Workshop Agenda - Morning

- Overview of Scenario Planning (FHWA)

- Scenario Planning at MARC – *Trends in the Region & Overview of Current Efforts* (MARC)

- Peer Presentations – *Scenario Planning Perspectives – Imagining What the Future Will Bring*
  - Ted Knowlton
    Wasatch Front Regional Council
  - Monique de los Rios-Urban
    Maricopa Association of Governments
  - Brett Fusco
    Delaware Valley Regional Planning Commission

- Scenario Planning at MARC – *A Deeper Dive into Scenario Development* (MARC)
Workshop Agenda - Afternoon

- Full Group Discussion – Feedback on MARC Scenario Development

- Peer Presentations – *Scenario Planning Perspectives – Considering the Impacts*
  - Ted Knowlton
    Wasatch Front Regional Council
  - Monique de los Rios-Urban
    Maricopa Association of Governments
  - Brett Fusco
    Delaware Valley Regional Planning Commission

- Break-out Group Discussions and Report-outs

- Recap of Day / Next Steps
Federal Highway Administration (FHWA)

Scenario Planning Overview

Hosted by:
Mid-America Regional Council

Kansas City, MO
January 31, 2017
Presentation Overview - Key Questions

- What is scenario planning?
- Why use scenario planning approach?
- What are some available resources?
What does the Future hold for your Community?

- Economy
- Demographic characteristics
- Energy supply and cost
- Communication technology
- Travel characteristics
- Transportation technology (freight and personal)
- Where and how people live
- Where and how people work
- Transportation funding
- Quality of Life
What is Scenario Planning?

- Process to define alternative future conditions.
- Range of approaches; plausible stories about the future

- Used by military and corporations to identify risks, consider options and what-ifs, strategic planning.

- Typical applications in transportation planning consider interaction of land use and transportation to achieve “desired” end state.

- Evolving practice to provide range of approaches to meet different needs and consider “driving forces”.
Puget Sound Regional Council

Continue as planned

Focus growth in bigger cities

Focus growth in smaller cities and towns
Denver Scenarios

Urban Footprint

Compact

Expanded

Highways

Transportation Investment Priorities

Transit

Scenario A

Scenario B Baseline

Scenario C

Scenario D

Scenario E

Scenario F
NCHRP Foresight 750 Scenarios

MOMENTUM
General continuation of current trends

GLOBAL CHAOS
Worldwide financial instability leads to negative growth. Extreme weather increases its impact.

TECH TRIUMPH
New tech radically changes transportation. Economy booms and U.S. becomes more self-reliant.

GENTLE FOOTPRINT
Public demands low-impact choices. Regulations reduce consumption, increase government control.
Scenario Planning

- Creates multiple plausible stories about what the future could be
- Develops a common understanding of issues, interactions and driving forces of change
- Helps assess and prepare for possible future conditions
### FHWA Scenario Planning Guidebook

#### September 2010

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

**Prepared by:**
Transportation Policy, Planning and Organizational Excellence Division
John A. Volpe National Transportation Systems Center
Research and Innovative Technology Administration
U.S. Department of Transportation

---

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Considerations</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How should we get started?</td>
<td>Scope the effort and engage partners. Process goals, objectives, budget, and stakeholder roles and responsibilities.</td>
<td>Work plan.</td>
</tr>
<tr>
<td>2</td>
<td>Where are we now?</td>
<td>Establish baseline analysis; identify factors and trends that affect the state, region, community, or study area. Considerations: Transportation and land supply, availability, and demand; state, regional, community, or study area trends.</td>
<td>Transportation systems inventory; land suitability analysis; evaluation of historic trends.</td>
</tr>
<tr>
<td>3</td>
<td>Who are we and where do we want to go?</td>
<td>Establish future goals and aspirations; base on values of the state, region, community, or study area. Considerations: Key values and priorities for the state, community, region, or study area.</td>
<td>Outputs: Key of working principles that document broad state, community, region, or study area goals and preferences.</td>
</tr>
<tr>
<td>4</td>
<td>What could the future look like?</td>
<td>Create baseline and alternative scenarios. Considerations: Scenario types, analysis tools, travel demand model.</td>
<td>Identification of appropriate scenario analysis tool or refinement of travel demand model, baseline and alternative scenarios.</td>
</tr>
<tr>
<td>5</td>
<td>What impacts will scenarios have?</td>
<td>Assess scenario impacts, influences, and effects. Considerations: Indicators to help evaluate scenario performance.</td>
<td>Outputs: Refined or calibrated analysis tool(s) or model(s) if necessary. List of indicators to compare scenario outcomes. Qualitative or quantitative assessment of scenario impacts.</td>
</tr>
<tr>
<td>6</td>
<td>How will we reach our desired future?</td>
<td>Craft the comprehensive vision; identify strategic actions and performance measures. Considerations: Stakeholder feedback on scenarios and the future influencing potential actions, investments, or policies to lead the state, community, region, or study area toward the comprehensive vision.</td>
<td>Outputs: Comprehensive vision; action steps, performance measures to assess progress; plan for monitoring progress.</td>
</tr>
</tbody>
</table>
# Scenario Planning in Six Phases

<table>
<thead>
<tr>
<th>Step</th>
<th>Phase</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How do we get started?</td>
<td>Scope effort and identify expectations</td>
</tr>
<tr>
<td>2</td>
<td>Where are we now?</td>
<td>Analyze existing context, baseline and trends</td>
</tr>
<tr>
<td>3</td>
<td>Where do we want to go?</td>
<td>Confirm values and goals</td>
</tr>
<tr>
<td>4</td>
<td>What could the future look like?</td>
<td>Develop alternative futures</td>
</tr>
<tr>
<td>5</td>
<td>What are the impact of those different futures?</td>
<td>Evaluate alternative futures</td>
</tr>
<tr>
<td>6</td>
<td>How do we achieve the future we want?</td>
<td>Define next steps</td>
</tr>
</tbody>
</table>
Approach to the Future

- Probable Futures: What is most likely to happen?
  - Predictive, trend line

- Desired Futures: What is the future we want?
  - Normative, preferred, end-state

- Uncertain Futures: What might the future look like?
  - Exploratory, contingent
Why Do Scenario Planning?

- Structure to consider tradeoffs among different choices and impacts of driving forces
- Way to challenge accepted beliefs and prompt creative thinking
- Active stakeholder engagement
- Collaboration among transportation, land use, economic development, environment, etc.
- Awareness & consensus building
- More robust and informed decision making
- A little more certainty about uncertainty
FHWA & FTA Support Scenario Planning

- Sponsor scenario planning workshops.
- Conduct webinar series.
  - Focused on a range of topics (e.g., getting started with scenario planning; analyzing and assessing scenarios).
- Maintain website.
  - Reports from recent workshops, research and relevant publications.
- Provide assistance to agencies using scenario planning.
  - Collect and share innovative practices and lessons learned through case studies and research.
- Sponsor research
  - Operations and Management, Next Generation Practice

FHWA Scenario Planning Program Website:  
www.fhwa.dot.gov/Planning/scenplan/index.htm
Scenario Planning Supports Performance-Based Planning and Programming

- Apply performance management concepts in transportation planning and programming processes

- Based on strategic direction to shape decisions about policies and investments

- Ensure that transportation investment decisions (long-range and short-range) are based on their ability to meet established goals
For Additional Information

FHWA Scenario Planning website:
www.fhwa.dot.gov/planning/scenario_and_visualization/scenario_planning/

TPCB Scenario Planning website:
https://www.planning.dot.gov/scenario.asp

Contacts:

- FHWA Headquarters
  - Michael Barry (202-366-3286) or Michael.Barry@dot.gov

- FTA Headquarters
  - Anna Corniel (202-366-2888) or Anna.Corniel@dot.gov

- FHWA Resource Center
  - Brian Betlyon (410-962-0086) or Brian.Betlyon@dot.gov
  - Jim Thorne (708-283-3538) or Jim.Thorne@dot.gov