Peer Workshop on Scenario Planning

Sponsored by the Federal Highway Administration

Location: Honolulu, HI

Date: June 24, 2004

Forum Host Agency: Federal Highway Administration, Hawaii Division Office

Forum Participants:
- City and County of Honolulu
- County of Hawaii
- County of Kauai
- County of Maui
- Federal Highway Administration, Hawaii Division
- Federal Highway Administration, Office of Planning
- Hawaii Department of Business, Economic Development, and Tourism
- Hawaii Local Technical Assistance Program
- Hawaii State Department of Transportation
- Oahu Metropolitan Planning Organization (MPO)
- Renaissance Planning Group
- Thomas Jefferson Planning District Commission and Charlottesville-Albermarle MPO
- US DOT Volpe National Transportation Systems Center

Summary

The following report summarizes a Peer Forum on tools and effective practices for scenario planning. The Forum was coordinated and supported by the FHWA. The FHWA Hawaii Division Office and the Hawaii Local Transportation Assistance Program (LTAP) Center hosted the Forum. The Thomas Jefferson Planning District Commission and Charlottesville-Albermarle MPO and their consultant, the Renaissance Planning Group, served as peers. Participants at the Forum included engineers and planners from local, State, and Federal agencies.

I. Introduction

A. Scenario Planning Defined
Scenario planning is a process in which transportation professionals and citizens work together to analyze and shape the long-term future of their communities. Using a variety of tools and techniques, participants in scenario planning assess trends in key factors such as transportation, land use, demographics, health, economic development, environment, and more. The participants bring the factors together in alternative future scenarios, each of these reflecting different trend assumptions and tradeoff preferences. In the end, all members of the community—the general public, business leaders, and elected officials—reached agreement on a preferred scenario. This scenario becomes the long-term policy framework for the community's evolution, and is used to guide decision-making.

B. Overview of Scenario Planning
Sherry Ways of the FHWA Office of Planning opened the Peer Workshop by presenting an overview of scenario planning and the FHWA's role in supporting its use. Discussing the benefits of effective scenario planning, Ms. Ways noted that it:
- provides an analytical framework and process for analyzing complex issues and responding to change,
- facilitates consensus building by giving communities the capacity to participate actively in planning,
- includes tools to assess transportation's impact on communities,
- improves communication and understanding in a community,
- yields an enhanced decision-making framework for a community, and ensures better management of increasingly limited resources.

FHWA is offering technical support, information, and research to state and local partners as they undertake scenario planning. Recent efforts include:
- FHWA funded scenario planning initiatives in Utah, Virginia, Michigan, Missouri, Wisconsin, Illinois and California
- A National Peer Roundtable gathering for policymakers, community leaders, and technical experts, that discussed the keys to effective scenario planning and US DOT support recommendations (Washington, D.C. September 25, 2003).
- University of Utah Scenario Planning Research (November 2003).
- Scenario Planning Video Conference with three key FHWA Divisions (January 2004).
- FHWA coordination and support of FHWA/FTA Peer Workshops on scenario planning in 2004 (hosted by Binghamton, NY and Honolulu, HI), and three more in 2005.

II. State and Local Planning Efforts
Bruce Turner of the FHWA Hawaii Division gave an overview of transportation planning in Hawaii, noting that it presents diverse challenges due in part to the fact that each island has its own concerns and priorities. Planners in Hawaii want to scrutinize the State's current long-range plan and evaluate its implications by examining internal and external pressures. Current trends, including population changes and transportation demand, are essential to plan review and evaluation. Several initiatives are underway in Hawaii to implement smart growth. The Island Oahu and the town of Ewa are working with the U.S. Environmental Protection Agency to implement smart growth practices. Additionally, the City of Honolulu has invested in planning for a sustainable community. The current plan anticipates a population increase in eight areas. Honolulu has an urban growth boundary in place that stipulates the limits for such growth.

The Hawaii Local Technical Assistance Program is one way the FHWA assists the State with its unique transportation planning needs. The
program works to improve transportation planners’ access to technology by facilitating technology transfer and training.

III. Panelist Experiences and Observations

Both peer panelists have implemented and/or developed scenario planning techniques that measure possible outcomes and help determine future investments. In these cases, scenario planning avoids site-specific planning because trips often overlap among destinations. Instead, it demonstrates practices that will be most effective in a particular area.

A. Peer Presentation- United Jefferson Area Mobility Plan (UnJAM) 2025

Harrison Rue, Executive Director, Thomas Jefferson Planning District Commission and Charlottesville-Albemarle MPO

The United Jefferson Area Mobility Plan 2025 (UnJAM) combines the Charlottesville-Albemarle Regional Transportation (CHART) Plan for the MPO area with the Rural Area Transportation Long-Range Plan, for the five-county Thomas Jefferson Planning District. UnJAM incorporates visions from each of the local jurisdictions in the Thomas Jefferson Planning District and addresses the project priorities outlined in the MPO’s 20-year plan.

Development of the UnJAM Plan has been informed by results of the Jefferson Area Eastern Planning Initiative (EPI), a recently completed comprehensive and integrated land use and transportation study focusing on the City of Charlottesville, the eastern two-thirds of Albemarle County, the southern half of Greene County, and all of Louisa and Fluvanna Counties. Public workshops showed a strong preference among residents for a more compact, nodal form of development, and for transportation systems that would support this pattern. The study concluded that the region should avoid a dispersed, low density pattern and plan for clustered, enhanced communities along major corridors and key crossroads.

Due to severe budget constraints, the UnJAM Plan focuses on a set of improvements that maximizes the effectiveness of existing transportation investments. The overarching goal is to create a balanced, multi-modal transportation network, by 1) improving connections throughout the region; 2) improving mobility within neighborhoods, towns, and counties; and 3) making transportation choices that help foster livable communities.

Mr. Rue’s presentation to the Hawaii state and local participants focused on (1) how scenario planning was implemented in his area, and (2) how it was incorporated into plans and programmed into projects. Mr. Rue recognizes scenario planning as an effective tool in developing long-range plans because it can examine scenarios in the “big picture.” By doing this, highway and transit improvements can use visualization techniques to help make implementation both more understandable and more acceptable to communities.

Process

A Citizens Advisory Committee led the process for developing the CHART long-range plan. The research began with traffic demand forecasting and modeling. Another component of research included determining which transportation projects have already been defined as priorities by each local government. The Committee also reviewed and considered public comments received from
Upon receiving final model runs, the CHART Committee analyzed the data and decided which projects to include in the Plan. This process required several months and included detailed and comprehensive discussion and analysis. Once the CHART Committee approved a transportation package for inclusion in UnJAM 2025, its recommendations were forwarded to the MPO Technical Committee for review and comment and ultimately to the MPO Policy Board for final approval. Members of the MPO Technical Committee also served as technical advisors to the CHART Committee during the development of the UnJAM Plan.

The process for developing the rural sections of the UnJAM Plan was similar, but did not incorporate the modeling required in the urban MPO area. The Rural Technical Committee – consisting of County planners, TJ PDC, VDOT, and transit agency staff – served as the main coordinating committee, with oversight and policy direction from the Thomas Jefferson Planning District Commissioners.

**Public Involvement**

Public involvement was a major component in developing the UnJAM 2025 Plan, with a series of workshops held over the one-year period leading up to the creation of the Plan. Initial workshops, coined UnJAM Round 1, solicited input from the public as to how the transportation network should look, and what specific areas needed to be addressed. Participants worked in groups to discuss those issues and marked up maps to further illustrate their suggestions and concepts. They were also given the opportunity to submit their individual ideas on a “Quick Pick” form. Those who were unable to attend the workshop were able to access the form from the TJ PDC/MPO’s website. ‘KidJAM’ activities were offered for families attending the workshop in order to incorporate children’s’ ideas into the plan. UnJAM Round 2 workshops presented information to the public that was gathered in the first sessions, to ensure their ideas were captured correctly. Participants worked in groups again and were encouraged to provide more detailed input on various options. Each group was given a large, blueprint-sized workbook to mark up based on group discussion.

The UnJAM 2025 Plan was presented in final draft format for review, feedback, and comments at the Round 3 Regional Open House. Additionally, two formal public hearings were held during regularly scheduled MPO Policy Board meetings. Each of the public forums for input into the UnJAM 2025 Plan were publicized in local newspapers, on the MPO/TJ PDC website and by email invitations, and by flyers and posters.

**Conclusions and Observations**

Utilizing scenario planning in Charlottesville established an effective public process for identifying community values and existing opportunities and challenges. Rue observed that the key to achieving successful public involvement is to ensure a wide range of stakeholders make it to the table. A well-designed process creates a visual plan that addresses public issues and priorities. Extensive public involvement fosters ownership and generates support. Some suggested questions to be presented to the public and local officials are:

- What do you value?
- How do you measure sustainability?
- What makes a place a place (e.g., urban mixed-use, suburban mixed-use, small town, etc.)?

**B. Peer Presentation- CorPlan One Scenario Planning Tool**

Chris Sinclair, President, Renaissance Planning Group

**Background**

CorPlan is a scenario planning model funded by a FHWA grant. This software was specifically used as part of the scenario planning efforts in Charlottesville. CorPlan allows the user to do the following:
• quantify the land use and development impacts of various scenarios,
• generate socioeconomic inputs to travel demand models, and
• estimate the transportation impacts of scenarios.

Unlike most land-use models, CorPlan allows for user feedback and ensures that the user is in control of the scenario planning application. CorPlan helps MPOs recognize various impacts, such as the effect of a new bypass, a growing corridor, or the potential for new transit demands. In addition, CorPlan’s model calibration sees that the simulation compares favorably to what actually exists, and shows where inconsistencies may lie with different data sources. It is created as a grid system in order to incorporate land-ownership and unexpected land changes (e.g., the development of large parcels). It is important to note, however, that the grid allows the “what if” scenario to be analyzed and does not take into account zoning constraints.

Conclusions and Observations
CorPlan was created not as a prescriptive tool, but rather a tool to help others visualize planning scenarios. The images are based on expectations rather than requirements and CorPlan and tools like it serve as a step in the overall scenario planning process. The goal is to keep the public and officials informed.

IV. Opportunities for Action

Each of the seven Hawaiian Islands has unique characteristics. However, scenario planning can be applied to individual islands to address each region’s specific driving forces—whether it be development, sustainability, tourism, agriculture, or environmental protection. The western coast of the island Hawaii, for example, is a fast-growth area that requires strong State, county, and public works coordination. Scenario planning can help to achieve this coordination by facilitating public input. In addition, all modal impacts can be more easily addressed with an interagency and intermodal team as part of the scenario planning process. The peer forum participants recommended that local officials take the lead on any scenario planning projects, rather than the State or Federal agencies, to create more local ownership by the stakeholders.

The participants at the brainstorming session identified several challenges and opportunities associated with implementing scenario planning in Hawaii, and from this discussion articulated a number of specific actions to be taken.

Challenges:
• Budgeting for scenario planning ~ Visioning tools are costly may be assigned a relatively lower priority if not properly funded
• Gaining developers’ buy-in ~ Data from developers is essential for effective planning, but they are often wary of disclosing their plans.
• Prioritizing ~ Traffic issues in certain corridors may be a priority over long-term planning and visioning techniques.
• Funding ~ Funding is needed to upgrade systems with a focus on increasing tourism.
• Receiving local officials’ buy-in ~ Scenario planning may require standards or zoning changes. Since local officials only serve two-year terms, it may be difficult to get buy-in on these types of land use changes.
• Public skepticism ~ The Oahu MPO just went to the public to receive input on its long-range plan. Citizens may not be willing to engage in another public involvement process.

Opportunities:
• Scenario planning can be used to address transit needs on several neighbor islands.
• On the Island of Kauai, scenario planning can be used for corridors with increased development.
• Scenario planning can address the need for capital improvements for roads and parklands that result in high tourism.

Next Steps:
• Create a Memorandum of Understanding (MOU) to outline cooperation and identify responsibilities among local, State, and Federal stakeholders.
• Establish a working group or steering committee with developers, the public, and others.
• Include scenario planning with current updates to short-range plans, models, and county standards.
• Request facilitation by the FHWA to provide scenario planning technical assistance.
• Encourage the FHWA to involve the National Association of Counties (NACO) with scenario planning. Counties will be more receptive to moving faster if NACO initially proposes using the tool.

V. For More Information

<table>
<thead>
<tr>
<th>Key Contact:</th>
<th>Bruce Turner, Assistant Division Administrator FHWA Hawaii Division</th>
<th>Dr. Costas S. Papacostas, Director Hawaii Local Technical Assistance Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>300 Ala Moana Blvd. Box 50206 Honolulu, HI 96850</td>
<td>Department of Civil and Environmental Engineering University of Hawaii at Manoa 2540 Dole Street - Holmes Hall 383 Honolulu, Hawaii 96822</td>
</tr>
<tr>
<td>Phone:</td>
<td>(808) 541-2700 x 309</td>
<td>(808) 956-6538</td>
</tr>
<tr>
<td>E-mail:</td>
<td><a href="mailto:Bruce.turner@fhwa.dot.gov">Bruce.turner@fhwa.dot.gov</a></td>
<td><a href="mailto:csp@wiliki.eng.hawaii.edu">csp@wiliki.eng.hawaii.edu</a></td>
</tr>
</tbody>
</table>

VI. Attachments

A. Agenda

Welcome (8:30 am- 8:45 am) Bruce Turner
FHWA Hawaii Division, Honolulu, Hawaii

Sherry Ways
FHWA Office of Planning, Washington DC

Introductions (8:45 am – 9:00 am) Self-Introductions

Overview of Scenario Planning (9:00 am – 10:15 am) Sherry Ways
FHWA Office of Planning

• Overview of Scenario Planning
• FHWA Definition
• Why it is important to FHWA and for good planning
• Scenario Planning Process
• Scenario Planning tools

**Break (10:15 am – 10:30 am)**

Overview of Hawaii Transportation Planning

Facilitated by Bruce Turner
Initiatives (10:30 am – 11:00 am)
FHWA Hawaii Division

Participants will provide an overview of long range and corridor planning efforts currently taking place. There will be an open discussion of obstacles and issues facing Hawaii: current population, economic, and demographic trends; and the impact of new policy and planning throughout the Hawaiian Islands.

**Peer Presentation**

(11:00 pm – 12:30 pm)
Thomas Jefferson Planning District Commission &
Charlotte-Albemarle MPO

Harrison Rue
Executive Director
Charlottesville, Virginia

Presentation on the scenario planning process in Charlottesville, Virginia

**Scenario Planning Software Demonstration**

Christopher Sinclair
President
Renaissance Planning Group
Orlando, Florida

**Working Lunch: Brainstorming on Scenario Planning in Hawaii**

(12:45 pm – 2:00 pm)
Facilitated by Bruce Turner
FHWA Hawaii Division

This section is intended to brainstorm scenario planning for Hawaii. The group assembled will explore what it would take to implement scenario planning for the upcoming long-range plan update or corridor study. Some topics to guide the group in this exercise may include:

• How can we integrate scenario planning in our region/state?
• Is there a particular corridor project, short-range planning, long-range plan update etc. could be used as a starting point for scenario planning? If we have already started, how can we integrate scenario-planning techniques?
• What are the specific factors that could influence different scenarios?
• What tools or resources are necessary for us to accomplish this?
• Who should be involved? How do we involve them?
• Are there any real or perceived obstacles?
• What are our next steps?
• What technical assistance can FHWA help us with?

**Break (2:00 pm – 2:15 pm)**

Discussion of Next Steps and Conclusions

(2:15 pm– 3:00 pm)
Facilitated by
Bruce Turner and Sherry Ways
FHWA
The concluding session will be devoted to thoughts regarding how Hawaii will move forward. This process will stimulate thinking and discussion on next steps. The meeting will end with concluding remarks and commitment to future activities.

Adjournment

B. List of Participants

Peer Presenters

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christopher Sinclair</td>
<td>Renaissance Planning Group</td>
<td><a href="mailto:CSinclair@CitiesThatWork.com">CSinclair@CitiesThatWork.com</a></td>
</tr>
<tr>
<td>Harrison Rue</td>
<td>Thomas Jefferson Planning District Commission and Charlottesville-Albermarle MPO</td>
<td><a href="mailto:hrue@tjpdc.org">hrue@tjpdc.org</a></td>
</tr>
</tbody>
</table>

Forum Attendees

<table>
<thead>
<tr>
<th>Organization</th>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>City and County of Honolulu</td>
<td>Cheryl Soon</td>
<td><a href="mailto:csoon@co.honolulu.hi.us">csoon@co.honolulu.hi.us</a></td>
</tr>
<tr>
<td>City of Maui Department of Public Works &amp; Waste Management</td>
<td>Cary Yamashita</td>
<td><a href="mailto:cary.yamashita@co.mauhi.us">cary.yamashita@co.mauhi.us</a></td>
</tr>
<tr>
<td>County of Hawaii, Department of Planning</td>
<td>Roy Takemoto</td>
<td><a href="mailto:r.takemoto@co.hawaii.hi.us">r.takemoto@co.hawaii.hi.us</a></td>
</tr>
<tr>
<td>County of Hawaii, Department of Public Works</td>
<td>Galen Kuba</td>
<td><a href="mailto:g.kuba@co.hawaii.hi.us">g.kuba@co.hawaii.hi.us</a></td>
</tr>
<tr>
<td>County of Kauai, Department of Public Works</td>
<td>Ladye Martin</td>
<td><a href="mailto:lmartin@kauaigov.com">lmartin@kauaigov.com</a></td>
</tr>
<tr>
<td>County of Kauai, Planning Department</td>
<td>Keith Nitta</td>
<td><a href="mailto:knitta@kauaigov.com">knitta@kauaigov.com</a></td>
</tr>
<tr>
<td>County of Maui, Planning Department</td>
<td>John Summers</td>
<td><a href="mailto:john.summers@co.mauhi.us">john.summers@co.mauhi.us</a></td>
</tr>
<tr>
<td>FHWFA Hawaii Division</td>
<td>Bruce Turner</td>
<td><a href="mailto:bruce.turner@fhwa.dot.gov">bruce.turner@fhwa.dot.gov</a></td>
</tr>
<tr>
<td>Jon Young</td>
<td><a href="mailto:jon.young@fhwa.dot.gov">jon.young@fhwa.dot.gov</a></td>
<td></td>
</tr>
<tr>
<td>FHWFA Office of Planning</td>
<td>Sherry Ways</td>
<td><a href="mailto:sherry.ways@fhwa.dot.gov">sherry.ways@fhwa.dot.gov</a></td>
</tr>
<tr>
<td>Hawaii Department of Business Economic Development &amp; Tourism</td>
<td>Mary Lou Kobayashi</td>
<td><a href="mailto:mlkobaya@dbedt.hawaii.gov">mlkobaya@dbedt.hawaii.gov</a></td>
</tr>
<tr>
<td>Hawaii Local Technical Assistance Program</td>
<td>Juli Kobayashi</td>
<td><a href="mailto:juli@wiliki.eng.hawaii.edu">juli@wiliki.eng.hawaii.edu</a></td>
</tr>
<tr>
<td>Dr. Costas S. Papacostas</td>
<td><a href="mailto:csp@wiliki.eng.hawaii.edu">csp@wiliki.eng.hawaii.edu</a></td>
<td></td>
</tr>
<tr>
<td>Hawaii State Department of Transportation, Central Planning Office</td>
<td>Glenn Soma</td>
<td><a href="mailto:Glenn.Soma@hawaii.gov">Glenn.Soma@hawaii.gov</a></td>
</tr>
<tr>
<td>Steve Takashima</td>
<td><a href="mailto:steve.takashima@hawaii.gov">steve.takashima@hawaii.gov</a></td>
<td></td>
</tr>
<tr>
<td>Julia Tsumoto</td>
<td><a href="mailto:Julia.tsumoto@hawaii.gov">Julia.tsumoto@hawaii.gov</a></td>
<td></td>
</tr>
<tr>
<td>Ronald Tsuzuki</td>
<td><a href="mailto:Ronald.tsuzuki@hawaii.gov">Ronald.tsuzuki@hawaii.gov</a></td>
<td></td>
</tr>
<tr>
<td>Hawaii State Department of Transportation, Design Branch, Highways Division</td>
<td>Gary Choy</td>
<td><a href="mailto:gary.choy@hawaii.gov">gary.choy@hawaii.gov</a></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Hawaii State Department of Transportation, Highways Hawaii District</td>
<td>Stanley Tamura</td>
<td><a href="mailto:Stanley.tamura@hawaii.gov">Stanley.tamura@hawaii.gov</a></td>
</tr>
<tr>
<td>Hawaii State Department of Transportation, Highways Maui District</td>
<td>Ferdinand Cajigal</td>
<td><a href="mailto:Ferdinand.cajigal@hawaii.gov">Ferdinand.cajigal@hawaii.gov</a></td>
</tr>
<tr>
<td>Hawaii State Department of Transportation, Highways Maui District</td>
<td>Charlene Shibuya</td>
<td><a href="mailto:Charlene.shibuya@hawaii.gov">Charlene.shibuya@hawaii.gov</a></td>
</tr>
<tr>
<td>Hawaii State Department of Transportation, Statewide Transportation Planning Office</td>
<td>Dean Nakagaua</td>
<td><a href="mailto:Dean.nakagaua@hawaii.gov">Dean.nakagaua@hawaii.gov</a></td>
</tr>
<tr>
<td>Hawaii State Department of Transportation, Traffic Branch, Highways Division</td>
<td>Alvin Takeshita</td>
<td><a href="mailto:Alvin.takeshita@hawaii.gov">Alvin.takeshita@hawaii.gov</a></td>
</tr>
<tr>
<td>Oahu Metropolitan Planning Organization</td>
<td>Gordon Lum</td>
<td><a href="mailto:glumompo@hawaii.rr.com">glumompo@hawaii.rr.com</a></td>
</tr>
<tr>
<td>US DOT Volpe Center</td>
<td>Rachael Barolsky</td>
<td><a href="mailto:barolsky@volpe.dot.gov">barolsky@volpe.dot.gov</a></td>
</tr>
</tbody>
</table>