportunities for public input into the transportation planning and project development process.		

ORGANIZATIONAL STRUCTURE QUESTION 2: Is the agency centralized/decentralized?			
Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Centralized. • Centralized (headquarters and 12 districts). • Decentralized (seven districts, turnpike office, central office). • Centralized. • Central office and 6 districts. • Decentralized (six districts)/ administrative work mostly centralized. • Decentralized with a structure of seven regions. • Central office and 10 district offices. • Centralized (six district maintenance offices and the Turnpike office). • Centralized (headquarters and three regions). • Centralized.	• Centralized. • Centralized. • Centralized. • Centralized. • Centralized. • Centralized. • Centralized. • Centralized. • Centralized. • Part of a joint city/county agency. • Centralized.	• Centralized. • Centralized.	• Centralized. • Centralized.

ORGANIZATIONAL STRUCTURE QUESTION 3: Is authority for public involvement held at headquarters/regions/districts or all?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Authority held in headquarters with nine divisions responsible for coordination. • Guidance/training comes out of headquarters with districts conducting public involvement. • All. • All (headquarters, regions, seven districts). • Headquarters w/district assistance as needed. • Headquarters w/district assistance as needed. • Headquarters and regions (shared on Environmental Assessments and Environmental Impact Statements/regions handle Categorical Exclusions with assistance from headquarters). • Both. • Headquarters. • Headquarters. • Headquarters.	• Headquarters. • Headquarters. • Headquarters. • Headquarters. • Headquarters. • Headquarters. • MPO (collaborate w/local jurisdictions on individual work). • Headquarters. • Headquarters. • Headquarters. • Headquarters.	• Headquarters does agency-wide outreach. • Work closely with counterpart for stakeholder affairs offices targeted to construction.	• Press Secretary for public affairs and Public Relations. • Headquarters (partner with DOT and FHWA).

ORGANIZATIONAL STRUCTURE QUESTION 4: How are public involvement responsibilities distributed throughout the agency?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Joint effort between central office and divisions. Central office serves as oversight. • In environmental, the environmental planner is responsible for organizing public involvement. • Central office for statewide plans; districts/individual departments (planning, environmental, design & right-of-way) within the district for planning studies, corridor studies, NEPA studies, design and construction. • Split into various areas—NEPA, environmental planners have some responsibilities; district planning and programming—engineers have some of the responsibilities. • Headquarters, but each of the districts has a public involvement person and a communications person. • Staff of three dedicated for public involvement. • Regions and Transportation Service Centers with assistance depending upon the level of controversy. • Distributed throughout the agency. • Project managers and lead staff are generally in charge. • All at headquarters. • Headquarters, but the regional Public Involvement Officer does help them out with public involvement.	• Director of External Affairs and Member Services with assistance from communications staff; project manager(s). • Public Involvement Manager and Public Information Officer; project managers; consultants. • Everybody (except Financial Officer). • Team effort—Manager of Public Outreach; Department of Support Services; Department of Community Services; Department of Comprehensive Planning; Department of Communication; Workforce Development; Aging Division; Governmental Services Division. • Project team(s). • Not officially distributed throughout the agency—based on collaboration. • Operationally—mandated to maintain open records; programmatically—develop and maintain a public participation plan for the MPO planning process; project level—develop public participation plans for individual studies. • Directors of media and public relations are primarily involved in community relations. Most of the staff is involved in some aspect of public involvement. • Public affairs office focuses on the media aspect and there are other staff members who engage in public involvement, but it is not their main responsibility. • Everyone does other things.	• Two-fold responsibility—one with broader umbrella and one with the projects. There are totally different people involved in these divisions. • Two groups in the agency that do public involvement.	• Various people in the agency have public involvement responsibilities. • Project managers handle public involvement responsibilities with assistance from government liaisons. Consultants also provide assistance.

ORGANIZATIONAL STRUCTURE QUESTION 4: How are public involvement responsibilities distributed throughout the agency?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
	• Two branches of public involvement—Air Quality group does outreach for specific programs (vanpool/carpool, telecommuting); Transportation Planning and Programming side deals with LRTP and Transportation Improvement Program.		

ORGANIZATIONAL STRUCTURE QUESTION 5: What phases of transportation decision making in the agency have public involvement components (policy development, systems planning, project planning, environment, design, right-of-way, construction, and operations and maintenance)?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Project planning, environment, design, and right-of-way. • Systems planning, environment, design, right-of-way, construction. • Planning and policy, NEPA, environment, systems planning, environment, design, right-of-way, operations, maintenance. • Project planning, pre-construction, construction (on some projects). • Planning and programming section, project development, design, right-of-way, construction, operation and maintenance. • Policy development, systems planning, project planning, environment, design; small amount with construction, operations and maintenance. • Policy development, systems planning, project planning, environment, right-of-way, construction, operations and maintenance.	• Policy development, systems planning, project planning. • Policy development, system planning, environmental planning, project planning. • Policy development, systems planning, project planning, environment, design. • Systems planning, project planning, environment. • Policy development, systems planning, project planning, environment. • Policy development, systems planning. • Policy development, systems planning, project planning, environmental. • Policy development, systems planning, project planning. Environmental, design, and right-of-way would be done through DOT. • Policy development, systems planning, project planning. • Policy development, systems planning.	• Capital projects and service planning. • Policy development, systems planning, project planning, environment, design, right-of-way, construction, operations and maintenance.	• Policy development, transportation systems planning, project planning. • Policy development, systems planning, project planning, environment, design, right-of-way, construction, operations and maintenance.

ORGANIZATIONAL STRUCTURE QUESTION 5: What phases of transportation decision making in the agency have public involvement components (policy development, systems planning, project planning, environment, design, right-of-way, construction, and operations and maintenance)?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• NEPA, policy development, systems planning, project planning. • Policy development, systems planning, project planning, environment, design, right-of-way, construction, operations and maintenance. • Policy development, systems planning, project planning, environment, design, right-of-way, construction, operations and maintenance. • Project planning, environment (during NEPA), design, right-of-way.	• Policy development, systems planning (large corridors)		

STAFFING QUESTION 6: How many staff in your organization conduct public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Varies with the divisions and need for special expertise. • All of approximately 200 environmental planners have the authority. • There are so many and we have consultants—guess about 50. Not counting central office, eight districts. Districts rely on consultants. One or two districts have a designated public involvement staff person, but not all. • No one designated public involvement, also do other social, environmental, air, and noise studies. • Central office—about 20 (eight person section in public hearing office plus planners). • About 15 people. • One or two people at each Transportation Service Center have responsibility; one or two people at each of the regions do face-to-face. • Headquarters has between 50 and 75 people; approximately 45 project managers statewide. • 25–30 people. • Three people—one person in each region. • Five of NEPA staff are most involved with public involvement within the Environmental Division; Community Relations office helps (public affairs).	• At least half of our staff is involved in public involvement regularly. • Two people are dedicated public involvement, but additional staff is trained. • Staff of eight people. • Four full-time staff, but many other staff members conduct public involvement also. • Four staff members help with public involvement, but others assist if needed. • One staff member with primary responsibility. Another staff member works on communication (press releases, etc.) • All 13 staff members do public involvement in some capacity. • Five people are attached to the public involvement tasks. In the work program there is an element dedicated solely to PI—Citizen Participation and Public Information. Budgeted time for eight people. • Everyone. • The MPO Administrator and three planners. • Fifteen people on staff who conduct public involvement.	• Sixteen people. • A director, six outreach reps, four stakeholder affairs reps, plus contractors that were hired with public involvement knowledge during design build.	• Eight planners. • Twelve people and the police department conduct public involvement also.

STAFFING QUESTION 7: What are their qualifications (academic training and work experience), professional designations (e.g., register engineer), or memberships in professional organizations (AICP, APA, IAP2) others?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Preconstruction engineer ultimately responsible (almost always PE); varying degrees under that; planners help with meetings as project managers. • Besides marketing and customer service, hire from a variety of approved majors, including all sciences and social sciences. Some planners belong to National Assn. of Environmental Professions; some planners are AICP. • Some project managers are engineers, some are AICP, some have been certified; some staff have the experience and are very serious about doing a good job involving the public. • Degrees vary; generally a Bachelor's is required. • Communication skills—engaging, like working with people, communicate effectively, flexible, adaptable, clear thinkers. Pretty diverse group from other disciplines environmental documentation and right-of-way. • Journalism degree helps; when screening applicants, look for things like human services skills or experience or training. • Can't answer—only conjecture. • Unknown. • No. • In CIA, at least a degree in planning; membership in professional groups is an added bonus; will pay for professional license; ability	• Communications staff has different backgrounds in public involvement; community outreach specialist has teacher/volunteer background and is a member of IAP2; organizational membership with IAP2. • Primary PI personnel—environmental science/marketing. • Senior planner has Masters and is AICP; GIS person has Masters and is AICP; Bike/Pedestrian guy has a Bachelors and eight years experience; Transit planner has a Masters in Public Administration. • Backgrounds in education, planning, public administration, marketing, environmental; most of the planners have AICPs; NTI courses, leadership strategies training, meeting facilitation, conflict resolution. • No specific training or background in public involvement—two have AICPs. • Bachelors and Masters in social work. • Professional memberships like AICP, APA or other professional organizations—AMPO, NARC; attend TRB. • Person that heads up public involvement has some media background. Others are primarily professional planners, most with a graduate degree in planning and social science background; we are conscious of those with the ability to communicate.	• Two keys are good oral and written communication skills and a sense of understanding that we are a public agency and that the public has a right to be included in and it is our responsibility to include them in all of our decision making. • So many of the staffers were staffers with an elected official and are very familiar with public engagement and public involvement.	• Professional license required; require all members to be members of APA and most have AICP or PE. • Both have PEs.

STAFFING **QUESTION 7: What are their qualifications (academic training and work experience), professional designations (e.g., register engineer), or memberships in professional organizations (AICP, APA, IAP2) others?**			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
to go to national conferences (TRB, AASHTO), training (NHI, NTI). • PE, NEPA group has a registered geologist.	• Backgrounds in marketing, working with the press and other media. • Public administration; planners have Masters Degrees in City and Regional planning. • Some staff has backgrounds in marketing and public relations; others are largely planners with Masters degrees and many are AICP; push membership in professional organizations.		

STAFFING
QUESTION 8: What training have these staff received in Community Impact Assessment, Environmental Justice, Public Involvement, or Context Sensitive Solutions?

Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• NHI course on public involvement. • Future plan is to develop training for staff; get a little in their CIA workshop (two day), but most of it is on-the-job experience. • Public involvement, Title VI, Sociocultural Effects Evaluation; environmental conference every two years; planning conference; design conference; project management conference. • Primarily public involvement and environmental justice, context sensitive solutions, Title VI, DOT sponsored training; NHI classes. • Internal soft skills training, NHI public involvement, CSS, CIA. • NHI or NCHRP courses; in-house training/experience; IAP2 (one person). • NHI effective public involvement techniques; environmental clearance process; limited participation in conferences like TRB, APRA, AMPO. • In-house/external training on CIA, environmental justice, public involvement, context sensitive solutions; project development; NEPA (every other year); Systematic Development of Informed Consent; limited participation in conferences like TRB; requirement to become a member of APA, AICP or joining IAP2. • Context sensitive solutions; various outside courses; limited participation in conferences.	• Send all staff to at least one conference a year; community outreach specialist attended EJ training; member of California Public Information Officials Assn. —attended annual conference; member of AMPO and NARC. • NTI courses, IAP2 training, the agency allows us to go to conferences. We train whenever possible. • Try to attend conference out of state to get training on Title VI and CIA. Due to funding, try to get training to come to them. • Participated as a presenter in the statewide sociocultural effects evaluation training. Staff member that did attend training no longer with them. • No formalized training. Everyone reviews the public involvement plan and participates in coordination meetings; send staff members to conferences. • NTI courses on public involvement and environmental justice; FHWA trainings; conferences. • Continuing education units through NHI or APA; attended CSS and Complete Streets training; specialized technical training through consultants. • They use all available external training, go to AMPO meetings, TRB, and Texas MPO conferences.	• Internal and external training; customer service classes for all levels; try to be involved in professional organizations—marketing, Women's Transportation Seminar, APTA; attended TRB. • Don't have much internal training—able to go to conferences and do off-site training.	• Attend conferences and seminars. • EJ and Title VI training; attend different training classes; members of American Public Works Assn., Institute for Transportation Engineers; attended CSS courses.

STAFFING QUESTION 8: What training have these staff received in Community Impact Assessment, Environmental Justice, Public Involvement, or Context Sensitive Solutions?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• National conferences (TRB, AASHTO); NHI and NTI courses for PI, EJ, Title VI, public speaking; in-house training from experienced staff. • CIA course by FHWA; internal CSS class; NHI NEPA class.	• EJ and Title VI training; Planners Methodology—how to ensure federal mandates in EJ and Title VI are met and how to prepare a public participation plan. • EJ, public involvement and CSS conferences held by DOT. • NHI public involvement course; EJ training; attend all conferences.		

STAFFING QUESTION 9: How long has each of these staff members been in their current position?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Probably averages 5–10 years. • Varies—one person with a lot of experience and several with very little; average length of an environmental planner about 9 years. • Unknown. • Air, noise and public involvement staff average about 2 years. • 2–6 years (last person hired 2 years ago, pretty stable). • Some for 10 years and some for 2–3 years. • Public involvement is a secondary task to most employees—only one employee with public involvement as primary task. • They have had a lot of turnover in the last 3–4 years, not many people left with 20 years experience. • Experienced folks do public involvement, but take some of younger staff to night meetings. • 5 years, 17 years, 20 years. • 10 years.	• 1–6 years. • Doesn't know. • 6 years. • 2–26 plus years. • Two are long term planners, but haven't been here that long. One a recent graduate with a Masters in Public Administration, fourth is a current grad student. • Prior experience at volunteer center. • 5 years. • 1–20 years. • 6 months–30 years. • 28 years. • 8 years.	• 7–13 years. • 7 years.	• 2–20 years. • Average is between 5 and 15 years.

STAFFING QUESTION 10: What was their previous position in this agency or another organization?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Almost always promoted into this position. • People come to them from other organizations and right out of college. • Most project managers started with DOT; some worked with DOT, left, and then came back. • Right out of college; transferred from other part of the department. • Variety of different backgrounds, some within the organization and some outside (three of eight staff from outside). • One or two that started out in other positions at agency; most hired from outside the agency. • Within the organization who has worked their way up, usually engineers. • Community relations—generally come from outside; engineering side—project managers have generally worked their way up through the organization. • Generally with the department a few years to get familiar with what's going on and what is being discussed. • College, consulting firm after college. • Come up through the ranks.	• All were external hires. • Another position with our agency. • State agency and NASCAR. • Different organizations. • They were planners at another agency, in school, still in school. • Volunteer center serving the region. • Promotion from within; other agencies and organizations. • Junior staff straight from school, others from some sort of municipal planning background. • Outside the region; it's a mix—other agencies. • School. • Half of the employees came directly from college and half from other organizations.	• Hired from internship; typically would hire someone with a couple of years experience out of college. • Outside the agency.	• Graduate school; other jobs in the field. • Outside.

STAFFING QUESTION 11: What is the total full time equivalent staff positions devoted to public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Don't have full time public involvement staff. • 800 folks in environmental (total) and 200–250 are project specific planners and would all be doing that or have the authority to do that. No full time public involvement people. • Unknown. • Six staff members do public involvement and other things; 17 NEPA staff members also do public involvement (none full time). • 8 persons. • 10%. • 10% or less. • 75% of day doing public involvement. • Depends on project. • 1.25 persons. • 1 person equivalent.	• 1.5–2 persons. • 2 persons. • 1.0–1.5 persons. • 4 persons • 0.5 person. • 1 person and others as needed. • 3 persons. • 13–14 percent. • 1.5 persons. • 0.75 person. • 9 persons.	• Employees are full-time public involvement. • All of them are full-time.	• 0.2 person. • More than 1.0 person equivalent.

STAFFING QUESTION 12: Do you use consultants to conduct public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• No, never for state projects; there are a lot of MPO projects where small cities hire own consultants, state personnel assist. • Yes, at times for public involvement on larger projects; also have on-call consultants. • Yes, they rely heavily on consultants; if consultant hired to do environmental, then public involvement is included in that contract. • Yes, as part of the consultant's environmental responsibilities. • Yes, certainly for Environmental Impact Statement projects. • Yes, extensively. • Yes, particularly on major action documents like Environmental Impact Statements. • Yes, depends on the project. • Yes. • Yes, not enough staff to go around. • Yes.	• Yes. • Yes. • Florida International University. • Yes. • Yes. • On occasion. • Yes. • No. • Not as a rule. • Yes, for last LRTP. • Yes.	• Not in the last 10 years. • Yes.	• Yes, for transportation. • Yes.

STAFFING QUESTION 13: What certifications or pre-qualification requirements do you have for consultants that conduct public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• None. • Respondent is sure they do, but has never seen the statement of qualifications submitted to department to get on the on-call list. • Districts do look for consulting firms that have expertise or experience in public involvement. • None. • Do have a certification—ask all consultants for environmental document to participate in 3-day training course and public involvement is one of the classes in the training. Have to have certification showing training and been certified to put together the environmental document and conduct public involvement on behalf of DOT. • None required, but looks for qualifications and experience. High regard held for those with IAP2 training or demonstrated skills training. • None. • None. • Experience. • Project Manager required to have a master's degree in transportation planning, background dealing with socioeconomic issues, public involvement, and community impact assessment; trying to tailor qualifications and looking for experience in marketing, public relations due to skill set. • No.	• None. • None. • None. • None—do Requests for Proposals and review qualifications at that point. Tend to focus on hiring minority or disadvantaged business enterprises when possible. Qualifications are based on each project. • No. • Look at experiences and references. • They do a request to qualifications. • No. • Follow the Request for Proposal process. • None. • Looks at experience, requires some disadvantaged business enterprise participation.	• Do not hire consultants. • Consultants retained primarily through planning department.	• Pre-qualified by DOT; in terms of public involvement, do not require pre-qualification. • Do not advertise specifically to be pre-qualified; have a professional services roster that they can be pre-qualified on.

COST QUANTIFICATION QUESTION 14: Have you quantified the cost for doing public involvement in your agency?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Never have quantified the cost of doing public involvement, it just costs whatever it takes. • We have not quantified the cost of doing public involvement. • Public involvement is a part of the project contract and part of the project cost so it is not really broken out—it costs what it costs. • Internally we do not quantify the cost of doing public involvement. • No. • We have not been able to do that. • I haven't ever been asked to quantify public involvement costs. • I do not think they have quantified the cost of public involvement—it takes whatever it takes. • We have not quantified the cost of doing public involvement. • No, start out with what is thought to be needed to get the job done and cost it from there. It is ever changing. • Not that is known.	• No, it has not been broken out. • No, not ever. • Budget of $200,000, excluding salaries and stuff. If ever a need for more, they have been accepting, but PI Manager is very frugal and doesn't ask for much. • No. • Never tried to quantify how much something cost, but there is always. It is nebulous because it is soaked up in so many line items. • No. • No, probably not. • We do whatever we have to do. • We have never done a formal exercise. • Not really. We have not quantified the cost of doing public involvement in our agency. • They have never done that.	• I think we more look at the complexity of the project and try to size it around that. For us, some projects are much more complex simply because they are more intrusive into a neighborhood, there is more property taking, there is complexity around a bridge, or something else. • No.	• No. • Yes—allocate costs between staff and consultant/share costs on some activities.

COST QUANTIFICATION QUESTION 15: How are these costs allocated (staff salaries/benefits, consultant costs, marketing expenses, website development/maintenance, etc.)?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• They do not allocate these costs. • Unknown how those costs are allocated. • Cost allocations are not broken out. • Do no allocate costs this way. • No. • It depends. • Don't allocate costs. • Doesn't think they do this. • Doesn't do this. • Costs are broken down and reviewed with consultant to identify staffing hours/salaries/tasks. • Isn't sure they do this.	• It has not been broken out. • They spend $100,000 on their annual newsletter, $60,000 on FIU, and $40,000 every two years on their booklet. • They aren't. • Don't break it down. • Don't do this. • Allocated costs only in the unified planning work program as a line item in the budget that covers public involvement and EJ. • General operational responses to public requests billed as overhead; the rest would be direct to public participation tasks or direct charge to a contract. • Estimate and tweak. • Unknown. • Never done that. • Costs are allocated across salaries, consultant costs, marketing expenses.	• I don't think we have done it that way—to set a percent of construction cost for public involvement. • Unknown.	• They don't do this. • They have an estimate of everything.

COST QUANTIFICATION QUESTION 16: How do you quantify public involvement cost (% of project cost, cost per person in the project area, others)?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• They do not quantify public involvement costs (% of project cost, cost per person in the project study area, others). • Unknown how to quantify public involvement costs—do what it takes to do it. • They are not broken out. • They do not quantify public involvement costs. • They don't do that. • I have not gone back to look at that relationship. • They don't quantify public involvement costs. • He doesn't think they have done this. • They don't do this. • They have a formula that allocates 8% to public involvement. • Did not think of that. It is part of project costs—do what it takes to do it.	• It has not been broken out. • They divide it into the annual newsletter, FIU and their booklet. • We don't. • They don't do this. • We don't. • They don't. • They don't quantify public involvement costs. • They do hours per task. • She doesn't know. • They have never done that. • Plan out what doing or involved with as far as public outreach over a 2-year period and try to estimate and come up with staffing level—negotiate for budget.	• They do not do this. • Not sure.	• They do not do this. • Number of hours spent on tasks and the cost on printing, driving, facilitating, posters, staffing meetings, travel time.

PUBLIC INVOLVEMENT PROCESS (Social/Community Issues, Studies and Reports) QUESTION 17: What technical studies/reports are conducted to address social and community issues?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Socioeconomic Technical Study prepped by planners or consultant. • Community Impact Assessments portion of the environmental document. • It is included in the ETDM process. • EIS or incorporated into an EA document. • Don't require a technical document—one of the impacts evaluated within the environmental document. • Technical reports on social and economic factors are rolled into the prime consultant's report (public involvement section and environmental justice section). • Community inventory. • As part of the affected environment chapter of an EIS. Usually a part of the affected environment chapter of the environmental document. • Socio-economic report tied into the environmental document. • Part of the Feasibility Assessment report. • Transportation Planning Report.	• Regional Transportation Plan includes chapter; Metropolitan Transportation Plan—chapter titled Equity in Choice and appendix to Metropolitan Transportation Plan. • Assembled an environmental justice community on their website. • Community background reports; Public Involvement Effectiveness Report; Title VI Report. • Strings and Ribbons Report. • Prepare an environmental justice report. • We periodically do technical reports such as Environmental Justice based on certain projects. • During data collection and assembly of population and economic forecasts. • Environmental Justice Report; component of LRTP Updates. • "…And Justice for All." • Do not do anything like this to identify who our public is. • Yes, periodically.	• Engineering studies, environmental studies. • Under development.	• No specific studies have been done—rely on the experience of various planners. • They do that for the federal documents as part of environmental justice for the human impact.

PUBLIC INVOLVEMENT PROCESS (Social/Community Issues, Studies and Reports) QUESTION 18: What subjects do these studies address?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• The issues that are listed in the technical advisory for social and economic impacts. • Economics, community cohesion. • The ETDM process addresses all NEPA topics and public involvement issues and processes. • Minorities, low-income. • Not applicable. • Pockets within the communities requiring further efforts. • Race, income. • Demographic information. • Disadvantaged groups or environmental type things. • Air and noise, race and ethnicity, economic development. • Defining the public to develop public involvement.	• How to identify the public and background information. • Populations and their characteristics. • Demographic data, local neighborhood history, informal and formal leaders, appropriate outreach techniques, GIS component. • They don't. • Minorities, low-income, elderly. • Identify major concerns like EJ and transportation concerns that people in the region had and try to create working groups that would connect people to the right folks or people with the right power to resolve issues. • Study of the need for transit service that looked at addressing social and community issues; impact of the proposed project on a population. • Low income and minority. • Elderly, non-car households, poverty, race, ethnicity. • Don't have documents that go into this—used to do an ESE that showed the incomes, environmental issues, etc. as part of the LRTP. • Demographic and social information.	• Rely on own data and census data (demographics). • The technical analysis is currently being revamped.	• Nothing formalized. • Variety of information.

PUBLIC INVOLVEMENT PROCESS (Social/Community Issues, Studies and Reports) QUESTION 19: How do you identify the segments of the various "publics" you will target for public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Depends on the division and relocation analysis for most of that. • Census data are the first broad cut; encourage the planner to spend foot time in the area observing and talking to the local planning agencies to identify the movers and shakers and the civic groups in the area; find existing organizations and build relationships with them. • Covered extensively under the ETDM process. • Check Census data and do a site assessment. • We don't do social and community studies. • Case-by-case basis. • Work with key players on a regular basis. • From our demographic information. • Work with Title VI Coordinator in-house; review census for project area. • Review census and GIS data, talk with local leaders, community based organizations; conduct field visits. • Census data.	• We use the data that we collect for our Metropolitan Transportation Plan. • Our CCP process helps us identify who is in the neighborhoods. • Catch as catch can—go out to everyone and ask for other contacts; use database to identify low-income areas. • They have a staff member that used to be with their communications department and he is responsible for this. • Prepare an environmental justice report for each project. • Doing generally broad-based outreach to notify people about the different public involvement opportunities. • Identify one segment is the public is the community or neighborhood and then identify those across the coast; look by land uses what kind of activities are taking place in certain areas; look at demographics. • Study the mannerism of various communities to bring them in; identify various segments by demographic data. • Region wide outreach; Degrees of Disadvantaged Methodology help in identifying who initial people are; reach out to non-profit organizations, civic associations, community groups, etc. • Done as an area-wide issue or limited to project study area. • Look at demographic data and socio-demographic areas.	• Try to zero in on audience and define the audience through census data or businesses; a lot of foot work. • Survey to determine demographics in the service area, and then determine outreach needed.	• Targeted public with a survey—compared responses to census data. • Target everybody, every group.

PUBLIC INVOLVEMENT PROCESS (Social/Community Issues, Studies and Reports) QUESTION 20: How do you make decisions about how to do public involvement and tailor it to the various segments you have identified?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• The division alerts them to the fact that there were a high percentage of minorities, then up to central office to determine format. Usually coordinate with FHWA for consensus on approach. • Done by environmental planner who is in charge of the project and tailoring them to their unique needs at the district level. • Our public involvement policy provides flexibility for our districts to adapt their plan and their activities. • Do not have anything in writing that identifies what is required—the DOT has a policy statement that is being updated, but nothing is written in terms of a checklist. • Work with Citizens Advisory Committee and community. • Work closely with local government officials and a good network of those interested in certain modes or topics as identified through previous public involvement efforts. • Representatives in each district. • It would be core team decision. • Title VI Coordinator provides thoughts and ideas about reaching specific segments.	• During 2-year public involvement process to update MTP, reviewed census data to determine target for involvement. Asked participants to complete background form to identify sector (business, elected official, etc.) and put them in general age brackets. Analyzed data to identify groups with low participation and conducted targeted focus groups and phone surveys. • They created a matrix of activities by month. • Created spreadsheet identifying demographics of area and use tools/techniques appropriate to demographics. • Identified minority base and worked through churches and non-profit groups. • Use matrix to identify populations and determine techniques. • Prepare environmental justice report and input from citizens. • Look at purpose and need of public involvement to decide what needs to be done. • Use input from above organizations, field work of staff. • Looking at the degrees of disadvantage methodology and where the project area	• Rely on own data and census data. • Data collection, data interpretation, and a data driven plan developed for that public.	• Look at cost to see what the most cost-effective/low cost way to reach the public would be. • Brain storming sessions with public involvement group to more effectively involve targeted groups.

PUBLIC INVOLVEMENT PROCESS (Social/Community Issues, Studies and Reports) QUESTION 20: How do you make decisions about how to do public involvement and tailor it to the various segments you have identified?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Look at population and identify needs. • Early environmental screening and GIS to identify people in area and tailor meetings towards them.	may be will affect when and where meetings are held. • Usually have 4 or 5 meetings in MPO area based on geography, make sure to have at least one in low-income area accessible by transit. • Varies by objectives of project.		

PUBLIC INVOLVEMENT PROCESS (Social/Community Issues, Studies and Reports) QUESTION 21: What process do you use to develop a public involvement plan?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Look at the situation and try to decide what needs to be done. • Identify the population within the project area and determine the best techniques for reaching those segments. • Our senior meet with local government folks, MPOs, and the general public. • It is fluid—we look at the project and what we are trying to accomplish and go from there. • Project manager and others identify potential problems, target audience and who to bring in. • We work with our engineering staff and consultants to identify stakeholders and issues. • They have a public involvement document that outlines different plans for different levels of environmental documents. • The core team would be involved in the development of a public involvement plan.	• Joint effort. • Ensures that it is in compliance with SAFETEA-LU; three areas—required documents, transportation studies, general outreach strategies; updated every three years with evaluation. • If it is a good idea, they try it. • Used the environmental justice team, aging services team, bike/pedestrian team, transit operators' team, internal staff, mailing list and public involvement advisory group. • Through research GIS to locate census tracts or blocks that have a certain percentage of minority and low-income populations. • Developed in collaboration with the citizens' advisory committee (30 people at year end w/10 people rotating off and 20 that know what is going on). • Identify the publics and develop strategies and outreach.	• Identify everyone that is going to be affected, using a variety of techniques, including the citizen's advisory committee. • We will now be using the four-factor analysis and gathering data on the community and analyzing it, and tailoring a program.	• No formalized process. • Experience.

PUBLIC INVOLVEMENT PROCESS (Social/Community Issues, Studies and Reports) QUESTION 21: What process do you use to develop a public involvement plan?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Generally do that on projects which we feel will be quite a bit of public involvement and where we anticipate there could be some kind of negative impact on the project. • Census, existing locations and time of meetings that are currently being held in the community—piggyback when possible. In project development, the decision is made as a team. • DOT has a public involvement guidance document available on the web. Environmental Assessments and Environmental Impact Statements require a public involvement plan—usually submitted by the consultant and reviewed by DOT.	• It is pretty straight forward for MPOs. • Use the Public Participation Plan that outlines what they do; also have Planners Methodology; collaborate with others. • Public participation plan, process used. • Mapped different neighborhoods based on different criteria.		

PUBLIC INVOLVEMENT PROCESS (Level of Effort, Education, and Documentation) QUESTION 22: How are decisions made about the level of effort to devote to public involvement at each level of decision making (number of staff and time, use of consultants, budgets for publications, websites, marketing, etc.)?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Do what they have to do. • Done on a project level at the districts and dependent on what is needed. • Refer to public involvement manual and handbook. • Depends on the scope of the project. • Depends on the type of formula document that is being prepared and it really starts to get you to think in the general direction as to how much effort, how much work public involvement wise. • Judgment call—depends on the situation. • Do what is required according to NEPA; work with consultant to determine what is needed beyond that. • It would be a core team decision. • Depends on the project—trying to "Right Size" it. • Start off with something and then it evolves. • Limited by state/budget. Use as many DOT staff and consultants as needed.	• Management level decision—do what is needed to do the best. • Depends on the breadth of the study. Quality, not quantity. • Don't break it down that much. • Develop plan in consultation with planning department and communications which is then sent through the ranks to the Department Director. • Projects vary. • Standard procedures for public involvement activities with more effort depending on project (LRTP requires more). • Annual assessment of previous year and project additional need. • We have a lot of staff which allows us flexibility in using them as opposed to consultant staff. • Estimate number of meetings and determine staffing needs. • They had a two tiered approach with their public meeting running with their transportation planning advisory committee meeting. • Varies by objective for the project or plan.	• We do what it takes. • We are currently writing our public involvement plan that will provide guidance for this.	• Done as needed. • Based on consensus and an iterative process.

PUBLIC INVOLVEMENT PROCESS (Level of Effort, Education, and Documentation) QUESTION 23: How do you provide education to the public to better equip them to provide meaningful input to the agency (e.g., strings and ribbons)?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Open house meetings, graphics and staff to talk with the public. • Open house style meetings with staff members; prior to meeting, advertise and use flyers. • The ETDM process provides web-based information, publications, informal meetings, ads, graphics, and staff. • Documents are "plain speak." Handout for typical open house is a welcome letter, project description, purpose and need and comment card. Staff answers individual questions. • Public meetings, open houses, website, etc. historically, the CE jobs have gotten very little practical public involvement before the actual document has been developed and put out for public review. • Engineers go out and talk to people directly and help educate people face to face in non-technical manner; project information portal. • Seek first to understand, then to be understood. First listen, and then tell what you think. • Increasing amount of graphic visualization and video; websites; publications; street interviews; aerials with existing conditions and then overlay plans to get input. • We provide graphics and simulations, information on the website, publications, and just talking things out.	• Very plain in explanation of what the planning process is like—explain what needs to be accomplished, purpose for doing plan, process for the plan. • PSA contest; blocks and ribbons activity. We just want to ensure that we understand what their transportation needs are and they can relay needs to us in an efficient manner. • Strings and ribbons activity; website; simple Q & A brochure called "Layman's Guide to the MPO" distributed to cities, libraries & high schools. • We have never done this well. • Use every possible format available; plain language; games; podcasts; Facebook; blogs; TV shows (DVD and CD); visual techniques; use translators; reading service; TTY machine. • Try to get as much publicity/free media; community groups; local officials. • Various community meetings. • Monthly newsletter; huge database with a huge mailing; alternative language formats; attend civic group meetings. • Resource center with a ton of information the public can access like studies, plans, and census data; background presentations; background information on the website; educational meeting called "Dots & Dashes."	• Use communications people with good understanding of project to communicate with the public; door-to-door talking to people; website; contact lists to distribute updates; frequent open houses; animation on the website; monthly neighborhood association meetings; consultant expertise. • We hire consultants who have expertise in these areas.	• Public meetings. • Engaging the public; surveys; town meetings; fielding questions from the community.

PUBLIC INVOLVEMENT PROCESS (Level of Effort, Education, and Documentation) QUESTION 23: How do you provide education to the public to better equip them to provide meaningful input to the agency (e.g., strings and ribbons)?			
• They might do something through a PIC, website, talk directly to people, on the street interviews. • Members of a citizen's advisory committee get better educated; DOT begins with a PowerPoint presentation.	• Newsletter; let the public draw/write on maps; ask public to take pictures of their three favorite roads and five least favorite roads. • Educate people about the process and roles of the different agencies.		

PUBLIC INVOLVEMENT PROCESS (Level of Effort, Education, and Documentation) QUESTION 24: What written documentation do you have related to the following topics (Community Impact Assessment, Environmental Justice, Public Involvement, and Context Sensitive Solutions)?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Public Involvement—Action Plan; EJ—FHWA guidance; CIA—FHWA guidance; CSS—case-by-case basis. • Little public involvement in CIA manual; project development manual has public involvement section; EJ manual, policy, and guidance; Desk Guide; CIA manual, policy, and guidance. • The ETDM process manual. • Public involvement manual (EJ section contained within); CSS document under development. • Environmental procedures manual that touches on public involvement, EJ, and community impacts; online context sensitive solutions manual. • Sharing the Future document. • Public participation plan online; CSS process for guidance on stakeholder engagement; Public Involvement/Public Hearing Procedures for Federal Aid Project Development. • Tracker performance measures—one is "butts in	• Public participation plan. • CCP—includes public involvement, environmental justice, community impact assessment, context sensitive solutions, ETDM, and sociocultural effects. • Public involvement plan; DBE plan; environmental justice wrapped into PIP. • Public involvement plan; environmental justice mission, description of team, and purpose. • Public participation plan updated annually; environmental justice plan for each project; FHWA publications. • Public participation plan outlining techniques and parameters (address EJ and access, people with disabilities within); limited English proficiency plan (Title VI policy within plan). • Public participation plan that includes manuals with guidance for certain activities; adopted policies within the plan. • Public involvement plan; environmental justice guidance and a report; community impact	• Do not have any of these. • Do not have any of these.	• No. • Title VI report; public involvement plan; local government guidance which includes Federal Aid policies on EJ; department policy manual with guidance for community impact assessment; context sensitive solutions implementation.

PUBLIC INVOLVEMENT PROCESS (Level of Effort, Education, and Documentation) QUESTION 24: What written documentation do you have related to the following topics (Community Impact Assessment, Environmental Justice, Public Involvement, and Context Sensitive Solutions)?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
seats measure" and other is targeted survey of users to measure whether we are building the right transportation solution. • Manuals and pamphlets put out to the public; hoping to have a CSS manual or include it in their Highway Design manual. • CSS and EJ policies and procedures; working on CIA policies and procedures; looking at completing a Title VI and limited English proficiency guide. • Public involvement manual; FHWA guidance for environmental justice; CIA brochures; in-house DOT class.	assessment. • Public participation plan; Title VI compliance plan; EJ at DVRPC (annual update of Title VI and EJ activities); Teaming Traffic Context Sensitive Solutions. • FHWA or DOT guidance; Title VI report prepared annually; public participation plan. • Public participation plan; various workshops.		

PUBLIC INVOLVEMENT PROCESS (Goals) QUESTION 25: What are your agency goals for public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• No written goals. • No written goals. • "Insure that all interested parties have an opportunity to participate fully in the transportation decision-making process and that public input is carefully considered." • Make the public aware and provide an opportunity for meaningful involvement in the decision-making process by providing project information early in the process and making it plain, then doing their best to get a meeting at a time when the public can show up. • Provide a revolving door where comments and input can come in and we can respond and get issues addressed as the door revolves and just have that door continue to revolve and make people aware that they can get their comments and get input to us and we will get information back to them. • Public involvement plan called "Sharing the Future" is both a treatise and how public involvement should be done that includes various mission, vision, and goals. • Involve as broad an audience as possible so that our decisions are in the best interest of the motorists. Go out and reach as many people as possible, make opportunities available that are tailored to their ability to participate, to address issues in an open and transparent way.	• The public participation plan states our goals and how we approach public involvement. We don't really have written goals, but citizen involvement is key to anything we do and we try to be as transparent as possible. • Goal—to plan a more efficient transportation system. We want to plan the best transportation system possible—that is a huge challenge when the funds are not available because we have some wonderful plans coming out of this office but which operating agency can pick them up and implement them—who can afford it. • That is going to be revisited because right now they do not have goals, and that gets back to how do you know you have met your goals or is your goal reasonable. • Provide opportunities for citizens to help shape the region's future through an active engagement process that is early, open, and accessible to decision-makers and acknowledges their insights. Work with community groups to create opportunities for all segments of the public to learn and become informed about issues and proposals under consideration in the planning process. Integrate and coordinate citizen involvement activities with state and local governments' public involvement processes to increase efficiency and to broaden the base of	• Every person that wants to be involved in the decision has an opportunity to be. • None.	• Include as many people as possible (but we're not really quantifying it). • Reach out, meet, and provide for consensus on a transportation solution with the most effective tools that we have available to us and make sure reaching many instead of the same few.

PUBLIC INVOLVEMENT PROCESS (Goals) QUESTION 25: What are your agency goals for public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
Constantly strive to find new and innovative ways to do that. Figuring out who the audience is and how to conduct outreach is key to figuring out how to involve them. Those things are not always easy to do and involve a lot of staff resources to do this. • Tracker performance measures—one is "butts in seats measure" and other is targeted survey of users to measure whether we are building the right transportation solution. • Don't know that we've set any goals. • Have a collaborative process that is not just all about the transportation, but it is more of an integrated system that we should be getting people involved in for the pedestrians, to the bicycle rider, and all those options have to be weighed when you build a facility. It is not just about the cars anymore. That is the significant change that they have made in their process. • Unsure whether have any—required by law to have public involvement.	outreach. Look for opportunities to seek the advice and guidance of low-income and ethnic communities that do not consistently participate in the regional planning process. • To make sure people understand what they are trying to do, that everybody has the opportunity to voice their concerns, and that those concerns would be taken seriously. • Goals are listed in the participation plan. Personally—to make the work that we do here interesting to the public and encouraging people to see the relevance of their lives so they find it interesting to be engaged. Officially—providing an open process that offers complete information, timely public notice, full public access to key decisions, and support for early and continued involvement of stakeholders. (1) Public involvement is an important element of a high quality transportation planning process; (2) effective transportation planning must include participation of those whose everyday lives are critically affected by how they are able to get to work, home, school, stores, and services; (3) essential to ask for public participation—it is essential to respect and seriously consider input that is received, not just collect it; (4) informing and educating the public about transportation planning issues and the		

PUBLIC INVOLVEMENT PROCESS (Goals) QUESTION 25: What are your agency goals for public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
	transportation planning process is key to obtaining good quality public input; (5) additional emphasis should be placed on involving persons and groups typically under-represented in transportation planning or with special transportation needs, including low-income, minority, elderly, and disabled populations. • To insure that the transportation plan reflects the needs of the population and provides benefits to all communities within the planning area equally. • We need to become more involved and really begin to get the input we need to get; not that we have to get but what we need to get. As far as specific goals, perhaps to get more input than we are currently getting. • To reach out to as many populations as possible and to have them help us figure out the solutions to our regional issues. • To provide an active and representative forum for all segments in the MPO study area in developing common regional transportation goals and needs. • No defined goals.		

PUBLIC INVOLVEMENT PROCESS (Goals) QUESTION 26: How were these goals developed?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Do not have written goals. • Someone was just a good Samaritan and said you know, we need to do better and that kind of thing. • Outcome of a small working group with MPO staff and DOT staff—realized they need a goal because you don't have anything to measure if you don't have a goal. • They have been developed based on our experience. • Discussion—taking the direction of leadership that has come in, talking with state agency as different administrations, different leadership groups come in. • Built over a period of several years—worked with public affairs managers and others to lay out the goals. • Doesn't know. • Doesn't know. • Haven't set any goals. • Through the various programs, Title VI, CSS, and the public action involvement plan the goals come together and converge into one piece. • No goals.	• The process was a conversation between staff and elected officials on what they wanted us to do and what our strategies were for achieving that. • Through the public involvement plan, being administered from the Federal level and the directives, from the authorizations, they take their cues from there and they work off of that, and from there we just created our public involvement plan and that became their goals. • Currently don't have goals. • Unknown—through policy committee and director. • Developed through the Regional Transportation Committee. • Developed in collaboration with the Citizens Advisory Committee. • In response to federal regulations. • Sought input from Citizen's Advisory Committee when looking at public involvement. • They are written in the public participation plan. • They are a part of the public participation plan. • No defined goals for public involvement.	• Just how you should do things as a government agency. Anything that affects anyone's life that is a policy decision they should have an opportunity to be involved in that. • No public involvement goals.	• Area that they have struggled with—trying to find way to reach out to more people. • Set by individual.

PUBLIC INVOLVEMENT PROCESS (Communicating Public Input and Commitments) QUESTION 27: How is input fromthe public integrated into the agency decision making process?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• They look at the comments that they get and they respond to each comment directly or in the environmental document. Try to integrate valid suggestions into the project. • We have required laws that require a public review period. We have to read and respond to every comment that has been received. • During the ETDM process, plan process and during PD&E, comments are carefully monitored, documented and tracked. Public hearing comments go with the final environmental document to FHWA. • Try to get the information early; send it out to the DOT's subject matter expert for their consideration. • Give it full consideration—anything that comes in and it really goes back to this whole discussion about the type of document and the significance of impact to the community—speaking to our groups earlier so there is more opportunity to get input in for consideration and have it be implemented into the final decision that comes out. • We're doing public involvement for policy decision making, planning, and design and environmental projects. • He immediately sends any public input to those people in the DOT who need to hear it.	• Comments are captured and reviewed. • Comments are recorded in a database and reviewed/tracked. • Use strings and ribbons to get public involved and evaluate citizens' alternatives. MPO uses their website as a tool for the public to submit comments. • Comments are received and forwarded to the appropriate staff. Very specific comments are recorded in a database and shared. • Collect and analyze the comments for guidance on how to proceed. • Integrated in different ways—have public comment period to gather all comments and forward to board for review; create matrix that summarizes comments. Depending on number of comments received, board may have workshop to discuss comments and responses. If one comments, board reviews it and puts it in, use it in their final determination on how they decide to vote or go forward. • Have a public hearing comment period and gather public comments and full text comments and send to the board. • Consultation back and forth so that everything is considered. • Coordinate early public involvement to capture what the public desires. It is important to think about it carefully and utilize the	• Try to respond to each one; develop a frequently asked questions sheet and post to the web. • Comments are collected, reviewed and evaluated.	• If it's something we think is appropriate to include, we will include it. • Comments are received, reviewed and evaluated to try to build consensus.

PUBLIC INVOLVEMENT PROCESS (Communicating Public Input and Commitments) QUESTION 27: How is input from the public integrated into the agency decision making process?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Our planning division uses a lot of public input tolls. • We prepare a conference report and take that back into the design and take a look at what they asked. We review it, and then go back out to present the responses. • A lot of time things are integrated into our projects because of public involvement—it might determine the project alignment or add an amenity. • Comments received are addressed in the NEPA document and the project may or may not be changed to reflect the comments.	results of the public involvement. Comments get serious consideration and a response. • Capture comments and compare them to guiding themes and policies to determine whether policy should be changed or looked at differently. Policies are based on certain rationale and public comments are a good way of examining those rationales. • Comments collected, reviewed and evaluated.		

PUBLIC INVOLVEMENT PROCESS (Communicating Public Input and Commitments) QUESTION 28: How are public/agency commitments/permit requirements/etc. tracked by the agency through each phase of the process?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Include an environmental commitment page in all of the documents—every agency/bureau through development of the project is supposed to look at that environmental commitment page and make sure they are fulfilling the environmental commitment. • Mitigation monitoring program that would include any concerns from the public and tracked in each district. • ETDM allows the process to track comments and identify a controversy and further studies that are needed. • Currently document on a static green sheet in the project file. Most of the commitments are in the pre-construction arena so before it goes to construction they certify that they have completed everything and that the project plans reflect that. Going to work with AASHTO to improve the process. • Attach a commitment to each project—usually done at the end. • Formally done via memos; computerized project tracking system. • They use Tracker. • Commitment sheet goes with the contract when the project is let. Project status software database that environmental staff uses to track commitments. • Documented in meeting notes. • Feasibility Assessment Report includes	• We track them as part of our public involvement plan. • Through the database and coordination with the County based on identified performance measures. • Kind of MPO and kind of DOT. Coordination through Community Traffic Safety Teams—safety issues received via a letter or email and forwarded to the community traffic safety teams. • As a line item in the project database. • Included in the executive summary (available on the web). • Online comment form—reviewed/approved and posted on web. Written comments are put in PDF and posted online. Maintain database of comments received and maintain file—documented and included in any plan done (supporting documentation). • Meeting notes/minutes; number of response cards; replies to the public; response and changes that may be illustrated within the plan and justification of the final plan. • As far as making commitment to hold meetings with Citizens Advisory Group, they will call us on it if we don't follow up. • Informally the tracking system is the Office of Public Affairs. • On our major documents like the long range transportation plan and our	• They have a process, but it is not handled by her group. • We are governed by a project manager oversight group that tracks everything.	• Meeting minutes with submitted comments attached to the report. Internal responsibility to make sure comments are addressed through our work. • Tracked on a webpage; participate in meetings and provide input; write reports and strategies.

PUBLIC INVOLVEMENT PROCESS (Communicating Public Input and Commitments) QUESTION 28: How are public/agency commitments/permit requirements/etc. tracked by the agency through each phase of the process?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
commitments. Vital information is placed in the Project Reporting System. • In the process of putting together commitment tracking information in the DOT's internal software. Green sheets are put in the front of environmental documents to show special commitments made.	current subarea plans, we have an appendix that addresses all comments, that documents all comments. • They maintain a record of public comments through the project development phase and pass these along to the appropriate agencies.		

DEFINITIONS OF SUCCESSFUL, EFFECTIVE, AND COST-EFFECTIVE PUBLIC INVOLVEMENT QUESTION 29: How do you define successful public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Not being taken to court; good turnout; public appears to understand; meaningful feedback. • When the public doesn't have any questions. • Equitable access to decision-making and offers opportunities for input which is then carefully considered when making transportation decisions. • When it is multifaceted; when people show up at the meetings; when concerns are raised that we address those issues to the point that the citizen or communities are satisfied with the answer, even if it is not the answer they want, at least they buy into the process. • If the public is made aware of proposed projects and proposed transportation improvement projects in their area and if they are made aware and they have had an opportunity to review the project and	• When we can touch a representative set of our population and get meaningful input from them and that result in a plan that reflects the priorities of our community—a genuine representation of our communities' priorities. • Quality over quantity. • When the public shows up to participate and help develop plans they support instead of just arguing against things. • When the project, if it is a good project, goes forward—everyone knows what is going to happen and feels good about it. When people feel that they understand what is going on and they feel that they have given their input and it was heard and will be used. • When the stakeholders are happy with the process, even if they don't agree with the project, if they felt like they had a fair shake.	• Anybody whose life is affected by the decision has an opportunity to be involved in the process. • If we don't have a lot of negative reactions, that's sometimes good.	• Reaching out to a wider audience. • Larger numbers and different people attending.

DEFINITIONS OF SUCCESSFUL, EFFECTIVE, AND COST-EFFECTIVE PUBLIC INVOLVEMENT QUESTION 29: How do you define successful public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
review project information along the way and they have an opportunity to comment and submit their input and they have been made aware every step of the way. • When we're able to deliver a project that satisfies or at least addresses the critical needs of the traveling public and that people generally at least understand and accept. • Having a better decision than what you set out to do. • Informed consent. • When we receive input that helped us make good decisions and a better product that is long lasting and people can look back and say it is a good project. • Depends on the overall goal—sometimes you can have successful public involvement and never even build the project. • The public knows about the project and they have accurate information about the project.	• When we have people who have gone through a process that they feel like they are able to have their opinion voiced whether or not it is necessarily followed they at least feel that their information or ideas submitted have been heard and has been thoughtfully considered. • When the input has been received by the affected population community that indicates that they have an increased knowledge of the subject and that it has encouraged dialogue. • Trying to establish and get a cross section of the entire population. • When a person who has never come to one of the meetings before says this is very interesting—I will come again and participate again. Having spirited public meetings. Getting people to be less suspicious of government agencies. Answering questions on an individual basis. • When the MPO and the public interact in a willing and open way and by receiving information, that information helps shape the decision-making process and helps address substantive issues of the community. • When we can say with any plan or project we are involved in that the people who will be impacted by it understand well in advance what the project entails.		

DEFINITIONS OF SUCCESSFUL, EFFECTIVE, AND COST-EFFECTIVE PUBLIC INVOLVEMENT QUESTION 30: How do you define effective public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Do not have a definition for effective public involvement. A good turnout and the people seem to understand what is going on and provide meaningful feedback. • Successful and effective public involvement is the same. • Providing folks, stakeholders, partners, and general public with timely opportunities to comment—early and clear, continuous, variety of ways to get involved. • Getting people to show up and voice their opinion. • People kept in the loop; they always knew what was going on; always had an opportunity to comment; no surprises. • Got to have a project make sense to people that is doing the right thing at the right time at the right place—public involvement can be the filter that shows if it is successful and effective but may tell us it's not the right project. • An exchange of information—by the time you reach the conclusion, the public is there with you because they understand and went through the process. • Successful and effective public involvement is the same. • You get the buy-in into the problems and solutions and everyone has an understanding at how we arrived at the solution that we came to and they are in consensus with that.	• For the most part, effective is the same as successful. • Lines blur between successful and effective. • Successful and effective are the same thing. • When everybody is engaged and that means the planners, the public, lawmakers, and decision makers. All on the same page and working for the common good and it is all transparent, and that will never, never happen. • Successful and effective are the same thing. • If effective, successful—having the dialogue and the exchange of ideas so that whatever plan or project we decide on in the end is much better because we have got the input from the people who live in the area who use the service that we are talking about that sort of thing that is going to be much better because we have got the opinion of folks who are users of the system. • The same as successful. • Low cost and successful. • Having 200 people show up but if those people are not representative of the population, it might not be effective. • When get information from the public and they are able to use it and incorporate it into the plan. Not only when they get information from the public that helps the MPO understand the public's issues, but when they are able to provide information to the public	• Successful and effective are the same. • Successful and effective are the same.	• Whatever you can do to achieve your goal is effective. • Both are the same.

DEFINITIONS OF SUCCESSFUL, EFFECTIVE, AND COST-EFFECTIVE PUBLIC INVOLVEMENT QUESTION 30: How do you define effective public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Look at the strategies there were used for a particular population and whether it served the purpose with them. • Get the public out and informed about the project.	that helps them understand the MPO's concerns. • Same as successful.		

DEFINITIONS OF SUCCESSFUL, EFFECTIVE, AND COST-EFFECTIVE PUBLIC INVOLVEMENT QUESTION 31: How do you define cost-effective public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• They don't. • They don't. • They don't. • Never tied public involvement back to cost—it cost what it cost. • Written into annual budget (i.e., advertising). Consider costs when negotiating scopes of work for consultants to conduct public involvement activities. • Engaging a sufficient number of stakeholders to reveal the pertinent issues and receive meaningful input that could affect project outcomes. • The application of common sense—adopting an attitude that the public is an important part of the process and how can we do this in a low-cost way beginning with our day-to-day operations and how we do our jobs. • Build good projects, not great ones, with an emphasis on improving the state system—end up with a great system. • Currently not defined. • Depends—sometimes can spend a ton of money and	• Getting sufficient input from a broad base of the public without compromising on the representation. • Try to do the most that we can with the least amount possible. • Do not define the cost. • Spending money on human resources, those that go out and talk to people. • People put so much emphasis on cost-effectiveness and cost benefit ratios and almost invariably if you look only at that, he thinks that rural communities are at a disadvantage from day one. If you are looking to serve the most number of people for the amount of money all the money is only going to your highly populated areas. • It is more did I get, am I building relationships with people or is our name getting out there, are we getting email addresses of people that we can then stay in touch with so that it is not just a one time shot in the dark but ongoing, building knowledge, building understanding, building relationships.	• Same as successful and effective public involvement because if you don't do it right up front, it is going to cost you more in the long run. Most cost-effective way—do the right thing up front and put the resources in it to make sure that you do it effectively. • Depends on what you are trying to promote.	• Keeping it as cheap as possible in terms of cost—the smallest percentage of your budget with maximum effectiveness. • If they set a budget and can realize it and they don't go over and don't have to borrow money from another part of the project.

not be effective and sometimes spend very little money and be very effective. • The number of people in attendance versus the money spent.	• It doesn't cost more than the plan. • Don't have a huge budget, but have staff resources. • Depending on who you are trying to reach out to, cost-effectiveness is sometimes not the issue. • Have never viewed it in terms of is it effective or is it cost-effective. • Unknown.		

MEASURES OF EFFECTIVENESS **QUESTION 32: What are the outcomes you expect from your public involvement efforts?**			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Agreement but not necessarily that they solve everybody's problems or that everybody is in agreement with what the DOT is doing, but that the public understands what the DOT is doing and that the DOT has met the requirements for public involvement. • That no one is surprised when that project appears in their neighborhood. • Making sure that all interested parties have an opportunity to comment in an equitable manner, early, clearly, and continuously. Outcomes come directly from goals. • Expect to get an idea of whether or not the public likes the project. • That the public is made aware of a proposed project in their area and they have the opportunity to get their feedback to us. That they are made aware, that they're educated on the project and that they have an opportunity to know who to contact or who to talk with.	• Consensus is top priority. • The community is aware and they can make the best informed decision possible. • Would like to see an improvement in public involvement—attendance wanes and it is hard to keep people interested in such a mundane subject such as transportation planning. Not just letting people show up to complain about something, you are getting people showing up who want something and sometimes that is the same thing, but not always. • Meaningful feedback for policy makers. We do get meaningful feedback in the sense of people will support transit, but haven't found quite yet that leadership is really listening and really considering. Public involvement is still not viewed very seriously. • Hope answer is same as the answer to "How do you define successful public involvement." • Having people that are submitting comments,	• Haven't figured out how to do that. • Getting people to come to a meeting because they knew about it.	• Meaningful input from the public. • A Record of Decision and an environmental document that is believable. On a personal level for the team—the feeling of ownership and that they have performed something significant, in a timely efficient and the most cost efficient.

MEASURES OF EFFECTIVENESS QUESTION 32: What are the outcomes you expect from your public involvement efforts?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Measurable outcomes—you can always go back to the number of people that come to your meeting that you talked to, numbers of comments, hits on websites, numbers of meetings, etc. One of the measurable outcomes—is the project the right project and is it going forward? • Better and more enlightened decisions and a more informed public. • Informed consent. • Consensus and buy-in for the project. • A project that is completed and agreed upon in a collaborative way that might not necessarily address all of the concerns of everybody, but a consensus was reached. A livable project with all stakeholders. • An informed public.	coming to meetings. People who are better educated on what the plans are, what the process is, how they can be engaged should they choose to be. • A more knowledgeable public, improved communication between the public and the planning process, the planners, and a better substantiation of the plan that results from the process. • That the public involvement process is seriously taken into account by policy leaders when we are doing any of our policy documents. • Getting new people to come to meetings, media to write stories about us, and a diverse group at our events. • Expecting better information from the public regarding what they see as major issues. • When a construction crew shows up on the highway, the public will have been made aware of that prior to it happening and they have had some opportunity if they wish to weigh in on that decision to send in the construction crew.		

MEASURES OF EFFECTIVENESS QUESTION 33: Have you developed quantitative/qualitative measures for the effectiveness of your public involvement?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• No. • Rudimentary on their part—not sophisticated. Keep rolls and head counts. • Yes—document sent to interviewer. • No. • Measure the things we can—number of meetings, number of newsletters distributed, amount of project correspondence sent out, display expenditures, number of brochures, etc. • No. • No. • Have done a few—looking for other ways to measure what they are doing. Hard because it is not hard and fast. • No. • Evaluate project in terms of what you think worked and did not work. Looking for scientific numbers—would have to hire someone to do that for us. • No.	• Their public participation plan has a section in it that talks about how to evaluate all of our things. • Yes and no. individual evaluations based on number of newsletters distributed, etc. going to use clicker to vote anonymously during meetings. • Required by FHWA. Sign-in sheets for meetings. • Did evaluation reports for a long time, but kept changing how we wanted to do things because things were changing in the whole network of possibilities so the numbers were not comparable after. Can't judge the secondary and tertiary effects of public involvement. • None that are written. • Not specifically outlined yet. Do some informal tracking—number of e-newsletters distributed, etc. • Yes, the usual number of people in attendance, website hits, what is the actual feedback. • In various aspects—in the area of air quality they clearly have. Post season surveys. • Don't have any formal way of measuring this. Do a debriefing session with staff and talk about what worked and what didn't. • Developed ways to evaluate the tools. In public participation plan, identified all the tools used and have performance goals and how they evaluate success. • Unknown.	• No. • No.	• No. • Yes, they are doing the reporting. Ask everybody to debrief on specifics.

MEASURES OF EFFECTIVENESS QUESTION 34: Do those measures include measures of the equity or inclusiveness of your public involvement to assure that your efforts target groups that are traditionally underrepresented in the decision making process and underserved by transportation facilities?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Not applicable. • Don't have any measures. • These include measures for equity or inclusiveness. First objective is equity—provide equitable access to transportation decision-making. One of the indicators is access to information and participation opportunities by persons with disabilities, convenience of meetings and events to public transportation when available, geographic dispersion, convenience of meeting and time and locations. • Not applicable. • Once into project, may identify groups and need to take a different approach. More opportunity to do so in larger projects. • Not applicable. • Not applicable. • It is the Tracker/Tracker Performance Measures on website. • Not applicable. • Not applicable. • Not applicable.	• Yes, there are specific sections that deal with environmental justice. • They do not have a formal process, but their Community Characteristics Program provides them with good information. • The MPO tries to get to all of the people as much as possible. • We found this didn't work. • They don't have any measures of effectiveness. • No measures of effectiveness. • Nominally. • We don't. • Yes. • They cover a variety of populations. • They have never established performance measures.	• Transit equity is a big deal for us. Found that the criteria that we use for where we put service is using ridership number 1—transit equity follows because the more transit dependent a neighborhood is the more the ridership potential. • No.	• No. • Yes.

MEASURES OF EFFECTIVENESS QUESTION 35: How do you measure the cost-effectiveness of your public involvement activities?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• The DOT does what it takes to do public involvement. • Do what it takes to do public involvement. • Really don't. • Do not measure this. • We don't. • The DOT does what it takes to do public involvement. • Better and more enlightened decisions and a more informed and involved public. We have not developed any quantitative measures for effectiveness. • Do not measure this. • Do not measure this. • Do what it takes. • Do not measure cost-effectiveness.	• They are in our Public transportation plan with an extension matrix in that plan. Broken down into optional and required activities—try to do as many of the optional activities as are feasible within the cost and time of the project. For each activity, we have a number of different measurements for what meets the requirements. • Doesn't think this is done per se—just ensure that what they do is effective. • They don't. • Have in the past. Put together numbers that showed how much we spent on it. Don't normally do that. • They don't. • Do not do this. • Do not measure it. • Do not measure cost-effectiveness. • Doesn't know. • They don't. • Doesn't know.	• They don't. • They don't.	• They don't do this. • Tracking all of the miscellaneous expenses for public involvement.

EFFECTIVE, COST-EFFECTIVE, AND INEFFECTIVE TECHNIQUES QUESTION 36: What specific techniques have been most effective?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Informal public involvement meeting. • Open house with all aspects of the project in one place; meeting location that is in the project area and accessible; information booths/kiosks at school/community events; coordinating with churches. • Targeted meetings with various interested groups/parties; little targeted group meetings; identify various groups and meeting in their place, in their language. • Piggyback on community based organizations; flyers/letters; talk with people in the community. • Quarterly newsletters, open houses, project specific websites, project offices for larger projects. • Small group and one-on-one meetings • Visualization; before/after photos, Google earth, and aerial imagery; morphs and drive-thrus; simulation and videos. • Open house public meetings; interpreters; large print materials, as requested; websites (track repeat visitors and break down by district). • Meetings with elected officials and general public, place making, charettes, workshops; aerial maps with nothing on them—collect input from public about their community and concerns. • Going out to the public and showing them aerial maps with nothing on them.	• Community level meetings. • Blocks and ribbons; clicker, brochures; animations; piggybacking on other events. • Strings and ribbons, brochures, piggybacking on other events. • Small discussion groups; constant contact with the people you are working with; special targeted meetings. • Open house meetings; meetings with groups/neighborhoods; in rural areas, contact community leaders. • Online outreach—e-newsletters, partnership with libraries (online survey), radio advertising. • Charettes—give participants blank slate and let them build; visuals; one-on-one conversation; school-based work; maps and traffic counts on website. • One-on-one meetings within the community. • Emails; personalization; Dots and Dashes game; news articles. • Advisory committees. • One-on-one community meetings.	• Door-to-door meetings; bus/train meetings; one-on-one meetings; open houses; going to churches, community centers, community organizations, hair salons. • Partnerships with other organizations.	• Surveys—online and out in the community; go to senior centers and the housing authority. • One-on-one meetings; working with community liaisons (i.e., Korean liaison).

EFFECTIVE, COST-EFFECTIVE, AND INEFFECTIVE TECHNIQUES QUESTION 36: What specific techniques have been most effective?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Doesn't think DOT has branched out enough for them to know.			

EFFECTIVE, COST-EFFECTIVE, AND INEFFECTIVE TECHNIQUES QUESTION 37: What specific techniques have been most cost-effective?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• DOT has not been concerned that much with cost—whatever it takes. • Open houses in the project area spread over time and in different geographic locations. • Piggybacking on other meetings. • Direct invites; send information home with kids. • Websites, open house meetings. • Area engineers and local public affairs managers out in the community talking with people; working with local officials; news releases. • Common sense and adopting an attitude that the public is an important part of the process and figuring out how to involve the public in low cost ways beginning with day-to-day operations and how we do our jobs. • They use their own staff members rather than consultant staff at their public meetings. • Being cost-effective depends on the project. • Taking maps into the community and talking with them; surveys sent home with kids (for kids and parents). • Information table at school.	• Workshops. • Going to the community; blocks and ribbons. • Don't measure cost-effectiveness. • Small group meetings. • Working with key community leaders/personal visits. • Online outreach. • In-house staff to go out into the public; Facebook. • Do not measure cost-effectiveness. • Website and email blasts. • Email announcements. • Focused group meetings that we have been invited to participate in someone's neighborhood association meeting. Haven't done a good job with Hispanic and Vietnamese communities—don't go out and meet one-on-one with these communities because we don't speak the language.	• Focused group meetings; neighborhood meetings; build relationships in community; be a resource for the community. • Using community based organizations.	• Flyers and mailings; announcements at council meetings. • Signs on the road (variable message signs and static signs); website.

EFFECTIVE, COST-EFFECTIVE, AND INEFFECTIVE TECHNIQUES
QUESTION 38: What specific techniques have been ineffective?

Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Newspaper as the only means of advertisement. • Newspaper advertising. • Meeting location that is not in the project location or difficult to find; meetings at inconvenient times. • Putting information in the paper. • Advertisements in the newspaper. • Traditional public hearing with assigned time to speak (3 minute limits, etc.). • Can't think of anything ineffective. • Newspaper advertising. • Going out with a plan that's already prepared. • Newspaper advertisements. Mail lists based on the tax assessor information only (excludes renters). • Putting an ad in the paper.	• Using PR firms and for-profit organizations. • Talking head workshops. • Advertising a poster session. • Public meetings with maps on walls. • Newspaper advertising. • Newspaper advertising. • Open houses (a couple) to discuss the long range plan. • Newspaper advertising; too many meetings. • Sending out flyers indiscriminately; newspaper advertising. • Newspaper advertising. • Using government buildings as meeting locations.	• Public hearing; newspaper advertising. • Public hearings for service changes; newspaper advertising.	• Don't know what is ineffective. • Newspaper advertising (most expensive ads).

EFFECTIVE, COST-EFFECTIVE, AND INEFFECTIVE TECHNIQUES
QUESTION 39: Distinguish these by segments of the public that you target (limited English proficiency, low literacy, elderly/disabled, those without access to public transportation, second/third shift workers, single mothers with children, other underrepresented groups)?

Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Meet with minority groups in churches; post flyers; early meetings where there is high unemployment; various meeting times. • LEP—same techniques, different language; Elderly/Disabled—field surveys, community centers, retirement homes/communities, vanpools. • LEP—Distribute notices in various languages, use community leaders; Elderly—schedule	• Use community based partners; post fliers in community health clinics and public agencies. • Go out into the community; Low Literacy—one-on-one communication, assist with paperwork; LEP—use CCP to identify areas and use proper tools—assist with sign-in, use videos, use radio; Elderly/Disabled—ADA accessible facilities, work with local coordinating board; Single Moms—welcome kids at meetings.	• LEP—alternative languages, attend community functions, provide translation services, door-to-door meetings, use more symbols; Elderly/Disabled—ADA accessible buses, large print materials, coordinate with Ride Connections (non-profit group to assist in spreading the word). • Tailor material, marketing and message to particular audience.	• LEP—provide translator; alternative languages for materials/announcements; Elderly/Disabled—ADA accessible facilities, distribute announcements at senior facilities. • LEP—alternative languages for materials, use community liaisons, piggyback on community events; Elderly/Disabled—large print materials, readable in gray scale (for those who are color blind); No Transportation—

EFFECTIVE, COST-EFFECTIVE, AND INEFFECTIVE TECHNIQUES QUESTION 39: Distinguish these by segments of the public that you target (limited English proficiency, low literacy, elderly/disabled, those without access to public transportation, second/third shift workers, single mothers with children, other underrepresented groups)?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
meetings around elderly schedule (supper/early bird). • LEP and Elderly/Disabled—meetings in their neighborhoods; Low Literacy—court recorders; No Transportation—coordinate shuttles; 2nd/3rd shift—schedule meetings in between shifts at various locations; Moms w/ Kids—provide color books/crayons. • LEP—received good feedback from local town managers and mayors, contact newspapers and ask for assistance on translating ads and writing some sort of article to help get the word out. Low Literate—identify group through development of public involvement plan. Elderly/disabled—yes. Active discussion to identify who the stakeholders are. Child care and food—never provided child care or food at meetings. Have served light refreshment, but not the norm. Have had occasional activity to keep younger folks occupied (color books/crayons, reading books). • Low Literacy—talk with people and explain things to them, help them sign in, use television or radio (information/news releases); Hearing/Visually Impaired—hearing assistive devices, large print versions; No Transportation—coordinate with others to transport people; Moms w/ Kids—	• Low Literacy—animations; Elderly/Disabled—go out to them, work with transportation disadvantaged board. • Work with their representatives. • LEP—provide alternative languages; Low Literate—use court reporter; Elderly/Disabled—late afternoon/early evening meetings (4:00–8:00 p.m.). • Low Literacy—use networks through social work; contact volunteer center(s). LEP—networks through social work; volunteer center(s), census data. • LEP—translator for meetings, no low literacy, transportation for the elderly, on-call transport for those with no cars, multiple meetings for shifts, no child care. • LEP—use alternative language media contacts, work with church groups; Elderly/Disabled—work with senior citizen homes, go to them; No Transportation—use locations with access to public transportation. • LEP—provide translators, visual displays—before/after photos/drawings; No Transportation—broadcast phone number and publish it in newspaper ad to arrange travel; 2nd/3rd shift—move meetings around (different times/locations). • LEP—legal notices in foreign language		meeting locations on transit routes, go out into communities as requested.

EFFECTIVE, COST-EFFECTIVE, AND INEFFECTIVE TECHNIQUES
QUESTION 39: Distinguish these by segments of the public that you target (limited English proficiency, low literacy, elderly/disabled, those without access to public transportation, second/third shift workers, single mothers with children, other underrepresented groups)?

Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
bring kids to meeting, serve food. • LEP—mailings in alternative languages, translation services; Low Literate—be more observant of those that might have trouble reading and explain what they are viewing, provide assistance in writing comments; Elderly/Disabled—ADA accessible locations, afternoon/early evening meetings; Visually Challenged—large print materials and narration; Moms w/ Kids—provide coloring sheets and fun things. • LEP—alternative languages, use church contacts and community centers. • LEP—provide interpreters; 2nd/3rd shift—day and evening hours. • LEP—work with community members as translators; Elderly/Disabled—use senior facilities, coordinate with bus service; No Transportation—use the website, emails to commuters and carpools; Single Moms—provide food (bought or donated). • LEP—provide interpreters; Elderly/Disabled—include phone number in ad to request special services.	newspapers, website translatable into most common languages; Low Literacy—visualization; radio advertising. • Can't say they do anything specific to target them—have always targeted in terms of either area-wide or a specific geographic region of the MPO study area. Never done it by LEP or other kinds of segments.		

LEVERAGING RELATIONSHIPS
QUESTION 40: How do you leverage your public involvement efforts to make them more effective or cost-effective (e.g., partnering with community organizations (NGOs), other public agencies, the media or others)?

Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Do not leverage public involvement efforts. • Partner with community groups, NGO, media. • Getting together with other groups, going where they are, being part of their meetings, partnering with them, developing relationships with them; working with transportation disadvantaged local coordinating boards. • Use groups that have inroads into the communities or are affiliated with other business organizations or mutually support each other; try to get the word out to those who will be directly impacted by the project. • Piggybacked in the past, but that's then norm (really a project by project thing). • Use neighborhood associations, local advocacy groups like bike pad or ADA groups, local historic folks (as applicable). • Work closely with organizations that have non-English speaking individuals as part of their membership to help conduct outreach.—you can't do it without involving and getting the support of those groups that can outreach to the individuals you are trying to reach. • Piggyback existing activities as much as possible; use Farm Bureau.	• They use community organizations, other public agencies, the media, and other organizations. • Partnering with community organizations, other public agencies, the media. • Piggyback; strings and ribbons game. • Piggyback on existing activities; use governmental services people to coordinate with local officials. • Not for public involvement. They have for highway safety meetings. • You have to leverage—how else does one person reach 6 million people? You have to do what you can to try and reach as many people as possible with a limited amount of money that we have and limited staff resources. • Radio station reads the plan to the blind, distributed surveys to schools, worked with non-profits. • Maintain tremendous working relationships with United Way, Neighborhood Alliance, Urban League, and Latino Action Committee. • They use community organizations, other public agencies, the media, and other organizations. • Working with coalition of neighborhood	• Attend volunteer fire dept. spaghetti dinners, PTO/Parent Teacher Association meetings, festivals, chamber meetings, club/organization meetings/functions. • Work with partnering organizations and piggyback on events.	• Piggyback on other media events. • Partner early and do early communication.

LEVERAGING RELATIONSHIPS QUESTION 40: How do you leverage your public involvement efforts to make them more effective or cost-effective (e.g., partnering with community organizations (NGOs), other public agencies, the media or others)?			
Departments of Transportation	Metropolitan Planning Organizations	Transit Agencies	Local Governments
• Local government meetings; churches. • Presentations to non-profit group and other community based organizations. • MPOs and send out information to the media.	associations and making presentations. • We work through partnerships with other agencies and through the media.		

APPENDIX D

Tools, Techniques, and Examples of Their Use

Utilizing the Internet and Intranet

Advertising an on-line corridor public meeting on MapQuest (Mr. Bob Brendel, Missouri DOT, Jefferson City, Missouri)
Missouri's I-70 corridor project is approximately 200 miles long. Because of the length of the corridor, the Missouri Department of Transportation (MoDOT) was looking for a cost-effective way to advertise a corridor-wide meeting that was also going to be broadcast on-line. In 2009, they approached MapQuest and bought an ad that would pop up every time anyone searched for an address within a certain distance of their project. The pop-up ad told MapQuest users what the meeting was about, when it would occur, and how to access the on-line presentation. The ad cost less than $100 to place and MoDOT estimated that more than 140,000 people saw it. While all 140,000 MapQuest users did not connect to the on-line meeting or attend the actual meeting, MoDOT felt that those who had seen the pop-up ad were more informed about the I-70 corridor project. Approximately 130 people attended the actual meeting and another 600 viewed the meeting on-line, with a high percentage of the on-line viewers submitting comments. After having reviewed the comments, MoDOT officials felt that the comments received from the on-line viewers were generally better thought out and much more focused that those received from the public who attended the meeting. MoDOT's central office has shared the technique with its districts and they are looking into using this same technique on other corridor projects.

Using intranet surveys of school students to reach all populations (Mr. Jabari Parker, Georgia DOT, Atlanta, Georgia)
Georgia DOT (GDOT) was looking for a way to efficiently survey a 32-county rural area in southwest Georgia about their transportation needs. Census information and individual school enrollment information revealed that most counties were sparely populated, had high percentages of low-income populations, had high percentages of the populations with low educational attainment, and several counties had minority majority populations. Information obtained from database marketing companies confirmed that a low percentage of the households in the 32-county area had Internet connections. An e-mail blast to those identified by the database companies would have reached only those households that could have afforded a computer and an Internet connection, and would not have reached those who were low income. In an attempt to utilize the Internet in a way that would provide access to all income groups, and racial and ethnic groups, the Superintendent of Education for each of the 32 counties and 4 independent city school districts were contacted. They were asked if they would allow a hyperlink to be embedded on their individual intranet home pages so that their students could access a multi-question survey about their daily use of the transportation system. Students accessed the survey from their computers in their school's computer lab, completed it, and submitted it on-line to the consultant. In addition, paper copies of the surveys were sent to schools in other counties, filled out by hand, and returned by mail to the consultant. As a result, more than 4,400 surveys were completed and returned. Costs included making phone calls to the superintendents, sending a follow-up letter to the superintendents, printing paper surveys, and sending stamped self-addressed packets of surveys to the schools.

Using intranet surveys to reach downtown business employees (Mr. Drew Joyner, North Carolina DOT, Raleigh, North Carolina)
As part of the I-40 Business project in Winston–Salem, North Carolina, downtown business employees were surveyed about whether they preferred to shut down a portion of I-40 Business totally for two years or partially leave it open to traffic for six years while reconstruction took place. Business owners and operators were identified using Chamber of Commerce and Downtown Business Partnership lists, as well as canvassing individual office building lobbies. Phone calls and letters were sent to the businesses and they were asked if they would embed a hyperlink on their home page so that their employees could click on it, fill it out, and submit it to the consultant. This allowed downtown businesses owners and their employees to be surveyed without leaving their seats. Targeting these individuals engaged both in-town residents and suburban commuters, a difficult group to effectively and economically reach. This same techniques was used to inform businesses, and through them their employees, about upcoming project events.

Using Visualizations

Using videos reaffirmed the axiom that a picture is worth a thousand words (Mr. Karl Welzenbach, Volusia County MPO, Dayton Beach, Florida)
Volusia County Florida Metropolitan Planning Organization (MPO), asked Florida DOT (FDOT) to provide a video of the proposed improvements to Clyde Morris Boulevard for the project's public hearing. Prior to this, FDOT had only shown the city representatives a two-dimensional typical section of the proposed improvements. While the city representatives assured FDOT and the MPO they understood the typical sections, the MPO was concerned that the city representatives didn't truly understand all of the project's ramifications. The MPO asked FDOT to undertake a pilot project that would create videos of proposed improvements and to use the Clyde Morris Boulevard project as the first test case. FDOT presented a video that showed the existing condition morphing into the proposed improvements. When the video was shown to the city representatives, they realized that it was not at all what they had anticipated. As a result of the video, the city representatives decided not to pursue the improvements. In 2009, the total cost of FDOT's pilot project was $100,000 for 15 project videos. At approximately $6,700 per video, this equated to approximately 3% of the money spent during the Planning, Development, and Environmental phases of a typical project. The MPO posted the videos on its website so they could be viewed by the general public.

Creating videos of concepts that had not been used in Missouri (Mr. Bob Brendel, Missouri DOT, Jefferson City, Missouri)
MoDOT has a multi-media unit in their central office that is available to all of their districts to use. Often, MoDOT shows a video at the beginning of meetings to prepare the public for what they are going to see at the meeting. If they have a message or a concept that they can demonstrate visually instead of using static boards they do this. When MoDOT proposed reconstructing and widening I-70 truck only lanes, the first time this concept had been used in its state, they prepared a visualization that

demonstrated how it would operate and what it would look like. The video was posted on YouTube and has been seen approximately 10,000 times during the past year. MoDOT feels that using videos has helped the public understand the improvements that are being proposed.

Asking the public to take pictures of the things that are important to them (Ms. Judith Dovers, Atlanta Regional Commission, Atlanta, Georgia)
The Atlanta Regional Commission (ARC) in Georgia sponsored a photo contest last year and asked people of all ages to take photographs, bring them to the ARC, and talk with ARC staff members about what the images represented. ARC got the idea from the Chicago Metropolitan Agency for Planning, Chicago's MPO, and used it for their two-year visioning project called "Fifty Forward." It was ARC's way of finding out what residents treasured and what they wanted changed. ARC put the pictures on Flickr so everyone visiting the site could see what others treasured or wanted changed. The contest involved not only the photography community, but also a variety of local community-based organizations such as the Boys and Girls Clubs, Atlanta Celebrates Photography (Atlanta's annual photography festival), technical schools, colleges, museums, and art shops. The ARC used Metro Cultural Coalition as their advisors and selected representatives of Care, Boys and Girls Club, the museum community, and Atlanta Celebrates Photography to judge the submissions and pick four winners. The winners were announced at an ARC breakfast and given prizes such as Air Tran airline tickets and photography classes at the Showcase Photography Studio. The pictures received during the contest showed ARC the different ways that people see things and think about them. One of the groups involved in sending ARC photographs was the Savannah College of Art and Design. As a result of their interest, ARC is considering hiring a Savannah College of Art and Design intern to help them communicate some of its work. ARC considered the event such a success that they are going to hold the contest again next year.

Holding the Meeting in the Right Place, on the Right Day, at the Right Time

Breakfast meetings (Mr. Eric Johnson, Sacramento Area Council of Governments (COG), Sacramento, California)
The Sacramento Area COG in California was trying to increase participation from its business community in their Metropolitan Transportation Plan. Rather than having a night meeting as they normally did, they had a breakfast meeting on a Friday morning and experienced much more participation from the business community. They found the business community preferred to have meetings before their work day began.

Middle of the day and evening meetings (Ms. Elizabeth Smith, Tennessee DOT, Nashville, Tennessee)
Tennessee DOT (TDOT) mailed out its first newsletter with an attached stamped self-addressed post card. On the post card were several questions including three concerning meeting logistics: what location is the most convenient for you (three locations were suggested and an "other" blank was provided), what time of the day or night is most convenient for you (two-hour increments beginning at 9:00 a.m. and ending at 9:00 p.m. were provided), and what day of the week or weekend is the most convenient for you to attend a meeting (Monday through Sunday were provided). Approximately 15% of the 4,000 post cards were returned with two times of the day or night chosen more often than others. The time period that garnered the highest response was 7:00–9:00 p.m. and the second highest was 11:00 a.m.–1:00 p.m. Kingsport, Tennessee, is a retirement destination, has a large number of active "soccer moms," and has a large number of second shift employees. The older adults wanted a daylight meeting, the "soccer moms" wanted a meeting that occurred before 3:00 p.m. when their children got home from school, and those on the second shift wanted a meeting that occurred when they were not working. Each of these demographics wanted a meeting in downtown Kingsport, a location that would also allow first shift downtown business employees to attend during their lunch hour. These meeting were held on a Wednesday at the Civic Auditorium and generally attracted 100 or more attendees. The more traditional evening meeting from 7:00–9:00 p.m. was held in the suburbs and attended by traditional first shift workers and others who lived in suburban Sullivan County. These were held on a Thursday evening in the gym of one of the large Baptist churches and were generally attended by approximately 200 or more individuals. TDOT's willingness to seek input from the public, be flexible, and adapt to the publics' life and work schedules resulted in larger turnouts at their meetings.

Sunday afternoon and all day meetings (Mr. Mike Lobdell, Georgia DOT, Atlanta, Georgia)
GDOT's Buford Highway project in Atlanta involved two major population groups, Hispanics and Asians (Koreans, Chinese, and Vietnamese). The Hispanics composed approximately 90% of those who lived, worked, and sent their children to school along Buford Highway. The Koreans, Chinese, and Vietnamese composed approximately 10% of the population and they owned or operated businesses along Buford Highway, but did not live along Buford Highway. Because of the language and cultural differences, two distinctly different public involvement plans were developed to engage these populations.

A citizens' advisory committee was formed with representatives of community-based organizations, faith-based organizations, major property owners, advocacy groups, local elected officials, and others. Two of the major property owners, Plaza Fiesta Shopping Center, and Mercado del Pueblo, and a community-based organization, Center for Pan Asian Community Services, volunteered to provide space at their locations for meetings, suggested appropriate times for meetings, and agreed to provide interpreters. Advertisements were placed in the ethnic and mainstream newspapers, and on ethnic and mainstream radio and television stations. In addition, flyers in English and Spanish were given to school children who attend the schools within the corridor and they were asked to take them home to their parents.

The first meeting for the Hispanic population was located in the northern portion of the project corridor at Plaza Fiesta, the largest shopping center in the project area, from 4:00–8:00 p.m. on a Sunday. The shopping center provided four tables with set ups and put them at each of the four entrances. They also provided eight bi-lingual interpreters who conducted 345 oral surveys. The second meeting for the Hispanic population was located in the southern portion of the project corridor at Mercado del Pueblo, the largest Hispanic grocery store in the project area. It was held from 2:00–6:00 p.m. on a Sunday. One table with a set-up was provided and located opposite the bakery. Four bi-lingual interpreters were provided and they conducted 168 oral surveys. The oral surveys were conducted by bi-lingual English/Spanish interpreters because many in the Hispanic community did not read Spanish or English. The surveys asked three questions, with the first being do you think there are too few, enough, or not enough sidewalks, street lights, bus shelters, signalized intersections, etc., on Buford Highway. The answers to this question would be used to influence roadway's redesign. The second question was what do you cross Buford Highway to get to—a grocery store, school, bank, medical clinic, etc. This question was asked in order to identify "desire lines" between one side of the roadway and another. Mid-block crossings would be studied to see if they were feasible given that signal-

ized intersections were more than one mile apart. The third question asked what would be the best way to get project information to them—which newspaper, radio station, television, church, etc. This question was asked because no personal contact information was requested in order not to frighten away those who might have questionable legal status.

The Center for Pan Asian Community Services set up appointments for personal meetings with three Korean, three Chinese, and three Vietnamese business owners and operators at their places of businesses. These meetings were scheduled and conducted by interpreters in each language. Each individual was interviewed using the same survey that had been conducted with the Hispanic population.

The results of the surveys were summarized and incorporated into the redesign of the project. The meetings were advertised in mainstream and ethnic newspapers, radio, and television; announced from church pulpits; and distributed as flyers left at each apartment complex (in English and Spanish), at every business (in English, Spanish, Korean, Chinese, and Vietnamese), and taken home by school students (in English and Spanish). In addition, posters in English and Spanish were left with businesses. For the first time, GDOT created temporary large metal roadside signs in English/Spanish, English/Korean, English/Chinese, and English/Vietnamese.

A 4-foot by 16-foot display of the corridor was created and photographs of landmarks such as Kentucky Fried Chicken, the Latin American Association, and Plaza Fiesta were located along the corridor so that the public could orient themselves. In addition, before and after visualizations were located on the displays to show what the proposed improvements would look like. Almost no written language was shown on the displays. Smaller boards were also provided in English/Spanish, English/Korean, English/Chinese, and English/Vietnamese. On these was an itemized list of improvements the public had identified in the oral surveys. Next to this list was a description of what was proposed for the corridor. This was done so that the public could see that their input had been incorporated into the roadway design.

A second public involvement event was scheduled at Plaza Fiesta on a Sunday from 4:00–8:00 p.m. for the Hispanic population to view the displays and talk with bi-lingual interpreters. More than several hundred people viewed the displays, talked with interpreters, and filled out comments sheets. A court recorder and a bi-lingual interpreter were also available.

The survey with the Korean, Chinese, and Vietnamese business owners and operators revealed that there was no one time period that was convenient for business owners and operators to attend a meeting; therefore, the meeting was scheduled for a Thursday at the Center for Pan Asian Community Services between 10:00 a.m. and 7:00 p.m. In the past, the Korean, Chinese, and Vietnamese communities had not responded to invitations by flyers and advertisements as they felt these were too impersonal. Therefore, Korean, Chinese, and Vietnamese interpreters were hired to build a telephone tree. They were asked to spend eight hours telephoning friends, family, businesses, local associations, civic clubs, and other similar groups and personally invite individuals and members to the public information open house at the Center for Pan Asian Community Services. More than 100 business owners and operators and members of the general public attended the meeting. Handouts were provided in English/Korean, English/Chinese, and English/Vietnamese; interpreters were available in all languages; and a court recorder with interpreters was also available.

Providing the public with transportation to a meeting (Mr. Peter Bond, Caltrans, Sacramento, California)
Within one of the California DOT's (Caltrans') project areas, there were several large retirement homes. In an attempt to engage this portion of the population, Caltrans provided vans to pick up the residents, bring them to the open house meeting, and return them to the retirement homes.

Holding open house meetings (Mr. Peter Bond, Caltrans, Sacramento, California)
Caltrans' version of an open house meeting brings all aspects of the project to one place under one roof in a location within the project area that is accessible to all. Typically nine Caltrans staff members attend and are stationed at tables located around the room. Each table is dedicated to a different aspect of the project such as environmental, design, right-of-way, construction, etc. By bringing together these individuals, the public can get all of their questions answered at one meeting. Generally it takes people 45 minutes or more to go around the room and stop at each table. Prior to the meeting, Caltrans advertised in the local newspapers and sometimes flyered or left door hangers throughout the project area. The advertisement and flyers provide basic information about project, as well as the date, time, and location of the open house meeting.

Leveraging Relationships

Partnering with others (Mr. Bob Parson, Michigan DOT, Lansing, Michigan)
One of the innovative things that Michigan DOT (MDOT) did as part of their State Long Range Plan was to partner with the state library of Michigan. The library helped MDOT with its outreach to traditionally underrepresented populations who frequented libraries and used the library's computers. MDOT conducted a marketing effort that appealed to the libraries and worked with the libraries that agreed to participate.

Piggybacking on a high school football game (Mr. Peter Bond, Caltrans, Sacramento, California)
California's Central Valley is like small town America, where football is a religion. In these small farming communities, high school football games are a major event that is attended by most of the community. Several times Caltrans has piggybacked on these high school football games and set up an information booth in the stadium during games. It has been an effective way to engage a large part of the population simply by knowing where they were going and following them. Caltrans has used this technique not only on specific projects, but also on updates of its California Transportation Plan. Prior to arriving, Caltrans distributes flyers or door hangers throughout the project area or sends information to churches and schools.

Identifying gatekeepers to Marysville's Hmong population (Mr. Peter Bond, Caltrans, Sacramento, California)
Caltrans' Third River bridge crossing replacement project was located in Marysville, a small town about 30 miles north of Sacramento. By analyzing preliminary demographic information, Caltrans' staff identified a large Hmong community living in the town. Prior to the first community information meeting, Caltrans sent out flyers to local residents to provide them with information about the project and let them know the date, time, and place for the meeting. During the meeting, the Caltrans project manager noticed that no one from the Hmong community was present. He asked others in the town about the Hmong and found out that they had escaped from Laos where the government had tried to exterminate them. It occurred to him that this experience might make the Hmong apprehensive about getting an invitation from a government entity such as Caltrans and reluctant to

attend a government-sponsored meeting. With the help of local residents, the project manager identified school teachers and clergy members that the Hmong trusted. He asked them to invite the Hmong community to the next community information meeting. Leveraging the relationships the school teachers and the clergy had with the Hmong resulted in some members of the Hmong community participating in the second community information meeting. Realizing that the middle-aged and older Hmong spoke mostly Hmong and very little English, Caltrans translated its follow-up invitations into Hmong. Engaging this community was possible because Caltrans understood the community's history, identified trusted caretakers, leveraged those relationships, and translated materials into Hmong.

Playing Interactive Games

Several fiscally constrained interactive games have been developed as public involvement tools. These are often used as part of the public involvement process for prioritizing elements of the following:

- Long range transportation plan,
- Short term transportation plans,
- Statewide transportation improvement programs,
- Transportation improvement programs, and
- Project specific plans.

These interactive games are used because they do the following:

- Engage the public beyond traditional "decision points" meetings,
- Educate the public on why and how transportation plans and programs are developed and their process,
- Educate the elected officials and professionals as to the perceived needs of the public,
- Provide concrete examples of desired projects,
- Avoid lecturing to the public, and
- Ensure active/true public involvement and allow immediate hands-on participation.

These interactive games offer a number of advantages over traditional public involvement such as the following:

- Leveling the playing field by giving every resident the same amount of money and influence;
- Eliminating the conflict between the public and the agency by requiring the public to reach a consensus among themselves;
- Relying on almost no written information so all residents, including the low literate, limited English proficient, and visually impaired can play;
- Providing project-specific recommendations;
- Constructing maps that visually document the residents' transportation choices;
- Letting residents explain their choices to others;
- Including a mechanism to rank their choices under fiscally constrained conditions;
- Accommodating any number of residents; and
- Taking approximately one to two hours to play.

Charlotte County/Punta Gorda MPO's Strings and Ribbons (Ms. Lisa Beaver and Ms. Nancy Wagner, Punta Gorda, Florida)

In 1998, the Charlotte County/Punta Gorda (Florida) MPO staff created the original strings and ribbons game. Its name comes from the different colors of string and ribbon used to represent different transportation improvements. Red string represented a four-foot sidewalk, and blue string a six-foot sidewalk. These materials were used because of the MPO had limited funds to spend and string and ribbon were inexpensive and could easily be glued to maps. The MPO wanted to use the interactive game to accomplish the following:

- Increase the number and diversity of participants in the regional planning process,
- Make the process more interesting and enjoyable for both their staff and the public,
- Transfer complicated information more easily between their staff and the public, and
- Identify specific needs in the context of cost and available revenue for their 1998 Transportation Improvement Plan.

The MPO found that the standard way of doing things wasn't working, wasn't any fun, and as a result no one showed up for their meetings. Using strings and ribbons, they created a game that was low tech, low cost, lots of fun, and people wanted to play. The participants could buy roads of various types and sizes, bridges of various widths, different bus transit services, variable width sidewalks, trails, bus shelters, traffic signals, buses and drivers, landscaping, and other features. As a result, the following happened:

- The number of participants increased.
- The diversity of participants increased,
- The events were more fun for both the public and the MPO staff, and
- Complicated information was easily transferred between the public and staff.

The Center for Neighborhood Technology's Transopoly, Neighborhood Transopoly, and eTransopoly (Ms. Jacky Grimshaw, Center for Neighborhood Technology, Chicago, Illinois)

In 2001, Chicago's Center for Neighborhood Technology created a trio of strings and ribbons offshoots called "Transopoly, Neighborhood Transopoly, and eTransopoly." This non-profit advocacy group utilized Transopoly, a game played with ribbons as part of their Long Range Transportation Plan process. The game documented the public's suggested inputs to the Long Range Transportation Plan, which then was sent to the Chicago Metropolitan Agency for Planning. In past years information had been collected at small group meetings held throughout the area. From this information, a series of small group reports was drafted and returned to the game players for them to verify that their vision, values, problems, and solutions had been correctly stated. Once public approval was obtained an area plan was prepared. After all of the area plans were completed, one overreaching plan was created for the region. The game has been played with residents who could not read, did not speak English, and were hearing and visually impaired.

Volusia County MPO's Long Range Transportation Plan Version (Mr. Karl Welzenbach, Volusia County MPO, Daytona Beach, Florida)

In 2004, the Volusia County (Florida) MPO used a variation of strings and ribbons to promote public involvement in its 2025 Long Range Transportation Plan (http:www.vcmpo2025.com/input.html). The MPO played games at more than 30 different locations, engaged more that 691 people, and identified more than 1,900 projects for consideration. The Volusia County MPO displayed each map by date of session on its website and took the improvements identified by the public and prioritized them based on how frequently an improvement was suggested. The MPO defined a "citizens Long Range Transportation Plan alternative" by taking the Long Range Transportation Plan budget

and applying it to this prioritized improvements list until the budget was expended. This list was then given to the MPO Board and modeled along with other plans. The list of groups that played the game included, but was not limited to, the following:

- High school and college students,
- Hispanic associations,
- Housing authority residents,
- Emergency response personnel,
- Bicycle and walking clubs,
- Senior groups,
- Faith-based organizations,
- Visually impaired groups,
- Municipal employees,
- Friends of the library,
- School board transportation department employees, and
- Members of the general public.

As a result, interest in the MPO process increased, participation at the MPO meetings increased, the game educated the public to the costs of transportation improvements, and the MPO was so pleased with the results that it plans to use strings and ribbons for their next Long Range Transportation Plan update process.

The Bluegrass Area Development District's Bluegrass Monopoly (Mr. Bruce Duncan, Bluegrass Area Development District, Lexington, Kentucky)
In 2005, Kentucky's 10-county Barren River Area Development District (ADD) and 17-county Bluegrass ADD prioritized their unscheduled transportation needs projects. The Barren River ADD had identified a total of 81 unscheduled needs projects valued at $500 million, but only had a $166 million budget. More than 30 representatives from the 10-county regional transportation committee gathered in Bowling Green and played the game for almost two hours. As a result of the session, one of the county judges in attendance used the game in her county for local project prioritization.

The Bluegrass ADD had a similar list of 330 unscheduled needs projects valued at $4.8 billion, but only had a $1.6 billion budget. More than 80 representatives from the 17-county regional transportation committee met in Lexington and played the game for almost three hours. Prior to using the strings and ribbon game, the Bluegrass ADD had sent each regional transportation committee member a list of the unscheduled needs projects and asked them individually to select which projects they thought were most important. By bringing all of the committee members together at one place and at one time, participants completed the process faster, were able to select their "pet" projects, contributed to multi-county connector projects they never would have known were important to others in the region, identified their unscheduled needs projects in less than a day, and had fun. The Bluegrass ADD was so pleased with the response and results they created a DVD entitled "Bluegrass Monopoly" that described the event and sent copies to the state's other area development districts and counties encouraging them to use the game. The Bluegrass ADD found playing "Bluegrass Monopoly" made prioritizing their unscheduled needs project easier and quicker. By using play money, they found that everyone understood the costs of the projects and just how far their funding would go.

Miami–Dade County MPO's blocks and ribbons (Ms. Elizabeth Rockwell, Miami–Dade County MPO, Miami, Florida)
In 2008, the Miami–Dade County MPO used a game called "Blocks and Ribbons." The game increased public participation in the regional planning process from only 24 people several years ago to almost 500. The MPO plans to expand the number of venues and increase the number of events for its future transportation projects.

Taking the Time to Sit and Listen

Small projects need public involvement too (Ms. Jeanette Wilson, Indiana DOT, Indianapolis, Indiana)
Indiana DOT (InDOT) had a simple resurfacing project going through Advance, a small town of approximately 400 to 500 people. Because this was a small project, there had been no real public involvement process. Notices were sent to churches and posted throughout the town to let the residents know that there would be a public meeting on a certain night at a local small church. The church, located on the main road, had been chosen for the meeting location because there really was no other place in town to meet. InDOT staff, its public involvement consultant, and its resurfacing consultant went to Advance to meet with the local residents about the proposed resurfacing. As expected, there was a turnout of about 40 people.

Going into the meeting InDOT's goal was to separate the people into smaller groups and have a team member sit at each table and talk one-on-one with the locals to see what they had heard, what their fears were, and what they would like to see. InDOT gave out fake dollar bills to the public, defined the project's budget, and asked them what they wanted to spend it on. What did they want to see in landscaping? What did they want to see on utilities? Did they want new sidewalks? A board was put up with a list of the different amenities that the public could choose from, and the public was asked to pick what they wanted as long as it did not go over the project's budget.

Before going to the meeting, InDOT had thought the public would be upset about the old trees along the road that would have to come down. The trees were at the point where they were being destructive and their root systems were tearing up the sidewalks. In talking with the public during the meeting, it became apparent that the public really wasn't that upset about losing the trees. They didn't like the grass strip between the curb and the sidewalk. Instead, they would rather have the sidewalk next to the back of the curb and have the grass strip on their side of the sidewalk. They felt that it was more difficult for them to maintain the grass strip when it was between the sidewalk and the street.

The other thing that InDOT thought would happen was that people would be pretty comfortable talking in front of each other given that Advance was such a small town. Instead, everyone was quiet until they broke up into the smaller groups and then they started talking. They admitted that even though they knew each other they were afraid to voice their opinions in front because some people wanted their utility work done, others didn't, while some wanted more ADA compliance, others didn't. Separating the residents into smaller groups at tables turned out to be a positive thing. Since then, this technique has been used on several other projects with fairly good results. Giving people an opportunity to sit down and talk one-on-one allowed them to express themselves without fear, increase participation, and provide InDOT with valuable information.

Utilizing Public Involvement Programs

Creating the Community Characteristics Program (Ms. Elizabeth Rockwell, Miami–Dade County MPO, Miami, Florida)
Approximately five years ago, the Miami–Dade County MPO hired Florida International University's geographic information

system (GIS) lab to collaborate with them and create the MPO's Community Characteristics Program (http://mpoportal.fiu.edu). This is an interactive, web-based GIS system designed for city planners and project managers to use to generate customized demographics for project-related reports of any selected area within Miami–Dade County. In addition, this tool helps users determine appropriate public involvement strategies for identified targeted populations. A tutorial is also provided at this site.

The first component of the Community Characteristics Program is interactive mapping. This web-based GIS program allows a user to input a project and its limits (including the ability to specify a buffer width) into the database or onto the screen and then conduct a search. It produces census data (based on census block groups) and allows different demographics in the communities to be queried. Also, it produces a report on the demographics of that community and identifies locations within the community where meetings can be held that are central and local to the community such as churches or community centers. This information generally forms the basis of its public involvement plans.

In addition to the GIS component and the demographic report component, the user can take the initial information and go to the second component of the Community Characteristics Program known as the community background report. Currently the MPO has more than 90 community background reports for the various communities within Dade County. Included in the community background report is the community's development history, the boundary of the community, the attitudes of those in that community toward transportation, the transportation projects that have been implemented in that community, and whether there were favorable or unfavorable attitudes toward those projects. The MPO is currently working on adding the names of formal and informal leaders and their association with political parties to those communities.

The MPO first started creating community background reports for the 35 municipalities in Dade County. Having completed that task, the MPO began creating community background reports for the 20 major neighborhoods in the unincorporated areas of Dade County. Then the MPO went back into the municipalities and the different neighborhoods within the municipalities. For instance, the city of Miami has Coconut Grove, Downtown Miami, the Brickle area, Overtown, and Liberty City and within those communities there are even smaller neighborhoods. This allowed the MPO to go from the micro level to the macro level and they have since been trying to identify all of the possible little niches and neighborhoods in the county. To date, the MPO has completed community background reports on more than 90 neighborhoods. This year the MPO will attempt to identify another 20 neighborhoods. At this rate, the MPO expects to have community background reports for 150 or more neighborhoods within the next two years and beyond that to expand this to include new neighborhoods as they are created. The community background reports provide an array of information about each community including the following:

- Physical boundaries,
- History,
- Community dynamics (selected census data), and
- Sources of information.

By using the first two components of the Community Characteristics Program, the user should begin to have a multidimensional picture of the neighborhoods.

The third component of the Community Characteristics Report is public involvement strategies. The public involvement strategies are a compilation of best practices from across the country. It is updated as other best practices are identified. These best practices or public involvement strategies are put into the MPO's database and sorted by demographic type. They have public information strategies for the following demographic groups:

- Age (seniors, working-age adults, and youth),
- Disability (hearing impaired, sight impaired, physically challenged, and other),
- Education (college education, high school diploma, and no high school diploma),
- Income (low income and middle/affluent),
- Language (English, Spanish, and Creole),
- Race and ethnicity, and
- Vehicle ownership (non-vehicle ownership and vehicle ownership).

The user can click on "seniors" under "age" and will be directed to a page that provides "general, innovative, and technology" categories. Across from them is the type of strategy identified as "educational, promotional, and civic engagement." Click on "mailing lists" under the "general" heading and be taken to another page that provides the following:

- A description of the strategy,
- Recommended target groups for the strategy,
- Implementation guidelines and suggestions for the strategy,
- Lessons learned/challenges in using the strategy, and
- Case studies of using the strategy.

". . . and Justice for All" (Ms. Jean Merconi, Delaware Valley Regional Planning Commission, Philadelphia, Pennsylvania)

The Delaware Valley Regional Planning Commission (DVRPC) published ". . . and Justice for All" in September 2001, as their strategy for the fair treatment and meaningful involvement of all people. The DVRPC is the MPO for the nine-county, bi-state Philadelphia–Camden–Trenton (PA/NJ) region and has an Environmental Justice Technical Advisory Committee and an Environmental Justice Participation Task Force.

The DVRPC developed its environmental justice (EJ) assessment to mitigate potential direct and disparate impacts of its plans, programs, and planning process on defined minority, handicapped, and low income populations in the Delaware Valley region. The report provides background information about what EJ is; summarizes DVRPC's existing EJ-related plans, policies, and public involvement activities; and describes a quantitative and qualitative methodology for evaluating the long-range plan, the Transportation Improvement Program (TIP), and other programs. It proposed recommendations for policies and implementation strategies to enhance DVRPC's EJ responsibilities including an annual monitoring and evaluation process to ensure that the policies and implementation strategies remain effective. The qualitative review of the DVRPC's existing plans and programs included a summary of EJ-related policies and goals from the adopted long-range plan (both the Year 2020 Plan and their Year 2025 Plan), the adopted Year 2025 Regional Airport Systems Plan, and the Regional Job Access and Reverse Commute Transportation Plan from 1999.

Other planning documents reviewed included the Southeastern Pennsylvania and Southern New Jersey Bicycle and Pedestrian Mobility Plans, a study of regional elderly mobility needs, the regional multimodal TIP, and the annual Unified Planning

Work Program (UPWP). The more technical quantitative methodology relied primarily on available census data, analyzed at the nine-county, bi-state, regional scale by municipality, or census tract for various indicators of disadvantage. These categories included concentrations of the following:

- Hispanic minorities,
- Non-Hispanic minorities,
- The elderly,
- The handicapped,
- Carless households, and
- Number of households in poverty.

The number of factors that applied in a given census tract or municipality represented the "Degrees of Disadvantage." In addition, "Quality of Life Factors" were defined and included the presence or absence of the following:

- Arterial highways,
- Transit service,
- Hospitals,
- Employment centers, and
- Job access/reverse commute transportation services.

The resulting "Degrees of Disadvantage" and "Quality of Life Factors" maps were then combined to reflect the positive and negative influences of the region's infrastructure systems (transit and highway access) and key services. These factors and data sources were expanded over time as the 2000 census data were released and will be reevaluated as 2010 census information is released. The Regional Transportation Plan and the TIP were evaluated separately using the combined map of "Degrees of Disadvantage" and "Quality of Life Factors" factors as an overlay. The resulting maps were evaluated from a geographic perspective (but also incorporating service and quality factors) to identify gaps or areas of low quality service. Such areas could become the focus of additional actions or mitigation efforts through future DVRPC planning and implementation activities, working with either county and local officials or the public. The identified disadvantaged areas also served as an "early warning" of the need to do additional local area EJ analysis as part of any subsequent environmental assessment of individual projects.

In general, the DVRPC's Year 2025 Transportation Plan and TIP were geographically extensive in terms of the scope and scale of their recommended projects and implementation funding. Few gaps or areas of lower quality service were found using the defined overlay methodology. In fact, many of the areas having four or more degrees of disadvantage were well-located with respect to planned and programmed transportation improvements and public transit service. However, most of the region's outlying, rural areas were not well served by public transportation, were located further from the region's major employment centers, and had lower "Quality of Life Factors" than the more urban and suburban communities. Where possible, one way to enhance the transportation accessibility of such areas was to focus on introducing new or additional paratransit service and expanding job access services that connected outlying areas to nearby employment centers or the region's core transit network. DVRPC has adopted its 2030 Long Range Plan called *Destination 2030: A Vision for the Future,* and is working on their 2035 Long Range Plan called *Connections—The Regional Plan for a Sustainable Future.* The principles espoused by ". . . and Justice for All" have been integral to both plans. A copy of ". . . and Justice for All" can be found on DVRPC's website http://www.dvrpc.org/planning/regional/ej/chap1.htm.

Abbreviations used without definitions in TRB publications:

AAAE	American Association of Airport Executives
AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
ACI–NA	Airports Council International–North America
ACRP	Airport Cooperative Research Program
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATA	Air Transport Association
ATA	American Trucking Associations
CTAA	Community Transportation Association of America
CTBSSP	Commercial Truck and Bus Safety Synthesis Program
DHS	Department of Homeland Security
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HMCRP	Hazardous Materials Cooperative Research Program
IEEE	Institute of Electrical and Electronics Engineers
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
NASA	National Aeronautics and Space Administration
NASAO	National Association of State Aviation Officials
NCFRP	National Cooperative Freight Research Program
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
NTSB	National Transportation Safety Board
PHMSA	Pipeline and Hazardous Materials Safety Administration
RITA	Research and Innovative Technology Administration
SAE	Society of Automotive Engineers
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
TCRP	Transit Cooperative Research Program
TEA-21	Transportation Equity Act for the 21st Century (1998)
TRB	Transportation Research Board
TSA	Transportation Security Administration
U.S.DOT	United States Department of Transportation