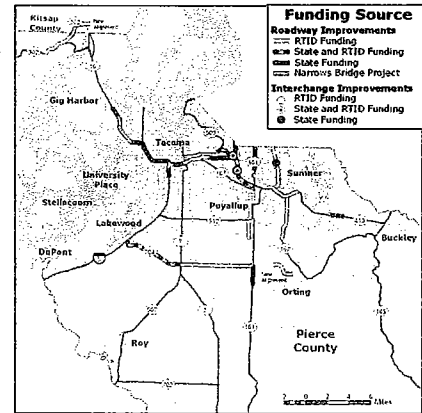
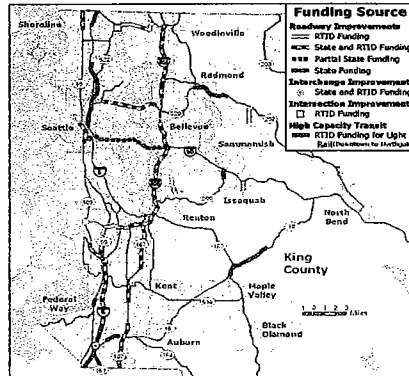
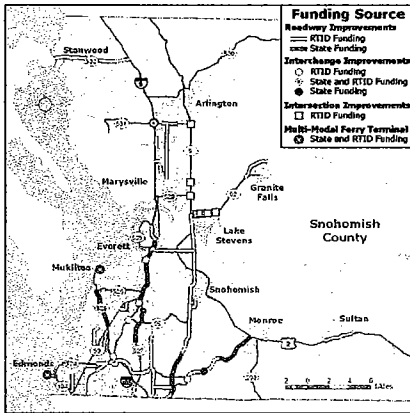




Washington State Department of Transportation

INITIAL FINDINGS & RECOMMENDATIONS COST ESTIMATE REVIEW AND ASSESSMENT



PREPARED FOR:

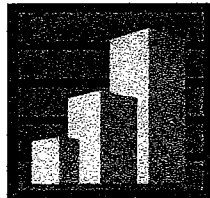
Regional Transportation Investment District

ADMINISTERED BY:

**State of Washington
Department of Transportation**

PREPARED BY:

U.S. COST



03 June 2004

Initial Findings and Recommendations Summary

Introduction

The Washington State Department of Transportation was tasked by the Legislature to conduct “an external review of the Regional Transportation Investment District (RTID) project cost estimates in order to provide best available estimate of cost...ensuring that projects will not overrun estimates”.

U.S. Cost was engaged to review the cost and scheduling estimates for RTID projects and the cost estimating methodologies used to produce them, and provide an assessment of these cost estimates in terms of the “likelihood that the projects will not overrun the estimate”. The methodologies included conventional cost estimating procedures, as well as the WSDOT CEVP[®], Cost Risk Analysis (CRA), Schedule Cost Risk Evaluation (SCoRE) processes.

The following sections summarize the initial findings and short term recommendations of that review and assessment.

Overall Assessment

The CEVP[®] process is both thorough and systematic; it fosters good communication among the agencies and the public. It provides a formal and rational framework to establish believable estimates that can be effectively communicated to the public and to public officials through the CEVP[®] summary format.

As currently administered, the CEVP[®] process appears to concentrate more on risk analysis compared to the overall cost validation process. A validation of the cost estimates requires a complete and detailed look into the quantities and pricing used in the estimate development.

All of the large projects in this assessment, and many of the smaller ones, had been through the CEVP[®] process, or its companion SCoRE, the simpler Cost Risk Assessment (CRA) process.

However, because many of the projects reviewed do not have WSDOT involvement, they have not benefited from the extensive development and evolution of the CEVP[®] process over the past two years, nor have they been through any other validation process.

For the seventy-four (74) projects reviewed, the project cost estimates were produced using several different methods – all are considered “best practices” methods. These estimating methodologies are consistent with the various levels of design (conceptual, preliminary, etc.) detail.

The following are the summary assessment results, in terms of currently identified budget using reasonable management standards:

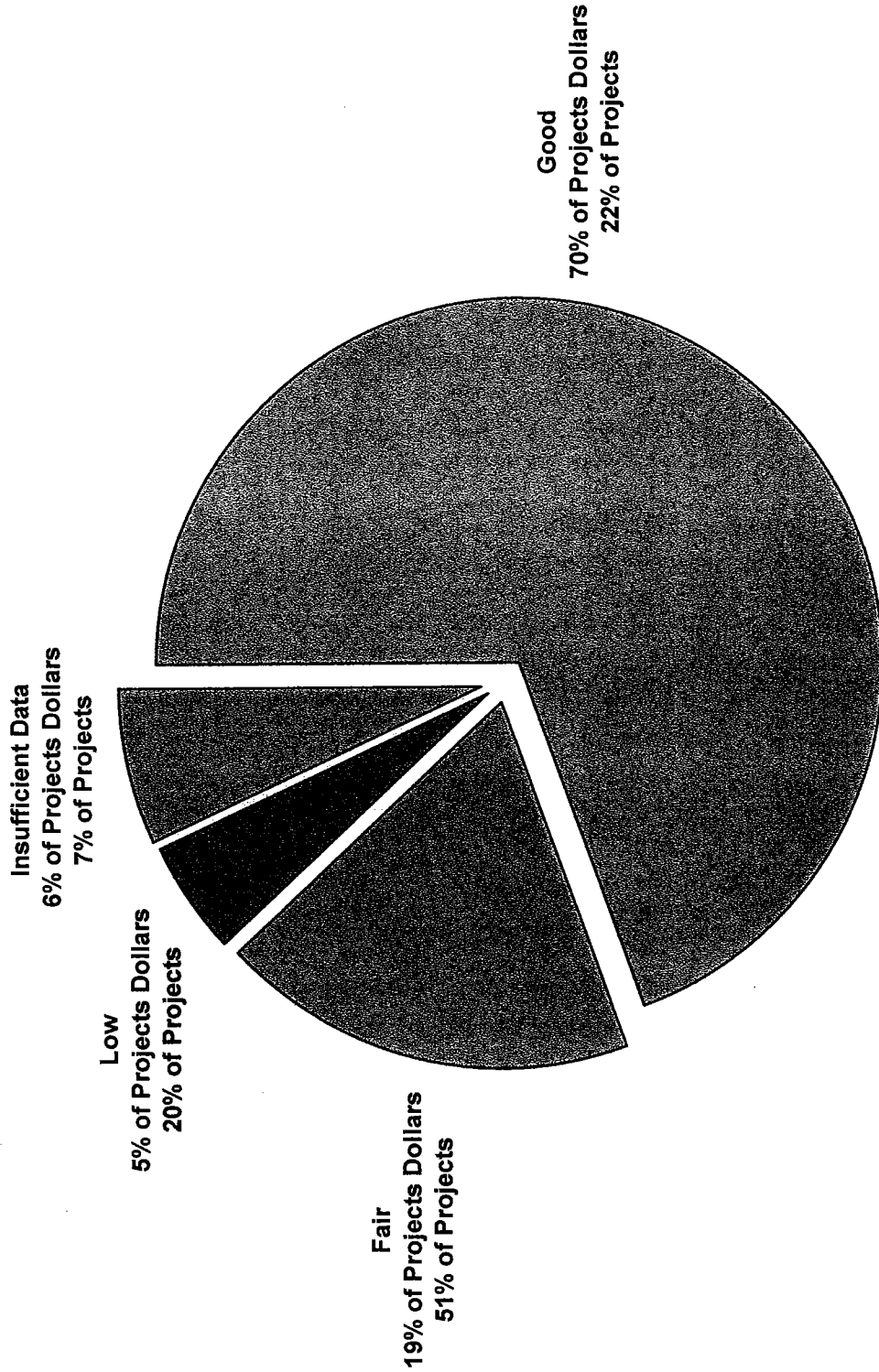
- Seventy percent (70%) of the assessed project budgets were determined to have a good confidence level that they can be completed within the currently identified budget. Continue CEVP® and other risk analysis, and validation processes.
- Nineteen percent (19%) of the project budgets were determined to have a fair confidence level (some concerns) that they can be completed within the currently identified budget plus twenty percent (20%) as allowed by legal legislation. Further work is necessary to resolve the identified issues and budgets may need to be adjusted.
- Five percent (5%) of the assessed project budgets were determined to have a low confidence level (significant concerns) that they can be completed within the currently identified budget plus twenty percent (20%). Further work is required to resolve the identified issues and budgets may need to be adjusted.
- Six percent (6%) of the project budgets were found to have insufficient information for a proper assessment. This does not necessarily mean that these projects are deficient, but it does mean that an assessment could not be completed. More information is required to allow an assessment to be made.

The U. S. Cost Team recognizes that RTID needs to maintain a good stewardship of public funds, used for their projects. As noted above, the current cost estimates are of sufficient quality to support RTID in this area. With the implementation of some of the changes and improvements recommended and, with the use of normal management standards, we believe that this program has a high probability of success – as measured by confidence that the projects can be completed within the currently identified budgets.

The following charts indicate U.S. Cost's High Range overall assessment level compared to the project budgets as identified by the following confidence level categories:

- **Good Confidence Level**
(Less than or equal to project budget)
- **Fair Confidence Level**
(Less than or equal to project budget plus 20%)
- **Low Confidence Level**
(Greater than project budget plus 20%)
- **Insufficient Data**
(Insufficient data for proper assessment)

Washington State Department of Transportation
Regional Transit Investment District
Projects Assessment Confidence Level Distribution



Project Assessment Distribution

Engineering Cost Estimate Review

Proj ID	County	Description	Confidence Level
202	King	Alaska Way Viaduct	GOOD
203	King	SR-520 Bridge Placement and HOV Project	GOOD
201	King	I-405 Congestion Relief and Bus Rapid Transit Project	GOOD
301	Pierce	SR-167 Tacoma to Puyallup	FAIR
204	King	SR-509/I-5, Freight & Congestion Relief Project	GOOD
205	King	I-405 Congestion Relief and BRT (Total RTID Investment)	GOOD
206	King	SR-167 Valley Freeway Corridor Improvements	GOOD
302	Pierce	I-5/SR-167 HOV	INSUFFICIENT DATA
103	Snohomish	SR-9: 176th St. SE to SR-92, Widen to Five Lanes	FAIR
110	Snohomish	US-2 Trestle	FAIR
303	Pierce	SR-162 Capacity Expansion	INSUFFICIENT DATA
304	Pierce	SR-704 Cross Base Highway	GOOD
144	Snohomish	Edmonds Multi-modal Terminal	FAIR
210	King	SR-522 BRT Facilities	FAIR
305	Pierce	SR-302 Elgin Clifton	INSUFFICIENT DATA
145	Snohomish	Mukilteo Multimodal Terminal	FAIR
207	King	I-5, SR-18 & SR-161 "Triangle" Interchange in Federal Way	FAIR
109	Snohomish	SR-522: Woodinville, Paradise Lake to Snohomish River, 4-Lane Widening & I/C	FAIR
118	Snohomish	US-2 Sultan Widening	FAIR
307	Pierce	176th St. E. Corridor	GOOD
306	Pierce	SR-167 Sumner to Auburn	FAIR
151	Snohomish	Community Transit Bus Replacement	FAIR
120	Snohomish	SR-532 Stanwood to I-5	GOOD
102	Snohomish	SR-524: 24th Ave. W. to SR-527	FAIR
209	King	SR-99 North BRT Facilities	FAIR
104	Snohomish	Arterial Access Improvements	FAIR
107	Snohomish	20th St. SE: US2 to SR-9	FAIR
211	King	SR-518 Corridor Improvements	INSUFFICIENT DATA
101	Snohomish	I-5/41st St. Interchange Improvements	FAIR
133	Snohomish	39th/35th Ave. SE: 228th St SE to Seattle Hill Rd.	GOOD
105	Snohomish	I-5: 196th St. SW Interchange - Southbound Braided Ramp	FAIR
139	Snohomish	51st Ave. NE, 88th St. NE to SR-531	FAIR
106	Snohomish	I-5 128th Phase I Interchange	FAIR
122	Snohomish	I-5 South Everett Interchange Improvements (100th St. SE, Everett Mall Way)	INSUFFICIENT DATA
132	Snohomish	39th Ave SE Extension from 228th St. SE to 240th St. SE Comple Missing Link	FAIR
121	Snohomish	SR-99: 244th St. SW to SR-104 Interchange (Br. 99/600)	GOOD
119	Snohomish	SR-9: SR-92 to SR-530, Intersection Improvements	FAIR
214	King	SE Issaquah Bypass from Front Street South to I-90	FAIR
128	Snohomish	SR-92 Granite Falls	FAIR

148	Snohomish	Transit Park and Ride Facilities on I-5, SR-2, SR-9	FAIR
212	King	Coal Creek Parkway	FAIR
213	King	244th Ave. NE Phase I from SE 8th to SR-202	FAIR
112	Snohomish	SR-531: 43rd Ave. NE to 67th Ave. NE, Widening	GOOD
111	Snohomish	I-5: Smokey Point – 172nd St. NE Interchange (SR-531) Modification	FAIR
143	Snohomish	Everett Station Phase 2 Parking Structure	GOOD
146	Snohomish	CT Canyon Park & Ride	GOOD
113	Snohomish	I-5/WB SR-525 Ramp	FAIR
152	Snohomish	Project: 152 I5 Mountlake Terrace In-Line Transit Station	GOOD
147	Snohomish	Bus/Van Fleet Expansion	FAIR
130	Snohomish	200th St. SW (48th Ave. W. to SR-99)	GOOD
308	Pierce	94th Ave. East	FAIR
131	Snohomish	East Everett Ave. Overcross	FAIR
140	Snohomish	228th St SE: 39th Ave Se to SR 9	FAIR
138	Snohomish	52nd Ave Beverly Park Rd: 168th St SW to Shelby Rd.	FAIR
135	Snohomish	SR-92 Intersections @ 99th, 113th, 127th, Callow Road, and Machias Cutoff	FAIR
125	Snohomish	8th Ave W. 212th St. SW to 238th St. SW	FAIR
117	Snohomish	SR-524 (196th St. SW) 48th Ave. W. to 37th Ave. W.	FAIR
136	Snohomish	State Ave: 100th St NE to 116 St NE	FAIR
127	Snohomish	Airport Way: SR-9 to Bridge #1	GOOD
137	Snohomish	36th/35th Ave W, Maple Rd and 148th St SW	GOOD
129	Snohomish	SR 527: 228th SW to 240th St SW Widening	FAIR
141	Snohomish	I-5 Mountlake Terrace Commuter Parking Expansion	GOOD
114	Snohomish	East Marine View Drive	GOOD
124	Snohomish	4th Ave. W: 112th St. to Everett Mall Way	FAIR
123	Snohomish	41st I-5 Overcrossing (Lowell Neighborhood)	GOOD
149	Snohomish	Transit Signal Priority	FAIR
134	Snohomish	State Ave.: 136th St. NE to 152nd St. NE	GOOD
142	Snohomish	SR-525 Mukilteo Park and Ride Lot	GOOD
150	Snohomish	CT Bus Stop Zones, Passenger Shelters & Turnouts	GOOD
108	Snohomish	112th SW (I-5 to SR-527)	FAIR
126	Snohomish	Snohomish-Woodinville Road: Snohomish County Line to SR 522	FAIR
115	Snohomish	116th St. NE Widening I-5 to State Ave.	FAIR
116	Snohomish	238th St. SW Improvements (84th Ave. W to SR-104)	FAIR
153	Snohomish	44th Ave w. - 200th to 196th	FAIR

