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# Regional Financing for Transportation Projects in King, Pierce and Snohomish Counties

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## ***Independent Cost Review*** By U.S. COST

**TASK ADMINISTERED BY:  
Washington State Department of  
Transportation**

# Essential, critical transportation investments



- Three-county effort to complete road, transit, possibly light rail links in transportation network
- Funding package of local taxes & fees
- All tax dollars to be spent in counties where raised
- Board – Members of three County Councils decide projects, funding recommendations
- Region's voters must approve recommendations

# Project plan adopted June 3, 2004



- Major improvements to “highways of regional significance”
  - I-5, I-405, SR 167, SR 9, SR 509, US 2, SR 522
- Earthquake safety – Viaduct, 520 bridge
  - Replace, expand
- HOV lane completion
  - I-5, SR 167, SR 509
- Transit-related improvements
- Complete 1.5-mi light-rail link to airport

*\$12.8B:  
These  
projects  
are an  
essential  
part of  
our  
region's  
long-  
term  
vision.*

# Funding recommendation adopted June 3, 2004



## Recommended

- 0.2% sales tax
- 0.1% RTA sales tax
- 0.3% MVET
- \$75 license fee
- 2.8¢ local option gas tax
- Tolls on SR 520

## Additional allowed

- 0.3% sales tax
- Employer tax
- Parking tax
- \$25 license fee

## Context of work

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- Schedule, consultant selection process
- November ballot - time restrictions
- Confidence assessment, not re-estimation
- Assessment - general results
- Current work to improve the “low and fair confidence” estimates



# Independent consultant: U.S. Cost

**U.S. COST** is one of the leading cost and value management firms in the United States. Since 1983, it has provided pre- and post-bid cost control services and software to facility owners, designers, contractors and others in the design and construction industry, with over 70 staff members.



# U.S. Cost capabilities

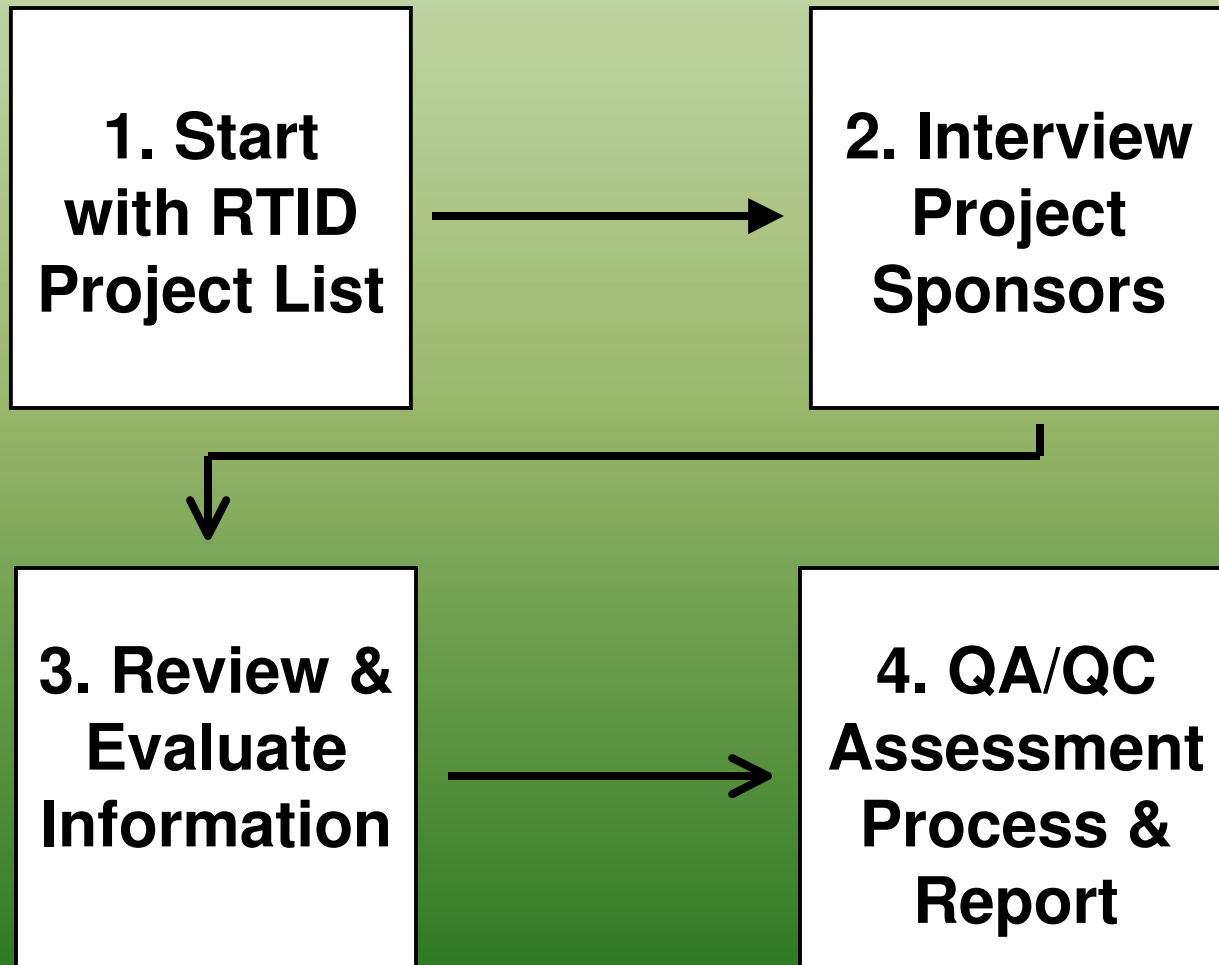


- ✓ **Engineer's Estimate Submittal Reviews**
- ✓ **Independent Check Estimates**
- ✓ **Estimate Reconciliation**
- ✓ **Independent Planning / Budget Estimates and Schedules**
- ✓ **Order of Magnitude and Detailed Estimates & Time Impact Analysis for Construction Change Orders**
- ✓ **Value Engineering**
- ✓ **JOC Tool and Unit Price Database**
- ✓ **Validation of Current Capital Improvement Program or Master Plan Budgets and Schedules**
- ✓ **Creation of Initial Work Breakdown Structure (WBS) with Logic and Coding**
- ✓ **Creation of Final Base Line Budgets and Schedules for Capital Improvement Program or Master Plan**
- ✓ **Assistance in Cost Report Updates and maintenance**

- ✓ **Independent A/E / Fee Estimates**
- ✓ **A/E Proposal Evaluations**
- ✓ **Liquidated Damage Assessments**
- ✓ **Contractor Proposal Evaluations for Construction Change Orders**
- ✓ **Negotiation Support for Construction Change Orders**
- ✓ **Contractor Baseline Schedule Review**
- ✓ **Contractor Schedule Updates Review**
- ✓ **Review of Contractor Time Extension Requests**
- ✓ **Claims Management / Avoidance**
- ✓ **Cash Flow Projections**
- ✓ **Peer Constructability Reviews**
- ✓ **Software Sales**
- ✓ **Software Integration**
- ✓ **Risk Analysis / Assessment**



# Review and assessment process



# Review and assessment process

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## 1. Start with RTID Project List

- *Three counties*
- *Over 70 individual projects*
- *Various types and sizes of projects*



# Review and assessment process

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## 2. Interview Project Sponsors

- *Four concurrent teams*
- *Average team member with over 30 years' experience*
- *Interviews completed in two weeks*

# Review and assessment process

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## 3. Review & Evaluate Information

- *Examine the status of project*
- *Review the basis of estimate*
- *Review the contingency, risk assessment*



# Review and assessment process

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## 4. Assessment Process & Report

- *Process information received*
- *Secondary review as needed*
- *Summarize findings*
- *Make recommendations*

## Summary of findings

- The cost-estimating procedures used were found to reflect “best practices” of the industry.
- The CEVP process is thorough and systematic, it fosters better communication & risk management.
- CEVP tends to focus on risk – WSDOT should strengthen the cost validation part of the process.
- Need more consistent documentation of base cost estimates and schedules.

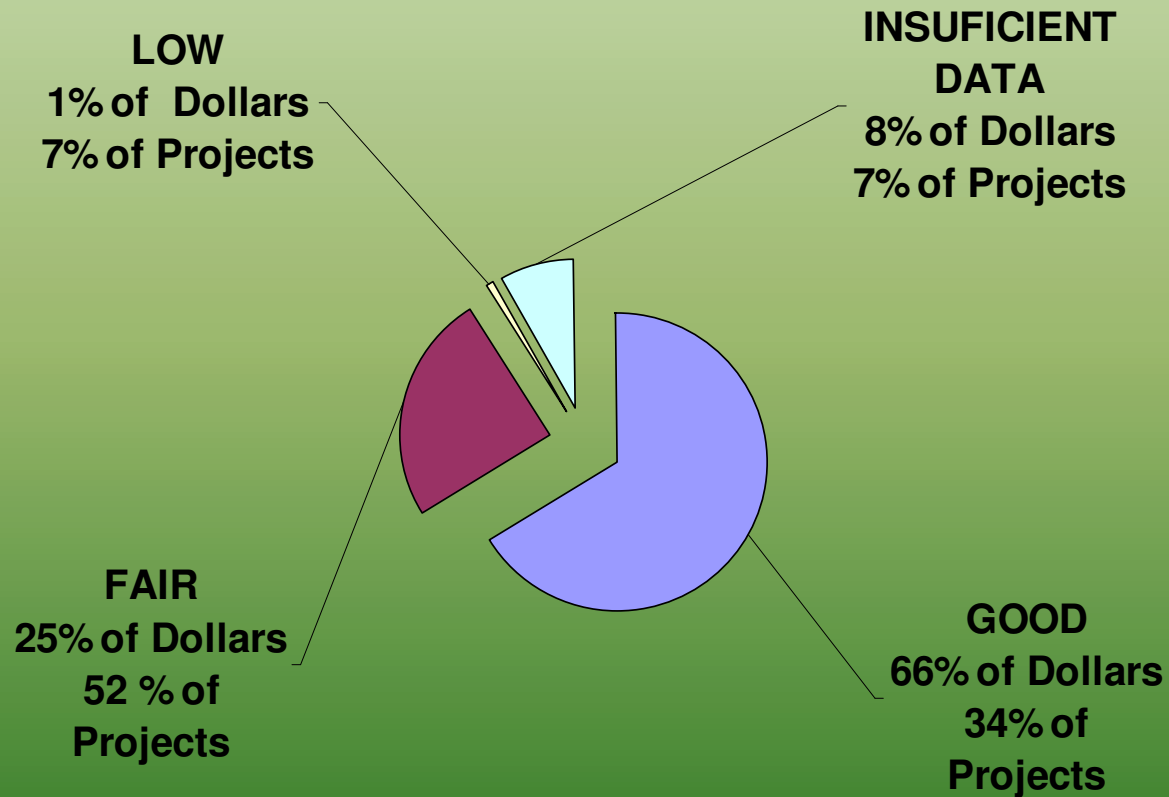


## Summary of findings



- The 66% “Good Confidence” by dollars / 34% by number of projects finding means there is more confidence in the larger projects, which generally get more attention and use CEVP.
- “Fair” or “Low” confidence projects, in general, had one or more of the following: incomplete scope, poor schedule definition, incomplete or missing risk identification.

# Project assessment confidence level distribution



# Short-term recommendations

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- Confirm project definitions (scope) – “Basis of Estimate Document”
- Develop improved construction schedules
- Perform CRA workshops
- Establish standards
- Perform an overall program risk assessment
- Reconcile estimates for consistency



# Acknowledgments

*The completion of this cost estimate review and assessment would not have been possible within the time frame allotted without the full cooperation and able assistance of the staffs of WSDOT, the surrounding counties and neighboring cities. Our thanks to the staff members of WSDOT, RTID, King County, Snohomish County, Pierce County, City of Seattle, Kenmore, Bothell, Lake Forest Park, City of Lynnwood, Newcastle, City of Everett, Issaquah, Shoreline, Port of Seattle, City of Marysville, Edmonds, Granite Falls, Sound Transit, Community Transit and Everett Transit.*



# Current actions



- Verifying:
  - Scopes
  - Schedules
  - Assumptions that affect cost
  - Reasons for any cost discrepancies
- Initiating limited work to upgrade cost estimates for “Low” & “Fair” confidence projects
  - CRAs / CEVP®
  - Meet with the project teams -- adjust estimates
  - Contracting with project sponsors to assist with the cost estimate updates
- Reporting back

**For more information**

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**[www.rtid.dst.wa.us](http://www.rtid.dst.wa.us)**

