

Pilot Testing of the TCAPP Decision Guide and Related Capacity Products: Southeast Portland, Oregon

DETAILS

0 pages | 8.5 x 11 | PAPERBACK

ISBN 978-0-309-43340-2 | DOI 10.17226/22334

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SHRP 2 Capacity Project C39A4

Pilot Testing of the TCAPP Decision Guide and Related Capacity Products: Southeast Portland, Oregon

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TRANSPORTATION RESEARCH BOARD
Washington, D.C.
2015
www.TRB.org

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ACKNOWLEDGMENT

This work was sponsored by the Federal Highway Administration in cooperation with the American Association of State Highway and Transportation Officials. It was conducted in the second Strategic Highway Research Program, which is administered by the Transportation Research Board of the National Academies.

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Acknowledgments

This work was sponsored by the Federal Highway Administration in cooperation with the American Association of State Highway and Transportation Officials. It was conducted in the second Strategic Highway Research Program (SHRP 2), which is administered by the Transportation Research Board of the National Academies. This project was managed by Jo Allen Gause, Senior Program Officer, SHRP 2.

The research reported on herein was performed by Metro, the elected regional government of the Portland, Oregon, metropolitan region. Brian Monberg was the Principal Investigator. The other authors of this report are Joyce Felton and Dana Lucero. The authors acknowledge the contributions to this research from Katherine Kelly, Kelly Clarke, and Jeff Shelley, City of Gresham, and Joanna Valencia and Brian Vincent, Multnomah County.

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Executive Summary

Purpose

This pilot project tested the effectiveness of applying the beta version of Transportation for Communities—Advancing Projects through Partnerships (TCAPP) in regional collaborative decision making through its application in the Portland, Oregon, metropolitan region. Metro, the metropolitan planning organization (MPO) for the region, led the TCAPP pilot project. This report

- Provides observations and recommendations to improve TCAPP content and functions; and
- Documents where the application of TCAPP led to better outcomes and what Metro can do differently in the future.

The roadway projects in this pilot are an outcome of the East Metro Connections Plan (EMCP), a regional corridor study completed in 2012. That process, which was also led by Metro, reached consensus on transportation recommendations among four cities, Multnomah County, Metro, and the Oregon Department of Transportation (ODOT). Recommendations included road improvements connecting two highways: Interstate 84 and US 26, known locally as Powell Boulevard.

This pilot project focuses on the 238th/242nd/Hogan corridor, one of the four north/south arterials in the EMCP plan area, shown in Figure 1.1. In the north, the arterial is owned and operated by Multnomah County; the southern portion is owned and operated by the City of Gresham. The arterial changes names from 238th Drive in the north, to 242nd Drive in the middle section, and to Hogan Road in the south. These projects were identified as priorities in the corridor study and have been moving through project development. This pilot primarily focused on the TCAPP Decision Guide elements for Environmental Review/NEPA (National Environmental Policy Act) Merged with Permitting, but the pilot also used and provides recommendations for other areas of the TCAPP website.

What the Pilot Team Did

The pilot project staff assessed three areas of the TCAPP website:

- Decision Guide Elements. This report includes observations and recommendations based on five key decision points: ENV-3 (Approve Purpose and Need/Reach Consensus on Project Purpose); ENV-4 (Reach Consensus on Study Area); ENV-5 (Approve Evaluation Criteria, Methods, and Measures); ENV-6 (Approve Full Range of Alternatives); and ENV-7 (Approve Alternatives to be Carried Forward).
- Assessments. This report provides recommendations for the Partner Collaboration, Stakeholder Collaboration, and Expediting Project Delivery Assessments.

- Applications. This report recommends enhancements to the applications section, including the special topics Linking MPO Planning and NEPA and Streamlining a Bottleneck Project.

The pilot project staff included planners at Metro who managed most aspects of the EMCP. The pilot team worked closely with jurisdictional partners: City of Gresham and Multnomah County transportation planners, engineers, and elected officials. The findings described herein include observations and recommendations for further TCAPP development.

The findings are organized by TCAPP element in the following manner:

- When applicable, a description of standard planning practices, or business-as-usual, for Metro and jurisdictional partners as a measure of assessing the completeness and/or usefulness of TCAPP;
- The way in which TCAPP content was applied;
- Observations on TCAPP content or its application; and
- Recommendations for further TCAPP development.

What the Pilot Team Found

Overall, the beta version of TCAPP was helpful in identifying and focusing on key decision points for a project. The pilot team found it to be a useful guide to engage a wide variety of planning and engineering practitioners. Recommendations in this report offer the suggestions to simplify and focus the content on the existing website while providing flexibility for it to address a wider variety of projects.

One important outcome of the pilot is that TCAPP did help improve both internal and cross-agency understanding, communication, and coordination. Metro is typically involved in long-range planning and corridor studies. The pilot created the opportunity to better understand how local agency partners move environmental review and project development forward. This has improved collaboration among the MPO, county, and cities, and in turn, provided guidance on how Metro can better direct future long-range plans and corridor studies to meet the needs of local partner project development.

Decision Guide

The Decision Guide was a helpful tool in moving project development forward. The key decision points are a strong foundation. Many of the recommendations in this report are refinements for each key decision point. There are opportunities for content improvements, organizational improvements, and navigational improvements within each of the key decision point Data tabs. Some key findings and recommendations include the following:

- The Decision Guide is a useful tool to define key decision points for project development. Suggested refinements include these:

- Environmental Review/NEPA Merged with Permitting is primarily focused on projects that will prepare an environmental impacts statement (EIS). The pilot team recommends that TCAPP address the decision on the environmental classification. This would allow TCAPP to apply to a wider range of capital projects.
- While the four main tracks in the Decision Guide are helpful, building additional clarification on linking and refining project definition between Long-Range Transportation Plans, Corridor Plans, and Environmental Review/NEPA Merged with Permitting would be helpful.
- Elements of the Decision Guide key decisions can be improved to focus on the audience of practitioners and agency staff:
 - The Basics tab can be updated to represent local agencies in addition to federal and state agency partners.
 - The Policy Questions tab has useful questions to ask about each phase. Questions are currently organized based on references to other sections of TCAPP. To better address the audience, the questions could be reorganized based on the priority level for each decision point. Consider organizing the Policy Questions tab similarly to the Stakeholder Inputs tab.
 - There are opportunities to enhance and/or clarify questions to gather and incorporate feedback contained under the Stakeholder Inputs tab.
 - The organization of the Data tab is difficult to use. It is organized by linking certain data elements to other parts of TCAPP, such as other Decision Guide elements or Integrated Planning Applications. To make it easier to understand and use, it could be organized by priority of data needs for any given key decision point. In many cases it would be useful to provide more explicit descriptions of and guidance on technical data requirements, especially in federally mandated permitting and evaluation phases.
 - The team found the other tabs to be full of information but less valuable. While the Examples tab could be helpful, there was often not enough context to find the most relevant example without reading a lot of information. Consider simplifying the Decision Guide by consolidating the tabs. There could be as few as four tabs: Basics, Policy Questions, Stakeholder Inputs, and Data.

TCAPP Assessments

The TCAPP assessments have considerable potential for identifying problems and guiding practitioners and stakeholders toward successful outcomes. The pilot team suggests the following:

- The front page of these assessments has important questions that can be overlooked in the desire to begin an assessment. These questions could be used to assist in defining the

partner team, identifying stakeholders, and providing common understanding of the current situation. The team recommends creating an additional assessment or questionnaire at the beginning of this module that would document the responses to these questions:

- Who makes up the team?
- What are the roles of individual team members?
- What is the process?
- What is the existing situation?
- The intended audience for the assessments is not always clear. It would be helpful to separate the Stakeholder Assessment into two parts: one for project staff and one for stakeholders. TCAPP is currently best used for agency staff and professionals. It would be helpful to focus on that audience.
- The Summary Report of Results for the assessments is a useful tool. It is helpful to have the assessment documented. There are opportunities to simplify and focus the text on these outputs.

Applications

This pilot investigated and offers refinements to the Linking MPO Planning and NEPA and Streamlining a Bottleneck Project applications. The pilot team identified some improvements to two applications. The most important is to make more explicit the connection of MPO plans for long-range transportation planning and corridor plans, which may be appropriate to use before initiating a more detailed environmental review. See the section on TCAPP Applications in Chapter 3 for specific recommendations.

Environmental Justice and Title VI Components

Environmental Justice and Title VI components are not explicitly included in the key decision points under the Policy Questions, Stakeholder Inputs, and Data tabs. TCAPP will be strengthened by explicitly referencing environmental justice and Title VI within those areas, embedded within key decision points. This is true for the area of the pilot research—Environmental Review/NEPA Merged with Permitting—but also can be embedded within every TCAPP track. Another opportunity would be to build an application directly addressing environmental justice and Title VI, similar to the level of detail within the Natural Environment and the IEF (Integrated Ecological Framework) Application.

CHAPTER 1

Background: Project Purpose and Planning Challenge

Overview of the Project Purpose and Study

This pilot project tested the effectiveness of applying the beta version of Transportation for Communities— Advancing Projects through Partnerships (TCAPP) in regional collaborative decision making through its application in the Portland, Oregon, metropolitan region. Metro, the metropolitan planning organization (MPO) for the region, led the TCAPP pilot project. This report

- Provides observations and recommendations to improve TCAPP content and functions; and
- Documents where the application of TCAPP led to better outcomes and what Metro can do differently in the future.

TCAPP was used to assess partner and stakeholder relationships and identify and communicate key decision points on two roadway projects from the East Metro Connections Plan (EMCP), a corridor plan completed in 2012. The road projects are moving from the corridor planning stage into project development.

Planning Challenge: Moving from Corridor Study to Project Development

TCAPP Pilot Project and Study Area

The roadway projects in this pilot are an outcome of the EMCP, a regionally based corridor study completed in 2012. That process reached consensus on transportation recommendations among four cities, Multnomah County, Metro, and the Oregon Department of Transportation (ODOT). The recommendations included road improvements connecting two highways: Interstate 84 and US 26, known locally as Powell Boulevard.

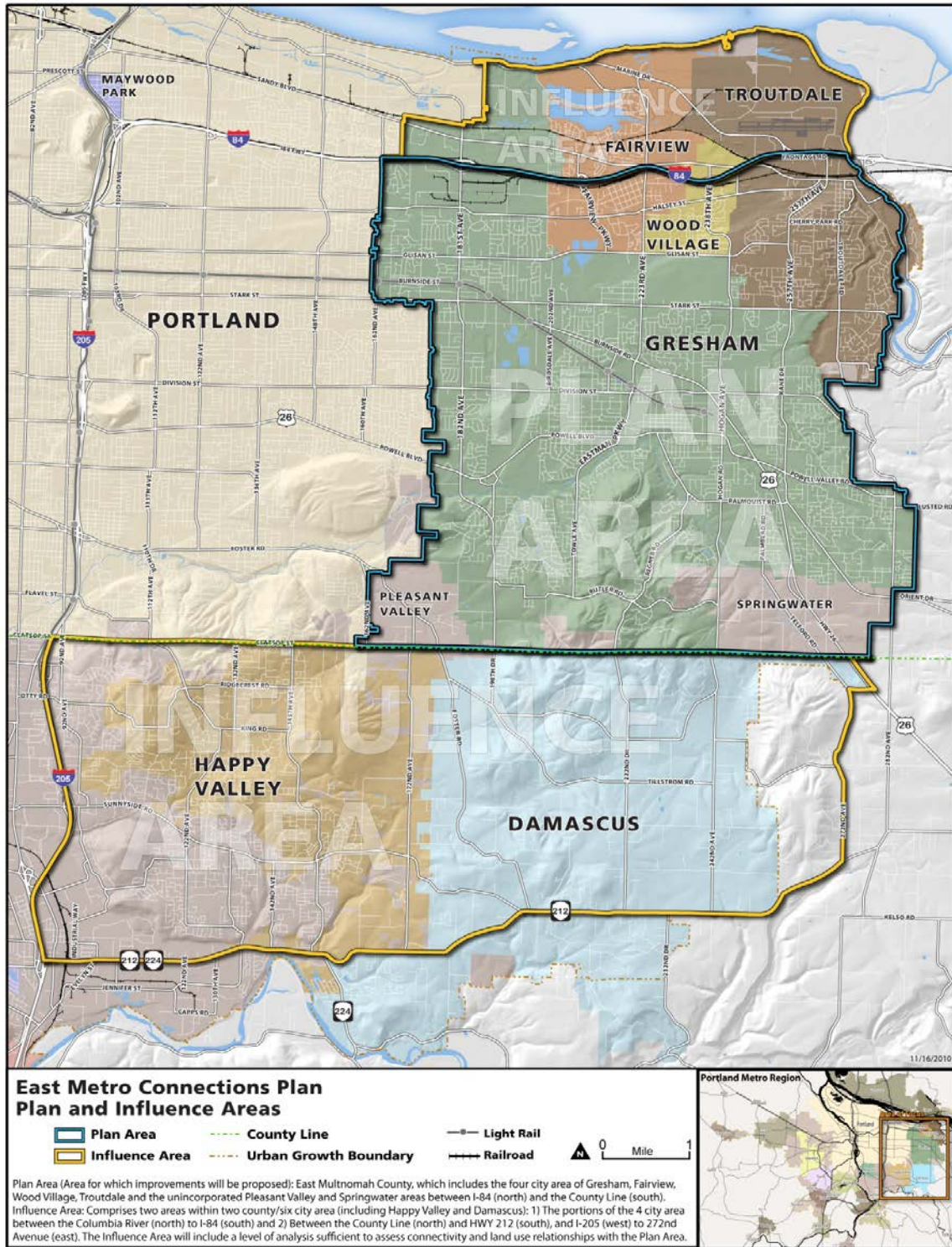
The EMCP area is shown in Figure 1.1. The area includes the City of Gresham, the fourth largest city in the state of Oregon, and the small cities of Troutdale, Fairview, and Wood Village. Multnomah County operates and maintains the arterial road network in the cities of Troutdale, Fairview, and Wood Village. ODOT, Metro, and TriMet (the regional transit agency) have also been involved in planning investments in the area. The geographic scope of the pilot project is shown in Figure 1.2.

This pilot project focuses on the 238th/242nd/Hogan corridor, one of the four north/south arterials in the EMCP plan area. In the north, the arterial is owned and operated by Multnomah County and separates the cities of Wood Village and Troutdale. The southern portion of the

corridor is owned and operated by and within the City of Gresham. The arterial changes from 238th Drive in the north, to 242nd Drive in the middle section, and to Hogan Road in the south.

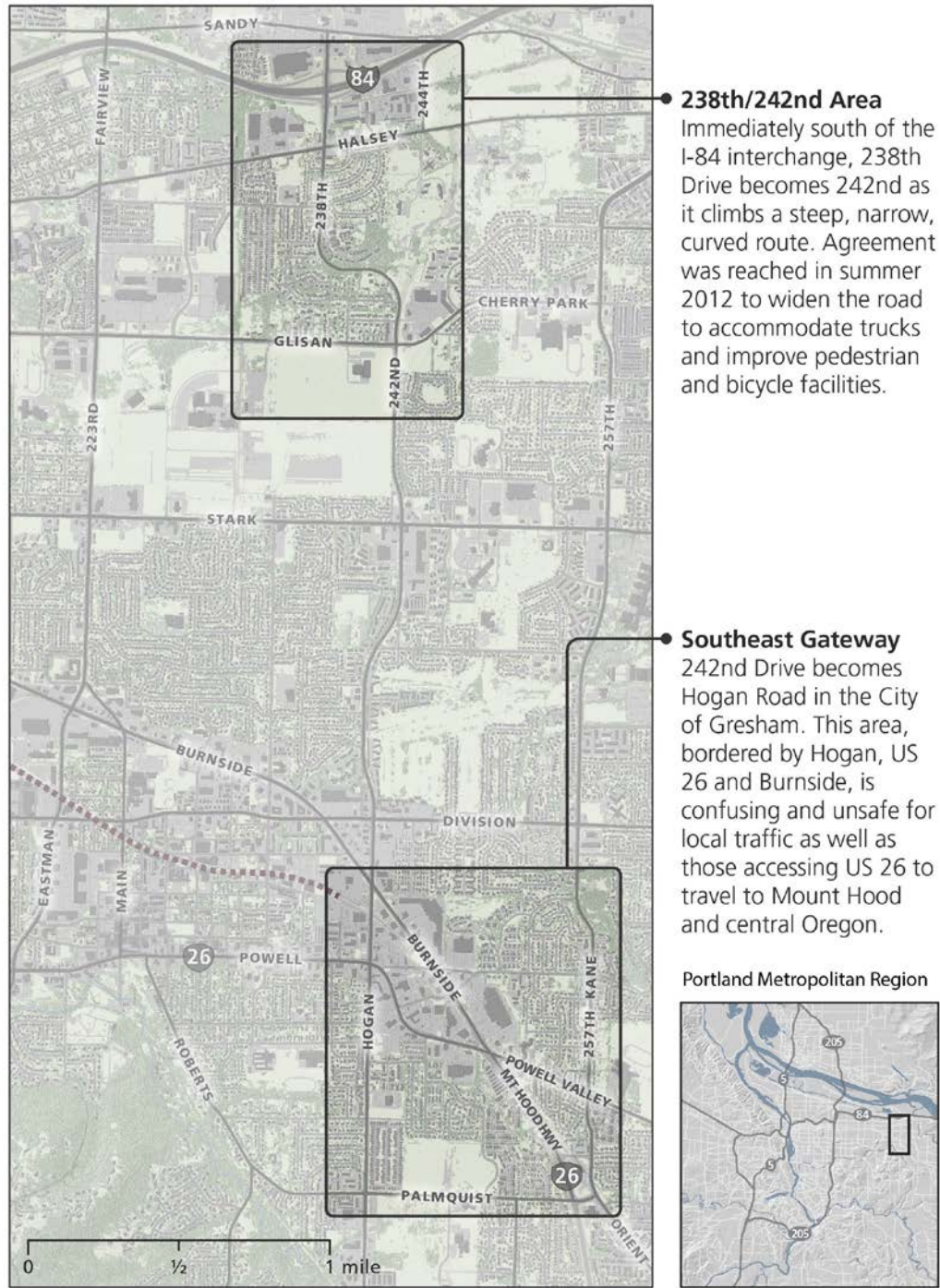
The corridor emerged as the highest priority during the EMCP deliberative process. To the north, 238th/242nd Drive—a steep, narrow, curved 3-lane road with an I-84 interchange—was the center of the long-standing debate. Agreement that the road should be widened to accommodate freight was a significant milestone for jurisdictions in east Multnomah County.

To the south, the corridor currently presents challenges for both local residents and drivers traveling through the area. It is part of a primary route—and a gateway—to and from Mount Hood and central Oregon on US 26. People uniformly find navigating in and through the area confusing and unsafe. Several investments were identified for this Southeast Gateway area, including projects that address future capacity needs, safety, way-finding treatments integrated with the adopted Mount Hood Scenic Byway route, and pedestrian improvements that include filling gaps in the sidewalk network, particularly along US 26, and at challenging crossings. This is one of the highest crash areas in the region. Additional roadway capacity south of US 26 is planned to support future desired growth.



Source: Metro.

Figure 1.1. EMCP area and influence area.



Source: Metro.

Figure 1.2. TCAPP pilot focus areas.

Previous Planning Studies: Past Conflicts and Recent Decisions

There has been a long-standing desire to improve connections from Portland's central city to Mount Hood and central Oregon. The region has undertaken three major planning efforts, spanning more than 50 years.

Mount Hood Freeway

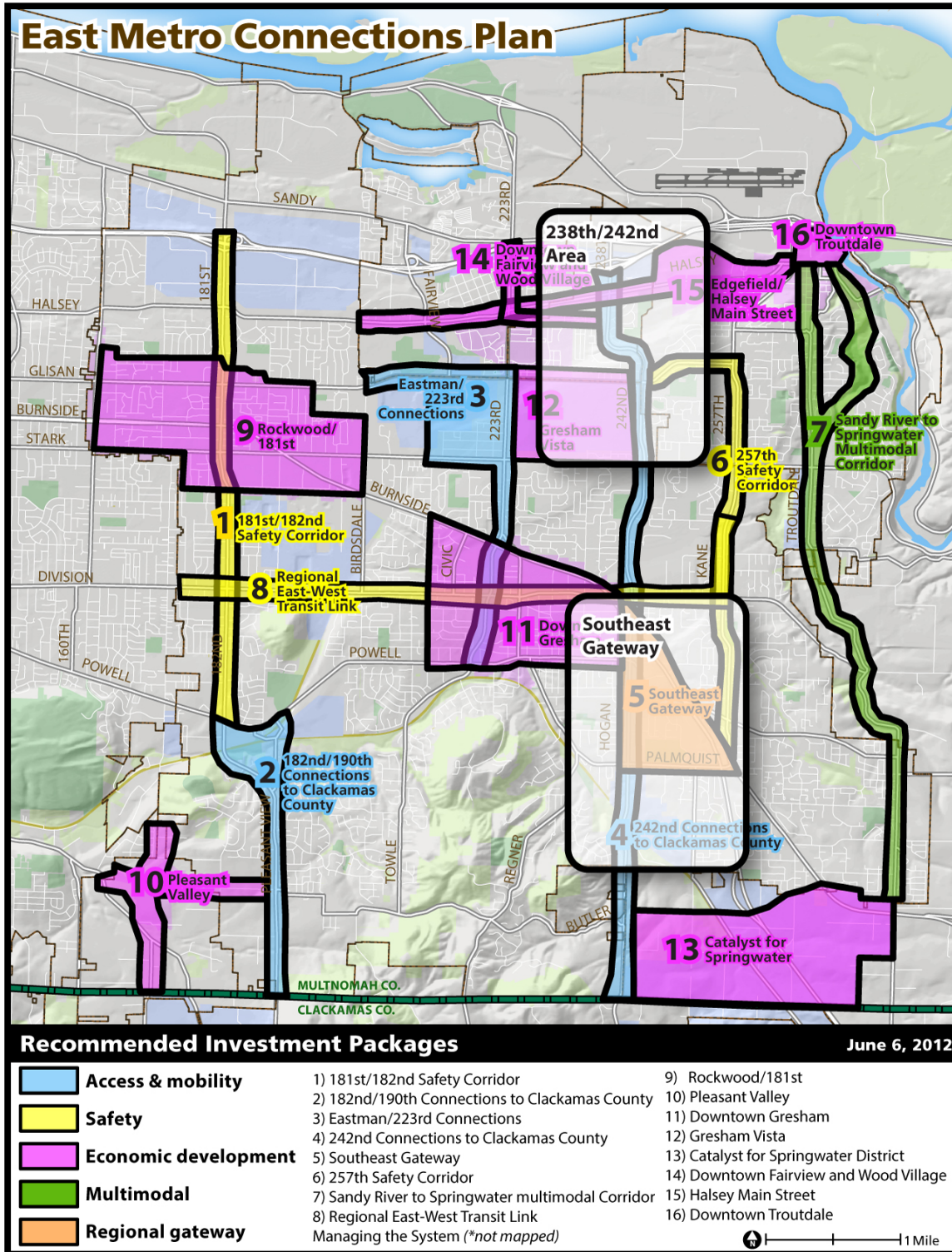
Considered one of the most controversial roadways ever planned in the region, the Mount Hood Freeway was a proposed limited access freeway roughly along the right-of-way of US 26 (Powell Boulevard) through Gresham and Portland. The project conducted an environmental impact statement (EIS) shortly after the passage of the National Environmental Policy Act of 1969 (NEPA) and met significant community opposition. In 1976, the U.S. Department of Transportation agreed to shift money originally targeted for the freeway to a light rail transit project (MAX Blue line) and a variety of regional road improvements.

Mount Hood Parkway

With the end of planning for the Mount Hood Freeway, a series of studies considered a north/south route to connect US 26 to I-84 in east Multnomah County. A variety of alternative assessments ultimately recommended a highway with a route that connected to the 238th/I-84 interchange. This proposed route—the Mount Hood Parkway—was incorporated into the regional transportation plan (RTP) and the regional comprehensive planning vision, Metro's 2040 Concept. However, concerns about community and environmental effects, cost, and lack of political support made this a highly contentious project in east Multnomah County for more than 20 years.

East Metro Connections Plan

In 2010, jurisdictional partners and business interests revisited the need for a connection between central Oregon and I-84. Metro initiated the EMCP, a corridor study that assessed transportation investments through 2035. The EMCP marked a significant shift in thinking about transportation capacity solutions. Based on local and regional policy, public input, and analysis, the partners moved away from recommending a single highway connection. The plan instead recommended a series of roadway, transit, safety, system management, and bicycle and pedestrian projects to address future mobility needs. Figure 1.3 shows the EMCP recommendations; the recommendations that led to these pilot projects are circled. Planning for the 238th/242nd/Hogan corridor, which had been focused on future highway expansion, now presented the opportunity to implement regional policy that prioritizes improving multimodal capacity across multiple parallel arterial corridors.



Source: Metro.

Figure 1.3. EMCP recommendations and pilot study area.

Moving from Corridor Study to Project Development

This pilot project looked at the process of moving from the corridor planning stage and developing a preferred alternative for NEPA environmental review. Despite a high degree of support to date, many milestones and challenges remain before construction can begin.

In this relatively small project area, there are four cities and a county involved in land use decisions and road construction and maintenance. Stakeholders were familiar with the EMCP, which concluded in 2012, but construction on these roadway projects might not begin until after 2017. Local stakeholder organizations such as the Gresham Area Chamber of Commerce and East Metro Economic Alliance remain motivated partners, working to increase spending for infrastructure in east Multnomah County, but in some areas there are no formal neighborhood organizations by which to reach people.

Maintaining agreement and general awareness through the project development process is critical. Stakeholders, including elected officials and the public, need certainty about future decision points so they can weigh in on important refinements. The goal of this pilot project was to work with jurisdictional partners to set the stage for completing permitting, engineering, and construction in a way that maintains continuing broad support. Metro, as the metropolitan planning organization, typically leads regional corridor studies, but does not typically play a role in the project development that follows. This pilot project afforded Metro staff an opportunity to learn about the typical processes its local partners perform.

Finally, there is a desire among policy makers to balance the need to advance this specific project with the wider identified needs from the EMCP. This project is not being done in a vacuum, and there are expectations to advance this project concurrently with projects in other areas, including transit, bicycle, and pedestrian projects throughout east Multnomah County.

CHAPTER 2

Evaluating TCAPP

Introduction

The pilot team included planners at Metro who managed most aspects of the EMCP. The team worked closely with city and county partners: City of Gresham and Multnomah County transportation planners, engineers, and elected officials. The project area in the north is owned and operated by Multnomah County; in the south by the City of Gresham.

The evaluation described herein includes observations and recommendations for further TCAPP refinement and development.

The findings are organized by the TCAPP elements reviewed:

- Decision Guide elements ENV-3 through ENV-7;
- Assessments; and
- Applications.

Each section is organized as follows:

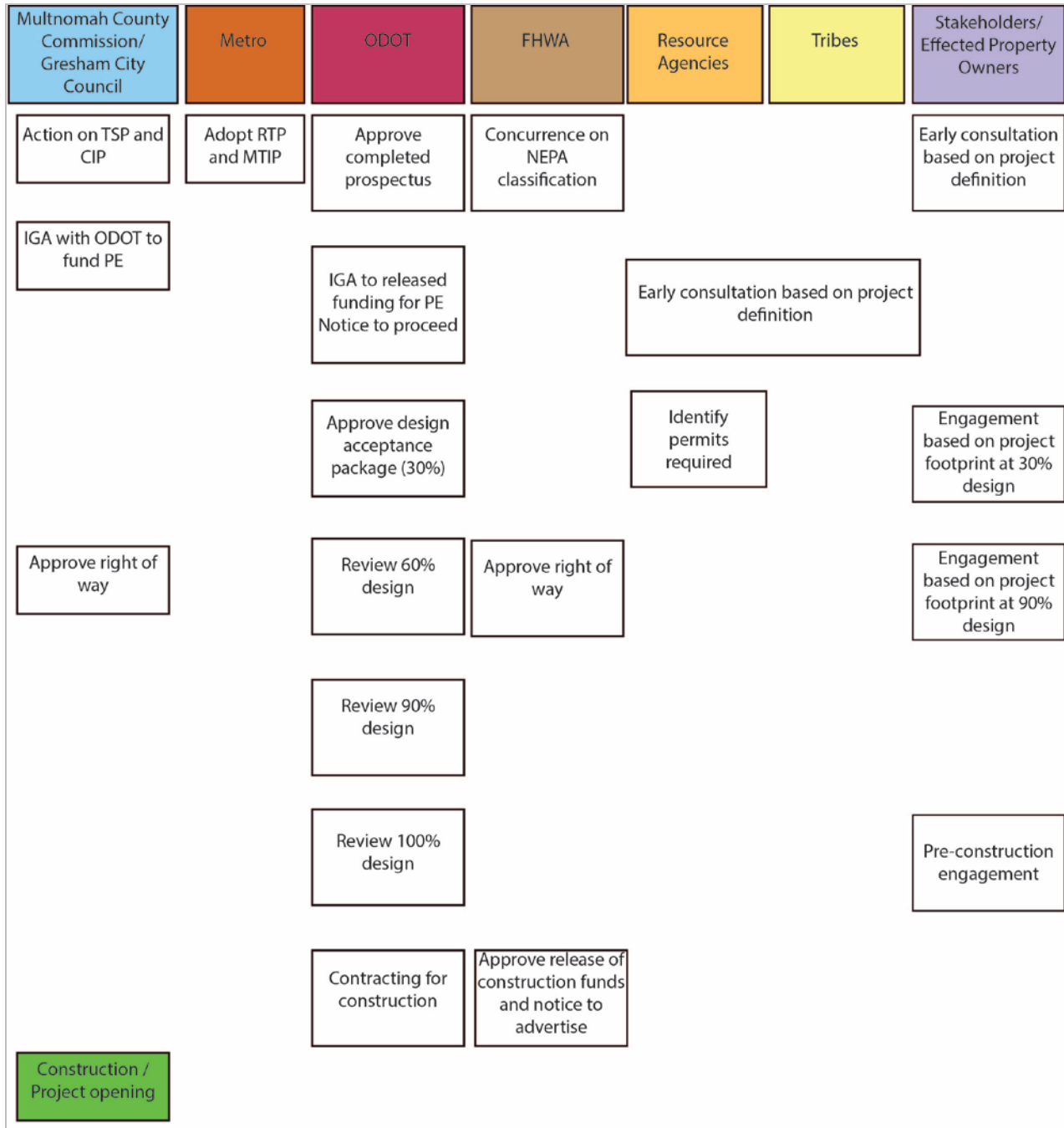
- When applicable, a description of standard planning practices, or business-as-usual, for Metro and jurisdictional partners to have a basis for assessing the completeness and/or usefulness of TCAPP and how TCAPP could be applied to improve the process;
- The way in which TCAPP content was applied;
- Observations on TCAPP content or its application; and
- Recommendations for further TCAPP development.

To initiate the pilot project, staff held a workshop with Gresham and Multnomah County transportation planners and engineers to understand and document current project development processes. The workshop focused on understanding what is needed to develop a successful construction project. The planners and engineers identified major tasks, decisions, and timelines deemed necessary to move a project into construction and completion. They developed project timelines by major tasks and decision points, agency and staff roles, and decision-making responsibilities, and identified typical problem areas and potential risks in moving a project forward. The project development cycles are relatively similar in approach for both jurisdictions. Figure 2.1 summarizes tasks and decisions, organized by key partners—those who make decisions—and key decision points.

The pilot team learned that many areas of the project development process are iterative and dynamic, and opportunities for development and construction vary in time based on availability of funding. Gresham and Multnomah County must effectively work with ODOT in order to advance projects. The project development process for federally funded projects is, to a

great extent, prescribed by ODOT. Local jurisdictions coordinate with ODOT through local agency liaisons, and guidance is provided in two documents available online:

- *Local Agency Guidelines Manual*
(http://www.oregon.gov/ODOT/HWY/LGS/pages/lag_manual.aspx#Overview) (accessed May 27, 2014); and
- *Project Delivery Guide*
(http://www.oregon.gov/ODOT/HWY/TECHSERV/BPDS%20docs/pdg_phase2_project_development.pdf) (accessed May 27, 2014).



Source: Metro.

Note: TSP = transportation systems plans, CIP = capital improvement plan, MTIP = metropolitan transportation improvement program, IGA = intergovernmental agreement, PE = preliminary engineering.

Figure 2.1. Decision makers, key decisions, and activities as defined by Gresham and Multnomah County.

Gresham and Multnomah County transportation planners and engineers identified five primary areas of focus in order to move a project forward.

Planning

- Adoption into planning and funding documents, including the RTP, transportation system plans, and capital improvement program.

Project initiation

- City/County completes a project prospectus with ODOT.
- The Federal Highway Administration (FHWA) concurs on environmental class of action determination.
- Intergovernmental agreement signed with ODOT provides funding for preliminary engineering.

Preliminary engineering

- Initiate detailed right-of-way assessment.
- ODOT approves design acceptance package (30% design).

Final design and right-of-way

- FHWA/ODOT/local approval for right-of-way purchase.
- ODOT approves final design.

Construction begins

- ODOT approves release of construction funds and notice to advertise.
- Contracting for construction begins.

ENV-3: Approve Purpose and Need/Reach Consensus on Project Purpose

Business-As-Usual

Gresham and Multnomah County do not expect to prepare an EIS. The jurisdictions expect to make capacity improvements without significant environmental impacts, enabling them to develop the project with a categorical exclusion or environmental assessment leading to a finding of no significant impact, rather than an EIS. Increasingly, local roadway owner/operators and state transportation departments are developing projects that add capacity, but incur lower costs and no significant impacts.

Applying ENV-3: Approve Purpose and Need/Reach Consensus on Project Purpose

Although not explicitly stated, the ENV-3 section of the Decision Guide focuses on an EIS process and the need for Section 404 permitting. TCAPP does not address determining whether a project would be classified as a categorical exclusion or environmental assessment. The pilot team reviewed several TCAPP elements, including ENV-1 and ENV-2, two applications, and Stakeholder and Partner portals, but did not find guidance that addressed this decision.

The pilot team shared the content within the Stakeholder Inputs tab with Gresham and Multnomah County transportation planners who are responsible for engaging stakeholders and incorporating public input into the planning and decision-making process.

Observations

The pilot team expected this element of the decision to assist in confirming a common understanding and a foundation for the project with our partners. However, TCAPP did not specifically address how a project purpose would be established other than a purpose and need. At this point in the project development process between the time when the corridor plan has been completed and successful funding to begin preliminary engineering has been obtained there is not a process to manage expectations. Managing expectations with the general public and elected officials about when key design decisions are being made was identified as a critical component of this early phase. TCAPP can help clarify and inform this critical time in project development by defining decision points and illuminating the road that lies ahead.

The pilot team discussed the Stakeholder Inputs tab with the Gresham and Multnomah County transportation planners responsible for stakeholders' engagement. Table A.2 in the Appendix contains their observations on the Stakeholder Inputs content (questions to gather stakeholder interests and questions to incorporate stakeholder interests) for ENV-3 through ENV-7. Recommendations are in the following section.

Recommendations

Gresham and Multnomah County transportation planners reacted positively to the questions to gather stakeholder interests. Question 2 was particularly useful because it will establish an understanding of the vision for the project and provide context to measure against as the project moves forward. They did not have any recommended changes to these questions. They had explicit recommendations to make the content more useful or appropriate.

- Add “How has this been communicated to stakeholders?” to Question 2.
- Spell out what is meant by P3 in Question 3.
- Question 3 should be expanded to include themes beyond economics and land use. Provide a more comprehensive list, such as environmental, traffic, safety. Provide an opportunity to let stakeholders define these themes. TCAPP could highlight the importance of linking these themes to evaluation criteria and performance measures.

- Consider rewording Question 5 to read, “How was stakeholder input incorporated into the planning and decision-making process? How has this been communicated to stakeholders?” Its current iteration made the planners uncomfortable insofar as it seems like someone making excuses for why they disregarded stakeholder input.
- Eliminate Question 6, as it is redundant with Question 1.

The pilot team recommends expanded TCAPP content to address other NEPA classes of action. The Decision Guide is focused on an EIS, and based on the team’s work; the team believes the construction project being researched is likely to land on a categorical exclusion and/or an environmental assessment. TCAPP could be more flexible to handle a different NEPA class of actions. One option would be to add a decision point before ENV-1 that specifically addresses the NEPA class of action.

If adding an additional decision point is not preferred, another option would be to consider adding an application specifically outlining the major steps, and required documentation to comply with NEPA, including early class of action decisions. This application would address effectively coordinating corridor planning, programming, and environmental review. Such an application can provide clarity about the relationship between those steps.

ENV-4: Reach Consensus on Study Area

Business-As-Usual

The project study area is generally defined through long-range planning and described in the RTP and local transportation system plans. The area is further refined as needed in corridor plans. For projects of this type in the Metro region, the project study area, including the project beginning and end points, are included in the project prospectus that is submitted to ODOT. The study areas for these roadway projects were defined generally through the EMCP corridor study. They were added to the RTP and the Gresham Transportation System Plan.

Applying ENV-4: Reach Consensus on Study Area

The pilot team reviewed the Policy Questions, Stakeholder Inputs, and Data tabs with project partners. There have been some refinements to the study area since the corridor study.

The northern study area is fairly well defined as an outcome of the EMCP, and after the review of TCAPP questions it will likely remain consistent on the submission of the prospectus to ODOT.

The southern study area was further refined from the EMCP. Two recommendations from the corridor study share a similar geographic boundary—both the Southeast Gateway area and 242nd Connections to Clackamas County. In this southern area, the project area has been further segmented to reflect a phased approach for project construction. The TCAPP policy questions were helpful to reinforce the policy direction of viewing this as one project area, while

segmenting the project to advance for different funding opportunities. TCAPP questions reinforced the full consideration of the study area and its comprehensive effects and benefits.

The pilot team reviewed ENV-4 policy questions and identified considerations to discuss with the partners:

- Is there agreement among partners on the boundaries of the study area?
- Does the study area take into account needs of partners?
- Is the geographic area identified during scoping sufficiently broad to address cumulative impacts and support alternatives analysis, including potential alternatives with operations components?
- Is the geographic area identified sufficiently broad to address all potential economic impacts on the relevant communities (including transfer effects)?
- Is the study area broad enough for consideration of the full range of issues that need to be addressed?
- Does the proposed P3 project relate to existing financial or economic planning in the region? If so, how does this inform the selection of the study area?

Observations

This pilot team found the policy questions and stakeholder inputs useful, and the Data tab less useful. In defining the project study area, partners wanted to be specific that the study area should address established policy in system plans, address the area of effect for NEPA, and be focused on the needs for the ODOT prospectus. Policy questions that explored the full range of social, environmental, and economic effects were helpful, as were questions about cumulative effects. The TCAPP Data tab provided a lot of additional information to consider, but it was helpful to narrow the scope by focusing on those three priorities: policy, purpose and need, and the prospectus. Simplifying this section can make it more effective.

Decisions on how to advance the project study area were directly related to availability of funding. The project definition was established as a cross-jurisdictional corridor in the corridor plan, and the systems plans reflect this entire corridor. But while this is a single corridor for policy, the project area in the south does have a phased approach tied to funding opportunities. This allows for the project to advance in the near term, while communicating to the public the relationship of the phases and their effects and benefits.

The issue of study area prompted the city and county planners to ask if TCAPP addresses project scope. People often want to add things to the scope of projects, and this may or may not relate to the physical boundaries of a project. Scope often comes down to staff capacity and/or funding, which is important for all stakeholders and partners to understand.

Within the questions to gather stakeholder interests, the planners reacted positively to the question, “What resources within the outline study area do you value?” This question would identify key destinations as well as significant community resources and would inform Title VI

and environmental justice analysis and engagement. This question could also ask how people use and get to the significant community resources.

Recommendations

As mentioned, the pilot team found that this key decision and the information used proved to be useful considerations for reflecting on a study area’s boundaries.

- While the policy questions description references ENV-3 (Approve Purpose and Need/Reach Consensus on Project Purpose), consider adding a policy question that specifically asks, “Does the study area reflect the purpose and need?”
- Under policy questions, consider separating the question about environmental justice as a stand-alone question.
- Under stakeholder inputs, add a question about defining the project’s scope and communicating that to stakeholders.
- Under stakeholder inputs, ask how people travel in and through the project area to complement the question, “What do we need to consider within the study area?”
- Under stakeholder inputs, the pilot team recommends adding the question: Does the geographic area benefit or burden Title VI or environmental justice populations?
- On the Data tab, the questions under “From other phases of transportation decision making” were useful.
- Consider simplifying or removing elements of the Data tab to better reflect specific requirements under NEPA, particularly those under “From other sectors and processes.”
- Consider adding utility locations and plans to the Data tab.
- On the Data tab, the “From stakeholder collaboration” should be more specific about the answers from the stakeholder inputs tab. The current statement “Summary of comments received on the proposed study area from the stakeholders and rationale for how those comments were addressed” is boilerplate language used in many other places in TCAPP. Consider revising it to say, “Any proposed changes to the project study area, and reasons why they were included or not.”

ENV-5: Approve Evaluation Criteria, Methods, and Measures

Business-As-Usual

The pilot team met with local jurisdiction partners to determine how this decision on the evaluation process would be made. The jurisdiction engineers and planners identified the following key measures or data as the criteria they would use:

- Right-of-way;
- Geotechnical engineering;
- Wetlands;

- Floodplains;
- Environmentally based zoning restrictions;
- Land use permit requirements;
- Safety;
- Traffic;
- Public perception and concerns about safety, traffic, and access;
- Construction impacts; and
- Continuing political support.

In addition, ODOT-required documentation influences how design alternatives might be compared. Answers to several questions are required for the ODOT process, including the following:

- Is water quality treatment required?
 - How will water be treated?
 - Will it require right-of-way or special approvals?
- Is the project near an existing floodplain?
 - Will there be impacts on the floodplain?
- What are the existing utilities in the project area?
 - Are there utility conflicts with the proposed project?
 - Are they reimbursable?
- Will the project require right-of-way (permanent or temp, fee take or easement)?
- Are there environmental resources in the area?
 - Historic,
 - Wetlands,
 - Fish passage,
 - Parks,
 - Carbon monoxide maintenance area (air),
 - Sensitive noise receptors, and/or
 - Archaeology.
- Will project require mitigation (noise, wetland, other)?
- Do elements of the design require state traffic engineer approval or other approvals?
- Are there any known hazardous material sources within the project areas?

A typical capacity-building project would include these measures but would also include additional transportation-related measures, such as travel time, congestion, and perhaps reliability. Most projects in the pilot team's experience spend a considerable amount of time and effort resolving which measures to use and how to use them both to measure and make decisions. Other considerations important for either political or regulatory reasons, or both, are

environmental justice, risk, and costs, which are also all very important considerations in making this key decision.

Applying ENV-5: Approve Evaluation Criteria, Methods and Measures

According to TCAPP, the evaluation criteria, methods, and measures are used to compare alternatives to determine how measures meet the purpose and need. TCAPP does recommend using criteria developed during long-range and corridor planning. The EMCP corridor planning process that identified these projects did develop evaluation methods, criteria, and measures that have continued to inform decisions. EMCP developed an evaluation methodology based on goals adopted for the EMCP process and adopted regional policy. It included a range of measures under transportation access and mobility, equity, and environmental goals.

Observations

This Decision point is a useful and necessary step regardless of the NEPA class of action determination. This decision is very different for a project with a significant NEPA process than for these smaller roadway projects. Local jurisdictions will need to focus on reducing costs and risk and successfully funding a project, and they do not need to identify and study a wide range of alternatives and develop additional criteria. The varying magnitude of a project is not reflected within TCAPP.

Recommendations

The pilot team recommends the following for ENV-5:

- The opening paragraph could be more informative concerning what is useful in developing evaluation criteria and methodology. The reference to resource agency guidance may not provide enough information to be useful.
- The purpose of this phase as described in the Basics tab is “To identify a range of alternatives that meet the project purpose and need.” That seems to be a result of the evaluation process, not the result of approving the “criteria, methods and measures.” At this point in the process in the TCAPP Decision Guide, there has not been a process for identifying alternatives. The purpose of this phase should be to reach agreement on criteria that would provide information that could distinguish among alternatives, are measurable, and are tied to the purpose and need of the project.
- The questions under the Policy tab seem very appropriate and helpful in reviewing the measures with partners. One question that might be added under the first question is “Do the partners agree on how the criteria and methodology will be used to make decisions?”
- Data in this phase are key. It would be helpful to help understand what specific data are important and why and how they can be used at this stage. Data definitions would be most helpful in this key decision point.

- The case study example is not helpful. Links to text in a case study are not helpful. Research results might be more helpful.

Gresham and Multnomah County transportation planners shared recommendations for the Stakeholder Inputs tab. Table A.2 in the Appendix contains their full comments. Within the questions to gather stakeholder interests, the planners suggested the following:

- Add explicit themes, such as health and safety, or specific locations such as intersections, to the question “How does transportation impact your quality of life? How can this be improved?” The question is too broad and will not elicit meaningful feedback.
- The question “How will we know if we have addressed or solved the transportation problems that have been identified?” (which the planners reacted positively to) could be enhanced by linking to the development of performance measures. This would help tell the story about the problems the project is solving.
- The questions “What are the characteristics or qualities of the project that will demonstrate that it is consistent with community values and protects environmental quality?” and “What characteristics or qualities do you expect from a project developed by the private sector that is different from your usual expectations?” were very useful. The former question is exactly what elected leaders want to know. The latter would help them articulate how the project achieves the vision established earlier for the project, which is central in crafting a story that is relevant for people.

The team’s recommendations include the following:

- Combine the questions in the first two bullets above and expand to include stakeholders beyond the private sector. Consider rewording it to say, “How was public, private, and general stakeholder input sought to create the evaluation criteria and measures, and how has this been communicated to them?”
- Spell out what is meant by P3 in Question 5.

ENV-6: Approve Full Range of Alternatives

Business-As-Usual

This project came out of a completed corridor study, so the process for defining alternatives as baseline began with the concept designs developed during the corridor study. Typically, for this region, alternatives are

- Identified in a local agency transportation system plan or capital improvement plan.
- Refined or revised during a corridor study, if needed.

- Added to the RTP with a project description and a project concept map with a design if available, but the minimum is a project area map with start and end points and a cost estimate based on standard regional cost-estimate methods.
- Added for funding to the state transportation improvement plan (STIP).
- Further refined at project level based on a department of transportation (DOT)-required prospectus. If NEPA class of action requires an environmental assessment or EIS, a range of alternatives are explored during scoping and formally designed during the NEPA process.
- Refined during preliminary engineering, typically 30%.
- Further refined during final design and construction.

Applying ENV-6: Approve Full Range of Alternatives

The purpose of ENV-6 is to identify a full range of alternatives for development. Information about both selected and eliminated scenarios and solution sets from long-range transportation planning and corridor planning inform the range of alternatives approved at this step. There is information developed in prior key decisions that informs this step.

The pilot team used the concept designs recommended from the corridor study as the basis for alternatives. The questions posed to the jurisdictional partners about this process involved considering a range of alternatives and design refinements that may not have been previously considered. The questions considered included these:

- Are the alternatives consistent with the financial assumptions from the long-range transportation plan (LRTP)?
- Do the alternatives support our vision and goals of the LRTP and/or corridor plan?
- Are there any viable alternatives that are not included?

The range of alternatives, and refinements to alternatives, is perhaps the area of greatest interest to the public. While the adopted designs for this work came out of the corridor study, project partners recognized the need to develop design refinements as the project moves forward and understood that as the project gets closer to construction it will be more visible to the public and decision makers.

The pilot team considered key data as part of the process for developing alternatives. The pilot focused on ensuring that there were key data needed for future design refinements. The data expressed as most important included the following:

- Completion of survey and geotechnical work;
- Environmental data involving historic resources, hydrology, and hazardous materials;
- Right-of-way assessment, including appraisals where necessary; and
- Other information scanned and checked in the DOT prospectus.

During the course of the pilot study, the pilot team met with stakeholders, including elected officials in the respective cities, to discuss refinements of the proposed design for the 238th/242nd area. A public engagement plan was also developed for ongoing engagement over the next several years. Some of the key considerations expressed during this time were:

- Understanding of the range of alternatives studied, which included potentially new facilities and new routes, increasing the number of traffic lanes, and widening the range of traffic;
- Access from local streets and adjacent residences with driveways;
- Safety provisions that could include operations and management strategies;
- Understanding of forecasts for demand that influence size and need of facility;
- Bicycle and pedestrian facilities;
- Freight access; and
- Funding and financing assumptions.

Observations

Observations about ENV-6 include the following:

- This module could be more flexible in terms of describing a “range of alternatives” in order to shape this decision point to be more appropriate for various NEPA classifications. The range of alternatives considered could be those primarily developed as part of long-range planning or corridor planning, that are either “refined” or “refined with design options.” A categorical exclusion or environmental assessment may not require a range of alternatives during the NEPA phase.
- This key decision point is a critical one for public engagement.
- It is important to have information available from previous studies, such as corridor planning, and communication to understand and be able to communicate why certain alternatives were advanced.
- Linking the policy elements defined in long-range planning with the policy and funding identified in programming is an important consideration to link to alternatives advanced. These elements should not prescribe a final alternative but can be used as criteria for approving a range of alternatives.
- The pilot team found the Data tab hard to use. It is organized by how certain data elements link to other parts of TCAPP, such as other Decision Guide elements, or Integrated Planning Applications. To make it more user friendly, it could be organized by priority of data needs for any given key decision point.
- In the Data tab, consider changing the name “From other phases of transportation decision making” to “From other parts of the Decision Guide.”
- The data that were found to be most helpful at this time included survey, geotechnical, hydrology, and hazardous materials to complete concept work.

- While the elements to make the key decisions were included in TCAPP, there is a need to further define the data elements in the Decision Guide more specifically. See the recommendations that follow.
- Usability of the Decision Guide was hindered by the lack of information in the “From other sectors and processes” section. Most of this section includes “No Specific Data.” See the recommendations that follow.

Recommendations

ENV-6 was useful in evaluating the project in the 238th/242nd area. Specific recommendations for refinements to TCAPP are particularly focused on the data needs. Suggested improvements are found in the Appendix.

Gresham and Multnomah County transportation planners shared recommendations for content for the Stakeholder Inputs tab. Table A.2 in the Appendix includes all comments. Within the questions to gather stakeholder interests, the planners felt the timing was strange for Question 1, asking people for their ideas for solving the problem. They wondered why this question didn’t appear in TCAPP prior to approving the range of alternatives.

Within the questions to incorporate stakeholder interests, their recommendations are as follows.

- Reconsider the first question. It is unclear how it relates to incorporating public input. One planner asked if this question is intended for staff or public consideration.
- Consider rewording Question 5 to read, “How was stakeholder input incorporated into the planning and decision-making process? How has this been communicated to stakeholders?” Its current iteration made the planners uncomfortable insofar as it seems like someone making excuses for why they disregarded stakeholder input.
- Modify Question 6 to articulate why certain alternatives are not included within the full range of alternatives and how that decision was made. In its current iteration, the question merely prompts a list of alternatives no longer considered.

ENV-7: Approve Alternatives to be Carried Forward

Business-As-Usual

For projects in the Metro region, the determination of which alternatives to carry forward into a NEPA class of action typically involves the following steps:

- Define a set of methods for screening and evaluating a range of alternatives based on the project purpose and need, RTP, and local plan goals and measures. The methods are refined based on project-specific needs and geography, usually reviewed and agreed to at some level by decision makers.
- Develop a range of alternatives for review. The amount of information and level of detail are based on the RTP, local plans, the STIP, and corridor study.

- Complete a matrix of information comparing the alternatives against the screening and evaluation measures. This information is typically shared with a recommendation on alternatives that are most promising.
- Provide information for public review and comment before presenting to decision makers.

Applying ENV-7: Approve Alternatives to be Carried Forward

This key decision point focuses on a review of the alternatives developed in ENV-6, based on the criteria developed in ENV-5, in order to determine the alternatives to be carried into an EIS.

Below is a description of how these elements were applied.

This is a shared step between the NEPA and permitting processes, which involves the approval of the alternatives that are suggested to be carried forward based on the application of the evaluation criteria and input from stakeholders.

The pilot team compared the alternatives developed in ENV-6 with the criteria established in ENV-5. The pilot team found that this module was less useful because of the smaller range of alternatives. The final alternatives developed in ENV-6 could be carried directly into the NEPA class of action. Staff ultimately reinforced the alternatives developed in the corridor study under COR-9. It was helpful to work back to COR-9 and look at the linkages between ENV-7 and COR-9.

Observations

ENV-7 was useful to compare the alternatives developed in ENV-6 to the criteria developed in ENV-5. A key finding is that this decision point is most useful when there is a wide range of alternatives that meet the project purpose and need. In pilot case the process in ENV-7 was less time-intensive because there were fewer alternatives to assess, with a proposed outcome to approach the projects with a NEPA class of action other than an environmental impact statement.

Observations about the module include the following:

- ENV-7 is not as necessary without a wide range of alternatives to screen. If ENV-6 results in a smaller range of alternatives, this step may not be necessary. For the purposes of projects not involving an EIS, consider flexibility to remove or streamline this step. This key decision point can be consolidated into the findings from ENV-6. The key decision in ENV-6, “Approve Full Range of Alternatives,” may be the alternatives to carry directly into NEPA.
- The Links to Decisions tab content was useful and helpful, particularly the emphasis on linking back LRP-8 and COR-7.

Recommendations

ENV-7 was useful in comparing the alternatives developed in ENV-6 with the criteria developed in ENV-5. Recommendations for refinements to TCAPP are particularly focused on the data needs. Suggested improvements include these:

- On the Data tab, the “Supporting data for the key decision” should make an explicit and direct reference to the criteria established in ENV-5. Consider not including any additional data outside of what was approved in ENV-5.
- On the Data tab, consider organizing this matrix not by its relationship to other TCAPP sections, but by level of importance for this decision. The pilot team is unclear about why there would be so much data in addition to what was developed as a part of ENV-5.
- On the Links to Decisions tab, consider changing “To Integrated Programming and Fiscal Constraint” to “Programming”; the link to the Decision Guide was not clear.
- There was no information provided under the Stakeholder Input tab. Consider adding information that describes sharing the information and decisions completed in this phase with the public. The questions to gather stakeholder input can be those used in ENV-6.

No questions currently appear within the Stakeholder Inputs tab for ENV-7. The pilot team recommends including the following:

Questions to Gather Stakeholder Interests

- Do you support these alternatives?
- How can these alternatives be improved?

Questions to Incorporate Stakeholder Interests

- Are there elements within the suggestions for improvement that can be added to the alternatives?
- How was stakeholder input incorporated into the planning and decision-making process? How has this been communicated to stakeholders?

TCAPP Assessments

Introduction

The purpose of the Assessment module of TCAPP is to provide assistance when problems arise. The pilot team took the assessments as the first step in using and assessing TCAPP, so it served as an introduction for the team. The tool has considerable potential for identifying problems and guiding practitioners and stakeholders toward successful outcomes. The pilot team also has recommendations to improve this component.

Applying the TCAPP Assessments

Partner Collaboration

The Partner Collaboration module was useful in evaluating the pilot team's process working with its jurisdictional partners. The results provided by the assessment confirmed much of what the team had thought about the issues it would confront and identified others, but most important, provided concrete ideas for addressing them. The team was able to better articulate areas where it needed to focus attention.

Because the City of Wood Village owns, and Multnomah County operates, the roadway where some of the major construction will occur, and the City of Gresham operates the same roadway to the south, in the process of completing the module the pilot team was concerned about how to get buy-in and participation from each jurisdiction for the project in the other jurisdiction. The team was able to use the questions provided and the assessment results with the partners to gain a better understanding and use these strategies to ensure that the decision-making process is clear and effective.

Metro has long been involved in long-range transportation planning, but project development is the responsibility of local governments and ODOT. Therefore there are no documented decision-making steps. This module was key in understanding how the situation could lead to confusion and problems in the future if Metro does not have agreement with partners on the decision making and the steps toward implementation. Specific things Metro can do, working with project partners and using TCAPP guidance, include defining and documenting the following:

- Project teams and team members;
- Roles and responsibilities of each project team and team member; and
- Decisions to be made and the decision-making process.

The Partner Collaboration Assessment can help define problems and provide guidance in the following areas:

- Understanding or agreeing on steps in the process;
- Obtaining or agreeing on data and information or tools and technology;
- Project decision making; and
- Partner collaboration.

Stakeholder Collaboration

The pilot team used the Stakeholder Assessment, and it was also shared with Gresham and Multnomah County transportation planners. Their observations are captured below.

DOES THE STAKEHOLDER ASSESSMENT MAKE SENSE? WAS ITS PURPOSE CLEAR?

- I struggle to see the utility of the tool or how it is to be used at a project-specific level.
- When would you ask yourself these questions? Some answers evolve as the project progresses. Some questions need to be revisited to make sure the message is on track. Some are list style that can just be checked off at the beginning of a project.
- The survey results do not really help in crafting the key message, which is something that we all need help with.
- It isn't clear in the beginning of the assessment which point of view I'm taking/representing as I answer the questions. I would suggest adding some clarifying language to this opening sentence, "Please respond to the following statements based on your current situation." Something to the effect as a practitioner and how you feel you are successfully able to communicate with stakeholders. I got lost in translation of taking it from a stakeholder viewpoint versus as a professional engaging stakeholders.

WAS IT EASY TO USE?

- I am not sure if the tool wants me, as a project manager, to answer each of these questions from each component or a stakeholder to answer, or me, as a project manager, to answer from the perspective of a stakeholder.
- It is easy to use.
- Tool is very easy to use. I think the statements/questions were easy to follow and respond to. I like the instant results.

WAS THE CONTENT FRAMED IN A USEFUL WAY? WAS THE LANGUAGE RIGHT?

- There is so much content and text, it is hard to answer this question with a yes or no.
- I think once the intended user is clarified, the way the Stakeholder Assessment is framed and the language that's used could work well.

DO YOU THINK IT WAS HELPFUL? WHY OR WHY NOT? WOULD YOU WANT TO USE IT ON A PROJECT?

- There is a lot to take in with this assessment tool.
- It could be helpful to force a project manager to consider the points raised in each question.
- I do not see it being very helpful and would not use it on a project.
- I think with some adjustments, this tool has potential to be valuable. It could help craft and/or implement a public engagement plan versus evaluate one that has been developed or that is being implemented (which is what this tool seems to want to do).

- The results are the same whether you answer strongly agree or strongly disagree for every question (I took the assessment three times to test that theory). Since this is the case, why not just provide the results? The text in the results is interesting and very important but very wordy and could be synthesized.
- I like that the assessment results link to a Decision Guide. I could see it being helpful in project management.
- I think it would be a good evaluation tool to make sure we're engaging people correctly and is a good check-in for us in regards to how much the stakeholder has influence, how we're going to use and respond to the info and comments received, and to think about next steps.
- I think it's something we could use. I especially like the potential risks portion.
- I think a flowchart of the assessment and the tools and how they all fit in together would help for me to get an understanding of how the TCAPP tool can help me. I need the big picture look to understand the value of going through the assessment and how the tools all fit in.

The Stakeholder Collaboration Assessment suffers because it tries to work for two very different audiences: project team members and stakeholders. The pilot team found this shift in point of view confusing and less useful than a pointed assessment of either audience. Though obviously a great deal of work and thought has gone into the results section, the receptivity of the audience needs to be considered. Some language is arcane and jargon laden. Parts of the results seem to be addressed to project team members, while many other parts are clearly addressed to stakeholders.

Expediting Project Delivery

Some of the issues discussed previously apply to this assessment, but in general, the pilot team did not find this as useful as the other assessments. It was long and arduous but did not produce satisfying results. In fact, there were no results, only the responses provided. Recommendations are provided below.

Recommendations

The TCAPP assessments have considerable potential for identifying problems and guiding practitioners and stakeholders toward successful outcomes; however, the timing and reasons for using the assessment feature is an important consideration that could be more fully addressed. Though the intent is to assist with problem solving, an assessment before a project kicks off would enable identifying potential problems early or perhaps avoid them entirely. We would suggest an additional module taken at the beginning of a project. When problems arise during the project, the assessment would help clarify the causes and potential solutions.

The three assessments open with a series of questions to answer before using each one. The Partner Collaboration Assessment suggests considering the following:

Before using this assessment consider

Who makes up the team?

Individuals from your agency or partner agencies who participate in decision making.

What are the roles of individual team members?

Each team member will participate in the process as an advisor, observer, or decision maker.

What is the process?

The steps that lead toward a final decision and approval. The steps are usually controlled by requirements or common practice.

What is the existing situation?

The current planning process, which includes past experiences or preexisting relationships that may affect how team members engage.

These are important questions to consider. The pilot team suggests making the questions a stand-alone assessment to make sure users define and address them. Such an assessment would provide the opportunity to ensure a project gets off on a strong foundation. That would be the time to answer the questions under “Before using this assessment consider” in each module. Answers should be documented for use during the course of the project. This would ensure that a common understanding is developed for the following:

- Who makes up the project team (or teams)?
- What are the roles of the members of the team?
- What are the steps in the decision-making process?
- What is required to accomplish each step?
- What is and what affects the current situation?
- Who are the stakeholders?
- Are stakeholders missing?
- How will stakeholders be included?
- What past problems associated with the project do team members need to be aware of?

It is important that TCAPP reflect the underlying values of collaboration, effectiveness, and partnership that TCAPP supports. The assessment should be accessible and relevant to the appropriate audience. The team also suggests framing statements in positive rather than negative language. This can be useful for demonstrating goals or providing specific targets for a project or for identifying gaps. Using positive rather than negative statements would also help with the problem of double negatives in the answers. For example, the Expediting Project Delivery module includes the following statements: “Project staff doesn't feel adequately involved or informed about project direction” and “Communicating with other project team members does not happen in a timely manner.”

Disagreeing with these statements results in confusing double negatives. Reframing these as questions such as “Does project staff feel informed?” may be a more neutral way to frame the question.

Other general observations or recommendations include these:

- Much of the language is written in a “reactive” as opposed to a “proactive” way, assuming that a specific issue may arise, instead of looking for ways to frame the project so that it does not become a concern.
- Simplify opening pages for each module and give simple consistent directions on how to use the modules and the offline PDF option.
- Avoid jargon and value-laden language.
- Use positive language whenever possible.

Partner Assessment Recommendations

Questions vary in terms of the language of tense, so it isn’t clear what questions are critical at the beginning of a project, or during a future phase, or completion. Instead it gives a very general introduction that says this module can help when there are problems. Drawing on some of the areas of discussion within the assessment would provide better direction. A more useful introduction could, for example, say this:

This assessment can help define problems and provide guidance in the following areas:

- Understanding or agreeing on steps in the process;
- Obtaining or agreeing on data and information, or tools and technology;
- Project decision making; and
- Partner collaboration.

The 18 pages of 7-point type with small margins with the results are overwhelming. This problem might be at least partially addressed by breaking this module into smaller, more specific units, either by topic area or timing, such as early or midway in the process. Other attempts to simplify the results would at least make it more user friendly.

As discussed, this part of the Assessment module would benefit from an earlier exercise to identify team members and understand and document roles and responsibilities and the decision-making process.

Stakeholder Collaboration

It may be useful to frame this problem-solving tool as a *problem-avoiding* tool.

Collaboration is the basis of a good, well-informed project, and maintaining good relations with stakeholders is the key to developing the collaborative process. It has to work. Therefore, TCAPP should provide specific guidance on developing a stakeholder identification and involvement process.

Expediting Project Delivery

Many of the issues discussed previously apply to this module. Again, this module should be usable to prevent rather than fix or manage crises when things go awry; yet it should remain available and relevant when they do. The pilot team has observations on specific sections or language for this assessment. The team strongly recommends reframing this entire module in a positive way. The first statement is a good example of a value-laden statement: Project decisions are delayed or protracted due to unexpected requests for additional analysis or for more information. Additional requests for data or information can be legitimate requests based on faulty process, data, or communication, not just a technique to stall a project. Later in the assessment, the 106 section seems out of place. There are many specific regulations and permits required during project delivery. These should be included in a separate resource agency checklist.

The hover text for the section titled “Inefficient public engagement or support” may be offensive to some stakeholders or partners given the statements in that section.

There is a lack of assessment of proper initial scoping and project management, which may have avoided some of these problems. It may be worth considering adding this.

Other recommendations include the following:

- Simplify, especially by avoiding making the same statements twice or having more than one topic in each statement; use precise language;
- Avoid value-laden language. This segment in particular needs to be assessed by this criterion; and
- Make the disagree-agree scale consistent with the other modules.

TCAPP Applications

Introduction

The pilot team investigated the sections within the TCAPP applications to help address questions about the relationship between the corridor planning track and project development. The applications have utility and could be improved with the recommendations that follow.

Applying the TCAPP Applications

Linking MPO Planning and NEPA

Linking MPO planning and NEPA appears as a Special Topic Application. TCAPP describes the importance of linking metropolitan planning organization (MPO) planning and NEPA; however, the planning phase addressed is limited to, and stops at, long-range planning. A drop-down box allows the user to choose any one or all four of the Decision Guide phases deemed relevant. The application grays out the key decisions that “have no specific relevance to the individual

application or topic area.” All of the programming and corridor planning decisions are grayed out.

Corridor planning is not a legally required process. It would be helpful to address this and issues that could arise in linking MPO long-range planning because of the potential inconsistencies in requirements or processes specifically within the application. Rather than appearing irrelevant and grayed out, continuing coordination and collaboration, as well as consistent or scalable analysis, should be encouraged here. This is probably where the link really needs to be supported, and therefore also discussed, as part of corridor planning.

Streamlining a Bottleneck Project

It was only after the pilot team had a fair amount of experience with TCAPP that members noticed the Streamlining a Bottleneck Project Application and realized it might apply to the northern roadway project. The team hoped to find relevant information or specific guidance that could inform the roadway project. However, the guidance focuses on long-range planning decisions. The application focuses narrowly on a project that has not yet been adopted into the RTP. Since the 238th project was the result of recent corridor planning, and was adopted into the RTP in 2012, it did not appear to be relevant.

There is an additional key decision introduced in the application, JMP-1, between the key decisions in long-range planning and programming. See Figure 2.2 below. This is the same place that the team has identified for the suggestion to include a decision on environmental classification and the need to bridge the gap between corridor planning and environmental review. These could be incorporated as similar decisions, but with different streamlining needs. Our need is to move a project forward that is preparing for a categorical exclusion but that still needs to navigate political and technical aspects of project development.

The screenshot shows a web application interface with a navigation bar at the top containing 'Home', 'Decision Guide', 'Assessment', 'User Portals', 'Applications', and 'Library'. Below the navigation bar is a breadcrumb trail: 'Previous Key Decision | Return to Decision Guide | Next Key Decision'. The main content area is titled 'Applications - Streamlining a Bottleneck Project' and features a sub-header 'JMP-1 Approve Decision to Advance a Specific Project to the Environmental Review Phase'. A 'Description' section explains that the Jump key decision is a strategic interruption of the normal project cycle, requiring specific conditions: all partners agree on an urgent need, the LRTP does not identify the project in the first horizon period, and the TIP does not contain the project. It further states that the project's advancement is a pass/fail decision and that essential information is provided by LRP-1, LRP-2, and LRP-4. At the bottom of the page, there is a horizontal menu with buttons for 'Basics', 'Policy Questions', 'Stakeholder Inputs', 'Data', 'Links to Decisions', 'Examples', 'Integrated Planning', and 'Special Topics'.

Source: http://www.transportationforcommunities.com/shrpc01/kdp_step/5/0/43 (accessed May 27, 2014).

Figure 2.2. Key decision JMP-1.

Recommendations

The pilot team recommends the following improvement to the TCAPP applications:

- While the Special Topics and Integrated Planning sections were useful, it was not clear that the “Transportation Phases” column referred specifically to Decision Guide elements. It may be helpful to move this content into the Decision Guide tab, as opposed to its current location under the Applications tab.
- It is clear that there is a large amount of information in the Integrated Planning section, but it is not evident with the current navigation. A refinement should consider emphasizing the integrated planning elements in more detail.

The pilot team recommends the following improvements to the Linking MPO planning and NEPA Application:

- Much of this work could be better applied in the assessment tool and using the assessment guide to better understand partner and stakeholder interests and the expediting project delivery by assessing risks. For example, the table at the bottom addressing risk management is not as comprehensive as the risk assessment survey.
- The application is focused on the key Decision Guide elements, and the elements highlighted make no mention of corridor planning.
- Corridor studies are not federally required. But the importance of corridor or subarea planning in linking MPO planning and NEPA should be made explicit and supported with easy access to the appropriate data and related questions of appropriate scale. Instead, the corridor phase is grayed out in this application. The information is available by clicking on the “Read More” link, then identified in the Risks and Risk Management table. Corridor studies should be more prominent. Why gray out corridor studies on this page but explicitly refer to it as a risk management strategy?

The pilot team recommends the following improvements to the Streamlining a Bottleneck Project Application:

- Adding an additional key decision point, JMP-1, in the Streamlining a Bottleneck Project is confusing. Do not have additional key decision points outside the ones listed on the main page.
- Consider including a description of how to pursue NEPA after an RTP.

CHAPTER 3

Conclusions and Recommendations

General Observations on Applying TCAPP

Perhaps the most important finding from the pilot is that TCAPP helped increase internal-agency and cross-agency coordination. Metro, the regional MPO and lead on the pilot, is typically involved in long-range planning and corridor studies but is not involved in local project development. The pilot created the opportunity for Metro to be involved in project development and therefore better understand how local agency partners move environmental review and project development forward. This will help Metro to continue to improve collaboration with jurisdictional partners and provide guidance on how Metro can better direct future long-range plans and corridor studies to meet the needs of local partner project development.

Observations on the Decision Guide

The Decision Guide was a helpful tool in moving project development forward. The key decision points are a strong foundation. Much of the recommendations listed in this report are refinements and improvements to the more detailed data found within each decision point. There are opportunities for content improvements and navigational improvements within each of the key decision point Data tabs.

While the team has been able to use many things within key decision points in the Decision Guide, there has been one key finding of the study: The Decision Guide is focused on an EIS, and based on the team's work to date, the members believe the construction projects they are researching are likely to result in a categorical exclusion and/or an environmental assessment. TCAPP could be more flexible to handle different NEPA classes of action. One option would be to add a decision point before ENV-1 that specifically addresses NEPA class of action. Another option would be to consider adding an application specifically outlining the major steps and required documentation to comply with NEPA, including early class of action decisions. Another option would be to consider referencing a resource such as the FHWA environmental review toolkit at

<http://www.environment.fhwa.dot.gov/projdev/pd4document.asp> (accessed May 27, 2014).

Environmental Justice and Title VI Components

Environmental justice and Title VI components are not explicitly included in the key decision points under the Policy Questions, Stakeholder Inputs, and Data tabs. TCAPP will be strengthened by explicitly including them in those areas, embedded within key decision points. This is true for the area of the pilot team's research—Environmental Review/NEPA Merged with Permitting—but can be embedded within every TCAPP track. Another opportunity would be to build an application directly addressing environmental justice and Title VI, similar to the level of detail the Natural Environment and the IEF Application contains.

Linking MPO Planning and NEPA Application

There are several findings identified for improvements to this application. Most important is the opportunity to make more explicit the connection of MPO plans for the RTP and when corridor plans are appropriate to be used before initiating a more detailed environmental review. See the section on TCAPP Applications later in this chapter for specific recommendations.

Stakeholder Definition

Users of TCAPP would be well served by having specific resources to identify stakeholders. TCAPP describes how essential it is to do so, and both the assessments and the Decision Guide presume that the user has gone through a process to identify them. But it would be helpful to provide best practices for ways to do that. For example, the assessment includes questions to consider for each collaboration assessment. The pilot team believes it would be better to create an assessment that is a stand-alone document that explicitly walks a user through the questions and documents the answers. Another option would be to have an application or a reference to a resource such as FHWA's context-sensitive solutions:

<http://contextsensitivesolutions.org/content/reading/identifying/> (accessed May 27, 2014).

Integrating the context-sensitive resources into TCAPP would be beneficial.

Observations on TCAPP Assessments

The assessments have a great deal of potential that unfortunately is currently not captured because the assessment questions do not currently provide a clear framework for identifying problems, risks, and appropriate solutions and guidance. The questions are extremely important for this feature to be effective. The team suggests carefully thinking about the reason for each question. There should be one specific reason for each question, and redundancy should be avoided. The Expediting Project Delivery component feature could be extremely useful, but it should include federal agencies as a possible responsible party for problems.

Consider the perspective and needs of your intended audience.

Because the needs and perspective of the professional are often, but not always different, combining information intended for all audiences will be difficult to accomplish in a way that is not confusing and frustrating for the audience. This should be considered in the context of partner and stakeholder definitions, as well as more broadly across TCAPP. TCAPP is currently a resource best used by transportation planning professionals. If TCAPP does continue to function as a tool for stakeholder collaboration, considerable thought needs to be put in to how to effectively guide their participation.

Decision Guide Elements

Currently, there are eight tabs within each Decision Guide element. The team thinks there can be as few as four tabs: Basics, Policy Questions, Stakeholder Inputs, and Data. The other tabs were found to be full of information, but less valuable. While the Examples tab could be helpful, there

was often not enough context to find the most relevant example without reading a lot of information. Consider simplifying the Decision Guide by consolidating the tabs.

Partner Definitions in the Basics Tab

The pilot team learned a lot about how the MPO, county, and city all move forward on project development. But team members have found themselves spending a lot of time on early coordination and learning how one project—on one road—is being built by multiple agencies. Lining up the project development cycles, the public engagement, and the engineering for both the county and the city has been really helpful.

One thing the team is finding is that TCAPP is very focused on the DOT/MPO level; however, the partnerships are often with the owner/operator of facilities at the county and city level. In TCAPP the Basics tab of the key decisions does not include local entities in the partner list. Further defining the local entities' role, including decisions about local land use to be incorporated into the Data tabs, will provide flexibility for TCAPP to be used more widely at the local level.

Policy Questions

The Policy Questions tab has useful questions to ask about each phase. Questions are currently organized based on references to other sections of TCAPP. To better address the audience, they could be reorganized based on the priority level for each decision point. Consider organizing the Policy Questions tab similar to the Stakeholder Inputs tab.

Stakeholder Inputs

Both the pilot team and jurisdictional partners found useful, informative content in the questions to gather and incorporate stakeholder feedback. The partners shared observations about these questions, which the pilot team developed into suggested improvements.

Technical Data

In many cases it would be useful to provide more explicit descriptions of and guidance on technical data requirements, especially in any federally mandated permitting and evaluation phases. This is often the type of resource professional planners and engineers need. There is a risk because of the need to keep this information up to date, but that is a risk in other areas of TCAPP as well. For example, under ENV-5, the “supporting data” in the Data tab includes “traffic information” but does not detail what type.

The organization of the Decision Guide Data tab is hard to use. It is organized by how certain data elements link to other parts of TCAPP, such as other Decision Guide elements, or Integrated Planning Applications. To make it more user friendly, it could be organized by priority of data needs for any given key decision point.

The table for the Data tab in the Decision Guide could also be improved to make the connections clearer. For example, “From other phases of transportation decision making” can be

revised to be called “From other elements of the Decision Guide.” It is not immediately clear that the former is meant to explicitly reference the Decision Guide. This is also true with the “from other sectors and processes”; this could be more aptly renamed “From Integrated Planning Applications.”

The pilot team found the data in the “from other sectors and processes” difficult to find. It would be easier to use if there were a direct link to the data description in the respective Integrated Planning Application.

TCAPP Assessments

The current Partner Collaboration Assessment could be better served by starting with an assessment to define who makes up the team. The questions currently listed are good questions, but they can be skipped; instead, they should be incorporated specifically into an assessment to help users develop a list of their team members and roles before beginning.

The Expediting Project Delivery Assessment could be improved by the following:

- Reviewing and adding content from the SHRP C19 final report, *Expedited Planning and Environmental Review of Highway Projects*. This document includes a much more thorough and thoughtful assessment and strategies for identifying and avoiding or solving problems in project delivery.
- Doing additional research based on this report to understand and document why successful projects are successful and why unsuccessful project are not.

TCAPP Applications

While the Special Topics and Integrated Planning sections were useful, it was not clear that the “Transportation Phases” column referred specifically to Decision Guide elements. It may be helpful to move this content into the Decision Guide tab, as opposed to its current location under the Applications tab.

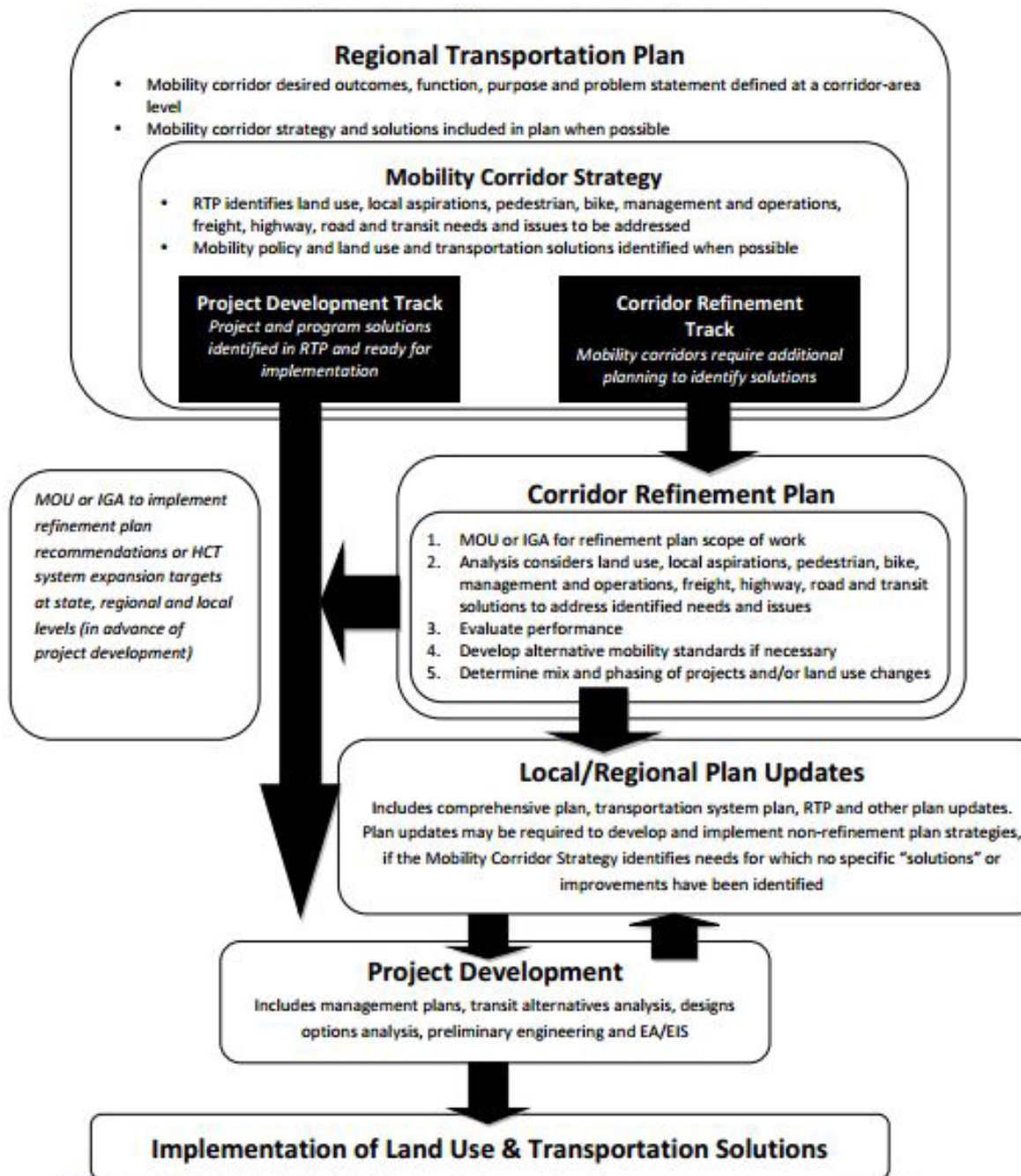
It is clear that there is a large amount of information in the Integrated Planning section, but it is not evident with the current navigation. A refinement should consider emphasizing the integrated planning elements in more detail.

Application: Linking MPO Planning and NEPA

On the front page of this application, the corridor planning phase is grayed out indicating that the NEPA process is all based on the long-range planning phase. A section below under Risks and Risk Management does suggest using subarea and corridor studies. It may be helpful to emphasize the need for corridor studies at the beginning of this page and not just under the Risks and Risk Management table.

Consider changing “MPO Planning” to “Long-Range Transportation Plan (LRTP)” to better reflect the connection from the LRTP to NEPA. This application could be refined to show

a more explicit connection between MPO planning, corridor planning, and the environmental process. One example to consider is shown in Figure 3.1 from the Metro 2035 RTP.



Source: Metro, 2035 Regional Transportation Plan (2010).

Note: MOU= memorandum of understanding, IGA = intergovernmental agreement, EA = environmental assessment.

Figure 3.1. Relationship of long-range planning, corridor plans, and project development from Metro 2035 RTP.

Application: Streamlining a Bottleneck Project

It was only after the pilot team had a fair amount of experience with TCAPP that it found the Streamlining a Bottleneck Project Application. At first glance it appeared that it should provide specific guidance for these projects. There is an additional key decision introduced in the application, JMP-1, between long-range planning and programming. There is a similar need to bridge the gap between corridor planning and environmental review for environmental assessment. These two could be incorporated as similar projects, but with different streamlining needs. The need for the pilot project is to move the project that is preparing for NEPA class of action determination but still needs to navigate the political and technical aspects of project development.

JMP-1 was not apparent as a key decision point in most places where the Decision Guide is referenced on the website. Just as JMP-1 connects long-range planning to the environmental review phase, it may be helpful to have a similar decision point to help clarify the relationship of corridor plans to the environmental review process. (See Figure 2.2.)

Using TCAPP Led to Better Outcomes; What Metro Can Do Better in the Future

The beta version of TCAPP was helpful in identifying and focusing on key decision points for a project. The pilot team found it to be a useful guide to engage a wide variety of planning and engineering practitioners. The team used the Decision Guide as a point of reference in developing the key decision points that were most relevant to the project development cycle in the context of local decision making. The Decision Guide prompted the conversation to focus on decisions and build a timeline and process based on the decisions. The timeline developed will be used over the next several years.

At the core of TCAPP is the focus on partnerships and having early conversations with partners and stakeholders. TCAPP has reinforced the need to have early, integrated conversations with stakeholders and partners identified in the assessment tool. In particular, the ability to have cross-jurisdictional conversations between city, county, and regional partners across a single facility has been very valuable. TCAPP provides a framework to guide those conversations. As a result of this pilot, the partners have had important conversations now that will save time as engineering and permitting begin.

The TCAPP assessments have considerable potential for identifying problems and guiding practitioners and stakeholders toward successful outcomes. The assessments offer the largest promise for practitioners to “dive in” to TCAPP and begin using it without having to be trained or fully understand all the other elements of TCAPP. The pilot team received a lot of positive feedback on the assessments and recommends highlighting them in future versions of TCAPP. With the suggested refinements identified in this report, in the future, assessments can offer additional value.

TCAPP did help improve both internal and cross-agency understanding, communication, and coordination. Metro is typically involved in long-range planning and corridor studies. The

pilot created the opportunity to better understand how local agency partners move environmental review and project development forward. This has improved collaboration among the MPO, county, and cities, and in turn, provided guidance on how Metro can better direct future long-range plans and corridor studies to meet the needs of local partner project development. In the future, Metro can anticipate and build into corridor studies key decision points that were identified as a result of this pilot.

APPENDIX A

Suggestions for Improvements to Decision Guide Elements

This appendix provides specific recommendations for tables found within the Decision Guide key decision points. Section A provides recommendations for the Basics tab—primarily addressing the partners. Section B provides recommendations for the Stakeholder Inputs tab by recommending questions to *gather* stakeholder interests and questions to *incorporate* stakeholder interests for the Decision Guide elements examined by this pilot: ENV-3 through ENV-7. Sections C and D provide recommendations for the Data tab by focusing on ENV-6 and ENV-7.

A. Suggested Improvements to the Partners Table in the Basics Tab

The following are proposed recommendations for refinements to the Partner table. This table, shown in Figure A.1, is virtually identical for every key decision point, and the recommendations below in Table A.1 are primarily focused on the inclusion of local partners that may be developing a project or are owners/operators of the facility.

Partner	Role Type	Role Description
FHWA	Decision Maker	Approves the development of the purpose and need in accordance with federal requirements
MPO	Advisor	Informs project purpose and need based on regional analysis of deficiencies and identified need
Resource Agency	Decision Maker	USACE approves a purpose and need that can be used for Section 404 requirements. Other resource agencies are advisors, supporting a purpose and need that represents the true need for the project and can be supported by all partners.
State DOT	Decision Maker	Ensures purpose and need is supported and documented with agreement by all partners

Figure A.1. Partners table under the Basics tab in TCAPP (USACE = U.S. Army Corps of Engineers).

Table A.1. Suggested Improvements to Basics Tab

Key Decision	Partner to Add	Role Type to Add	Role Description to Add
COR-9 Adopt Priorities for Implementation	Local Jurisdictions, Facility Owner/Operator	Decision Maker	Adopt priorities for implementation that are fiscally sound and realistic
ENV-3 Approve Purpose and Need/Reach Consensus on Project Purpose	Facility Owner/Operator	Decision Maker	Ensure purpose and need are supported and documented with agreement by all partners
	Local Jurisdictions	Advisor	Provide input on purpose and need
ENV-4 Reach Consensus on Study Area	Facility Owner/Operator	Decision Maker	Ensure a comprehensive study area for initiating the consideration of alternatives

Key Decision	Partner to Add	Role Type to Add	Role Description to Add
	Local Jurisdictions	Advisor	Provide input on project study area, including any necessary permits or approvals based on study area
ENV-5 Approve Evaluation Criteria, Methods and Measures	MPO	Advisor	Ensure consistency with Regional Transportation Plan
	Facility Owner/Operator	Decision Maker	Develop evaluation criteria that allow for full consideration of all reasonable alternatives
	Local Jurisdictions	Advisor	Contribute to the development of evaluation criteria

B. Suggested Improvements to the Stakeholder Inputs Tab

Identifying input needed from stakeholders is a fundamental part of creating a public engagement plan. The pilot met with partners from Multnomah County and Gresham and reviewed questions from the Stakeholder Inputs tab in ENV-3 through ENV-7. Partners provided feedback on the stakeholder input questions, which provide an initial set of recommendations for TCAPP.

The pilot also identified which stakeholder input questions to include within the public engagement plan. Table A.2 presents Gresham and Multnomah County transportation planners' feedback on stakeholder input questions.

Table A.2. Feedback and Suggested Improvements to the Stakeholder Inputs Tabs, ENV-3 through ENV-7

TCAPP Content	Partner Observations	Suggested Improvements
ENV-3: Approve Purpose and Need/Reach Consensus on Project Purpose		
Questions to Gather Stakeholder Interests		
Do you see additional needs and/or purposes that are not incorporated?	<ul style="list-style-type: none"> For road projects like this, we don't typically ask people to weigh in on the purpose and need. We would ask people to respond to the concept plan rather than a purpose and need statement. People have an easier time reacting to visuals. I would be more inclined to ask people about how they use the facility or want to use the facility and use that to assess people's needs related to the project. 	
What do you think this project should accomplish? What do	<ul style="list-style-type: none"> This will give us a good understanding of the vision for the project. This will give us something to measure 	

TCAPP Content	Partner Observations	Suggested Improvements
<p>you think the outcome of the project should be?</p>	<p>against as the project moves forward.</p> <ul style="list-style-type: none"> ▪ Articulating the vision will give people something to react to. ▪ Staff should explain why the project is needed and can ask people if they agree with those needs. 	
<p>What is your reaction to the outlined purpose and need?</p>	<ul style="list-style-type: none"> ▪ We would ask people to react to the vision for the project, but not the purpose and need. 	
Questions to Incorporate Stakeholder Interests		
<p>Are there conflicts in the stakeholder interests that we heard?</p>	<ul style="list-style-type: none"> ▪ It is important to us to understand if what we hear from the community conflicts with what we can or are able to do. This would be based on funding, physical constraints, and other project constraints. ▪ This could serve as a reality check that can inform the design of alternatives. This is a good test to understand how what people need or want out of the project is aligned with the design of the project as it develops. 	
<p>How were the public, private, and general stakeholder comments considered in the development of the purpose and need?</p>	<ul style="list-style-type: none"> ▪ This is a good internal check. ▪ We should use this. ▪ They should add: How has this been communicated to stakeholders? to this question. 	<p>Add “How has this been communicated to stakeholders?”</p>
<p>Is the understanding of deficiencies met by the P3 project consistent across the public and private sectors?</p>	<ul style="list-style-type: none"> ▪ What is a P3 project? I don't understand. ▪ This doesn't seem applicable to our project. 	<p>Spell out what is meant by P3.</p>
<p>What are the economic and land-use-related problems and opportunities identified by stakeholders?</p>	<ul style="list-style-type: none"> ▪ We should expand the question to include themes beyond economics and land use. Provide a more comprehensive list, such as environmental, traffic, safety. ▪ We should let stakeholders define these themes. ▪ The themes should link to evaluation criteria and performance measures. 	<p>Question should be expanded to include themes beyond economics and land use. Provide a more comprehensive list, such as environmental, traffic, safety. Provide an opportunity to let stakeholders define these themes. TCAPP could highlight the importance of linking these themes to evaluation criteria and performance measures.</p>

TCAPP Content	Partner Observations	Suggested Improvements
What is the rationale for how we handled information from the stakeholders? How has this been communicated to the stakeholders?	<ul style="list-style-type: none"> ▪ The wording of this question, specifically "rationale," makes me uncomfortable. ▪ This is an odd question. It seems redundant with the question: How were the public, private, and general stakeholder comments considered in the development of the purpose and need? 	Consider rewording question to read, "How was stakeholder input incorporated into the planning and decision-making process? How has this been communicated to stakeholders?" Its current iteration made the planners uncomfortable insofar as it seems like someone making excuses for why they disregarded stakeholder input.
What were the stakeholders' comments regarding the purpose and need?	<ul style="list-style-type: none"> ▪ This question seems redundant with a number of the other questions in this section. 	Eliminate question as it is redundant with Question 1.
ENV-4: Reach Consensus on Study Area		
Questions to Gather Stakeholder Interests		
Do you agree with the study area identified?	<ul style="list-style-type: none"> ▪ Our stakeholders are more interested in the scope of the project, not the study area. Focusing on scope is very important to people. 	Add a question about defining the project's scope and communicating that to stakeholders.
Is there anything missing from the study area? How should it be extended?	<ul style="list-style-type: none"> ▪ Again, people are more interested in adding things to the scope of projects, and less so the physical boundaries of a project. ▪ Scope often comes down to staff capacity and/or funding. Is this important to communicate to people? Does TCAPP offer anything about this? 	
What do we need to consider within the study area?	<ul style="list-style-type: none"> ▪ We would ask questions about how people travel in and through the project area. 	Ask how people travel in and through the project area to complement this question.
What resources within the outline study area do you value?	<ul style="list-style-type: none"> ▪ This would help us identify key destinations as well as significant community resources (per environmental justice engagement). ▪ We would want to know how people use these resources and how they get to them. 	Ask how people use and get to the significant community resources.
Questions to Incorporate Stakeholder Interests		
Is the information we received from stakeholders consistent with what we had? If it is inconsistent, how are we going to address these	<ul style="list-style-type: none"> ▪ It is important to us to understand if what we hear from the community conflicts with what we can/or are able to do. This would be based on funding, physical constraints, and other project constraints. 	

TCAPP Content	Partner Observations	Suggested Improvements
inconsistencies?		
<p>What is the rationale for how we handled information from the stakeholders? How has this been communicated to the stakeholders?</p>	<ul style="list-style-type: none"> ▪ Again, this makes me uncomfortable. It seems like someone making excuses for why they disregarded stakeholder input. 	<p>Consider rewording question to read, “How was stakeholder input incorporated into the planning and decision-making process? How has this been communicated to stakeholders?” Its current iteration made the planners uncomfortable insofar as it seems like someone making excuses for why they disregarded stakeholder input.</p>
ENV-5: Approve Evaluation Criteria, Methods and Measures		
Questions to Gather Stakeholder Interests		
<p>How does transportation impact your quality of life? How can this be improved?</p>	<ul style="list-style-type: none"> ▪ This question is way too broad. We find we need to give people specific things to prompt a reaction. We get specific with things like health or perceived safety, or we point to specific locations, such as intersections. ▪ I don't think this question would give you meaningful feedback. 	<p>Add more explicit themes, such as health, safety, or specific locations such as intersections, to the question. In its current iteration the question is too broad and will not elicit meaningful feedback.</p>
<p>How will we know if we have addressed or solved the transportation problems that have been identified?</p>	<ul style="list-style-type: none"> ▪ This is a great question. ▪ This question ties to performance measures. ▪ How do we ask the public to help us measure the outcome of the project? ▪ This will help establish what the problems are. ▪ This question is really about “the story.” 	<p>Enhance question by linking to the development of performance measures. This would help tell the story about the problems the project is solving.</p>
<p>What are the characteristics or qualities of the project that will demonstrate that it is consistent with community values and protects environmental quality?</p>	<ul style="list-style-type: none"> ▪ This is closely tied to the question above that prompted us about performance measures. ▪ I would want to expand this question and link to the themes we heard from the question: What are the economic and land-use-related problems and opportunities identified by stakeholders? ▪ We would want to prompt people based on the project vision or community values uncovered earlier in the process. 	
<p>What characteristics or qualities do you expect</p>	<ul style="list-style-type: none"> ▪ This isn't applicable to our project. 	

TCAPP Content	Partner Observations	Suggested Improvements
from a project developed by the private sector that is different from your usual expectations?		
Questions to Incorporate Stakeholder Interests		
How was private sector input sought to create the evaluation criteria and measures?	<ul style="list-style-type: none"> ▪ This and the next question should be combined. Use “public, private and general stakeholders” language, as used in ENV-3. 	Combine Questions 1 and 2 and expand to include stakeholders beyond the private sector. Consider rewording it to say, “How was public, private, and general stakeholder input sought to create the evaluation criteria and measures, and how has this been communicated to them?”
How were stakeholder interests used to create the evaluation criteria and measures?	<ul style="list-style-type: none"> ▪ Should add “and how has this been communicated to stakeholders?” 	
What are the characteristics or qualities of the project that demonstrate it advances regional and local economic development goals?	<ul style="list-style-type: none"> ▪ This is exactly the kind of thing that our elected leaders want to know. ▪ This is a great question. 	
What are the characteristics or qualities of the project that will demonstrate that it is consistent with community values and protects environmental quality?	<ul style="list-style-type: none"> ▪ This question can help us articulate how the project achieves the vision established earlier for the project. ▪ This question would help us craft an important story about the project. 	
What do the public stakeholders consider important for a P3 project?	<ul style="list-style-type: none"> ▪ I don't think this is applicable for our project. 	Spell out what is meant by P3.
ENV-6: Approve Full Range of Alternatives		
Questions to Gather Stakeholder Interests		
What are your ideas for solving the problem?	<ul style="list-style-type: none"> ▪ This is strange timing for this question. ▪ Why are we going back to square one? 	
What do you think about the proposed alternatives? Is there anything missing from these alternatives? What would you add?	<ul style="list-style-type: none"> ▪ We would ask these questions at design-related workshops. ▪ What do you mean by alternatives? There may be wiggle room within the design. 	
Questions to Incorporate Stakeholder Interests		
Are the alternatives	<ul style="list-style-type: none"> ▪ What does this have to do with 	Reconsider Question 1. It is unclear

TCAPP Content	Partner Observations	Suggested Improvements
feasible and rational?	stakeholder input? <ul style="list-style-type: none"> Are we supposed to ask ourselves this or the public? I'm unclear. 	how it relates to incorporating public input. One planner asked if this question is intended for staff or public consideration.
Did the stakeholders identify any missing alternatives? If so, how did we address that?	<ul style="list-style-type: none"> This is a good question. It's part of a consistency check that we should do internally. 	
What alternatives did the stakeholders suggest?	<ul style="list-style-type: none"> Does this mean something beyond just documenting comments received from stakeholders? 	
What input have we received from stakeholders about project implementation through a P3?	<ul style="list-style-type: none"> This seems both unclear and not applicable. 	
What is the rationale for how we handled information from the stakeholders? How has this been communicated to the stakeholders?	<ul style="list-style-type: none"> See comments earlier about "rationale." Keep the last part of the question. We need to reinforce giving feedback to people about how their input was used. 	Consider rewording question to read, "How was stakeholder input incorporated into the planning and decision-making process? How has this been communicated to stakeholders?" Its current iteration made the planners uncomfortable insofar as it seems like someone making excuses for why they disregarded stakeholder input.
What suggested alternatives are not included in our final list?	<ul style="list-style-type: none"> They should include why weren't alternatives included. This is important to communicate to people. 	Modify Question 6 to articulate why certain alternatives are not included within the full range of alternatives and how that decision was made. In its current iteration, the question merely prompts a list of alternatives no longer considered.
ENV-7: Approve Alternatives to be Carried Forward		
Questions to Gather Stakeholder Interests		
There are none.		Add "Do you support these alternatives? How can these alternatives be improved?"
Questions to Incorporate Stakeholder Interests		
There are none.		Add "Are there elements within the suggestions for improvement that can be added to the alternatives? How was stakeholder input

TCAPP Content	Partner Observations	Suggested Improvements
		incorporated into the planning and decision-making process? How has this been communicated to stakeholders?"

C. Suggested Improvements to ENV-6 Data Tab

The Data tab is a critical element of the Decision Guide key decisions. The pilot team met with partners to review the information provided in the Data table and compared it to information that partners would usually develop as part of a project development process. Table A.3 represents feedback and suggested improvements to the Data table. Perhaps most important, the Data table is currently focused on referencing other sections of the TCAPP website. Reorganizing data in the order of importance for each key decision point would make it easier to understand and more relevant.

Table A.3. Feedback and Suggested Improvements to the ENV-6 Data Tab

Supporting Data for the Key Decision			Suggested Improvements
From other phases of transportation decision making	Long-Range Planning	Information from the preferred plan scenario in the LRTP, including any scenarios that were eliminated	Consider calling the row “From other phases of the Decision Guide.” Yes, this section was helpful.
	Programming	No Specific Data	Consider adding “Title and description from the TIP/STIP.”
	Corridor Planning	Information on the range of solutions evaluated in the corridor planning process, including any solutions that were eliminated	Yes, this was helpful.
	Environmental Review	No Specific Data	Consider removing—redundant.
From other sectors and processes	Land Use and Smart Growth	Information about any land use alternatives that meet the purpose and need (all or in part) and supporting goals	Consider calling the row “From Applications involving Integrated Planning.” It is not clear where to find this information in the Land Use and Smart Growth Application.
		Smart growth impacts on travel demand, congestion, and conformity (as applicable)	

Supporting Data for the Key Decision			Suggested Improvements
	Air Quality Conformity	No Specific Data	This section should reference the air quality conformity required to amend the LRTP and STIP.
	Natural Environment and the IEF	Map of conservation, restoration, and enhancement priorities	This section is helpful. A quick list of data sources could be added.
	Capital Improvement	No Specific Data	
	Safety and Security	No Specific Data	This implies that safety and security are not important. Crash data are an important input for alternatives.
	Human Environment	No Specific Data	
	Economic Development	Information on the potential economic development impact of various strategies	
	Greenhouse Gas (GHG)	Federal and state requirements related to GHG reduction or any local GHG reduction targets that apply	
	Freight	No Specific Data	Reference freight policy designations and route restricted areas.
From the transportation technical process supporting this key decision	Analysis comparing the alternatives to the approved purpose and need		Priority of this entire section for ENV-6 can be helpful. Put this section first under the Data tab for ENV-6.
	Data to support the comparison of proposed alternatives to purpose and need		
	Any conceptual design completed		
	Description of each identified alternative		Finding: Emphasis on survey, geotechnical, hydrology, and right-of-way are the most important data points for description.
	Fatal flaws of any alternatives that were eliminated		
From stakeholder collaboration	Summary of public and stakeholder comments and justification for how feedback was addressed		
From public-private partnership	No Specific Data		This could be removed.

Note: LRTP = long-range transportation planning, (S)TIP = (state) transportation improvement program, IEF = Integrated Ecological Framework, GHG = greenhouse gas.

D. Suggested Improvements to ENV-7 Data Tab

The Data tab is a critical element of the Decision Guide key decisions. The pilot team met with partners to review the information provided in the Data table and compared it with information that partners would usually develop as part of a project development process. Table A.4 shows feedback and suggested improvements to the Data table for ENV-7. This Data tab could be more explicit to reference the criteria and measures developed in ENV-5: Approve Evaluation Criteria, Methods and Measures. Consider removing any data not explicitly part of the data developed in ENV-5.

Table A.4. Feedback and Suggested Improvements to ENV-7 Data Tab

Supporting Data for the Key Decision			Suggested Improvements
From other phases of transportation decision making	Long-Range Planning	Preferred scenario in the LRTP	Consider calling the row “From other phases of the Decision Guide.” Yes, this section was helpful.
	Programming	No Specific Data	Elements with No Data should be removed.
	Corridor Planning	Preferred solution set in corridor planning	
	Environmental Review	No Specific Data	Elements with No Data should be removed.
From other sectors and processes	Land Use and Smart Growth	Major conflicts between adopted land use plans, smart growth principles, and each alternative	Consider calling the row “From Applications involving Integrated Planning.” It is not clear where to find this information in the Land Use and Smart Growth Application. Consider removing this entire section.
	Air Quality Conformity	No Specific Data	Elements with No Data should be removed.
	Natural Environment and the IEF	No Specific Data	Elements with No Data should be removed.
	Capital Improvement	No Specific Data	Elements with No Data should be removed.
	Safety and Security	No Specific Data	Elements with No Data should be removed.
	Human Environment	No Specific Data	Elements with No Data should be removed.
	Economic Development	Major conflicts or fatal flaws between economic	This should be removed or reference measures developed in

Supporting Data for the Key Decision			Suggested Improvements
		development plans and any specific alternative	ENV-5.
	Greenhouse Gas	Data and tools necessary to support GHG analysis of alternatives	This should be removed or reference measures developed in ENV-5.
	Freight	Major conflicts or fatal flaws of any alternative with respect to freight	This should be removed or reference measures developed in ENV-5.
		Proposed implementation strategies, costs, perceived impacts, and benefits	This should be removed or reference measures developed in ENV-5.
From the transportation technical process supporting this key decision	Assessment of how each alternative addresses the purpose and need of the project		The purpose and need are helpful.
	Comparison of alternatives across the evaluation criteria, methodology, and performance measures		This should explicitly mention ENV-5.
	Justification for the elimination of any alternatives		This is helpful.
	Assessment of whether the alternatives are feasible and rational		This is helpful.
	Detailed information associated with individual alternatives		This is helpful.
	Study area data		This is helpful.
	Amount and relative degree of potential impacts of alternatives in relation to resource conservation priorities, consistent with the evaluation criteria, methods, and measures for ecological factors		This is helpful.
	Currently available public and private financial information		This is helpful.
	Fatal flaws of any alternatives that were eliminated		This is helpful.
	Data and analysis needed to compare operations strategies to traditional approaches in meeting purpose and need		This is helpful.
From stakeholder collaboration	Summary of feedback received from the stakeholders and justification for how that feedback was addressed		This is helpful.
From public-private partnership	No Specific Data		Consider removing.