Evaluate, Score, Improve
INVEST and Sustainable Transportation at WSDOT

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Secretary of Transportation

Evaluate, Score Improve
Webinar
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Introduction

• How did WSDOT use INVEST?

• What were the results of the INVEST evaluation?

• How does INVEST connect to WSDOT’s current work?

“WSDOT proposes to use INVEST to perform an evaluation of several recently completed corridor studies and a project development process. These evaluations will help us:
• Determine current performance.
• Identify programmatic barriers to sustainability.
• Develop recommendations for future planning and project development efforts.
• Apply recommendations to one or more current planning processes or projects.
• Support collaboration with external partners to further sustainability in the transportation system.

WSDOT’s goal is to build internal capacity with INVEST to improve integration of sustainability into our agency business practices, with a focus on demand management and public health.”

From WSDOT’s Letter of Interest to FHWA, February 15, 2013
How did WSDOT use INVEST?
WSDOT evaluated three recent corridor studies:
How did WSDOT use INVEST?
WSDOT supported a six month evaluation process:
How did WSDOT use INVEST?
WSDOT staff led the evaluation:

**Resources**: Provide subject matter expertise to the scoring leads.

**Scoring Leads**: Compile scoring documentation based on the plan and input from Resources.

**Project Leads**: Plan, coordinate, communicate, and report.

**Sustainable Transportation Leadership Team**: Direct and review.
How did WSDOT use INVEST?

WSDOT invested time preparing for the scoring workshop:

**Hazard Identification (2 points)**
Scoring for this requirement is based on the following, cumulative elements. The first element must be accomplished to earn the second.

1 point. The agency has conducted a GIS-based system-level assessment of potential hazards such as seismic events, relative sea level rise, storm activity/intensity, temperature and heat waves, precipitation events, lake levels, stream flow, etc.

1 additional point. The agency has identified locations potentially vulnerable and/or at risk as a result of current and future hazards, and includes a discussion of the potential implications on the transportation system in the LRTP, or other appropriate transportation planning document.

**US 2:**
- Includes the following geographic data and maps of potentially vulnerable areas and roadways: seismic hazard risk, climate change vulnerability (addresses sea level rise, precipitation change, temperature change, and fire risk), liquefaction hazard, floodplains, and point sources of hazardous materials contamination (p. 77-88).
- In the “Environmental Resources Overview” section, discusses specific impacts to state roadways in the study area and potential travel disruptions that may result from climate change (p 85).
- The descriptive text related to other risks simply restates the information in the maps (p 77-88).
- The appendix includes a qualitative evaluation of whether the recommended projects affect greenhouse gas emissions (p. 139).

Recommended Score: 2 Points.
How did WSDOT use INVEST?

WSDOT’s scoring workshop participants agreed on each score:

**SP-16 Infrastructure Resiliency**

**Goal:** Anticipate, assess, and plan to respond to vulnerabilities and risks associated with current and future hazards (including those associated with climate change) to ensure multimodal transportation system reliability and resiliency.

<table>
<thead>
<tr>
<th>SP - 16 Infrastructure Resiliency</th>
<th>US</th>
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<tbody>
<tr>
<td><strong>2 Pts - Hazard Identification</strong></td>
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<td>1</td>
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<tr>
<td>1 Pt - Conducts GIS-based system level assessment of potential hazards</td>
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<td>1 Pt - Identifies locations at risk and discusses implications to the transportation system</td>
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<tr>
<td><strong>4 Pts - Vulnerability Assessment</strong></td>
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<tr>
<td>2 Pts - Conducts a vulnerability assessment &amp; considered hazard consequences for some facilities. OR</td>
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<tr>
<td>4 Pts - Conducts a vulnerability assessment and considered hazard consequences for all facilities</td>
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<td><strong>4 Pts - Risk Assessment</strong></td>
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<td>2 Pts - Conducts a risk assessment for some facilities. OR</td>
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<tr>
<td>4 Pts - Conducts a risk assessment for all facilities</td>
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<td><strong>5 Pts - Develop and Implement Adaptation Strategies</strong></td>
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<td>2 Pts - Develops but has not yet implemented adaptation strategies. OR</td>
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<td>5 Pts - Develops and implements adaptation strategies.</td>
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<td>TOTAL (Out of 15)</td>
<td>6</td>
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**Planning Suggestions:** Address additional hazards. Better integrate hazard risk data in development of recommendations. Consult local hazard assessments. Reference or include adaptation strategies.

**Invest Suggestions:** Allow for non-GIS based analysis. Allow points for qualitative risk assessments and adoption of policies for project level assessments. Future tense for future assessments. Modifying documents after uploading to INVEST site.
What were the results of the INVEST evaluation?

WSDOT produced a final report:

The final report documented our process, described our findings, and summarized our recommendations, including:

- Suggestions for improving INVEST.
- Recommendations for making WSDOT’s corridor planning more sustainable.

The report can be found at:

www.wsdot.wa.gov/planning/community
How does INVEST connect to WSDOT’s current work?

Results WSDOT: Our Strategic Plan

Goal 1. Strategic Investments: Effectively manage system assets and multimodal investments on corridors to enhance economic vitality.

Goal 2. Modal Integration: Optimize existing system capacity through better interconnectivity of all transportation modes.

Goal 3. Environmental Stewardship: Promote sustainable practices to reduce greenhouse gas emissions and protect natural habitat and water quality.

Goal 4. Organizational Strength: Support a culture of multidisciplinary teams, innovation and people development through training, continuous improvement and Lean efforts.

Goal 5. Community Engagement: Strengthen partnerships to increase credibility, drive priorities and inform decision making.

Goal 6. Smart Technology: Improve information system efficiency to users and enhance service delivery by expanding the use of technology.

WSDOT’s Vision

The Washington State Department of Transportation’s vision is to be the best in providing a sustainable and integrated multimodal transportation system.

WSDOT’s Mission

The Washington State Department of Transportation provides and supports safe, reliable and cost-effective transportation options to improve livable communities and economic vitality for people and businesses.
## How does INVEST connect to WSDOT’s current work?

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<th>INVEST Recommendation</th>
<th>Current WSDOT Work</th>
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| **Broader Outreach.** Based on context and budget, WSDOT should engage broader internal and external interests in corridor planning. | **Community Engagement:**  
- Conducted a self-assessment.  
- Developed guiding principles.  
- Developing tools and resources.  
**Enhanced Collaboration**  
- Engaging in local planning efforts.  
- Developing technical assistance resources. |
| **Stronger Connections to Other Processes.** WSDOT should strengthen connections between corridor planning, programming, scoping, environmental review, and design. | **Practical Solutions:**  
- Mapping our processes from planning through implementation.  
- Working on process improvements and design manual changes.  
- Working in multidisciplinary teams.  
- Developing guidelines for integrating demand management into planning and programming |
How does INVEST connect to WSDOT’s current work?

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<th>Current WSDOT Actions</th>
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| **Data and Performance Measurement.** Corridor planners should consider a wider range of data to develop and evaluate planning recommendations | **Corridor Planning:**  
• Developed Safety Guidance  
• Provided Climate Vulnerability Assessment Training  
• Provided Wildlife Habitat Connectivity Training |
| **Analysis.** WSDOT may need additional analytical tools to help planners evaluate tradeoffs between diverse goals. | **Practical Design:**  
• Developing a context classification system to support design manual changes.  
**Statewide Models:**  
• Developing a multimodal forecasting model.  
• Developing an economic impact analysis model. |
Questions?

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