

Innovative Public Involvement Technology

Research and Implementation Study

CDOT Division of Transportation Development



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GROUP

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INNOVATIVE PUBLIC INVOLVEMENT TECHNOLOGY RESEARCH AND IMPLEMENTATION STUDY

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TABLE OF CONTENTS

| | <u>Page</u> |
|---|-------------|
| INTRODUCTION | 1 |
| Background and Purpose | 1 |
| Process | 1 |
| PUBLIC INVOLVEMENT GOALS AND OBJECTIVES..... | 3 |
| INTERVIEWS WITH COLORADO MPOs AND CDOT REGIONAL PLANNERS | 4 |
| Gaps in Public Outreach..... | 5 |
| Public Outreach Successes..... | 6 |
| PEER INTERVIEWS..... | 7 |
| Technology-Based Tools Currently in Use | 8 |
| Affect on Traditional Public Involvement Effort..... | 8 |
| Target Audience | 8 |
| Barriers to Implementation | 10 |
| Technology-Based Tools under Consideration | 10 |
| RESEARCH ON TECHNOLOGY-BASED TOOLS | 12 |
| EVALUATION OF TECHNOLOGY-BASED TOOLS | 14 |
| Evaluation Criteria | 14 |
| Evaluation Matrix | 15 |
| Scoring Methodology..... | 17 |
| RECOMMENDATIONS AND IMPLEMENTATION PLAN..... | 21 |
| 2040 Regional and Statewide Transportation Plan Updates | 21 |
| 2035 Regional and Statewide Transportation Plan Amendments..... | 23 |

LIST OF TABLES

| | | |
|----------|---|----|
| Table 1. | Colorado MPO and CDOT Region Contacts | 4 |
| Table 2. | Gaps in Public Outreach | 5 |
| Table 3. | Peer Interview Contacts..... | 7 |
| Table 4. | Technology-Based Tools Currently in Use | 9 |
| Table 5. | Technology-Based Tools under Consideration..... | 11 |
| Table 6. | Technology-Based Tools Included in Research | 12 |
| Table 7. | Evaluation Matrix | 16 |

LIST OF APPENDICES

| | |
|-------------|--|
| APPENDIX A. | INTERVIEWS WITH COLORADO MPOs AND CDOT REGIONAL PLANNERS |
| APPENDIX B. | PEER INTERVIEWS |
| APPENDIX C. | RESEARCH ON TECHNOLOGY BASED-TOOLS |

INTRODUCTION

Background and Purpose

Since the Colorado Department of Transportation (CDOT) began developing long range transportation plans, public involvement has been an integral component of the planning process. The public participation process for statewide transportation planning is authorized by and meets the requirements of 23 CFR 450.210 and is intended to complement and not replace local and regional public participation processes. For a regional and/or statewide transportation plan to be useful, it must fairly reflect the desires and values of the area's constituents. Public outreach has historically relied upon traditional techniques such as public open houses and presentations at meetings of elected officials. During the 2035 planning process, CDOT used state-of-the-art interactive voting keypads to solicit input on the public's sentiment and priorities relating to transportation issues in each region. The electronic keypads were viewed as a successful public involvement technique, and now CDOT wishes to expand their use of technology in the public involvement process for long range transportation planning.

The CDOT Division of Transportation Development initiated this research study with the primary goal of identifying technology-based tools to be incorporated in the public outreach program for the 2040 Regional and Statewide Transportation Plan updates. Additionally, this study intended to address ideas and concepts that resulted from the 2035 Plan debrief sessions hosted in the spring of 2008. The goal of the long range plan debrief was to discuss and obtain feedback on improvements for both the regional and statewide 2035 transportation plan process. Technological tools that could be used to engage the public and create a buzz about transportation include social networking sites, mapping applications, user-generated content websites, and online and interactive meeting tools.

This report documents the research conducted and the process used to evaluate and recommend technology-based tools.

Process

The key tasks involved in this research study included:

- ▶ Establishing goals and objectives for public involvement in the long range transportation planning process.
- ▶ Identifying gaps in the public outreach process through interviews with Colorado Metropolitan Planning Organizations (MPOs) and CDOT Regional Planners.
- ▶ Conducting peer interviews with progressive state transportation departments and MPOs to understand the public involvement technologies they use and the level of success they have had in using these technologies.
- ▶ Researching technology-based public involvement tools in order to document their utility and understand their limitations.
- ▶ Developing evaluation criteria and identifying how well each tool addresses the criteria.
- ▶ Recommending technology-based public involvement tools for implementation during the 2040 plan update.
- ▶ Developing a short list of tools to be implemented as a pilot project for the 2035 plan amendment process.

- ▶ Preparing an implementation plan that suggests policies to govern the use of technology-based public outreach tools in the long range planning process.

This research study has been completed with oversight from a Project Management Team, consisting of key CDOT staff from the Statewide Planning Unit, the Office of Public Information, and the Information Technology Office Web Team.

PUBLIC INVOLVEMENT GOALS AND OBJECTIVES

The following is a list of goals and objectives for the public outreach component of the Regional and Statewide Transportation Planning process. These goals and objectives have been developed based on feedback from the 2035 Plan debriefing session, along with input from the Public Involvement Technology Research Project Management Team, staff members from Colorado's MPOs and CDOT Regional Planners. These goals and objectives serve as an important component in evaluating the applicability of various public involvement technologies.

Goal 1: Raise the level of awareness of the transportation planning process and the importance of transportation to everyday life

Objectives:

- ▶ Develop programs and techniques to advise and educate the public about the transportation planning process and the increasingly challenging funding picture
- ▶ Engage active community, advocacy, and environmental groups that may have an interest in transportation's role in a community or region

Goal 2: Gather and understand the important issues of transportation users for consideration in shaping transportation solutions

Objectives:

- ▶ Assist in increasing citizens' transportation knowledge and opportunities to help influence planning-level decisions

Goal 3: Provide the public with new and innovative techniques for continuous involvement throughout the transportation planning process and develop creative and innovative ways to help make long range planning more meaningful to the public

Objectives:

- ▶ Offer early and continuous public outreach opportunities throughout the planning process
- ▶ Pursue opportunities to join with other community or regional events and meetings
- ▶ Expand the use of web-based outreach and participation
- ▶ Allow citizens the opportunity to provide input at their convenience

Goal 4: Increase the level and broaden the demographic composition of public participation in transportation planning to ensure a cross-section of Colorado's population is able to share various thoughts and ideas throughout the process

Objectives:

- ▶ Increase the number of citizens who contribute/provide input into the process
- ▶ Identify and involve traditionally underserved populations (minority, low-income, elderly, disabled, Tribal Governments, and low literacy and limited English proficiency populations)
- ▶ Increase the participation of students and young professionals

INTERVIEWS WITH COLORADO MPOS AND CDOT REGIONAL PLANNERS

The project team conducted phone interviews with each of the five MPOs in Colorado and regional planners from CDOT Regions 1 – 5 who represent the rural Transportation Planning Regions (TPRs). CDOT Region 6 is entirely contained within the Denver Regional Council of Governments’ (DRCOG) boundary. Since DRCOG covers the planning process and public outreach efforts for the Denver area Regional Transportation Plan, Region 6 planners were not interviewed. **Table 1** provides a list of the contacts from each of the MPOs and CDOT Regions.

Table 1. Colorado MPO and CDOT Region Contacts

| Agency | Contact Name(s) | Title | Interview Date |
|------------------|---|---|-----------------------|
| DRCOG | Steve Cook Kitty Clemens Jill Locantore | MPO Planning Program Manager Policy Development and Comm. Dir. Planning Communications Specialist | 4/22/10 |
| NFR MPO | Suzette Mallette | Regional Transportation Planning Director | 4/15/10 |
| Grand Valley MPO | Ken Simms | Senior Transportation Planner | 4/15/10 |
| PACOG | Bill Moore | MPO Administrator | 4/16/10 |
| PPACG | Craig Casper | Transportation Director | 4/20/10 |
| Region 1 Staff | Darin Stavish | Regional Planner | 4/20/10 |
| Region 2 Staff | Wendy Pettit | Regional Planner | 4/22/10 |
| Region 3 Staff | Mark Rogers | Regional Planner | 4/16/10 |
| Region 4 Staff | Karen Schneiders | Regional Planner | 4/22/10 |
| Region 5 Staff | Laurie Blanz | Regional Planner | 4/15/10 |

The Colorado MPO staff and CDOT Regional Planners were asked the questions listed below and the subsequent sections summarize the interviews:

- ▶ Do the Public Involvement Goals and Objectives reflect the outreach goals of your region(s)? Are there additional goals and/or objectives that are specific to your region(s)?
- ▶ What groups have you successfully reached through your Regional Transportation Plan public outreach process?
- ▶ What groups have you not been able to engage in the planning process but wish to?
- ▶ Which, if any, technology-based public outreach tools have you used for regional transportation planning or for other projects? Were they successful?

Gaps in Public Outreach

The primary purpose of these initial interviews was to understand the groups that have been reached historically through the regional public involvement process and those that have not. As summarized in **Table 2**, and in more detail in **Appendix A**, this information varies considerably from one region to the next. Understanding the gaps in public outreach is helpful in evaluating whether a public involvement technique is applicable throughout Colorado and whether it would be beneficial in reaching those groups that have been difficult to reach in the past. Five of the ten interviewees identified a need to reach out to the general public. The freight industry, the business and development community, and students were identified as key stakeholders who have not been reached historically. Four of the ten interviewees acknowledged a need to reach traditionally underserved populations (generally) or a specific population of the traditionally underserved (Latino, non-English speaking, elderly).

Table 2. Gaps in Public Outreach

| Agency | General Public | Freight Industry | Business and Development Community | Students | Traditionally Underserved | Latino Population | Non-English Speaking Population | Elderly |
|------------------|----------------|------------------|------------------------------------|----------|---------------------------|-------------------|---------------------------------|---------|
| DRCOG | | | ● | | ● | | | |
| NFR MPO | ● | | | | | | | |
| Grand Valley MPO | | | | ● | | ● | | |
| PACOG | | ● | | | | | | |
| PPACG | ● | | | | | | | |
| Region 1 Staff | | | | ● | | | ● | ● |
| Region 2 Staff | ● | | | | | | | ● |
| Region 3 Staff | ● | | | | | | | |
| Region 4 Staff | ● | | | | | | | |
| Region 5 Staff | | | ● | | | | | |

Based on the discussions with the Colorado MPO staff and CDOT Regional Planners, it is apparent that there is a desire to generally reach and receive input from more people (the general public) during the transportation planning process. There is also a considerable interest from the regions in reaching traditionally underserved populations.

Public Outreach Successes

Several of the MPOs and CDOT Regional Planners mentioned the public outreach mechanisms that have been successful in previous planning processes. The following is a brief summary of the traditional tools that have been particularly successful for more than one region:

- ▶ Community outreach at special events, public fairs, farmers' markets, etc. (PACOG, PPACG, Grand Valley MPO, DRCOG)
- ▶ Combined with project specific transportation meetings (PACOG, DRCOG, Region 2)
- ▶ "Money Game" (PPACG, NFRMPO)
- ▶ Keypad polling at open houses and meetings of elected officials (Grand Valley MPO, Region 5, NFR MPO)
- ▶ Planning liaisons used in 2030 Regional Transportation Plans (RTPs) for small communities (Region 5, NFR MPO)

Several of Colorado's MPOs have been using technology-based public outreach tools; those are summarized in the following section (Peer Interviews).

PEER INTERVIEWS

The project team conducted phone interviews with state transportation departments and MPOs outside of Colorado that have been identified as being progressive with regard to their public outreach processes. Five state transportation departments and three MPOs were interviewed, as shown in **Table 3**.

Table 3. Peer Interview Contacts

| Agency | Contact Name(s) | Title | Interview Date |
|--|--------------------------------|---|----------------|
| California Department of Transportation (Caltrans) | Del Deletetsky Nathan Smith | Public Participation Program Mgr Chief, Office of State Planning | 4/23/10 |
| Utah Department of Transportation (UDOT) | Megan James | Systems Planning and Programming Public Involvement Manager | 5/3/10 |
| New Jersey Department of Transportation (NJDOT) | Brent Barnes | Director of Statewide Planning | 4/22/10 |
| Capital Area MPO (CAMPO), Austin, TX | Greg Griffin | Senior Planner, Public Participation | 4/16/10 |
| Metropolitan Transportation Commission (MTC), Bay Area | Ellen Griffin | Regional Planner | 4/28/10 |
| Sacramento Area Council of Governments (SACOG) | Monica Hernandez | Community Outreach Specialist | 6/22/10 |
| Pennsylvania Department of Transportation (PennDOT) | Brian Wall | Transportation Planning Specialist Supervisor | 6/25/10 |
| Oregon Department of Transportation (ODOT) | Robert Maestre | Long Range Planning Manager | 7/2/10 |

The agencies were asked interview questions to gain a better understanding of:

- ▶ The traditional and technology-based public outreach tools they are currently using, those that they have considered, and those that they plan to implement in the future.
- ▶ The target audience for technology-based outreach tools.
- ▶ The level of success and cost-effectiveness of the tools.
- ▶ The downfalls or barriers to implementation.
- ▶ Whether they were able to implement the tools themselves (as opposed to hiring a consultant) and whether they cut back on traditional public outreach efforts when implementing technology-based tools.

The subsequent sections summarize the interviews, and detailed interview summaries are provided in **Appendix B**.

Technology-Based Tools Currently in Use

The DOTs and MPOs interviewed are currently using a variety of technology-based public outreach tools. **Table 4** summarizes the tools being used (or in a few cases will be implemented soon) by the eight DOTs and MPOs outside of Colorado. Since each of the five MPOs in Colorado is currently using some level of technology-based public outreach, they are also listed in the table. The agencies were asked to rate the success of each tool on a scale of 1 to 5 (with 5 being the most successful) and the cost effectiveness of each tool on a scale of 1 to 5 (with 5 being the most cost effective).

As shown, all agencies interviewed use traditional methods of public outreach such as public meetings, workshops, focus groups, and presentations to local elected officials. Of the technology-based tools, all of the 13 agencies use Websites, the most frequently used tool. Six agencies use online surveys, five use electronic voting keypads, five use online videos or webcasts, four use Facebook, and four use online scenario games. Other technology-based tools such as Twitter and YouTube are used only by one or two of the agencies.

Affect on Traditional Public Involvement Effort

Regarding the implementation of innovative tools, each agency was asked whether traditional outreach methods were cut back when the new tool(s) were introduced. Every agency answered that the technology-based tools are being used to supplement traditional public outreach methods; the traditional outreach effort has not been reduced or changed.

Target Audience

When asked about the audience being targeted through use of technology-based public outreach, agencies voiced the following:

- ▶ Internet-based tools only have the potential to reach about half of the population and do not reach the lower income and traditionally underserved populations. (NJDOT)
- ▶ The goal in implementing technology-based tools was to reach beyond the individuals who typically attend traditional public meetings. (MTC)
- ▶ The intent was to target a younger audience, including students at the area Universities. Data from an online questionnaire indicate that the participants generally represent the population, with a slight bias toward individuals with higher education levels and higher income levels. (CAMPO)
- ▶ Bicycle and pedestrian advocates tend to have a strong voice in the planning process in Utah; UDOT successfully reached beyond these groups by using technology-based outreach. (UDOT)
- ▶ The goal in implementing technology-based tools was to target younger demographics who are more tech-savvy. (Caltrans)

Table 4. Technology-Based Tools Currently in Use

| Agency | Traditional Methods | | | Electronic Voting Keypads | | | Website | | | Web-based Survey | | | On-line Scenario Game | | | On-line Videos/Webcasts/Podcasts | | | Facebook | | | Twitter | | | YouTube | | | Google Earth Mapping | | | User-Generated Content Mapping | | | Wiki Tool | | | Craiglist | | |
|------------------|---------------------|--------------------|---|---------------------------|--------------------|---|---------|--------------------|---|------------------|--------------------|---|-----------------------|--------------------|---|----------------------------------|--------------------|---|----------|--------------------|---|---------|--------------------|---|---------|--------------------|---|----------------------|--------------------|---|--------------------------------|--------------------|--|-----------|--|--|-----------|--|--|
| | Success | Cost Effectiveness | | Success | Cost Effectiveness | | Success | Cost Effectiveness | | Success | Cost Effectiveness | | Success | Cost Effectiveness | | Success | Cost Effectiveness | | Success | Cost Effectiveness | | Success | Cost Effectiveness | | Success | Cost Effectiveness | | Success | Cost Effectiveness | | Success | Cost Effectiveness | | | | | | | |
| NJDOT | ✓ | 3 | 4 | | | | ✓ | | | ✓ | 3 | 4 | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MTC | ✓ | 3 | 2 | ✓ | | | ✓ | 5 | 3 | ✓ | 4 | 5 | ✓ | 5 | 2 | ✓ | | | ✓ | | | | | | | | | | | | | | | | | | | | |
| CAMPO | ✓ | | | | | | ✓ | | | ✓ | 5 | 5 | | | | ✓ | 3 | 5 | ✓ | 3 | 5 | ✓ | 4 | 5 | | | ✓ | | | | | | | | | | | | |
| UDOT | ✓ | 3 | - | | | | ✓ | | | | | | | | | | | | | | | | | ✓ | 5 | - | ✓ | | | | | | | | | | | | |
| Caltrans | ✓ | 4 | 3 | ✓ | 4 | 3 | ✓ | 3 | 4 | ✓ | 5 | 5 | ✓ | | | ✓ | 4 | 5 | | | | | | | | | | | | | | ✓ | | | | | | | |
| SACOG | ✓ | | | | | | ✓ | | | | | | | | | ✓ | 5 | 5 | | | | | | | | | | | | ✓ | 3 | 4 | | | | | | | |
| PennDOT | ✓ | 4 | 4 | ✓ | 5 | 3 | ✓ | | | ✓ | 5 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ODOT | ✓ | 3 | 3 | | | | ✓ | 3 | | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | | | | | | | | | | | | | | | |
| PACOG | ✓ | | | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PPACG | ✓ | | | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Grand Valley MPO | ✓ | | | ✓ | | | ✓ | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRCOG | ✓ | | | | | | ✓ | | | | | | ✓ | | | | | | ✓ | | | | | | | | | | | | | | | | | | | | |
| NFR MPO | ✓ | | | ✓ | | | ✓ | | | | | | | | | | | | | | | | | ✓ | | | | | | | | | | | | | | | |

- ▶ Internet-based tools were implemented as a means for people living in outlying areas to have access to planning information even if they are not able to travel to traditional public meetings/workshops. (SACOG)
- ▶ The goal in establishing a Facebook page was to reach lifestyle and commute bicyclists. (SACOG)The Option Finder tool (electronic voting) was primarily used to get input from transportation professionals and other professionals whose industry relies heavily on the transportation system, statewide officials, MPO and RPO representatives, modal representatives, transit agencies, and local government representatives. (PennDOT)

Barriers to Implementation

Agencies identified the following barriers in implementing technology-based public outreach tools:

- ▶ Difficulty “selling” the benefits to DOT staff and local governments. There was some resistance from staff and local agencies who felt the cost and effort associated with implementing and maintaining technology-based tools would not be worth the [perceived limited] additional input. (NJDOT)
- ▶ Overall cost of many of the tools and the increasing demands and requirements. New tools take time and resources. (MTC)
- ▶ Many of the software tools/visualization techniques are more appropriate for project-specific planning efforts. (MTC)
- ▶ Social media tools could be biased toward younger individuals. (CAMPO)
- ▶ The tools do not reach the underserved and the elderly. (Caltrans)
- ▶ There were some negative perceptions that utilizing Facebook was unprofessional. (SACOG)
- ▶ Seven of the eight of the agencies interviewed indicated that there was some level of consultant assistance required to implement their innovative public outreach programs.

Technology-Based Tools under Consideration

Most of the agencies interviewed have considered or are considering the use of additional technology-based public outreach tools. **Table 5** provides a summary of those tools under consideration by each agency.

When asked about the barriers to implementing these tools, the agencies responding with the following:

- ▶ NJDOT noted cost and logistical challenges as reason for not yet implementing webinar town hall meetings.
- ▶ CAMPO stated that the main concern with using electronic voting keypads is that its success is dependent on the attendance at public meetings.
- ▶ Caltrans and NJDOT both mentioned that state agencies often prohibit the use of social networking.

- ▶ Staff time requirements (particularly for Twitter; for successful Twitter campaigns, tweets should be given at least twice a day). (SACOG, ODOT)

Table 5. Technology-Based Tools under Consideration

| Agency | Webinar Town Hall Meetings | Telephone Town Hall Meetings | YouTube | Vision Vessel Booth | Visualization Software | Blogs | Electronic Voting Keypads | Facebook | Twitter | Go-To Meeting | On-line Scenario Game | Web-based Survey |
|------------------|----------------------------|------------------------------|---------|---------------------|------------------------|-------|---------------------------|----------|---------|---------------|-----------------------|------------------|
| NJDOT | ✓ | | | | | | | | | | | |
| MTC | | | ✓ | ✓ | ✓ | ✓ | | | | | | |
| CAMPO | | | | | ✓ | | ✓ | | | | | |
| UDOT | | | | | | | | | | | | |
| Caltrans | | | | | | | | ✓ | ✓ | ✓ | | ✓ |
| SACOG | | | ✓ | | | | | | ✓ | | | |
| PennDOT | | | | | | | | | | | | |
| ODOT | | | | | | | | | | | | |
| PACOG | | | | | | | | ✓ | ✓ | | | |
| PPACG | | | | | | | | | | | ✓ | |
| Grand Valley MPO | | ✓ | | | | | | | | | | |
| DRCOG | | | | | | ✓ | | | | | | |
| NFR MPO | | | | | | | | | | | | |

RESEARCH ON TECHNOLOGY-BASED TOOLS

The project team conducted research on the technology-based public involvement tools that were identified through peer interviews, along with others identified by the Project Management Team. The purpose of the research was to provide an overview of each tool, clearly document its utility and limitations. The research focused on the following key characteristics of each technology:

- ▶ Amount and type of information conveyed
- ▶ Cost of implementation
- ▶ Ease of implementation
- ▶ Software/hardware requirements
- ▶ Current DOT/MPO uses
- ▶ Demographics of current users
- ▶ Compatibility with CDOT Cyber Security and Web Policies

Full documentation of the research is included in **Appendix C**, including hyperlinks to product or software websites and references. **Table 6** provides a list of the specific tools on which research has been conducted. Many of these tools reflect current trends; since technology is ever-changing and these specific tools may become dated quickly, the general category of tool has also been identified. A link to the appropriate page in **Appendix C** is also provided in the table.

Table 6. Technology-Based Tools Included in Research

| Specific Tool | General Category | Appendix C Link |
|---------------|-----------------------------|---------------------------|
| Blogs | Blog | Page C-1 |
| Connect Pro | Video Conferencing/Webinars | Page C-3 |
| Facebook | Social Media | Page C-5 |
| Google Earth | Mapping/GIS Applications | Page C-7 |
| Google Maps | Mapping/GIS Applications | Page C-10 |
| GoToMeeting | Video Conferencing/Webinars | Page C-12 |
| GovDelivery | Web Feed/Pushed Content | Page C-14 |
| MetroQuest | Online Scenario Testing | Page C-16 |
| MySpace | Social Media | Page C-18 |
| Podcasts | Audio/Video | Page C-20 |
| Reply | Electronic Voting Machines | Page C-22 |
| RSS | Web Feed/Pushed Content | Page C-23 |

| Specific Tool | General Category | Appendix C Link |
|----------------------|-----------------------------|---------------------------|
| Skype | Video Conferencing/Webinars | Page C-25 |
| Survey Monkey | Online Surveys | Page C-27 |
| Twitter | Micro-Blog | Page C-30 |
| Vision Vessel | Mobile Kiosks | Page C-32 |
| WebEx | Video Conferencing/Webinars | Page C-35 |
| Wiki | Collaborative Websites | Page C-37 |
| YouTube | Audio/Video | Page C-38 |

EVALUATION OF TECHNOLOGY-BASED TOOLS

After interviewing DOTs and MPOs and researching technology-based public outreach tools, the next task in this study was to evaluate the tools that were identified during earlier tasks. The purpose of the evaluation is to provide a comparison of the tools rather than to rank or prioritize them. The evaluation matrix is intended to be used not only for identifying appropriate tools for regional and statewide transportation planning, but also for other CDOT projects that necessitate a public outreach program. As the public outreach objectives and available budget will vary from project to project, the matrix may be used to identify tools that best meet the objectives and constraints of each specific project or outreach effort.

Evaluation Criteria

Working with the Project Management Team, a series of 16 evaluation criteria has been developed to assess and compare the technology-based tools. The first seven criteria listed below relate directly to one of CDOT's goals or objectives for regional and statewide planning public involvement.

1. Would the tool raise the level of awareness of the transportation planning process and the importance of transportation to everyday life?
2. Would the tool serve to gather input from the public and provide a better understanding of the important issues of transportation users and provide opportunities for citizens to help influence planning-level decisions?
3. Would the tool offer continuous public outreach opportunities throughout the planning process?
4. Would the tool expand the use of web-based outreach and participation?
5. Would the tool allow citizens the opportunity to provide input at their convenience?
6. Could the tool be used to better involve traditionally underserved populations?
7. Would the tool increase participation of students and young professionals?
8. Would the tool serve to disseminate information to the public? If so, what level of detail?
9. Would the tool provide opportunity for public input (as opposed to disseminating information)? If so, what level of detail?
10. Is the tool ubiquitous, accessible, and would it be easy for the public to use? (Assumes basic internet skills and access)
11. What are the costs and time requirements associated with implementing the tool (software and/or hardware costs, staff/consultant time)? And is the technology available?
12. What are the resources required to maintain/modify tool?
13. Is the tool consistent with CDOT's cyber security and web policies?

14. Could the tool be used by CDOT for other public involvement needs outside of Regional/Statewide Transportation Planning?
15. Is the tool compatible with other public outreach technologies and/or traditional public outreach tools?
16. Has the tool been successfully implemented by other DOTs or MPOs for use in transportation planning? (Note: this question is limited to those agencies interviewed through this research study)

Evaluation Matrix

Table 7 displays the results of the evaluation. The technology-based tools shown in the left-most column have been grouped into general categories. Because technology is ever evolving, the Project Management Team felt the evaluation should be based on these general categories rather than specific tools that may become obsolete in the near future. Examples of each category of tool are provided in the second column, most of which are described in detail in **Appendix C**.

Two categories of tools included in the matrix are not documented in the research: user-generated content and mobile applications.

- ▶ User-generated content is a fairly straightforward component of many websites; users can provide comments on articles or material provided on the website, often referred to as discussion boards.
- ▶ To date, few, if any public involvement mobile applications (“apps”) have been developed. Apps have become very popular, and new apps become available regularly. Because a public involvement mobile application is likely to be developed in the future, this tool has been included in the matrix. Many of the criteria could not be evaluated for this tool since an application does not exist. It is likely that a mobile app would be developed to specifically address many of the criteria outlined in the matrix.

Since most of the evaluation criteria are subjective in nature, each tool has been given either an empty circle, a half circle, or a full circle for each of the 16 evaluation criteria. An empty circle is least desirable, meaning that the tool would not meet the intent of the criterion. A half circle is moderately desirable; the tool would partially meet the intent of the criterion. A full circle is the most desirable, meaning that the tool would fully meet the

Table 7. Evaluation Matrix

| Tool | Examples | 1. Raise Level of Awareness/Educate | 2. Gather and Understand Important Issues from Public | 3. Offer Continuous Outreach | 4. Expand use of Web-based Outreach | 5. Allow Input at Public's Convenience | 6. Involve Traditionally Underserved Populations | 7. Increase Participation of Students and Young Professionals | 8. Level of Detail Disseminated to Public | 9. Level of Detail Received from Public | 10. Ease of Use/Ubiquity/Accessibility for User | 11. Cost/Time and Ease of Implementation | 12. Cost/Time to Maintain/Modify | 13. Consistency with CDOT Cyber Security and Web Policies | 14. Utility for CDOT outside of Regional & Statewide Planning | 15. Compatibility with Other Outreach Tools | 16. Successfully Implemented by Other Agencies |
|------------------------------|---------------------------------|-------------------------------------|---|------------------------------|-------------------------------------|--|--|---|---|---|---|--|----------------------------------|---|---|---|--|
| Micro-Blogs | Twitter | ○ | ○ | ● | ● | ◐ | ○ | ● | ◐ | ○ | ○ | ◐ | ◐ | ● | ● | ● | ◐ |
| Blogs | Blogger | ● | ○ | ● | ● | ◐ | ○ | ● | ● | ○ | ◐ | ◐ | ○ | ○ | ● | ● | ○ |
| Web Feeds/ Pushed Content | RSS Feeds Gov Delivery | ● | ○ | ● | ● | ◐ | ● | ● | ● | ○ | ○ | ● | ● | ● | ● | ● | ○ |
| Mobile Applications | N/A | TBD | TBD | TBD | ● | ● | TBD | ● | TBD | TBD | ○ | ○ | TBD | TBD | TBD | TBD | ○ |
| Social Media | Facebook MySpace | ○ | ○ | ● | ● | ◐ | ○ | ● | ◐ | ○ | ○ | ◐ | ◐ | ○ | ● | ● | ◐ |
| Mapping/GIS Applications | Google Maps Google Earth | ● | ● | ● | ● | ● | ○ | ● | ● | ● | ◐ | ◐ | ◐ | ◐ | ● | ● | ● |
| Video Conferencing/ Webinars | Skype GoToMeeting WebEx | ● | ○ | ○ | ● | ◐ | ○ | ● | ● | ○ | ◐ | ○ | ● | ● | ◐ | ● | ● |
| Audio or Video | YouTube Podcasts | ● | ○ | ○ | ● | ◐ | ○ | ● | ● | ○ | ◐ | ◐ | ○ | ◐ | ● | ● | ● |
| Online Surveys | Survey Monkey | ○ | ● | ● | ● | ● | ○ | ● | ○ | ◐ | ● | ● | ● | ● | ● | ● | ● |
| Online Scenario Testing | MetroQuest Money Game | ● | ● | ○ | ● | ● | ● | ● | ◐ | ● | ◐ | ○ | ○ | ◐ | ◐ | ● | ● |
| Mobile Kiosks | Vision Vessel | ● | ● | ○ | ○ | ○ | ● | ● | ● | ● | ● | ○ | ○ | ● | ● | ● | ● |
| Electronic Voting Machines | Reply | ○ | ● | ○ | ○ | ○ | ● | ○ | ○ | ◐ | ● | ◐ | ◐ | ● | ● | ● | ● |
| User Generated Content | Online comments and discussions | ○ | ● | ● | ● | ● | ○ | ● | ○ | ● | ◐ | ● | ◐ | ○ | ● | ● | ● |
| Collaborative Websites | Wiki | ● | ● | ● | ● | ● | ○ | ● | ● | ● | ○ | ○ | ○ | ○ | ◐ | ● | ◐ |

● = Most Desirable ◐ = Moderately Desirable ○ = Less Desirable TBD = To Be Determined (tool does not currently exist)

intent of the criterion. The methodology used in scoring the tools is provided after the matrix; the documentation should be used as a companion to the evaluation matrix.

Because the evaluation matrix is not intended to rank or select the “best” technology-based tool, a “total score” has not been calculated. The matrix should be used as a means to select the appropriate tools depending upon the primary public involvement objectives of a project. For example, if the focus of a public involvement program is to disseminate information to the public, evaluation criterion #8 should be the focus; those tools that do not serve as a means of disseminating information (and therefore receive an empty circle for criterion #8) could likely be eliminated. Public outreach objectives are typically much more complex than this simple example and will require weighing the value of several evaluation criteria.

Scoring Methodology

The project team developed a methodology for “scoring” how well each tool meets each evaluation criterion. The methodology is presented below for each of the 16 evaluation criteria. In all cases, the scoring has been generalized to describe that basis for assigning the full, half, and empty circles. In cases where one or more tool does not clearly fit within the general scoring methodology, more detail on the reasoning is provided. This documentation should be used as a companion to the evaluation matrix.

1. Would the tool raise the level of awareness of the transportation planning process and the importance of transportation to everyday life?
 - ▶ **Full Circle** – tool would provide substantial educational information to the public
 - ▶ **Empty Circle** – tool would not provide substantial educational information; serves more of an advertising or input gathering role

2. Would the tool serve to gather input from the public and provide a better understanding of the important issues of transportation users and provide opportunities for citizens to help influence planning-level decisions?
 - ▶ **Full Circle** – tool would serve as a means for the public to express their opinions and voice their preferences
 - ▶ **Empty Circle** – tool would not provide significant opportunities for input; serves more of an advertising or information disseminating role

3. Would the tool offer continuous public outreach opportunities throughout the planning process?
 - ▶ **Full Circle** – tool would provide continuous outreach that would be updated and modified continually throughout the process
 - ▶ **Empty Circle** – tool would not be updated continually; would likely allow for one-time input from an individual or the information provided would not be updated more than a few times

4. Would the tool expand the use of web-based outreach and participation?
 - ▶ **Full Circle** – tool is web-based
 - ▶ **Empty Circle** – tool is not web-based

5. Would the tool allow citizens the opportunity to provide input at their convenience?
 - ▶ **Full Circle** – tool would allow for input anytime
 - ▶ **Half Circle** – tool would provide information for the user to review at their convenience, but not a significant input opportunity
 - ▶ **Empty Circle** – tool could only be used at specific times and locations

6. Could the tool be used to better involve traditionally underserved populations?
 - ▶ **Full Circle** – tool could be used as a means of soliciting input from underserved populations
 - ▶ **Empty Circle** – tool is Web-based and therefore would not be easily accessible for traditionally underserved populations

Web feeds/pushed content often provide the option of being distributed via text message; since cell phones are so prevalent, even with traditionally underserved populations, this tool was given a full circle.

Although online scenario testing is web-based, this tool could easily be physically brought to traditionally underserved populations. For example, DRCOG has done considerable outreach with their MetroQuest tool where they bring the tool and a presentation to specific groups of people. Online scenario testing therefore received a full circle.

7. Would the tool increase participation of students and young professionals?
 - ▶ **Full Circle** – tool would likely appeal to and increase participation of students and young professionals
 - ▶ **Empty Circle** – tool would not likely increase participation of students and young professionals (would require attendance at traditional public meeting)

8. Would the tool serve to disseminate information to the public? If so, what level of detail?
 - ▶ **Full Circle** – tool would disseminate considerable information to the public
 - ▶ **Half Circle** – tool would disseminate information but with limited detail; tool would serve more as a way of getting people to other public outreach forums
 - ▶ **Empty Circle** – tool would not disseminate information

9. Would the tool provide opportunity for public input? If so, what level of detail?
 - ▶ **Full Circle** – tool would allow the public to provide free form input
 - ▶ **Half Circle** – tool would allow the public to provide input in the form of responding to specific questions
 - ▶ **Empty Circle** – tool would not allow the public to provide input

10. Is the tool ubiquitous, accessible, and would it be easy for the public to use? (Assumes basic internet skills and access)
 - ▶ **Full Circle** – tool would be very easy for most users and/or is very common

- ▶ **Half Circle** – tool would be easy for users with moderate internet navigation skills and the tool is common
- ▶ **Empty Circle** – user must proactively find and join/implement the tool

11. What are the costs and time requirements associated with implementing the tool (software and/or hardware costs, staff/consultant time)? And is the technology available?

- ▶ **Full Circle** – cost and time to implement are nominal; tool entails distributing content that has already been created or the content is a one-time minimal effort
- ▶ **Half Circle** – cost and/or time to implement are moderate; tool would require some initial investment and/or would require generating moderate content to initiate
- ▶ **Empty Circle** – cost and/or time to implement would be high; tool would require a significant investment and/or would require generating significant content to initiate and/or the technology is not currently available

The cost to implement audio or video tools can vary widely. Simply posting a video of a presentation onto YouTube is a very cost effective use of this tool. However, a promotional type of video requires professional audio/video equipment and personnel to create a high quality product and would require a significant investment.

The time and cost to implement online scenario testing can also vary widely. [DRCOG's MetroQuest](#) tool cost in the range of \$200,000 to implement, while [Whatcom Council of Governments'](#) scenario game was developed for approximately \$20,000. Nonetheless, this tool received an empty circle because, compared to the other tools, implementation of a simplistic version would require more time and budget.

12. What are the resources required to maintain/modify tool?

- ▶ **Full Circle** – cost and/or time maintain the tool are nominal; one time setup allows for continuous use
- ▶ **Half Circle** – cost and/or time to maintain the tool are moderate; would require ongoing content updates
- ▶ **Empty Circle** – cost and/or time to maintain the tool would be high; would continually require generating significant content and/or modification to another version of the tool would be very difficult

13. Is the tool consistent with CDOT's cyber security and web policies?

- ▶ **Full Circle** – tool is currently being used by CDOT and is therefore consistent with the policies or tool is not Web-based
- ▶ **Half Circle** – tool is not currently being used by CDOT but could likely be customized to be consistent with the policies
- ▶ **Empty Circle** – tool is not currently being used by CDOT and its compatibility with the policies is not likely at this time

14. Could the tool be used by CDOT for other public involvement needs outside of Regional/Statewide Transportation Planning?
- ▶ **Full Circle** – tool clearly could be applied to other CDOT public outreach efforts
 - ▶ **Half Circle** – tool could be used for other CDOT public outreach efforts but would require a significant investment to make the tool applicable or tool has limited application for a specific transportation project/corridor
 - ▶ **Empty Circle** – tool could not be applied to other CDOT public outreach efforts
15. Is the tool compatible with other public outreach technologies and/or traditional public outreach tools?
- ▶ **Full Circle** – tool is highly compatible with other outreach techniques; could be a means of bringing the public to other outreach forums; could provide supplemental information discussed in other forums; could be used in conjunction with a project Webpage; could be used at a traditional public meeting
16. Has the tool been successfully implemented by other DOTs or MPOs for use in transportation planning? (Note: this question is limited to those agencies interviewed through this research study)
- ▶ **Full Circle** – tool has been implemented by other agencies and was rated as being successful in the peer interviews
 - ▶ **Half Circle** – tool has been implemented by other agencies and was rated as being somewhat successful in the peer interviews
 - ▶ **Empty Circle** – tool has not been implemented by other agencies or has been implemented but was not rated as being successful

RECOMMENDATIONS AND IMPLEMENTATION PLAN

Based on the research conducted through this study and the evaluation of the technology-based public involvement tools described in the previous section, the project team has developed a recommended set of tools to be used in the upcoming Regional and Statewide Transportation Planning processes. These tools are intended to supplement traditional public outreach; the public meetings and presentations to local elected officials that have been used by CDOT in the past clearly provide a useful venue for public involvement. The tools recommended in this report are intended to expand the public outreach, provide opportunities to reach more stakeholders, and provide the public with multiple and convenient avenues to provide input.

2040 Regional and Statewide Transportation Plan Updates

In 2012, CDOT and the Transportation Planning Regions (TPRs) and MPOs throughout Colorado will initiate the process of updating the Regional and Statewide Transportation Plans for the 2040 time horizon. A significant public outreach effort is envisioned for this plan update process, and the primary focus of this research study was to identify technology-based public involvement tools to be used in the 2040 Plan Update process. For each recommendation, the primary benefits and other considerations are noted. In some cases, specific tools have been included in the recommendation. In other cases, detailed evaluation outside the scope of this research study will be required to select the appropriate software/specific tool. For each recommendation, a suggested plan for implementing and maintaining the tool is provided.

▶ **Create a Statewide and Regional Transportation Planning Webpage.**

This would provide a home-base for all Web-based public outreach and could be housed within CDOT's Website. The Webpage address should be included on all flyers, handouts and other materials distributed to the public pertaining to the Plan Update. Links specific to each of the 15 TPRs (by way of a map so that the public can easily locate the appropriate TPR) should be provided, where information specific to the region (such as goals, inventory, forecasts, etc.) could be posted and updated regularly to provide easy and timely access to relevant project material. Links to the five Colorado MPOs' Websites should also be provided on the main Webpage.

▶ **Create online surveys (Survey Monkey) specific to each TPR, plus a general statewide survey.**

Online surveys would allow each TPR to receive input on a specific set (or sets) of questions relevant to developing the Plan Update and ascertain respondents' demographic information. Surveys will provide the opportunity to quantify the desires of the public. Care should be taken to word the survey questions in a way that avoids directing respondents to a particular answer.

▶ **Provide Web-based videos (YouTube) of presentations that occur in each TPR.**

Video recordings of short presentations given at traditional public meetings should be posted on the Plan Webpage. The required hardware and internet bandwidth is not likely available in most regions to provide live webinars, but brief presentations could be posted after the meetings for viewing at the public's convenience.

▶ **Develop a discussion board on the Plan Webpage where the public can post their comments and participate in ‘seeded’ discussions.**

Discussion boards that allow the viewing of other people’s comments can be very beneficial in generating ideas and facilitating meaningful discussions. However, the downside of allowing user-generated content to be posted for public viewing is the possibility of inappropriate, hurtful, or misleading posts. In order to gain the value of a discussion board and minimize the misuse, the following measures are recommended:

- 1) Seed the boards on a regular basis (weekly or biweekly) to focus the discussion on useful/meaningful topics,
- 2) Clearly state on the Webpage that inappropriate comments will not be tolerated and will be removed,
- 3) Provide a tool for users to flag inappropriate comments that would automatically send a notice to CDOT staff, and
- 4) Monitor the comments for appropriate content regularly and remove any inappropriate comments.

▶ **Develop a statewide mapping application that locates and provides information on current projects, corridor visions, and allows the public to provide location-specific comments.**

CDOT is currently in the process of developing the “CDOT PIN” (Planning Insight Network) which will accomplish this recommendation. In considering whether or not to allow public viewing of comments, the value and possible downside, as described under user-generated content should be evaluated. If public viewing of comments is allowed through the mapping applications, the measures identified under user-generated content should be applied.

▶ **Use micro-blogging (Twitter), social media (Facebook), and web feeds (GovDelivery and RSS) as a means of publicizing other public outreach forums, both traditional meetings and Web-based tools.**

These tools can be used as a form of advertising to people who have already expressed an interest in CDOT, but perhaps not specifically in long range transportation planning. Twitter, GovDelivery, and RSS feeds are already being used by CDOT and already have a following that can be tapped. Although the Attorney General has ordered discontinued use of Facebook, if and when the indemnification issues have been resolved, CDOT should reinstate a Facebook fan page.

▶ **Use electronic voting machines (Reply) to survey the audience at traditional public meetings.**

CDOT already owns this system and has had a successful experience in using it during the 2035 Plan Update process. The same questions that are used in the online surveys could be used with this tool.

- ▶ **Foster relationships with key bloggers with interest in the transportation industry.**

Since creating a CDOT-generated blog would have significant barriers (namely, staff time to enable frequent updates), this is a more realistic and potentially beneficial use of blogging.

- ▶ **Develop an online scenario testing tool that would allow people to experiment with various investment choices, view the implications and results, and provide input on their preferences.**

This would provide the public with a better understanding of how much transportation improvements cost, how difficult choices are required and would allow the public to provide input on how they feel limited transportation funds should be spent. This tool would require a significant time and money investment to implement; CDOT should initiate further investigation into what specific tools might be most appropriate for the level of public involvement funding anticipated.

2035 Regional and Statewide Transportation Plan Amendments

CDOT and the TPRs and MPOs in Colorado are currently in the process of amending the 2035 Regional and Statewide Transportation Plans. While the 2035 Plan Amendment will not revisit the corridor visions, it will address specific emerging issues. As a pilot project, the project team has identified a few components of the recommended 2040 Plan Update technology-based tools for use in the 2035 Plan Amendment outreach program.

Specifically, the first three recommendations (Plan Webpage, online surveys, and Web-based videos) are recommended as a pilot. The Webpage could be structured in a manner consistent with the recommendation for the 2040 Plan Update, with links to TPR pages and MPO websites and pertinent information posted periodically throughout the amendment process. Online surveys could be used ask pointed questions that relate specifically to the emerging issues being addressed in the 2035 Plan Amendment. Open-ended on-line commenting is not recommended for this process since the amendment will be focused on specific issues. As available and appropriate, brief videos of presentations relating to the Plan Amendment could be posted on the Plan Webpage for public viewing at their convenience.

APPENDIX A. INTERVIEWS WITH COLORADO MPOs AND CDOT REGIONAL PLANNERS

Agency: Denver Regional Council of Governments

Contact: Steve Cook, MPO Planning Program Manager
Kitty Clemens, Policy Development and Communications Director
Jill Locantore, Planning Communications Specialist

Interview Date: April 22, 2010

Attendees: Jenny Young

- 1) **Do the Public Involvement Goals and Objectives reflect the outreach goals of your region(s)? Are there additional goals and/or objectives that are specific to your region(s)?**

The “continuous” outreach portion of Goal 3 perhaps should be elevated to its own Goal, separate from the use of innovative techniques.

We may want to include something about providing a meaningful opportunity to influence decisions.

- 2) **What groups have you successfully reached through your Regional Transportation Plan public outreach process?**

- 3) **What groups have you not been able to engage in the planning process but wish to?**

The group felt that folks with a financial interest (the business and development community) have been difficult to reach in the past planning processes. These groups need to be engaged early in the process because they can act as a major barrier late in the process if they are not on board.

DRCOG put forth a concerted effort to reach the traditionally underserved populations during the 2030 RTP update, but they did not get great turn out.

- 4) **Which, if any, technology-based public outreach tools have you used for regional transportation planning or for other projects? Were they successful?**

DRCOG is in the process of developing a new media policy that addresses the use of social networking and appropriate use of website tools.

DRCOG is currently using Twitter to distribute information pertaining to MetroVision. Typically they “retweet” headlines and provide links to websites or articles with more information. They typically send out one tweet per day; Kitty mentioned that if your Twitter account is not active you’ll lose interest and followers.

RideArrangers is interested in using Twitter to match riders, but it has not been implemented yet. Kitty mentioned the concern about needing to screen people; some people use RideArrangers for children. The RideArrangers website currently uses “iCarpool” software for ride-matching.

DRCOG received a grant from FTA to do a Web 2.0 pilot project focused on Transit Oriented Development (TOD). Jill is in the process of setting up the website, which will include discussion boards, video vignettes from experts to initiate discussions, and a library of references where users can rate, tag, and comment on the various references, making it more useful for other users.

Jennifer Schaufele (DRCOG Executive Director) writes an article every two weeks for The Villager newspaper (south metro area) which is distributed as a traditional newspaper and is also available on-line. The intent is to eventually turn this "newsletter" into a blog.

DRCOG uses MetroQuest, which allows users to "visit" alternate 2040 scenarios. (<http://denverregion.metroquest.com/MetroQuest.html>) They have had 700-800 participants. The website also includes a stated preference survey.

DRCOG has a discussion board on their website for use among member governments. It is used sometimes as follow up to a meeting, but there seems to be some hesitancy to "document" an opinion.

Steve, Kitty, and Jill mentioned other technology-based public outreach techniques that are not necessarily being used by DRCOG, but that they have seen used for various transportation planning efforts:

- ▶ VMS signs directing people to a public meeting
- ▶ Posting videos of meetings or powerpoint presentations on the internet with a link from the main website
- ▶ Website-based calendar where a user can click on a previous even to see the agenda, packet, meeting minutes, etc.
- ▶ "Point of View" handheld survey devices – can be used in an open house environment or for pedestrian intercepts

Utah held an on-line contest to design a bus stop and users could then vote on the best design. Not only did they get designs from outside of the state and the country, they also got votes from outside of Utah. Need to be careful in limiting input to your constituents.

Agency: North Front Range MPO

Contact: Suzette Mallette, Regional Transportation Planning Director
Interview Date: April 15, 2010
Attendees: Jenny Young

1) Do the Public Involvement Goals and Objectives reflect the outreach goals of your region(s)? Are there additional goals and/or objectives that are specific to your region(s)?

Suzette felt that the Goals and Objectives are fairly vague, but she concurred that they probably should be to reflect the needs of all regions in the state.

2) What groups have you successfully reached through your Regional Transportation Plan public outreach process?

During the 2035 RTP development process, the NFRMPO hired a consultant to lead the public outreach effort. They did a very extensive outreach program (\$100,000) that included meeting with 45 different interest groups, web-based outreach, a series of charettes where participants made "decisions" about how to spend transportation funds.

There was a lot of involvement from the typical "transportation groupies," but the outreach effort was also successful at reaching the under-served populations (elderly, disabled, minority) because they made a concerted effort to go to these groups.

Suzette said that it is always a challenge to get continuous participation from the public, and she questioned whether spending the money on an aggressive outreach program was really worthwhile. She said in all likelihood they will conduct a similar outreach program for the next RTP update (in 2012).

The "floating planner" concept that was used for the Upper Front Range 2030 RTP was hugely successful in getting smaller communities involved in the planning process. Providing one-on-one counsel and assistance was very helpful for communities that lack the staff resources to be fully engaged in the planning process.

The keypad polling that was used in the 2035 planning process was useful, but it does not provide any depth in response (i.e., why a person would chose one thing over another).

3) What groups have you not been able to engage in the planning process but wish to?

The average citizen in northern Colorado is not represented in the planning process. They tend to be too busy or do not care about long range transportation planning. Suzette mentioned that there needs to be a "hook" to get people interested.

She also mentioned that people are very sensitive to expending their time. For the MPO's household survey, they gave away a bike to one of the survey participants, but a lot of people still did not want to commit the level of time required.

4) Which, if any, technology-based public outreach tools have you used for regional transportation planning or for other projects? Were they successful?

The web-based outreach for the 2035 RTP included a link on the MPO's website that provided updated information on the planning process, a place for people to sign up for newsletters, and a place for people to post comments (not for public viewing). They maintained a list of over 400 email addresses and distributed monthly electronic newsletters.

The NFRMPO is in the process of developing an online vanpool/carpool matching service through the SmarTrips website. The idea is to use social networking so that people can find their own carpool/vanpool matches. The SmarTrips website will also show bike routes in the region using a Google Maps application.

Agency: Grand Valley MPO

Contact: Ken Simms, Senior Transportation Planner
Interview Date: 4/15/2010
Attendees: Laura Haas

1) Do the Public Involvement Goals and Objectives reflect the outreach goals of your region(s)? Are there additional goals and/or objectives that are specific to your region(s)?

Ken believes that the Public Involvement Goals and Objectives for the Grand Valley MPO are generally the same. There are no additional goals/objectives that he would add to the list.

2) What groups have you successfully reached through your Regional Transportation Plan public outreach process?

Ken expressed that traditional public involvement methods (i.e., open houses) have generally resulted in low attendance. The citizens that do attend are generally upper middle class and have higher education levels.

A new technology-based online survey tool (see #4) is being utilized for the 2035 plan and the early statistics indicate that the income level of well over 50% of the respondents is over \$75,000/year.

3) What groups have you not been able to engage in the planning process but wish to?

Two groups that the Grand Valley MPO is targeting for the 2035 plan include the Latino community, which is the biggest minority group in the county, and students at MESA State College.

4) Which, if any, technology-based public outreach tools have you used for regional transportation planning or for other projects? Were they successful?

Following is a list of the technology-based public outreach tools and other innovative tools being used in 2035 planning process:

- ▶ An online survey tool (Connecting-Our-Communities Transportation Survey) is available at <http://www.2035rtp.com/>. The tool is being used to gather input on the 2035 plan. The survey was publicized via press releases, TV-station interviews, and through email. Emails were circulated to over 1,000 people, including citizens in the email contact database and numerous listservs. Survey participants are invited to a focus group meeting at the end of the survey.
- ▶ Informational kiosks at the MESA Mall
- ▶ Keypad polling at open houses and meetings of elected officials
- ▶ The Grand Valley MPO may conduct a "Telephone Town Hall Meeting". Citizens would be called and invited to listen to the County Commissioners meeting and provide feedback from the comforts of home.

Other techniques:

- ▶ The Grand Valley MPO is organizing a motorcycle tour and bicycle tour. The routes and areas being visited (e.g., an off road bicycle trail) were selected based on the feedback received from the online survey tool regarding the transportation concerns in the area. The purpose of the tours is to educate the citizens about the particular transportation issues and gather additional information on their transportation concerns.
- ▶ On-board transit satisfaction surveys to help solicit more input from the lower income population
- ▶ Targeting students at an on-campus bagel shop at MESA State College campus
- ▶ Targeted outreach meetings to the local freight interests
- ▶ The Grand Valley MPO is also using an interactive workshop to convey to the public the challenging decisions that have to be made with limited funding. Participants are given “chips” with categories of transportation improvements (e.g., new interchanges, widening roads, adding new roads, pedestrian/bicycle facilities) and asked to place the chips on the maps where different types of improvements are needed. Participants are then asked to make choices regarding the transportation improvements based on a given amount of funding (using fake money).

All of the tools that have been implemented are considered successful according to Ken Simms. He mentioned that MESA County has used Facebook and Twitter to some extent, but the initial feeling is that they are not very successful tools.

Agency: Pueblo Area Council of Governments (PACOG)

Contact: Bill Moore, MPO Administrator
 Interview Date: April 16, 2010
 Attendees: Laura Haas

1) Do the Public Involvement Goals and Objectives reflect the outreach goals of your region(s)? Are there additional goals and/or objectives that are specific to your region(s)?

Bill believes that the Public Involvement Goals and Objectives are generally in line with the goals of the Pueblo Area MPO. Additionally, the Pueblo Area MPO has developed several specific public involvement performance goals.

| Public Involvement Tool | Evaluation Criteria | Performance Goals |
|-------------------------|----------------------------------|---|
| MPO Web Site | Number of Hits | Minimum of 60 hits/month |
| Public Hearings | Attendance, calls, letters, etc. | 30 persons for sub-area plans and 50 persons for regional plans |
| Comment Forms | Number of Responses | 50% of meeting attendees completed & returned |

2) What groups have you successfully reached through your Regional Transportation Plan public outreach process?

The MPO Transportation Advisory Commission (TAC) Citizens Advisory Committee (CAC) is the most direct connection to the citizens in the community. The CAC includes members from:

- ▶ City of Pueblo Planning and Zoning Commission
- ▶ County Planning and Zoning Commission
- ▶ 2020 Commission (a citizen’s volunteer group)
- ▶ Pueblo Economic Development Corporation, and
- ▶ Citizen appointees

Other active groups include:

- ▶ The Nature Conservancy (Engage other local environmental groups)
- ▶ Puebloans for Active Community Environment (Engage on issues related to pedestrian/bicycle and non-motorized transportation issues and public health)
- ▶ Environmental Policy Action Committee
- ▶ Pueblo Chamber of Commerce
- ▶ Hispanic Chamber of Commerce

3) What groups have you not been able to engage in the planning process but wish to?

Bill mentioned that it is difficult to engage the freight interests. Trucking firms (e.g., UPS/FedEx and hazardous materials haulers) are reluctant to participate and do not like sharing information.

4) Which, if any, technology-based public outreach tools have you used for regional transportation planning or for other projects? Were they successful?

The PACOG MPO/TPR website is the most used technology-based tool being used. The website includes notice of public meetings, TAC agendas and PACOG board agendas, public meeting minutes, and links to CDOT, FHWA, FTA, and other relevant transportation sites. Additionally, staff contact information is provided for the public to email/call with questions/comments about the planning process.

Social networking sites, such as Twitter and Facebook may be considered as outreach tools at some point; however, due to security issues and indemnification clauses associated with the Facebook site and state agency rules, the use of such sites is not yet possible.

Traditional tools being utilized include publications (e.g., brochures, newsletters, advertisements, mapping products, public opinion surveys), public meetings, and community outreach at special events, public fairs, and neighborhood meetings. When possible, public meetings are often held together with CDOT public meetings as a way to show the public that the groups are working together on transportation issues. Information about the planning process is also provided to the public via the local newspaper (i.e., Pueblo Chiefton) every few months.

Agency: Pikes Peak Area Council of Governments (PPACG)

Contact: Craig Casper
Interview Date: 4/20/2010
Attendees: Laura Haas

1) Do the Public Involvement Goals and Objectives reflect the outreach goals of your region(s)? Are there additional goals and/or objectives that are specific to your region(s)?

Craig felt that the Goals and Objectives generally reflect the outreach goals in their region. He suggested that another goal he might add would be to evaluate what public involvement tools are working and what public involvement tools are not working.

2) What groups have you successfully reached through your Regional Transportation Plan public outreach process?

Craig believes that citizens do not generally feel that the planning process is important enough for citizens to contact the Pikes Peak MPO, so efforts have generally focused on reaching out to the citizens directly.

The Pikes Peak MPO public outreach efforts generally have included:

- ▶ Setting up booths at local farmer's markets and street fairs. At these types of events the Pikes Peak MPO typically asks citizens to participate in quizzes/questionnaires that allow citizens to rank the issues of importance.
- ▶ The "money game" is used to convey to the public the challenging transportation decisions that have to be made with limited funding. Participants are asked to pick priority areas for improvements based on a given amount of funding (using fake money). Craig feels this is a very useful public outreach tool and intends to engage neighborhood groups in this activity with the upcoming plan updates.
- ▶ A speaker's bureau allows the Pikes Peak MPO to get out and talk to people at different venues, such as neighborhood organizations, city and county meetings, and other group (e.g., EDC) functions.
- ▶ The Pikes Peak MPO only holds one required public hearing, but otherwise Craig feels that the public hearings are a waste of time and resources because of the very low turnout (i.e., two to three people).

Craig feels like they are reaching the general public, but he said that it has been suggested to them that they are only reaching the pro-transit citizens through their outreach efforts (See #3).

3) What groups have you not been able to engage in the planning process but wish to?

Craig said that at times it has been suggested to the Pikes Peak MPO that there is a silent majority out there that they might not be reaching, but he is not quite sure if that is accurate or not. He said that this has been suggested to the Pikes Peak MPO at times, such as when they present results of planning efforts.

4) Which, if any, technology-based public outreach tools have you used for regional transportation planning or for other projects? Were they successful?

Technology-based tools have not been implemented in the public outreach process, but Craig mentioned that if resources were available he would like to implement the online version of the “money game”. Craig has seen this tool used elsewhere and thinks it is a good idea based on the success they have seen with the face-to-face “money game” they use currently. He was not exactly sure which organizations have implemented the online version of the tool, but thought that maybe it was being done with planning efforts in Philadelphia, Portland, and Vermont.

Agency: CDOT Region 1

Contact: Darin Stavish
Interview Date: 4/20/2010
Attendees: Laura Haas

1) Do the Public Involvement Goals and Objectives reflect the outreach goals of your region(s)? Are there additional goals and/or objectives that are specific to your region(s)?

On the first objective for Goal 1, Darin suggested that maybe the objective should be to “advise and educate (if applicable) the public...” rather than just to “educate the public” about the process. The basis for his suggestion of adding “if applicable” was that certain people are already educated about the process.

On the second objective for Goal 2, Darin suggested that we add special advocacy groups in addition to the community groups and environmental groups listed. He did not think that these types of groups would fall under the umbrella of “community groups”.

On Goal 2, Darin suggested that we change “important” to “relevant”.

On the third objective for Goal 3, Darin suggested that some examples of web-based outreach (e.g., Twitter, Facebook) be added in parentheses. Also, Darin suggested that a statement be added that these tools would be supplemented with traditional outreach methods.

On the fourth objective for Goal 3, Darin suggested that maybe the objective should be to “provide real time input” and expand on the meaning of “at their convenience” (e.g., during or after public meetings).

On Goal 4, Darin suggested adding senior populations to the second objective.

2) What groups have you successfully reached through your Regional Transportation Plan public outreach process?

Darin’s perspective is that the public outreach in Region 1 has been successful in reaching the TPRs and the general public. He felt that there have been some differences between the intermountain and eastern TPRs. In particular, he mentioned that the citizens in the intermountain TPR do not seem to attend the traditional public hearings, but that they seem to already have a good feel for the planning process and tend to be better at organizing than the Eastern TPR. He gave the I-70 Coalition as an example of the “organizing” and said that the Coalition is doing a good job keeping citizens informed. He noted that there seems to be more attendance at the traditional public hearings for the Eastern TPR. In general, the citizens tend to be interested in being educated on the process and wait for the information to be brought to them to keep them involved.

3) What groups have you not been able to engage in the planning process but wish to?

Darin's perspective is that they often have a hard time reaching non-English speaking populations, in addition to elderly and students. He feels that students do not have a lot of interest in the process and perhaps this is because students are not necessarily residents and do not intend on staying in Colorado after school is finished.

4) Which, if any, technology-based public outreach tools have you used for regional transportation planning or for other projects? Were they successful?

Darin did not know which technology-based outreach tools are being used and suggested that headquarters would be better able to answer this question.

Agency: CDOT – Region 2

Contact: Wendy Pettit, Regional Planner
Interview Date: April 22, 2010
Attendees: Laura Haas

1) Do the Public Involvement Goals and Objectives reflect the outreach goals of your region(s)? Are there additional goals and/or objectives that are specific to your region(s)?

Wendy feels like CDOT is moving in a great direction with the Goals and Objectives and the Region is in favor of this direction. She thinks the goals are on track and provide a good basis for covering the subject of public outreach. There are no additional goals or objectives she would add to the list.

2) What groups have you successfully reached through your Regional Transportation Plan public outreach process?

Wendy mentioned that generally attendance is very low at the traditional public hearings/meetings and this is consistent across the different TPRs. In the Colorado Springs area, the bike/pedestrian advocates are typically engaged in the process because they are generally very active within the community. She also mentioned that she feels like the Pikes Peak MPO does a good job of engaging the bike/pedestrian advocates. Wendy feels that participants at the traditional meetings are seldom representative of the general population. Within the Central Front Range, participants are typically associated with the TPRs and Council of Governments staff or individuals that already have some sort of involvement in the planning process.

Meetings are at times tagged onto the County Commissioners meetings. This technique appears to draw more people because they may already be attending the County Commissioners meeting and then choose to stay for the transportation planning piece. The overall attendance at these meetings is often very issue driven and dependent on what is on the agenda for the County Commissioners meetings.

Wendy also feels that the timing of the planning meetings is likely limiting the overall turnout and could be improved upon. For instance, the Region schedules meeting with the TPRs and transit providers during the day. These meetings appear to be limiting for some of the rural areas since people working in these areas are often serving multiple positions within the community and are not always available during the day.

3) What groups have you not been able to engage in the planning process but wish to?

In general, Wendy felt like they have a hard time reaching the general public, and especially the elderly population in the rural areas that do not have easy access to computers.

4) Which, if any, technology-based public outreach tools have you used for regional transportation planning or for other projects? Were they successful?

The website and interactive keypads are the two technology-based public outreach tools that Wendy mentioned. She believes that the interactive keypads used during the last 2035 plan were received generally well, although these sessions were not heavily attended by the general public. Wendy also feels like the website update has actually made the site less user-friendly because a lot of information was removed.

Agency: Region 3

Contact: Mark Rogers, Regional Planner
Interview Date: April 16, 2010
Attendees: Laura Haas

- 1) **Do the Public Involvement Goals and Objectives reflect the outreach goals of your region(s)? Are there additional goals and/or objectives that are specific to your region(s)?**

Mark believes that the Public Involvement Goals and Objectives for Region 3 are generally the same. There are no additional goals/objectives that he would add to the list.

- 2) **What groups have you successfully reached through your Regional Transportation Plan public outreach process?**

Generally, Mark feels that the most active groups include elected officials and groups such as CLUB 20, which includes members of counties, communities, tribes, businesses, individuals, and associations in the Western Colorado area. This is consistent throughout the different TPRs. Also, Mark mentioned that some of the development interests are often active in the process.

- 3) **What groups have you not been able to engage in the planning process but wish to?**

Typically, the general public is the most difficult group to engage in the process, which Mark attributes to the challenges associated with generating interest and comprehension of the 30-year planning timeframe and future transportation needs. The most success in engaging the general public comes with controversial issues.

- 4) **Which, if any, technology-based public outreach tools have you used for regional transportation planning or for other projects? Were they successful?**

Mark referred to the Grand Valley MPO online survey tool. This tool (Connecting-Our-Communities Transportation Survey) is available at <http://www.2035rtp.com/>. The tool is being used to gather input on the 2035 plan. The survey was publicized via press releases, TV-station interviews, and through email. Emails were circulated to over 1,000 people, including citizens in the email contact database and numerous listservs. Survey participants are invited to a focus group meeting at the end of the survey.

Mark views the online survey tool as a success and feels that it is a good tool to reach the busy general public, such as full-time working individuals that may not have time to attend a public meeting, but do have time to fill out the survey from home.

Agency: Region 4

Contact: Karen Schneiders, Regional Planner
Interview Date: April 22, 2010
Attendees: Laura Haas

1) Do the Public Involvement Goals and Objectives reflect the outreach goals of your region(s)? Are there additional goals and/or objectives that are specific to your region(s)?

Karen believes that the Public Involvement Goals and Objectives for Region 4 are generally captured in the listed goals and objectives. There are no additional goals/objectives that she would add to the list.

2) What groups have you successfully reached through your Regional Transportation Plan public outreach process?

Karen did not feel like she could accurately answer this question since she became involved with the last plan update very late in the process.

Karen mentioned that the turnout can be different within the different TPRs and can be dependent on seasonal timing of meetings. For example, meetings in the fall result in more college student turnout in the Fort Collins or Boulder areas. However, within the Eastern TPR, fall meetings may be sparsely attended due to the harvest season. Also, turnout in general can be affected by what else is happening in the community. For instance, turnout will be higher if there is a highly visible project in the area.

Karen also feels that the special interest groups get more involved in the urban meetings.

3) What groups have you not been able to engage in the planning process but wish to?

Karen feels that the Region always does what it can to reach out to a diverse audience, including those populations that are traditionally underserved (i.e., minority, low-income), but there is always more that could be done to reach and engage a greater audience.

Karen mentioned that she thinks that CDOT could do more with emerging technologies like the social networking sites to reach out to a more diverse audience. She feels like these are available technologies and new avenues that they should take advantage of for outreach purposes. Karen said that the CDOT Facebook page was last updated in April 2009 and it would be good if they could at least use the site since they already have it available to them.

4) Which, if any, technology-based public outreach tools have you used for regional transportation planning or for other projects? Were they successful?

Karen identified a quarterly newsletter that is sent out via email to about 300 people as the only technology-based public outreach tool that the Region has been using. The newsletter is sent out to many different people/groups involved in the planning process, such as county commissioners, city managers, elected officials, and also anyone that requests to be on their mailing list. She expressed that this is a good informational tool and people are always excited to hear what is going on with the process and helps them to feel involved (especially for the people that do not generally get information any other way). Karen also mentioned that this is a good tool to disseminate the planning information internally as well.

Agency: CDOT Region 5

Contact: Laurie Blanz, Regional Planner
Interview Date: April 15, 2010
Attendees: Jenny Young

1) Do the Public Involvement Goals and Objectives reflect the outreach goals of your region(s)? Are there additional goals and/or objectives that are specific to your region(s)?

Laurie feels that “developing creative and innovative ways...” (in Goal 3) could be a way to achieve a broader goal, but the goal should not be to use creative and innovative approaches just for the sake of it. If the existing outreach process is working, why spend the time and money on new tools/processes? Technology-based tools should only be used if they provide a measurable benefit. Laurie questioned if social networking would really be helpful in getting input for the long range transportation planning process.

On Goal 4, Laurie suggested that maybe the goal should be to “expand the outreach” rather than to “increase the level” of involvement. Her basis for this suggestion is that we can’t force people to be involved.

2) What groups have you successfully reached through your Regional Transportation Plan public outreach process?

Laurie’s perspective is that the public outreach in the Southwest, San Luis Valley, and Gunnison Valley TPRs has been successful in previous planning cycles. Laurie was the liaison for small communities (less than 5,000 population) during the 2030 planning process, and she felt that was a very successful outreach program. The small towns tend to be weary of the planning process, but by providing one-on-one assistance and follow-up on all their issues, they became more engaged in the process. Although not many “strategic” projects came out of the process, it was good for CDOT relations with the communities. Laurie noted that this level of outreach may not be appropriate for every planning cycle.

The transportation forums that were held during the 2035 planning process were very well attended for the three TPRs in Region 5. Laurie said that they were successful at reaching people that are not typically involved in the process. She said the electronic keypads were a very good tool.

CDOT Region 5 attends TPR meetings that vary in timing and consistency for the three TPRs. The Southwest TPR meets every two months, the San Luis Valley TPR meets only when needed, and the Gunnison Valley TPR generally conducts business via email (which typically does not spur great discussion).

CDOT Region 5 also goes to a county hearing every year in all of their counties to update them on CDOT projects and get input on what their needs are. She said this has been a very useful, ongoing dialect with the counties.

3) What groups have you not been able to engage in the planning process but wish to?

Laurie suggested that developers should be at the table during the transportation planning process. It would help to establish some common group and enable both the public sector and the private sector to have a better understanding of what issues that other is up against.

At a statewide level, the Indian Tribes need to be included in the public outreach.

4) Which, if any, technology-based public outreach tools have you used for regional transportation planning or for other projects? Were they successful?

None (other than the electronic keypads).

APPENDIX B. PEER INTERVIEWS

Agency: California Department of Transportation

Contact: Del Deletetsky, Public Participation Program Manager
Nathan Smith, Chief, Office of State Planning
Interview Date: April 23, 2010
Attendees: Laura Haas

1) What public involvement techniques do you typically use for transportation planning or other efforts?

Traditional techniques—brochures, newsletters, workshops, focus groups, flyers, pens (advertising), press releases, interviews, and surveys.

Caltrans mentioned that they believe Focus Groups are one of the more effective traditional public outreach methods because it allows them to solicit a better idea of the issues before going out to the general public. Caltrans also mentioned that they use Craigslist as a way to advertise for the focus groups and also offer participants a small stipend.

2) What innovative/technology-based public involvement tools have you used?

Innovative techniques /technology-based techniques include: world café (conversation to cross-pollinate ideas), web portal, webcasts, audience response systems (clickers), consultant services contracted to supplement limited staff resources for engagement (PPEC).

World Café

The world café concept is used by Caltrans to bring major players together to discuss policies, issues, and strategies. Approximately six to eight participants are seated at different tables (8-10 tables are set up) and given one to two different questions to discuss. Each small group brainstorms on the transportation issues and solutions to the issues and provides Caltrans with valuable information on the topic of discussion. More information on the world café concept is included online at: (<http://www.theworldcafe.com/>)

Webcasts

Six workshops were held to solicit input on the California Interregional Blueprint (CIB). These workshops were held in different areas across the state and also available via webcast. The workshops were generally for stakeholders and transportation planning professionals, but the general public was also welcome. According to Del Deletetsky, the webcasts “expanded the in-house audience from 221 to a webcast audience of 653 additional viewers using the webcast techniques....These webcasts also included some polling of audience through audience response system (ARS) or clickers, which is a huge boon to sharing opinions and guiding discussions on key concepts or policies. The webcast also allows us to archive for future audience needs at a very small cost. ”

Web Portal (<http://www.californiainterregionalblueprint.org/>)

The web portal was developed for the CIB and California Transportation Plan and has over 400 members. The CIB will be the foundation for the next California Transportation Plan 2040. The site includes materials and webcasts from the CIB workshops that were held across the state. Subscribers to the web portal also receive updates via email blasts. Informal surveys on a variety of issues are also included on the site.

Visual Preference Surveys

Caltrans also briefly mentioned the benefit of using computer-generated simulations to conduct visual preference surveys. Del mentioned that the computer-generated simulations have not been generally used for planning functions, but other groups within Caltrans have used such simulations. For instance, according to Del, "...landscape architects (using computer generated rendering of vegetation and simulated traffic calming features in a fly-by scenario) and our traffic operations (using microsimulation models simulating traffic congestion and relief), traditionally use computer simulation, photo simulation and photomontages extensively to gather support for their efforts." Del also mentioned that the microsimulation models have also been used for some corridor planning efforts to capture public preferences. Del thinks that the computer generated tools will become more prevalent as time goes on.

3) What innovative/technology-based public involvement tools have you considered using, but haven't as of yet? What have you seen as barriers to integrating these tools?

Facebook and Twitter are two tools that come to mind (State agencies often prohibit these features even though they have utility engaging the public). Web-based tools and other technological innovations can be barriers when dealing with the underrepresented and the elderly.

Caltrans also mentioned that they have considered using "Go-To Meeting" as a way to increase participation.

4) When implementing these innovative tools, did you cut back on traditional public involvement efforts?

The innovative tools make recruitment, facilitation, and recording of discussions easier, but the core issue in traditional public involvement is still hard work. There are no shortcuts in the actual traditional involvement as it includes a lot of heavy lifting -- rolling up your sleeves to complete the tough agendas that are required to get input and feedback or consensus from the engaged public.

5) What was the relationship between the innovative tool(s) implemented and the intended audience and transportation users? Was the tool selected based on a specific audience or transportation user? Was there any consideration of a targeted tool to help reach a specific audience and the effectiveness at reaching that audience with the new technique?

Targeted to access younger demographics who are more tech-savvy...web-based is especially productive in this target group.

6) How successful was each public involvement tool on a scale of 1 – 5 (with 5 being the most successful)?

Each tool has a different purpose: world cafés (4) have been successful as they elicit conversation in order to cross-pollinate ideas among a wider range of discussions; web sites and portals (3) with e-blasts cater to the younger demographics or busier public that only wants reminders of important events or inputs; webcasts (4) offer useful travel savings in tight budgets or for people with tight schedules; audience response systems or clickers (4) offer real-time analysis of opinions while eliciting various discussion points on various issues or strategies, and is an easy/efficient way to collect Title VI/Environmental Justice demographic information; and consultant services (4) supplement limited staff resources when considerable public engagement is required. Given the circumstances I would say that no single tool is effective as layering approach using several tool strategically (i.e., layering webcast audiences through interactive polling online should rate a solid 5.

7) How cost effective was each public involvement tool on a scale of 1 – 5 (with 5 being the most cost effective)?

Webcasts (4-5) offer the most cost effective with large numbers able to participate with huge travel and venue savings; Web sites and portals (4) with e-blasts catering to a large number of younger or more techie-based demographics are also cost effective—with the carrying charges and maintenance charges the key costs; audience response systems or clickers (3) offer a lesser cost effectiveness because of the cost of clickers and facilitators, but when combined with newer technologies that offer online polling over webcasts(5), they are more cost effective; and, world cafés (3) are probably least cost effective, requiring refreshments, venues, facilitators, and time traveling and participating.

8) Were there any downfalls or barriers to implementation?

Again, there are barriers associated with the underrepresented and the elderly.

9) Were the public involvement tools implemented by agency staff?

Staff resources are limited, and were thus the purpose behind our consultant services to supplement these limited staff resources for engagement (PPEC). Local staff implemented these tools within the Office of Community Planning, and these consultant services have been used by agency staff resources to involve the public in efforts ranging from outreach for the development of the statewide transportation plan to our corridor systems management plans.

10) Are there any new public involvement techniques that you are considering for future efforts?

For future efforts, we would consider tying our webcast audiences to actual interactive polling online. We would have leveraged polling of 221 in the workshop audience by having another 653 viewing “live” webcasts of the six workshops—totaling 874 participants in the poll—had the webcast audience been part of the interactive polling.

Agency: Utah Department of Transportation

Contact: Megan James
Interview Date: May 3, 2010
Attendees: Laura Haas

1) What public involvement techniques do you typically use for transportation planning or other efforts?

Megan identified two public involvement programs that have been used for UDOT transportation planning efforts. Examples of the final product for each program is located online at: <http://www.udot.utah.gov/main/f?p=100;pg:2116867243767911:::1:T,V:1367>,

Community Transportation Plan (CTP) Program

The first technique Megan discussed was the Community Transportation Plan (CTP) program. As part of this planning program, the public outreach consisted of UDOT staff traveling to different communities throughout the state to hold a series of two meetings. City officials and the general public were invited to these meetings, although attendance by the general public was generally low. The first meeting was held to discuss the transportation problems within the community and also potential solutions. During the second meeting, meeting participants were given the opportunity to vote on potential priority projects based on a given budget. Based on the results of the project prioritization, UDOT would use this information to develop a CTP. Approximately 34 CTPs were developed throughout the state. Some of the CTPs were adopted by the communities and used as their Master Plans. This technique is no longer used.

Emerging Areas Plan (EAP) Program

The second technique Megan discussed was the Emerging Areas Plan (EAP) program. This program moved beyond planning at the individual community level and focused on a regional vision. Attention was focused on rapidly growing areas or areas projected to grow more rapidly (outside of the MPOs) with the goal of addressing transportation issues before they become problematic. Five emerging growth areas were selected.

As part of the EAP Program, the public outreach consisted of public workshops and interviews with stakeholders (e.g., city officials). Generally, attendance by the general public was low. The goal of the public outreach was to discuss growth issues/concerns with other stakeholders and ultimately developing a "common transportation vision" identifying how they would like to see the transportation system function. Local leader and planners can then use the vision map to develop project priorities.

In general, Megan also mentioned that general public meetings are often piggy backed with the MPO and RPO meetings.

2) What innovative/technology-based public involvement tools have you used?

Megan discussed one major technology-based public involvement tool that UDOT has implemented called the Bicycle Priorities Mapping Tool, located online at:
<http://www.udot.utah.gov/main/f?p=100:pg:2095497421978577:::1:T,V:2124>

This is a Google earth mapping tool that was developed to identify gaps in bicycle routes across the state. UDOT first developed an "existing conditions" map for all major state bicycle routes. The condition of each route was categorized as very good, good, fair, poor, or very poor. The "existing conditions" map was presented at open houses across the state to solicit public input on priorities. The public comments were collected and integrated into a "public comment" map to show routes that the public would like to see improved. A "priorities" map was created as the final product of this effort and includes priority routes where improvements could help to fill in gaps and make regional connections.

3) What innovative/technology-based public involvement tools have you considered using, but haven't as of yet? What have you seen as barriers to integrating these tools?

Megan identified one public involvement tool that will soon be launched as part of the UDOT transportation planning efforts. The tool is called UPlan.org and consists of a user-friendly GIS mapping tool. The tool will include layers of data from all Utah state agencies and also private entities. The tool started out as an environmental planning tool, but has grown to encompass all types of data. UPlan will eventually be used as a public involvement tool to solicit input and comments on long-range planning issues. The website is anticipated to become available for public viewing in the summer of this year (2010).

Megan provided us with a guest pass to explore the uplan tool:

uPlan link: <http://utahplanning.org/>

Username: guest

Password: guestpass123

4) When implementing these innovative tools, did you cut back on traditional public involvement efforts?

In general, UDOT has not cut back on traditional public involvement efforts.

5) What was the relationship between the innovative tool(s) implemented and the intended audience and transportation users? Was the tool selected based on a specific audience or transportation user? Was there any consideration of a targeted tool to help reach a specific audience and the effectiveness at reaching that audience with the new technique?

Megan mentioned that the bicycle/pedestrian advocates in the state always have a strong voice in the planning process. Therefore, UDOT tried to reach beyond the bicycle/pedestrian interests as part of the outreach for the Bicycle Priorities project. In general, Megan felt that

UDOT had a great turnout for the project that did reach beyond the bicycle/pedestrian advocates.

6) How successful was each public involvement tool on a scale of 1 – 5 (with 5 being the most successful)?

CTP Program = 3/4 – Megan felt like this process was a successful tool that built a lot of good will within the communities. The communities were impressed that UDOT took the time to listen to their concerns.

EAP Program for General Public = 2/3, EAP Program for decision-makers = 4/5

Bicycle Priorities Mapping Tool = 5 – Megan felt like this tool was very successful and a lot of the success could be attributed to an interesting subject matter which created a lot more enthusiasm than long-range planning typically does.

7) How cost effective was each public involvement tool on a scale of 1 – 5 (with 5 being the most cost effective)?

CTP Program = 4/5 – Megan felt that the cost effectiveness was dependent on how each community used the individual CTPs once they were completed. She mentioned that sometimes a change in staffing at the community-level could affect if the developed CTP was actually used or not.

EAP Program = Unknown at this time - Megan felt that measuring the cost effectiveness requires future follow-up on the actual implementation of the transportation priorities identified during the "vision" process.

Bicycle Priorities Mapping Tool = Unknown at this time - Megan felt that measuring the cost effectiveness requires future follow-up on the actual implementation of the bicycle/pedestrian priorities by the UDOT Regions.

8) Were there any downfalls or barriers to implementation?

Bicycle Priorities Project

Megan identified limited funding and limited support for more bicycle facilities in general. She feels that sometimes cost is given as the reason to not include such facilities as the project gets closer to construction. Megan also mentioned that the planning staff has a lot more work to do in order to "sell" the priority routes project internally within UDOT. Overall, it has been met with great support and enthusiasm outside of the department to date.

9) Were the public involvement tools implemented by agency staff?

CTP Program = In-house staff

EAP Program = In-house staff and consultants

Bicycle Priorities Mapping Tool = In-house staff and consultants

10) Are there any new public involvement techniques that you are considering for future efforts?

See answer to question #3.

Agency: New Jersey Department of Transportation

Contact: Brent Barnes, Director of Statewide Planning
Danielle Graves
Interview Date: April 22, 2010, Follow-up on June 4, 2010
Attendees: Laura Haas

1) What public involvement techniques do you typically use for transportation planning or other efforts?

The most common traditional public outreach techniques that Brent mentioned include public hearings, informal project-specific public meetings (i.e., Information Centers), and newsletters. The traditional techniques are generally used for more project-specific related outreach.

More recently, the NJDOT has become more involved with communities up-front in a visioning and planning process that they refer to as the Mobility and Community Form program. The MCF program “connects transportation and land use and helps to determine how communities should be built.” Information is available on the NJDOT website: <http://www.state.nj.us/transportation/community/mobility/>

The MCF process includes a series of “visioning” charettes within each community. The participants are asked a series of questions, for instance:

- ▶ How do you want your community to be? (e.g., transit friendly, bike/pedestrian friendly)
- ▶ What activities do you want to support? (e.g., Farmer’s Market, Marina)
- ▶ How does your community need to be formed? For instance, where would a Farmer’s Market logically go?
- ▶ How does transportation layer into and support these community activities?
- ▶ The process is used by communities to “combine the circulation and land use elements of their master plans. This can also be used from redevelopment concepts and for creating site plans. Using an MCF Element is the first step in creating an integrated development code to replace or improve traditional zoning.”

2) What innovative/technology-based public involvement tools have you used?

Innovative/technology-based public outreach tools that were used during the last statewide long-range plan update included:

- ▶ Website
- ▶ Electronic/web-based surveys (supplemented with traditional hard copy surveys). An online survey tool (e.g., Survey Monkey) was not used.
- ▶ Electronic Online Scenario Gaming – This program was developed by a consultant and participants were given “funds” to spend on hypothetical projects in different broad categories (e.g., bike/pedestrian facilities, transit, etc.) and are asked to prioritize projects with the given funding.

- ▶ A few video “scenarios” were posted on the website that demonstrated the deterioration of an aging bridge over a 20 year period. There were a couple videos posted and really seemed to grab people’s attention.

These innovative techniques tend to be used more for transportation planning processes.

3) What innovative/technology-based public involvement tools have you considered using, but haven’t as of yet? What have you seen as barriers to integrating these tools?

Brent mentioned that the NJDOT considered implementing an electronic Town Hall meeting (webinar) that would be broadcast on public television. Additionally, the idea was to also have specific viewer locations set-up around the state. At these specific viewer locations, participants would be able to ask questions and participate in the meeting over a video feed. The barriers to implementing this technique included cost and challenging scheduling and logistics.

4) When implementing these innovative tools, did you cut back on traditional public involvement efforts?

Traditional techniques are most widely being used for more of the project-specific planning, whereas the innovative techniques are being implemented as a supplement to the traditional techniques used for the long-range planning process.

5) What was the relationship between the innovative tool(s) implemented and the intended audience and transportation users? Was the tool selected based on a specific audience or transportation user? Was there any consideration of a targeted tool to help reach a specific audience and the effectiveness at reaching that audience with the new technique?

The NJDOT recognized that when the website, electronic survey, and electronic online scenario game were implemented on the internet during the last statewide planning process, these outreach techniques would generally only reach one half of the population. Other techniques were implemented at the same time to reach the lower income populations and traditionally underserved. These techniques included reaching into the community via community groups, stakeholder groups, and faith-based groups.

The MCF program targeted toward municipalities with specific needs. Outreach within the specific municipalities was further targeted based on the specific issues identified within the community. For instance, high school students were targeted for one particular community that had issues related to access to the athletic fields from the area high school. The students were walking along the highway to access the athletic fields. Outreach to the students included a survey and a charette at the high school.

6) How successful was each public involvement tool on a scale of 1 – 5 (with 5 being the most successful)

- ▶ Web-surveys – 3
- ▶ Electronic Online Gaming Scenario – 2 Brent mentioned that the information they gathered from this tool tended to be information they already knew.
- ▶ Traditional methods – 3; Traditional methods are widely used because it is one of the best ways to gather feedback.
- ▶ Charettes – 5 (Enormous benefits)

7) How cost effective was each public involvement tool on a scale of 1 – 5 (with 5 being the most cost effective)?

- ▶ Web-surveys – 4 (Very large bang for your buck, but expensive)
- ▶ Electronic Online Gaming Scenario – 2
- ▶ Traditional methods – 4 (Fairly inexpensive)
- ▶ Charettes – 2 (Very expensive in terms of time and resources)

8) Were there any downfalls or barriers to implementation?

- ▶ In relation to the non-traditional outreach techniques, Brent mentioned that it is sometimes very difficult to “sell” the local municipalities and officials on the benefits of hearing from their very own communities.
- ▶ Also, Brent mentioned that there is a lot of internal “selling” at NJDOT to get people to understand the value of doing the up front planning with the communities. In order to successfully “sell” the planning internally, Brent feels like the key is to get staff to understand what the payoff will be in the end. Implementation of the MCF program took at least a year and a half to get buy-in internally and with the local planning community.

9) Were the public involvement tools implemented by agency staff?

The innovative public outreach tools were primarily implemented by consultants. There was also involvement of the local University. Generally the public involvement office at NJDOT is focused on community relations and specific projects rather than the planning work.

10) Are there any new public involvement techniques that you are considering for future efforts?

No – NJDOT is not using Facebook or Twitter due to IT concerns.

Subject: Follow-up Regarding Online Visualization Tools

A) Was there a link to the game from your general website?

Links are provided on the NJDOT's website for the 2030 LRP and the visualization tool: <http://www.state.nj.us/transportation/works/njchoices/documents.shtm>.

B) Can you provide some additional information on how the game was developed and what software was used?

The tool consists of three interactive demonstrations: Your Commute, Bridges, and Your Community: Smart Growth vs. Suburban Sprawl. They were developed by the long-range plan's consulting team (AECOM and PB), with PB's project visualization group in the lead, using the following software: Adobe Photoshop, Autodesk 3D Studio Max, Director MX 2004, and Sonic Foundry Sound Forge. Additional details for each component are as follows:

Interactive Application - The interface for the tool was designed using Adobe Photoshop. The application was authored using Macromedia Director MX 2004 (now owned by Adobe), and the custom coding was written using Director's proprietary scripting language called Lingo.

Your Commute - Isochrone maps produced from model output (originally in GIS produced by AECOM) were redesigned in Photoshop for color and size consistency. Locations on the overall map can be zoomed, and the Existing Condition, the 2030 Plan scenario, and the 2030 Reduced Plan scenario can be compared side by side using the interface buttons.

Bridges - Two photos, one from under the bridge at pier level, and one from the bridge deck, were used as the basis for a series of photosimulations that were created in Photoshop. The bridge at the time of the photos was 40 years old, so the bridge photos were digitally improved to represent the approximate conditions at 0, 10, 20, 30, and 35 years old and digitally degraded to represent the approximate condition at 45 years. A custom slider function swaps the different photosimulations to represent changes of the bridge deck and bridge piers over time.

Your Community: Smart Growth vs. Suburban Sprawl - Two contrasting maps, one representing a Smart Growth Community and one representing a Suburban Sprawl Community, were created using 3D Studio Max. The maps were then imported into After Effects which was used to create the animations showing hypothetical paths through each community. The overall distance and time are included in these animations and are represented by a bar chart. A "Go" button triggers the animations which play in order, and after each animation, points are awarded for benefits related to Health, Environment, Convenience, and Time. The animation of the coins used to represent points was created using Director's standard animation tools. The sound effects for the animations are separate audio files (acquired from a stock audio service). The sound effects were edited using Sound Forge and are timed in Director to match the animation and button events in the application.

If CDOT has any further questions on the technical aspects of the tool development, they are welcome to contact Marc Steuben of PB's Project Visualization group in Denver CO directly at (303) 832-9097.

C) How expensive was it to implement?

The consultant's cost to develop these three interactive demonstrations and the interface was \$93,000.

D) Did you generalize transportation improvements by project type or did you include specific projects?

The Your Commute demonstration is based on travel demand model output from the Long-Range Plan scenarios. Those scenarios reflected assumptions about the level of investment in hypothetical projects, based on historical expenditures and assumptions about available revenues. For example, highway capacity projects were assumed to occur at a rate of x number of lane miles per year, distributed by county. The categories of hypothetical projects were derived from the state's transportation capital program and included highway capacity, transit capacity, highway system preservation and transit system preservation.

E) What kind of response (number of participants) did you get?

Usage of the online tool is not being monitored. In addition to the online version, the tool has also been presented and used informally at events such as the New Jersey statewide transportation conference, TransAction, however we do not have a count of users.

F) How did you get the word out about the online game?

The publication of the LRP provided publicity by pointing people to the tool's availability on the NJDOT website. Flyers have also been circulated at events such as the New Jersey statewide transportation conference, TransAction. We also anticipate using the state's Transportation Management Associations to get the word out to local elected officials, employers and schools about the plan and the tool.

G) Would it be possible for us to view the game and/or the results?

You are welcome to try out the visualization tools on the following link, <http://www.state.nj.us/transportation/works/nichoices/documents.shtm>. There are no statistical results as such. The Your Community: Smart Growth vs. Suburban Sprawl demonstration includes comparative indicators in the form of animated coins that are intended to be educational.

Agency: Capital Area MPO (CAMPO)

Contact: Greg Griffin, Senior Planner, Public Participation
Interview Date: April 16, 2010
Attendees: Laura Haas

1) What public involvement techniques do you typically use for transportation planning or other efforts?

Greg mentioned the following public involvement techniques that CAMPO typically uses for transportation planning efforts:

- ▶ Community Meetings
- ▶ Board Meetings
- ▶ Public Hearings
- ▶ Electronic Newsletters
- ▶ Public Opinion Surveys (~ every four years)
- ▶ Press Releases/News Releases
- ▶ Speaker's Bureau – presentations at specific venues (e.g., City Council meetings, small groups) on specific topics
- ▶ Mailings

2) What innovative/technology-based public involvement tools have you used?

Greg mentioned the following technology-based public involvement techniques that CAMPO has recently implemented for the transportation planning efforts:

- ▶ Informal Online Questionnaires
- ▶ Website Content
- ▶ Launched Twitter, Facebook, and YouTube as outreach techniques in February 2009.
 - Twitter is used to provide timely and immediate updates about the planning process. Twitter attracts about 200 people that are following the process very closely.
 - Facebook provides the opportunity to have the public post questions/comments about the planning process.
 - YouTube has included footage that introduced citizens to the planning process and also footage of the Board Chair.

3) What innovative/technology-based public involvement tools have you considered using, but haven't as of yet? What have you seen as barriers to integrating these tools?

- ▶ Electronic polling/keypad polling – Greg mentioned that the greatest barrier to implementing this technique would be that its success is dependent on the attendance at public meetings.
- ▶ Visualization techniques, such as 3D movie visualizations using mapping applications such as google earth – Greg mentioned that these techniques take a great deal of time for preparation.

4) When implementing these innovative tools, did you cut back on traditional public involvement efforts?

CAMPO has not cut back on traditional public involvement efforts following the launch of Twitter, Facebook, YouTube, and the online questionnaire tool. The hope is that these techniques will supplement traditional techniques and help encourage more participation in the traditional outreach methods.

5) What was the relationship between the innovative tool(s) implemented and the intended audience and transportation users? Was the tool selected based on a specific audience or transportation user? Was there any consideration of a targeted tool to help reach a specific audience and the effectiveness at reaching that audience with the new technique?

CAMPO was originally targeting a younger audience, including students at the area Universities, when they launched the use of Twitter, Facebook, YouTube, and the online questionnaire tool.

Data from the online questionnaire indicates that participants generally represent the population, with a slight bias toward individuals with higher education levels and higher income levels.

CAMPO does not think that the use of these tools is any more biased toward a specific group than traditional public involvement techniques.

6) How successful was each public involvement tool on a scale of 1 – 5 (with 5 being the most successful)?

- ▶ Informal Online Questionnaires - 5
- ▶ Twitter – 3
- ▶ Facebook - 3
- ▶ YouTube - 4

7) How cost effective was each public involvement tool on a scale of 1 – 5 (with 5 being the most cost effective)?

- ▶ Informal Online Questionnaires - 5
- ▶ Twitter – 5
- ▶ Facebook - 5
- ▶ YouTube – 5

All of these techniques are seen by CAMPO as very cost-effective tools that can reach a broader audience in combination with traditional techniques.

8) Were there any downfalls or barriers to implementation?

The only downfall is that social media tools could be biased toward younger individuals; however, Greg feels that these tools are increasingly reaching a wide audience and the perspective that only younger individuals use these social media sites is starting to disappear.

9) Were the public involvement tools implemented by agency staff?

The tools were mainly implemented by the agency staff in conjunction with consultants.

10) Are there any new public involvement techniques that you are considering for future efforts?

Agency: Metropolitan Transportation Commission (MTC)

Contact: Ellen Griffin
Interview Date: April 22, 2010, Follow-Up on May 21, 2010
Attendees: Laura Haas

1) What public involvement techniques do you typically use for transportation planning or other efforts?

The MTC uses a variety of public involvement techniques as part of their transportation planning process. The full suite of public outreach techniques is included in the MTC Final Public Participation Plan for the San Francisco Bay Area (September 2007) on pages 24-26.

The primary public involvement tools that Ellen identified include:

- ▶ The Policy Advisory Council: Three separate groups (i.e., MTC Advisory Council, the Elderly and Disabled Advisory Committee, and the Minority Citizens Advisory Committee) recently combined and formed the Policy Advisory Council. Ellen feels that this advisory committee is one of the main ways that the MTC gathers input on transportation issues. Information on this group is included on the MTC website: http://www.mtc.ca.gov/get_involved/advisory/.
- ▶ Traditional meetings with the general public and the Policy Advisory Council - Ellen considers traditional meetings as a necessary outreach technique.
- ▶ Statistically valid Surveys/Polls and Online Surveys/Polls
- ▶ One of the widely-used techniques for outreach to the traditionally-underserved communities includes partnering with community-based organizations. The MTC provides these groups with grants for organizing public meetings in their local communities. This tool is essential for meeting Title 6/Environmental Justice requirements.
- ▶ Focus Groups

2) What innovative/technology-based public involvement tools have you used?

Ellen mentioned the following technology-based public involvement techniques that the MTC has utilized for transportation planning efforts:

- ▶ Online Surveys/Polls
- ▶ Website Content
- ▶ Electronic voting via keypads
- ▶ "Budget Challenge" Game (Online version and used at meetings) –Participants were given "funds" to spend on hypothetical projects and then asked to prioritize projects with the given funding.
- ▶ MTC will soon be launching a Facebook page for the latest Long-Range Plan
- ▶ "Change in Motion" online Video provided "...an overview of the challenges addressed by Transportation 2035."

- ▶ “One Bay Area” online Video provides an overview of the upcoming long-range transportation plan.
- ▶ “SB 375” online video

3) What innovative/technology-based public involvement tools have you considered using, but haven’t as of yet? What have you seen as barriers to integrating these tools?

One innovative/technology-based outreach tool that Ellen mentioned was hosting a “YouTube contest” as a way to engage the public on transportation issues. This technique is something that the USEPA has implemented. Information on the EPA contest can be found at <http://www.epa.gov/owow/videocontest.html>.

Another tool that Ellen identified was the “Vision Vessel” concept implemented in Portland, Oregon. This technique of gathering public input consists of a video-recording booth that can be set-up at select areas (e.g., college campuses) and provides individuals an opportunity to voice their concerns, ideas, and opinions on specific issues.

Ellen also mentioned the possibility of using visualization software as a way to show people how transit-oriented development would change the look of their communities.

Blogs were also mentioned as a possible tool, however this tool takes a lot of commitment and requires constant up-keep to assure that questions/comments are being addressed in a timely fashion.

4) When implementing these innovative tools, did you cut back on traditional public involvement efforts?

The MTC has not cut back on traditional public involvement efforts.

5) What was the relationship between the innovative tool(s) implemented and the intended audience and transportation users? Was the tool selected based on a specific audience or transportation user? Was there any consideration of a targeted tool to help reach a specific audience and the effectiveness at reaching that audience with the new technique?

The goal of implementing the innovative techniques was to generally reach beyond the individuals who typically attend traditional public meetings.

6) How successful was each public involvement tool on a scale of 1 – 5 (with 5 being the most successful)?

- ▶ Online Survey/Poll – 4
- ▶ Budget Challenge Game – 5
- ▶ Website – 5
- ▶ Partnerships with community-based organizations – 5
- ▶ Traditional Public Meetings – 3

7) How cost effective was each public involvement tool on a scale of 1 – 5 (with 5 being the most cost effective)?

- ▶ Online Survey/Poll – 5
- ▶ Budget Challenge Game – 2
- ▶ Website – 3
- ▶ Partnerships with community-based organizations – 5
- ▶ Traditional Public Meetings - 2

8) Were there any downfalls or barriers to implementation?

One major barrier that Ellen identified to implementation of the innovative techniques is the overall cost of many of the tools. Additionally, the increasing demands and requirements for public involvement require a great deal of time and resources.

Ellen identified one barrier being that the software tools/visualization techniques are costly, but also difficult to use for outreach that is focused on the regional-scale planning efforts. Ellen feels that the software tools are often more appropriate and useful for the project-specific planning efforts.

9) Were the public involvement tools implemented by agency staff?

The tools were mainly implemented by the agency staff in conjunction with consultants.

10) Are there any new public involvement techniques that you are considering for future efforts?

See answers to Question #2.

Subject: Follow-up Regarding Online Budget Game

A) Was there a link to the game from your general website?

According to Ellen, the “Budget Challenge” game was prominently featured on the website. People were also notified about the game via a postcard mailing to contact database and an email blast.

B) Can you provide some additional information on how the game was developed and what software was used?

The game mirrored (very generally) the investment decisions that the Commission was being asked to make. It covered issues like how much should be spent on operation and maintenance of the existing system versus adding new capacity; it covered choices with regard to mode (highways, transit, regional incentive-based programs) and how many prior funding commitments should be honored.

C) How expensive was it to implement?

One of MTC's in-house IT people worked on it, probably a total of one month of his time. No other expenses. It was very basic, not a lot of visual frills. This was done nearly 10 years ago, so very simple compared to a lot of the visualization tools and gadgets we see today.

D) Did you generalize transportation improvements by project type or did you include specific projects?

MTC did it by type of investment versus specific projects.

E) What kind of response (number of participants) did you get?

Not available.

F) How did you get the word out about the online game?

See answer to question # 1.

G) Would it be possible for us to view the game and/or the results?

Alas, no, it is longer available.

Agency: Sacramento Area Council of Governments (SACOG)

Contact: Monica Hernandez
Interview Date: June 22, 2010
Attendees: Laura Haas

1) What public involvement techniques do you typically use for transportation planning or other efforts?

SACOG uses regularly advisory groups, public workshops, one-on-one meetings by request, and neighborhood group presentations. Staff also works with standing advisory groups- Bicycle & Pedestrian, Planners Committee, Transit Coordinating Committee and Regional Planning Partnership.

2) What innovative/technology-based public involvement tools have you used?

Most recent SACOG utilized a wiki tool to allow interested parties to comment on working papers related to our rural landscape study. The wiki tool can be found at www.sacog.org/rucs. We have also used social media (Facebook) for behavior change campaigns such as May is Bike Month www.mayisbikemonth.com.

3) What innovative/technology-based public involvement tools have you considered using, but haven't as of yet? What have you seen as barriers to integrating these tools?

We have accounts with Twitter and YouTube but have not begun to use them. The primary barrier to using these tools is staff time, particularly for Twitter. For successful Twitter campaigns, tweets should be given at least twice a day and we currently don't have staff resources. For YouTube, staff is considering placing multilingual videos on using transit, walking, biking and carpooling. Those videos are currently housed at www.sacregion511.org, currently or videos exceed the YouTube maximum allotment for video length. Staff has not yet, secured management buy-in for either resource.

4) When implementing these innovative tools, did you cut back on traditional public involvement efforts?

No, SACOG continues to use traditional outreach techniques, but we strongly feel that new technologies are will engage populations that historically have not been part of the process. Many parts of our region do not have high-quality internet access, so we do not foresee reducing our traditional outreach methods while increasing the implementation of new methods.

5) What was the relationship between the innovative tool(s) implemented and the intended audience and transportation users? Was the tool selected based on a specific audience or transportation user? Was there any consideration of a targeted tool to help reach a specific audience and the effectiveness at reaching that audience with the new technique?

For the wiki-tool, we selected this option as a means for people living in outlying areas to have access to working papers even if they were not able to travel to workshops. One obvious exclusion of using web-based technology is that there are still many residents in our region that do not have access to the internet. Our Facebook page was used to reach lifestyle and commute bicyclists alike and create opportunity for engagement.

6) How successful was each public involvement tool on a scale of 1 – 5 (with 5 being the most successful)?

For the wiki-tool success was 3, for Facebook success was a 5.

7) How cost effective was each public involvement tool on a scale of 1 – 5 (with 5 being the most cost effective)?

The wiki-tool cost effectiveness was 4, we initially had significant staff time devoted to the development of the site and working out glitches with the first implementation. Facebook cost effectiveness is a 5, the framework and technology was already in place and we only had bill staff time.

8) Were there any downfalls or barriers to implementation?

There were some negative perceptions that utilizing Facebook was unprofessional. There were no barriers to using the wiki-tool, the only challenge was explaining to many users how a wiki is used and the purpose.

9) Were the public involvement tools implemented by agency staff?

Yes, wiki-tool implemented and developed by staff.

10) Are there any new public involvement techniques that you are considering for future efforts?

We are discussing using Twitter and Facebook to promote public meetings.

Agency: Pennsylvania Department of Transportation (PennDOT)

Contact: Brian Wall, Transportation Planning Specialist Supervisor
Interview Date: June 25, 2010
Attendees: Laura Haas

1) What public involvement techniques do you typically use for transportation planning or other efforts?

PennPlan public involvement efforts included input from over 1,800 individuals representing typical residents, business and commercial interests, visitors to Pennsylvania, professional planners, politicians and appointed public officials, transportation visionaries and focus groups. Input was obtained through “town” meetings, classrooms discussions and written surveys. Outreach continued after plan finalization through follow up phone surveys. Approaches and results of the public involvement initiatives are available upon request.

The Pennsylvania Mobility Plan continued the strong emphasis on public involvement in the statewide planning process. Over 2300 Pennsylvanians were consulted through general phone surveys, stakeholder and economic interests’ internet surveys, transportation visionaries (face-to-face or telephone conversations with transportation professionals such as University professors or former Secretaries of Penn DOT), regional outreach workshops, focus groups and implementations workshops. Approaches and results of the public involvement initiatives are available on the Pennsylvania Mobility Plan website. www.pamobilityplan.com.

The Department also conducts public hearings every two years in various locations throughout the state to hear testimony as it develops the Twelve Year Program.

2) What innovative/technology-based public involvement tools have you used?

Stakeholder and economic interests’ internet surveys:

Brian mentioned that the internet survey tool was one of the most cost-effective public involvement tools utilized early in the Pennsylvania Mobility Plan development process. The survey was targeted toward government officials, business interests, MPOs/RPOs. These stakeholders were notified via email of the internet survey via a link to the Penn Mobility Plan website. The general public was not targeted for this particular survey; however, the general public could still participate in the survey from the Penn Mobility Plan website. Following the completion of the plan, the intent was to do a follow-up survey for all stakeholders (including general public), but due to overall budget constraints, the follow-up survey was not conducted.

Option Finder technology was used for Regional Outreach (stakeholders) and development team input.

EXAMPLE: One of the more unique public involvement initiatives for the Pennsylvania Mobility Plan occurred during the regional outreach workshops. A “trade off” exercise was used to determine the priorities of participants across eleven categories of transportation investments. Participants were asked if they were the Secretary of Transportation, how they

would redistribute funds across the eleven categories in an environment of constrained resources. They were then asked where they would distribute any new resources across the eleven categories.

Additional information on Option Finder:

The Option Finder technology is a keypad selection tool. As part of the Regional Outreach process, questions were displayed to a group of stakeholders via a PowerPoint presentation. This tool allowed the results to be instantly provided for the entire group. PennDOT then used the results to lead a qualitative discussion with the stakeholder groups. Stakeholders included transportation professionals (e.g., MPO/RPO staff) and other interest groups that rely heavily on the transportation system (e.g., area associations for the aging).

3) What innovative/technology-based public involvement tools have you considered using, but haven't as of yet? What have you seen as barriers to integrating these tools?

N/A. The Statewide Transportation Plan is not currently being updated.

4) When implementing these innovative tools, did you cut back on traditional public involvement efforts?

Public involvement has been expanded for each successive Statewide Long Range Transportation Plan.

5) What was the relationship between the innovative tool(s) implemented and the intended audience and transportation users? Was the tool selected based on a specific audience or transportation user? Was there any consideration of a targeted tool to help reach a specific audience and the effectiveness at reaching that audience with the new technique?

Option Finder used for stakeholder and development team participants. Stakeholders were defined as transportation professionals and other professionals whose industry relies heavily on transportation the system. The development team was mainly comprised of transportation professions, statewide officials, MPO and RPO representatives, modal representatives, transit agencies, local government representatives.

Yes. Stakeholders and Development Team defined above.

Yes. Regional Outreach was the most successful element of our public involvement process.

6) How successful was each public involvement tool on a scale of 1 – 5 (with 5 being the most successful)?

- ▶ Phone Surveys: 5.
- ▶ Stakeholder and Economic Interests' Internet Surveys: 5.

- ▶ Transportation Visionary Interviews: 5.
- ▶ Regional Outreach (Option Finder): 5.
- ▶ Focus Groups: 3.
- ▶ Development Team Meetings: 4.
- ▶ Implementation Workshops: 3.

7) How cost effective was each public involvement tool on a scale of 1 – 5 (with 5 being the most cost effective)?

- ▶ Phone Surveys: 3.
- ▶ Stakeholder and Economic Interests' Internet Surveys: 5.
- ▶ Transportation Visionary Interviews: 5.
- ▶ Regional Outreach (Option Finder): 3.
- ▶ Focus Groups: 3.
- ▶ Development Team Meetings: 4.
- ▶ Implementation Workshops: 4.

8) Were there any downfalls or barriers to implementation?

Public Involvement was very successful and directly influenced plan development. Brian feels that the Penn DOT public involvement program is very robust and it is clear where the public influenced the goals, objectives, and implementation of the plan.

9) Were the public involvement tools implemented by agency staff?

Consultant driven approach. PENN DOT has three planning staff and the consultant team consisted of 13 firms that were involved in the plan development.

10) Are there any new public involvement techniques that you are considering for future efforts?

N/A. The Statewide Transportation Plan is not currently being updated.

Agency: Oregon Department of Transportation (ODOT)

Contact: Robert Maestre, Long Range Planning Manager
Vanitha Murphy
Interview Date: July 2, 2010
Attendees: Laura Haas

1) What public involvement techniques do you typically use for transportation planning or other efforts?

The Oregon Department of Transportation (ODOT) uses a variety of public involvement techniques as part of their transportation planning process.

The *primary* public involvement tools that ODOT identified include:

- ▶ Press Releases
- ▶ Radio Stories
- ▶ Websites (ODOT website and specific Long-Range Planning website) for important planning project information
- ▶ Linking Planning and Project Development – Guidance developed by ODOT to more efficiently get public input integrated into ODOT policies and strategies. This guidance mandates that consultants working with local governments on land use and transportation planning projects use a public involvement process.
- ▶ Charettes
- ▶ Area Commissions on Transportation – More information is included on the ODOT website at: http://www.oregon.gov/ODOT/COMM/act_main.shtml
- ▶ Public involvement handbook for planning and STIP development
- ▶ Project Delivery Public Involvement Resource Guide
- ▶ Extensive involvement with Native American tribes through a state government process that includes quarterly meetings. ODOT attends meetings concerning natural resources, economic development, and cultural resources.
- ▶ Context Sensitive and Sustainable Solutions (CS3) Process
- ▶ Stakeholder Groups
- ▶ Public involvement policy set forth by the statewide transportation commission.
- ▶ The Practical Design RaceTrack Process involves the public at many stages, from planning through development.
- ▶ Education and outreach throughout the state through the TGM program
- ▶ Bi-annual phone survey

More detailed information is included at the end of this summary.

2) What innovative/technology-based public involvement tools have you used?

ODOT mentioned the following technology-based public involvement tools that have been utilized for transportation planning efforts:

- ▶ Website Content: The Transportation Development Division (TDD) houses the ODOT Planning Section. TDD has both an intranet and an internet site to share planning information and provide contact information to collect public input.
 - ODOT also creates web sites for specific projects such as legislative implementation projects involving various stakeholders and citizens.
 - ODOT has five regions that house planning sections and field staff. They have their own web sites for their regions and for individual projects as necessary. The region web sites are all a bit different as they are tailored to each region's individual needs.
 - An example of ODOT public involvement for statewide planning is the Oregon Transportation Plan (OTP). During the OTP development public involvement process, the OTP website played a key role in communications throughout the OTP planning process. The site contained the Draft OTP and Executive Summary, background material, outreach and committee meeting information, contact information and the OTP survey. Over the fifteen-week public review period, the OTP home page received nearly 6500 visits. Now the website includes published copies of the adopted Oregon Transportation Plan, related materials developed during its development, mode maps and other pertinent information such as newsletters that were mailed out to stakeholders.
 - The Communications Office Webpage: <http://www.oregon.gov/ODOT/COMM/>. The webpage has links to podcasts, videos, radio news stories, and TripCheck. TripCheck is the ODOT real time camera system that informs the public of current road conditions. The public can also sign up to receive email updates regarding ODOT activities.
 - The Citizens' Representative Office Webpage: <http://www.oregon.gov/ODOT/COMM/CRO/index.shtml>
 - This webpage is the portal for the public to find many types of information about ODOT, including specific project information.
- ▶ ODOT uses e-mail messages, electronic surveys, and the Worldwide Web. For public engagement/ involvement/outreach in our highway construction projects, ODOT is *planning* to use social media...but are not right now. ODOT is currently using social media for traffic alerts (twitter) and some general press release support (youtube and flickr for videos/photos). ODOT has also used YouTube as a voting tool for specific project designs.
- ▶ Transportation On-Line Database (TPOD) is an ODOT intranet GIS tool with document links to Transportation System Plans (TSPs) and transportation facility plans. With this tool, users are able to query a polygon on a GIS map and see a pop-up of all the related transportation planning documents. The user then clicks on the plan they want to see and a PDF of the document comes up. The user can read and/or print the document, do a search for a key word or save the document on their computer. TPOD is a valuable tool for any individual wanting to know more about the numerous transportation plans that have been developed throughout the state. The use of TPOD

will lead to greater interaction and cooperation between organizations and the public because of the ability to share transportation planning information more efficiently. TPOD will soon be available to the public through the ODOT internet site.

3) What innovative/technology-based public involvement tools have you considered using, but haven't as of yet? What have you seen as barriers to integrating these tools?

ODOT has just started using the social media tools discussed above in Question #2, but that are moving forward carefully. Some barriers that were mentioned include making sure that they can be responsive to posts or input in a timely manner, which takes staff at many levels and computer security.

4) When implementing these innovative tools, did you cut back on traditional public involvement efforts?

ODOT has not cut back on traditional public involvement efforts.

5) What was the relationship between the innovative tool(s) implemented and the intended audience and transportation users? Was the tool selected based on a specific audience or transportation user? Was there any consideration of a targeted tool to help reach a specific audience and the effectiveness at reaching that audience with the new technique?

6) How successful was each public involvement tool on a scale of 1 – 5 (with 5 being the most successful)?

Innovative

- ▶ Linking Planning and Project Development Process = 2/3
- ▶ Public Involvement Handbook = 3.5/4
- ▶ Charettes (Specifically a 4-day focused charette) = 4.5
- ▶ Stakeholder Groups = 3/3.5 (For outreach to general public and interest groups)

Technology-Based

- ▶ Social Media = ??
- ▶ Webpage Content for the Planning Web Page= 3 (Webpage is hard to find and the general public is not greatly interested in long range planning at the state level. It is more useful for stakeholder groups and citizen groups who may be doing local planning and need to access webpage for materials.)

7) How cost effective was each public involvement tool on a scale of 1 – 5 (with 5 being the most cost effective)?

Innovative

- ▶ Charettes (Specifically a 4-day focused charette) = 4.5
- ▶ Public Involvement Handbook = 5
- ▶ Stakeholder Groups = 3 (Time intensive and costly)

Technology-Based

- ▶ Social Media = ???
- ▶ Webpage Content =

8) Were there any downfalls or barriers to implementation?

In general, some of the challenges include a lack of meaningful participation and stakeholders becoming involved near project completion to express viewpoints that suggest significant revisions or direction. Other challenges include accurate cost or time projections for public involvement activities for planning projects.

Getting the public involved at the necessary time has been a challenge for ODOT. Sometimes an issue is not ripe for a community and getting the right people at the table for critical decision-making can be difficult. Generally, I think shifting the focus to the SDIC approach, mentioned above, and using communication tools and techniques that provide good outreach and public information has been important for ODOT. Conducting project open houses, citizen advisory meetings, workshops, and design charrettes has been a successful approach. Additionally, project specific newsletters and web sites have proven to be effective communication tools to provide information and receive input from the public and stakeholders.

Social media – One challenge that ODOT identified is making sure that the information made available to the public via social media outlets is very professional and productive. ODOT has been very careful with the information they post via these methods.

One major issue with using social media sites is computer security.

9) Were the public involvement tools implemented by agency staff?

The suite of public involvement tools have *mainly* been implemented by the agency staff in conjunction with limited consultant support for the TGM process.

10) Are there any new public involvement techniques that you are considering for future efforts?

See answer to Question #3.

Additional Detailed Information

Public Involvement Tools

In Oregon, we have 19 Statewide Planning Goals. Goal 1 is Citizen Involvement which can be viewed at http://www.lcd.state.or.us/LCD/goals.shtml#Statewide_Planning_Goals. Goal 1 provides an outline of the key components of public involvement that must be done during land use and transportation planning, including a citizen involvement program and public involvement plans for projects. The goal requires federal, state and regional agencies, and special-purpose districts to coordinate their planning efforts with the affected governing bodies and make use of existing local citizen involvement programs established by counties and cities.

The Oregon Transportation Plan (OTP) provides policy objectives for all of ODOT. The OTP has seven goals: Goal 1 – Mobility and Accessibility; Goal 2 – Management of the System; Goal 3 – Economic Vitality; Goal 4 – Sustainability; Goal 5 – Safety and Security; Goal 6 – Funding the Transportation System; and Goal 7 – Coordination, Communication and Cooperation. The seventh goal is to pursue coordination, communication and cooperation between transportation users, providers and those most affected by transportation activities to align interests, remove barriers and bring innovative solutions so the transportation system functions as one system:

Policy 7.3 (Public Involvement and Consultation) It is the policy of the State of Oregon to involve Oregonians to the fullest practical extent in transportation planning and implementation in order to deliver a transportation system that meets the diverse needs of the state.

At ODOT's public involvement web page, information is provided for our commissions, the Oregon Transportation Commission (OTC) and the Area Commissions on Transportation (ACTs).
<http://www.oregon.gov/ODOT/involvement.shtml>

The Oregon Transportation Commission establishes state transportation policy. The commission also guides the planning, development and management of a statewide, integrated transportation network that provides efficient access, is safe, and enhances Oregon's economy and livability. The commission meets monthly to oversee Department of Transportation activities relating to highways, public transportation, rail, transportation safety, motor carrier transportation, and drivers and motor vehicles.

The governor appoints five commissioners, ensuring that different geographic regions of the state are represented. One member must live east of the Cascade Range; no more than three can belong to one political party.

In particular, we have Area Commissions on Transportation (ACTs) which are advisory bodies chartered by the Oregon Transportation Commission. ACTs address all aspects of transportation (surface, marine, air, and transportation safety) with primary focus on the state transportation system. ACTs consider regional and local transportation issues if they affect the state system. They work with other local organizations dealing with transportation-related issues. There are ten official ACTs and two advisory bodies that have an ACT-like role, one in the Portland Metro Area and one in Lane County.

ACTs play a key advisory role in the development of the [Statewide Transportation Improvement Program](#) (STIP), which schedules funded transportation projects. ACTs establish a public process for area project selection priorities for the STIP. Through that process and following adopted project eligibility criteria, they prioritize transportation problems and solutions and recommend projects in their area to be included in the STIP.

When completing planning projects, ODOT planning staff uses Citizen Advisory Committees, Stakeholder Committees and Technical Advisory Committees with citizens and stakeholders. Sometimes these committees are formed specifically for the project and sometimes they are already in existence and we tap into them for advisory purposes. The committees that would be involved during planning include the Oregon Freight Advisory Committee, the Oregon Bike and Pedestrian Advisory Committee, the Public Transportation Advisory Committee, the Rail Advisory Committee, the Scenic Byways Advisory Committee and the Historic Columbia River Highway Advisory Committee.

ODOT is also working to strengthen the link between planning and project delivery to improve communication between planning and project development during the life cycle of a project. A stronger link ensures that information, commitments and agreements with planning stakeholders are forwarded to project leaders, and provides for timely integration of relevant planning information for project design and construction.

Project Delivery Operational Notice – PD-18 establishes expectations for information and knowledge transfer from planning to project delivery, including consistent methods for documentation and decision-making, to ensure staff confidence that planning decisions can be relied upon during project delivery. It also provides a communication framework and specifies roles and responsibilities for planning and project delivery staff. This operational notice focuses on the planning-project delivery transition during the draft STIP process.

PD-18 requires planners to complete Part 5 of the project prospectus summarizing planning information for specific planning projects to be considered in development of STIP projects. During the scoping of a STIP project, a Region Planner decides if Part 5 is needed in consultation with the Project Leader. Information such as land use actions, public involvement, any commitments or agreements, considerations, identified risks/red flags and references to plans or related planning efforts are summarized in Part 5.

Linking Planning and Environmental Processes (LPEP): ODOT has formed an LPEP Steering Committee and Working Committee that are charged with developing and locating training and creating guidance for ODOT staff to link transportation planning with the environmental work that is done by ODOT staff and consultants. The Working Committee is comprised of planners and environmental project managers and they are currently working on LPEP best practices guidance. This work is important to public involvement because it suggests that environmental project managers get involved at the planning stages and that planners continue to follow the project once it moves into the NEPA process. This integration assures that decisions that are made in planning are more considerate of the environmental processes and there is less likelihood for duplication of efforts or work having to be re-done at the environmental documentation stage of the project delivery cycle.

Transportation System Plan Guidelines: The agency has some responsibility to assure local governments use effective public involvement processes in developing Transportation System Plans (TSPs). When assisting local governments in the development of their local transportation system plans, agency staff provides information and guidance on the public involvement process as outlined in the TSP guidelines (<http://www.oregon.gov/ODOT/TD/TP/TSP.shtml>).

Detailed tribal consultation activities occur throughout the planning and project development processes. One forum is the Government-to-Government quarterly meetings sponsored by the Governor's office. These meetings stem from a 1996 Executive Order, which became law in 2002 (ORS 182.162) and outlines expectations for state agency interactions with tribal governments. As part of this forum, seven clusters consisting of tribes and applicable public agencies meet two or three times a year to problem solve natural resource, economic development, safety, education and other issues. Consultation and a presentation on the draft OTP occurred at a cluster meeting during the OTP development process.

Tribal governments are also participating members of the ACTs and were a primary focus of OTP consultation activities. Tribal governments were represented on the OTP Mobility and Economic Vitality Policy Committee that helped guide policy development of the Plan. Tribal governments received OTP outreach materials and newsletters in the same way as other jurisdictions throughout the state. As the OTP was being developed, staff contacted and requested to meet with various Oregon tribal governments; however, most tribes felt they had sufficient involvement in the planning process through their ACT.

Tribal governments in Oregon prepare a Transportation Improvement Program (TIP) every two years that includes transportation projects on Indian reservation roads. ODOT coordinates with the Secretary of the Interior, via the regional Bureau of Indian Affairs (BIA) office, to include the Tribal TIP in the STIP exactly as submitted.

Recently, the Department has implemented an effective method of citizen participation: the Systematic Development of Informed Consent (SDIC) created by Hans and Annemarie Bleiker (www.ipmp-bleiker.com or www.consentbuilding.com). Their training is provided to project managers, planners, public information officers, and mid- and executive level managers. The basic concept is not to try to get 100 percent of citizens and stakeholders supporting a project. Rather, the objective is to get those who have veto power and absolutely oppose the project to not (even if grudgingly) exercise their veto power, informed consent. Therefore, you are not focusing a lot of time on a "blanket" approach to citizen engagement components of public involvement, but you are honing in on strategies to achieve informed consent, and working with those who truly impacted or have value to add into the decision making process. The basic strategy to achieve informed consent means gaining a common understanding with the public that: There truly is a problem or an opportunity that must be addressed; It is our responsibility to address the need or opportunity; We have a reasonable, fair, and prudent decision-making process; We do listen and we do care.

Another innovative method that Oregon has embraced for the design and construction of projects is Context Sensitive and Sustainable Solutions <http://www.obdp.org/partner/cs3/>. Oregon's \$1.3 billion OTIA III State Bridge Delivery Program established a new way of doing business for the Oregon Department of Transportation— one designed to create a positive legacy that endures long after construction is complete. The innovative decision-making framework, known as Context Sensitive and Sustainable Solutions, or CS³ (pronounced C-S-cubed), helps ODOT preserve

Oregon's scenic, aesthetic, historical, environmental, economic and other community values while building safe and enduring projects. CS3 puts communities and stakeholders at the heart of decision-making. Listening to and responding to community needs are key components in rebuilding Oregon's highway bridges. The CS3 umbrella includes eight factors: economic stimulus, diversity, environmental program management, environmental justice, mobility, public involvement, sustainability and cost-effectiveness. Although this phase of project delivery typically occurs after the planning stage, the concept is universal and many of its components apply to planning.

Social Media

ODOT tweets and posts to Facebook. ODOT is about to blog. And ODOT has posted videos to YouTube and photos to Flickr for several years now. Welcome to the 21st century!

"We're going where they are," ODOT Communications Director Pat Cooney said. "There are audiences we need to reach who will never find the ODOT Web page on their own — they don't think we have anything to offer. So we're reaching out to them, in the manner they expect to be contacted."

Almost every social media platform can be viewed as just another communications channel. Information Systems Section and Communications Division staffs are working together to attempt to define the most appropriate methods of using each of these new channels to meet ODOT's mission. "It's all about transparently interacting with the people we serve," said Director Matt Garrett. "We're not using these tools because they're shiny and new. We're using them because they're the right tools at the right time to further connect us to the ongoing conversations about transportation now occurring online."

- ▶ **TripCheck**

TripCheck continues to be ODOT's well-known online resource for real-time information on highway conditions, including access to more than 200 highway cameras showing you up-to-the-minute road and weather conditions. TripCheck's underlying information feeds more than 150 other Web sites and information aggregators (such as Traffic.com), allowing millions of people to determine (and see!) Oregon road conditions whenever and wherever they want.

- ▶ **Traffic alerts**

ODOT uses several electronic distribution methods to distribute traffic alerts in the Portland metro area. Traffic alerts from Region 1's TMOC appear on virtually all Portland Metro media Web sites within minutes, putting real-time information in the hands of people checking their route before leaving home or work — putting action to the slogan "Know Before You Go."

ODOT e-mails those same TMOC traffic alerts to Portland area traffic reporters, who broadcast them via radio and TV, as well as online. The Oregonian's commuter blogger automatically tweets each Portland-area traffic alert.

▶ **Twitter**

ODOT Communications staff is ODOT's official "tweeters," using Twitter to communicate safety messages, open houses or other ODOT-sponsored events. We're still considering our overall strategy for using Twitter.

▶ **You Tube**

ODOT uses its own YouTube channel to help people learn how to put on tire chains, learn more about Oregon's Solar Highway and experience the beauty of Central Oregon. ODOT has been posting to YouTube for more than a year; we now have more than five dozen videos online.

▶ **Flickr**

ODOT has been posting photos to Flickr for several years. Although our archive is still relatively small (about 650 photos), we're posting more all the time. Statewide media are learning that they can access our photos and construction project graphics from Flickr. We're also sharing photos with folks interested in transportation issues, including other state departments of transportation.

▶ **Facebook**

ODOT Human Resources uses Facebook as a recruiting tool as staff visits colleges across the nation. And ODOT Region 1 is launching a Facebook pilot project involving a community of I-205 multi-use path users. In the meantime — just like with Twitter — we're still considering our overall strategy for using Facebook, learning from other government agencies and Region 1's new pilot project.

▶ **GovDelivery**

ODOT's own Web site has been augmented using a program called GovDelivery. With this free service, citizens can sign up for information they care about on almost a Web page-by-Web page basis. Whenever we update those pages, citizens are notified that the pages changed. Currently, only the Communications Division is using GovDelivery; the process of how other divisions or units can employ this mechanism is still being defined.

▶ **Blogs**

ODOT is considering the business cases for one or more construction project blogs using Google's Blogger. We'll let you know more about these as they prepare to launch.

These new tools also represent major changes in how ODOT conducts itself online. In the long term, you'll have access to ODOT content on Web sites such as YouTube, Flickr and Twitter, as long as you're using these Web sites to do your job and not for personal use. But in the short term, until a number of internal safeguards are created and certified, employee access must remain limited.

"Computer security is always an issue," ODOT Chief Information Officer Ben Berry said. "We're excited to employ these new technologies and platforms, but first we must make sure that we have safeguards to keep hackers from using any software gaps in these new tools to damage our computer systems."

Project groups that might want to blog about their projects must write a business case explaining how the blog enhances stakeholder outreach. For more information, please contact Dave Thompson, ODOT Public Information Section manager.

ODOT Online

ODOT: www.oregon.gov/ODOT
TripCheck: www.tripcheck.com
Twitter: www.twitter.com/OregonDOT
YouTube: www.youtube.com/OregonDOT
Flickr: www.flickr.com/OregonDOT
Facebook: www.facebook.com/pages/Oregon-Department-of-Transportation/27524542833
Blogs: TBA!

ODOT Links

Link to ODOT's public involvement page - <http://www.oregon.gov/ODOT/involvement.shtml>

- ▶ Link to the Oregon Transportation Commission Public Involvement Policy - http://www.oregon.gov/ODOT/COMM/docs/OTCpolicy11_PIP.pdf
- ▶ Link to Area Commission on Transportation (Oregon Transportation Commission chartered advisory bodies) and related policy and directive (internet link)
Main Page - http://www.oregon.gov/ODOT/COMM/act_main.shtml
- ▶ Link to all Oregon ACTS - http://www.oregon.gov/ODOT/COMM/act_main.shtml#Oregon_ACTs Policy on formation of ACTSs - <http://www.oregon.gov/ODOT/COMM/docs/acts/ACTPolicy0603.pdf> - you may be interested in page 6 which deals with public involvement; and also other parts that Robert talked about during the interview related to staffing requirement are provided in pages 4 and 5.
- ▶ Link to the different Advisory Committees – (please see the Idaho DOT Survey document for more information on this) – here is the link to the main page - http://www.oregon.gov/ODOT/involvement.shtml#Information_Community_Affairs

Link to the ODOT's Communications Division and other tools on the web page - <http://www.oregon.gov/ODOT/COMM>

Links to Public Information Officers and Community Affairs/Public Involvement/Community Liaison

- ▶ <http://www.oregon.gov/ODOT/COMM/contacts.shtml>. - information about Public Information Officers help with public information related to statewide issues and construction/incidents on state highways.
- ▶ http://www.oregon.gov/ODOT/involvement.shtml#Information_Community_Affairs – help with public involvement related to specific projects or updates on projects at the local level

Technology based tools for (public information purposes) – used by our Communications Division staff:

- ▶ Podcasts, Radio News and Public Service Announcements - <http://www.oregon.gov/ODOT/COMM/radionews.shtml> - this page also has an option to sign up and receive announcements when updates are posted.
- ▶ Videos - http://www.oregon.gov/ODOT/COMM/video_podcasts.shtml - also has option to sign up for receiving updates.
- ▶ Link to our Citizen Representatives Office - <http://www.oregon.gov/ODOT/COMM/CRO/index.shtml>
- ▶ Radio News - http://www.oregon.gov/ODOT/COMM/news_main.shtml. Please note under this page we have an option to sign up for receiving newsletter updates
- ▶ Websites – TRIPCHECK - <http://www.oregon.gov/ODOT/COMM/tripcheck10year.shtml>

Link to ODOT Planning and STIP Public Involvement Resources Handbook, can be found from within the Final Survey Transportation Planning for ODOT.

Internal ODOT Initiatives - Agency Operational Directive – PD-18 (accessible by the Public) and Project Delivery Resource Handbook (please see more on this in Idaho survey response by ODOT).

Links:

- ▶ PD – 18: To establish the framework, roles and responsibilities, and the deliverable for communications between Planning and Project Delivery staff in the transition between Planning and Project Development. The purpose of this Notice is to establish expectations, outcomes, and roles and responsibilities. - http://www.oregon.gov/ODOT/HWY/PDU/docs/pdf/PDLTNotice_18.pdf - please see page 6 for public involvement expectations
- ▶ <http://www.oregon.gov/ODOT/HWY/PDU/docs/pdf/ProcessMap.pdf> - picture of the process
- ▶ http://www.oregon.gov/ODOT/HWY/PDU/docs/word/PDG/PD_PIRG/PDPIRG_PI_Plan_Template.doc#PITools – this is a template that goes with every project – it’s a public involvement plan template for every ODOT project.
- ▶ The Project Delivery Public Involvement Resource Guide: (accessible by the public on the internet) - http://www.oregon.gov/ODOT/HWY/PDU/docs/word/PDG/PD_PIRG/PD_PIRG_2010.doc

Link to practical design website - The link to Practical Design site - http://www.oregon.gov/ODOT/HWY/TECHSERV/practical_design.shtml

Link to the practical design strategy http://www.oregon.gov/ODOT/HWY/TECHSERV/docs/Practical_Design_Guideline.pdf - see page 26 for the “Race Track” Robert talked about during the interview

Miscellaneous Links:

ODOT Public Participation Page for Rule Making -
<http://egov.oregon.gov/ODOT/CS/RULES/public.shtml>

General Link - <http://egov.oregon.gov/ODOT/CS/RULES/> - please note option to sign up for updates.

Survey Links:

- ▶ Link to the Statewide Needs and Issues Survey.
http://www.oregon.gov/ODOT/TD/TP_RES/docs/Reports/2009/FY_2009_Oregon_Transportation_Needs_and_Issues_Survey.pdf
- ▶ Household Activity Survey - <http://www.oregon.gov/ODOT/TD/TPAU/Survey.shtml>
- ▶ http://www.oregon.gov/ODOT/Partner_Services.shtml - provides links to local partners and services

Link to the Transportation Growth Management Program Outreach -
<http://www.oregon.gov/LCD/TGM/outreach.shtml>

Statewide transportation Improvement Program - info

- ▶ <http://www.oregon.gov/ODOT/TD/TP/ssc.shtml> - Link to the STIP Stakeholder Committee - The Statewide Transportation Improvement Program (STIP) Stakeholder Committee was established by the Oregon Transportation Commission in 2001 to advise on policies and procedures related development of the STIP. [Committee members](#) represent diverse transportation interests including freight, private business, public transit, local governments, and state agencies.
- ▶ <http://www.oregon.gov/ODOT/TD/TP/docs/0811stip/primerBrochure.pdf?ga> - Brochure developed for the Statewide Transportation Improvement Program Outreach Process.
- ▶ Region Planners use map products from ODOT's GIS unit. The unit produces map products – some of these maps have won national level recognition and awards for their usefulness factor. The GIS Unit serves the Oregon Department of Transportation by effectively providing geographic information products and services through the development of spatially-enabled applications, databases, mapping products, analysis, education and technical support. Here is a link to the different services offered by the GIS Unit. -
http://www.oregon.gov/ODOT/TD/TDATA/gis/odotgis.shtml#GIS_and_Mapping_Links – here is a link

Link to the Transportation Development Division Web Page – Link to the Planning Section is from here <http://www.oregon.gov/ODOT/TD/index.shtml>.

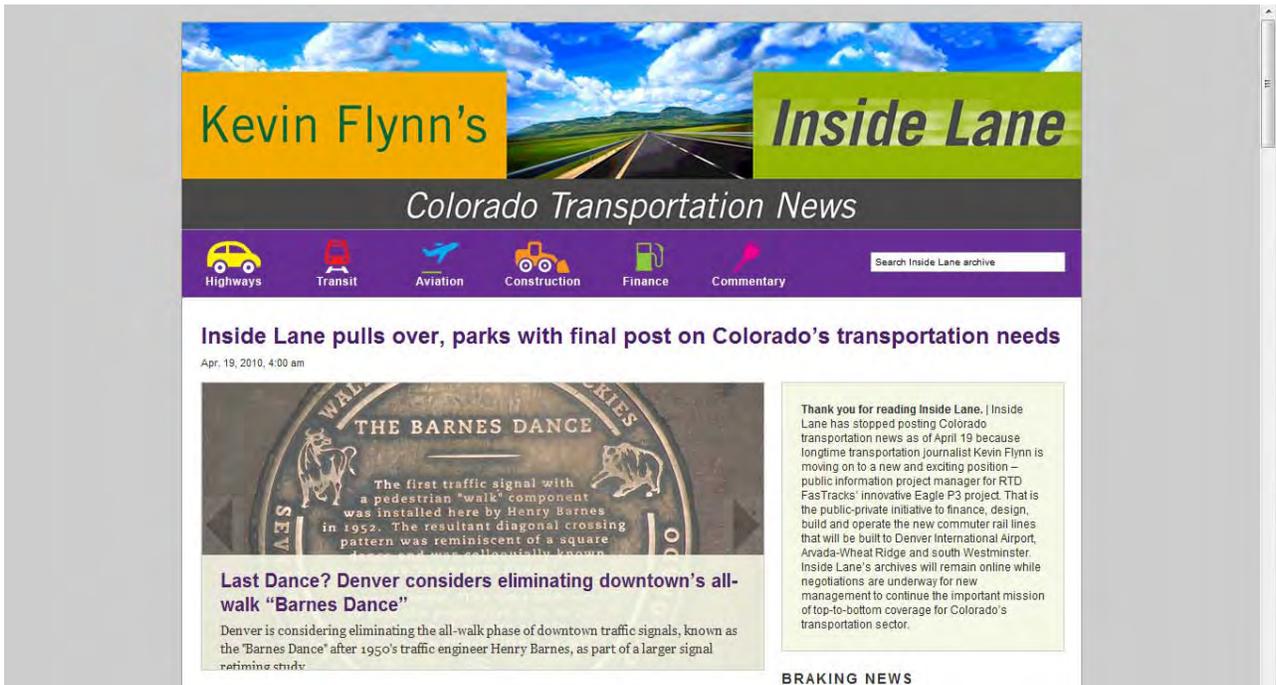
Link to our publications is from here -
http://www.oregon.gov/ODOT/TD/business_units.shtml#Publications

APPENDIX C. RESEARCH ON TECHNOLOGY BASED-TOOLS

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| Tool | Blogs |
| Description | <p>According to Wikipedia, "A blog (a contraction of the term "web log") is a type of website, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse-chronological order. "Blog" can also be used as a verb, meaning to maintain or add content to a blog.</p> <p>Many blogs provide commentary or news on a particular subject; others function as more personal online diaries. A typical blog combines text, images, and links to other blogs, Web pages, and other media related to its topic. The ability of readers to leave comments in an interactive format is an important part of many blogs. Most blogs are primarily textual, although some focus on art (Art blog), photographs (photoblog), videos (Video blogging), music (MP3 blog), and audio (podcasting).</p> <p>Microblogging (example: Twitter) is another type of blogging, featuring very short posts."</p> |
| Amount/Type of Information Conveyed | <p>A blog can literally be about anything – and you'd likely be surprised with the number of blogs that are maintained on what would seem even the most obscure of topics.</p> <p>A search on the Google Blog Search came up with more than 1.6 million listings for the word, "barefoot." Similar searches for "cartoon," netted 1.7 million sites and "leprechaun" posts numbered more than 319,000 as of April 2010.</p> |
| Cost of Implementation | <p>Setting up a blog ranges from free (Blogger.com and other sites), or becomes more expensive with the integration of customized software applications. At this time, there does not seem to be a true advantage for those paying to use proprietary software.</p> |
| Ease of Implementation | <p>Creating a blog is simple and easy – most sites only require registration.</p> |
| Software/Hardware Requirements | <p>Computer with Internet access and browser, or wireless device with same.</p> |

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| Tool | Blogs |
| Current DOT/MPO Uses | Many DOTs use blogs as communication tools, including Texas, Nova Scotia, Delaware, Virginia – the list goes on and on. Miami-Dade and Santa Fe MPOs are the top blogs listed under a Google Blog search for “metropolitan planning organization.” |
| Demographics of Current Users | Very little information exists to quantify the demographic that uses blogs, however an article published last year claims that 77% of active Internet users read blogs. |
| Compatibility with CDOT Cyber Security and Web Policies | CDOT’s creation of a public involvement blog would intuitively be an extension of the public relations office and therefore fall under its direct control. |

Screenshot



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| Tool | Adobe Acrobat Connect Pro – www.adobe.com   |
| Description | According to Wikipedia, “Adobe Acrobat Connect Pro (formerly Macromedia Breeze) is software used to create information and general presentations, online training materials, web conferencing, learning modules, and user desktop sharing.” |
| Amount/Type of Information Conveyed | Users view a presentation run by the presenter in real-time. Users can also share files, ask questions via text messages and indicate preferences via integrated voting. |
| Cost of Implementation | \$45/month for unlimited sessions with a maximum of 100 participants per month. Adobe also offers customers a pay-per-use plan at \$.32/minute/user. |
| Ease of Implementation | A turnkey service, there is nothing to download. As most (98%) of computers in the world currently have Adobe Flash Player installed, there are few barriers to entry for individuals who wish to participate in information sessions. |
| Software/Hardware Requirements | Users must have a computer with Internet connection and browser. System built on Adobe Flash technology, which is already installed on 98% of computers worldwide. Data bandwidth should be 56k or better. |
| Current DOT/MPO Uses | FHWA currently uses this service; no other MPOs or DOTs came up in research as using the platform. |
| Demographics of Current Users | No demographic information was available. |
| Compatibility with CDOT Cyber Security and Web Policies | N/A |

Screenshot

Web seminars — Adobe Connect

ADOBE ACROBAT CONNECT PRO WEBCAST

Adobe Acrobat Connect Pro

Adobe's web-conferencing solution is positioned as a leader in Info-Tech Research Group's Vendor Landscape.

The next best thing to meeting in person

Communicate your ideas powerfully using Adobe Acrobat Connect™. The web-conferencing software. Research shows presentations and multimedia get your attention, and get feedback from hundreds of participants — all with a web browser and the Adobe Flash® Player plugin, which is built on 98% of Internet-connected personal computers.

Secure web conferencing | **eLearning**

Control access to team meetings and help ensure privacy and confidential communications and business data. | Create self-paced courses and deliver rich, rich technical content on servers.

Ask a Question

What plans are available for small-to-medium size businesses?

Next Steps:

- Talk to Adobe:
 - Sales 888-649-2990
 - Request a consultation
- Learn more:
 - Free trial
 - Purchase options
 - Get support

The power to persuade

With Adobe® Connect™ software, you can host high-impact web seminars to help increase leads, boost response rates, and close deals faster. As for your audience — clients, partners, and prospects — all they need is a web browser and Adobe Flash® Player software.

Solution benefits

STEP-BY-STEP WORKFLOW DIAGRAM

Go beyond screen sharing and engage your audience with streaming video, SWF animations, and interactive content.

FHWA

FEDERAL HIGHWAY ADMINISTRATION

The U.S. transportation department uses Adobe Acrobat Connect Pro software to create engaging eLearning experiences for staff and customers nationwide

eTraining a diverse user base

Introducing technology into any organization can be difficult, especially when it is unfamiliar to most employees. When the Federal Highway Administration (FHWA) wanted to provide web conferencing and distance learning across its diverse enterprise, agency managers knew they had to implement a solution that was user-friendly and offered top-notch capabilities without requiring extensive training and management.

BENEFITS

- Reduced travel costs of up to \$1,200 for many trainings
- Accelerated rollout of time sensitive safety training
- Empowered staff to improve job performance
- Increased speed and accuracy of compliance with government regulations

PROJECT DETAILS

The FHWA is the major agency of the U.S. Department of Transportation (DOT), a Cabinet-level organization of the executive branch of the U.S. government. The agency is charged with the broad responsibility of ensuring that U.S. roads and highways are the safest and most technologically up-to-date. The FHWA is headquartered in Washington, DC, with field offices in every state, the District of Columbia, and Puerto Rico.

The geographically dispersed, multi-tiered organization wanted to improve its internal and external communication and training systems. Overall, the objective was to reduce training costs with an eLearning platform that would reach widespread audiences securely and reliably—including contractors, associations, and members of the private sector.

Adobe Government Communications

- Subscribe now
- Adobe Government White Paper
 - Download now
- Adobe Government Events and eSeminars
 - Attend now

FHWA uses just-in-time web conferencing and eLearning to improve communication and deliver training to staff within the agency and at state-level Departments of Transportation.

"By using the Adobe solutions to support our eLearning efforts, we realize remarkable savings. Throughout the organization, training is taking place that otherwise might not have been offered."

Deborah Gwaltney
Knowledge Exchange Manager
FHWA

Link to Federal Highway Administration »
Cross Agency Collaboration »

| | |
|---|---|
| <p>Tool</p> | <p>Facebook – www.facebook.com</p>  |
| <p>Description</p> | <p>Facebook is a social networking website with more than 400 million active users around the world. The service is free and available to users over the age of 13 with a valid e-mail address. Facebook makes money by selling targeted advertisements on its site.</p> <p>Facebook users can add friends, send them messages and update their personal profiles to notify other users about themselves. Communicating with friends and other users can be done through private or public messages or a chat feature. Users can also join sub-networks organized by workplaces, schools, colleges, etc.</p> <p>More recently, Facebook started offering “Fan Pages” to businesses and organizations. In short, just as individuals can create their own pages, now businesses (and organizations) can do the same. As with individual pages, Fan Pages are free to the organization and advertisements are sold to support the broader site. Individuals who want to keep up with an organization (in our case, CDOT), list themselves as a fan and automatically receive updates.</p> |
| <p>Amount/Type of Information Conveyed</p> | <p>From a public involvement perspective, Facebook can communicate/publicize upcoming events and gatherings to solicit more participation. It isn’t the best tool to communicate details of any given planning program, but can increase visibility using a platform that becomes more and more popular every day.</p> |
| <p>Cost of Implementation</p> | <p>CDOT already has a Fan Page online; the key cost seems to be the personnel and resources to properly maintain this presence.</p> |
| <p>Ease of Implementation</p> | <p>Again, the question of implementation here is mainly a question of allocating personnel resources to provide regular updates. Also, there is the current issue of the Attorney General’s Office ordering all State offices to take down their Facebook sites due to “indemnity issues.” It is unclear at this time if or whether these issues has been resolved.</p> |
| <p>Software/Hardware Requirements</p> | <p>Computer with Internet access and browser, or wireless device with same.</p> |
| <p>Current DOT/MPO Uses</p> | <p>CDOT currently has a Fan Page.</p> |

| | |
|---|--|
| <p>Tool</p> | <p>Facebook – www.facebook.com</p>  |
| <p>Demographics of Current Users</p> | <p>According to estimates by Quantacast.com, Facebook users are mostly female (55%), are between the ages of 18-34 (42%), Caucasian (75%) and African American (13%), 29% have kids between 13 and 17, are more affluent than the average Internet site visitor and are less well educated with 47% of visitors with no college experience.</p> <p>Facebook's target audience is more for an adult demographic than a youth demographic. Facebook is one of the first social networking sites to become nearly ubiquitous; most large businesses have created and maintain Fan Pages, and advertisements are beginning to promote these pages just as we saw advertisements begin to include URLs several years back.</p> |
| <p>Compatibility with CDOT Cyber Security and Web Policies</p> | <p>CDOT has a Fan Page on Facebook, however it does not appear to currently be in-use.</p> |

Screenshot:

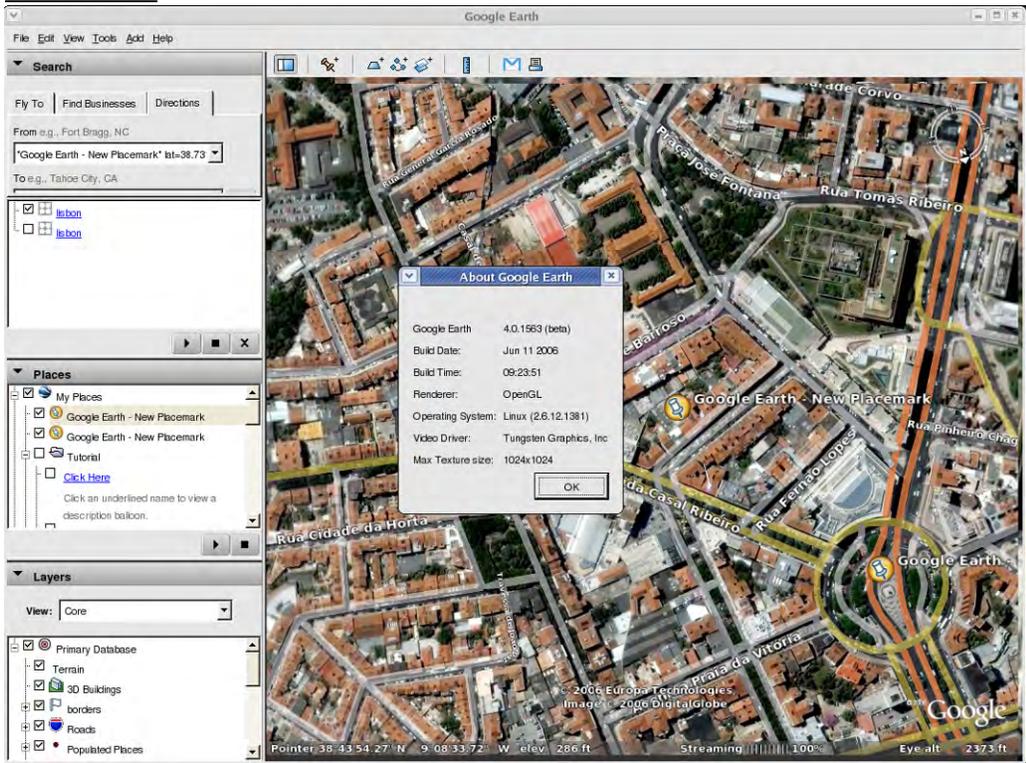


| | |
|--|--|
| Tool | <p>Google Earth – earth.google.com</p>  |
| Description | <p>Google Earth is a virtual globe, map and geographic information program that stitches together and displays satellite and aerial imagery of the Earth. Depending on the satellite imagery available for any given location, resolution varies from many meters all the way down to six inches.</p> <p>As a more robust and greater functionality version of Google Maps, this standalone application provides users with the ability to tag specific locations and add photos, comments and bits of information.</p> |
| Amount/Type of Information Conveyed | <p>As with Google Maps, the amount and type of information able to be communicated is nearly limitless. Of particular note is the ability for third-party software to place overlays on top of existing maps. This provides a level and degree of functionality that is exciting in the public involvement realm.</p> |
| Cost of Implementation | <p>Google Earth comes as a free version with limited functionality. For CDOT's purposes, the Department would likely need to invest in Google Earth Pro (\$400 per year), which is designed for commercial use.</p> |
| Ease of Implementation | <p>Google Earth is a very powerful tool that is being used to communicate transportation planning alternatives and issues to stakeholder groups across the country. The complexity of the application would likely require a consultant to be hired by CDOT to get the IT infrastructure in place and train the appropriate personnel.</p> <p>Also, we caution that using this tool to communicate with stakeholders may not be the most effective method because of the complexity of the application and the time required for users to become proficient.</p> |
| Software/Hardware Requirements | <p>According to Wikipedia, "Google Earth is currently available for use on personal computers running Windows 2000 and above, Mac OS X 10.3.9 and above, Linux Kernel: 2.4 or later (released on June 12, 2006), and FreeBSD. Google Earth is also available as a browser plugin which was released on May 28, 2008. It was also made available on the iPhone OS on October 27, 2008, as a free download from the App Store."</p> |
| Current DOT/MPO Uses | <p>Research found many transportation departments and MPOs outside Colorado are using Google Earth files to communicate future plans and transportation alternatives with stakeholder groups. Initial search found this true of Missoula County, MT (http://www.co.missoula.mt.us/transportation/Trans_Maps.htm), Fredericksburg Area MPO (http://www.fampo.gwregion.org/2035LongRangeTransportationPlan.html), Metropolitan Washington Council of Governments Transportation Planning</p> |

Appendix C-7

| | |
|---|---|
| <p>Tool</p> | <p>Google Earth – earth.google.com </p> |
| | <p>Board (http://www.mwcog.org/clrp/projects/current/ge_intro.asp) and others.</p> |
| <p>Demographics of Current Users</p> | <p>56 percent of users are older than 35, according to estimates by Quantcast. Users are almost evenly split between male and female (53% and 47%, respectively), Caucasian and Hispanic Americans make up the largest user groups (78% and 11%, respectively). Users tend to be more affluent (31% claim their household income exceeds \$100k/year, however 50% have not been to college.</p> |
| <p>Compatibility with CDOT Cyber Security and Web Policies</p> | <p>Compliance is likely, as this tool doesn't easily fit the definition of social media.</p> |

Screenshot:



Appendix C-8

Missoula, MT

- FFY 2011 TIP Call for Projects
- 2010 Public Participation Plan Revision Documents (04/02/2010)
- Missoula Active Transportation Plan
- MATP Missoulian Article (01/19/2010)
- Active Missoula - TIGER Grant Application (09/15/2009)
- Final FFY 2010-2014 TIP (02/09/10)
- FY 2010-2014 TDP (08/18/2009)
- FFY 2010 UPWP Final (10/14/09)
- Project List - (Federal and Matching Funds Obligated 10/1/2007-09/30/2008)
- City of Missoula Public Works Major Project Information
- 2009-2013 Statewide Transportation Improvement Program
- 2008 Missoula Long Range Transportation Plan (Final) - 10MB
- 2001 Non-Motorized Transportation Plan
- 2000-2008 Traffic Counts - Google Earth File

OPG Transportation Division - Google Earth Files



If you currently use Google Earth version 4 or above you can download these files and view them using Google Earth. We recognize that Google Earth cannot be run on many computers, so any available files will only include the information available in the maps from the section above.

To download and install Google Earth please visit Google, [Google](#)

You must save the file to your computer and open it using Google Earth. Once the file is opened, Google Earth should zoom to the extent of the file. By double clicking on an element, i.e. traffic count station, you will zoom to that element and the information will be displayed. Example [screenshot](#).

If you have problems viewing our files, you may need to change the **Graphics Mode** in Google Earth to **OpenGL**. To change your Google Earth settings, click on **Tools => Options => 3D View** tab. Change the setting in **Graphics Mode** to **OpenGL** if it isn't already checked ([screenshot](#)). This should clean up any erroneous lines that may appear in the **DirectX** mode.

The files typically contain three components: features, feature labels and information points. Features represent the data and must be turned on. Feature labels tend to clutter up the map and should be turned off until needed. Information points contain the data associated with the feature. The information points can be turned off until you zoom into the area of interest. Example [Screenshot](#).

Download instructions:
Right-click on the hyperlink and choose **Save Target As**. Save the file to your desktop. Select **"All Files"** from **Save As Type** drop-down. Once the download has completed, you can open the file in Google Earth.

Metropolitan Washington Council of Governments Transportation Planning Board

National Capital Region Transportation Planning Board Accessibility | Languages | Contact Us | Search



clrp

Long-Range
Transportation Plan

PROJECTS
ELEMENTS
PROCESS
PERFORMANCE
PARTICIPATION
FEDERAL REGULATIONS
DOCUMENTS

Home > Projects > Current > The Plan Visualization

- Proposed Changes for 2010
- Updates for 2009
- Highways
- Transit & HOV
- Major Studies
- Bicycle & Pedestrian
- Selected Highlights
- Six-Year TIP
- Google Earth
- Search the CLRP & TIP

THE PLAN VISUALIZATION

This page provides important information on how to use and interpret the Plan Visualization using Google Earth. Please read through this before continuing on to the visualization. The projects shown in this visualization reflect only those approved since the 2007 Update to the CLRP. Check back later for the updated visualization of projects included in the 2009 CLRP update.

- Getting Started
- What is Google Earth?
 - Why Google Earth?
 - How to get Google Earth
 - The basics of Google Earth
- The Plan and Google Earth:
 - Project Alignments
 - Project Shapes
 - Working with Built-in Layers
 - Working with Plan layers
 - Highways
 - Transit, HOV and HOT
 - Studies
 - Bicycle and Pedestrian
 - Activity Clusters/Centers
- Troubleshooting
 - I clicked the link but Google Earth didn't launch.
 - I can't see the CLRP road/transit/HOV/HOT/studies lines.
 - Google Earth tries to open, but then it crashes.
 - I can't find a specific project I am looking for.



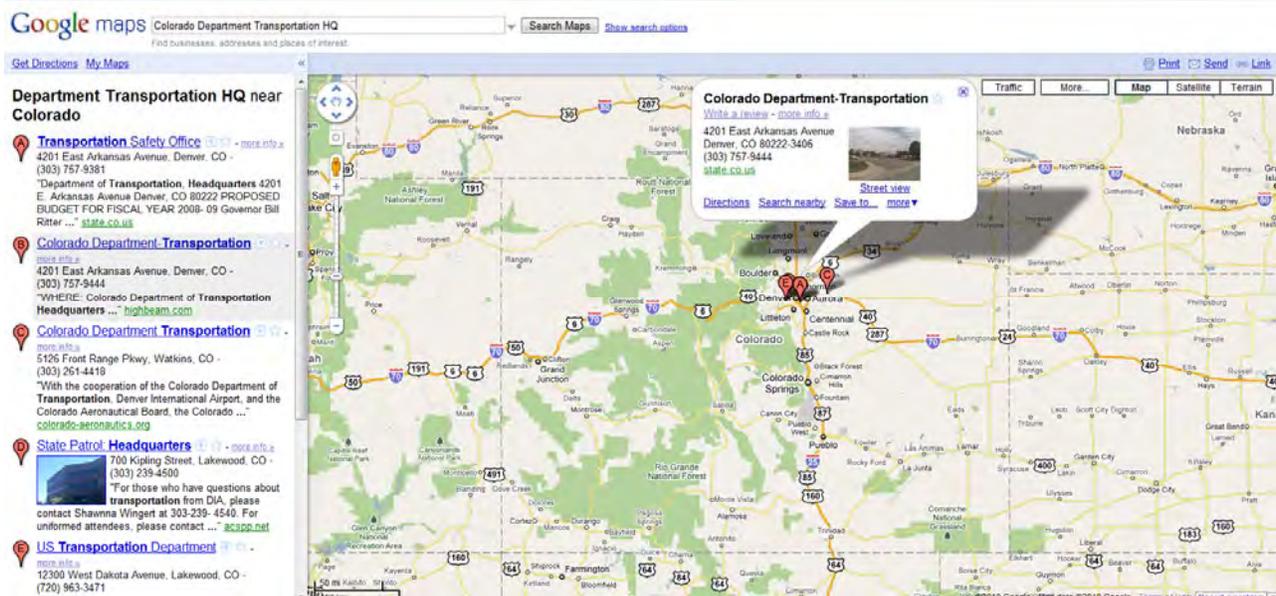
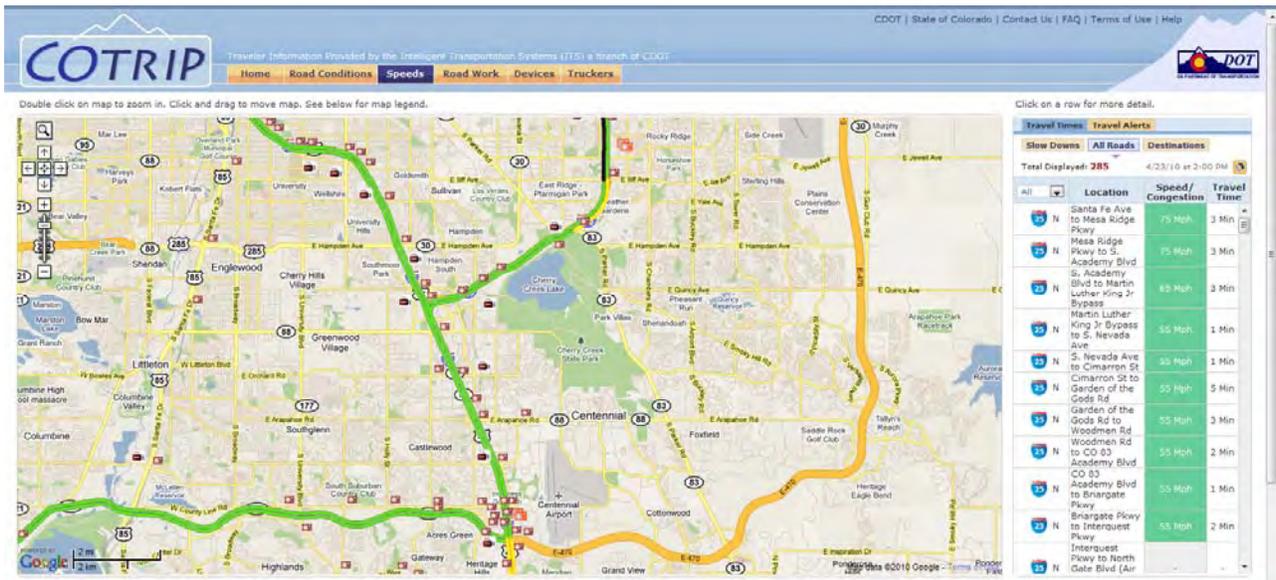
Run the 2007 CLRP
Visualization NOW!

| | |
|--|--|
| Tool | Google Maps – maps.google.com  |
| Description | <p>Google Maps is a free (for non-commercial use) Internet-based mapping service provided by Google. It offers various Geographic Information System (GIS)-based services including street maps, route planner, business locator, etc.</p> <p>Google Maps provides high-resolution satellite images for most urban areas in the United States. Not all areas on satellite images are covered in the same resolution; less populated areas usually are shown with less detail.</p> |
| Amount/Type of Information Conveyed | The amount and type of information able to be communicated is nearly limitless. Of particular note is the ability for third-party software to place overlays on top of existing maps. This provides a level and degree of functionality that is exciting in the public involvement realm. |
| Cost of Implementation | Google Maps are free to use; third-party software overlays specific to CDOT's needs and/or projects require a greater investment. |
| Ease of Implementation | To maximize the utility for CDOT's planning and public involvement needs, it is likely that a consultant would need to be hired to share expertise in this area. |
| Software/Hardware Requirements | Anyone with a computer or wireless device with an Internet browser can access Google Maps. Software overlays would require implementation of a Content Management System, although most platforms do this via cloud computing vs. installation of a software license. |
| Current DOT/MPO Uses | CDOT incorporated a version of this technology on the Transportation Expansion (T-REX) Project, which used Intelligent Traffic System (ITS) sensors to relay traffic information to a server that then displayed information graphically via the Internet. Currently, CDOT's CoTrip.org Web site includes GIS-based road and traffic information, as well as other details. |
| Demographics of Current Users | 36 percent of users are 18-34, according to estimates by Quantacast . Users are almost evenly split between male and female (51% and 49%, respectively), Caucasian and Hispanic Americans make up the largest user groups (76% and 10%, respectively). Users tend to be more affluent (33% claim their household income exceeds \$100k/year, and 60% claim either college or graduate school education. |

Innovative Public Involvement Technology Research and Implementation Study

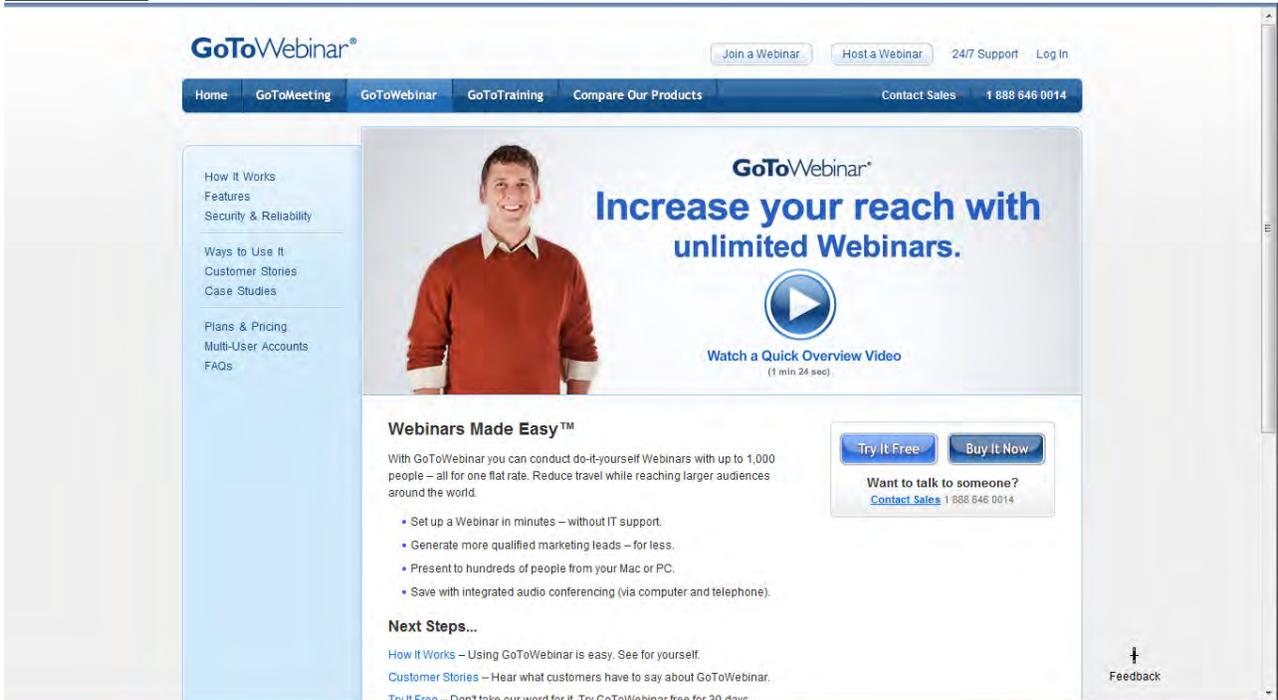
| | | |
|---|--|---|
| <p>Tool</p> | <p>Google Maps – maps.google.com</p> |  |
| <p>Compatibility with CDOT Cyber Security and Web Policies</p> | <p>Currently in-use by CDOT.</p> | |

Screenshots:



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|--|--|
| Tool | GoToMeeting – www.gotomeeting.com  |
| Description | According to Wikipedia, GoToMeeting is a, “remote meeting and desktop sharing software that enables the user to meet with other computer users, customers, clients or colleagues via the Internet in real-time. |
| Amount/Type of Information Conveyed | Using a screen sharing component of the service, users can view the computer screen of the presenter in real-time. Users can also share files to facilitate collaboration. |
| Cost of Implementation | For the purposes of this study – evaluating new methods to engage and secure the involvement of the public – we recommend a related GoToMeeting product known as GoToWebinar. For up to 100 attendees per month, plans are available starting at \$99. For up to 500 or 1,000 attendees, plans start at \$399 to \$499 per month, respectively. |
| Ease of Implementation | Getting started with GoToWebinar seems quite simple, as the technological hurdles in place have been resolved by the company offering the service. |
| Software/Hardware Requirements | Users must have a computer with Internet connection and browser. Data bandwidth for the host/presenter should be DSL or better. |
| Current DOT/MPO Uses | Research was unable to find case studies or other data suggesting that GoToMeeting (or GoToWebinar) is in wide use by either DOTs or MPOs. |
| Demographics of Current Users | According to Quantacast.com , GoToMeeting users are mostly female (55%), are older than 35 (68%), Caucasian (67%) and African American (19%). 36% claim a household income of \$100k/year or more, and 66 percent of users claim a college or graduate school degree. |
| Compatibility with CDOT Cyber Security and Web Policies | N/A |

Screenshot



| | |
|---|---|
| <p>Tool</p> | <p>GovDelivery – www.GovDelivery.com</p>  |
| <p>Description</p> | <p>According to its website, “GovDelivery is a web-based digital communication solution that allows government to reach stakeholders with the right information at the right time.”</p> <p>This service allows CDOT to set up topics, and subscribers “opt-in” to receive updates based on their own preferences. Information is distributed via e-mail, RSS and text messages.</p> |
| <p>Amount/Type of Information Conveyed</p> | <p>GovDelivery allows governments a turnkey approach to publicizing information it already distributes through other channels. The information is limited only by the constraints of typical e-mail, text messaging and Internet websites.</p> |
| <p>Cost of Implementation</p> | <p>CDOT is already a GovDelivery user.</p> |
| <p>Ease of Implementation</p> | <p>Use of GovDelivery requires training, but current CDOT staff are already using this service.</p> |
| <p>Software/Hardware Requirements</p> | <p>GovDelivery is web-based, so CDOT staff already has the technology they need to use this service. Members of the public will need a computer with Internet access and browser, or a mobile device with data capability (web or text).</p> |
| <p>Current DOT/MPO Uses</p> | <p>Many DOTs across the country, including CDOT, currently use GovDelivery.</p> |
| <p>Demographics of Current Users</p> | <p>N/A</p> |
| <p>Compatibility with CDOT Cyber Security and Web Policies</p> | <p>Content providers must be registered GovDelivery users, so content distribution is controlled in that manner.</p> |

The screenshot shows the GovDelivery website homepage. At the top, the logo "get the word out. govDELIVERY." is on the left, and contact information "856-276-5583 Contact Clients: Sign In | Support" is on the right. Below the logo is a navigation bar with links: "MADE FOR GOVERNMENT", "REACH MORE PEOPLE", "SOLUTIONS", "WHO'S USING GO", "LEARN MORE", and "ABOUT US".

The main content area features a large banner with the text "get the word out." and a photo of a woman on a mobile phone. Below the banner is a navigation menu with categories: "Federal", "State & Local", "By Function", and "International".

On the left side, there is an "Expertise" sidebar with a list of services: Analytics, Automation, Blogs, Collaboration, Cost Savings, Delivery, Digital, Subscriptions, Email, Facebook, Federal, GovLoop, Integration, On Demand, Personalization, RSS Feeds, SaaS, Social Media, State & Local, Subscribers, Text Messaging, Transparency, Transportation, Twitter, UK, Web 2.0, and Widgets.

The main content area includes a "LIVE" section with updates: "int Paul Road Closings Update 11:10:06 | BP Oil Spill Response Update: TODAY: EPA Administrator Returns 1" and a "Get a free demo" link.

There are two "In the News" sections. The first is titled "Proactive Public Communication" and describes GovDelivery as a leading proactive public communication solution. The second is titled "In the News" and contains two news items: "Apr 30 | U.S. Census Holds 'Academy Awards' Show for Los Angeles Students" and "Apr 23 | Spies Like Us The Texas Comptroller gets a report from GovDelivery that includes how many emails were sent, how many bounced back, how many were delivered and opened.".

On the right side, there is an "Upcoming Events" section with a title "Jul 14 | Building Perfect Council Websites '10 (UK)" and a description: "A partnership between E-Government Bulletin and the Socitm Insight Programme, this conference will attempt to encapsulate and present every aspect of how to create the perfect council website from the citizen and the organisation's perspective: easy to use, working first time, compelling and engaging."

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| <p>Tool</p> | <p>MetroQuest – www.metroquest.com</p>  |
| <p>Description</p> | <p>MetroQuest is a proprietary software program used by municipalities and planning agencies to educate and communicate the long-term impacts of the various policy choices to non-expert audiences. The company claims that use of their product leaves audiences and stakeholder groups with a sense of ownership over the result.</p> <p>According to the company Web site, “MetroQuest allows stakeholders to set their priorities, try different planning choices and see future consequences related to their priorities. This sets the stage for stakeholders to have a meaningful discussion about future plans and send feedback to planners.”</p> <p>The user interface of this product is compelling, although it is clear to the product reviewer that communicating effectively the consequences of different outcomes requires inputting a tremendous amount of data. It is also clear that the quality of the presentation (visually) will be directly proportional to the amount and quality of information provided.</p> <p>MetroQuest completes the communication circle by collecting information from stakeholders using wireless voting technology to collect preferences from audience members during planning presentations. Stakeholders may also submit preferences online or even from kiosks in strategic locations around the community.</p> |
| <p>Amount/Type of Information Conveyed</p> | <p>A broad array of information and alternatives can be represented graphically using MetroQuest.</p> |
| <p>Cost of Implementation</p> | <p>TBD – CIG contacted MetroQuest 4/23 and 5/21. Anecdotal evidence (based on DRCOG’s experience) indicates this product costs approximately \$200,000 to implement. This figure is likely to vary based on the quantity of data and information inserted into the software model(s).</p> |
| <p>Ease of Implementation</p> | <p>TBD – for CDOT, an advantage of this method of securing public involvement would be the assistance provided by the vendor in setting up compelling public involvement presentations.</p> |
| <p>Software/Hardware Requirements</p> | <p>Stakeholders may view the end product using an Internet connected computer with browser.</p> |

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| Tool | MetroQuest – www.metroquest.com  |
| Current DOT/MPO Uses | Currently in-use by DRCOG. http://denverregion.metroquest.com/MetroQuest.html |
| Demographics of Current Users | N/A |
| Compatibility with CDOT Cyber Security and Web Policies | N/A – MetroQuest is not a social media application |

Screenshot:

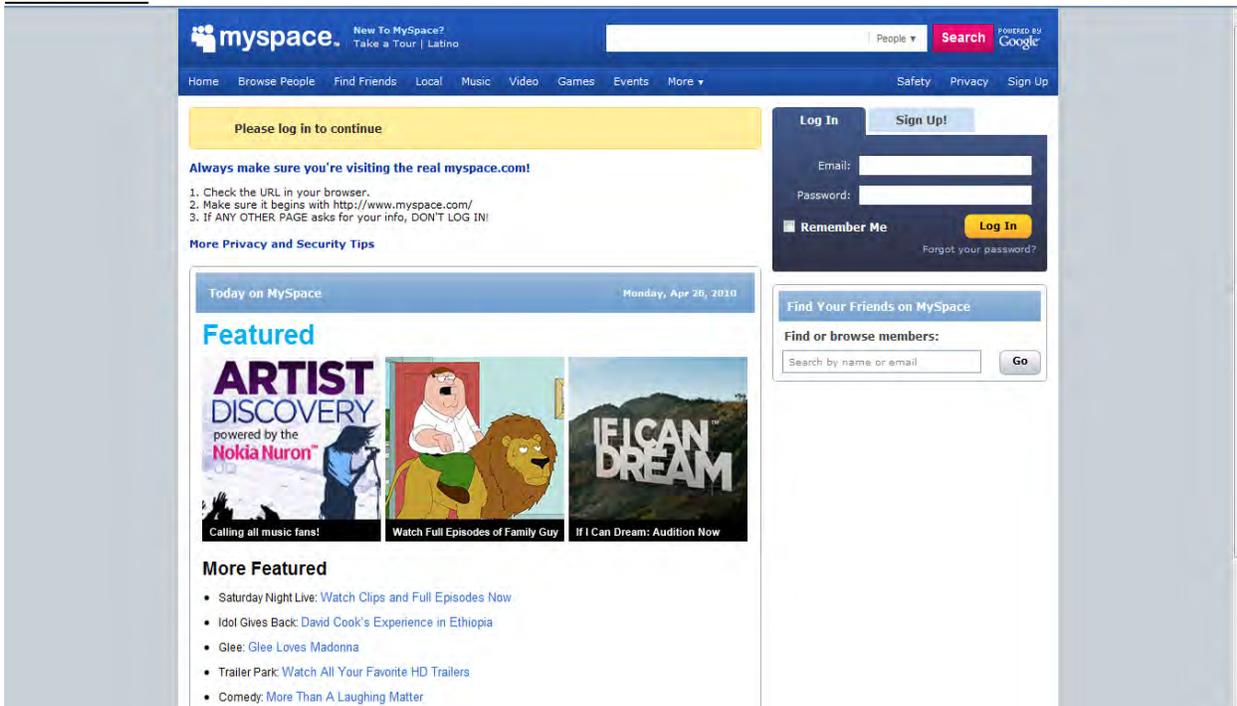
The screenshot displays the MetroQuest Denver Urban Footprint simulation interface. At the top, there are navigation buttons for 'Rating + Feedback', 'Take a short Survey', 'Info + Help', and 'Overview', along with the DRCOG logo. The main content area is divided into three sections:

- Choices:** A vertical list of policy options with radio buttons:
 - Development Mix:** Favor low density, **Maintain current mix**, More compact growth, Mostly compact growth.
 - Development Location:** **Unfocused**, Central city focused, Multiple centers, Corridor focused.
 - Road Network:** **Maintain existing network**, Moderate network upgrade, Significant network upgrade.
 - Transit System:** **Maintain existing system**, Moderately expand system, Significantly expand system.
 - Urban Form Policy:** **Favor drivers**, Maintain current mix, Support alternatives, Strongly favor alternatives.
 - Environmental Policy:** Spend less on programs, **Maintain programs**, Spend more on programs, Achieve best practices.
- Outcomes: Urban Footprint:** A central map showing the projected urban footprint for 2040. Text explains that higher density areas are more urban and consume less land, while lower density areas expand the footprint. It includes a 'Map Legend', 'Zoom' controls (Out, In), and an 'Animate Map Over Time' button.
- Outcomes:** A vertical stack of sliders for various metrics: Urban Footprint, Housing Choices, Travel Options, Commute Time, Resource Usage, Air Quality, Government Spending, and Cost of Living. A 'Replay Last Choice' button is at the bottom.

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| Tool | MySpace – www.myspace.com  |
| Description | <p>MySpace became the most popular social networking site in the United States in June 2006, but was overtaken by Facebook in 2008. According to a recent New York Times article, MySpace has struggled to maintain and add users in recent years, while Facebook's popularity has continued to rise. In March 2010, the site (MySpace) had a little over 70 million unique users, 6 million fewer than in October 2008, according to comScore, which measures Web traffic."</p> <p>Today, MySpace seems to exist mainly in the niche of music promotion; our research indicates its use for transportation planning is very limited – time would be better spent pursuing opportunities made available by Facebook.</p> |
| Amount/Type of Information Conveyed | Like Facebook, MySpace features very similar ways for users to communicate about themselves and things that interest them. |
| Cost of Implementation | Registration is free. The key factor here, as with Facebook, is ensuring that staff who are responsible for updating the information has enough time to adequately do so. |
| Ease of Implementation | Again, the question of implementation here is mainly a question of allocating personnel resources to provide regular updates. The current issue involving the State Attorney General's Office would seem to be relevant to MySpace as it is to Facebook. It is unclear at this time if or whether these issues has been resolved. |
| Software/Hardware Requirements | Computer with Internet access and browser, or wireless device with same. |
| Current DOT/MPO Uses | The Corpus Christi MPO is the only page that is delivered when searching for "metropolitan planning organization," and even this page seems outdated and/or no longer in regular use. |
| Demographics of Current Users | According to Quantacast.com , MySpace users are mostly female (56%), are between the ages of 18-34 (44%), Caucasian (65%) and Hispanic (17%), 57% have kids between 13 and 17, and are less well educated with 58% of visitors with no college experience. |

| | |
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| Tool | MySpace – www.myspace.com  |
| Compatibility with CDOT Cyber Security and Web Policies | CDOT's use of this social media site would certainly fall under the current policy. |

Screenshot



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| Tool | Podcasts – N/A  |
| Description | <p>Wikipedia’s definition of podcast is as follows: “A podcast (or netcast) is a series of digital media files (either audio or video) that are released episodically and often downloaded through web syndication.</p> <p>The term ‘podcasting’ was first mentioned by Ben Hammersley in <i>The Guardian</i> newspaper in a February 2004 article, along with other proposed names for the new medium. It is a portmanteau of the words ‘pod’—derived from iPod, a brand of portable media player produced by Apple Computer (now Apple,) — and ‘broadcasting.’ The name may be misleading, as despite the etymology it has never been necessary to use an iPod, or, indeed, any other form of portable media player, to use podcasts; the content can be accessed using any computer that can play media files.”</p> |
| Amount/Type of Information Conveyed | Amount of information is nearly limitless – type of information is most often audio (.mp3), although sometimes may also be video (.mp4). |
| Cost of Implementation | Recording equipment and editing software required; both may be purchased off-the-shelf for less than \$500. |
| Ease of Implementation | 6 on scale of 1-10; technical nature of this form of media may be confusing at first to new users. Brief training likely required to ensure expert use of equipment and software. |
| Software/Hardware Requirements | Digital audio recorder and editing software and/or digital video recorder and editing software; mid- to high-end computer for fast compiling of end product. Internet connected computer with Content Management System (CMS) to enable posting to Web site(s). |
| Current DOT/MPO Uses | Multiple DOTs currently engage in some form of podcasting, including Kansas, Washington, Texas and Rhode Island. Podcasts of several MPOs are posted online, although these do not seem to be posted on the actual MPO Web site(s). |
| Demographics of Current Users | According to a 2009 study by Edison Research , awareness of podcasting grew from 37% to 43% among Americans in the study year. 1 in 4 Americans indicated they have downloaded and watched/listened to a podcast. Podcast users are highly educated and affluent, spend more than seven hours online each week and tend to be males between the ages of 18 and 44. |

| | | |
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| Tool | Podcasts – N/A |  |
| Compatibility with CDOT Cyber Security and Web Policies | CDOT's creation of public involvement podcast(s) would intuitively be an extension of the public relations office and therefore fall under its direct control. | |

Screenshot

KDOT Podcasting

A podcast is a digital media file, or a series of such files, that is distributed over the Internet using syndication feeds for playback on portable media players and personal computers. The term "podcast", like "radio," can mean either the content itself or the method by which it is syndicated; the latter is also termed podcasting. The host or author of a podcast is often called a podcaster. This media can be played through the web or downloaded and played later. Contrary to a popular belief, you do not need an iPod to download or play a podcast.

Available Podcasts

- [Managing Kansas Roadsides](#) 76MB
- [Managing Kansas Roadsides\(Transcript\)](#)
- [Behind the Vest\(High Bandwidth\)](#) 29MB
- [Behind the Vest\(Low Bandwidth\)](#) 13.8MB
- [Behind the Vest\(Transcript\)](#)
- [PSA – Behind the Vest](#) 21.6MB
- [PSA – Behind the Vest\(Transcript\)](#)
- [AVA Video](#) Windows Media version for lower bandwidth connections, 5MB

This is a training video on the purpose and use of the air void analyzer (AVA). The AVA is used to quickly measure the entrained air content of fresh Portland cement concrete. The proper amount of entrained air improves concrete pavement resistance to damage from freeze-thaw cycles.

- [KDOT Flagger Safety](#) 29MB
- [KDOT Flagger Safety \(Spanish\)](#) 158MB
- [Roundabouts in Kansas](#) 95MB
- [Smoother Roads Playbook](#) 21MB - The Smoother Roads Playbook video created in 2000 still provides good information on concrete pavement smoothness specifications and construction techniques.
- [Construction of Low-Cracking High-Performance Bridge Decks](#) 11MB

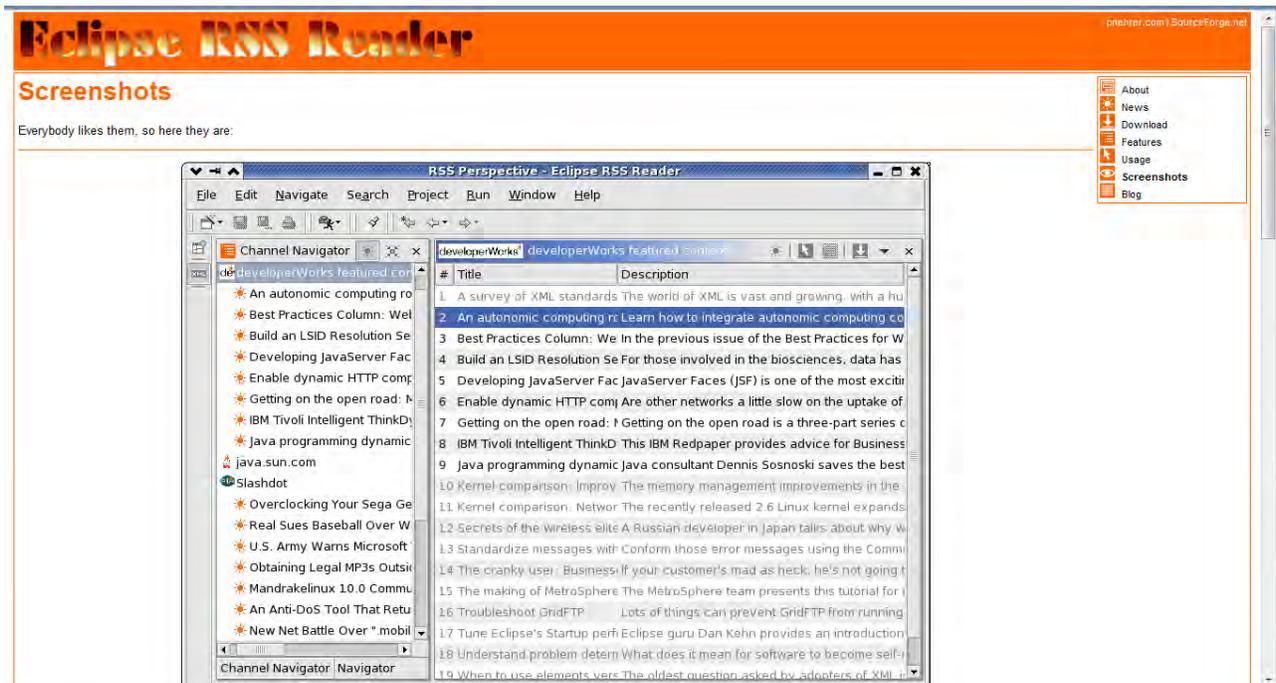
Copyright © 2009 Kansas Department of Transportation
[Disclaimer](#) | [Contact Us](#) | [Kansas.gov](#)
 Last updated : 11/20/09

| | |
|---|---|
| <p>Tool</p> | <p>Electronic Voting Machines</p>  |
| <p>Description</p> | <p>Audience responsive handheld keypads that allow meeting participants to “vote” in response to questions or surveys presented. The devices record audience member answers which can be tallied immediately following the response period and the results presented (unanimously) to the audience. Website: www.replysystems.com</p> |
| <p>Amount/Type of Information Conveyed</p> | <p>The keypads have 10 buttons, allowing up to 10 choices.</p> |
| <p>Cost of Implementation</p> | <p>The Base Station costs \$395.00, and each keypad costs \$59.95. Starter kit includes Base Station and 20 keypads for \$795.00 CDOT currently owns this system.</p> |
| <p>Ease of Implementation</p> | <p>Implementation is relatively straight forward; however, some technical difficulties were experienced at the Transportation Forums during the 2035 Regional Transportation Planning process.</p> |
| <p>Software/Hardware Requirements</p> | <p>Reply software is a part of the Base Station package and can be used interactively with MS PowerPoint.</p> |
| <p>Current DOT/MPO Uses</p> | <p>CDOT owns this system and used it during the 2035 Regional Transportation Planning process</p> |
| <p>Demographics of Current Users</p> | <p>Dependent upon meeting attendees.</p> |
| <p>Compatibility with CDOT Cyber Security and Web Policies</p> | <p>The electronic voting machines are not web-based and therefore are not subject to the policies.</p> |

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| Tool | RSS – N/A  |
| Description | <p>According to Wikipedia, "RSS (most commonly expanded as Really Simple Syndication) is a family of web feed formats used to publish frequently updated works—such as blog entries, news headlines, audio, and video—in a standardized format.</p> <p>An RSS document (which is called a "feed", "web feed", or "channel") includes full or summarized text, plus metadata such as publishing dates and authorship.</p> <p>Web feeds benefit publishers by letting them syndicate content automatically. They benefit readers who want to subscribe to timely updates from favored websites or to aggregate feeds from many sites into one place.</p> <p>RSS feeds can be read using software called an "RSS reader," "feed reader," or "aggregator," which can be web-based, desktop-based, or mobile-device-based. The user subscribes to a feed by entering into the reader the feed's URL or by clicking an RSS icon in a web browser that initiates the subscription process. The RSS reader checks the user's subscribed feeds regularly for new work, downloads any updates that it finds, and provides a user interface to monitor and read the feeds."</p> |
| Amount/Type of Information Conveyed | N/A – RSS conveys information such as summarized text, metadata and a URL. |
| Cost of Implementation | Beyond training of individuals in charge of implementing RSS feeds on the CDOT Web site, there is no charge to operate. |
| Ease of Implementation | There are many RSS feed compiler/publishing software currently in the market; many are freeware. |
| Software/Hardware Requirements | RSS readers are currently installed/integrated into most Internet browsers. To access RSS feeds, users must have an Internet connected or wireless device with an RSS feed reader. |

| | |
|--|---|
| Tool | RSS – N/A  |
| Current DOT/MPO Uses | RSS is currently in use by many DOTs and MPOs across the United States. |
| Demographics of Current Users | N/A |
| Compatibility with CDOT Cyber Security and Web Policies | RSS is currently being used by CDOT |

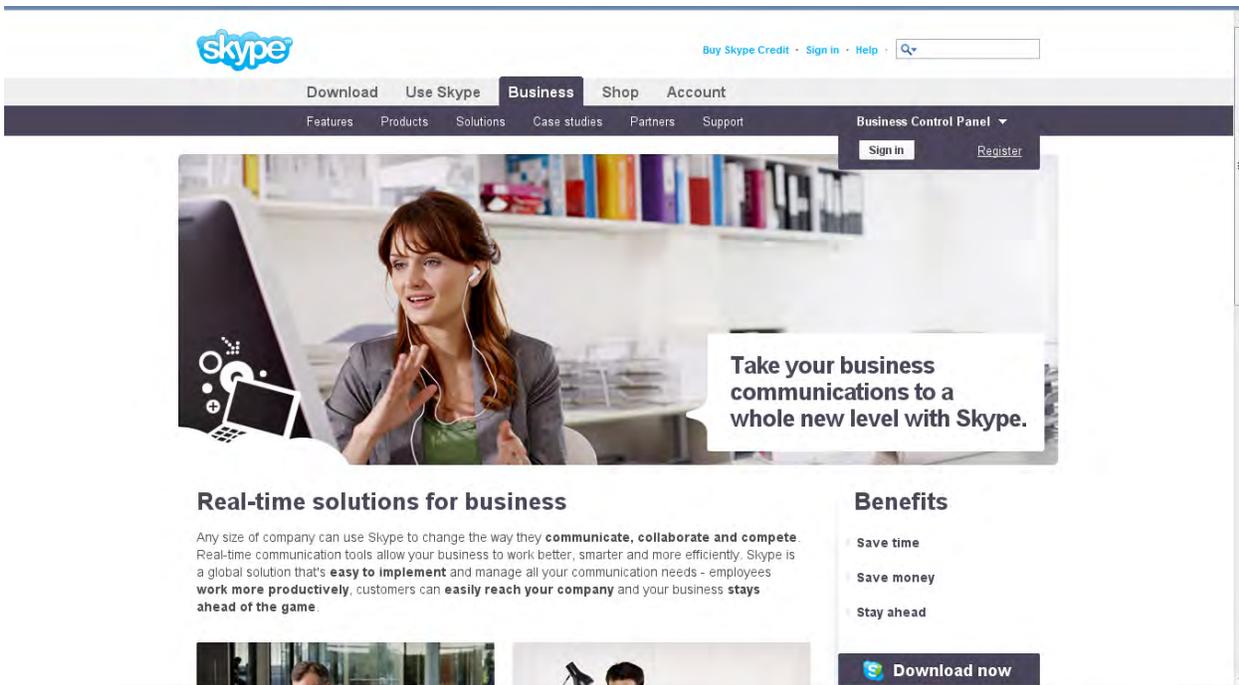
Screenshot



| | |
|--|--|
| Tool | Skype – www.skype.com  |
| Description | <p>According to Wikipedia, "Skype is a software application that allows users to make voice calls over the Internet. Calls to other users within the Skype service are free, while calls to both traditional landline telephones and mobile phones can be made for a fee using a debit-based user account system. Skype has also become popular for their additional features which include instant messaging, file transfer and video conferencing."</p> <p>According to its Website, Skype is "responsible for 8% of global international calling minutes, and with its users making 3.1 billion minutes of calls to landlines and mobiles in the third quarter of 2009... In the third quarter of 2009, Skype users made 27.7 billion minutes of Skype-to-Skype calls, and over a third of these were video calls."</p> |
| Amount/Type of Information Conveyed | <p>Skype is mainly known for video conferencing between two or more individuals. The features that intrigue us during this study are the ability for users to host video conference calls, which we see as an interesting addition to the more traditional public meeting.</p> <p>Also, Skype permits screen sharing, which allows individuals to see the computer screen of any user (if permission is given by that user). This function could prove useful during presentations, so at-home participants would see the same presentation that is being viewed by in-person meeting participants.</p> |
| Cost of Implementation | Skype is free for computer-to-computer calls. Other services (such as computer-to-mobile and some international calls) require a fee. |
| Ease of Implementation | Some technical hurdles will need to be addressed – not the least of which being the data bandwidth requirements if video conferencing among multiple users. |
| Software/Hardware Requirements | Internet connected computer with browser; web cam for at least presenter's computer. |
| Current DOT/MPO Uses | Skype does not appear to be in heavy use by either DOTs or MPOs. |

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| Tool | Skype – www.skype.com  |
| Demographics of Current Users | According to Quantacast.com , Skype users are mostly male (54%), are between the ages of 18-34 (39%), Caucasian (63%) and evenly split (12%) between African American, Hispanic and Asian demographics. There is an interesting split among Skype users, where 20 % claim a household income of \$30k/year or less, while 32% claim a household income of \$100k/year or more. 20 percent of users claim a graduate school degree. |
| Compatibility with CDOT Cyber Security and Web Policies | Skype does not fit the definition of social marketing, and therefore would not likely be regulated by the CDOT Policy. |

Screenshot



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| Tool | Survey Monkey – surveymonkey.com SurveyMonkey |
| Description | Survey Monkey is a user-directed online polling tool. Using available templates, or by uploading custom templates, survey administrators can develop this tool to communicate information and gather immediate feedback from target users. |
| Amount/Type of Information Conveyed | Information is limited only by the content available to the survey administrator. Visuals (charts, graphs, videos, etc.) can be embedded. |
| Cost of Implementation | Less than \$200/year; includes unlimited surveys and unlimited responses. |
| Ease of Implementation | <p>On the difficulty scale of 1-10, Survey Monkey is around a 4. With an hour or two of exploration/training, survey administrators can be well-prepared to develop surveys and begin collecting responses.</p> <p>It should be noted that there is a bit of controversy among professional pollsters regarding the accuracy of Survey Monkey. Their concern is that when amateurs design questions for surveys, they could be written in such a way that elicits a desired result. Users should be careful to be mindful of this and to avoid inserting bias into the survey.</p> |
| Software/Hardware Requirements | Computer with Internet access and browser. |
| Current DOT/MPO Uses | Using anecdotal evidence, Survey Monkey is in wide use by multiple DOTs and MPOs across the country. |
| Demographics of Current Users | <p>According to the website, "Our customers include 100% of the Fortune 100, as well as other businesses, academic institutions, and organizations of all shapes and sizes. Literally millions of people use SurveyMonkey for everything from customer satisfaction and employee performance reviews, to course evaluations and research of all types."</p> <p>As varied as the applications for Survey Monkey are, demographic information is difficult to define. We suggest, however, that because it is an online application, the same audiences that would be difficult to</p> |

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| Tool | Survey Monkey – surveymonkey.com SurveyMonkey |
| | reach via the Internet (for example the EJ community) would be difficult to reach via Survey Monkey. |
| Compatibility with CDOT Cyber Security and Web Policies | N/A |

The screenshot shows a web browser window displaying a survey. The browser title is 'City of Centennial Transportation Master Plan Survey - Windows Internet Explorer'. The address bar shows a SurveyMonkey URL. The survey content includes the following sections:

- Centennial Transportation Master Plan** logo and title.
- City of Centennial Transportation Master Plan Survey** header.
- *1. Do you:**
 - Live in Centennial
 - Work in Centennial
 - Live and work in Centennial
 - Other (please specify)
 -
- *2. On a typical day, how do you travel to work?**
 - Drive alone
 - Carpool
 - Vanpool
 - Bus
 - Rail
 - Walk
 - Bike
 - Don't work outside the home
- *3. On a scale of 1 to 5 with 1 being the best, how would you rate traveling in and around Centennial:**

| | 1 Very Highly | 2 Highly | 3 Neutral | 4 Low | 5 Very Low | don't know |
|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| On bike | <input type="radio"/> |
| On foot | <input type="radio"/> |
| Riv bus | <input type="radio"/> |

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| Tool | Twitter – www.twitter.com  |
| Description | <p>Social networking/microblogging service allowing users to post short updates (AKA tweets) that are limited to 140 characters or less -- the same as in this sentence.</p> <p>According to Wikipedia, "Tweets are ... displayed on the author's profile page and delivered to the author's subscribers who are known as followers. Senders can restrict delivery to those in their circle of friends or, by default, allow open access. All users can send and receive tweets via the Twitter website, Short Message Service (SMS), or external applications (notably including those developed for Smartphones). The website currently has more than 100 million users worldwide."</p> <p>Users may reply to tweets posted by others either in the open, or via private message to the original sender. Users may also "retweet" a message from another user, which is the Twitter equivalent of forwarding an e-mail message to the user's followers.</p> <p>Twitter is searchable, allowing users to see in real-time issues and topics that are popular in the global "Twitterverse." Users have also pioneered the use of "hash tags," short codes that follow a pound sign (#) that shows up more easily in searches.</p> |
| Amount/Type of Information Conveyed | As posts are limited to 140 characters or less, there is limited space to convey information. Many users post a short "teaser" sentence and follow it with a shortened URL that directs followers to a website that provides more information. |
| Cost of Implementation | Twitter is a free service; registration is required. Users post information for free, although tweeting via a Smartphone may incur data charges from the wireless provider. |
| Ease of Implementation | 4 on scale of 1-10; terms used may be confusing at first to new users. Brief training likely required, particularly if using third-party application to post/monitor tweets. |
| Software/Hardware Requirements | Internet connected computer or wireless device. |

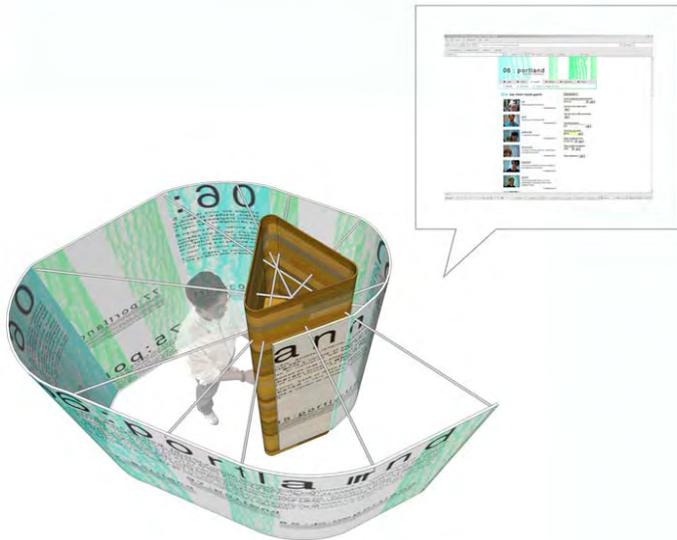
| | |
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| Tool | Twitter – www.twitter.com  |
| Current DOT/MPO Uses | CDOT currently using Twitter to publicize variety of announcements, including road closures and traffic conditions. |
| Demographics of Current Users | 45 percent of users are 18-34, according to estimates by Quantacast . Users are almost evenly split between male and female (45% and 55%, respectively), Caucasian and African Americans make up the largest user groups (69% and 16%, respectively). Users tend to be more affluent (30% claim their household income exceeds \$100k/year, however 49% claim no college education). |
| Compatibility with CDOT Cyber Security and Web Policies | Currently in-use by CDOT. |

Screenshot:



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| Tool | Vision Vessel – Many Sources |
| Description | <p>According to MetropolisMag.com, “(The Vision) Vessel is a mobile recording studio crossbred with a ballot box, commissioned by Portland, Oregon mayor Tom Potter as part of a wide-ranging initiative to reform the city’s vaunted urban-planning process.”</p> <p>The tool is a next-generation mobile kiosk that includes a Macintosh computer, a microphone and digital camera to record responses. Visitors/users are welcomed into a spiral curtain area on which information is printed. The closed-in area is meant to evoke the feeling of being in a voting booth (see photos below).</p> <p>The kiosk plays interactive video and prompts responses from visitors. The responses are captured via a provided keyboard or the user creating their own audio podcast.</p> <p>The project received wide praise from the branding/designer community due to the attractive design developed by its creators, two members of the Portland-based architecture firm BOORA.</p> |
| Amount/Type of Information Conveyed | <p>Information provided on the curtain would have to be limited to charts, graphs and text, and would necessarily have to have a greater lifespan to contain production costs.</p> <p>Information provided via the computer, however, would not be limited at all and could be updated regularly based on the information the vessel was intended to collect.</p> |
| Cost of Implementation | <p>Depending on the complexity of the design, developing another Vision Vessel would cost between \$5,000-\$10,000. Ongoing content production would also vary based on degree of complexity and how polished the final product is intended to be.</p> <p>For a year-long study of how this product would improve CDOT’s public involvement outreach, a budget of at least \$50,000 is recommended.</p> |
| Ease of Implementation | <p>CDOT would need to contract with a vendor to develop the vessel itself, and team with a content developer to load the tool with information.</p> <p>We see this as one of the most expensive public involvement techniques we investigated during this study, however the amount of “buzz” the Vision Vessel created in Portland may make it worthwhile for CDOT to investigate its uses further.</p> |

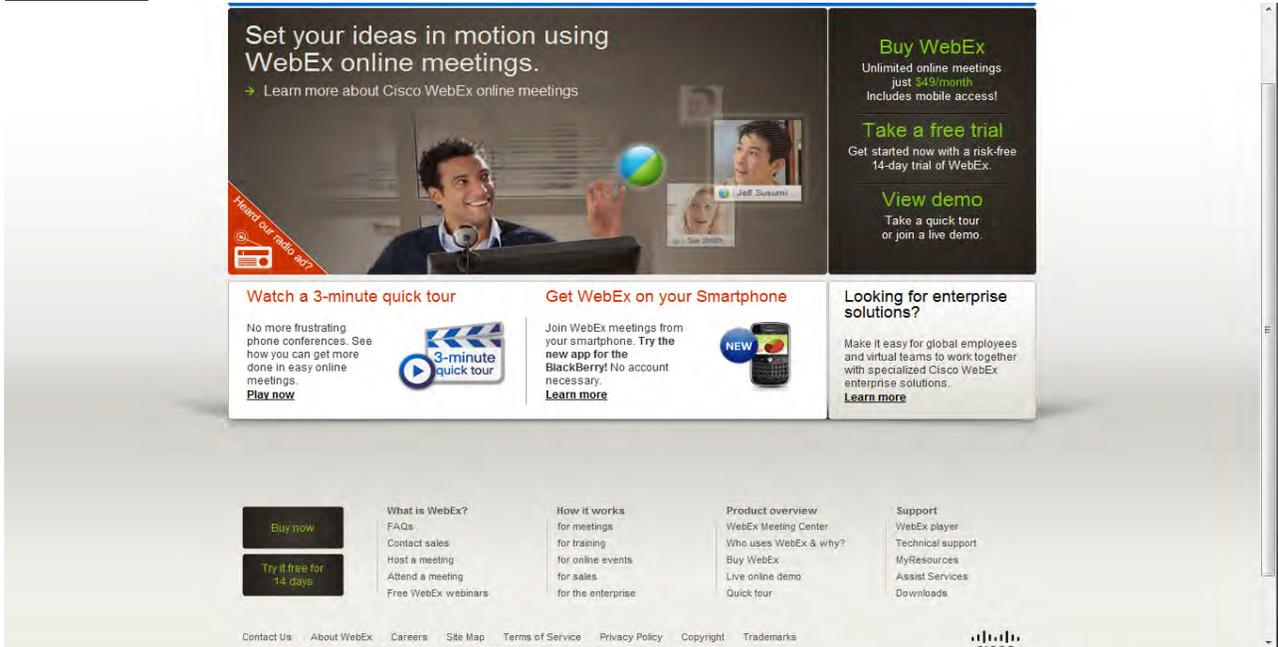
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| Tool | Vision Vessel – Many Sources |
| Software/Hardware Requirements | N/A |
| Current DOT/MPO Uses | Kiosks are in-use by many MPOs and DOTs across the country. |
| Demographics of Current Users | With the ability to set up the Vision Vessel at many public events across the state, the ability to “go where the people are” is unlimited. Portland officials set up the booth at fairs, farmers markets, and other places to gather public input with great success. This form of innovative public involvement is less tied to the Internet, and therefore is not as likely as other tools to skew away from those in the Digital Divide. |
| Compatibility with CDOT Cyber Security and Web Policies | N/A |





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| Tool | WebEx – www.webex.com  |
| Description | According to its Web site, “WebEx is an easy way to share ideas with anyone, anywhere. It combines real-time desktop sharing with phone conferencing so everyone sees the same thing while you talk.” |
| Amount/Type of Information Conveyed | Using a screen sharing component of the service, users can view the computer screen of the presenter in real-time. Users can also share files to facilitate collaboration. |
| Cost of Implementation | \$49/month for unlimited sessions with a maximum of 25 participants per session. Webex also offers customers a pay-per-use plan at \$.33/minute/user. |
| Ease of Implementation | Turnkey – technological issues have presumably been worked out by the provider; no IT interface is required. |
| Software/Hardware Requirements | Users must have a computer with Internet connection and browser. Data bandwidth for the host/presenter should be DSL or better. |
| Current DOT/MPO Uses | Research uncovered Webex use by the State of New York Transportation Department in communicating TIGER Grants to stakeholder groups. |
| Demographics of Current Users | According to Quantacast.com , GoToMeeting users are mostly female (53%), are older than 35 (67%), Caucasian (76%) and African American (12%). 43% claim a household income of \$100k/year or more, and 67 percent of users claim a college or graduate school degree. |
| Compatibility with CDOT Cyber Security and Web Policies | N/A |

Screenshot

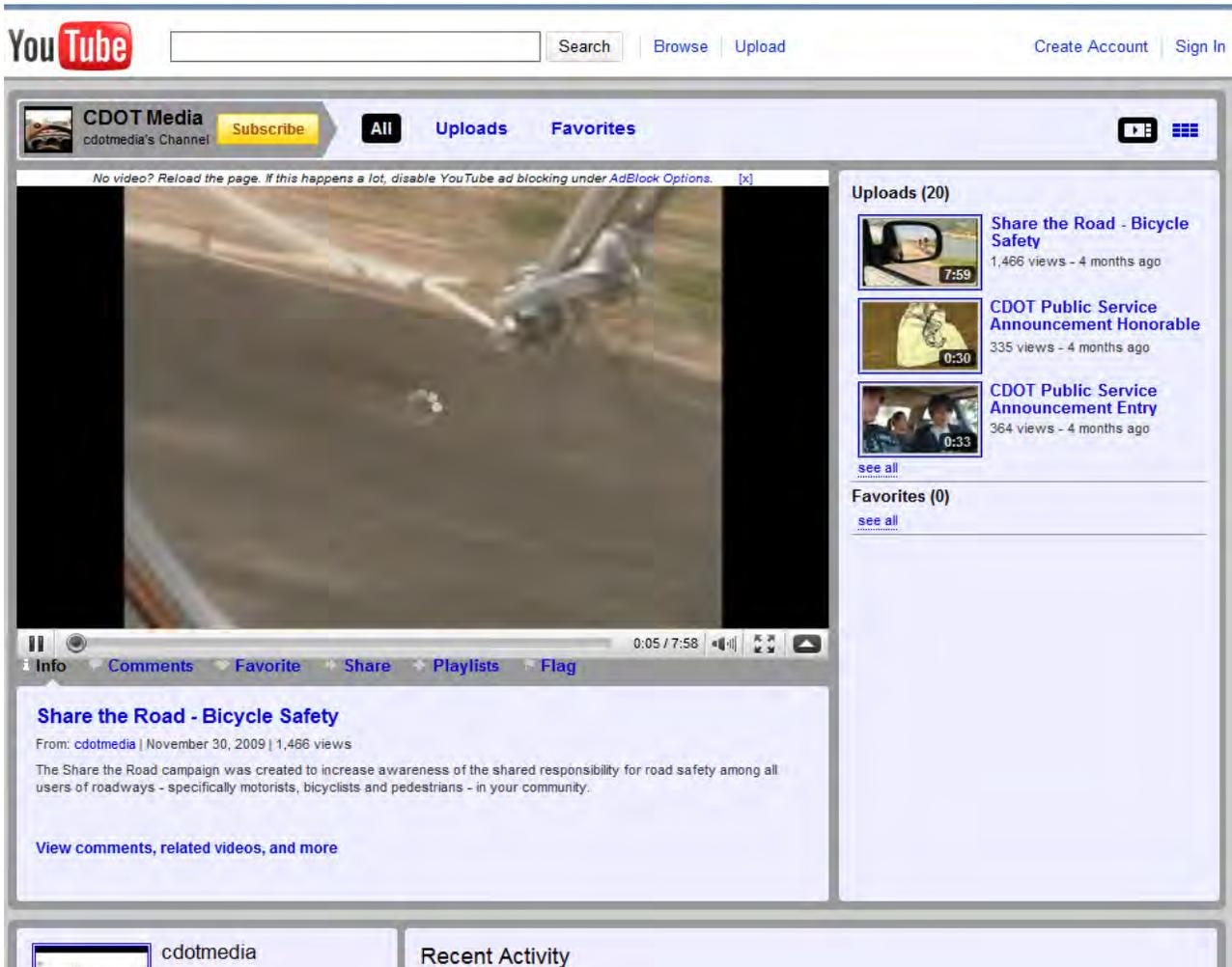


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| Tool | Wiki  |
| Description | <p>A wiki is a collaborative website that allows users to create and edit content. Wikis are typically powered by wiki software. Wikis may exist to serve a specific purpose (e.g., long range transportation planning) and allow any user to contribute.</p> <p>Because people can invent facts or pass off ideas as facts on a wiki, they contain a lot of suspect information and are therefore not considered reliable or trustworthy. Information found on a wiki generally requires verification.</p> |
| Amount/Type of Information Conveyed | Nearly limitless in terms of content topic (although some content may be censored by the owner of the wiki). |
| Cost of Implementation | Cost to purchase wiki software, which varies considerably from one software to the next. |
| Ease of Implementation | Considerable staff and/or consultant time would be required to set up and maintain the wiki. |
| Software/Hardware Requirements | Wiki software is required; for the user – computer with Internet access and browser. |
| Current DOT/MPO Uses | Currently in-use by Sacramento Area Council of Governments (SACOG). http://www.sacog.org/rucs/wiki/index.php/Main_Page |
| Demographics of Current Users | According to quantcast , 52% of wiki users are male, 37% are between the age of 18 and 34, and 25% are between the age of 35 and 49. Users are 70% Caucasian, 11% African American, and 11% Hispanic. |
| Compatibility with CDOT Cyber Security and Web Policies | Potential incompatibility. |

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| <p>Tool</p> | <p>YouTube – www.youtube.com</p>  |
| <p>Description</p> | <p>YouTube is a video sharing service where users upload, share, and view videos online. Using Flash technology, YouTube displays a broad spectrum of user-generated video content. Most has been uploaded by individuals, although various media corporations offer some of their material via the site.</p> <p>Videos are indexed and searchable. Unregistered users can watch any public video, however video owners can restrict viewing of private videos using account settings. Only registered users may uploading videos.</p> <p>Also as part of settings, video owners may allow comments (either using text) or also via video response. This function allows for two-way communication between video owners and viewers.</p> |
| <p>Amount/Type of Information Conveyed</p> | <p>Nearly limitless in terms of content topic (although some content may be censored based on user complaint and/or copyright infringement).</p> |
| <p>Cost of Implementation</p> | <p>Video posters must have video equipment and means by which to upload content. This may be as simple and inexpensive as a wireless device/Smartphone with video capability and Internet access. For CDOT, however, it may be worth a larger investment in equipment to deliver a higher quality end product.</p> |
| <p>Ease of Implementation</p> | <p>6-7 on a scale of 1-10; while most users are amateurs, CDOT's contributions in this forum should reflect the professionalism of the organization as a whole. This should include software/hardware described in greater detail below, as well as on-camera talent who will represent the Department in a professional manner.</p> |
| <p>Software/Hardware Requirements</p> | <p>Mid-range video production equipment, fairly robust computer with higher-end dual-core processor and 4 Gb minimum of RAM. Video editing software.</p> |
| <p>Current DOT/MPO Uses</p> | <p>Currently in-use by CDOT.</p> |

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| <p>Tool</p> | <p>YouTube – www.youtube.com</p>  |
| <p>Demographics of Current Users</p> | <p>According to YouTube, “Our user base is broad in age range, 18-55, evenly divided between males and females, and spanning all geographies. Fifty-one percent of our users go to YouTube weekly or more often, and 52 percent of 18-34 year-olds share videos often with friends and colleagues.”</p> |
| <p>Compatibility with CDOT Cyber Security and Web Policies</p> | <p>Currently in-use by CDOT</p> |

Screenshot:



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