

Summary of the Federal Highway Administration's (FHWA) Scenario Planning – Advanced Phases Webinar

August 17, 2011
1:00 - 2:30 PM (EDT)

These notes provide a summary of the presentations discussed during the webinar, and the question-and-answer session that followed the presentations.

Copies of the speakers' presentations are available from any of the presenters listed below.

Presenters

Name	Organization	Contact Information
Fred Bowers	Federal Highway Administration (FHWA) Office of Planning	(202) 366-2374 Frederick.Bowers@dot.gov
Alisa Fine	U.S. DOT Volpe Center	(617) 494-2310 Alisa.Fine@dot.gov
Martin Kim	Miami Valley Regional Planning Commission (MVRPC)	(937) 223-6323 Mkim@mvrpc.org
Kacey Lizon	Sacramento Area Council of Governments (SACOG)	(916) 340-6265 Klizon@sacog.org
Brian Betlyon	FHWA Resource Center	(410) 962-0086 Brian.Betlyon@dot.gov

Participants

Approximately 70 participants attended the webinar.

Introduction to Webinar and the FHWA Scenario Planning Program

Fred Bowers

Mr. Bowers welcomed participants and thanked them for attending the webinar. The webinar focused on advanced phases of the scenario planning process. It was the third in a continuing FHWA webinar series on scenario planning.

- The first webinar in the series focused on providing an introduction to scenario planning and featured a peer speaker from the Chittenden County Metropolitan Planning Organization (MPO) in Burlington, Vermont.

- The second webinar in the series focused on getting started with scenario planning and focused on the first three steps in the FHWA *Scenario Planning Guidebook*. It featured two peer speakers from the MPO for the Gainesville, Florida, Urbanized Area and the Denver Regional COG in Colorado.

Notes and recordings of the two previous webinars, as well as the FHWA *Scenario Planning Guidebook* and additional resources related to scenario planning, are available on the FHWA scenario planning website at www.fhwa.dot.gov/planning/scenplan/.

The goals of the webinar were to:

- Follow up on topics of interest identified by participants in the two earlier webinars in the series.
- Highlight how agencies can create and assess scenarios through references to phases four, five, and six of the FHWA *Scenario Planning Guidebook*.
- Provide examples of how agencies around the country have created scenarios, assessed impacts, and used scenarios as a framework for action planning.

Overview of FHWA Scenario Planning Program

Mr. Bowers explained that the FHWA supports scenario planning as an enhancement to the existing transportation planning process. FHWA's scenario planning program was established in 2004 as part of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. Scenario planning is a flexible technique that is adaptable at many scales and may address many different issues.

FHWA actively promotes scenario planning as a way to support collaborative and strategic transportation decision-making. As part of its scenario planning program, FHWA:

- Sponsors scenario planning workshops to share and disseminate information.
- Collects and shares innovative practices and lessons learned through case studies and research.
- Encourages the use of planning and other transportation funds to implement scenario planning.
- Provides guidance to agencies through webinars and the FHWA scenario planning website.

FHWA *Scenario Planning Guidebook*

Alisa Fine

Ms. Fine provided a brief overview of the FHWA *Scenario Planning Guidebook*. The guidebook provides a generic, non-prescriptive framework for scenario planning and details six phases that agencies are likely to encounter when implementing the technique. Ms. Fine reminded participants that the guidebook is available through the FHWA scenario planning website and that it can also be requested as a hard copy by contacting FHWA staff.

Ms. Fine briefly reviewed the six-phase structure of the guidebook and detailed phases four, five, and six, which comprise the advanced phases of scenario planning:

- **Phase Four: What could the future look like?**
Phase Four focuses on developing multiple scenarios, including both baseline and alternative scenarios. Key considerations during this phase are selecting scenario types and choosing analysis tools such as an existing regional travel demand model. Potential outputs from Phase 4 include identification of analysis tools, a refined travel demand model, and the baseline and alternative scenarios.
- **Phase Five: What impacts will scenarios have?**
Phase Five focuses on developing indicators that will be used to evaluate scenario performance. Indicators can be either quantitative or qualitative. Potential outputs from Phase 5 include refined or calibrated analysis tool(s) or model(s), a list of indicators to compare scenario outcomes, and an assessment of scenario impacts.
- **Phase Six: How will we reach our desired future?**
Phase Six focuses on developing a comprehensive vision and an action plan for achieving it. Key considerations during this phase include validating/refining a vision through stakeholder feedback and identifying potential actions, investments, or policies to lead an area toward its vision. Potential outputs of Phase 6 include the comprehensive vision, action steps, and a set of performance measures.

MVRPC

Martin Kim

MVRPC is the MPO for the Dayton, Ohio, metropolitan region. MVRPC used scenario planning in its integrated regional land use visioning process called *Going Places*. The impetus for *Going Places* was the realization that if past land use and development trends continued, the region would continue to grow much faster in area than in population, resulting in lower average population density and a “thinner” tax base, thus leading to concerns about future quality of life.

The objective of the vision planning process was to address where and how the region should develop by 2040 using a “bottom-up” strategy involving broad public engagement and scenario planning.

During the webinar, Mr. Kim detailed the *Going Places* scenario planning framework and focused on its intersection with phases four, five, and six of the FHWA *Scenario Planning Guidebook*. Details are provided below:

Phase Four (What could the future look like?)

- **Scenario Building.** Community aspirations and preferences were determined through a series of 33 workshops during which participants used dots to map their preferences for future development and brainstormed ideas for how particular land-use configurations could address local and regional goals.

The information gathered through these workshops was used to create seven alternative scenarios for future land use in the region. These scenarios were graphically represented in a series of maps showing the possible future spatial distribution of new jobs and new population across the region.

- Stakeholders. MVRPC staff made a concerted effort to engage stakeholders who did not typically engage in the regional planning process. Staff used a wide variety of media to market *Going Places* and conducted both evening and daytime workshops to broaden attendance. Many of the workshops were open to all members of the community, while others were targeted toward specific populations that have historically been underrepresented in the planning process.

Phase Five (What impacts will scenarios have?)

- Performance Indicators. MVRPC used an iterative approach to develop its scenario evaluation criteria. First, MVRPC identified a set of over 80 potential indicators. This large set was reduced to 23 through internal discussion and debate. Finally, the set was reduced to a list of 12 using input from a group of local planning practitioners, who prioritized indicators based on their relevance and importance.
- Scenario Evaluation. MVRPC staff used geographic information systems (GIS), travel demand forecasting, and the INDEX analysis tool to evaluate each of the seven alternative scenarios based on the final list of 12 performance indicators. The results of the analyses were presented in a matrix that enabled viewers to compare the performance of each scenario across all indicators or conversely to compare each indicator across all scenarios.
- Communication of Results. MVRPC presented the results of its scenario building and evaluation work through a series of open house guided tours. Recognizing that many stakeholders would be unable to attend these events in person, MVRPC also conducted a virtual open house and made materials available on the web.

Phase Six (How will we reach our desired future?)

- Crafting a Comprehensive Vision. Using feedback from stakeholders on the comparison of alternative scenario performance, MVRPC staff combined three of the alternative scenarios to form a preferred scenario. The new preferred scenario was then vetted using the same criteria as the previous alternative scenarios.
- Implementing the Vision. Mr. Kim noted that MVRPC plans to conduct public open houses to present the preferred scenario and to solicit input on a draft regional land use plan called the *2040 Regional Growth Framework*. This framework will also include policy recommendations for implementing the regional vision. Policy recommendations will be based on input from local public officials, planning professionals, and other interested parties. Within the next few months, MVRPC plans to seek formal endorsements on a preferred scenario. The agency will also solicit local jurisdictions' formal review of the draft framework to encourage public buy-in followed by final approval from the MVRPC Board of Directors.

SACOG

Kacey Lizon

SACOG includes 22 local governments and six counties. It is the MPO for the Sacramento metropolitan region in California. The region is home to more than two million people and lies in north-central California between the San Francisco Bay and the Lake Tahoe areas. The region

is fast growing and has been designated by the Environmental Protection Agency as an air quality non-attainment area.

SACOG began using scenario planning as part of its *Blueprint* 50-year regional vision study. The scenario planning process took more than two years. The effort sought to better integrate land use and transportation planning in response to forecasts that showed that regardless of how transportation funds were invested in the 2000 long-range transportation plan, traffic congestion and air quality would worsen. SACOG partnered with Valley Vision, a local philanthropic organization, on public outreach and stakeholder engagement.

During the webinar, Ms. Lizon detailed the 50-year regional vision process, focusing on its intersection with phases four, five, and six of the FHWA *Scenario Planning Guidebook*. While SACOG's process steps closely followed the guidebook's, there were some differences. For example, SACOG selected analysis tools earlier in the process than suggested by the guidebook. Details are provided below:

Phase Four (What could the future look like?)

- Scenario Building. SACOG developed four regional scenarios based on input from public workshops and forums. The input-gathering process utilized the web-based I-PLACE³S analysis tool, which allowed participants to create their own vision for local and regional land use. SACOG focused its early workshops on neighborhood planning and used the outputs of these sessions to inform subsequent sessions targeted first to county-scale and then to regional-level planning.

Ms. Lizon stressed that the selection of the I-PLACE³S tool early in the process was a key decision. SACOG wanted a tool that could be used to support public workshops and could also help staff evaluate scenarios and later planning efforts beyond the 50-year vision planning effort.

- Stakeholders. SACOG engaged over 5,000 individual participants during the information-gathering stages of its process. Participants included members of the general public, local government officials, and other stakeholders.

Phase Five (What impacts will scenarios have?)

- Performance Indicators. SACOG staff considered several questions and issues to guide the selection of scenario performance indicators, including:
 - Do the indicators support the project's goals/guiding principles?
 - Can indicators be measured with available data/tools?
 - Include as many as possible that "normal people" can relate to.
 - Can indicators be monitored over time?
 - Too many without context or "story" will be overwhelming.

Using these considerations, SACOG staff developed a list of indicators and linked them to the *Blueprint* smart growth principles. The considerations presented above represent a sampling. A complete list is available at www.sacregionblueprint.org/implementation/pdf/blueprint-book.pdf.

- Scenario Evaluation. SACOG staff analyzed each scenario using the I-PLACE³S tool and assessed the performance of each using indicators. The results of these analyses were presented as bar charts that illustrated the differences for each indicator between existing conditions, the base case scenario, and other scenarios. Since the *Blueprint*

study, SACOG has also created maps that illustrated the performance when the format is conducive to an indicator. During the presentation, Ms. Lizon toggled between two maps to demonstrate how the use of maps enabled direct comparison of indicator performance.

Phase Six (How will we reach our desired future?)

- Crafting a Comprehensive Vision. SACOG selected a preferred alternative based on scenario evaluation and ongoing engagement with stakeholders and its board of directors. The *Blueprint* vision was incorporated into other regional planning efforts such as the Metropolitan Transportation Plan (MTP), resulting in the identification of new transportation priorities.
- Implementing the Vision. Ms. Lizon noted that SACOG launched several activities to implement the *Blueprint* 50-year vision:
 - Providing training to local governments and the private sector on how to use the I-PLACE³S tool.
 - Working with local governments to develop a 2035 map to be used in the next update of the MTP.
 - Hosting an educational series for planners, planning commissioners, and elected officials.
 - Providing assistance to local governments to support *Blueprint* implementation.
 - Development of project monitoring.
 - Overseeing a community design grant program funded through the MTP.

Lessons Learned

Ms. Lizon stressed that technically sound data and selection of the appropriate analysis tool are important factors to encourage buy-in from participants as well as local communities' implementation of the vision.

Key Points from the Webinar

Brian Betlyon

Mr. Betlyon summarized key points from the webinar presentations:

- Providing interactive public engagement opportunities can be highly effective for encouraging public buy-in and meaningful public input.
- Visualizing “base case” or status quo scenarios can add urgency to the process by communicating the often unpleasant costs of inaction to stakeholders.
- A robust visioning process can be very lengthy. It is important to allow sufficient time (two to three years).
- It is important to select performance indicators that resonate with a region's goals.

- Incorporating a range of tools for scenario evaluation is a good strategy. Even basic tools such as a transportation demand model can add value to a scenario planning analysis when paired with other tools and decision-making software.
- At a minimum, preferred scenarios can be used to inform the metropolitan planning process regardless of whether or not they are incorporated into long-range plans.
- Build consensus on recommendations for policy formation.
- Educating and involving local partners and establishing incentive programs are effective implementation strategies.

Closing Information

Fred Bowers

To conclude the webinar, Mr. Bowers thanked the presenters and hosts. He invited participants to contact FHWA staff for further assistance with scenario planning. He also reminded participants about FHWA's scenario planning resources:

- FHWA scenario planning website: www.fhwa.dot.gov/Planning/scenplan/index.htm
- Program contacts:
 - Ken Petty: (202) 366-6654 or Kenneth.Petty@dot.gov
 - Fred Bowers: (202) 366-2374 or Frederick.Bowers@dot.gov
 - Rae Keasler: (202) 366-0329 or Rae.Keasler@dot.gov
 - Alisa Fine: (617) 494-2310 or Alisa.Fine@dot.gov
 - Brian Betlyon: (410) 962-0086 or Brian.Betlyon@dot.gov
 - Jim Thorne: (708) 283-3538 or Jim.Thorne@dot.gov

Summary of Questions and Discussion

The questions and answers presented here are summaries and are not direct transcriptions of what occurred during the webinar proceedings.

1. What tools does SACOG make available for public use or partner governments' use?

SACOG: We provide the I-PLACE³S tool and provide support to member communities in using the tool. A number of additional topic-focused tools are under development to supplement the I-PLACE³S tool.

2. What type of funding did SACOG use for the community design grant?

SACOG: Congestion Mitigation and Air Quality Improvement (CMAQ) Program funds and local funds.

3. Is regional population in MVRPC's region still declining and is that affecting planning operations?

MVRPC: It is not declining. We project about a 3 percent increase in population from 2000 to 2040.

4. Can you tell us more about MVRPC’s mind mapping exercise?

MVRPC: Mind mapping is an exercise where participants brainstorm ideas on a central theme and chart them on a blank sheet of paper, drawing lines between ideas to show how they are inter-related.

5. Did SACOG identify its smart growth principles as specific visions? How did SACOG develop these principles?

SACOG: We looked at a lot of resources to develop them, including our previous plans. We started by conducting internal discussions and then reviewed the principles with our board of directors and other agency stakeholders. Finally, we vetted the principles with the public.

6. Can you provide more information about the cost of performing these multi-year scenario planning processes?

MVRPC: Our original budget was \$1 million for a four-year process. We stayed close to that but are now going slightly over budget. We kept costs down by doing almost all of the work in-house.

SACOG: We committed \$2 million of our core funds. We also received grants and earmarks totaling \$2 million. Valley Vision helped us to secure a number of the grants.

Participant Polling

Question 1: Who do you work for?

	Number Responding	Percent Responding
Federal Government	12	25%
State Government	8	17%
City/County Government	1	2%
Metropolitan Planning Organization/Regional Planning Council or Organization	27	56%
National Association	0	0%
Private Sector	0	0%
Academia	0	0%
Other	0	0%

Question 2: How many people are participating in this webinar with you?

	Number Responding	Percent Responding
0-2	43	90%

3-5	3	6%
6-10	2	4%
More than 10	0	0%

Question 3: What experience do you have with scenario planning?

	Number Responding	Percent Responding
No experience.	4	9%
I have heard about it but do not have firsthand experience.	15	32%
I have participated in scenario planning exercises.	24	51%
I have led a scenario planning exercise.	5	11%

Question 4: How did you learn about today's webinar?

	Number Responding	Percent Responding
FHWA's email announcement	39	87%
Other	6	13%

Question 5: Did you participate in FHWA's previous scenario planning webinars in September and March?

	Number Responding	Percent Responding
Yes, I participated in both webinars.	7	17%
Yes, I participated in one webinar.	9	21%
No, I did not participate in either webinar.	26	62%

Question 6: Was the information presented in today's webinar useful?

	Number Responding	Percent Responding
Very useful	21	52%
Somewhat useful	18	45%
Not as useful as expected	1	3%

Question 7: What topics would you like to see addressed in future webinars?

	Number Responding	Percent Responding

Climate change	12	29%
Broader environmental issues (e.g. open space, air quality, wetlands preservation)	10	24%
Demographics	14	33%
Economic Changes	16	38%
Energy (availability, price, alternatives)	10	24%
Financial Resources Available for Future Investments	15	36%
Funding Resources Available for Scenario Planning	19	45%
Land Use Planning	23	55%
Public Health	8	19%
Transportation Investments or Infrastructure	28	67%