

Case Study:

Applying INVEST to Corridor Studies and the SR 520 Bridge Project Washington State

Lead Agency: Washington State Department of Transportation

INVEST Modules: System Planning and Project Development

Link: <http://www.wsdot.wa.gov/SustainableTransportation/>

The Washington State Department of Transportation (WSDOT) used the INVEST System Planning (SP) module to score three corridor planning studies and the INVEST Project Development (PD) module to evaluate the SR 520 Bridge Replacement and HOV Program. WSDOT is committed to sustainability, as evidenced by the WSDOT Secretary of Transportation's executive order for [Moving Washington](#) and WSDOT's strategic plan, *Results WSDOT*. The INVEST process helped WSDOT assess how the agency is doing with respect to sustainability and where it could improve.

SP Module: Corridor Planning Studies

WSDOT selected three recently completed corridor studies in the Seattle/Tacoma metropolitan area for evaluation:

- SR 516 — SR 167 in Kent to SR 169 in Maple Valley
- SR 520 Multi-modal Corridor Planning Study
- US 2 Everett Port / Naval Station to SR 9

These studies represented a variety of contexts, including the type of highway and surrounding land use, different commute patterns and availability of transit, and varying scope, schedule, budget, and stakeholder participation levels.

Throughout the INVEST process, the study team emphasized that INVEST scores were less important than the identification of recommendations to improve WSDOT's sustainability practices, encouraging an honest assessment. Some of the INVEST criteria were not relevant to corridor studies, yielding lower scores. The three studies scored as follows: SR 516 – 60 points, SR 520 – 76 points (Bronze level), US 2 – 68 points.

Through the INVEST evaluation, WSDOT staff developed substantive recommendations for making corridor planning at the agency more sustainable, including:

- **Broader Outreach.** Based on context and budget, WSDOT should engage broader internal and external interests in corridor planning.
- **Stronger Connections to Other Plans.** Corridor plans should reference and integrate a broader set of internal and external plans.
- **Stronger Connections to Other Processes.** WSDOT should strengthen connections between corridor planning, programming, scoping, environmental review, and design.
- **Sustainability Goals.** Corridor plans should include goals and objectives that are quantifiable where appropriate, support sustainability principles, and harmonize the vision and goals of the community and WSDOT.
- **Data and Performance Measurement.** Corridor planners should consider a wider range of data to develop and evaluate planning recommendations.

“Integrating INVEST into WSDOT’s updated planning guidelines will help planners view their work through a sustainability lens built upon a well-developed and nationally vetted framework.” - WSDOT

- **Analysis.** WSDOT may need additional analytical tools to help planners evaluate tradeoffs between diverse goals.
- **Strategy Development.** Corridor plans should document how sustainability goals, objectives, and data informed the analysis, the identification of potential strategies, and the selection of final planning recommendations.
- **Planning Recommendations.** WSDOT should develop guidelines for prioritizing which strategies are better when, where, and for what purpose.

The INVEST SP module is primarily geared towards evaluating long range transportation plans. WSDOT demonstrated how the INVEST SP module could be applied to corridor studies and provided helpful feedback on how the next version of the tool could be adapted to better suit this purpose. This feedback complements that provided by other agencies, which evaluated corridor studies using the INVEST PD module, including in Cape Cod, MA and Springfield, IL.

Locations of the three corridor planning studies



PD Module: Bridge and HOV Project

SR 520 stretches from Seattle to Redmond, crossing over Lake Washington via a floating bridge. Using the INVEST PD module, WSDOT evaluated the unfunded project elements of the SR 520 Bridge Replacement and HOV program – that is the 1 ½ mile approach to the bridge on the west side of Lake Washington.

The project scored 55 points in the PD module, to achieve the Silver level. It scored an additional 13 points on the SP criterion, *SP-7: Multimodal Transportation and Public Health*, which WSDOT used due to a particular interest in exploring a public health perspective.

Key Outcomes of Using INVEST:

- Integration of the INVEST planning recommendations into WSDOT’s updated Practical Planning Guidelines. WSDOT planners statewide use these guidelines to develop corridor planning studies. As such, the sustainability improvements identified through the INVEST evaluation will have a positive impact on all future corridor studies.
- Inclusion of INVEST results into a research project to integrate demand management strategies into WSDOT planning and programming. This research will result in performance measures and guidelines that support the implementation of INVEST *SP-01 Integrated Planning: Land Use and Economic Development*, *SP-07 Multimodal Transportation and Public Health*, and *SP-09 Travel Demand Management*.
- An action Plan with timelines for integrating sustainability improvements into WSDOT’s corridor planning process.
- Potential to support WSDOT’s effort to explore options for incorporating a public health perspective into transportation decision-making.
- Feedback to FHWA on specific improvements to the INVEST tool, including adapting it to better score corridor planning studies, providing more flexibility and context sensitivity in the PD module, and recommending that the best time to use the PD module is during the environmental/early design phase.