## CRC Project Development: Key Milestones and Decisions

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
2005 dopted Vision and Values IS Notice of Intent D9/27/05) form CRC Task Force (39 Members) dopted Problem Definition (TF) (12/05)	2006 Approved Purpose and Need (FTA/FHWA) Screened and narrowed solution concepts - Step A (TF) Screened and narrowed solution concepts - Step B (TF) Developed, screened and narrowed preliminary alternatives (TF) - 12 Alternative Packages Alternative Evaluation Framework 23 River Crossing Ideas: • 9 Passed screening • Movable spans/tunnel removed by task force • 4 Ideas remain for alternative packages • Replacement (upstream/ downstream) • Supplemental • Arterial • 14 Transit Ideas • 4 Ideas remain for alternative packages • Express bus in G.P./M.L. • Bus rapid transit • Bus rapid transit • G Freight Ideas • 3 Passed to alternative packages • 18 TDM/TSM Ideas • 10 Passed to alternative packages <b>CRC recommends 3</b> DEIS alts: • No build • Replacement w/BRT	2007 Identified DEIS alternatives to analyze (TF) Proposed and received no conflicting comments on 95' vertical clearance for river crossing structures (CRC, USCG) Task Force Recommends Fourth Alternative w/ Supplemental • Subcommittee of task force met 3 times between 02/07/07 & 03/27/07 • Recommended 2 new alternatives for DEIS • Supplemental w/BRT & incr. bus • Supplemental w/LRT & incr. bus • Supplemental w/LRT & incr. bus • Supplemental w/LRT & incr. bus • Supplemental w/LRT & 13 Highway ideas • 3 Transit ideas • 5 River crossing ideas • Transit inside a segmental box girder (2-bridge concept)	Recommendation of Locally Preferred Alternative (TF) DEIS (05/02/08) (95' v.c.) • No build • Replacement w/BRT • Replacement w/LRT • Upstream or • Downstream • 3 Bridges (HCT/SB/ NB) or • 2 Bridges (STHB) • 08/10/12 Lanes • Supplemental w/BRT & incr. bus • Supplemental w/LRT & incr. bus • Downstream • Seismic retrofit existing (for NB) • New HCT/SB bridge • 8 Lanes • All transit options (BRT & LRT) had 4 possible segments • Lincoln via I-5 • Mill District • Clark College Endorsement of Locally Preferred Alternative 06/24/08 (COV, COP, CTRAN, TriMet, SWRTC, Metro) • Replacement w/LRT • Downstream • 2 Bridge (STHB) • 10 Lanes • Clark College M.O.S. • Rebuild MD/HI/14/ MP/4P/500 • Replace I-5 NPH Bridge • Cost: \$3.1B to \$4.2B	2009 Recommendation for 2 bridge river crossing (UDAG, PBAC, PSC) 06/05/09 Recommendation for mobility council (PSC) 10 vs 12 lanes • 3 General purpose lanes on river crossing • Up to 3 auxiliary lanes LPA Refinements • Design • River crossing substructure • Other (unit prices, quantities, etc.) • Highway • Phase victory braid • Phase wictory braid • Phase wictory braid • Phase wictory braid • Phase victory braid • Phase victory braid • Design 1-5 bridge over NPH • Lower profile over Hayden Island • 10 Lane river crossing • Reduce NB lane from SR14 to SR500 • Phase SR500 NB ramps • Cost: \$2.6B to \$3.6B (\$3.2 most likely) Open-Web box girder passed by PSC (09/04/09)	2010 Affirmed P&N and recommendations for next steps (IRP) Recommendation on 10 lanes and refined Hayden Island interchange design (PSC) Selected LRT route in Vancouver (COV, CTRAN) Independent review panel • 18 Findings • 30 Recommendations • Resolve tech. issues Re: CRC bridge • "Solve" Hayden Island • Finish NEPA related requirements • Reinvigorate public involvement process • Establish a goverance structure • Consider phasing plan for project delivery Hayden Island Design Group • On island I-5 interchange • Off island I-5 access (via Marine Dr) • IPS recommended Concept D • On island I-5 I/C • Arterial between MD & HI (shared LRT Br) PSC re-confirms 10 lane br. w/full shoulders (09/09/10) Bridge Review Panel • 6 Recommendations • Discontinue work on open-web box • Select a new bridge type	<ul> <li>2011</li> <li>Biological opinion (01/19/11) <ul> <li>Established in-water work window</li> <li>Impact pile driving 09/15 - 04/15</li> <li>Debris removal 11/01 - 02/28</li> <li>Pile driving only for temp work bridge</li> <li>Piles shall be vibed/ oscillated if possible</li> <li>Pile driving requires bubble curtain</li> <li>CRC recommended a bubble curtain test project in the Columbia River</li> </ul> </li> <li>OR/WA governors select deck truss CR bridge</li> <li>FEIS (09/23/11) <ul> <li>LPA w/refnements</li> <li>MD to victory braid, MD to NB flyover and SR 500 North ramp analyzed but not part of LPA phase 1</li> <li>River crossing type: Deck truss</li> <li>Cost: \$3.1B to \$3.5B</li> </ul> </li> <li>ROD (12/07/11)</li> <li>Columbia River bridge temporary test pile program</li> <li>Confined and unconfined bubble curtain</li> <li>6 Total piles (3 - 24"/3 - 48") (Contract 8078)</li> </ul>	Drilled shaft and driven pile program • O-Cell tests on 3 shafts to determine capacity • 3 Shafts • 6' diam x 120' deep • 8' diam x 130' deep • 10' diam x 215' deep • 5 driven pile (24"" diam x 140' deep) Project packaging and phasing <i>See table below</i> Initial construction package Cost: \$3.2 Billion Proposed Packaging Sun Package Title River Crossing (RC) Package Columbia River Interstate Bi	General bridge permit issued (USCG) CR bridge height re-ev • Evaluated impacts to vessels, env. and desig for clearances betwee and 125' • Selected 116' vertical clearance • NEPA re-eval found n significant impacts Develop procurement for CRBA project • Request for qualificati • Request for proposals • Chapter 1 (w/WSDC admin) • Chapter 2 • Key docs: Geotech baseline, geotech c WSDOT close-out (07/01/13) ODOT continues to pur CN USCG general permit (09/27/13) CRC first phase • I-5 NB to Vancouver • I-5 NB to Vancouver • I-5 over McLoughlin • Community connect • Cost +/- \$2.8 Billion	Tolling investment g analysis report         ODOT close-out (05         n n 95"         docs         docs         ata         rsue         or
	<ul> <li>18 TDM/TSM Ideas</li> <li>10 Passed to alternative packages</li> <li>CRC recommends 3</li> <li>DEIS alts:</li> <li>No build</li> </ul>		<ul> <li>2 Bridge (STHB)</li> <li>10 Lanes</li> <li>Clark College M.O.S.</li> <li>Rebuild MD/HI/14/ MP/4P/500</li> <li>Replace I-5 NPH Bridge</li> </ul>		lane br. w/full shoulders (09/09/10) Bridge Review Panel • 6 Recommendations • Discontinue work on open-web box	• 6 Total piles (3 - 24"/3 -	Package Title River Crossing (RC) Package Columbia River Interstate Br	nmary Procuring Agency WSDOT	Method DB
	• Replacement w/LRT		Task Force complete Project Sponsor's Council Established		<ul> <li>Cable stay</li> <li>Arch</li> <li>Deck truss</li> <li>Public process to select bridge type</li> <li>Work w/FAA to allow cable stay/arch</li> <li>Develop a tangent alignment for cable stay/ arch</li> </ul>		Removal (BR) Package Mainland Connector (MC) P Marine Drive (MD) Package Oregon Transit (OT) Package Washington Transit (WT) Pa Park-and-Ride (PR) Package Transit Systems (TS) Package	TriMet ODOT e TriMet ckage WSDOT WSDOT	DBB DBB DBB or GC/CM DB DFI
					<ul> <li>Replace I-5 NPH bridge (Final report 02/03/11)</li> <li>Vancouver working group selects Vancouver LRT align</li> <li>Couplet (Washington/ Broadway)</li> <li>17th Street (under I-5 @ McLoughlin)</li> <li>PNR @ Clark College/Mill District/SR 14</li> </ul>		Transit Other (TO) Package Ruby Junction Maintenance Modifications Steel Bridge Modifications Light Rail Vehicle Procureme Command Center Upgrades Modification	Facility TriMet TriMet ent TriMet	DBB DBB DFI DFI