Future Freight Flows Workshop

PLANNING GUIDE

includes **ROLES & RESOURCES, WORKSHOP DESIGN COMPONENTS, APPENDIX** (with sample content)

W

TABLE OF CONTENTS

"Input received from the workshop has been used to identify solutions to freight issues and trends identified in the Future Freight Flows Workshop. The solutions were compiled into a list and assessed for their implementability, along with other implementable actions obtained from other sources/processes."

Introduction

SCENARIO PLANNING & FUTURE FREIGHT FLOWS

A brief history of scenario planning

The effectiveness of long-term investments is determined by their performance in the future. Before investing in expensive assets, decision makers typically analyze how different types of assets might perform in the future, and then choose the one that best suits their evaluation criteria. This exercise involves making predictions about the future environment. Assets such as transportation infrastructure have long lives, which are measured in decades. It is generally difficult, if not impossible, to forecast the environment that will exist over the element's lifetime with reasonable accuracy. Furthermore, it can be difficult to modify such an asset to adapt to unforeseen changes in the environment. Therefore, an approach other than traditional forecasting is needed to make judicious decisions for investing in long-term assets.

Scenario planning is one such approach. It has been used for more than half a century to make long-term decisions in both the public- and private sectors. Instead of trying to predict one future, scenario planning generates a set of diverse, yet plausible, scenarios of the future. These scenarios are used for evaluating the strengths and weaknesses of different investment decisions. The scenarios are generated using the knowledge of macro environmental forces that affect the environment in which the investment decisions play out. Thus, a set of scenarios is created specifically for the investment decision being made.

The use of scenarios for planning decisions started after World War II on both sides of the Atlantic. The U.S. government used scenario planning to evaluate its investments in weapons system while the French government used it for social planning. Royal Dutch/Shell was the first widely known non-governmental organization to successfully use scenario planning in late 1960s. The approach helped Shell better prepare for the 1972 Oil Shock, which caught most oil companies by surprise. Today, many public and private-sector firms use scenario planning for long-term investment decisions. Scenario planning should complement rather than replace traditional forecasting techniques – especially for investment decisions with a very long-term planning horizon.

WHAT CAN I DO WITH THE FUTURE FREIGHT FLOWS WORKSHOP?

Sponsors of past workshops were asked to describe what they did with the data and insights generated in a Future Freight Flows workshop. Each chapter in this guidebook starts with excerpts from their testimonials.

An introduction to Future Freight Flows

The Future Freight Flows (FFF) project was conceived to better enable informed discussions of national, multistate, state, and regional freight policy and system investment priorities. The target audience for the FFF project is public sector decision-makers in planning or transportation offices. The FFF project has two key deliverables.

The first is a critical analysis of the driving forces behind high-impact economic changes and business sourcing patterns that may affect the U.S. freight transportation system over the next 30 to 40 years. This analysis is contained in the final report for the NCHRP 20-83-(01) project, the official project designation, and is available through the Transportation Research Board. This final report summarizes the critical forces and key uncertainties that face freight transportation infrastructure needs in the United States over the next 40 years as well some suggested sensors in the ground to monitor.

The second deliverable is a methodology for transportation and planning decision-makers to better incorporate these future uncertainties into their overall long-term planning process. This resulted in the creation and development of a Scenario Planning Toolkit. The toolkit primarily consists of four potential future scenarios and other tools that are used in a Scenario Planning Workshop. This document is a guide for a planner who is tasked with the design and execution of one of these workshops. The complete toolkit is available from the Transportation Research Board and contains template documents, videos, slide presentations, brochures, and other collateral that can be used in the Scenario Planning Workshop.

The workshops are intended to complement rather than replace existing transportation planning processes for states and metropolitan planning organizations. Unfortunately, there is not a consistent methodology for states or metropolitan areas for developing transportation infrastructure investment plans. By regulation, each state and MPO must develop both a Long Range Transportation Plan and a Transportation Improvement Program, but the details on how to do this is left up to each organization. The Long Range Transportation Plan must have a minimum of a 20 year forecast period and should involve all constituencies. The Transportation Improvement Program (Statewide Transportation Improvement Program for state DOTs) has a 4 year planning horizon should list the planned and funded infrastructure projects.

The Scenario Planning Workshop fits best in the development of the Long Range Transportation Plan. The time frame is appropriate to scenario planning and the workshop can be used to help the planners better integrate input from the freight community.

How to use this guide

This guide was developed to help you design, plan, and run an effective Scenario Planning Workshop for your organization. It is based on two years of research involving surveys, expert panels, analysis of macro-trends, and conducting a number of trial Scenario Planning Workshops across the United States. This guidebook is the culmination of all the lessons learned from these efforts. The remainder of the guide is organized as follows.

The **Introduction** provides an overview of scenario planning and its importance. The Timeline is a visual map of the activities and checkpoints that occur along the way.

The **Roles and Resources** will give you a sense for what is required in terms of human and physical assets. Tables and checklists are provided to help you organize your information.

The **Workshop Design Component** chapter is the most important section for planning. It describes all the critical steps for the design as well as guidelines for how to think about decisions and actions. Use this section to create a preliminary design by going through each step one by one. Then refer back to the steps as you continue the planning process.

The **Process** chapter lists what you should do before, during, and after the Scenario Planning Workshop. It is a checklist for members of the planning team and contains everything from sending out invitations to training facilitators and reserving facilities. This chapter also describes the sequence of events for the actual **workshop day** with time estimates for various activities.

The **Appendix** contains samples of participant invitations, category lists, maps and other items than may be useful in your planning.

Remember that the purpose of this workshop is to generate discussion and insight. After making all the design decisions and arrangements, the focus can move to your participants: helping them immerse themselves in their scenario worlds while facilitating (and capturing) ideas.

TIMELINES

This guide includes three timelines to help you plan the overall event, the specific activities of the day, and the roles your team will play.
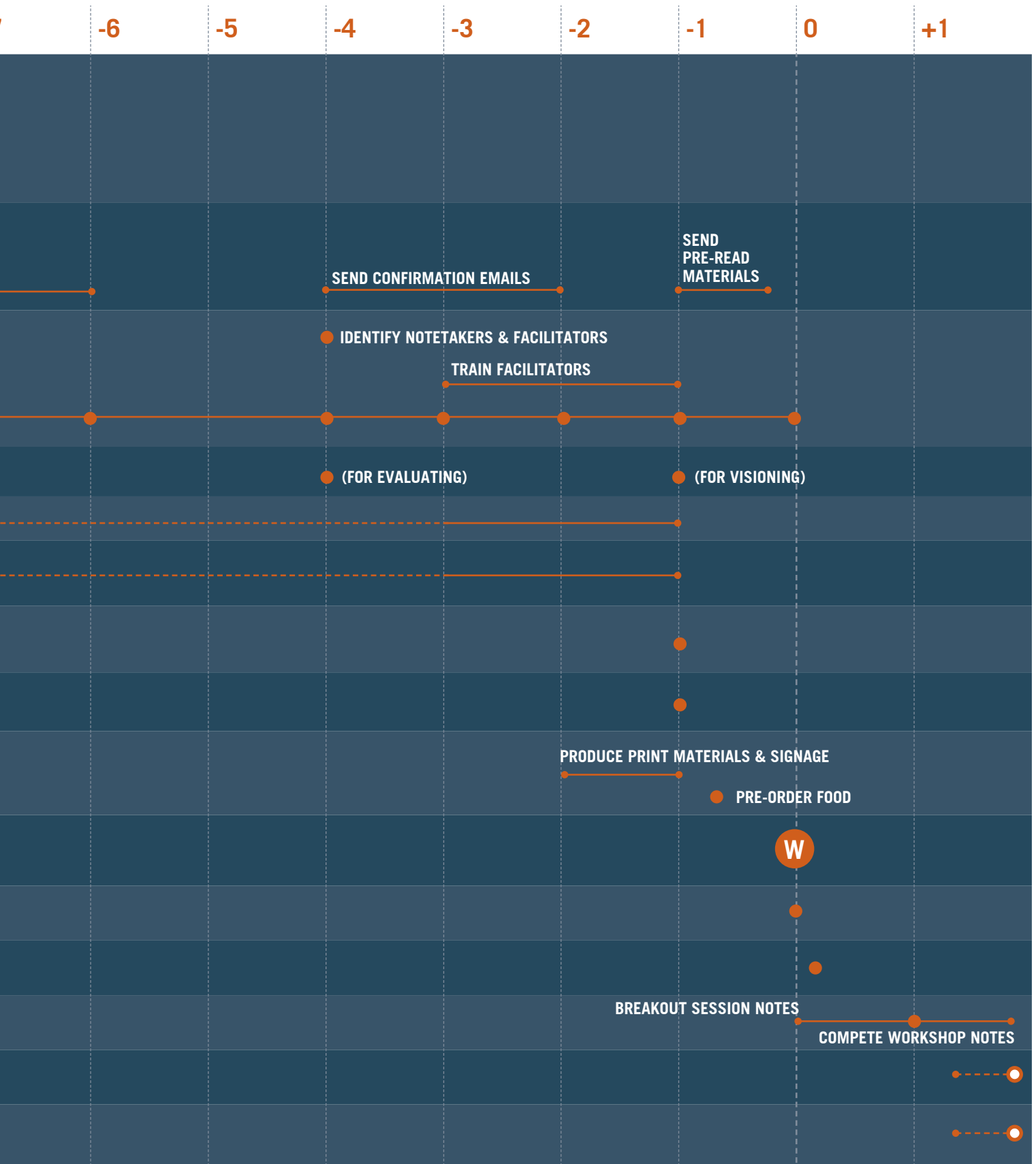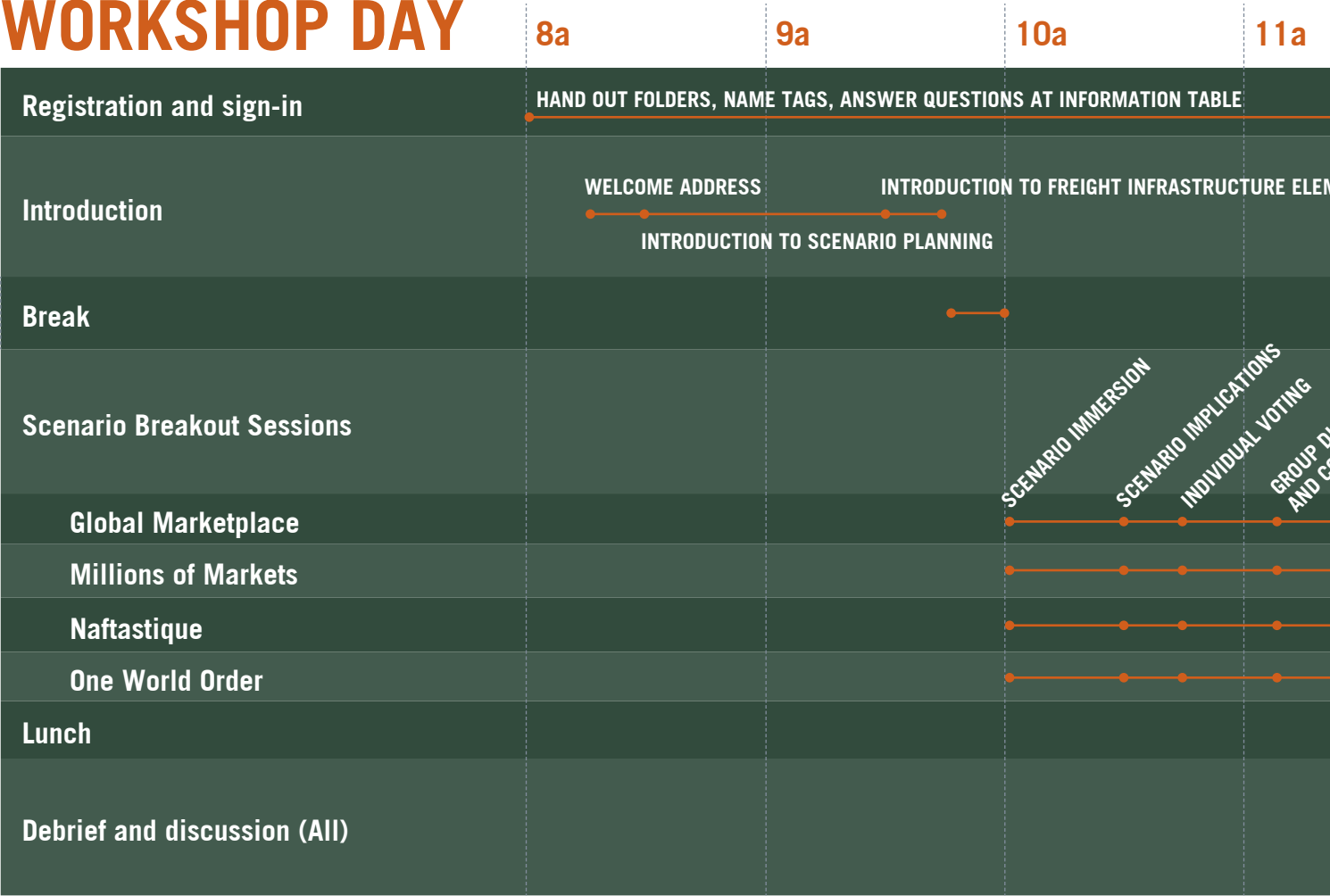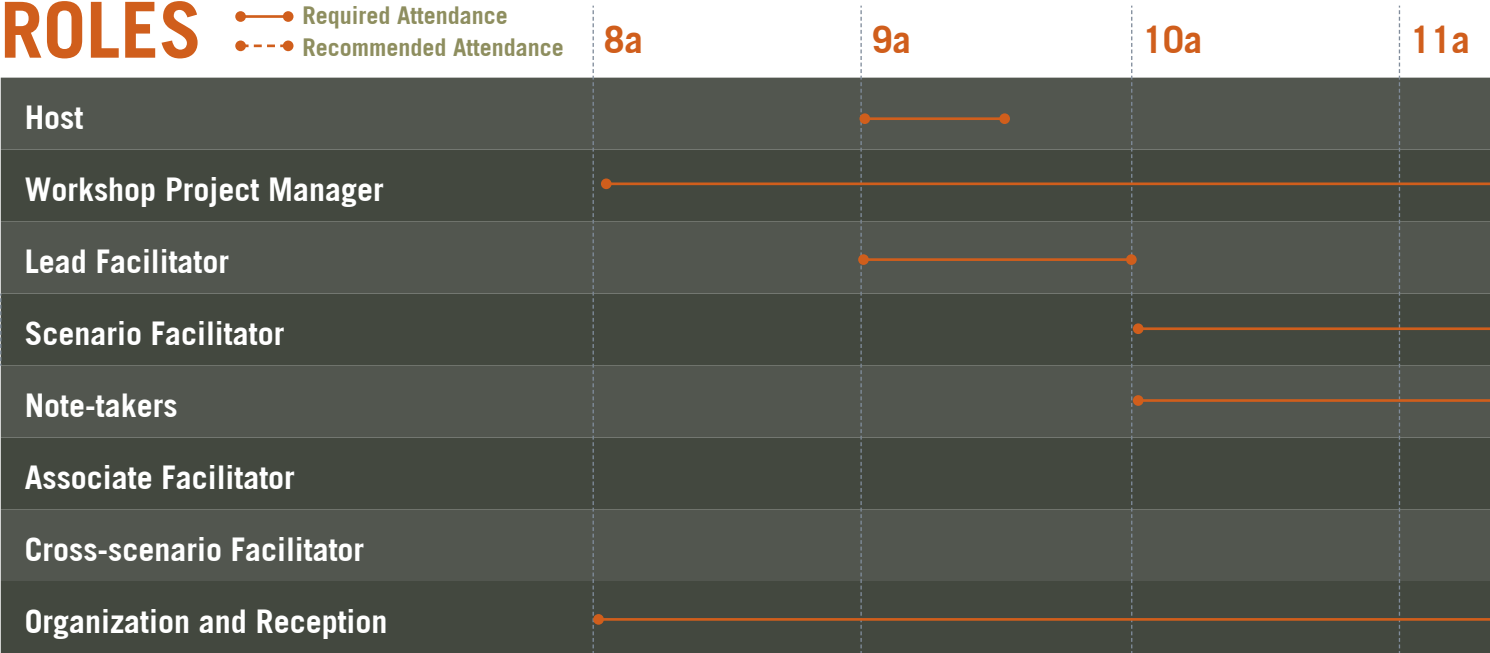
TIMELINE

WEEKS PRIOR
TO WORKSHOP

	-12	-11	-10	-9	-8	-7
Choose workshop design	SCOPE ●————————●					
	OBJECTIVE ●————————●					
	DURATION ●————————●					
Create a partipant communication plan	SEND INITIAL INVITATIONS ●————————————————————●					
			SEND FOLLOWUP TO RSVP ●—————————————			
Build the team	IDENTIFY AND REQUEST TIME ON HOST CALENDAR ●————————————————————●					
			TEAM STATUS MEETINGS ●————————————●			
Create the strategic question						
Select the elements to evaluate			●- - - - - - - - - - - - -			
Establish voting rules and data collection methods			●- - - - - - - - - - - - -			
Categorize participants and create breakout groups						
Choose the scenarios for the workshop						
Prepare other resources	● RESERVE THE FACILITIES					
WORKSHOP: See Facilitator's guide for more detail						
Conduct Informal After-Action Meeting						
Send Thank You Notes & Survey						
Compile Notes						
Conduct Formal Debrief: within 1 month						
Merge Results in Current Planning Process: longer term						

-6 -5 -4 -3 -2 -1 0 +1

SEND CONFIRMATION EMAILS

SEND
PRE-READ
MATERIALS

IDENTIFY NOTETAKERS & FACILITATORS

TRAIN FACILITATORS

(FOR EVALUATING)

(FOR VISIONING)

PRODUCE PRINT MATERIALS & SIGNAGE

PRE-ORDER FOOD

W

BREAKOUT SESSION NOTES

COMPETE WORKSHOP NOTES

WORKSHOP DAY

	8a	9a	10a	11a
Registration and sign-in	HAND OUT FOLDERS, NAME TAGS, ANSWER QUESTIONS AT INFORMATION TABLE			
Introduction		WELCOME ADDRESS	INTRODUCTION TO FREIGHT INFRASTRUCTURE ELEM	
		INTRODUCTION TO SCENARIO PLANNING		
Break				
Scenario Breakout Sessions			SCENARIO IMMERSION / SCENARIO IMPLICATIONS / INDIVIDUAL VOTING / GROUP D AND C	
Global Marketplace				
Millions of Markets				
Naftastique				
One World Order				
Lunch				
Debrief and discussion (All)				

ROLES

Required Attendance
Recommended Attendance

	8a	9a	10a	11a
Host				
Workshop Project Manager				
Lead Facilitator				
Scenario Facilitator				
Note-takers				
Associate Facilitator				
Cross-scenario Facilitator				
Organization and Reception				

LARGE CONFERENCE ROOM   SMALL BREAKOUT ROOMS

	12a	**1p**	**2p**	**3p**	**4p**

MENTS

DISCUSSION
CONSENSUS

IDENTIFICATION OF
INITIATIVES

SCENARIO REVEAL

**PRESENTATION OF
CROSS-SCENARIO ANALYSIS**

**PRESENTATION OF INDIVIDUAL
SCENARIO RESULTS**

SENSORS IN THE GROUND

	12a	**1p**	**2p**	**3p**	**4p**

TBD   **LARGE CONFERENCE ROOM**
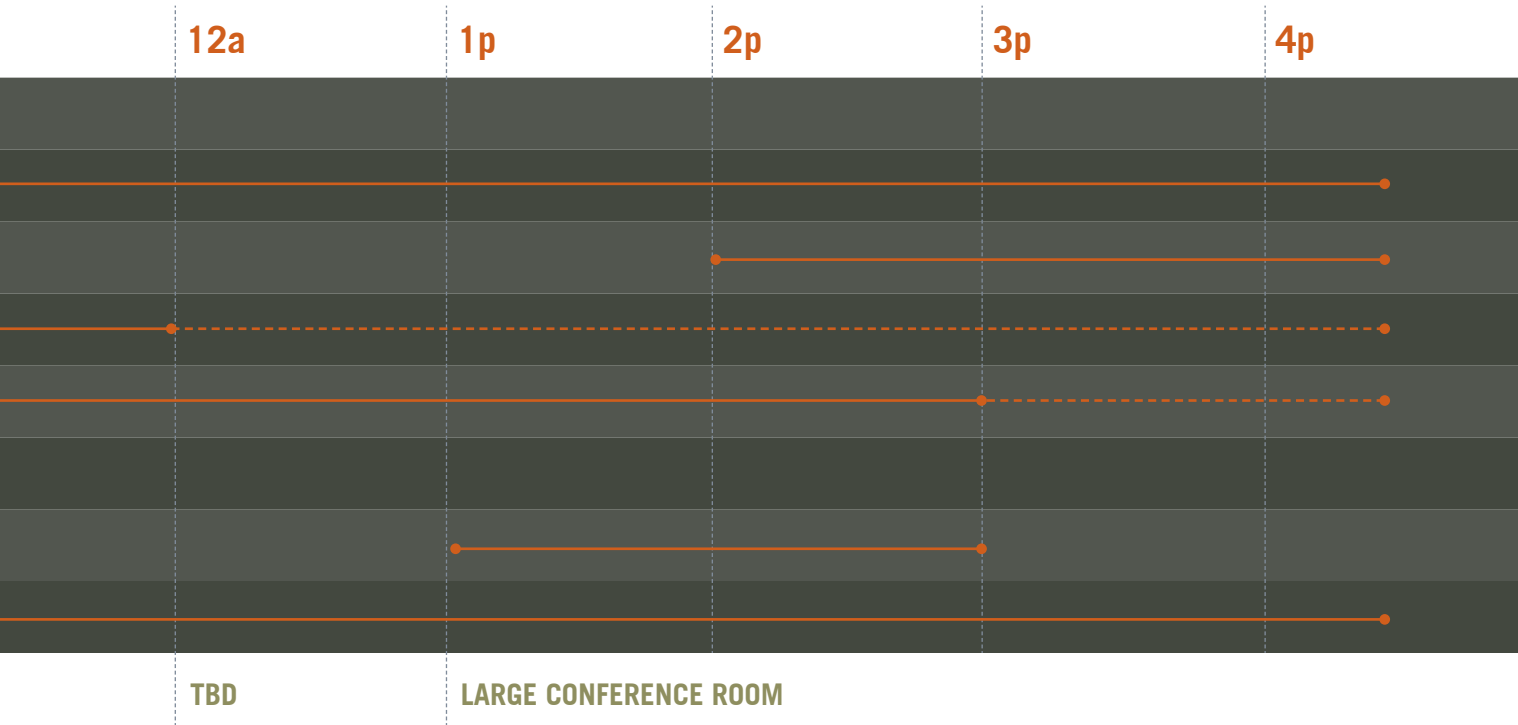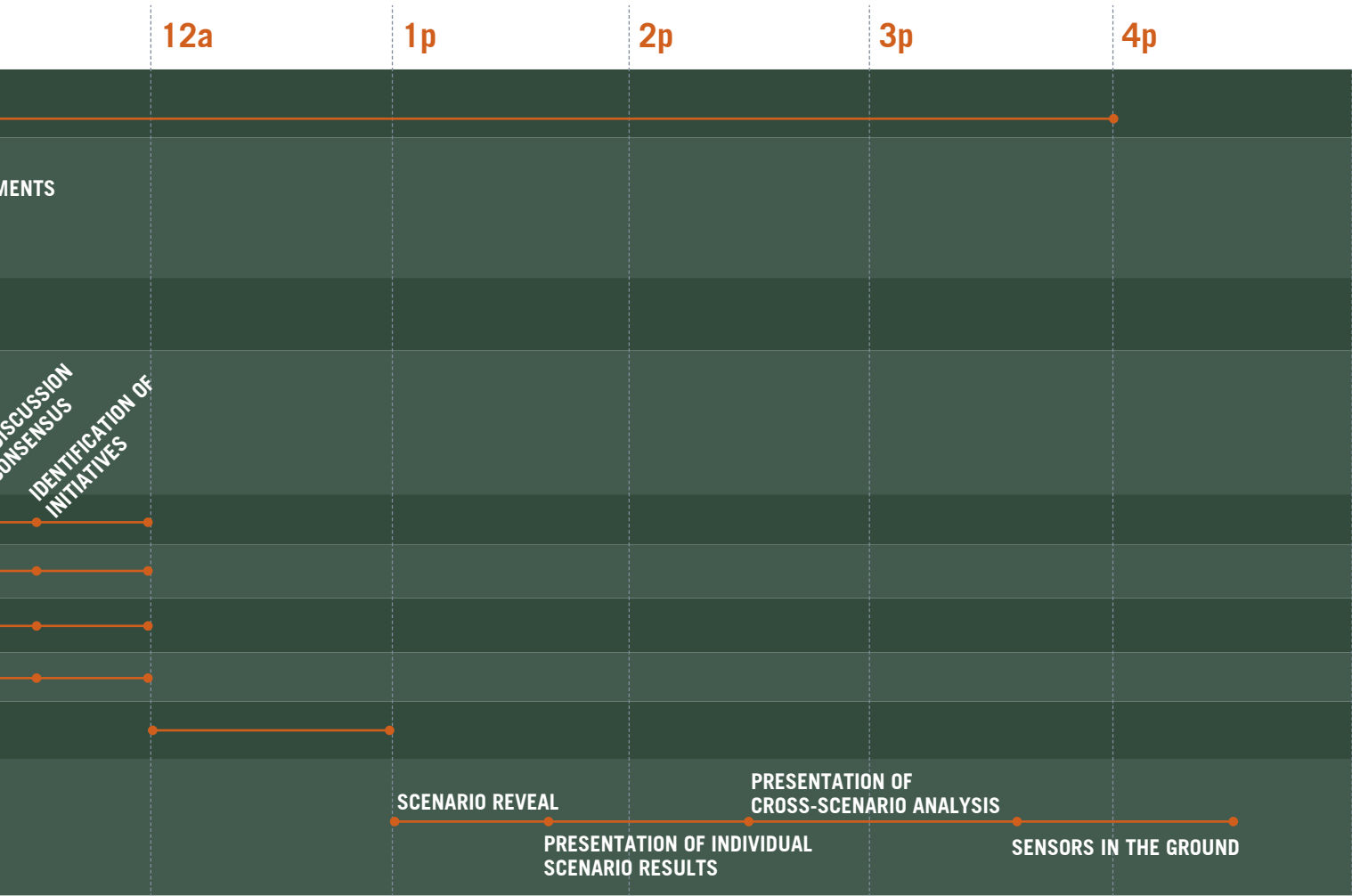
"The workshop was particularly useful in educating planners about important forces and opportunities such as the Panama Canal expansion, short sea shipping, and short haul rail. All of this establishes an excellent foundation for future updates of the regional long range plan and possible funding opportunities."

Roles & Resources

B. ROLES & RESOURCES

Simultaneous to completing the preliminary design, you should start building a team and gathering the resources required for the workshop. This section describes the seven key roles that need to be filled as well as a summary of other required resources.

Roles

Host: _____

Welcomes the participants and informs them of the importance of the workshop. This is a high-level executive at the host/planning agency. For example, the state Secretary of Transportation, Executive Directors, and Directors have played this role in past state level workshops. Having a high-profile person as the host sends a strong signal to the workshop participants about the commitment of the planning organization to taking the input from this workshop seriously into its planning process.

Workshop Project Manager: _____

Coordinates all preparation and activities related to the Scenario Planning Workshop. This manager also brings the results from the workshop to the planning organization to integrate into its planning / decision-making process. It is best if this role is filled by a member of the host organization since he or she will be coordinating the entire event. This guidebook is intended for the Workshop Project Manager.

Lead Facilitator: _____

Sets the stage for a productive scenario planning session. At the beginning of each workshop, the lead facilitator introduces the workshop participants to the philosophy of scenario planning and describes how the workshop will be conducted. There is benefit in having all of the facilitator roles be filled by people from outside of the host organization. Having impartial and neutral facilitators removes any perceptions (real or imagined) of bias in the discussions.

Scenario Facilitators: _____

Facilitate and encourages the discussion within their assigned breakout group. The main objective of the facilitator is to help the participants in his or her group immerse themselves into the scenario. They will also help the group apply their collective knowledge and insights to express the utility of the candidate freight segments in their scenario through

WORKSHOP PROJECT MANAGER

There are three important skills for this role:

PLANNING AND MANAGEMENT
Over a 12-week period, the Workshop Project Manager coordinates a host of activities, many in sequence and on a strict timeline. They need to acquire a variety of human and physical resources for the workshop. They must delegate, persuade, and communicate effectively with the stakeholders outside the planning organization.

APPRECIATION of the importance of QUALITATIVE THINKING TO INFORM QUANTITATIVE ANALYSIS.
Scenario Planning Workshops seek to gather insights from the participants about various aspects of the business environment and their effect on the strategic decision. This data is qualitative, by nature, and guides any further quantitative analysis.

ABILITY TO PRESENT
The Workshop Project Manager will often play the role of main facilitator, who presents the philosophy of scenario planning to the audience. This requires effective presentation skills.

discussion, debate, and, potentially, voting. The scenario facilitator manages the dynamic interaction within the group so that all individual members can express their unique insights without any single member dominating. There should be one facilitator for each breakout group. Consider training at least one extra person on the team to act as an alternate for the workshop in case of an absence by an assigned facilitator.

Note-takers: _____

_____

_____

_____

MORE ON NOTETAKERS

Immediately after the workshop, each note-taker should compile and clean up their notes. They should already know what they are expected to turn in before the workshop begins. Chances are their notes were collected and written down in the chronological order they were brought up. To make the notes more useful, the Note-taker needs to transform these by organizing the comments around each of the elements discussed, in priority order.

Listens and captures the insights expressed by the participants in the breakout session. They are members of the planning organization and there should be at least one note-taker per group and two is preferred. These roles are best filled by members of the host organization since they will be asked to use their notes to integrate the findings into the host's existing planning process. People assigned to these roles should be detail oriented and able to capture the thought and discussion behind the different decisions being made. Because the note-takers will create the official record of the discussion and debate, it is one of the most critical roles to fill.

Associate Facilitator: _____

Helps the Lead and Scenario Facilitators compile the data generated by individual scenario teams during the breakout sessions. Expedites the cross-scenario analysis so that a fairly thorough analysis can be presented to the workshop participants during the debrief and discussion session. This is more of a behind the scenes role suitable to a more data savvy person.

Cross-scenario facilitator: _____

Orchestrates the presentation of results from individual scenarios and engages the participants in comparing the results across scenarios and presents the cross-scenario analysis. The Lead Facilitator or one of the Scenario Facilitators can fill this role.

Organization and reception: _____

Helps organize the resources needed for the workshop and supports the Scenario Project Manager with logistics. On the day of the workshop,

this individual staffs the registration desk, signs in the attendees, and hands out individual folders containing the material used in the workshop. This is a predominately administrative role.

Resources

The resources needed for the workshop are listed in the table below. The quantities are based on the number of attendees and the number of scenario breakout sessions being run.

Scenario Workshop Planning Guide	✓
Facilitator's Guide	
Folders	
Agenda	
Scenario Brochures	
Description of Elements (written and/or maps)	
Presentation Template	
Name Tags	
Signage (for plenary and breakout rooms)	
Videos	
Voting	
Individual investment decision forms	
Voting chips	
Group voting sheets	
Pen and Paper	
Flip chart paper (20x30) and stand	
Post-it notes	
Space	
Main conference room	
Breakout Rooms (one for each group) with white boards	
Audio Video equipment	

"The voting exercise results were very clear in establishing priorities among the pre-determined investment bundles. In particular, the bundle of **** highway routes in the region emerged as a top priority […]. This has led to efforts to foster greater involvement of the <planning organization's> freight advisory committee in addressing transportation funding issues the region is confronted with."

Workshop Design Components

C. WORKSHOP DESIGN COMPONENTS

1 Scope

Regions to include (and exclude):

Planning horizon

2 Objective

Style of workshop: O Visionary   O Evaluating?

3 Duration

Workshop Duration

4 Participation

Invited (#)   Target (#)

Expected (#)   Actual (#)

5 Strategic Questions

Strategic Questions

6 Evaluation Elements

Elements for Evaluation

7 Evaluation Mechanism

Voting Mechanism

8 Scenarios

Global Market Place (#)   One World Order (#)

Millions of Markets (#)   Naftastique (#)

1. SCOPE

Objective

Determine the desired planning horizon and geographic area to be considered in the workshop.

Guidelines

The geographic scope should be in line with the jurisdictional control or responsibility of the host organization. Past workshops have used areas ranging from multiple counties within a MPO to a whole state to the entire nation. Elements used within a workshop can fall outside of the geographic region if it impacts the area under consideration. For example, for the Washington State DOT workshop, a Canadian highway was one of the potential investment elements.

An appropriate planning horizon is usually 20-30 years for most large infrastructure projects. Scenario planning is less useful for planning horizons under 5 or 10 years while planning beyond 50 years is somewhat futile. Consider your organization and the timing that makes the most sense given your region. While the scenario collateral uses the date of November 2, 2037 for the newscast videos (shown as part of the scenario immersion process), you may instruct participants to imagine a different year if it suits the host organization.

Timeframe

3 months prior to workshop

Actions

Define the regions to include (and exclude) as well as the planning horizon. Discuss and obtain approval from leadership.

2. OBJECTIVE

Objective

Determine whether your Scenario Planning Workshop is "Visionary," "Evaluating," or a combination of both.

Guidelines

Scenario Planning Workshops are designed to either enable visioning of potential future strategies or facilitate the evaluation, ranking, and selection of strategies from an existing set of potential choices.

Visioning workshops are pure brainstorming exercises that are used to develop new unfettered thoughts or ideas; a "clean sheet of paper" approach. Visioning workshops are good for areas where innovative thinking is required and no established options are desirable or sufficient. These sessions are great for bringing up new and out of the box ideas, but they rarely drive to a consensus or produce an actionable recommendation. These sessions tend to have very open-ended discussions and are more akin to a brainstorming session that generates ideas rather than makes decisions.

Evaluating workshops require the participants to compare and contrast between a set of alternatives. This forces the participants to make choices and trade-offs; debating the pro's and con's of the alternatives with each other. Presenting a closed set of options to a group of participants focuses the participants' attention and forces them to make decisions. There is a risk of missing potential strategies not initially considered; but providing an "other" category can mitigate this. Collecting, harmonizing, and analyzing evaluation data is much easier than visioning data.

If time and schedule permits, we recommend that the host organization runs an open-ended visioning session with a small, core group of stakeholders far in advance of the Scenario Planning Workshop. This could be a more traditional brainstorming session where the objective is to generate a potential list of elements to evaluate in a series of evaluation workshops for a larger set of stakeholders. In the evaluation workshops there should still be some open-ended element to capture things that have not been previously considered. The use of more focused follow-on evaluation questions can help generate additional discussion and more open-ended comments. The actual selection of the potential

investments is not as important as understanding the thinking and the logic that went in to that selection. This is another reason why the Note-Takers play such a critical role in the workshop.

Timeframe

3 months prior to workshop

Actions

Determine the style of workshop and discuss/obtain approval from leadership

3. DURATION

Objective

Determine the duration of your workshop

Guidelines

While it is possible to conduct a half-day session, a four-hour workshop does not provide sufficient time to understand the scenarios, explore their implications, and evaluate various infrastructure elements and/or generate ideas for strategies in each scenario. We recommend planning for a six-eight hour (3/4 to full day) workshop. This provides sufficient time for the discussion but does not overly tax the attention and attentiveness of the participants.

As the last activity of the day, the "debrief" is often rushed, so be sure to allow enough time during the workshop to present and discuss scenario outcomes. It is also useful to plan a second half day for a detailed debrief of the results with a select group of decision makers. This second debrief session can be held immediately after the workshop, or a few weeks later.

Timeframe

3 months prior to workshop

Actions

Determine the workshop duration and discuss/obtain approval from leadership.

4. PARTICIPANTS

Objective

Determine who will be invited to participate.

Guidelines

Participation should be by invitation only with a priority going to individuals with first-hand knowledge of the region's freight infrastructure needs. Government transportation planners in the region, shippers, carriers, and community & environmental groups are appropriate invitees. Consulting firms, academics, and independent consultants should not be invited, unless you feel that they are highly insightful and relevant to the discussion.

Select participants from varied backgrounds from both the public and private sectors. The specific categories will differ by the region, but in general you would like to have representation from:

Carriers. It is helpful to have at least two representatives from each of the relevant modes (trucking, rail, ocean, barge, air, etc.). Representatives from modal trade organizations and 3PLs are also good candidates here.

Shippers. A good mix of shippers that dominate in the area – or are large users of the transportation network in the area is recommended. Try to include a mix of retailers, manufacturers, distributors, and others that are relevant to your region's economy.

Government. Many members of the private sector often think of the government as a single monolithic organization. Dispel this myth by inviting representatives from Federal, state, regional, local, and any other relevant level of government involved in planning, such as tribal.

Other Organizations. Depending on the region selected, you might want to invite representatives from the military, coast guard, ports (air and sea), intermodal or logistics facilities, non-governmental organizations, etc. These people bring a different set of perspectives to the discussion.

Once you have a list of attendees, these categorizations are used to create the breakout groups for each scenario. Each scenario should contain a representative mix of the attendees – try to avoid having an "all-government" or "all railroad" group, for example.

CATEGORIES

3PL

Academic

Association

Carrier

Citizens, environment

Consultant

Government (Federal)

Government (Local)

Government (State)

Panel

Port

Shipper

Ideally, a workshop will have about 60 attendees. You may need to invite 100 people, or 150 people depending on the timing of your event and the potential participants. Consider your local response rate to determine how many people to invite. A good technique is to classify the attendees in each of the four categories into first, second and third tier invitees. The initial invitations can go out to the first tier and then the second and third tier invitees can be invited selectively to ensure sufficient representation from each of the segments. Also, it is usually helpful to ask the invitees if they have anyone they think would be worth inviting. Keep in mind that some "in-demand" participants may require longer lead-time for attendance so be sure to send out invitations early. (See page 37 in the Appendix for sample invitation language and other helpful information regarding this communication.)

Timeframe

6-8 weeks prior to workshop

Actions

Create and categorize a list of potential attendees.

5. STRATEGIC QUESTIONS

Objectives

Formulate the strategic focal question(s) for the workshop.

Guidelines

The strategic questions that the attendees are asked determine the direction of the discussion throughout the workshop. The form of the questions will differ between Visioning and Evaluating workshops.

For Evaluating Workshops, questions should be specific and lead to choices and priority-setting. The most typical strategic questions are "where should investments be made TODAY in order to be ready for the future described in your assigned scenario?" or "which elements are the highest priority in your assigned future?" In order to focus on larger projects, attendees should be advised to ignore the source of the funds, on-going maintenance, and the timing or sequencing of any construction. The participants of an Evaluating workshop will then vote (positively and negatively) on the different proposed elements. Forcing the participants to make hard decisions between the competing alternatives brings up valuable discussion that leads to potential insights on future freight flows. It is important that each group has a note-taker to capture the decision making behind the specific votes.

For Visioning Workshops, the strategic questions will typically be much more thematic and open-ended. For example, previous Visioning Workshops have asked, "What should our strategy be?" or "How should the DOT prioritize different themes within its freight planning?" These questions will obviously generate a wide variety of responses. The note-takers are critical, again, to capture all of the insights and observations. The challenge, after the workshop, is to harmonize and make sense of the wide range of responses.

We have found that adding some open-ended questions as follow-on questions works well within Evaluating Workshops. For example, several workshops have asked the participants to specify a handful of potential initiatives within the infrastructure segments that they prioritized. Using a mix of open-ended and forced voting questions seem to bring out the most discussion.

VISIONING WORKSHOPS

"How should MNDOT prioritize different themes?"

"What initiatives within each theme should be pursued today to improve freight infrastructure in 2037?"

"What will be the primary (and secondary) Freight Corridor in 2037?"

EVALUATING WORKSHOPS

Where should we prioritize Federal funds NOW given that the future described in your scenario in 2037 is going to occur?

What level of investment should the Federal Government take for each type of infrastructure (Maintain Existing, Improve Existing, or Add New)?

"Where should the POLICY should be made (local or federal) and how should primary FUNDING be provided (private, public, private-public)?

"Which freight infrastructure elements should be invested in TODAY to be ready for the year 2037?"

"What initiatives should be undertaken TODAY to prepare for this scenario."

6. EVALUATION ELEMENTS

Objective

Select the elements to evaluate.

Guidelines

The elements are the things that the attendees will pick between. These can consist of specific large-scale projects, existing infrastructure segments, entire corridors, modal facilities, or even concepts or themes. The name of the elements used in the workshop should reflect their nature. For example, previous workshops have called them Freight Investment Bundles (where each element consisted of a set of potential infrastructure projects), Freight Action Bundles (where the elements were thematic and not necessarily infrastructure related), Modal Segments (where each element was specific segment of the existing transportation network) as well as other names.

For Evaluating Workshops, we recommend that the elements be mode agnostic, cover the entire region, and include elements of the three general freight infrastructure categories: gateways, corridors, and connectors. Gateways are points of entry for freight into the geographic region in scope. These cover water, air, and land (both rail and road) ports and border crossings. Corridors are the high volume trunk lines that connect different locations across the region. They consist of highways, rail lines, and waterways. Connectors are the elements of the infrastructure that enable the movement of freight between the production or consumption locations and the corridors. Connectors include the transportation network that brings goods to or from the hinterlands to the trunk lines (examples include Farm to Market roads and short haul rail lines.) The workshop project manager should make sure that each category is represented and if there are multiples of each (such as more than one seaport or airport) they can be collapsed into common group categories without any loss of detail. The distinctions between the multiple airports in a category, for example, can be explored during the discussion. Finally, maintenance of the existing infrastructure should not be included as a unique element. During the workshop participants should assume that maintenance is taken care of separately.

We recommend that between eight and twelve elements are used in the actual workshop. Using fewer than this limits variety while providing more than a dozen seems to overwhelm the participants. Each of the elements should be of sufficient size and magnitude to be worth the discussion and should be considered important to multiple stakeholders. Improving a specific exit ramp, for example, is too small of an element and is only important to a small set of stakeholders. Also, the elements should not already be in the current funded investment plan. The challenge is to select elements that are big enough to warrant the discussion, but specific enough to avoid generalities (such as, "build more roads").

The selection of the elements to use within the Scenario Planning Workshop is usually a fractious and highly debated activity involving many different players. We recommend that you, the Workshop Project Manager, lead the overall process and be sure to involve the facilitators and representatives from your organization. A multiple round approach works well. The initial round is a brainstorming session where all proposed elements are collected and harmonized. Then, the (neutral) facilitators suggest how to combine different elements or winnow some out. The larger group discusses this and the process repeats until consensus is reached. Using the three criteria mentioned above (limited to 8-12 elements, being of sufficiently large scale, and having balanced representation of gateways, corridors, and connectors) seems to help the stakeholders converge on the final set of elements.

See page 41 in the Appendix for examples.

Timeframe

At least 2 weeks prior to workshop

Actions

Choose elements. Create names and descriptions that are brief but detailed enough to give your participants a clear understanding of each element. Provide examples and/or maps if they are useful for your audience.

Freight Infrastructure Segments
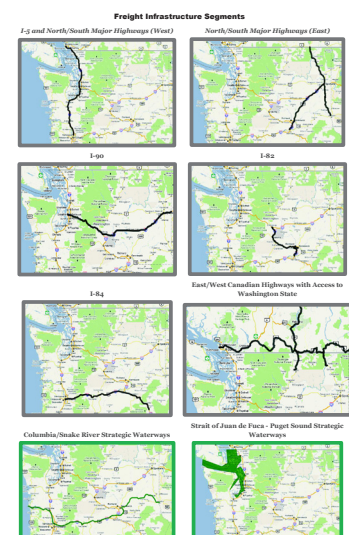
SEE APPENDIX FOR ELEMENT MAP SAMPLES

7. EVALUATION MECHANISM

Objective

Establish voting rules and data collection methods.

Guidelines

As the name implies, evaluation mechanisms are primarily used for Evaluating Workshops. The objective of the workshops, however, is to enable and encourage discussion of ALL proposed elements and not just a selection of the single most critical element. For this reason, we recommend that a multiple-winner voting mechanism be used. Three potential forms include Single Voting, Cumulative Voting, and Forced Ranking. Single voting is where each attendee may place one vote on up to a certain number of the proposed elements. This is equivalent to picking a set of "winners" without ranking them individually. Cumulative voting is where each attendee is given a set number of votes and they may place one or more of their votes on any of the proposed elements. Finally, forced ranking is where each attendee has to sort the elements in priority order. Each of these mechanisms has strengths and weaknesses.

For these workshops we recommend using Cumulative Voting with professional weight poker chips on a large sheet of paper that geographically displays the different elements. Using poker chips forces the participants to get up and physically place their chips around a table; forcing interaction with each other and making the votes more visible. It also reinforces the sense of playing a game and this leads to more interesting and open discussions.

The number of chips or votes that each attendee gets can vary between 1 (which reverts to a Single Voting mechanism) to several times the number of elements. We recommend that each attendee be given as many votes as there are elements to evaluate. Each chip represents one vote and the participants can place one or more chips on any of the elements. In addition to these "positive" votes, we recommend that you introduce "negative" or "veto" votes. Each attendee is given three black poker chips that are used to express opposition to a specific element. Participants are instructed to place one negative vote on at least one and up to three different elements (Single Voting with a 3 vote budget). The negative votes are used to force each participant to say

SEE THE APPENDIX FOR A SAMPLE INDIVIDUAL VOTING FORM

no to something. It is a truism in management that having a strategy means saying "no" to something and this twist on the voting provokes more discussion among the participants. Again, the objective is not to see which element is most popular, but instead to uncover insights and generate discussion from the diverse set of stakeholders in attendance. Forcing everyone to place at least one negative vote helps with this.

For Visioning Workshops voting is not a critical activity for the groups, but may be used for consensus building. Other board game pieces can be used as props as well.

Timeframe

Lead time for ordering poker chips, otherwise 2-3 weeks.

Actions

Determine the voting mechanism to use and order poker chips or collect other game pieces as props.

8. SCENARIOS

Objectives

Decide how many and which future scenarios to employ and assign attendees to respective scenarios.

Guidelines

Four scenarios were created for the project: Global Marketplace, Naftástique, One World Order, and Millions of Markets. Each scenario describes the world assuming a different set of macro socio-technical and economic factors. A full description of each of the scenarios can be found in the TITLE OF THE SCENARIO BACKGROUND BOOK.

The number of scenarios used in each workshop is a function of the total number of attendees. Ideally, each of the scenarios will be used during the workshop. We have found that the optimal size of a breakout group is between 10 and 15 people. Therefore, to use all four scenarios within a workshop, the number of attendees needs to be at least 40 participants. If the number of attendees is between 30 and 39, we recommend that three scenarios be used (Naftástique, One World Order, and Millions of Markets). Global Marketplace is the scenario most like today so it is the least disruptive when not used. If the number of

attendees is between 20 and 29, then we recommend using Global Marketplace and Naftastique since they present very different futures. If the attendance is greater than 60, then we recommend that you run a duplicate breakout session for enough of the scenarios so that each breakout group is between 10 and 15 people. The selection of which scenarios to duplicate is not critical.

Once you determine the number of scenarios, compose the breakout groups via "stratified" sampling to create a mix of perspectives across all selected scenarios. Refer to your categorized list of participants and distribute members of one category evenly among the scenarios. If it is not possible to evenly distribute members of one category across all chosen scenarios, similar categories can be combined and then the participants from the broader categories are randomly assigned to the selected scenarios. See page 40 in the Appendix for an example of group composition.

Timeframe

2 weeks prior to workshop

Actions

Determine the number of attendees and categorize. Use the guidelines above to assign groups. A code or graphic for each scenario should be displayed on the participants' nametag in order to identify their break-out group.

"The <planning organization> has used some of the workshop techniques as part of its 50-year transportation vision for ***, principally the development of future scenarios and identifying robust, reactive actions to potential futures."

Process

D

D. PROCESS

What to do **before**, **during**, and **after** the workshop.

PRE-WORKSHOP ACTIVITIES

Choose workshop design (12 weeks prior to workshop)

See Chapter C: Workshop Design Components.

Create a participant communication plan
(10-12 weeks prior to workshop)

Create a communication plan that starts with the initial email invitation and continues with reminders to rsvp, collecting and confirming responses, and additional emails as the workshop date approaches. (See Appendix for samples.)

Build the team (10-12 weeks prior to workshop)

Assign individuals to the various roles and reserve the resources described in Chapter B such as space and equipment. Conduct team status meetings every 2 weeks (up to 4 weeks prior) and then 1 or more per week during the last month.

Identify and request time on Host calendar
(10-12 weeks prior to workshop)

Identify Note-Takers (4 weeks prior to workshop)

Identify and Train Facilitators

Identify and schedule the individuals who will act as facilitators within 8-10 weeks of the workshop. If appropriate, consider some form of training and use the Facilitator's Guide as preparation within 4 weeks of the workshop.

Create the strategic question

For an Evaluating workshop: 4 weeks prior
For an Visioning workshop: 1 week prior

Select the elements to evaluate (2-3 weeks prior to workshop)

Establish voting rules and data collection methods
(2-3 weeks prior to workshop)

Categorize participants and create breakout groups
(2 weeks prior to workshop)

See Section C: Workshop Component Design for guidelines on categorizing and creating breakout groups and the Appendex for sample lists.

Choose the scenarios for the workshop
(2 weeks prior to workshop)

Prepare other resources

Reserve the facilities (large conference room, breakout rooms) as soon as you set a date for the workshop and reserve other equipment such as audio visual equipment (4 weeks prior)

Produce printed materials (brochures, voting props, nametags) and signage (1-2 weeks prior)

Pre-order lunch, coffee, refreshments, water (3 days)

Send out pre-read materials to participants
(1 week prior to workshop)

This includes the scenario the participant is assigned to, description of the transportation infrastructure elements chosen for the workshop, and the document describing the workshop,

WORKSHOP DAY ACTIVITIES

REGISTRATION AND SIGN-IN

Create a registration table where participants receive name tags and folders.

INTRODUCTION

Welcome Address

The Host or Lead Facilitator (high-level executive at the host organization) kicks off the workshop with a warm welcome. Besides formally welcoming the participants to the workshop, they also inform the audience that their organization is planning to bring the results of the workshop into their own planning process. This speech reinforces the value and gravity of the workshop.

Introduction to Scenario Planning

The Lead Facilitator continues with the presentation "An Introduction to Scenario Planning," which is included in the Scenario Planning Toolkit. Using several examples of societal, technological and political changes over the last 20-30 years it describes how the world we live in today is far different from the 1980s, and could not have been predicted 30 years ago. It also uses examples of forecasts which were egregiously wrong, to make a case for using scenario planning. This presentation lasts approximately 30-45 minutes. Alternatively, the two videos can be shown to introduce scenario planning to the attendees.

Introduction to Freight Infrastructure Elements

In this part of the introduction, the participants learn about the infrastructure elements used for evaluation in the workshop. All participants should have a uniform understanding of how the elements are defined. Where applicable, use maps of the region. The introduction to elements takes approximately 15 minutes, and is presented by the Scenario Planning Manager or the Lead Facilitator.

At the conclusion of this Introduction, the Lead Facilitator informs the participants of the "rules of engagement" for the workshop: suspend disbelief of the scenario, avoid criticism of ideas, and share insights freely.

Then the group takes a 15-minute break before participating in the interactive portion of the workshop, the Breakout Sessions.

BREAKOUT SESSIONS

Scenario Immersion

The facilitators ask their group to "live in year 2037" in their scenarios. The participants are then asked to describe the scenario. (All participants should have received and read the pre-read materials before the workshop.) The scenario facilitators possess a list of the important facets of their respective scenarios, and they facilitate the discussion so that the group identifies most, if not all, of those features. Following this, the scenario facilitators show that scenario's specific Newscast Video. The goal of the immersion is to ensure that all participants understand their scenario as well as possible, in order to judge the usefulness of investments in various segments and/or to identify the initiatives for the scenario. Scenario immersion will take approximately 30 minutes.

Scenario Implications

After the immersion, the participants are asked to identify the implications of the scenario for the region's freight infrastructure. There are five types of implications: origin, destination, volume, value density, and the transportation mode of the freight originating, coming into, and passing through the region. Identification of implications will take approximately 15 minutes.

Individual Voting

After Immersion and Implications, the participants work individually and answer how freight infrastructure funds should be invested **today** to prepare for the scenario. The participants first write their answers individually on the "Individual Investment Decisions form" (See Appendix) and then place voting chips on the "Group Voting Sheets" accordingly. The voting exercise will take approximately 20 minutes, then the group can take a brief break while the Scenario Facilitator tallies the votes.

In a Visioning workshop participants write their ideas for initiatives on post-it notes, and post them on a large sheets of paper such as a flip-chart pad. The group and the Scenario Facilitator should summarize the ideas to reveal common themes.

Group Discussion and Consensus

The Scenario Facilitator leads a discussion about the group's vote, to identify the reasons why the group voted as they did. Note-takers capture the insights shared by the workshop participants. After the discussion, the participants are invited to change their votes. These group discussions will take approximately 20 minutes.

Identification of Initiatives

You may choose to include a "visioning" exercise after the "evaluation" part of your workshop. If so, then the participants are asked to identify specific initiatives that the planning agency should take today in order to prepare for the scenario. For this qualitative exercise, the participants can write their ideas on post-it notes and place them on a large sheet or flipchart pad. The group and the Scenario Facilitator read the notes to identify the common themes for initiatives suggested by the group. The initiative identification exercise lasts for approximately 30 minutes.

Before the groups break for lunch, they select representatives to share the results from their breakout with the entire group of participants during the debrief session.

LUNCH

We recommend that the lunch have no structured activities. Encourage the different attendees to meet and mix with each other. While the participants enjoy lunch, the facilitators need to tabulate the output of each scenario group (votes, initiatives, insights, etc.) into spreadsheets prepared for the analysis. The charts generated by these spreadsheets are linked into the presentation used for sharing the results of individual scenarios as well the cross-scenario analysis. This is a very busy time for the facilitators.

DEBRIEF AND DISCUSSION

Plan a minimum of 2 to 2.5 hours for a productive debrief and discussion of the results. There are four important sections to this last part of the workshop:

Reveal of the Scenarios

After lunch, the attendees should be exposed to all of the different scenarios through the viewing of the Scenario Reveal Video. Up until this time, each person only knows one scenario: the one he or she participated in. The Reveal video contains the voice-over introductions from each of the longer Newscast Videos. It provides a good overview of each of the scenarios and should help them understand the different scenarios that formed the basis for discussion within each group. Following the reveal videos, it is helpful to break the ice by asking the group some simple questions to get them to start thinking across the scenarios instead of just within a single scenario. Three questions that we have used are:

- Which scenario is most like the world of today?

- Which scenario do you think will most likely occur over the next 30 years?

- Which scenario do you prefer to occur over the next 30 years?

You can ask for a show of hands, a voice vote, or use more sophisticated voting tools. But, these three simple questions tend to generate cross-discussion amongst the attendees that gets them ready for the more in-depth debrief session.

Presentation of Individual Scenario Results

The Cross-Scenario Facilitator invites the representatives from each scenario to present their group's results. They use the presentation that the facilitators prepared during the lunch hour. The Cross-Scenario Facilitator encourages the participants in other scenarios to compare their findings to the ones being presented. This often results in a lively exchange of ideas among the group.

Presentation of Cross-Scenario Analysis

After the presentation of results from individual scenarios, the Cross-Scenario Facilitator presents the charts comparing results from all of the scenarios. These charts show the participants how different infrastructure elements can be classified into robust and contingent elements. The classification developed by MIT's Supply Chain 2020 research group is used for this analysis:

- **No-brainer elements** are the ones found to be favorable investments in all scenarios.

- **No-gainer elements** are those that are unfavorable investments in more than one scenario and not found to be favorable in any.

- **No-regret elements** are those that are favorable in some, but not all scenarios, and are not unfavorable in any scenario. These three types of elements are robust investments, i.e. the decision to invest in them remains the same regardless of the scenario.

- **Contingent elements** are those that are favorable in some scenario(s) and unfavorable in some others. The decisions to invest in these elements are contingent upon which scenario the world comes to be like. The strategy to invest in these elements involves making some "flexible" investments that can be adapted once the planning organization bets a better sense of which way the future may evolve.

Sensors in the Ground

The cross-scenario analysis is followed by a presentation of "sensors in the ground." Sensors are those events in the business environment that change the assessment of the subjective likelihood of the future evolving in direction of a particular scenario. Sensors provide indications for if and when flexible options in the contingent segment should be exercised. The Lead Facilitator gives this presentation.

After the discussion, the Lead Facilitator or the Workshop Project Manager can wrap up the discussion and close the workshop.

POST-WORKSHOP ACTIVITIES

Most of the work involved in running a Scenario Planning Workshop occurs in the planning and execution stages. However, the long-term value generated by the workshop is related to how well you incorporate the insights gathered in the workshop into your planning process. The Post-Workshop Activities are about bringing the lessons into your planning process. While many would view the workshop as the end product, we believe that it is only a means to the end. The end, in this case, is clear guidance on potential infrastructure investment options.

A common trap for post-workshop activities is to continually postpone the work to focus only on solving more urgent problems that arise. It is important to set up and adhere to a schedule **prior** to the actual workshop itself. A critical first step is to make sure that you and your staff collect all the sticky-pads, voting forms, etc. that were used in each of the breakout sessions. Be sure to clearly mark them and keep them together. Give the materials to the respective Note-taker.

Informal After-Action Meeting (same day as workshop)

Running a full day workshop with 40-60 or more attendees is exhausting. As the Workshop Project Manager you will have spent the day on your feet solving problems as they surface. Still, you need to complete some tasks the same day or people will begin forgetting things.

Once the attendees are dismissed and the workshop is completed, you should gather all of the facilitators (Lead, Scenario, Associate, Cross-Scenario, etc.), the Note-takers, and any other members from your host organization. Bring everyone into one room and lead a 30-60 minute discussion (not a lecture) on the day's activities. The objective is to get

the insights while they are still fresh in everyone's mind. Some questions you can use to get the conversation started are:

- What was your biggest take-away?

- Which insight or observation was most surprising to you?

- What do you think worked really well during the workshop?

- What did not work that well and how should it be improved?

- Who provided the most interesting insights?

- What stakeholder groups should have been better represented in the workshop?

- How do you think the perspectives differed between the private and public sector attendees?

Continue the discussion until the comments start to dry up. Be sure to have someone take notes. At the end, direct the note takers to clean up and compile their notes over the next day or two.

Send Thank You Notes & Survey to Attendees
(one day after the workshop)

You should send short electronic thank you notes to all of the workshop attendees. This solidifies their relation to you and your organization and lets them know you appreciate the time and effort they spent participating. Also, we recommend that you include a short survey (web-based is easiest) in the notes.

The survey should ask the basic post-event questions on the quality of the facilities, food, arrangements, registration, etc. Other questions that are worth asking mirror the after-action meeting questions and include:

- What was your biggest take-away?

- Which insight or observation was most surprising to you?

- What do you think worked really well during the workshop?

- What did not work that well and how should it be improved?

- Were there any observations or thoughts that you forgot to mention at the workshop?

A reminder should be sent out after a week. The results should be tabulated and included in any final report. The insights can be used to improve future events.

Complete Breakout Session Notes
(within one week of the workshop)

Each note-taker should compile and clean up their notes. They should already know what they are expected to turn in before the workshop begins. Chances are their notes were

collected and written down in the chronological order they were brought up. To make the notes more useful, the Note-taker needs to transform these by organizing the comments around each of the elements discussed, in priority order. Note-takers should start this immediately the day after the workshop. The memories of the small details of thebreakout sessions fade away quickly, and it becomes difficult to make sense of the notes scribbled in a hurry during the breakout session.

In the end, each of the breakout session notes should consist of a section for each element that contains the voting results and the specific thoughts that went into the votes. Where possible, direct quotes should be used. All comments should be attributed to the person who suggested them. The reasoning and debate that went into the final positive and (especially) negative votes should be stressed. Bullet point format is fine.

Compile Complete Workshop Notes (within two weeks)

A single document should be created that captures the discussion of each of the separate breakout sessions and compares the value of each element across the scenarios. This report will be used to house all of the cross-scenario results as well. We suggest that it is organized by each element and the pertinent comments are arranged by scenario. The Workshop Project Manager should be able to explain (and critique) the valuation of each element and the rationale behind the valuation based on qualitative insights captured in the notes taken during the workshop. This can be used as the briefing document handed out to people prior to the Formal Debrief.

Formal Debrief (within one month)

Within one month, you should hold a formal debrief with your normal planning team. This does not need to include the facilitators or note-takers. It should include the normal members of your planning team or organization. This should be a half-day discussion of the points raised in the workshop and captured in the notes compiled earlier. The objective is to acid test the existing investment plan against the workshop findings to identify reinforcing or contradicting initiatives. This is essentially a way for you to socialize the findings with the owners of the long range plan.

Inclusion of Results in Current Planning Process (longer term)

Depending on the planning cycle, the insights brought up during the workshop and the follow-on discussion should be included in the formal planning documents. As discussed earlier, the insights best fit into the development of the Long Range Transportation Plan. The exact methods in which these processes are merged are under development and will most likely differ by state or planning agency.

"The voting also affirmed the importance of "freight centers" in the region. Planners often talk about the need to link transportation and land use, but freight is often left out of this discussion. In the future, the <planning organization> will further flesh out its inventory of freight centers."

Appendix

E. APPENDIX

Sample Invitation Text

To: <Participant Name>

From: <Host organization>

Sent: <Date>

Subject: Invitation to Future Freight Flows workshop at the Cobb Galleria (May 9, 2011)

Dear <Participant Name>,

You are cordially invited to participate in a Future Freight Flows (FFF) Workshop to be held at the Cobb Galleria on Monday, May 9th from 10:00 am to 5:00 pm. The FFF workshops are part of a national project funded by the National Academies Transportation Research Board (TRB) National Cooperative Highway Research Program (NCHRP). This workshop is one of six to be held across the United States and is the only one to be held in the south.

The goal of this one-day workshop is to bring together a rich variety of freight stakeholders to evaluate Georgia's long-range freight transportation infrastructure strategy and priorities under four diverse global scenarios. The workshop will employ a dynamic, interactive scenario planning method developed at MIT's Center for Transportation and Logistics. Both the Atlanta Regional Commission (ARC) and the Georgia State Department of Transportation will host the workshop.

Particulars:

Time: 10:00-5:00 (registration @ 9:30 AM)
Date: Monday 9 May 2011
Location: Cobb Galleria Centre, Meeting Room
                Two Galleria Parkway
                Atlanta, Georgia
                30339
Registration: RSVP (no fee)
Attendance: Limited to **50**

Due to your intimate familiarity with freight transportation and supply chain flows, your participation in the workshop would be greatly welcomed. We anticipate a broad turnout of shippers, carriers, planners, and other professionals and, as a result, provocative and productive discussions.

Please RSVP by April 28, 2011. If you are unable to attend the workshop, I would appreciate if you could suggest an appropriate alternate from your organization. Please note that there will be some minimal preparation and read-ahead material for participants prior to the event.

I hope that you can participate in this important workshop and support efforts to maintain Atlanta and the State of Georgia as leaders in freight movement and planning.

Best,
<Host Name>
<Host Contact information>

Pre-read reminder sample text

To: <Participant Name>

From: Workshop Planning Manager

Sent: Thursday, June 23, 2011 5:02 PM

Cc: <Host Name>

Subject: Reading material for the Future Freight Flows Workshop (Washington DC, June 28)

Hello,

We are meeting this Tuesday (June 28) for the **Future Freight Flows workshop in Washington, DC**! I hope you are as excited as we are to participate in this interesting exercise.

You have been randomly assigned to participate in the Millions of Markets scenario at the workshop. I have included a link to a PDF document that describes this scenario. The first two pages of this document describe the scenario, and the remaining illustrate important aspects of it. Please download and read this document before the workshop.

(Link: http://ctl.mit.edu/sites/default/files/FWS_grey_MillionsMarkets_2.pdf)

Some of your colleagues coming to this workshop may have been chosen to participate in a different scenario. Please DO NOT read their scenario nor describe yours to them. We want everyone to know one - and only one - scenario very well before the workshop. After the interactive session at the workshop, you will get to know the other scenarios.

I have also attached a short document that describes the nature of the workshop. In the workshop, we will work with the 13 freight infrastructure segments you evaluated in the pre-workshop survey.

Workshop particulars
Date: Tuesday June 28, 2011
Time: 8:30 am – 4 pm (registration starts at 8 am)
Location: U.S. Department of Transportation Headquarters
                West Building Conference Center
                1200 New Jersey Avenue, SE, Washington, DC 20590
                (Located across from the Navy Yard Metro stop)
Dress: Business casual

We are looking forward to meeting you at the exercise.

Best,

<Workshop Planning Manager>
<Contact information>

Number of Invitees to the Workshop by Group

Organization classification	Number Invited	Number Attending
Academic	3	2
Association	3	1
Carrier	60	8
Carrier - assn.	5	0
Consultant	8	1
Developer	4	1
Government - Fed	6	3
Government - Local	18	9
Government - State	32	13
Government - Tribe	3	1
Labor	3	2
Military	7	3
Port	15	8
Port - assn.	1	0
Shipper	115	10
Shipper - assn.	11	2
	294	**64**
Minus WSDOT	19	
TOTAL INVITEES	**275**	**64**

Subpopulations used in Stratified Sampling

Group	Number Attending
Academics and consultants	3
Carrier	8
Government - Federal	6
Government - Local	13
Government - State	13
Industry advocate	2
Port	9
Shipper	10

Sample of participant category and Scenario Breakout Group assignments

ORGANIZATION CLASSIFICATION	Global Marketplace	Millions of Markets	Naftastique	One World Order
3PL	2	2	2	2
Carrier	2	2	3	2
Consultant/infrastructure	0	1	0	0
Government	1	0	1	0
Military	0	1	0	1
Port	2	2	2	2
Shipper	3	3	3	4
TOTAL PER SCENARIO	10	10	10	10

Sample element maps

I-5 and North/South Major Highways (West)
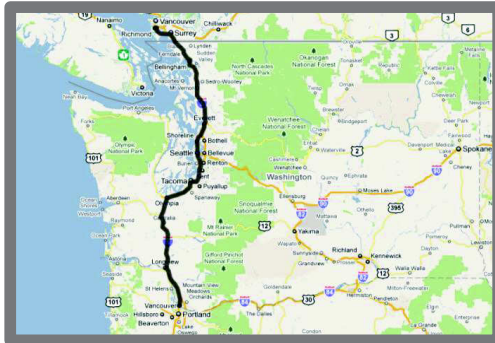
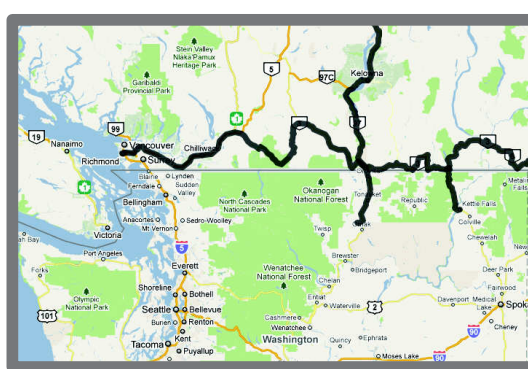*North/South Major Highways (East)*
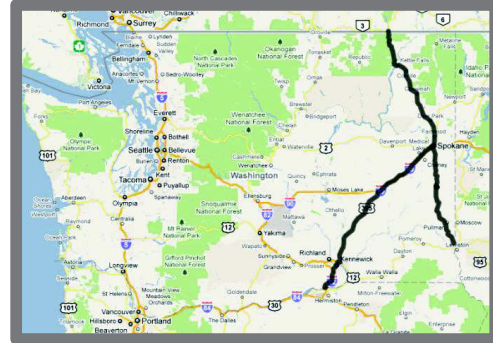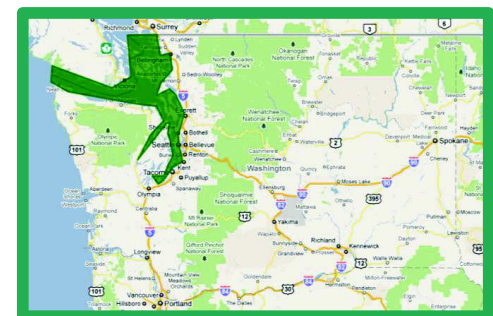

I-90
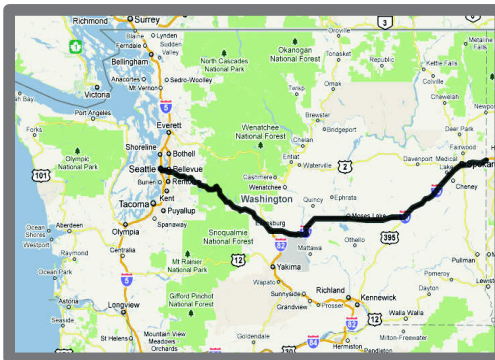
I-82
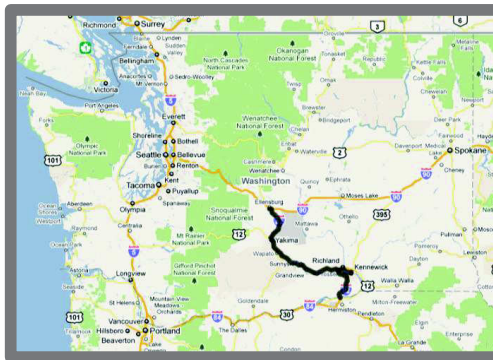
I-84
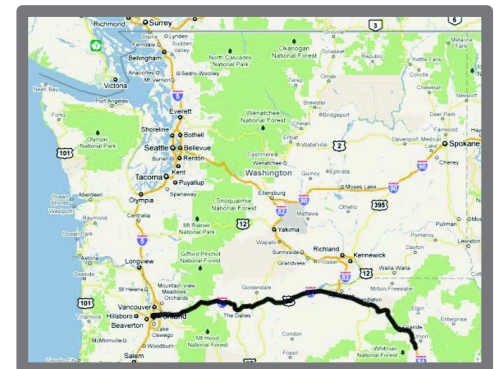
East/West Canadian Highways with Access to Washington State

Columbia/Snake River Strategic Waterways

Strait of Juan de Fuca - Puget Sound Strategic Waterways

Sample of Individual Investment Form

Future Freight Flows Workshop

Washington State Department of Transportation
Individual Investment Decision for Scenario: Naftastique!

Freight Infrastructure Modal Segments	Invest (points)	Veto	No opinion
Highway			
I-84 I-84 highway and associated infrastructure.		☐	☐
I-5 and North/South Major Highways (West) Examples of what may be included in this segment: I-5 and neighboring highways, BC Route 99 and neighboring highways.		☐	☐
North/South Major Highways (East) Examples of what may be included in this segment: US-395 and any neighboring highways, US-195 and any neighboring highways.		☐	☐
East/West Canadian Highways with Access to Washington State Examples of what may be included in this segment: BC Route 3, Trans-Canada Highway (Highway 1), Access to the highways, etc.		☐	☐
I-82 I-82 highway and associated infrastructure.		☐	☐
I-90 I-90 highway and associated infrastructure.		☐	☐
Water			
Strait of Juan de Fuca - Puget Sound Strategic Waterways Examples of what may be included in this segment: Waterways in Strait of Juan de Fuca and Puget Sound, Major ports associated with the waterways (e.g. Anacortes, Everett, Olympia, Seattle, Tacoma, etc.)		☐	☐
Columbia/Snake River Strategic Waterways Examples of what may be included in this segment: Columbia River waterway, Snake River waterway, Major ports associated with the waterways (e.g. Kalama, Longview, Pasco, Vancouver (WA), etc.)		☐	☐
Pipeline			
Strategic Pipelines Examples of what may be included in this segment: Chevron Pipeline, Olympic Pipeline, Yellowstone Pipeline, Associated pipeline terminals.		☐	☐
Rail			
I-5 North/South Rail Lines Examples of what may be included in this segment: North/South rail line along I-5, Major rail terminals on the line (e.g. Seattle, Tacoma, Vancouver (WA), etc.)		☐	☐
Grays Harbor - Chehalis Rail Line This segment includes the Grays Harbor - Chehalis rail line and the associated terminals.		☐	☐
Stevens Pass East/West Rail Line This segment includes the Stevens Pass rail line and associated terminals.		☐	☐
Columbia River East/West Rail Lines Examples of what may be included in this segment: Columbia River East/West rail line (BNSF), Columbia River East/West rail line (Union Pacific), Major rail terminals associated with the lines.		☐	☐
Stampede Pass East/West Rail Line This segment includes the Stampede Pass rail line and associated terminals.		☐	☐
Air			
Cargo Airports (East) Examples of what may be included in this segment: Spokane International Airport (GEG).		☐	☐
Cargo Airports (West) Examples of what may be included in this segment: Boeing Field - King County International Airport (BFI), Seattle - Tacoma International Airport (SEA).		☐	☐
Other segments not listed above that need to be invested in			

Summary of investment decisions	Points	Veto
Add the number of points you assigned to all the segments including the ones you added. Count the number of segments for which you checked the "Veto" box. 1. The number of points assigned to segments to invest in must equal 100. 2. The number of segments to "Veto" in must be at least 1 and at most 3.	**must equal 100**	**at least 1; at most 3**

WSDOT Form-01

NOTES

NOTES