

SCENARIO PLANNING TRENDS AND TRANSITIONS

Federal Highway Administration

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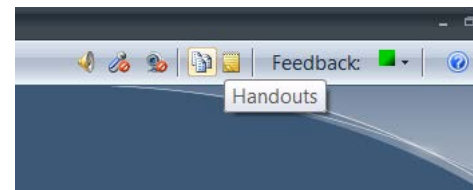
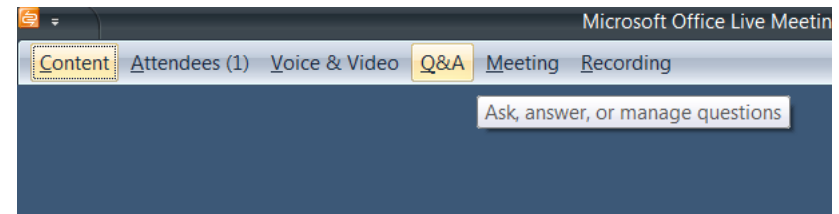
ICF International and Renaissance Planning Group

February 14, 2013

For the audio portion of the program, dial 1-877-423-6338 and enter passcode 746580

Web System Instructions

- ❑ To join the audio portion of the webinar, dial 1-877-423-6338 and enter passcode 746580
- ❑ All lines are muted. To ask a question during the discussion period, dial *6
- ❑ To ask text questions, click on the Q&A menu on the top bar
- ❑ To download files from the webinar, click on the Handouts button on the top right



Webinar Agenda

- Introductions
- FHWA's Transportation Planning Capacity Building Program and Scenario Planning Overview
- Scenario Planning State of the Practice
 - ▣ Practice Trends
 - ▣ Questionnaire Results
- Dialogue
- Conclusion

Transportation Planning Capacity Building Program

- FHWA/FTA Transportation Planning Capacity Building (TPCB) Program
- Offers training, technical assistance, and support to State, local, regional, and Tribal governments, transit operators, and community leaders
- Enables communities and transportation agencies to better prepare for the future and make more effective decisions in the present



www.planning.dot.gov

Scenario Planning Program

www.fhwa.dot.gov/Planning/scenplan/index.htm

- Provides a framework for developing a shared vision for the future that tests various future alternatives that meet state, community, or regional needs

- FHWA offers:
 - ▣ Online Resources
 - ▣ Peer Exchanges/Workshops
 - ▣ Research
 - ▣ Technical Assistance
 - ▣ Training

The screenshot shows the FHWA website for Scenario Planning. The page is titled "FHWA Scenario Planning and Visualization in Transportation Scenario Planning". It includes a navigation menu with links for "Scenario Planning" and "Visualization In Planning". The main content area is titled "Scenario Planning" and contains the following sections:

- Scenario Planning**: A welcome message and a link to "What is Scenario Planning?".
- What is Scenario Planning?**: A definition of scenario planning as an analytical tool for preparing for the future by analyzing various forces (e.g., health, transportation, economic, environmental, land use, etc.) that affect growth. It mentions that scenario planning can be done at the statewide level or for metropolitan regions, tests various future alternatives that meet state and community needs, and is a defining characteristic of successful public sector scenario planning.
- Scenario Planning Technical Assistance Available**: A section stating that FHWA and FTA are updating USDOT's approach to providing scenario planning assistance to state Departments of Transportation (DOTs), metropolitan/regional planning organizations (M/RPOs), and other transportation decision-makers. It encourages users to monitor the website for forthcoming opportunities to apply for federal resources to support their agency's scenario planning efforts. A link to the "Scenario Planning Technical Assistance Page" is provided.
- FHWA Scenario Planning Guidebook**: A section describing the "FHWA Scenario Planning Guidebook" (October 2010). The purpose of the guidebook is to assist transportation agencies with carrying out a scenario planning process from start to finish. It states that agencies can use the guidebook as a framework to develop a scenario planning approach tailored to their needs. The guidebook provides detailed information on the six key phases that agencies are likely to encounter when implementing a scenario planning process. For each phase, the guidebook provides considerations, steps, examples, and strategies to help guide agencies in managing and implementing a comprehensive scenario planning effort. While this guidebook focuses on regional scenario planning, it recognizes that scenario planning is flexible and can be used to address many different issues at multiple scales, such as at the statewide level. (EIS, 1.2948).
- FHWA Scenario Planning Webinars**: A section listing recent webinars:
 - FHWA New Tools for Scenario Planning - April 5, 2012** (www.d11102012): A Scenario Planning Webinar was conducted on April 5, 2012, which shared information on the Denver Regional Council of Government's (DRCOG's) previous scenario planning work with a national audience, including the agency's use of innovative visualization and public engagement techniques. The webinar also explored how DRCOG intends to use several new scenario and land use analysis tools as part of a scenario planning approach to update its regional plan, Metro Vision 2040. Finally, the webinar provided a forum for DRCOG to engage in dialogue with a panel of five nationally recognized experts on scenario planning, highlighted the advanced phases of scenario planning. (EIS, 70K8)
 - FHWA Advanced Phases Webinar - August 2011**: A Scenario Planning Webinar was conducted on August 17, 2011, that highlighted the advanced phases of scenario planning. It outlined some suggested steps in how agencies can create and evaluate scenarios; additionally, it provided examples of how agencies around the country have created scenarios, assessed their impacts, and used scenarios as a framework for action planning. The webinar featured peer speakers from the Miami Valley Regional Planning Commission in Dayton, Ohio, and the Sacramento Area Council of Governments

Benefits of Scenario Planning

- Engages wide variety of stakeholders.
- Potential to clearly illustrate the trade offs among different land use and transportation choices.
- More informed decision making.
- Helps organizations develop performance measures and evaluate different policies for their effects on targets.
- Ideal method to focus on the broader array of issues implied by the focus on livability.

MAP-21 - Provisions

- **MAP-21 Performance Management (PM) Provisions**
 - Establish transparent, accountable decision-making framework for States, Metropolitan Planning Organizations, and Providers of Public Transportation to identify multimodal capital investments and project priorities.
 - Emphasize sound multimodal planning processes.

- **MAP-21 – Optional Scenario Development**
 - MPOs that choose to develop scenarios are encouraged to consider investment strategies, distribution of population and employment, transportation system performance measures, and estimated costs and potential revenues.

Scenario Planning Contact Information

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<http://www.planning.dot.gov/>



State of the Practice

- Synthesis of recent reports
- Insights from online questionnaire
- Insights from practitioners
- Webinar dialogue



Recent Reports

- Opening Access to Scenario Planning Tools, Lincoln Institute of Land Policy, 2012
- Integrated Transportation Scenario Planning, Bartholomew & Ewing, 2010
- New Trends in Transportation and Land Use Scenario Planning, FHWA, 2010



NEW TRENDS IN TRANSPORTATION AND LAND USE SCENARIO PLANNING

Five Case Studies of Regional and Local
Scenario Planning Efforts

APRIL 2010

Prepared for:
Office of Planning
Federal Highway Administration
U.S. Department of Transportation



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Next Generation of Scenario Planning

- ***Next generation scenario planning*** aims “to capture a broader range of issues and challenges than previously considered in transportation and land use scenario creation and analysis.”

- From Federal Highway Administration, “New Trends in Transportation and Land Use Scenario Planning.” April 2010.

Trends – Key Findings

- Bartholomew/Ewing studied 28 scenario planning projects between 2003 – 2010.
- From a sample of 107 scenarios, found that:
 - Increasing average regional density by 50% in 2050, along with strategies that emphasize infill, mix land uses, and implement road user charges can be expected to reduce VMT by at least 25%.
 - Alternative scenarios also show positive effects, relative to trends, on agricultural land consumption, infrastructure cost, and greenhouse gas emissions.

Trends – Key Issues

- Only about 15% of MPOs have used scenario planning.
- Regions not including climate change or energy supply variations as inputs.
- Even regions that use scenario planning often revert to trend conditions for long-range transportation plans.
- Planners report that cost and technical capacity are the greatest obstacles to using scenario planning.
- Acquiring data also an obstacle.

Trends – Key Issues

- Lincoln Institute for Land Policy found scenario planning as a very effective tool, but...
 - Skepticism and lack of awareness
 - Complexity and high cost
 - Difficulties in obtaining and using data
 - Lack of interoperability across tools

Trends - Opportunities

- HUD-DOT-EPA Partnership for Sustainable Communities supporting several scenario planning efforts.
- View scenario planning as a useful method for evaluating complex and interconnected issues of livability.
- HUD grant programs support scenario planning:
 - ▣ 31 of 39 HUD Community Challenge Grantees.
 - ▣ 38 of 44 HUD Regional Planning Grantees.
- EPA supporting scenario planning implementation.
- DOT holding scenario planning peer exchanges.

Trends - Opportunities

- State laws also promoting the practice:
 - California Senate Bill 375
 - Requires MPOs to adopt “Sustainable Communities Strategies” to meet GHG targets.
 - Law also encourages scenario planning for MPOs that can’t meet targets through its Sustainable Communities Strategies.
 - Oregon Senate Bill 1059
 - Aims to reduce transportation-related greenhouse gas emissions. One of its provisions calls for developing guidelines for scenario planning.

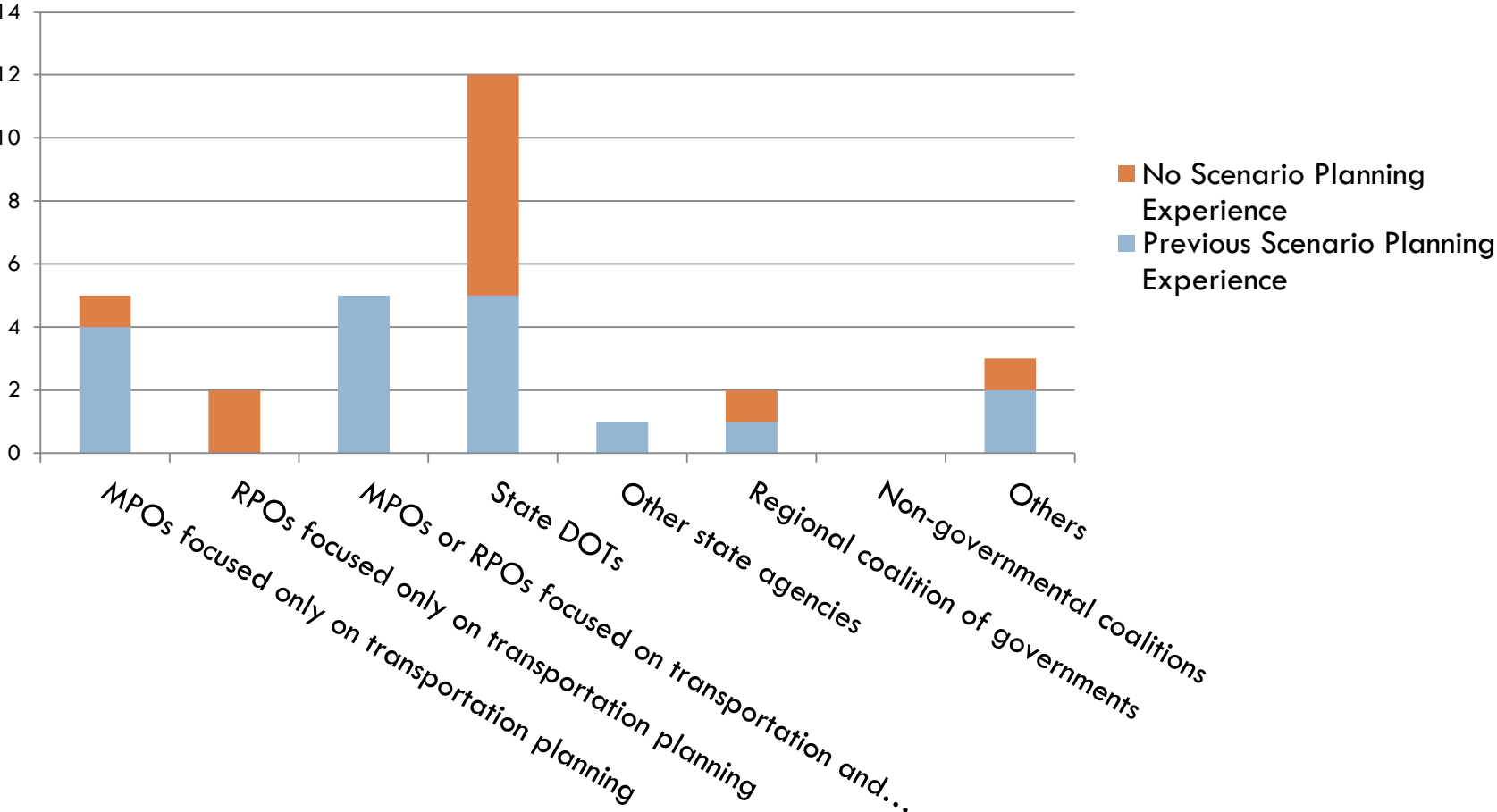
Trends - Opportunities

- MAP-21 – New Federal Transportation Law
 - ▣ Calls for MPOs in their long-range transportation plans to describe the performance measures and targets used in assessing system performance and progress in achieving the performance targets.
 - ▣ Scenario planning can help MPOs evaluate how different land use-transportation scenarios affect their progress towards achieving performance targets for a wide range of outcomes.

Questionnaire

- Purpose was to collect information on...
 - ▣ The degree of success using scenario planning.
 - ▣ Cost-effectiveness and desire to use it again.
 - ▣ Obstacles faced.
 - ▣ Champions and local buy-in.
- Survey distributed in December and January.
- 41 organizations responded.

Profile of Respondents



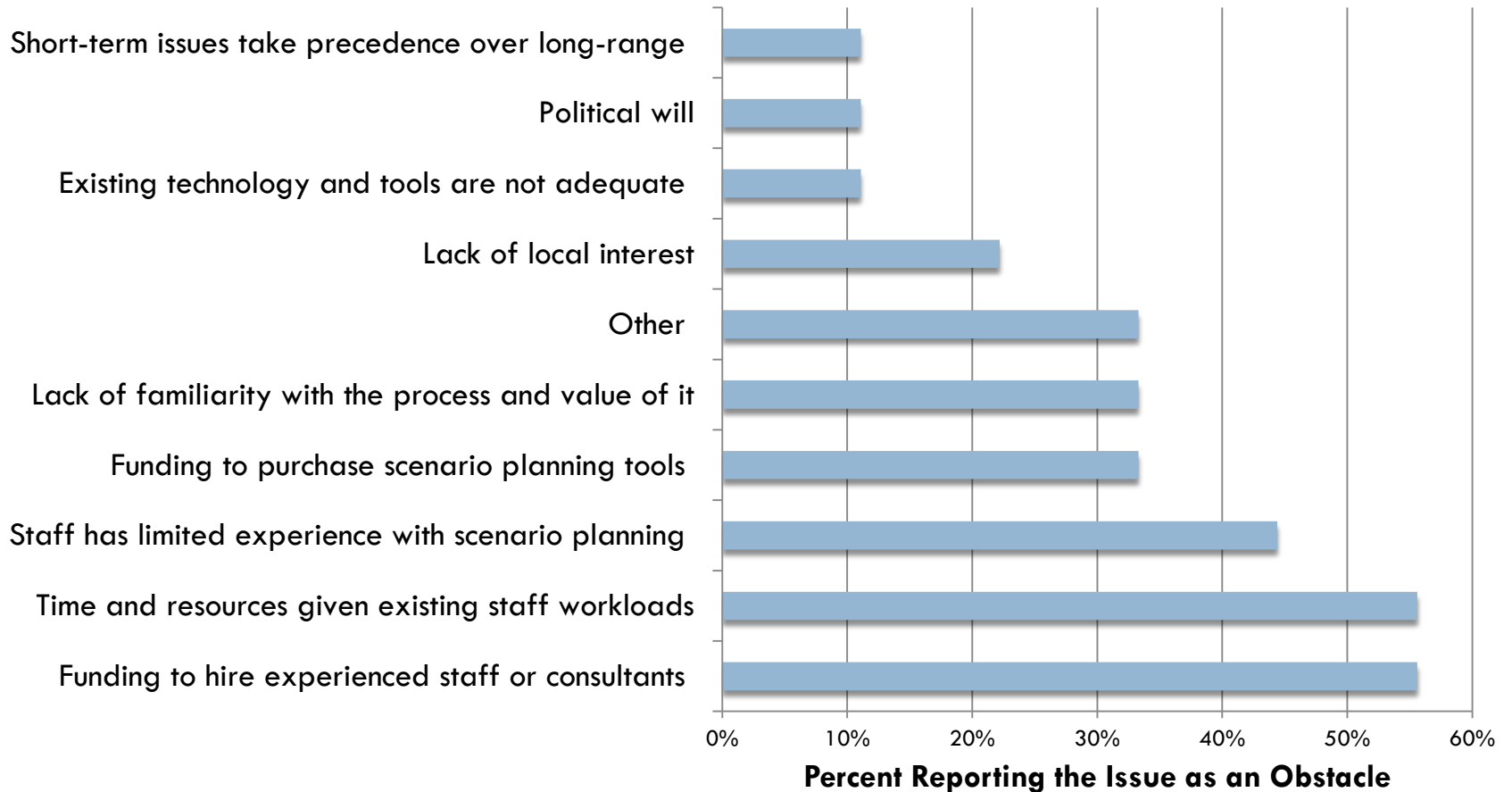
Poll Question 1

- For those of you on the call today, have you used a scenario planning process?

Top Factors that Led to Scenario Planning

Factor	% Identifying it as a Reason for Using Scenario Planning
Need to engage stakeholders and citizens	52%
Desire to integrate land use and transportation plans	48%
Financial or economic development concerns	48%
Desire to create performance measures or indicators	44%
Population growth concerns	39%
Uncertainty about the future	39%

Obstacles to Scenario Planning



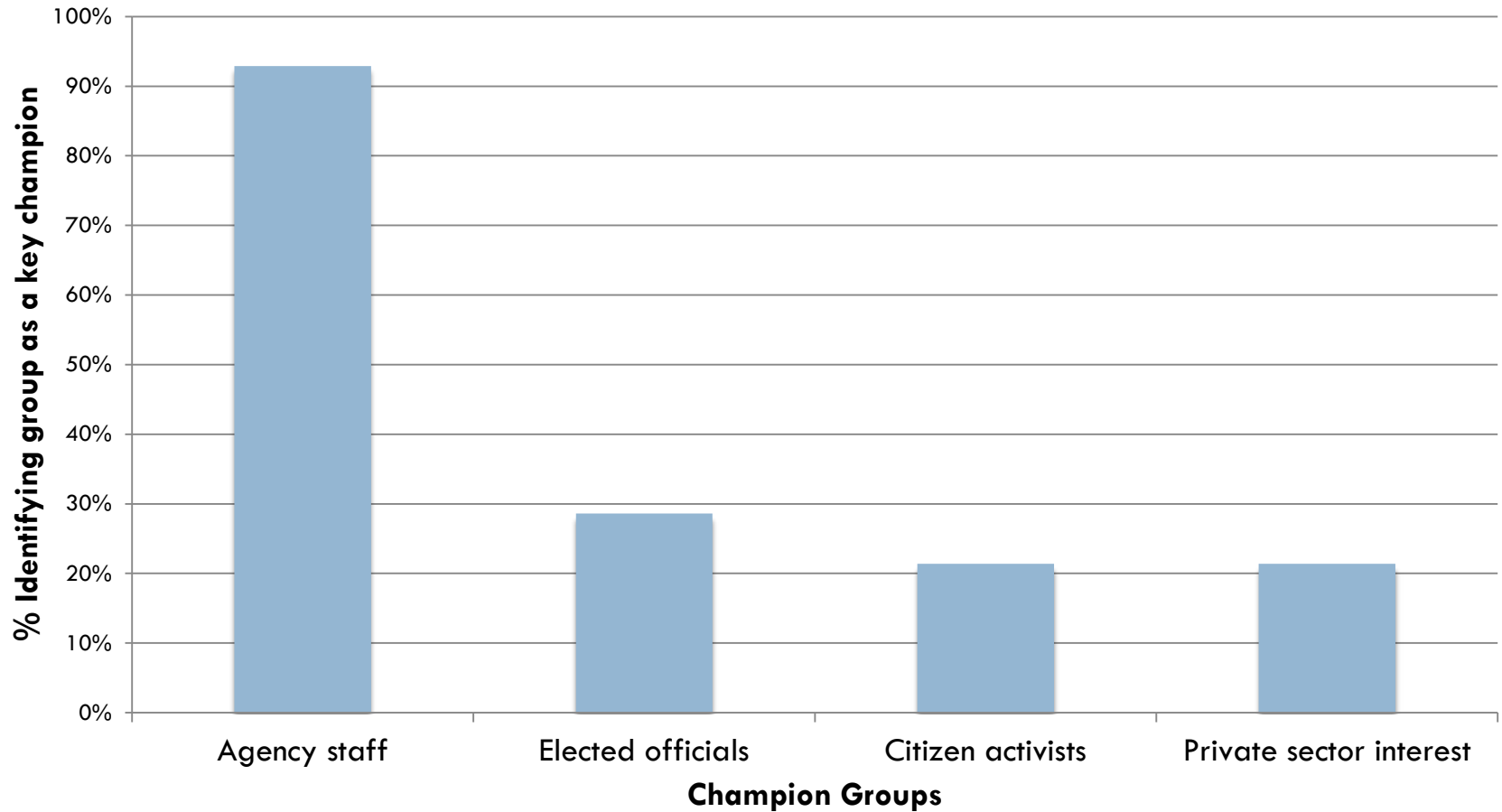
10 Most Popular Measures

Measure or Category of Measure	% Using in Scenario Planning or Performance-Based Planning
Level of congestion	71%
Vehicle miles traveled per capita	61%
Environmental justice and social equity	57%
Walkability	46%
Accessibility to transit	43%
Time savings	39%
Household transportation costs	39%
Transportation system reliability	39%
Economic development	39%
Housing affordability	36%

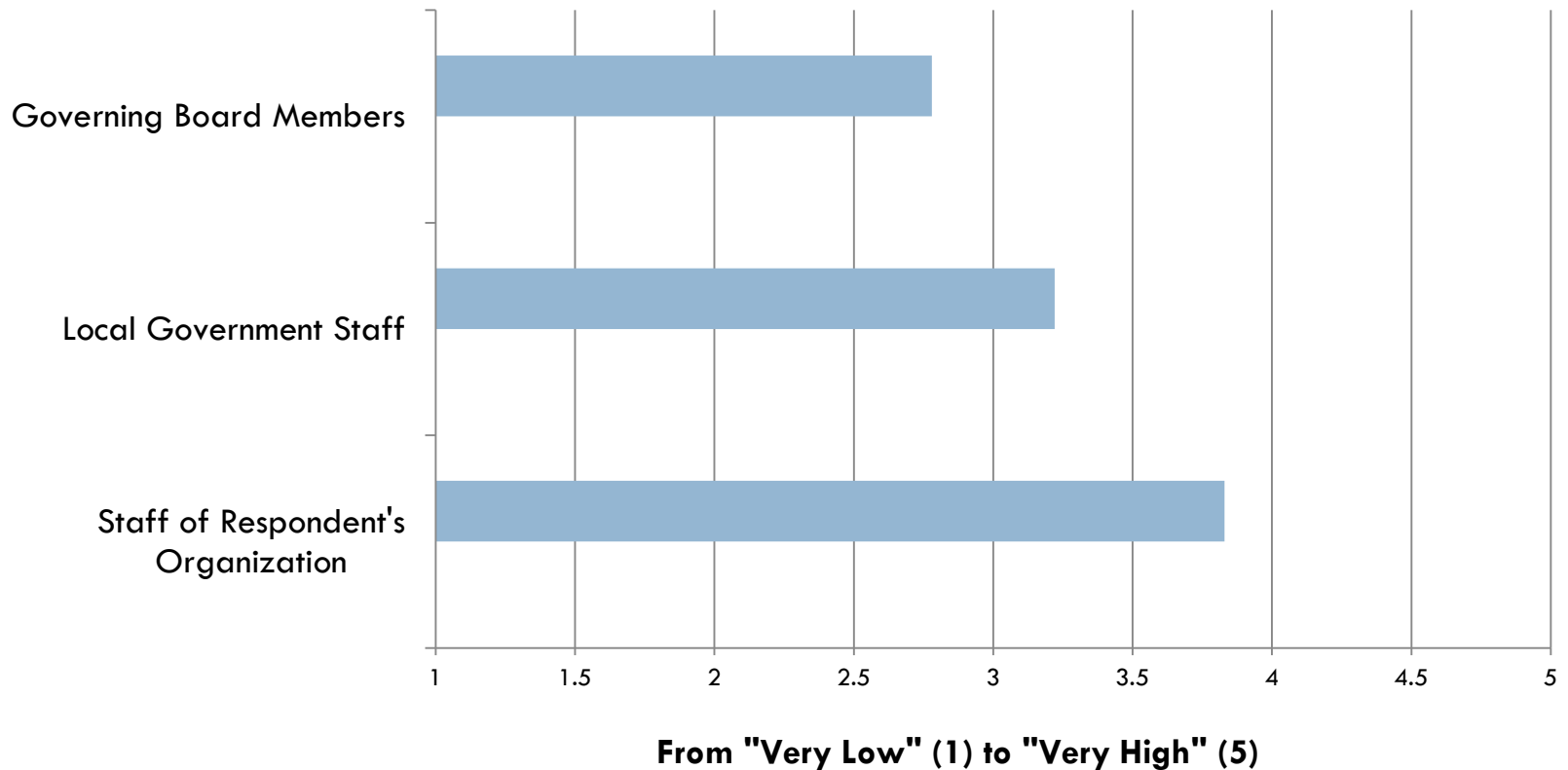
Poll Question 2

- If you have used scenario planning to establish performance measures, are you using the those measures to evaluate and guide transportation investment decisions?

Key Champions of Scenario Planning



Scenario Planning Level of Understanding Among Key Groups



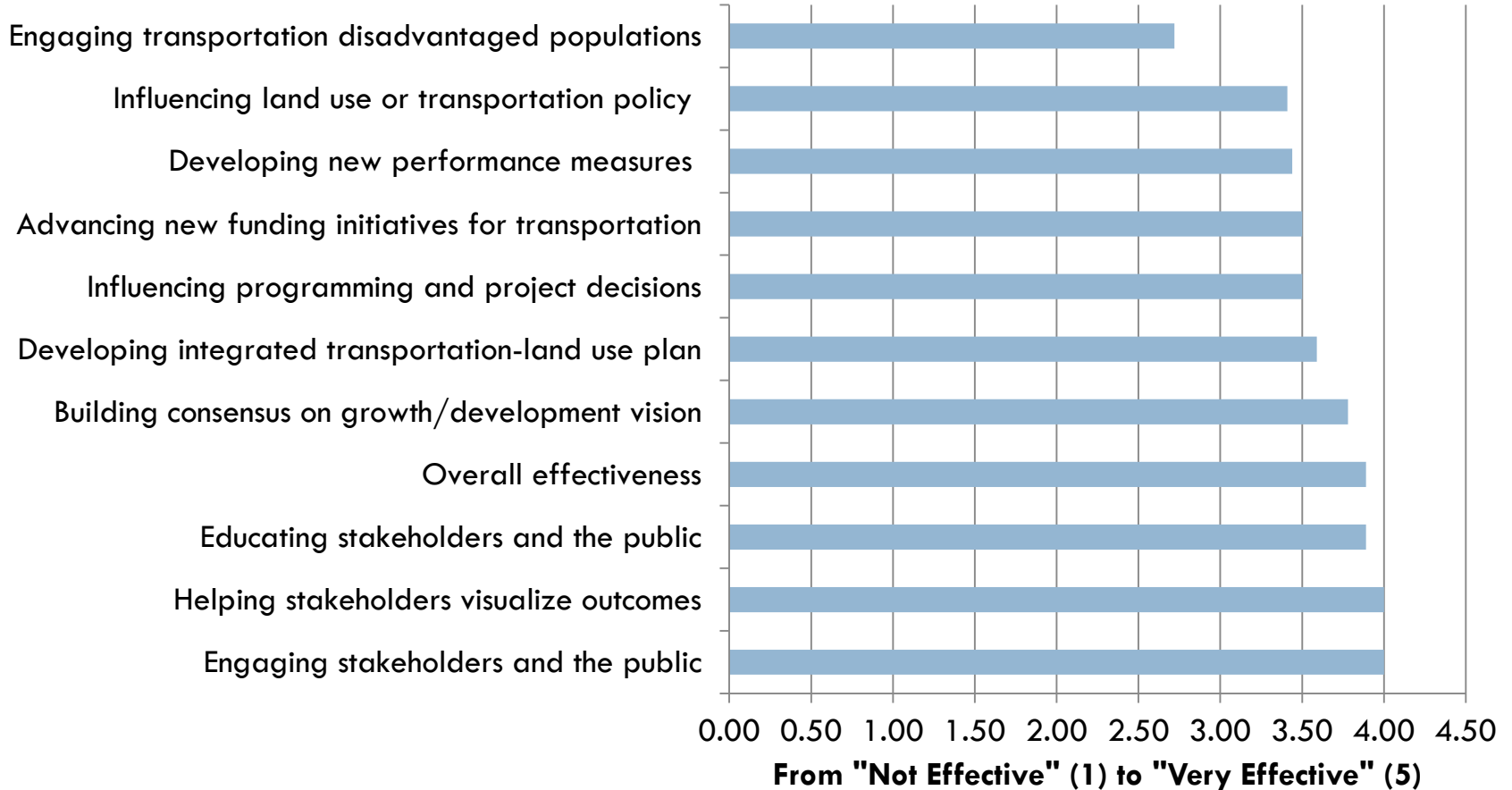
Ratings of Technical Assistance Options

Technical Assistance Options	% Rated as “Somewhat Useful” or “Very Useful”
Workshop or conference	88%
Hands-on with an expert that meets with both your staff and board	81%
Hands-on with an expert that meets with your staff and partners	65%
Peer exchange	65%

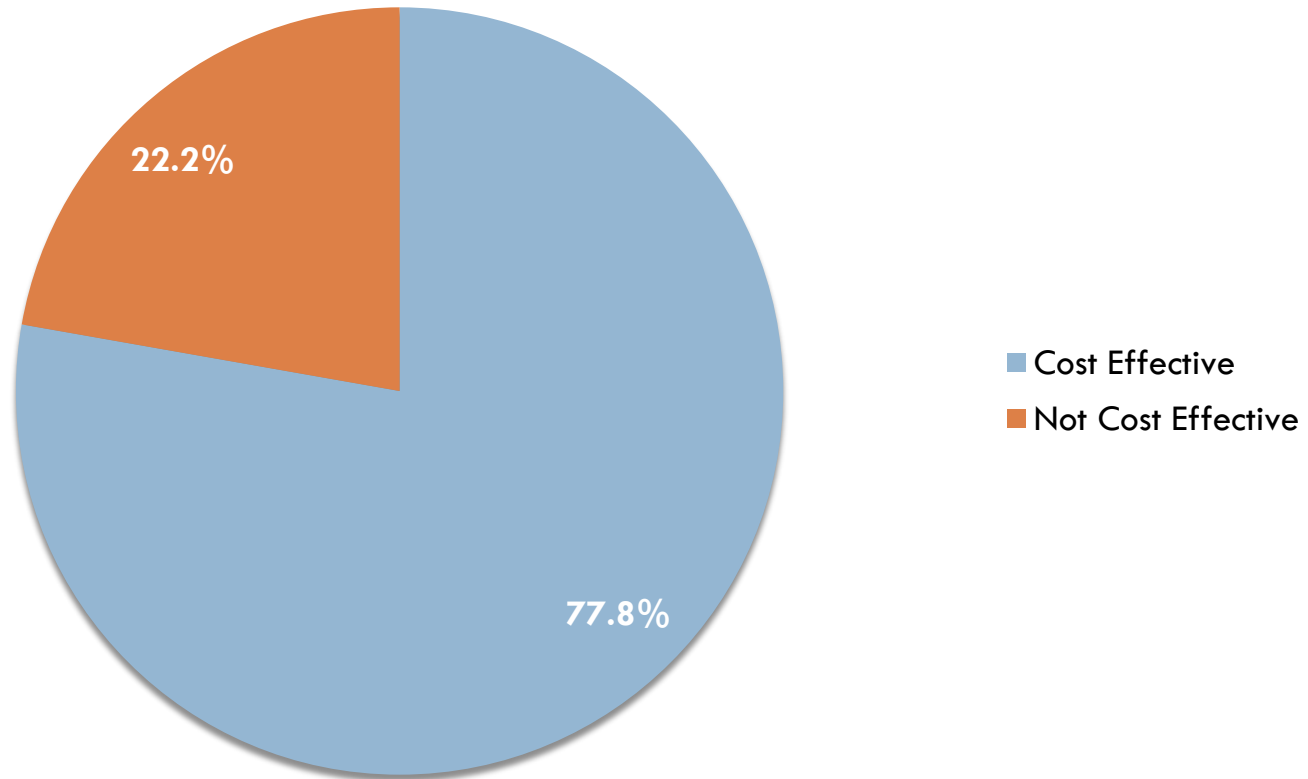
Poll Question 3

- Given the results of the questionnaire, do you think that FHWA's technical assistance should:
 - ▣ Continue to focus on technical assistance for transportation planning agency staff.
 - ▣ Focus on assistance for small and medium size planning agencies.
 - ▣ Focus more directly on elected officials and other local government stakeholders.

Scenario Planning Reported Effectiveness at Achieving Outcomes



Reported Cost Effectiveness by Organizations Using Scenario Planning



Key Findings

- Scenario planning is cost effective and more than 70% are likely or very likely to use it again.
- Scenario planning is particularly effective at engaging stakeholders, which is a top reason for using it.
- 85% of respondents said MAP-21 would have “some effect” or a “great effect” on their decision to use scenario planning in the future.
- Funding, staff time, and technical capacity are the greatest obstacles to scenario planning.
- Face-to-face technical assistance is particularly valuable.

Discussion

- Based on the key findings and the questionnaire results as presented, does this accurately reflect your sense of the state of the practice? Did we miss any important points?
- Given the challenges and opportunities presented, where should FHWA go next in enhancing its technical assistance program?

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