
# Long Range Transportation Planning Process: Puget Sound TCAPP Pilot Test

**DETAILS**

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SHRP 2 Capacity Project C18B

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## Puget Sound TCAPP Pilot Test

SHRP 2
STRATEGIC HIGHWAY RESEARCH PROGRAM
Accelerating solutions for highway safety, renewal, reliability, and capacity

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SHRP 2 Capacity Project C18B

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## Puget Sound TCAPP Pilot Test

**Puget Sound Regional Council**

**TRANSPORTATION RESEARCH BOARD**
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www.TRB.org

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# Executive Summary

SHRP 2 designed the SHRP 2 C18 Pilot Test to demonstrate the utility of the "Transportation for Communities - Advancing Projects through Partnerships" (TCAPP) tool within the context of the Long-Range Transportation Planning Process.

The Puget Sound Regional Council (PSRC) designed its pilot test to demonstrate the utility of the TCAPP tool in facilitating consensus-building among PSRC stakeholders on key decisions during the development of this new process for updating how projects are evaluated in the long-range plan, and developing a new process to prioritize those investments. In particular, this project used the tools contained within Long-Range Planning Key Decision Point 3 (LRP-3) to facilitate enhanced collaboration among members of PSRC advisory and elected committees in policy making, establishing goals, values and performance measures, and implementation. Pilot testing the TCAPP framework presented an opportunity to broaden stakeholder involvement during this process.

As PSRC is a Metropolitan Planning Organization (MPO), the stakeholders engaged are diverse, and carry divergent views. It was only through a truly collaborative process that a consensus was reached amongst the varied perspectives, underscoring the desirability of a tool that enables collaborative decision making through a logical assessment process. As conceived in the TCAPP, whether federal, state, or local/regional, all government transportation agencies can benefit from a systematic tool that can be universally applied at each governmental level to gain consensus. Among the 384 MPOs across the nation, there are many unique issues and considerations related to technical and human infrastructure resources. These multiple layers of government and unique institutional arrangements present a monumental challenge for the development of a universal tool.

PSRC's experience in using the TCAPP tool suggests the following improvements to the tool:

1. To enhance the TCAPP tool's flexibility pertaining to the spectrum of local and regional jurisdictional roles across the nation, text should be added that recognizes the opportunity to adapt the tool to local and regional planning phases.
2. PSRC found during the development of the new long-range plan prioritization process that weighting was an important element. Setting weights has effects on the collaborative nature of the process. In terms of successful collaboration, PSRC learned the importance of developing technical tools that are understandable and transparent in terms of function. Based on feedback from stakeholders, the practitioner may need to adjust the approach in order to maintain the collaboration and ultimate success of the project.
3. To enhance the usefulness of TCAPP's Collaboration Assessment Tool, the website should allow for a user to save his/her work and later return to the website to complete the questionnaire as well as review any recommendations received based on

responses to the questionnaire. Further, users of the Assessment Tool should be allowed to modify the questions to fit their specific circumstances and save and/or download responses for analysis. In addition, the tool should recognize input from multiple subgroups within a planning process so that joint results can be tallied and shared electronically with all.

4. To improve the relevance and usefulness of the TCAPP tool, additional case studies that support LRP-3 should be provided. Consider linking this tool to the FHWA/FTA Planning Capacity Building Website at www.planning.dot.gov
5. To enhance TCAPP's applicability to a range of settings, and thus its value, consider providing guidance on how an advanced user may "drill down" to identify specific information that addresses their particular situation.

Additional recommendations can be found in the Technical Memo Part 1 in Appendix D.

## Report Overview

The SHRP 2 C18 Pilot Test was designed to demonstrate the utility of the "Transportation for Communities - Advancing Projects through Partnerships" (TCAPP) tool within the context of the Long-Range Transportation Planning Process.

The PSRC pilot test was designed to demonstrate the utility of the TCAPP tool in facilitating consensus-building among PSRC stakeholders on key decisions during the development of this updated project prioritization process. In particular, this project used the tools contained within Long-Range Planning Key Decision Point 3 (LRP-3) to facilitate enhanced collaboration among members of PSRC advisory and elected committees in policy making, establishing goals, values and performance measures, and implementation. Pilot testing the TCAPP framework presented an opportunity to broaden stakeholder involvement during this process.

This report is structured in two chapters: Chapter 1 explains the Transportation 2040 Prioritization Project, the focus of this pilot test. Chapter 2 describes how PSRC employed the TCAPP tool and provides highlights of the lessons learned from this process.

# CHAPTER 1
# Transportation 2040 Prioritization

Transportation 2040 (T2040), the Puget Sound region's long-range transportation plan, was adopted in May of 2010. The Transportation 2040 Plan included a commitment to revisit the process for prioritizing projects that are in the plan. The direction to revisit the prioritization process emerged as a stakeholder concern that projects included in the Transportation 2040 Plan did not best implement VISION 2040, the region's comprehensive growth, economic development, and transportation strategy.

## Transportation 2040 Prioritization - Background

In 2007 PSRC began work on a major update of *Destination 2030*, the region's long-range, multimodal transportation plan. Now called Transportation 2040, the updated plan was developed through a process designed to meet federal transportation planning requirements and state Growth Management Act (GMA) requirements, and to align with and implement VISION 2040 and the Regional Economic Strategy. PSRC's work in developing the plan mirrored the Key Decision Points outlined in the TCAPP framework, which are further discussed in Appendix A.

The first step in developing Transportation 2040 involved providing a significant amount of background information to external stakeholders, PSRC advisory committees, and elected boards. Information provided included growth trends, travel patterns, and modes, as well as economic development trends. Additionally, staff hosted numerous events to solicit feedback and input from the general public. The Transportation 2040 scoping process identified a range of key issues, including:

- **More People:** Accommodating approximately 1.5 million more people (including more seniors), a higher level of diversity, and more demand for special needs transportation.
- **Economic Growth:** Supporting economic growth, including nearly 1.2 million more jobs and growth in trade and freight movement.
- **Mobility Challenges:** Enhancing mobility in the face of travel demand anticipated to increase by nearly 40%. Without intervention, forecasts show large increases in delay, affecting all forms of person and freight travel.
- **Environmental Impacts:** Protecting air and water quality, and reducing greenhouse gas emissions from transportation.
- **Funding for Transportation:** Developing sustainable options for unstable transit funding and the gas tax, the primary source of transportation funding at local, state, and federal level, which is declining due to inflation and more fuel-efficient vehicles.

Based on an understanding of these and other pertinent issues, six plan alternatives were developed (including a baseline scenario) based on varying levels of roadway expansion, demand management and operations programs, and alternative transportation options such as transit expansion, and bicycle and pedestrian projects. Ultimately, the scenario that included a wide variety of transportation options and the lowest amount of greenhouse gasses was selected as the basis for the development of the preliminary preferred alternative. After a significant amount of collaboration with PSRC's policy boards, the final preferred alternative was developed along with the appropriate environmental documentation.

Transportation 2040 was adopted by PSRC's General Assembly in May 2010 with 98% of the weighted vote. While the plan was approved by such a large margin, some stakeholders were concerned about the plan content and approach. There were also concerns that local agency staff did not have sufficient time to brief their elected representatives before policy decisions were finalized. Based in part on these concerns, PSRC was directed, as a first step in the T2040 Implementation, to revisit the methodology for prioritizing projects and programs within the long-range plan.

## Transportation 2040 Prioritization - Stakeholder Involvement

A wide array of stakeholders were involved in the development of Transportation 2040, including the Regional Staff Committee, Transportation 2040 Working Group, Pricing Task Force, Transportation Policy Board, advisory committees, and the general public (see Figure 1.1). To promote ongoing involvement by the boards in the update process, specific board action was required at three key steps, called *concurrence points*:

**Scoping:** This action approved the general scope of the plan update, identified issues to be addressed, outlined a broad range of alternatives, and identified a range of criteria to be used in evaluating the alternatives, the list of impact categories, and the range of analysis to be done in the EIS. This concurrence point was approved by the Executive Board in March of 2008.

**Alternatives:** This action approved the alternatives to be evaluated in more detail in the planning process and in the Draft Environmental Impact Statement (DEIS). This concurrence point was approved by the Executive Board in January of 2009.

**Recommendation:** The third concurrence point was the proposed action. This action was the recommendation to the General Assembly for the adoption of the Transportation 2040 Plan.

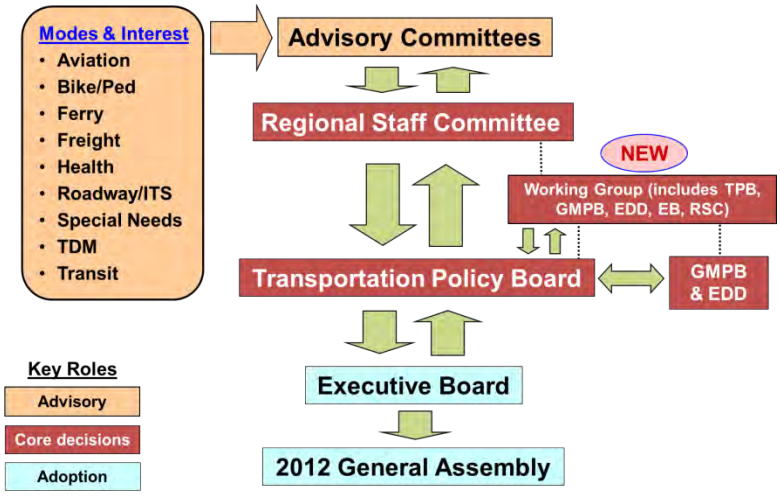


**Figure 1.1. Transportation 2040 stakeholder involvement.**

## Transportation 2040 Prioritization – Schedule

Considerable effort was undertaken to establish the general framework for the Transportation 2040 Prioritization Process. The schedule and work plan (Figure 1.2) adopted by the Transportation Policy Board in December 2010 was implemented with an inaugural meeting of the Transportation 2040 Prioritization Working Group in January 2011. The first few meetings focused on education and background materials, with the next set of meetings focusing on goal clarification and evaluation methods.

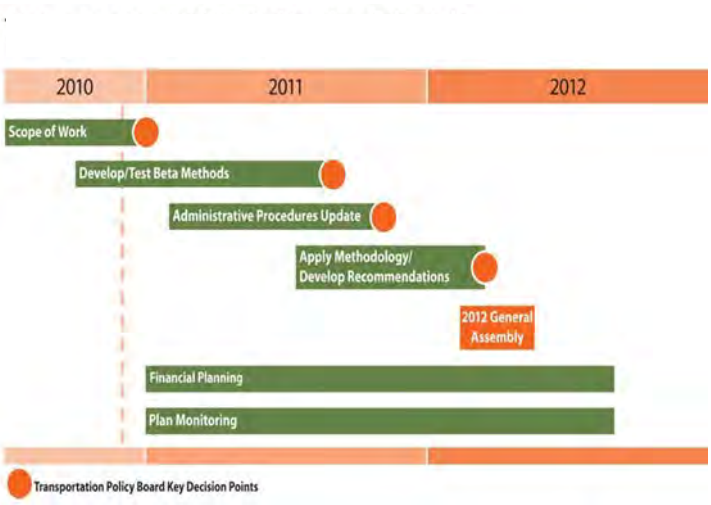


**Figure 1.2. Transportation 2040 prioritization schedule.**

## Stakeholders

In addition to the Prioritization Working Group, a large number of other further stakeholders—advisory committees and boards, were engaged with the prioritization process (illustrated in Figure 1.1). The main approach to stakeholder engagement included direct, regular interaction with the Regional Staff Committee and the Prioritization Working Group.[1] Topics related to the prioritization process were first brought to and vetted with the Regional Staff Committee. Once the Regional Staff Committee concluded their work on an issue, it was elevated for discussion with the Prioritization Working Group. And once the working group was prepared to make a recommendation on a particular topic or approach, the working group's recommendations were forwarded to the Transportation Policy Board and Executive for discussion.

## Evolving Approach

Both the approach to the prioritization process, as well as the analytical approach were nimble, and evolved considerably over the course of the project, particularly based on stakeholder engagement. The approach to the prioritization process has had three major iterations including:

1. A set of three screens
2. A set of procedures
3. Incorporation of prioritization into the plan update.

Likewise, the analytical approach evolved from a multi-criteria evaluation tool reliant on modeled information to a scorecard evaluation more heavily reliant on stakeholder inputs.

At the onset of the project, a three-step prioritization process was developed with a pre-screening of the programmatic or fully-funded projects, then a VISION 2040 screening, with a post-screening of the projects based on various technical elements (see Figure 1.3).

[1] The Regional Staff Committee (RSC) is comprised of 30 senior officials of PSRC's member jurisdictions, including the Washington State DOT. The Prioritization Working Group (PWG) serves as a subcommittee of the Transportation Policy Board and includes 38 members of the Growth Management Policy Board, the Economic Development District Board, the Executive Board, and liaisons from the Regional Staff Committee.

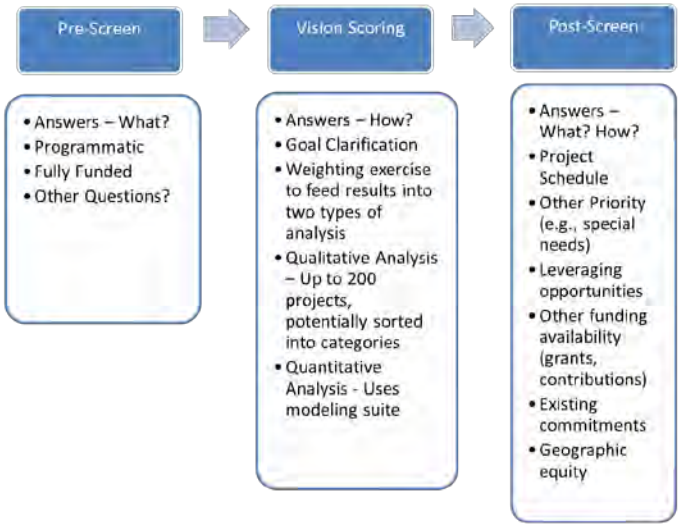


**Figure 1.3. Transportation 2040 prioritization approach.**

At this early stage, two major activities occurred: further scoping of the project, which raised new issues and approaches for how to consider those issues, as well as definition for the criteria to be used in the evaluation.

The initial set of criteria for prioritization was drafted based on the policy direction contained in VISION 2040. In addition to regular engagement with the Regional Staff Committee and the Prioritization Working Group, additional effort was made to engage with the Growth Management Policy Board and related interested parties. Based on these interactions, and guidance within VISION 2040 and Transportation 2040, a set of 17 criteria was established for use in the evaluation process. However, over the course of refining the prioritization process, feedback was offered suggesting that the number of criteria was too large to be meaningful, and that this large number of criteria added an unnecessary level of complexity (especially due to potential overlap between the criteria). Ultimately, after further refinement, the final set of criteria included nine measures intended to encapsulate the policy direction in VISION 2040 and operationalize the core concepts of VISION 2040 of the triple-bottom-line of People, Prosperity, and Planet (see Figure 1.4).

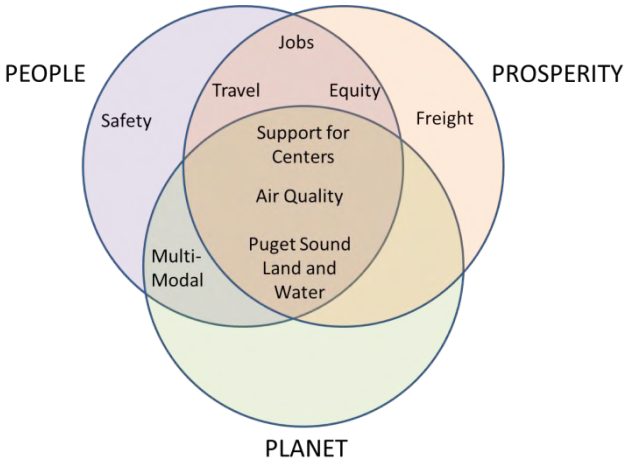


**Figure 1.4. Transportation 2040 prioritization criteria.**

Similarly, as the discussions related to the prioritization process unfolded, and issues and questions from various stakeholders were addressed, the process itself was improved and changed from the original three-screen approach to a set of procedures that would ultimately result in considerable information provided to decision makers in order have an informed discussion about project prioritization. This process included all of the elements initially addressed through the screening process, but was more refined and explicit about which actions would be taken and when. This approach, referred to as the Decision Guide (see Figure 1.5), was generally supported by the Regional Staff Committee and Prioritization Working Group, and was forwarded on for consideration by the higher boards.

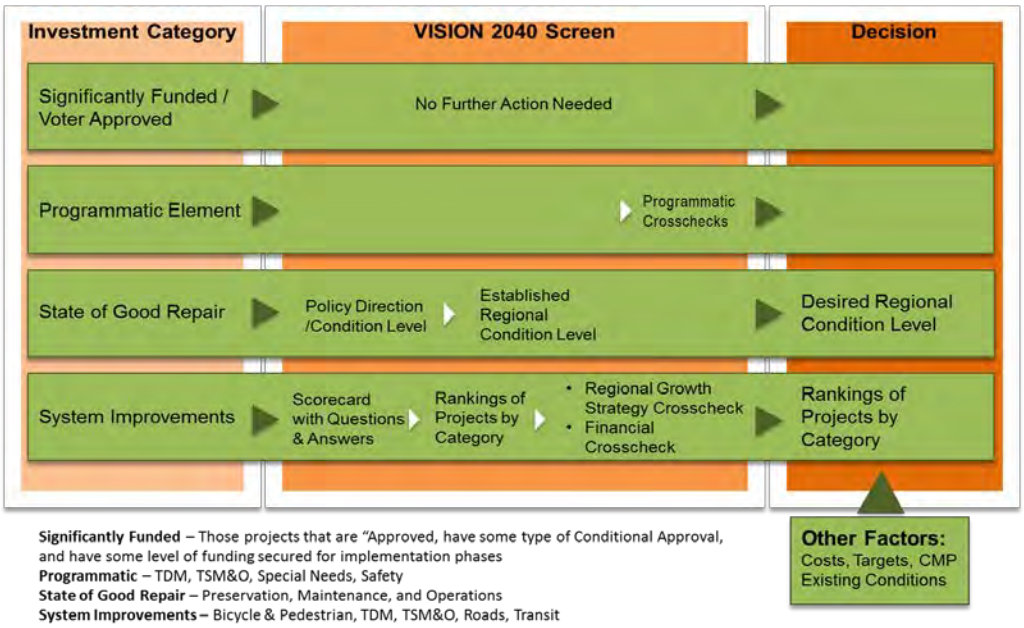


**Figure 1.5. Transportation 2040 prioritization Decision Guide.**

Despite the general support for the Decision Guide approach, multiple stakeholders felt that the purpose of the process required further clarification. At the direction of the Executive Board, it was decided that the prioritization process would become a part of the next long-range transportation plan update. In other words, the information produced through prioritization would inform the Transportation 2040 Plan update scheduled for adoption in 2014. This change in direction allowed for the process to be altered a final time. Under the final approach, the evaluation components of the prioritization process remain, but the various other processes, such as crosschecks, are removed, and instead become part of the plan update. In other words, the prioritization process has been simplified to be more digestible and comprehensible by the various stakeholders, especially the elected official that will have to act on the information provided.

## Analytical Approaches

At the onset of the prioritization process, a multiple criteria evaluation process was developed. This evaluation approach included utilizing the criteria for evaluation, and engaging with stakeholders by having them utilize survey tools (iPod Touch) to develop a set of weights that would show the importance of one criterion versus all others. Although this approach was elegant in its research design, it was universally felt that the approach was overly complicated and opaque in terms of a stakeholder's ability to understand how the results were derived. Indeed, one stakeholder referred to this approach as being similar to a root canal.

After considerable discussion with both the Regional Staff Committee and the Prioritization Working group, the approach was changed to a qualitative scorecard approach. Rather than attempting to combine quantitative and qualitative information into one score for any given project, the new scorecard approach produces the quantitative and qualitative information, but keeps them separate (see Figure 1.6). Specifically, quantitative information from the travel model and benefit-cost analysis tool is provided, and, at the same time, results from a qualitative assessment based on a set of questions and stakeholder engagement is also provided. In this way, no information is lost, but the display of information is simple, transparent, and approachable for stakeholders who prefer qualitative or quantitative analysis.

**TRANSPORTATION 2040 PRIORITIZATION - SCORECARD - HIGHWAY PROJECTS EXAMPLE**

| PROJECT | SUPPORT FOR CENTERS | JOBS | FREIGHT | TRAVEL | SAFETY | MULTI-MODAL | EQUITY | AIR QUALITY | PUGET SOUND | SCORE | COST | BENEFIT | NET BENEFIT | BC RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Project 1 | SB | SB | SB | SB | SB | N | SB | SB | N | 7 | $ 36 | $ 357 | $ 322 | 10.0 |
| Project 2 | SB | B | B | B | N | N | SB | SD | N | 7 | $ 503 | $ 2,474 | $ 1,971 | 4.9 |
| Project 3 | N | N | SB | SB | N | N | N | SB | N | 3 | $ 34 | $ 127 | $ 93 | 3.7 |
| Project 4 | SB | SB | N | N | SB | SD | N | N | N | 2 | $ 259 | $ 310 | $ 52 | 1.2 |

**Scoring symbols:** B = beneficial; SB = somewhat beneficial; N = neutral; SD = somewhat detrimental; D = detrimental

All dollar values are in millions and represent totals in present terms.

**Figure 1.6. Transportation 2040 prioritization Scorecard - Highway Projects.**

# CHAPTER 2
# TCAPP Pilot Test

PSRC designed this SHRP 2 C18 Pilot Test to demonstrate the efficacy of the TCAPP tool in facilitating development of consensus among PSRC stakeholders charged with making key decisions in the updated Transportation 2040 Prioritization Process. In particular, this project used the tools contained within Long-Range Planning Key Decision Point 3 (LRP-3) to facilitate enhanced collaboration with PSRC advisory and elected committees in the areas of policy making; establishing goals, values, and performance measures; and implementation. Pilot testing the TCAPP framework presented an opportunity to broaden stakeholder involvement during this process and provided PSRC with the appropriate tools to develop a consensus through increased collaboration and information sharing.

## Employing TCAPP in Transportation 2040 Update Process

In essence, PSRC's desire to apply TCAPP in the Transportation 2040 Update process stemmed from its interest in continually improving the regional transportation planning process to more effectively address regional needs and priorities. To do so, however, requires a strong and credible approach to building consensus among the region's diverse stakeholders and perspectives. PSRC saw TCAPP as a tool that could potentially support and facilitate this improvement.

To make the TCAPP application manageable and allow for evaluation of TCAPP within the time frame provided by SHRP 2, PSRC focused mainly on the LRP-3 element of TCAPP (Approve Evaluation Criteria, Methodology, and Performance Measures). Specifically, PSRC sought to apply the TCAPP tool to a critical sub-process of the Transportation 2040 Update: the update of project prioritization criteria. This is an important undertaking that affects both the overall Transportation 2040 strategic direction and the specific major investments (and investment types) selected for inclusion in the eventual adopted Transportation 2040 Update.

## Reflection on Stakeholder Engagement and the Stakeholder Collaborative Assessment Tool

Perhaps the most important and enduring achievement of the Transportation 2040 Prioritization Process was facilitating the stakeholders' understanding that the process did not have a predetermined approach, and that MPO staff was making an honest and transparent effort to engage with stakeholders, incorporate their feedback, and, if needed, change direction based on their input.

Because PSRC is the region's metropolitan planning organization, the stakeholders engaged are diverse, and thus bring an array of different perspectives to the regional transportation planning process. During the prior update of the long-range transportation plan, Transportation 2040, various stakeholders had publicly expressed concern about a perceived lack

of balance in various modal perspectives. These concerns underscored a desire by PSRC decision makers to ensure that the Transportation 2040 Update process would be perceived as being founded on a balance of perspectives and inputs, and accepted through consensus of the key stakeholders. Achieving such consensus would require a commitment to compromise and collaboration from the members of the Regional Staff Committee (RSC) and other key committees.

To help determine the potential for successfully pursuing this collaboration, PSRC employed the TCAPP Stakeholders Collaborative Assessment Tool as a means of gauging readiness to work through differences to achieve consensus and progress. PSRC staff administered the Assessment Tool to the RSC two times: at the beginning of the prioritization update process and after the process was completed. This approach allowed for a "before and after" assessment of the RSC's perceived ability to collaborate. It also provided important information to PSRC staff regarding issues and information gaps that staff could address to make future collaboration processes more effective.

A comparison of the results of the first assessment with the second assessment suggests that committee members' ability and willingness to collaborate increased during the course of the consensus-building process associated with this project. As shown in Appendix B, the "before" test revealed an overall predisposition to collaboration among the committee members, although for some of the collaboration factors the assessment put forth, fewer than two-thirds of the members agreed they were present. For example, only 58% agreed that they were able to clearly articulate key messages with decision makers. Similarly, only 50% agreed that they understood how decisions made would affect their special interests. Conversely, 89% of members agreed that they had a high level of individual commitment to the process and the outcomes of the decision-making process. Similarly 89% of members agreed that they are able to consistently participate in the process and represent their interests throughout the decision-making process.

As shown in Appendix C, the "after" collaboration assessment showed that members' understanding of the collaborative process and willingness to collaborate changed in certain ways from the baseline established by the "before" assessment. For example, the percent of members who agreed that "the input I provide has an influence on the decision made by formal decision-making partners" increased from 54% in the "before" test to 68% in the "after" test. Similarly, the percent who agreed that "I am able to clearly articulate key messages with decision makers" increased from 58% to 72%.

Overall, the collaboration assessment tool helped PSRC staff, as well as the RSC, achieve a greater understanding of the necessary underpinnings of an effective collaboration process. Further, the use of the tool helped to set a tone and atmosphere within which stakeholders felt comfortable in providing frank and useful input and feedback during the course of the prioritization process update. It was only through a truly collaborative process that a consensus was reached among the varied perspectives on the updated Transportation 2040 prioritization scheme. Ultimately, the success of this process will facilitate future transportation planning

processes in the Puget Sound region, particularly the development of long-range transportation plan (LRTP) updates. See Appendix B and Appendix C for Stakeholder Collaborative Assessment Tool Results.

## Observations on Application of TCAPP Tool to Metropolitan Planning Process

As discussed above, the PSRC employed elements of the TCAPP Tool, particularly the Collaboration Assessment and the LRP-3 guidance, in the T2040 Update prioritization revision process. Based on this experience, the research team offers the following observations and suggestions:

1. At Issue: Role Definitions under Decision Guide Basics - The MPO's role as defined in the four TCAPP planning phases are useful. However, there are a local set of corresponding technical and policy roles that play out continuously at the regional and local planning levels and thus deserve some acknowledgement in the TCAPP tool. During the TCAPP training session in Washington, DC in October, 2010, pilot test participants raised this issue. The TCAPP consultant stated that the TCAPP process could be adapted to different levels of planning.

   Suggestion: There is an opportunity to expand upon this set of roles to explain TCAPP philosophy at the local level as well as the higher federal decision level. In the case of the PSRC, an entity made up of 80 member organizations, each organization contributes as a decision-making body. It may be appropriate, therefore, to add text to the TCAPP tool that recognizes the opportunity to adapt the tool to local and regional planning phases.

2. At Issue: Collaborative Assessment Ease of Use - PSRC and Resource Systems Group (RSG) staff conducted an initial test of the Collaborative Assessment, completing both the "Practitioner" and "Stakeholder" questionnaires. In using the online tool, there were some ease of use issues related to saving and printing results. For example, if the user navigates away from the results, the website does not save them for later reference.

   Suggestion: Provide user with a way to track and save their progress. Ideally, a user would be able to save their work and log back into the website to complete the questionnaire as well as review the recommendations received based on responses to the questionnaire.

3. At Issue: Collaborative Assessment Applicability and Functionality - PSRC and RSG staff conducted an initial testing of the Collaborative Assessment, taking both the "Practitioner" and "Stakeholder" questionnaires. PSRC staff also had the PSRC Regional Staff Committee complete the Stakeholder questionnaire at a March 17, 2011 meeting. The questions in the Stakeholder instrument were relevant to this project. However, the Practitioner questions

were far more extensive and in some cases less relevant to this project. The online questionnaires also do not allow for online compilation, analysis, and assessment of group results; thus, the team was required to manually enter each RSC response, average those entries, and create a printed report on the resulting TCAPP advice. Again, as noted in #2 above, the team could not save the advice or electronically share it with others.

Suggestion: Provide user with a way to modify the questions and save their customized format. This way the practitioner can customize the tool to their needs. It is also important to be able to save and/or download the responses for analysis and reporting. In addition, the web tool should be further developed to recognize input from multiple users in a group so that the joint results can be tallied and shared electronically with all.

4. At Issue: Decision Guide LRP-3 Case Studies – At this time, the TCAPP website provides only one case study in support of LRP-3.

   Suggestion: Add additional case studies drawn from readily-accessible sources, such as the FHWA and FTA Transportation Planning Capacity Building website (www.planning.dot.gov) or the AASHTO Standing Committee on Planning (SCOP) website (www.statewideplanning.org). In addition, PSRC hosted a peer exchange in November 2010 to review MPO prioritization processes with three peer agencies. PSRC staff and elected officials attended and directly benefited from the experience of peers. This information has continued to be useful in the prioritization scoping and process development. The FHWA and FTA Transportation Planning Capacity Building Program sponsored this event, with support by Volpe Center staff. This and other case studies would be useful as references in the TCAPP website.

5. At Issue: Advanced Users and TCAPP – As currently structured, one would find it challenging to determine how best to use the TCAPP tool when trying to account for an MPO or DOT's unique characteristics related to experience, expertise and technical sophistication. For example, it is not obvious how to expeditiously identify key sub-elements of TCAPP with applicability to a user's unique situation (e.g. an MPO with significant technical capacity versus an MPO with only a few generalist staff). Without such a "screen" or "filter," a user might spend considerable time and effort trying to determine how best to use the TCAPP tool's many features or even decide to not use TCAPP because there is no apparent match to that user's specific level of expertise or sophistication.

   Suggestion: Provide additional guidance on the TCAPP homepage that clarifies the range of user situations for which the tool could be applied and how one can "disaggregate" or refine elements of TCAPP to be applicable to their situation.

# APPENDIX A
# TCAPP Long-Range Plan Key Decision Points

A description of how PSRC has implemented the long-range planning process in the recent past is summarized below within the framework of the TCAPP Decision Guide for the Long-Range Transportation Plan (LRP):

**LRP-1 = Approve Scope of Long-Range Transportation Plan**

- As the Transportation 2040 planning process began in 2007 a series of background presentations were made to the Transportation Policy Board and other stakeholders describing a wide variety of issues facing the region. Subjects included population and employment growth, land-use, VISION 2040, demographics, travel characteristics and markets, and comparisons to peer regions.
- The Transportation 2040 Background Report: Growth and Transportation in the Central Puget Sound Region was developed in March 2009, which provided stakeholders and decision makers with a comprehensive assessment of the existing transportation network and context in which the regional plan would be developed.
- Both of the efforts listed above began to identify some of the transportation deficiencies (LRP-4) that would be addressed in Transportation 2040.
- The Scoping Report summarizes over 1,000 public comments and concludes that the alternatives must consider three key concerns: congestion and mobility, impact on the environment (specifically climate change and water quality in Puget Sound), and how to collect and sustain transportation funding.
- Scoping Report approval and concurrence on the scope direction of the plan update was issued by the Transportation Policy Board on March 13, 2008 and by PSRC's Executive Board on March 27, 2008.

**LRP-2 = Approve Vision and Goals**

- The scoping process identified an overall goal of sustainability in the three key areas of congestion and mobility, environmental impacts (specifically climate change and water quality in Puget Sound), and transportation funding.
- Vision and goals were adopted in Vision 2040 that provided the foundation for the Transportation 2040 process. These were not formally approved or adopted by PSRC boards, however all committees and boards were briefed on the applicable transportation guidance in Vision 2040 and findings of the scoping process and primary focus of Transportation 2040 throughout the plan's development, particularly in the early stages. No concerns or dissenting opinions were raised in regards to the goals and/or vision for Transportation 2040.

**LRP-3 = Approve Evaluation Criteria, Methodology, and Performance Measures**

- Issues identified through LRP-1 and LRP-2 helped inform decisions on what criteria and performance measures would be used to evaluate draft plan scenarios.
- A combination of qualitative and quantitative analyses were used in the DEIS and FEIS (Final Environmental Impact Statement) to describe how each scenario would impact the region. Qualitative evaluation was primarily related to discussing each scenario's relationship to policies outlined in VISION 2040 whereas quantitative analysis included a more detailed look at impacts on land-use, transportation facilities, congestion, mobility, and the environment. The latter was framed by the capabilities of PSRC's suite of analysis tools including the regional travel demand model, UrbanSim, and newly developed benefit/cost software.
- PSRC's advisory committees, including the Pricing Taskforce and Transportation 2040 Working Group, as well as the Transportation Policy Board and Executive Board were involved in the development of evaluation criteria, methodology, and performance measures used to analyze Transportation 2040. However, these elements were not formally approved.

**LRP-4 = Approve Transportation Deficiencies**

- LRP-1 and LRP-2 broadly identified major issues that the regional transportation plan focused on. Many of these larger issues were incorporated in Transportation 2040 through the development of broad strategies comprised of multiple elements. For example, the congestion reduction strategy included four integrated elements of land-use, managing system demand, better management of system operations, and strategic capacity. Each element is comprised of programs and projects included in the plan.
- PSRC used existing projects and programs (Destination 2030) and relied on the stakeholders to submit programs and projects for inclusion in the plan that fit within broad strategies described above and addressed specific transportation deficiencies identified through local processes.
- Transportation deficiencies were not formally approved by either the Transportation Policy Board or Executive Board.

**LRP-5 = Approve Financial Assumptions**

- The T2040 Financial Plan is built through a variety of financial assumptions including historical information and the region's economic forecast. Additional details can be found here: www.psrc.org/assets/4856/Chapter_4._A_Sustaniable_Financial_Framework.pdf
- A major element of the Transportation 2040 Financial Plan is tolling. Revenues that could be expected from broad tolling programs were estimated using a tolling optimization model that in turn served as an input into the travel demand model. This

allowed PSRC to estimate both revenues and transportation and environmental impacts of implementing varying degrees of regional tolling.

- Expenditures in Transportation 2040 are a composite of programmatic estimates developed through various means at PSRC and cost information associated with individual projects that were submitted by project sponsors.
- PSRC's Pricing Taskforce and Transportation 2040 Working Group were heavily involved in the development of the financial assumptions for Transportation 2040, particularly in the area of tolling. Financial assumptions were not individually approved by the policy board but they were explained in detail to the boards. The financial plan was adopted by the Executive Board and was incorporated into part of the Transportation 2040 Plan update.

**LRP-6 = Approve Strategies**

- The Transportation 2040 baseline was based on the maintenance of existing transportation assets, services, and programs; existing planned improvements with identified funding; and projects and programs included in "current law" revenue packages such as Sound Transit 2.
- Five preliminary (action) alternatives were developed that emphasized different approaches to addressing transportation challenges facing the region (identified in LRP-1, LRP-2, and LRP-4). While each scenario emphasized a particular strategy, they each included varying mixes of all strategy types, such as system and demand management, tolling, and highway and transit capacity expansion.
- PSRC's advisory committees, Pricing Taskforce, and Transportation 2040 Working Group were the most heavily involved in crafting the five preliminary alternatives. However, there was no formal approval for individual strategies. Plan scenarios were approved in LRP-7: Approve Plan Scenarios.

**LRP-7 = Approve Plan Scenarios**

- On January 8, 2009, PSRC's Transportation Policy Board concurred with the recommendation to endorse the baseline and five preliminary action alternatives as representing a reasonable range of future transportation investment options that should be moved forward for more detailed analysis in the planning process and a DEIS.
- On January 22, 2009 PSRC's Executive Board endorsed the same baseline and five action preliminary alternatives and authorized staff to prepare a DEIS.
- Over the course of 2009 each alternative was evaluated using the endorsed criteria, methodology, and performance measures in the Draft Environmental Impact Statement.

**LRP-8 = Adopt Preferred Plan Scenario**

- The Transportation 2040 preferred alternative was endorsed by PSRC's Executive Board on December 9, 2009.
- A minority group of decision makers raised concerns that the preferred alternative did not meet recently mandated state greenhouse gas emissions or vehicle miles traveled per capita goals.
- Evaluation of the preferred alternative using the documented criteria, methodology, and performance measures is contained in the FEIS, which also includes over 2,000 comments and responses submitted through the DEIS process.

**LRP-9 = Adopt Finding of Conformity by MPO**

- The transportation conformity analysis was performed in compliance with all applicable Federal and State requirements as well as PSRC's adopted Public Participation Plan.
- The conformity finding was adopted by PSRC's General Assembly on May 20, 2010, along with the long-range transportation plan, Transportation 2040.

**LRP-10 = Adopt LRTP by MPO**

- Transportation 2040 was adopted by PSRC's General Assembly on May 20, 2010, with nearly 98% of the weighted vote.

**LRP-11 = Approve Conformity Analysis (Federal Conformity Determination)**

- PSRC received the final approval of Transportation 2040's Air Quality Conformity Analysis from federal resource agencies on June 16, 2010.

# APPENDIX B
# Stakeholder Collaborative Assessment Tool Before Results – March 17, 2011

| Stakeholder Communication | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | N/A |
|---|---|---|---|---|---|---|
| I am able to clearly articulate key messages with decision makers. | | 4 = 21% | 4 = 21% | 6 = 32% | 5 = 26% | |
| I am able to communicate the appropriate message at the appropriate times and to the appropriate people. | | 2 = 10% | 5 = 25% | 11 = 55% | 2 = 10% | |
| I understand the process required to communicate my message. | | 3 = 15% | 1 = 5% | 11 = 55% | 5 = 25% | |
| I have ample opportunity to make my voice heard. | | | 7 = 35% | 8 = 40% | 5 = 25% | |
| The input I provide has an influence on the decisions made by formal decision-making partners. | | 2 = 11% | 4 = 21% | 10 = 52% | 3 = 16% | |

| Stakeholder Understanding | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | N/A |
|---|---|---|---|---|---|---|
| I understand the decision-making process, the proposed plans, and the purpose of the plans. | | 1 = 5% | 3 = 16% | 13 = 68% | 2 = 11% | |
| I have access to the information I need to make informed choices. | | 3 = 16% | 4 = 21% | 11 = 58% | 1 = 5% | |
| I understand the process I can use to influence the decision-making process. | | 3 = 16% | 4 = 21% | 11 = 58% | 1 = 5% | |
| I understand my role in the decision-making process. | | 2 = 10% | 5 = 25% | 9 = 45% | 4 = 20% | |
| I understand the roles of others (other stakeholders, decision makers) in the decision-making process. | | 3 = 15% | 4 = 20% | 12 = 60% | 1 = 5% | |
| I receive feedback on the decision-making team's status and decisions made. | | 2 = 10% | 7 = 35% | 10 = 50% | 1 = 5% | |
| I understand how the decisions made will affect my special interest. | 1 = 5% | 3 = 15% | 6 = 30% | 9 = 45% | 1 = 5% | |

| Stakeholder Commitment | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | N/A |
|---|---|---|---|---|---|---|
| I have a high level of individual commitment to the process and the outcomes of the decision-making process. | | 1 = 5% | 3 = 15% | 6 = 30% | 10 = 50% | |
| I am able to consistently participate in the process and represent my interest throughout the decision-making process. | | | 2 = 11% | 13 = 68% | 4 = 21% | |
| There is a formal group available to support my needs during the decision-making process. | | 1 = 5% | 5 = 26% | 10 = 53% | 3 = 16% | |
| I have been able to engage with others of similar interest throughout the process. | | 3 = 16% | 2 = 11% | 11 = 57% | 3 = 16% | |
| I am able to identify, recognize and accept interests of others and work from common interests. | | | 2 = 11% | 14 = 73% | 3 = 16% | |

# APPENDIX C
# Stakeholder Collaborative Assessment Tool After Results – February 9, 2012

| Stakeholder Communication | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | N/A |
|---|---|---|---|---|---|---|
| I am able to clearly articulate key messages with decision makers. | | 1=9% | 2=18% | 6=55% | 2=18% | |
| I am able to communicate the appropriate messages at the appropriate times and to the appropriate people. | 1=9% | 1=9% | 2=18% | 5=46% | 2=18% | |
| I understand the process required to communicate my message. | | 1=9% | 1=9% | 6=55% | 3=27% | |
| I have ample opportunity to make my voice heard. | | 1=10% | 1=10% | 4=40% | 4=40% | |
| The input I provide has an influence on the decisions made by formal decision-making partners. | | 1=9% | 4=37% | 3=27% | 3=27% | |

| Stakeholder Understanding | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | N/A |
|---|---|---|---|---|---|---|
| I understand the decision-making process, the proposed plans, and the purpose of the plans. | | | 1=9% | 8=73% | 2=18% | |
| I have access to the information I need to make informed choices. | | 1=9% | 1=9% | 6=55% | 3=27% | |
| I understand the process I can use to influence the decision-making process. | | 1=9% | 2=18% | 8=73% | | |
| I understand my role in the decision-making process. | | | 2=18% | 4=36% | 5=46% | |
| I understand the roles of others (other stakeholders, decision makers) in the decision-making process. | | 3=27% | | 6=55% | 2=18% | |
| I receive feedback on the decision-making team's status and decisions made. | | | 1=9% | 7=64% | 3=27% | |
| I understand how the decisions made will affect my special interest. | | 1=9% | | 6=55% | 4=36% | |

| Stakeholder Commitment | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | N/A |
|---|---|---|---|---|---|---|
| I have a high level of individual commitment to the process and the outcomes of the decision-making process. | | 1=9% | | 4=36% | 6=55% | |
| I am able to consistently participate in the process and represent my interest throughout the decision-making process. | | 1=9% | | 4=36% | 6=55% | |
| There is a formal group available to support my needs during the decision-making process. | | 2=18% | 3=27% | 2=18% | 4=37% | |
| I have been able to engage with others of similar interest throughout the process. | | 1=9% | 2=18% | 3=27% | 5=46% | |
| I am able to identify, recognize, and accept interests of others and work from common interests. | | 1=9% | | 5=45.5% | 5=45.5% | |

# APPENDIX D
# Technical Memo – Part 1

Project C18B
TCAPP Technical Memo – Part 1
February/March 2011

This Technical Memorandum will serve as an ongoing assessment of the TCAPP framework. PSRC and Resource Systems Group (RSG) acknowledge that the TCAPP framework is designed to advance the philosophy that credible and enduring transportation investment decisions must be derived from a process the includes the "right" stakeholders and engages them in a transparent, collaborative manner.

This SHRP 2 C18 Pilot Test focuses specifically on applying the TCAPP framework to a PSRC long-range transportation plan, Transportation 2040 Prioritization Process development. Adopted in May 2010, T2040 includes a commitment, as a first step in implementation, to revisit how transportation investments are "prioritized."

This Technical Memo offers observations regarding the applicability, ease of use and functionality of the TCAPP framework from the perspective of metropolitan transportation planning.

1. At issue: Role Definitions under Decision Guide Basics - The MPO's role as defined in the four TCAPP planning phases are useful. However, there are a local set of corresponding technical and policy roles that play out continuously at the regional and local planning levels and thus deserve some acknowledgement in the TCAPP tool. During the TCAPP training session in Washington, DC, in October, 2010, this issue was raised and the ICF staff response was that it is okay to adapt the process to different levels of planning.

   Suggestion: There is an opportunity to expand upon this set of roles to explain TCAPP philosophy at the local level as well as the higher federal decision level. In the case of the PSRC, an entity made up of 80 member organizations, each organization contributes as a decision-making body. It may be appropriate, therefore, to add text to the TCAPP tool that recognizes the opportunity to adapt the tool to local and regional planning phases.

2. At issue: Collaborative Assessment Ease of Use - PSRC and RSG staff conducted an initial test of the Collaborative Assessment, completing both the "Practitioner" and

"Stakeholder" questionnaires. In using the online tool, there were some ease of use issues related to saving and printing results. For example, if the user navigates away from the results, the website does not save them for later reference.

Suggestion: Provide user with a way to track and save their progress. Ideally, a user would be able to save their work and log back into the website to complete the questionnaire as well as review the recommendations received based on responses to the questionnaire.

3. At issue: Collaborative Assessment Applicability and Functionality - PSRC and RSG staff conducted an initial testing of the Collaborative Assessment, taking both the "Practitioner" and "Stakeholder" questionnaires. PSRC staff also had the PSRC Regional Staff Committee complete the Stakeholder questionnaire at its March 17th meeting. The attached matrix provides the results of their interaction with the assessment tool. The research team found that the questions listed in the Stakeholder instrument were relevant to the team project. However, the practitioner questions were far more extensive and in some cases less relevant to the team's project work. The online questionnaires also do not allow for online compilation, analysis, and assessment of group results; thus, the research team was required to manually enter each RSC response, average those entries, and create a printed report on the resulting TCAPP advice. Again, as noted in #2 above, the research team could not save the advice or electronically share it with others.

   Suggestion: Provide user with a way to modify the questions and save their customized format. This way the practitioner can customize the tool to their needs. It is also important to be able to save and/or download the responses for analysis and reporting. In addition, the web tool should be further developed to recognize input from multiple users in a group so that the joint results can be tallied and shared electronically with all.

4. At issue: Decision Guide LRP-3 Case Studies – At this time, the TCAPP website provides only one case study in support of LRP-3.

   Suggestion: Add additional case studies drawn from readily-accessible sources, such as the FHWA and FTA Planning Capacity Building website (www.planning.dot.gov). In addition, PSRC hosted a peer exchange in November, 2010, to review MPO prioritization processes with three peer agencies (available on the FTA Planning Capacity Building website). PSRC staff and elected officials attended and directly benefited from the experience of the peer exchange. This information has continued to be useful in the prioritization scoping and process development. This peer review was sponsored by the FHWA and FTA Capacity Building Program and supported by staff from the Volpe Center. This and other case studies would be useful as references in the TCAPP website.