

Summary of the Federal Highway Administration's (FHWA) Getting Started with Scenario Planning Webinar

March 1, 2011
1:00 - 2:30 PM (EST)

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

A complete recording of the webinar is available at <http://fhwa.adobeconnect.com/p42181957/>.

Copies of the speakers' presentations are available upon request from Fred Bowers at Frederick.Bowers@dot.gov, Rae Keasler at Rae.Keasler@dot.gov, or Alisa Fine at Alisa.Fine@dot.gov.

Presenters

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Participants

Approximately 140 participants attended the webinar.

Welcome

Jim Cheatham

Mr. Cheatham welcomed participants to the webinar. FHWA supports scenario planning as an enhancement of the traditional transportation planning process. The technique develops and compares alternative futures to help transportation agencies and stakeholders make better and informed decisions. Overall, the technique supports stakeholders to:

- Compare choices and consequences to make better decisions;
- Involve the public and other stakeholders in building a common understanding of future possibilities; and
- Better understand relationships between transportation networks and social, environmental, and economic factors that affect communities or regions.

Mr. Cheatham noted that the webinar is the second in a FHWA series on scenario planning that was initiated in September 2010. Notes and a recording from the September webinar, which focused on an “Introduction to Scenario Planning,” are available on the FHWA scenario planning website at: www.fhwa.dot.gov/planning/scenplan/.

The website also contains additional scenario planning materials, including the FHWA *Scenario Planning Guidebook*, case studies, reports from previous FHWA-sponsored workshops, and information on scenario planning tools and resources.

FHWA intends to continue the webinar series with a third webinar on scenario planning in the summer or fall of 2011 that focuses on “Creating and Assessing Scenarios”. More information will be forthcoming via email and posted on the FHWA Scenario Planning Website.

Introduction to Webinar and FHWA Scenario Planning Program

Ken Petty

Mr. Petty thanked participants for joining the webinar and described its goals:

- Follow up on topics of interest identified by participants in the first FHWA scenario planning webinar;
- Highlight how agencies can get started with scenario planning through reference to Phases 1, 2 and 3 of the FHWA *Scenario Planning Guidebook*; and
- Outline how scenario planning can be incorporated as part of an agency’s existing long-range planning processes.

FHWA established the scenario planning program in 2004 to promote innovative approaches to improve the quality of statewide and metropolitan transportation plans and programs. As part of the program, FHWA:

- Sponsors scenario planning workshops to share information on efforts from around the country and disseminate lessons learned to a broad audience.
- Provides guidance and assistance to agencies using scenario planning through workshops, webinars, case study reports, and the FHWA scenario planning website.
- Identifies resources for use in scenario planning, including public involvement tools.
- Encourages the use of planning and other transportation funds to implement scenario planning.

Mr. Petty also noted that the FHWA scenario planning website (www.fhwa.dot.gov/planning/scenplan/) features an online application for interested agencies to apply for scenario planning workshops. Additionally, scenario planning materials are available from the FHWA/Federal Transit Administration Transportation Planning Capacity Building Program (TPCB) website at www.planning.dot.gov/scenario.asp.

FHWA Scenario Planning Guidebook

Alisa Fine

Ms. Fine provided a brief overview of the FHWA *Scenario Planning Guidebook*. The guidebook provides a basic, suggested framework for scenario planning and details six key phases that agencies are likely to encounter when implementing the technique.

Ms. Fine detailed the first three phases of the guidebook, which deal with getting started with scenario planning and were the focus of the webinar:

- **Phase 1: How should we get started?**
Phase 1 concerns scoping the effort and engaging partners. Key activities can include reaching out to partners, defining stakeholder roles and responsibilities, and considering an overall timeframe and budget for the effort. As part of Phase 1, agencies might also consider how scenario planning can be integrated into existing transportation processes.
- **Phase 2: Where are we now?**
Phase 2 focuses on collecting data to describe current state of the state, community, region, or study area. Data can include information about the transportation system, demographics, environmental features, or land use patterns. Obtaining these data help to build a baseline analysis of the area in later phases and allow comparison of alternative scenarios with current conditions. Partners and the public can be involved during Phase 2 to help identify and obtain data.
- **Phase 3: Who are we and where do we want to go?**
Phase 3 focuses on identifying values, goals, and aspirations with input from public stakeholders. Overall, Phase 3 can be a first step toward developing a comprehensive vision that depicts long-term desired transportation and development patterns. An important aspect of Phase 3 is to consider how stakeholders, including the public, will be involved.

Getting Started with Scenario Planning: Gainesville MTPO

Marlie Sanderson

The Gainesville MTPO has conducted two scenario planning processes. During the webinar, Mr. Sanderson focused on Gainesville's most recent process and how it intersected with the FHWA *Scenario Planning Guidebook's* six phases.

Phase 1 ("How should we get started?")

- Objectives and Outcomes. The overall purpose of the Gainesville MTPO's scenario planning exercise was to address the issue of peak oil, which refers to a time in the future in which petroleum becomes very expensive or unavailable. The Gainesville MTPO sought to address peak oil in its long-range transportation plan as a way to minimize the effects of a potential future peak oil crisis.

The effort was motivated by an energy conservation strategies commission appointed by Alachua County, which recommended that the Gainesville MTPO study peak oil as part of its scenario planning effort.

The effort's anticipated outcome was to identify what land use and mitigation strategies the Gainesville community should implement to prepare for a future in which a peak oil crisis plays a prominent role.

- Budget and Scope. The effort built directly on the Gainesville MTPO's long-range transportation plan update. The agency included scenario planning as part of its Unified Planning Work Program (UPWP) and ensured that scenario planning was part of the scope of services for the consultant (Renaissance Planning Group) that assisted Gainesville on the technical aspects of its long-range plan.
- Stakeholders. Primary stakeholders for Gainesville's scenario planning effort included Gainesville's City Commission and the Alachua County Commission. Secondary stakeholders included advisory committees, the University of Florida, environmental groups, the Chamber of Commerce, and the Homebuilder's Association.

Phase 2 ("Where are we now?")

- Current Conditions and Future Trends. In the Gainesville area, growth is moving westward and is composed primarily of single-family, low-density development. The Gainesville MTPO believes this is an unhealthy land use balance for the area. Key future trends include changes in how the region's residents will travel.

Phase 3 ("Who are we and where do we want to go?")

- Visioning Exercises. The Gainesville MTPO conducted visioning exercises with both primary and secondary stakeholders. During these exercises, the MTPO asked stakeholders to "think like Rip Van Winkle" and brainstorm how the world might change in 20 years, as well as what the community should encourage to lead to a preferred future.

Major themes that came forward from visioning exercises provided a framework for addressing "who Gainesville is and where it wants to go." These themes included the desire for a livable community and to create a multimodal transportation system, reduce energy dependence, and address climate change. Stakeholders participating in the visioning exercises also expressed a desire to see more of a mix of land uses with growth directed to the core of the community.

- Working Principles. A potential output of Phase 3 is a set of working principles that documents the values and preferences of the community. The Gainesville MTPO's working principles included:
 - Minimizing vehicle miles of travel and congested lane miles.
 - Increasing transit ridership and bicycle/pedestrian trips.

These principles might later be tied to performance measures or criteria to evaluate different scenarios.

Scenario Analysis and Lessons Learned

The Gainesville MTPO ultimately developed four transportation scenarios that focused on bus rapid transit, highways, bus and light rail, and a combination of these modes. Each scenario was evaluated, both with no consideration for peak oil (e.g., "business as usual") and then under peak oil conditions.

To evaluate the scenarios, the Gainesville MTPO adjusted its travel demand model to account for either an increase or decrease in automobile ownership in each Transportation Analysis Zone. Additionally, the cost of gasoline was adjusted in the travel demand model to mimic conditions that might occur in a peak oil scenario.

The scenario analysis was compiled and presented to the MPO Board. The long-range plan was adopted in October 2010.

Mr. Sanderson concluded by noting that the Gainesville MTPO believes that one of the most beneficial aspects of scenario planning is its ability to attract the attention and interest of local elected officials and citizens. Scenario planning can also help develop a future vision for the long-range transportation plan.

Getting Started with Scenario Planning: DRCOG

Jill Locantore

DRCOG is the MPO and COG for the Denver metro area. Its membership includes 47 municipalities and nine counties. The planning region is more than 5000 square miles. The region is geographically diverse and includes mountain communities, urban areas, and small communities on the plains.

DRCOG has conducted three scenario planning efforts over the past several years. Elements from each of these efforts are described below.

1) Metro Vision Plan: 1990-1997

Phase 1 (“How should we get started?”)

- Objectives and Outcomes. There were several motivating factors for DRCOG’s first scenario planning effort:
 - Revisiting the agency’s regional development framework (adopted in 1985).
 - Reconciling overlapping and contradictory local comprehensive plans, which in aggregate assumed a large expansion of the urbanized area (to over 1000 square miles);
 - Coordinating a response to growth management;
 - Addressing air quality standards; and
 - Forecasting growth to make better decisions about transportation investments.

To address these issues, DRCOG’s Board decided to take on a major visioning effort. The effort’s objectives were to provide opportunities for the region’s citizens to identify pressing issues, articulate a preferred future for the region, and define steps to shape regional growth.

- Scope and Budget. The overall scope for DRCOG’s first scenario planning effort included developing a vision statement and policies to guide the effort (1990-1992), engaging in scenario analysis and defining an urban growth boundary target (1993-1995), and finalizing mapping/adoption of the final vision plan (1996-1997).
- Roles/Responsibilities. During this effort, the DRCOG Board of Directors, comprised of local elected officials, was the primary decision-maker and voted on whether to approve the final plan and related policies. The agency also worked closely with a regional task force, which included peer agencies, transit agencies, members of the business community, and citizens from neighborhood associations. This task force helped to develop the vision statement, researched issues, and helped design/evaluate scenarios. The general public was also involved throughout the effort.

Phase 2 (“Where are we now?”)

- Current Conditions and Future Trends. The regional task force compiled data to assess the current state of the region and documented the research in a background report on assumptions and trends.

Phase 3 (“Who are we and where do we want to go?”)

- Vision Statement. The regional task force developed a succinct guiding statement for the region that discussed overall growth principles, including ensuring equitable sharing of benefits and burdens across the region and making efficient use of limited resources.

Scenario Development and Lessons Learned

Ultimately, the regional task force identified 12 possible scenarios and narrowed them to four choices. The preferred scenario was a combination of “compact” and “satellite cities” scenarios.

As a result of this scenario planning effort, DRCOG’s Board identified a target for an urban growth boundary and then mapped this boundary. DRCOG communities also formed the Mile High Compact, which commits signing organizations to uphold tenets of the urban growth plan in their communities. Currently 47 of DRCOG’s member governments (there are 56 total) have signed the compact.

2) Refining Metro Vision Plan: 2007

Phase 1 (“How should we get started?”)

- Objectives and Outcomes. DRCOG’s second scenario planning effort began in 2007. The objective was to refine the Metro Vision Plan and reassess the urban growth boundary.
- Roles/Responsibilities. Given the more limited scope of this second effort, a smaller group of stakeholders was involved. The DRCOG Board acted as the ultimate decision-maker. DRCOG staff helped to guide the process, select alternatives for modeling, and provide input on evaluation criteria. Public stakeholders provided input during workshops.

Phase 2 (“Where are we now?”)

- Current Conditions and Future Trends. Prior to the scenario planning effort, DRCOG staff worked with stakeholders to develop an indicators report, “Measuring Progress,” which evaluated regional progress toward Metro Vision goals.

Phase 3 (“Who are we and where do we want to go?”)

- Vision Statement. DRCOG continued to rely on the original vision statement that was adopted by the DRCOG Board in 1992 during the first scenario planning effort.

Scenario Development and Lessons Learned

Ultimately, DRCOG developed six scenarios focused on various alternatives for expanding the urban growth boundary. The scenarios also examined transportation investments.

DRCOG assessed scenario performance against several indicators. The results of this assessment led to DRCOG’s Board approving a small expansion of the urban growth boundary.

3) Re-engaging the Region’s Citizens in Discussion of Metro Vision: 2009-Ongoing

Phase 1 (“How should we get started?”)

- Objectives and Outcomes. DRCOG’s third scenario planning effort focused on raising citizens’ level of awareness about Metro Vision and increasing their engagement in addressing regional issues and challenges.

DRCOG also sought to identify a flexible tool that would allow groups of stakeholders to create scenarios “on the fly” and immediately view their outcomes.

- Scope and Budget. The scope and budget of the third scenario planning effort was focused on the requirements for building an appropriate scenario analysis tool. MetroQuest was the tool built to meet these requirements (the effort to build it cost about \$200K). The tool required a large amount of data and its output is a library of thousands of different scenarios, which can be used during scenario planning workshops.
- Roles/Responsibilities. For the third scenario planning effort, DRCOG staff took a leading role to define policy questions and evaluation criteria for scenarios, with input from stakeholders. DRCOG’s Board receive ongoing information about workshops.

Stakeholders actively develop and explore alternative scenarios and outcomes in workshops. Local governments also participate to incorporate scenario discussions into local planning efforts.

Phase 2 (“Where are we now?”) and Phase 3 (“Who are we and where do we want to go?”)

Phases 2 and 3 of DRCOG’s third scenario planning effort relied on the existing the Metro Vision Plan, including its policies and related regional indicators.

MetroQuest Demonstration

Ms. Locantore conducted a brief demonstration of MetroQuest. The tool allows staff to lay out a series of policy questions during scenario planning workshops. Participants use electronic keypads to vote on these questions. DRCOG builds a scenario based on these responses and shows participants how the scenario performs on a number of indicators.

Next Steps

As a fourth scenario planning effort, DRCOG anticipated revisiting Metro Vision and exploring new issues such as climate change. The agency would like to use MetroQuest to help analyze and assess any new scenarios generated as part of this effort.

Key Points from Webinar

Jim Thorne

Mr. Thorne summarized key points from the previous presentations:

- The time and tools required for scenario planning will depend on the number of stakeholders involved in the effort, who they are (e.g., the public, local elected officials), and their roles.
- Scenario planning can address a diverse range of issues, including the influence of immigration, other demographic changes, energy considerations, and climate change.
- During its first scenario planning effort, DRCOG conducted Phase 3 prior to Phase 2. This is notable because the guidebook presents a suggested framework for scenario planning and agencies should tailor phases to meet their specific needs, as has DRCOG.
- One of the primary benefits of scenario planning is its ability to engage stakeholders and help educate them on the transportation planning process. Scenario planning is a powerful educational tool to help raise awareness of important issues/trends affecting communities and how these issues might interact.
- When getting started with scenario planning, it is important to consider or articulate the community’s values early on in the process. While doing so can be challenging, this will help establish buy-in to scenario planning and can allow stakeholders to take ownership of the process. Additionally, it can help set the stage for consensus-building.
- A variety of technologies, including visualization tools like MetroQuest, can support agencies in getting started with scenario planning.

Closing Information

To conclude the webinar, Mr. Petty provided resources and contact information for the FHWA scenario planning program:

- FHWA scenario planning website: www.fhwa.dot.gov/Planning/scenplan/index.htm
- Program contacts:
 - Fred Bowers: 202-366-2374 or Frederick.Bowers@dot.gov
 - Rae Keasler: 202-366-0329 or Rae.Keasler@dot.gov
 - Brian Betlyon: 410-962-0086 or Brian.Betlyon@dot.gov

- Jim Thorne: 708-283-3538 or Jim.Thorne@dot.gov
- Alisa Fine: 617-494-2310 or Alisa.Fine@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. How long did it take to update the Gainesville MTPO long-range plan?

Gainesville MTPO: The update took about 24 months.

2. Did DRCOG investigate other types of software besides MetroQuest? If so, what were the results of this research?

DRCOG: Yes, we did research on other software, including Community Viz, which allow “on the fly” analysis. We believed that MetroQuest offered a user-friendly interface and engaging graphics, both of which could help stimulate good dialogue.

3. How much did MetroQuest cost?

DRCOG: The version of the software that DRCOG purchased cost \$200K. The tool can be customized to fit a range of budgets.

4. Can DRCOG share the Request for Proposal (RFP) that it developed for MetroQuest?

DRCOG: Yes, we can share the RFP with anyone who is interested. Please contact Jill Locantore for more information.

5. It appears that MetroQuest requires a fair amount of data. Is it useful for areas that do not have a lot of readily available data?

DRCOG: The private sector firm that initially developed MetroQuest also created a more streamlined version that does not require as much data and costs less to develop. The simpler version does not provide as much detailed information on each scenario, but can still be effective in stimulating dialogue.

6. Are there examples of agencies in the Midwestern region that have conducted scenario planning?

FHWA Resource Center: The Chicago Metropolitan Agency for Planning (CMAP) has engaged in a notable scenario planning effort. For more information, see www.cmap.illinois.gov/2040/main.

Miami Valley Regional Planning Commission (MVRPC): MVRPC in Dayton, Ohio, is currently in the process of conducting a scenario planning effort. For more information, see www.mvrpc.org/land-use/going-places.

7. Is it more effective to focus scenario planning on one or two specific issues or to conduct a general process and let the issues “fall out” from the effort?

Gainesville MTPO: It is difficult for people to get their arms around a long horizon that might be included in a long-range transportation plan. The Gainesville MTPO focused its scenario planning efforts on a few specific issues, believing this would help lead to a good outcome. Additionally, we believed that focusing the effort on specific issues would help pique people’s interest; issues that are too general might not attract as much attention.

DRCOG: You can use scenario planning to identify specific issues and then explore them in depth. The type of scenario planning effort you conduct will depend on your goals.

8. Would FHWA create a common scenario planning software for everyone's use?

FHWA: FHWA is not likely to focus on developing common software; however, FHWA does want to support agencies in evaluating how different software packages can be utilized. FHWA has a demonstration version of a visualization software (TransView) available. This software supports some scenario analysis and is available via thumb drive. Please contact Fred Bowers at FHWA (Frederick.Bowers@dot.gov) if you are interested in receiving a copy of the thumb drive.

9. Is scenario planning an activity that is eligible for using metropolitan planning (PL) funds?

FHWA: Yes, we assume that scenario planning is eligible for PL funds. To use these funds, agencies need to be sure that their scenario planning efforts connect to transportation, even if these efforts also address land use issues.

Participant Polling

Question 1: Who do you work for?

	Number Responding	Percent Responding
Federal Government	8	14%
State Government	16	29%
City/County Government	2	4%
Metropolitan Planning Organization/Regional Planning Council or Organization	27	48%
National Association	1	2%
Private Sector	2	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	47	81%
3-5	5	9%
6-10	5	9%
More than 10	1	2%

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

	Number Responding	Percent Responding
No experience	16	28%
I have heard about it, but do not have firsthand experience	25	47%
I have participated in scenario planning exercises	17	29%
I have led scenario planning exercises	2	3.4%

Question 4: How did you learn about the webinar?

	Number Responding	Percent Responding
From FHWA/FTA Transportation Planning Capacity Building (TPCB) program website	8	14.8%
From another website	0	0%
Via email or listserv	45	83%

Other	2	3%
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Question 5: If you are conducting (or are planning to conduct) scenario planning, what issues are you focusing on?

	Number Responding	Percent Responding
Getting the public, elected officials, and others engaged in and excited about long-range planning	10	34%
Considering or addressing interactions between land use, transportation, climate change, or other issues	18	62%
Developing a framework to guide the long-range transportation planning process	8	27%
Developing a framework to guide a regional comprehensive plan that includes transportation	5	17%
Developing a framework for a corridor plan	5	17%

Question 6: What key issue(s) are you addressing in scenario planning (or want to address)?

	Number Responding	Percent Responding
Climate change	7	23%
Cost of living/government spending; financial resources available for future investment	9	30%
Broader environmental issues (e.g., open space, air quality, wetlands preservation)	5	17%
Demographics	8	27%
Economic changes	11	37%
Energy (availability, price, alternatives)	11	37%
Land use planning	21	70%
Public health	4	13%
Transportation investments or infrastructure	21	70%

Question 7: What is (or might be) the public's role in your scenario planning process?

	Number Responding	Percent Responding
Receive information and stay informed	0	0%
Participate and provide feedback	20	67%
Actively involved in process, influencing decisions	4	14%
Collaborate in developing process and solutions	3	10%
Make all decisions	3	10%

Question 8: Was the information presented in today's webinar relevant and useful?

	Number Responding	Percent Responding
Very useful	23	61%
Somewhat useful	14	37%
Not useful	1	3%