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Columbia River Crossing Project

Vancouver, WA

Washington State Department of Transportation

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Gannett Fleming, Inc.
Shelterpoint Business Center
591 Redwood Highway, Suite 5220
Mill Valley, California 94941

Prepared By: Mike Eidlin meidlin@gfnet.com

Checked By: David Adams/John Hugunin, P.E.

Length of Time Firm Assigned to Project: 4 Years 4 Months

Length of Time Person Assigned to Project: 2 Years 6 Months

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EXECUTIVE SUMMARY

Washington State Department of Transportation (WSDOT) Columbia River Crossing Project (CRC)

Project Status

- § CRC's request for entry into Preliminary Engineering (PE) was formally approved by the Federal Transit Administration (FTA) in December 2009. The FTA and Federal Highway Administration (FHWA) jointly issued a Record of Decision (ROD) on the project's Final Environmental Impact Statement (FEIS) on December 7, 2011. The CRC project received a Medium-High rating in FTA's Annual Report on Funding Recommendations for FY2013 (New Starts Report). The project also received a \$39M funding recommendation for FY2013; *however, no funds have been appropriated.*
- § *FTA released its Final Rule on Major Capital Investment Projects (49 CFR 611) on December 27, 2012. The regulations state that projects such as CRC, which were approved for Preliminary Engineering prior to the effective date of the rule (April 9, 2013), are considered to be in the Engineering Phase of the New Starts process. CRC also completed the National Environmental Policy Act (NEPA) process in December 2011 as required by MAP-21 for advancement to the Engineering phase.*
- § CRC submitted its FY14 New Starts update to FTA on September 14, 2012; the PMOC has completed its evaluation of the submission.
- § President Obama announced that the CRC project has been identified for expedited permitting and review as part of his "We Can't Wait" Initiative. The project's key permitting activities are being tracked on the President's Infrastructure Dashboard.
- § C-TRAN's ballot measure to increase the sales tax by 0.1% for high capacity transit, including operating funds for CRC, was defeated 57% to 43%. *C-TRAN's Board will consider its next steps at a retreat scheduled for February 23, 2013*
- § Washington voters approved Initiative 1185 which has an effect on state funding approvals. Prior versions of similar Initiatives are currently before the Washington Supreme Court for review and the interpretation of I-1185 will depend on the Court's opinion in those cases.
- § Quarterly Progress Review Meeting #15 was held on November 15, 2012.
- § Oregon Governor Kitzhaber announced that his budget for 2013-15 includes \$450 million for the CRC project. Washington state officials have not announced any transportation budget proposals.
- § *CRC's Fourth Quarter 2012 review meeting with WSDOT management occurred on December 20, 2012.*
- § Attorneys for Washington and Oregon are helping prepare answers to the legal complaints in the three (3) legal actions filed against the FTA and FHWA in early July 2012.
- § Project Scope: CRC continues to refine the scopes for the individual contract packages constituting the Initial Construction Program (ICP). The light rail transit (LRT) project that is an integral part of the ICP has not been affected.

- § Design: CRC's transit team continues to finalize consultant work scopes for the engineering work required to support the transit elements of the project's delivery plan. CRC continues to refine the location of the Hayden Island station platform in response to changes in the Hayden Island interchange in the ICP. Current engineering work includes further evaluation of Value Engineering (VE) alternatives from the January 2012 VE and Constructability Review Workshop and addressing stakeholder comments received on the 25% PE plans.
- § Project Delivery Planning: *CRC is carefully reviewing each proposed package in an effort to avoid conflicts and interferences between contractors; this may result in some consolidation or re-definition of packages. CRC's delivery team has completed scoping for consultant support for the main River Crossing package and expects to issue a Notice to Proceed in January 2013; this package is on the project's critical path. CRC expects to issue a Request for Qualifications for the main River Crossing (RC) design-build package in March 2013. The next packages to progress will be Washington Transit and the Mainland Connector. CRC submitted an updated Project Delivery and Procurement Plan (PDPP) to FTA on September 11, 2012.*
- § Driven Pile and Drilled Shaft Test Program: Work on the test program was completed in July 2012 with the exception of final tree planting; contract closeout is in progress. CRC continues to work with the contractor to resolve issues related to testing of the ten (10) foot diameter BS-1 test shaft on Hayden Island.
- § Environmental Permitting: *CRC prepared a National Environmental Policy Act (NEPA) Re-evaluation based on a revised bridge height of 116 feet in early December 2012; the document was signed by the FTA and FHWA on December 28, 2012. The USCG provided their comments on the re-evaluation document. CRC submitted its Navigational Impact Report (NIR) to the U.S. Coast Guard (USCG) on November 2, 2012 in accordance with the schedule established on the President's Dashboard. The USCG provided comments on the report during December 2012; CRC plans to address the comments in its General Bridge Permit (GBP) application, which is scheduled for submission on January 30, 2013. CRC executed a contract with the U.S. Army Corps of Engineers (USACE) on November 16, 2012 to fund specialized permit reviews and related activities. Several meetings of the federal principals were held in December 2012. CRC submitted its application for a permit under Section 404 of the Clean Water Act to the USACE on November 30, 2012 in accordance with the date established on the President's Dashboard. The Federal Aviation Administration (FAA) completed its feasibility study of potential impacts to the air traffic at Pearson Airpark based on updated bridge height assumptions.*
- § *CRC plans to submit its Section 401 water quality permit applications to the Washington State Department of Ecology and Oregon Department of Environmental Quality in early January 2013. CRC's permit team has reached agreement with the USACE on a permitting strategy that includes two (2) Section 408 approvals and two (2) Section 404 permits.*
- § Inter-governmental Agreements (IGA) and Third-Party Coordination: The recently enacted Moving Ahead for Progress in the 21st Century (MAP-21) eliminated the Final Design (FD) phase of project development and CRC has refocused its efforts on finalizing all necessary agreements prior to applying for a Full Funding Grant Agreement (FFGA). *Fifteen (15) agreements will require FTA legal review prior to being finalized and executed. The status of the term sheets for those agreements was as follows: two (2) were completed; four (4) were*

reviewed and accepted by FTA; and two (2) were reviewed by FTA and comments are being addressed. FTA and the PMOC are working with CRC to identify those agreements that must be in place prior to an FFGA application and those required prior to execution of an FFGA.

- § Real Estate: *The federal leads and the PMOC have reviewed Revision 6 of CRC's Real Estate Acquisition and Management Plan (RAMP). FTA and the PMOC held a conference call on December 4, 2012 to discuss their comments. CRC received a total of one hundred and sixty three (163) comments and is currently working to address those comments. A follow-up meeting between FTA, CRC and the PMOC has been scheduled for January 24, 2013. The issue of designating a Cognizant Federal Lead Agency remains unresolved.*
- § Project Schedule: *CRC's November 2012 schedule update was distributed on December 18, 2012. The November 2012 schedule update shows no change to the Revenue Service Date (RSD) and the interim milestones associated with the pre-MAP-21 required approval for entry into Final Design (FD) and award of the Full Funding Grant Agreement (FFGA).*
- § Project Cost: *CRC's FY14 New Starts update included a capital cost estimate which reflects adoption of the ICP and revised timing of contract packages. The estimated capital cost of the project has been reduced to \$2.7 billion in the Year of Expenditure (YOE). The estimated cost of the transit project is now \$924.7M (YOE), a slight decrease from the \$944M estimated last year. CRC completed an intensive, risk-informed, Cost Estimate Review in mid-November 2012 to confirm project costs and budget requests in advance of Washington's and Oregon's 2013 legislative sessions. CRC informed the PMOC that the review confirmed previous project estimates and state funding requirements.*
- § Project Finance: *The state transportation commissions for Washington and Oregon adopted an Interstate Tolling Agreement during their respective meetings in December 2012; however, the Agreement does not specify the amount of tolls to be imposed to finance the project. CRC's leadership team addressed a meeting of Washington's Columbia River Crossing Oversight Subcommittee of the Joint Transportation Committee on December 10, 2012. CRC's leadership team addressed a meeting of Oregon's Joint Legislative Committee on the Columbia River Crossing on December 11, 2012.*
- § Project Risks: *CRC updated its risk register as part of its Cost Estimate Review to confirm project costs and budget requests for both states' legislatures. CRC continues to conduct Risk Management meetings on a monthly basis; the most recent meeting was held on December 20, 2012.*

PMOC Assessment

- Ø *It is the PMOC's opinion that CRC's submission of the NIR to the USCG was an important first step in resolving the bridge height issue. CRC's completion of the NEPA re-evaluation is a significant accomplishment. It is the PMOC's opinion that CRC must demonstrate clear progress on reaching resolution of the bridge height issue to support its 2013 legislative efforts in both states' legislatures.*
- Ø *It is the PMOC's opinion that execution of the Interstate Tolling Agreement by the state transportation commissions of Washington and Oregon is a major accomplishment. However, because the Agreement does not specify the amount of tolls to be imposed to finance the project, it does not satisfy one of FTA's remaining uncertainties related to CRC's Finance Plan.*

- Ø *It is the PMOC's opinion that FTA's publication of its Final Rule on Major Capital Investments resolves the question of CRC's status in the Engineering Phase of project development.*
- Ø It is the PMOC's opinion that the defeat of C-TRAN's funding measure in the recent election adds further uncertainty to the project's financial plan.
- Ø It is the PMOC's opinion that Oregon Governor Kitzhaber's announcement that he is including \$450 million for the CRC project in his proposed budget for 2013-15 is a significant positive development.
- Ø It is the PMOC's opinion that the reported favorable result of CRC's recent Cost Estimate Review is a positive development which should be helpful during the upcoming legislative sessions in both states.
- Ø It is the PMOC's opinion that the execution of a contract between CRC and the USACE will allow work to commence on various permit related activities including the rather complex river navigation simulation required by the USACE.
- Ø It is the PMOC's opinion that the current estimate of transit project costs of \$924.7 million in YOE dollars may be somewhat understated because the present contingency amount is lower than desirable and escalation costs may be optimistic. This opinion is based on the PMOC's recent review of CRC's 2012 (FY14) New Starts Capital Cost Estimate.
- Ø It is the PMOC's opinion that it is vital for the project to secure the necessary funding commitments from both the Washington and Oregon legislatures during the 2013 sessions if the project is to achieve its planned date of mid-2014 to receive an FFGA from FTA.
- Ø It is the PMOC's opinion that the inclusion of CRC on the President's Infrastructure Dashboard is resulting in additional attention to the project by the involved federal agencies.
- Ø *It is the PMOC's opinion that the completion of reviews by the PMOC and federal partners of CRC's revised and updated RAMP is a major step toward finalizing the project's real estate program. However, a number of outstanding issues which include the right-of-way budget and schedule must be finalized before the RAMP can be approved.*
- Ø It is the PMOC's opinion that the filing of legal actions challenging the project's compliance with NEPA was anticipated and the possibility was identified in the project's risk register. It is the PMOC's opinion that the outcome of such challenges is difficult to predict.
- Ø It is the PMOC's opinion that most of the project's latent contingency has been consumed by a combination of the additional process associated with confirming the height of the CRB and the failure of both states' legislatures to provide permanent funding for the project in 2012. The start of construction on the CRB has been postponed until December 2014 but the transit Revenue Service Date (RSD) has not changed from September 2019. It is the PMOC's opinion that the project now has very limited ability to absorb further schedule delays without impact to the RSD.

- Ø It is the PMOC’s opinion that CRC’s issuance of its *November 2012* schedule update was timely. However, it is the PMOC’s opinion that the latest schedule update does not satisfy the FTA’s requirements because it does not identify explicit contingency; a deficiency that has remained unresolved far in 2012. *It is the PMOC’s opinion that failure to provide adequate schedule contingency results in higher overall project risk and might prevent FTA from approving an FFGA for the project.*
- Ø It is the PMOC’s opinion, based on its review of the initial PDPP and recent discussions with CRC’s leadership, that CRC understands the need to conform its procurement activities to FTA “hold points” such as execution of the FFGA. The PMOC understands that CRC does not intend to award any of its construction contracts until after an FFGA has been executed. *Further information is provided in Status of Project Contracts in Section 2 of this report.*

1.0 GRANTEE’S CAPABILITIES AND PROJECT APPROACH

Technical Capacity and Capability

- § *CRC’s Fourth Quarter 2012 review meeting with WSDOT management occurred on December 20, 2012.*
- § *Roger Kitchin, the Senior Cost Estimator has left the project, but remains available to support the project on a limited basis. CRC reports that they are moving quickly to fill that position and that Zeb Gherman continues to provide cost estimating support.*
- § *CRC is recruiting for a senior scheduler to replace Stan Wanless who left the project in October 2012. CRC has interviewed a “promising candidate” for the position and expects to have the position filled in February 2013.*
- § *Katherine Halpenny, a Senior Right-of-Way (ROW) agent from ODOT, began working two (2) days per week on the project in December 2012.*
- § *Nancy Boyd is WSDOT Program Director and Kris Strickler is Oregon Program Director. These new titles reflect the current focus on securing financial commitments from the states of Washington and Oregon. The project team has adopted a traditional General Engineering Consultant (GEC) model with day-to-day activities managed by Lyn Wylder, the project’s Consultant Project Manager.*
- § *Oregon Program Director Kris Strickler now has primary responsibility for communications and negotiations with the USCG on issues related to the GBP for the CRB. Kris is being supported by Jay Lyman, a senior executive on the consultant team and formerly the CRC Consultant Project Manager.*
- § *Wesley King, CRC’s Deputy Transit Manager and C-TRAN’s senior representative on the project team has left the project. C-TRAN reports that it is revising the job description to focus more on construction phase experience and expects to fill the position in the next three (3) to six (6) months. Scott Patterson, C-TRAN’s Director of Planning, will assume some of Mr. King’s responsibilities in the short term. Kelly Betteridge, a TriMet Transit Planner and long-time member of CRC’s transit team will also assume some of Mr. King’s responsibilities going forward.*

PMOC Findings and Recommendations

- Ø *It is the PMOC's opinion that the departure of CRC's lead estimator leaves an important vacancy that must be filled promptly to avoid significant impact. It is also the PMOC's opinion that the project's remaining estimator is qualified to carry out critical estimating responsibilities until a replacement is found.*
- Ø It is the PMOC's opinion that CRC has insufficient scheduling resources to meet its current requirements; a deficiency in its TC&C in the area of project controls. CRC's decision to hire a senior scheduler to fill its vacant position is sound. It is the PMOC's opinion that the shortage of qualified personnel is impacting CRC's ability to respond to PMOC's comments related to the project schedule.
- Ø The PMOC recommends that C-TRAN identify a permanent replacement for Wesley King as quickly as possible.
- Ø It is the PMOC's opinion that CRC's leadership recognizes the clear importance of the 2013 legislative sessions in both states. It is also the PMOC's opinion that the delegation of day-to-day management responsibilities to the Consultant Project Manager may result in more streamlined decision making after an initial adjustment period.
- Ø It is the PMOC's opinion that the addition of another senior ROW agent to CRC's Real Estate team will strengthen that group as it prepares for the anticipated start of ROW acquisition.
- Ø It is the PMOC's opinion that the designation of Kris Strickler as the lead for negotiations with the USCG is a clear indication of the importance of this issue to CRC.
- Ø It is the PMOC's opinion that executives from TriMet and C-TRAN should be integrated into the leadership and decision making functions of the project. The PMOC has been advised that C-TRAN and TriMet executives meet regularly with the CRC's Program Directors and that this practice will be documented in the coming update of the PMP and TCC Plan. *The PMOC is not aware of any specific concerns on the part of TriMet or C-TRAN leadership regarding the current arrangement.*
- Ø It is the PMOC's opinion that CRC's plan to align the organization structure with the ICP is a positive development.

Project Control – Scope, Schedule, and Cost Control Capabilities

- § Requirements for control of the CRC project's expenditures, capital cost and schedule, as well as monthly reporting, are in place and functioning.
- § *CRC published the November 2012 schedule update (Data Date: November 30, 2012) on December 18, 2012.*
- § CRC has received a preliminary report from the second joint WSDOT-ODOT internal audit of the CRC project. The report dealt with funding and reporting issues and is based on work performed by the auditors in summer 2012. A formal report is expected in early 2013.
- § CRC has selected a vendor for a financial management software system; *however, it is taking longer than expected to finalize the contract.* CRC has begun a server upgrade in order to support the new financial management software; following completion of the upgrade, *the*

new system will be implemented by April 2013. CRC reports that the vendor will host the program remotely until CRC's system upgrades are completed.

- § *CRC has decided to use WinEst software for future cost estimating efforts. The current cost estimate data is being imported into the new software.*
- § CRC advised the PMOC that they have performed a thorough consistency review of the recently developed project description with the project's PE capital cost estimate; a similar review of the project schedule is planned in the near future.
- § CRC has aligned its schedule with its project delivery strategy and is working on eliciting the schedule contingency in each of the packages. CRC is currently reviewing the schedule for each of its construction packages with a focus on identifying subordinate activities of more manageable durations. The master permitting strategy will ultimately feed directly into the project schedule. The PMOC continues to meet with CRC's Project Controls Manager and scheduler to provide feedback on the schedule.
- § CRC's Program Manager has informed the PMOC that the Project Controls Manager, will regularly attend the weekly senior managers' meetings on an "as needed" basis to provide direct input to the project's leadership on issues related to the project's schedule and costs.

PMOC Findings and Recommendations

- Ø It is the PMOC's opinion that CRC's review of the project's description and capital cost estimate for consistency, as well as the planned similar review of the schedule, is a positive step which is likely to pay dividends during the PMOC's detailed review of project documentation prior to the next FTA risk assessment.
- Ø It is the PMOC's opinion that CRC's decision to include the Project Controls Manager as an attendee at the Senior Managers' meeting on an "as needed" basis, while helpful, may not provide the routine focus on cost and schedule issues that is vital to the effective management of a project of this size and complexity.
- Ø It is the PMOC's opinion that the expected implementation of the new financial management system by *February 2013* is a significant step in what has been a very lengthy effort since the initial requirement was identified in early 2011.
- Ø *It is the PMOC's opinion that the planned implementation of WinEst software for cost estimating purposes is a significant step towards standardizing future cost estimates. The use of WinEst should ease the integration of cost estimate data from various team members.*
- Ø It is the PMOC's opinion that some improvements are needed in CRC's document control system prior to the project's entry into the next phase of project development. The PMOC is encouraged by the CRC's decision to upgrade its servers to meet future demands; this also addresses one of the concerns related to efficient processing of document control activities.
- Ø *It is the PMOC's opinion that CRC must demonstrate adequate project controls resources as an element of its technical capacity and capability (TC&C) prior to receiving an FFGA. The PMOC continues to closely monitor CRC's scheduling performance as one element of its TC&C in this area.*

- Ø It is the PMOC's opinion that CRC's receipt of a favorable audit opinion from WSDOT's internal audit group is a positive outcome. The audits, which were requested by CRC, are supportive of FTA and FHWA initiatives to curb waste, fraud and abuse on federally funded projects.

2.0 PROJECT SCOPE

Project Design Status

- § *The Federal Aviation Administration (FAA) completed its feasibility study based on engineering data submitted by CRC on November 2, 2012. The study, which was based on a 110' bridge height, was to determine whether elements of a bridge of that height will penetrate the airspace controlled by the FAA at Pearson Airpark, and if so, by what amount. FAA's study identified the light fixtures at the highest points of the proposed bridge as penetrating some portion of controlled airspace. FAA's final determination must be based on the actual bridge design documents.*
- § *CRC's design team provided support for the scoping of future design activities and other bridge related studies.*
- § *CRC's transit team continues to advance the PE work completed in April 2012. Work is focused on further evaluation and incorporation of the VE recommendations and resolving stakeholder comments on the 25% design package. CRC is holding follow-up meetings between staff and project partners to address specific design issues.*
- § *CRC distributed an updated project description on September 10, 2012 which reflects the scope of the ICP.*
- § *CRC continues to meet with bridge experts from WSDOT, ODOT and TriMet to finalize the design criteria for the CRB. CRC plans to produce a white paper on the subject after the design criteria is finalized.*
- § *CRC's design team has completed work on an updated staging plan for construction of the CRB. The associated schedule was used as one input to the recent Cost Estimate Review and will be incorporated into the schedule for the River Crossing (RC) contract package. The RC package includes significant land-side work in addition to bridge construction.*
- § *CRC continues to meet with City of Portland (COP) staff to refine the details of the ICP in the vicinity of the Hayden Island interchange, including the placement of the Hayden Island LRT station platform. The COP staff has expressed concern regarding bicycle and pedestrian connections on Hayden Island; the issue will be elevated in an effort to reach an acceptable resolution. The design team developed several concepts for local roadway connections and discussed them with COP staff. CRC presented one or more of these concepts to the community in October 2012 for their input. *The process was not completed by the end of 2012 as expected.**
- § *CRC reports that approximately one hundred ten (110) potholes have been completed in Vancouver and on Hayden Island in Oregon thru December 2012. A total of two hundred-fifty (250) potholes are planned and the remaining work is expected to start in late January 2013. CRC met for the first time in December 2012 with VAST, the Vancouver Area Smart Trek, a group of local public agencies with fiber-optic facilities. The conflict analysis workshop process that is intended to precisely identify utility conflicts and establish responsibility, cost and timing for utility relocations, will not be completed until May 2013,*

about ten (10) months later than initially planned. This work is not on the critical path in the CRC schedule, but is significant to the assessment of utility related risk.

- § CRC published an update of its Utility Management Plan (UMP) and associated schedule in August 2012. The UMP captures the process for developing utility term sheets and agreements and establishes the scope, cost and schedule for utility relocations. CRC has identified those utilities where relocation can be compelled and only a “notice to relocate” is necessary; the UMP and the agreements database will be modified accordingly. CRC reported that each term sheet will be accompanied by an attachment containing details of the scope, schedule and cost implications developed through the conflict resolution workshops.
- § CRC continues to finalize and negotiate the design team’s scope of services for the first three (3) contract packages: River Crossing (RC), Mainland Connector (MC) and Washington Transit (WT). *An NTP for work on the RC is expected in early January 2013. Scoping has begun on the transit systems package.*
- § CRC has discussed the possibility of using current excess parking capacity in downtown Vancouver to postpone construction of some of the structured parking to improve cash flow. CRC stated that the current ridership model anticipates that all three parking structures will be at capacity on opening day.
- § CRC distributed a final report documenting the January 2012 VE and Constructability Review Workshop on March 20, 2012. Forty-five (45) Value Alternatives (VA) were developed plus additional design and constructability suggestions. CRC published an updated VE Alternative Implementation Action Recommendation dated August 3, 2012. CRC’s updated Action Recommendation is to Accept one (1) VA; Accept with Modification three (3) VAs and conduct Further Study on 24 VAs; these 28 VAs have an aggregate estimated value of \$66,354,000. The estimated value of the four (4) VAs Accepted or Accepted with Modification is \$22,995,000. CRC’s design team has begun work on sixteen (16) of the VAs identified for further study.
- § *CRC completed a total of thirty-two (32) additional geotechnical borings at intersections in downtown Vancouver along the LRT alignment. Additional borings will also be done in the vicinity of the Columbia River levee near the planned Mainland Connector. CRC furnished the final geotechnical report for the Mill Plain to McLoughlin area to the PMOC in July 2012. This completes the submission of geotechnical reports for all transit related structures in Washington and Oregon with the exception of the results from the summer 2012 driven pile and drilled shaft test program.*
- § CRC’s transit team distributed the Conceptual Design Report (CDR) for LRT in downtown Vancouver to the C-TRAN Board and City of Vancouver Council. CRC will continue the distribution to neighborhood groups as a community outreach tool.
- § The final (30%) PE plans were completed on March 30, 2012 and were distributed on April 5, 2012. CRC received seven hundred and sixteen (716) comments from stakeholders as a result of their review of the 25% PE plans. The comments were distributed to staff for review and incorporation, where appropriate, into the final (30%) PE plans. CRC states that there were no conflicting comments and most issues had been raised previously. A tracking log for stakeholder comments received on the 25% plans was provided with the 30% PE plan set.

- § The SUE contractor delivered the existing utility plans in late-January 2012; however, the 30% PE plan set did not include the existing utility plans.
- § The 30% PE plans for the Phase 2 expansion of the Ruby Jct. Maintenance Facility was distributed as part of the final 30% PE plans. The cost estimate for the Phase 2 expansion has been incorporated into the final PE cost estimate. The PMOC has received Basis of Design reports for both Phase I and Phase II of the expansion.
- § The issue of relief turnouts at each end on the track couplet (7th and 17th Streets) in downtown Vancouver has apparently been resolved through the VE process. CRC Accepted with Modification the VA calling for the elimination of relief turnout TA-1 located at 7th and Washington Street. This was one of the two proposed relief turnouts in downtown Vancouver. However, a new single crossover may be required to preserve the desired operational flexibility. Costs associated with both turnouts are included in the current capital cost estimate.

Permitting and Environmental Review

- § *CRC is focused on completing the application for the USCG GBP by the Dashboard date of January 30, 2013. CRC prepared a NEPA Re-evaluation based on a revised bridge height of 116 feet; the document was signed by FTA and FHWA on December 28, 2012. The USCG provided their comments on the re-evaluation documents. The USCG also provided comments to CRC on the NIR submitted to them on November 2, 2012; these comments will be addressed in the CRC's bridge permit application. A meeting of the federal principals was held on November 28, 2012.*
- § CRC executed a contract with the U.S. Army Corps of Engineers (USACE) on November 16, 2012 to fund specialized permit reviews and related activities. A 30-day public comment period on the funding transaction ended on October 16, 2012 with no comments filed. The project team continues to meet with the USACE to discuss permitting and approvals under Section 404 of the Clean Water Act and Section 408 of the Rivers and Harbors Act and has reached tentative agreement with the USACE on a permitting strategy that includes two (2) Section 408 approvals and two (2) Section 404 permits. CRC submitted its application for a permit under Section 404 of the Clean Water Act to the USACE on November 30, 2012 in accordance with the date established on the President's Dashboard.
- § *The FAA completed a feasibility study of potential impacts to the air traffic at Pearson Airpark. CRC provided final engineering data to the FAA on November 2, 2011 to support these efforts based on updated bridge height assumptions.*
- § The President announced on August 20, 2012 that CRC has been added to a select group of Nationally or Regionally Significant Projects that will be expedited through the permitting and review process under his "We Can't Wait" Initiative. The project's key permitting activities are being tracked on the President's Infrastructure Dashboard. The current status of the Dashboard activities is shown in the table in Appendix B.
- § Attorneys for the states of Washington and Oregon are assisting in the preparation of answers to the three (3) legal actions were filed against the FTA and FHWA in early July 2102. The suits are related to the project's compliance with the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Clean Air Act (CAA) and Environmental Justice requirements.

- § *CRC submitted an updated Project Permit and Approval Plan for review by FTA and the PMOC on December 6, 2012.*
- § *CRC has developed preliminary plans for an alternate off-site mitigation area on the Sandy River in Oregon to meet their Section 404 permitting requirements. The alternate site was selected after complications developed with the original site at Hood River, Oregon. In Washington, CRC is working with a developer to develop a mitigation site. The 30% design plans for each site were included in CRC's Section 404 permit applications.*
- § *CRC plans to submit its applications for water quality permits under Section 401 of the Clean Water Act to the Washington State Department of Ecology and Oregon Department of Environmental Quality in early January 2013.*
- § *CRC met with representatives of the National Marine Fisheries Service (NMFS) in December 2012 and plans to re-initiate consultation with NMFS in January 2013. Additional consultation is required because of the recent identification of critical habitat for the endangered Eulachon (smelt) in the project area.*
- § CRC reports that tribal consultation continues to go well.

Status of Project Contracts

- § All work on the driven pile and drilled shaft test program has been completed with the exception of final tree plantings and contract close-out is in progress. *CRC reports that the contractor has provided additional data related to the ten (10) foot diameter BS-1 test shaft on Hayden Island to support its fulfillment of contractual requirements; negotiations with the contractor are still in progress.* The test program, which began in March 2012, was designed to confirm the assumptions for drilled shaft foundations associated with the main river crossing and other land-side structures.
- § CRC developed a reduced scope ICP in response to anticipated cash flow constraints. The ICP is the basis for CRC's FY 14 FTA New Starts submittal. CRC developed a detailed description of the project which was distributed on September 10, 2012. An updated PDPP reflecting the ICP was distributed on September 11, 2012. The ICP affects the timing for construction of some highway elements in both states but does not have any substantial effect on the planned LRT project. Construction of most highway improvements north of SR14 in Washington and south of Marine Drive in Oregon, including some elements of the Marine Drive interchange, will be postponed to a later phase. Changes affecting the transit project relate primarily to the allocation of costs for common project elements such as the CRB and pedestrian and bicycle improvements and refinement of the Hayden Island station location to accommodate deferred highway elements.
- § CRC updated and finalized its PDPP to conform it to the newly announced ICP and distributed the updated plan on September 11, 2012. The initial PDPP was published on February 14, 2012 and contained recommendations for the scope and sequence of construction packages, the contracting agency and the delivery method for each package. CRC continues to review and refine the scope of work associated with each proposed package.

- § CRC expects to issue a Notice to Proceed (NTP) to the design team in early January 2013 for work associated with the RC contract package. This work will include preparation of the Request for Qualifications (RFQ) which is scheduled for advertisement on March 31, 2013, and the Request for Proposal (RFP) documents.
- § *CRC's Delivery team is considering re-distributing the scope from the Oregon Transit (OT) package to the RC and MC contracts; this could reduce some risk associated with utilities and contractual interfaces.*
- § *CRC is planning to review its project delivery strategy based on the results of its utility location and conflict identification workshops and may propose a separate contract for advanced utility relocation.*
- § The following Table summarizes the status of project contracts.

Project Contracts Status

Contract	Award Date	Completion Date	Bid Amount	Expended to Date
Temporary Test Pile Program	01/13/2011	3/30/2011	\$811,204	\$802,400
Drilled Shaft Test Program	12/19/2011	Summer 2012	\$4,220,000	\$4,221,224 ¹

¹Includes change orders issued to date

PMOC Findings and Recommendations

- Ø *It is the PMOC's opinion that FTA's and FHWA's issuance of the NEPA Re-evaluation is a significant accomplishment.*
- Ø It is the PMOC's opinion that CRC's submission of its NIR to the USCG, execution of a contract with the USACE and submission of its Section 404 permit application to the USACE are very significant accomplishments.
- Ø It is the PMOC's opinion that CRC's current schedule of seven (7) weeks to complete the scoping (of consultant services) effort for each of the contract package is excessive. CRC's current schedule shows that these durations are affecting the near-critical design activities. The PMOC urges CRC to find ways to shorten this process.
- Ø It is the PMOC's opinion that updated staging plans for construction of the CRB will be a significant input to the project schedule. The PMOC encourages CRC to complete the integration of this schedule information promptly.
- Ø It is the PMOC's opinion that the SUE efforts, including potholing, are proceeding as planned, and that CRC is exercising appropriate oversight in advance of the potholing operations. It is the PMOC's opinion that Phase II of the SUE work should be completed as expeditiously as possible to provide definition to the scope, cost and schedule for utility relocations. It is the PMOC's opinion that utility relocation activities carry significant cost and schedule risk for rail transit projects. Until the Phase II work is completed, it will be difficult to accurately assess the impact of utility relocations on the project's schedule and cost. It is the PMOC's opinion that CRC's plan to attach a detailed description of the scope, schedule and budget for the utility work covered by the individual term sheets will greatly improve their usefulness to the project.

- Ø It is the PMOC's opinion that CRC should have a contingency plan to address excess parking demand if the planned parking facilities are full when light rail begins revenue service as currently projected.
- Ø It is the PMOC's opinion that the UMP should include a utility matrix that identifies the allocation of responsibilities for design, construction and associated costs among the parties such as the one being developed by CRC.
- Ø It is the PMOC's opinion, based on its review of the initial PDPP and recent discussions with CRC's leadership, that CRC understands the need to conform its procurement activities to FTA "hold points" such as execution of the FFGA. The PMOC understands that CRC does not intend to award any of its construction contracts until after an FFGA has been executed. *For example, the current schedule shows the start of the RC design-build contract on May 30, 2014, one day after the scheduled receipt of the FFGA on May 29, 2014.* The PMOC also understands that CRC is aware of the availability of mechanisms such as Letters of No Prejudice (LONP) and Early Systems Work Agreements (ESWA) and will consider their use as appropriate.
- Ø It is the PMOC's opinion that CRC has not yet addressed how its overall delivery program will be managed. It is the PMOC's opinion that CRC's program will involve concurrent work by multiple contractors in a relatively confined project area. Further, it is the PMOC's opinion that management and co-ordination of multiple prime contractors on a single project is the owner's responsibility. It is the PMOC's opinion that lack of an overall plan for management of program delivery increases project risk.
- Ø It is the PMOC's opinion that the agreement reached between CRC's environmental team and the USACE regarding a strategy to decouple the Section 404 permit and Section 408 approval for the North Portland Harbor structures from those needed for the main Columbia River Bridge is a very promising development which should reduce the risk associated with those activities. Because some of the requirements for the Section 408 approval for construction near the North Portland Harbor levee are relatively recent, the PMOC urges caution related to the schedule for this particular approval. The PMOC is working with the CRC staff to understand these effects.
- Ø It is the PMOC's opinion that the drilled shaft and driven pile test program has developed useful geotechnical and construction information. This new information was considered during the risk-informed cost review conducted in October and November 2012.
- Ø It is the PMOC's opinion that the VE workshop and constructability review brought forward a number of valuable suggestions for CRC's consideration. The PMOC is not aware of any VE alternatives that would adversely affect the recent Record of Decision. It is the PMOC's opinion that CRC is making progress in reaching resolution on the various alternatives developed in the VE workshop and constructability review, although some issues will not be completely resolved until the remaining design work is completed.
- Ø CRC previously provided the PMOC with design and estimating information for the CRB and requested that the PMOC provide feedback to the project on whether additional design work on the CRB may be either necessary or desirable to support CRC's request to enter Final Design. The PMOC evaluated the information provided by CRC in light of FTA's guidance documents and good industry practices. It was the PMOC's opinion that

some additional design work would likely be required for the CRB. The PMOC will review the design information and proposed contract documents for the CRB and other transit structures as part of its preparations for the project's next FTA sponsored Risk Assessment. The PMOC's assessment of the adequacy of the design for the CRB and other transit structures and the associated construction contract terms and conditions will affect the level of risk and related contingency assigned to those project elements. The PMOC notes that the recent WSDOT presentation on Lessons Learned on the SR520 project included comments from the presenter to the effect that the design of the SR520 Floating Bridge had been advanced to at least 30% prior to advertising the design-build contract. The PMOC notes that this is a higher level of design completeness than the 5-10% proposed for use on the CRB D-B solicitation. The PMOC recommends that CRC's delivery team consult with its counterparts on the SR520 project regarding CRC's current level of bridge design and consider having them perform a peer review on the RFP design documents once the bridge height issue is resolved.

3.0 PROJECT MANAGEMENT PLANS AND SUB PLANS

The enactment of MAP-21 has resulted in a change in the status of the CRC project. The project is now in the Engineering phase of FTA's project development process and no longer requires FTA's approval to enter the Final Design phase. As a result, CRC's Project Management Plan (PMP) and the associated sub-plans must now be revised to satisfy FTA requirements for an FFGA. The status of the PMP and sub-plans described below provides an indication of the general completeness of each document following its most recent pre-FD review. With few exceptions, this status is unlikely to change until the pre-FFGA reviews commence later in 2013.

Project Management Plan (PMP)

CRC is nearing completion of an update of its PMP and TCCP in response to PMOC comments and changes in the project since November 2011. The chapters related to the organization and staffing have been developed to meet the requirements of ICP and are currently under internal review by the Project team.

Quality Assurance Plan (QAP)

The PMOC completed its review of CRC's quality plans and documentation and recommended that FTA accept the plans on December 29, 2011. Monthly QA audits are being conducted and the QA Manager meets monthly with the Project Director to review findings from the most recent audit. Findings and recommendations from the audits are being tracked for follow-up and closure as appropriate. CRC has revised its schedule for Quality Assurance audits and now plans to audit deliverables prior to their submission rather than conducting audits on a monthly basis. CRC continues to conduct QA/QC training for new members of the project team. CRC's Quality team has developed supplemental quality control plans for the cost estimating and public communications functions.

Fleet Management Plans (FMP)

The PMOC has recommended that FTA accept TriMet's RFMP for Entry into FD conditioned upon satisfactory resolution of the remaining comments within six (6) months following entry into FD. The PMOC has previously recommended that FTA accept both TriMet's and C-TRAN's Bus Fleet Management Plans for Entry into FD. C-TRAN submitted a BFMP for its proposed Bus Rapid Transit (BRT) service on September 14, 2012.

Real Estate Acquisition and Management Plan (RAMP)

The federal partners and the PMOC completed their reviews of Revision 6 of CRC's RAMP. CRC received a total of one hundred and sixty three (163) comments on the RAMP and is currently working to address those comments. A follow-up meeting between FTA, CRC and the PMOC has been scheduled for January 24, 2013. The ROW acquisition schedule in the Master Project Schedule has been revised to reflect the ICP and changes in the procurement packages. CRC currently plans to initiate its appraisal efforts in February 2013 in anticipation of the availability of ROW funds on July 1, 2013. The issue of designating a Cognizant Federal Lead Agency remains unresolved.

The FTA has requested that WSDOT provide a legal opinion confirming its authority to use Washington State highway funds for property acquisitions related to the project's transit elements.

The Real Estate team is acquiring rights of entry for surveying, Phase I Environmental Site Assessments and other environmental work for those properties identified for initial acquisition. CRC is carrying out non-invasive surveying or testing work on properties under these permits of entry in both Washington and Oregon and invasive work on those properties where the owner has provided consented. CRC's Real Estate team recently identified some additional displacements in Oregon. The affected parties live-aboard sail or motor boats (not floating homes) moored in marinas and slips in the project area and were not identified in prior surveys. ODOT has put in place a contract for a broad scope of right-of-way services to support the project; the contract provides for individuals qualified to provide ROW services in both Washington and Oregon. CRC is currently working on a new contract to cover these services over the remainder of the project's term. The Real Estate team continued preparing Work Orders for the contractor in preparation for initial assignments. One employee of the contractor is currently on-site at CRC.

Interagency, Third-party and Master Utility Agreements (IMUA)

The elimination of the FD phase of project development by the enactment of MAP-21 has eliminated the need for preparation and execution of agreement term sheets. CRC has refocused its efforts on finalizing all necessary agreements prior to applying for an FFGA. Fifteen (15) agreements will require FTA legal review prior to being finalized and executed. The status of the term sheets for those agreements was as follows: two (2) were completed; four (4) were reviewed and accepted by FTA; and two (2) were reviewed by FTA and comments are being addressed. FTA and the PMOC are working with CRC to identify those agreements that must be in place prior to an FFGA application and those required prior to execution of an FFGA. The Term Sheet Scorecard as well as a new Agreement Scorecard showing the status of CRC's efforts is included below.

CRC has completed the term sheet between TriMet and C-TRAN for Bi-state Transit Operation and Maintenance and related issues. CRC has received executed term sheets for nineteen (19) of thirty-six (36) utility agreements. CRC recently completed a review to determine which utilities can be directed to relocate in accordance with existing agreements. No additional work will be performed on agreements with those utilities, however, all other utility planning and coordination activities will continue. The PMOC reminded CRC of the FTA requirement to include the Buy America clause in the agreements that include utility relocation funding by CRC project. CRC's Specialty Services Manager has discussed the need for additional support for the agreements' team with CRC leadership.

CRC received a signed term sheet from the BNSF railroad following its revision to incorporate FTA comments; the term sheet was submitted to FTA following an internal review. Discussions continue between CRC and local representatives of the BNSF railroad in an effort to reach agreement on a series of proposed ROW transactions involving multiple parties. The ROW transactions must be completed before the railroad will issue the necessary permits for construction.

TERM SHEET SCORECARD					
FTA CRITICAL		UTILITY		MISCELLANEOUS	
Completed	2	Completed	36	Completed	1
Under Development	11	Under Development	0	Under Development	3
FTA Review	2				

AGREEMENT SCORECARD		
AGREEMENT SPONSOR(S)	STATUS	
	COMPLETE	IN-PROGRESS
WSDOT	0	18
ODOT	0	3
WSDOT and ODOT	0	2
Utilities	0	3
Other	0	5

Safety and Security Management Plan (SSMP)

CRC held a Threat and Vulnerability Assessment Workshop on December 3, 2012 and two (2) Preliminary Hazard Analysis Workshops (one for civil elements and one for systems elements) on December 13 and 14, 2012. A follow-up Threat and Vulnerability Assessment Workshop will be held January 15, 2013 to complete the process. CRC distributed a revised and updated SSMP to FTA and the PMOC for review on September 14, 2012. This updated draft is expected to address the few remaining minor deficiencies identified in the prior document. The March 2012 version of the SSMP was also provided to the State Safety Oversight (SSO) representatives from both Oregon and Washington for their review; neither SSO had comments on the updated SSMP. The PMOC completed its review of the SSMP and recommended that FTA conditionally accept the plan for purposes of entry into FD on June 2, 2012.

WSDOT has agreed to defer to ODOT as the lead agency for SSO of light rail operations in Washington. CRC developed a term sheet outlining a proposed agreement between the SSOs of both states. The term sheet was sent to FTA on August 22, 2012 following its review by both states' SSOs and legal counsel. FTA completed its review and notified CRC that the term sheet is sufficient. The term sheet was sent to the parties for execution on October 17, 2012.

PMOC Findings and Recommendations

- Ø *It is the PMOC's opinion that the conference call between FTA and the PMOC on December 4, 2012 helped clarify a number of issues related to the current the RAMP revision and how future reviews will be accomplished. It is the PMOC's opinion that the*

conference call between FTA, the PMOC and CRC scheduled for January 2013 will be an important indicator of how significant an effort will be required by CRC to gain federal approval of its RAMP.

- Ø It is the PMOC's opinion that CRC has made reasonable progress in recent months on negotiating term sheets for the required agreements. The project team has benefited from the delay required to resolve funding and issues associated with the USCG permit. Now that Term Sheets are no longer required due to the elimination of the FD phase by MAP-21, the PMOC encourages CRC to maintain progress on the final agreements to avoid them becoming a barrier to approval of an FFGA. The PMOC supports the Specialty Services Manager's request for additional resources for this important and complex function.
- Ø The PMOC recommended that FTA accept CRC's Project Controls Procedures for entry into FD on June 18, 2012. This document remains under internal review at FTA.
- Ø The PMOC recommended that FTA conditionally accept CRC's SSMP for entry into FD on June 2, 2012.
- Ø The PMOC recommended that FTA accept TriMet's LRT Operating Plan and Operations and Maintenance Cost Model for entry into FD on June 19, 2012.
- Ø The PMOC recommended that FTA accept CRC's Permitting Plan for entry into FD on June 19, 2012. However, the FTA has expressed the need for additional information related to certain aspects of the plan and it remains under review at FTA.
- Ø The PMOC encourages CRC to actively engage the SSO's throughout the project development process.
- Ø It is the PMOC's opinion that the execution of a term sheet by the BNSF is a significant accomplishment that reduces risk normally associated with railroad agreements.
- Ø It is the PMOC's opinion that the award of a contract for bi-state real estate services is a significant step in addressing a wide range of technical capabilities required by the ROW acquisition and relocation processes.
- Ø It is the PMOC's opinion that FTA should conditionally accept TriMet's RFMP Revision 15F, dated June 21, 2011, for purposes of entry into FD.
- Ø The PMOC supports CRC's initiation of project-wide training on the PMP. The PMOC also supports CRC's earlier proposal to hire a Performance Manager to audit the project's compliance with the PMP.
- Ø The PMOC previously recommended that Condition 11A from FTA's letter approving entry to PE be closed-out based on its recent review of CRC's updated QA plan.
- Ø The PMOC previously recommended that FTA accept C-TRAN's BFMP Revision 3, dated September 2, 2011, as acceptable for purposes of entry into FD.
- Ø The PMOC previously recommended that FTA accept TriMet's BFMP for purposes of entry into FD with the condition that the PMOC's recommendations be addressed to FTA's satisfaction prior to the plan's re-submission to support an FFGA.

4.0 PROJECT SCHEDULE STATUS

- § The designation of CRC for expedited permitting and review has placed additional emphasis on schedule performance. *The November 30, 2012 schedule update reflects the dates shown on the President’s Infrastructure Dashboard which is attached as Appendix B.*
- § *CRC has completed its efforts to revamp the schedule WBS based on the ICP contract packages and CRC’s has been distributing schedule updates in a timely fashion; the November 2012 update was received by the PMOC on December 18, 2012.*

Project Schedule Milestones

Project Milestones (A) Actual Date	CRC Baseline ¹	Grantee Forecast		Change from Prior
		Last Update ²	Current Update ³	
Entry into PE	12/11/2009 (A)	12/11/09 (A)		
15% PE	7/7/2010 (A)	7/7/10 (A)		
FEIS Publication	3/11/2011	9/23/11 (A)		
FTA Record of Decision	5/10/2011	12/7/2011 (A)		
FFGA Approval	9/19/2013	5/29/14	5/29/14	0 Days
Transit Construction Start ⁴	12/4/2014	1/2/15	1/2/15	0 Days
Transit Revenue Service	8/21/2019	9/5/2019	9/5/2019	0 Days

¹Based on 2010 New Starts Submittal (Data Date August 31, 2010)

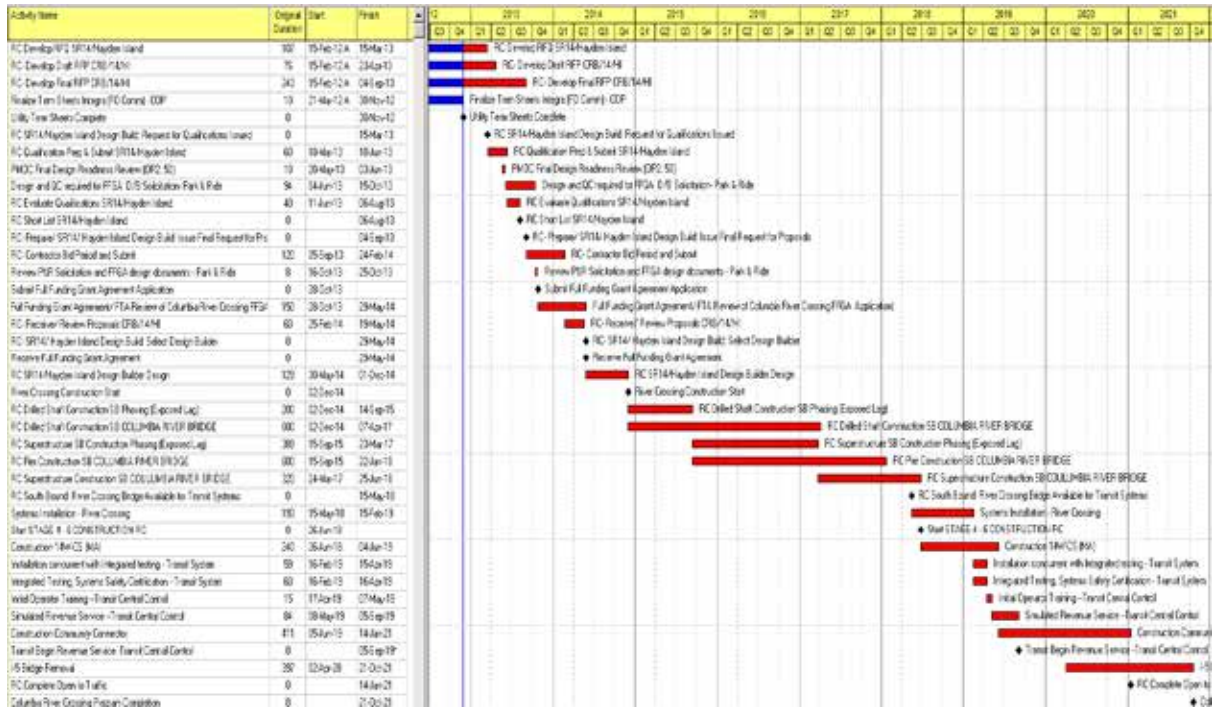
²Based on CRC Schedule Update (Data Date 10-31-12)

³Based on CRC Schedule Update (Data Date 11-30-12)

⁴Start of Ruby Junction Phase II

- § *The PMOC notes that CRC’s November 2012 Monthly Status Report has removed the dates for Compilation of the FD application and FTA approval for Entry into FD as a result of the enactment of MAP-21.*
- § The schedule WBS now reflects the ICP contract packages.
- § The last basis and assumptions document that the PMOC reviewed accompanied the January 2012 update. *The PMOC anticipates that a further update of this document will accompany CRC’s February 2013 schedule update.*
- § The baseline milestone dates are those presented in CRC’s 2010 New Starts submittal based on the Master Project Schedule (Data Date August 31, 2010). CRC is expected to establish new schedule milestones with its application to enter the next phase of project development.
- § *The Project Critical Path (CP) shown in the November 2012 update has changed. Because of changes in the logic ties, the CP now follows the activities leading up to preparation of RFP and award activities for the CRB Design-Build Contract, leading to the start of the Bridge D-B contract, design and construction. The southbound (SB) portion of the CRB is on the CP because it is needed for transit systems installation. Transit Systems installation follows the milestone for the availability of SB CRB, leading to integrated testing and pre-revenue operations and the Revenue Service Date (RSD). The PMOC notes that due to the funding needs of the project, the activities related to the submittal and award of the FFGA are also on the CP. In that context, the PMOC notes that the duration of the activity on the CP*

“FFGA/FTA Review of CRC application) has been reduced by three weeks in the November 2012 update and now it is roughly eight months long.



The November 2012 schedule shows that several key dates have been delayed by over ten (10) months since the February 2012 update without any change in the RSD. This indicates that latent schedule contingency was consumed to maintain the RSD. The November 2012 schedule update maintains the May 2018 date for availability of the Southbound CRB for transit by introducing a lag of negative twenty nine (-29) days. The accompanying narrative did not provide any explanation for this lag.

Milestone	February 2012 Update	Nov. 2012 Update
NTP to RC D-B Contractor	September 2013	May 2014
South-bound RC available for Transit Systems Contractor	August 2017	May 2018
Revenue Service Date	September 2019	September 2019

PMOC Findings and Recommendations

Ø CRC’s November schedule update includes the activities from the President’s Infrastructure Dashboard. A layout of those activities shows no changes from the October 2013 update, represented in yellow. The PMOC’s review of the dashboard activities indicates that those activities, although critical, possess substantial inventory of Total Float. It is the PMOC’s opinion that the sequencing of the President’s Dashboard activities should be carefully examined to ensure proper logic ties in the schedule.

Activity ID	Activity Name	Original Duration	Total Float	Start	Finish	2012	2013	2014	2015
CRC NOV 30 2012 SCHEDULE FINAL									
CRC PROJECT WIDE DELIVERABLES ICP									
CRC DELIVERABLES									
FRWA APPROVALS									
AG3450	Tolling Expression of Interest	0	362		01-Jul-13				
AG3470	Project Management Plan	0	362		01-Jul-13				
AG3460	Initial Finance Plan	0	234		31-Dec-13				
AG3480	TIFIA Master Credit Agreement Letter of Interest	0	234		31-Dec-13				
INITIAL CONSTRUCTION PROGRAM PACKAGES - (ICP)									
MAIN RIVER CROSSING PACKAGE - Design Build (DB)									
PERMITS - River Crossing									
US Army Corps of Engineers Rivers and Harbors Act Section 4									
PR4680	RC Prepare and Submit 100% Section 408	29	86	10-Oct-13	19-Nov-13				
PR4530	RC HQ Corps of Engineers Rivers and Harbors Act Secti	0	124		30-Jul-14				
General Bridge Permit									
PR0170	RC General Bridge Permit - Preparation & Submittal	11	244	20-Jan-13	30-Jan-13				
PR0200	RC General Bridge Permit - Approval	34	241	28-Aug-13	30-Sep-13				
FAA 7460 Permit									
PR0210	RC FAA 7460 - Preparation & Submittal	44	396	18-Jun-13	31-Jul-13				
PR0500	RC Form 7460 Hazard Determination	0	275		31-Oct-13				
MAINLAND CONNECTOR PACKAGE - Design Bid Build (DBB)									
ENVIRONMENTAL/ PERMITTING - Mainland Connector									
ENVIRONMENTAL Archeology - Mainland Connector									
Mainland Connector General Bridge Permit									
PR0270	MC General Bridge Permit - Revise & Submit Application	8	263	23-Apr-14	30-Apr-14				
PR0300	MC General Bridge- Final HQ Action and Final Approval	85	263	06-Feb-15	01-May-15				
Mainland Connector Water Act (CWA) Section 404 Permit (US									
PR0150	MC Section 404 - Preparation & Submittal	15	73	11-Jul-14	31-Jul-14				
PR0260	MC US Army Corps of Engineers Section 404 Permit Auth	0	77		31-Aug-15				
Mainland Connector Section 408									
PR4760	MC Prepare and Submit 100% Section 408	15	77	19-Nov-14	10-Dec-14				
PR4540	MC HQ Corp of Engineers Rivers and Harbors Act Sectio	0	109		31-Aug-15				

- ⊗ The PMOC has repeatedly expressed opinions in prior reports regarding the need for CRC to attend to certain aspects of its schedule since July 2012 schedule update; those comments are repeated below. However, the PMOC’s review of the *November 2012* schedule update reveals that *some* of those comments still have not been addressed. The re-occurring comments, accompanied by the status of each based on the PMOC’s review of the *November 2012* schedule update are listed below:

Re-occurring Comment #2

The PMOC’s review shows that the project schedule does not contain explicit contingency or buffer float. It is the PMOC’s opinion that failure to provide adequate schedule contingency might prevent FTA from approving the project’s entry into the next phase of project development.

Status (Open)

The schedule does not have any explicit contingency. The PMOC previously expressed the opinion that CRC’s schedule contained latent contingency; however, a comparison of the February 2012 schedule update with the *November 2012* schedule reveals that over ten (10) months of latent contingency has been consumed. CRC expressed the opinion during the PMOC’s late November 2012 monthly visit that the schedule still contains a substantial amount of latent contingency. It remains the PMOC’s opinion that it is unlikely that a significant amount of latent contingency now exists in the project schedule and the PMOC encourages CRC to fully develop its schedule contingency presentation so that this issue can be resolved.

Re-occurring Comment #3

The PMOC's review of procurement activities indicates that the durations for the procurement of Design Bid Build (D-B-B) packages might be overly aggressive. It is the PMOC's opinion that CRC should address the longstanding recommendation by the PMOC, to carefully review the sequencing and the duration of these packages in order to effectively manage the design, procurement and construction of these packages.

Status (Completed)

CRC continues its review of the procurement activities for the scope identified in each description and the sequencing of the activities.

The PMOC notes that the durations for the transit package procurements have been changed in November 2012 update to three (3) months between contract advertisement and start of construction.

Re-occurring Comment #4

It is the PMOC's opinion that the construction activities for each of the packages should be broken into smaller discrete activities to permit the identification of any latent contingency in the schedule.

Status (Open)

The PMOC did not find evidence that the key construction activities are broken down to match the level of advancement in design for various elements of the project. As a result, the latent contingency, if present in the schedule, cannot be determined in the *November 2012* schedule update. It is the PMOC's opinion that the Schedule Basis and Assumption document should be updated to include this information. During the PMOC's late November 2012 monthly visit, CRC explained that the recently updated staging plan for the CRB contains substantial scheduling detail which will be incorporated into the master schedule. However, because the CRB is only one element of the RC contract package, additional work must be done to develop the details of that package.

Re-occurring Comment #5

The PMOC has recommended that the utility relocation activities be broken down into smaller activities, such as design, review, and construction for better management control and, in addition, those activities should be assigned a responsibility code. The PMOC has also recommended that the utility schedule needs to be incorporated into the Master Schedule and the relocation activities should be linked to appropriate construction activities. This would allow calculating the float for the various relocation activities and identify the critical relocation sequences.

Status (Implementation Planned in May 2013)

CRC has indicated that they plan to include the utility relocation activities in the schedule only after completion of the conflict analysis workshops, which is now scheduled for May 2013. It is the PMOC's opinion that it will be difficult to accurately forecast the durations for utility relocation activities until the conflict resolution meetings have been completed and the term sheets and schedules updated accordingly.

- Ø It is the PMOC's opinion that the logic of the CP needs to be examined for consistency. There are several activities on the CP with long durations that overlap; this indicates a need to break down those activities into shorter durations. The PMOC recommends that

CRC carefully review the sequence and duration of CP activities, including the ones on the President’s Dashboard, to improve the accuracy and relationships in these areas. It is the PMOC’s opinion that the single construction activity for each of the packages should be broken into smaller discrete activities consistent with the current level of design to facilitate the identification of any latent contingency within the schedule. The PMOC understands that some contracts are expected to be design-build; however, for scheduling purposes, a typical sequence of construction activities can be developed to permit the single package to be sub-divided.

5.0 PROJECT COST STATUS

- § CRC briefed the PMOC on the results of its recent risk-informed Cost Estimate Review. The work was performed in October and early November 2012 to confirm project costs and budget requests in advance of Washington’s and Oregon’s 2013 legislative sessions. The work included an independent review of unit costs by National Constructors Group, a WSDOT contractor. CRC informed the PMOC that the results confirmed previous project estimates and state funding requirements as included in the recently submitted New Starts Finance Plan.
- § CRC submitted its 2012 (FY14) New Starts update to FTA in September 2012. CRC, in accordance with FTA guidance, submitted project costs based on information originally developed for the May 2011 CEVP workshop. This information was then modified to reflect the reduced ICP scope and other changes such as allocation of shared transit and highway costs.
- § The project’s capital cost is currently estimated to be \$2.7B (YOE) as presented in CRC’s 2012 (FY14) New Starts update; the estimated cost of the transit project is \$924.7M (YOE), a slight decrease from the \$944 M estimated last year.
- § The 30% PE capital cost estimate issued on April 3, 2012 does not reflect changes resulting from the ICP and contract packaging plans as well as continuing evolution of the design during Advanced PE. The final PE capital cost estimate also does not incorporate any savings resulting from the recent VE and constructability workshop.
- § *The CRC Cost Reports reflect project-wide expenditures through December 10, 2012.* The expenditures are summarized below. Expenditure percentages relative to cost shares have been omitted from this report because they provide no meaningful information at the present time.

Cost Category	Transit Project Cost¹		Current Forecast		Expended to Date⁵
Total cost	\$924.7M		\$924.7M		\$168.5M
FTA share \$ (%)	\$850.0M ²	91.9%	\$850.0M ²	91.9%	\$0M
New Starts share \$ (%)	\$850.0M ²	91.9%	\$850.0M ²	91.9%	\$0M
Local share \$ (%)	\$74.7M ³	8.1%	\$74.7M ³	8.1%	\$168.5M
Contingency ⁴	\$22.5M ⁴	2.4%	\$22.5M ⁴	2.4%	

¹Capital cost information is based on CRC’s 2012 New Starts Update. The total cost of the CRC project (combined highway and transit) presented in the New Starts Update is \$2,797M.

²Amount shown is based on CRC’s 2012 New Starts Update.

³Amount shown is the local share of the Transit project only. The local share of the entire CRC project is \$1,824.2M or 65.2%.

⁴Unallocated Contingency expressed in Year of Expenditure (YOE) dollars. Total allocated and unallocated contingency in the base year is \$127.0M on a project cost of \$634.2M (without contingency, escalation and finance charges) or 20% of the Base Year cost.

⁵Expenditure data for entire project as of CRC's December 10, 2012 accounting cut-off date.

§ FTA and the PMOC have requested that CRC develop and provide a monthly cost report, based on approved FTA Standard Cost Categories (SCC). The report should summarize the planned, actual, committed and forecast information for the \$924.7M transit project. CRC's most recent PE Report (*October 2012*) contains updated summary capital cost information, but includes no discussion of the changes in capital costs between the 2011 and 2012 New Starts submissions.

§ A financial audit of the project's expenditures and financial control systems was performed by representatives from WSDOT's and ODOT's internal audit teams during the second-half of 2011. The first audit report on consultant payments was released by WSDOT on March 13, 2012. The report summarized its findings as follows: "Based on our internal audit work, the CRC project office has controls and processes in place to monitor consultant payments and ensure work performed meets agreement terms. Through our audit of the internal controls, overall the payments we reviewed appeared to be appropriate." A preliminary report on the results of the second internal audit was received by CRC in early November 2102 and the final report is anticipated to be released in January 2013.

§ The current capital cost information is based on an update of project capital costs prepared to support CRC's 2012 New Starts submittal. Total cost of the transit project in Year of Expenditure (YOE) dollars is \$924.7M, consisting of Transit PE, Engineering and Construction costs of \$835.3M, Unallocated Contingency of \$22.5M and Interim Finance Costs of \$66.9M. This estimate is based on a September 2019 Revenue Service Date and represents a reduction of approximately \$21M from the \$945.7M estimated at Entry into PE.

The following Capital Cost Estimate for the transit project is based CRC's 2012 (FY 14) FTA New Starts update and presented using FTA's Standard Cost Categories (SCC).

STANDARD COST CATEGORIES	Base Year Dollars w/o Contingency (X000)	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)	Year of Expenditure Dollars TOTAL (X000)
10 GUIDEWAY & TRACK ELEMENTS (2.9 route miles)	163,494	34,135	197,629	223,966
20 STATIONS, STOPS, TERMINALS, INTERMODAL (5)	95,142	14,336	109,478	124,211
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	33,670	6,734	40,404	44,619
40 SITEWORK & SPECIAL CONDITIONS	94,916	17,071	111,986	127,268
50 SYSTEMS	46,311	8,570	54,881	64,000
CONSTRUCTION (10-50)	433,534	80,845	514,378	584,064
60 ROW, LAND, EXISTING IMPROVEMENTS	29,957	10,485	40,443	42,695
70 VEHICLES (19)	87,075	8,708	95,783	108,589
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	83,646	6,971	90,617	99,978
SUBTOTAL (10-80)	634,212	107,009	741,221	835,325
90 UNALLOCATED CONTINGENCY			20,000	22,543
100 FINANCE CHARGES			55,599	66,867
Total Project Cost (10 - 100)			\$816,819	924,735

Note: Totals may not add due to rounding

Project Finance

- § *The state transportation commissions for Washington and Oregon adopted an Interstate Tolling Agreement during their respective meeting in December 2012.*
- § *CRC's leadership team addressed a meeting of Washington's Columbia River Crossing Oversight Subcommittee of the Joint Transportation Committee on December 10, 2012.*
- § *CRC's leadership team addressed a meeting of Oregon's Joint Legislative Oversight Committee on Columbia River Crossing on December 11, 2012.*
- § *Oregon Governor Kitzhaber announced that his budget for 2013-15 includes \$450 million for the CRC project. The Governor met with legislative leaders from both parties in an effort to gauge legislative support prior to announcing his budget.*
- § *Washington state officials have not announced any budget proposals with respect to the project.*
- § *C-TRAN's ballot measure to increase the sales tax by 0.1% for high capacity transit, including operating funds for CRC, was defeated 57% to 43%. A local coalition has sent recommendations for alternate financing strategies to C-TRAN's Board.*
- § *Washington voters approved I-1185 which has an effect on state funding approvals. CRC advised the PMOC that prior version of similar Initiatives are currently before the Washington Supreme Court for review and the interpretation of I-1185 will depend on the Court's opinion in those cases.*
- § *CRC engaged the firm of CDM Smith Inc. to perform an "investment grade" financial analysis of tolling revenue projections. Data collection is in progress. An initial report, responding to specific questions, is due to both legislatures by July 1, 2013. A pre-investment grade report is expected by the end of 2013.*
- § *CRC submitted its Finance Plan to FTA in September 2012 as part of its 2012 (FY14) New Starts update. The updated plan incorporates changes in project scope and timing associated with the ICP. The ICP was developed in response to anticipated cash flow constraints and the lack of funding commitments by the 2012 Washington and Oregon legislatures.*
- § *CRC prepared and submitted documentation supporting its bi-state tolling commitments to FTA in September 2012.*
- § *The Governor of Washington signed legislation in 2012 which authorizes tolling of the new CRB and the negotiation of necessary bi-state tolling agreements with Oregon.*

PMOC Findings and Recommendations

- Ø *It is the PMOC's opinion that execution of the Interstate Tolling Agreement by the state transportation commissions of Washington and Oregon during 2012 was a very significant accomplishment. However, it is the PMOC's opinion that CRC must provide additional documentation to the FTA which demonstrates that the commissions commit to setting toll rates sufficient to generate at least the amount of funds identified in the project's Finance Plan.*
- Ø *It is the PMOC's opinion that Oregon Governor Kitzhaber's recent announcement that he is including \$450 million for the CRC project in his 2013-15 budget is a very significant occurrence.*

- Ø It is the PMOC's opinion that the recent passage of I-1185 in Washington adds another element of uncertainty to the project's financial plan.
- Ø It is the PMOC's opinion that CRC's Monthly Report should contain an explanation of any changes in the project's capital costs at the time the costs are revised or updated.
- Ø It is the PMOC's opinion, based on its recent review of CRC's 2012 (FY14) New Starts Capital Cost Estimate, that the present contingency amount is lower than desirable and escalation costs may be optimistic. As a result, it is the PMOC's opinion that the current estimate of transit project costs of \$924.7 million in YOE dollars may be somewhat understated.
- Ø It is the PMOC's opinion that CRC's submission of documentation of the bi-state tolling commitment to FTA in September 2012 was a positive step toward solidifying its finance plan. The PMOC encourages CRC's leadership to provide an outline, including relevant dates, of those activities or products (including interim products) that will be necessary to finalize both states' tolling commitments and the associated bond sales to FTA in the near future. The rationale for this recommendation is to avoid any last minute surprises in the FFGA approval process.
- Ø It is the PMOC's opinion that one of the highest priorities for this project's leadership is ensuring Washington and Oregon legislative decision-makers receive all information needed to make informed decisions about project funding in the 2013 legislative sessions.
- Ø It is the PMOC's opinion that the passage of legislation in Washington during 2012 that authorizes tolling of the new CRB and the negotiation of bi-state tolling agreement were very significant accomplishments. However, since neither the Washington nor the Oregon legislatures took action on permanent funding in 2012, ROW acquisition activities have been delayed.
- Ø It is the PMOC's opinion that CRC should complete an accurate estimate of utility relocation costs as promptly as possible consistent with their current process. It is the PMOC's opinion that because the estimate was not completed in time to include it in the final PE estimate, CRC should consider including an allowance for utility relocation, based on the best information available, when the PE estimate is finalized. CRC recently advised the PMOC that an allowance for utility relocation activities is included in the updated capital cost estimate. The PMOC encourages CRC to complete the utility relocation estimate prior to the FTA Risk Assessment workshop.
- Ø The PMOC has asked to review the project's current operating budget. CRC's Project Controls team recently provided a copy of the requested information to the PMOC and a discussion of this information will occur during an upcoming monthly visit.
- Ø It is the PMOC's opinion that CRC should quantify the expected costs associated with stakeholder comments to the extent they are not reflected on the final PE plans.

6.0 PROJECT RISK MANAGEMENT

§ CRC's transit team reviewed the current risk register as part of the recent Cost Estimate Review. The register is a compilation of risks identified during FTA's 2009 Risk Assessment and WSDOT Cost Estimate Validation Program (CEVP) processes. *CRC's risk management efforts are now focused on its internally generated risk register and the project is no longer*

monitoring and reporting on the status of risks shown on the 2009 FTA Risk Register. A copy of the most recent update (August 2012) of the 2009 Risk Register is included in this report as Appendix C. This appendix will be replaced and will not appear in future reports.

- § CRC completed a risk-informed Cost Estimate Review in November 2012, to confirm project costs and budget requests for both states' legislatures. The Cost Estimate Review included a review and updating of the existing risk register with each of the disciplines and an independent review of unit costs by National Constructors Group, a group of construction professionals and a WSDOT consultant. CRC last conducted a Cost Estimate Validation Program (CEVP) workshop April 23-27, 2012; however, a report was never released because of changes resulting from the adoption of the ICP and the uncertainty related to the final bridge height.
- § CRC is holding a regular monthly Risk Management meeting on the third Wednesday of every month; *the most recent meeting was held on December 20, 2012.* The risk register is reviewed and updated at each meeting. The PMOC requested that CRC share the resulting the top risk and summary of changes in the risk register from this monthly exercise with the PMOC. The PMOC shared a template for the monthly Risk Report with the CRC team and CRC has agreed to generate a risk variance report from its risk database.
- § CRC reports that the top cost risks facing the project include the GBP, increased condemnation costs for ROW, preparation of Supplemental Environmental Impact Statement (SEIS), steel price variability and higher bridge costs associated with aesthetic treatments. CRC also identified several significant cost saving opportunities.
- § CRC distributed its updated RCMP on April 25, 2012. CRC's Risk team has actively solicited the PMOC's assistance in clarifying FTA's expectations for the RCMP. The PMOC reviewed the most recent RCMP and provided comments to CRC on July 24, 2012.
- § *CRC continues its efforts to identify explicit schedule contingency.*
- § CRC has developed and placed all project risks in a database that will reside on their server for ease of access to the stakeholders. The database will be updated as events affect the individual risks, and can be used to produce a current risk register for use in a Risk Assessment or CEVP workshop.
- § Significant risks that have been avoided or retired since 2009 include:
 - Uncertainty related to number of bridges (3 vs. 2), number of lanes (10 vs. 12 lanes) and bridge type
 - Longer than anticipated IWWW
 - Possibility of an additional LRT station
 - Possible East-West LRT alignment shift
 - Shift LRT to 16th Street and tunnel

PMOC Findings and Recommendations:

- Ø It is the PMOC's opinion that the confirmation of aggregate project costs and state funding requirements by the recent Cost Estimate Review is a positive accomplishment. It is the PMOC's opinion that CRC's decision to conduct the Cost Estimate Review rather than a CEVP workshop in October – November 2012 recognized the difficulty in completing all required CEVP activities in a time frame that would satisfy the needs of legislative staffs. The PMOC understands that CRC will undertake another CEVP

workshop after the bridge height determination is made and state funding decisions understood.

- Ø It is the PMOC's opinion that the issues associated with the USCG GBP for the CRB and gaining approval of state funds from the 2013 Washington and Oregon legislatures are the most significant risks to the project at the present time.
- Ø It is the PMOC's opinion that the products developed in the April 2012 CEVP workshop, while helpful, have been overtaken by significant changes in the project that may have rendered some of the analytical results invalid. The impact of bridge height on the project cost and schedule is a very significant factor which will remain uncertain until its resolution by the USCG.
- Ø It is the PMOC's opinion that CRC's initiation of monthly risk meetings is a positive action which demonstrates CRC's commitment to an active risk management program.
- Ø It is the PMOC's opinion that failure of both states' legislatures to provide permanent funding for the project in 2012, has consumed the latent contingency in the project schedule. These schedule delays are running concurrent with the delay in securing the GBP from the USCG.
- Ø It is the PMOC's opinion that the filing of legal actions challenging the project's compliance with NEPA was anticipated and the possibility was identified in the project's risk register. It is the PMOC's opinion that the outcome of such challenges is difficult to predict.
- Ø The PMOC completed its review of CRC's RCMP and provided comments to the FTA on June 22, 2012 and to CRC on July 24, 2012. It is the PMOC's opinion that although the RCMP shows significant improvement from the previous version, it is not fully acceptable at the present time.
- Ø It is the PMOC's opinion that one additional risk associated with the uncertainty regarding Washington legislative approval to toll the new CRB was eliminated in March 2012.
- Ø The PMOC is encouraged that CRC is actively soliciting input from the PMOC's risk expert. It is the PMOC's opinion that CRC is making an effort to address FTA's requirement for explicit schedule contingency.
- Ø It is the PMOC's opinion that the need to re-initiate consultation with NMFS regarding newly listed critical habitat for Eulachon represents an additional risk to the project schedule. It is the PMOC's opinion that the re-initiation of consultation with NMFS as a result of minor changes during the FD phase is not unusual.
- Ø It is the PMOC's opinion that one additional risk, item 26 on the Risk register, should be retired. This item addresses the possibility that the PMLR project does not move forward and the associated cost implications related to the expansion of the Ruby Junction maintenance facility for CRC.
- Ø It is the PMOC's opinion that one additional risk, item 36 on the Risk Register, dealing with potential delay in reaching agreements with Native American tribes should be retired based on execution of the Section 106 Memorandum of agreement.

- Ø It is the PMOC's opinion that additional time may be required to satisfy USCG permit conditions and this represents a significant risk to the project's schedule. It is the PMOC's opinion that the results of the air-draft study and Navigation Impact Analysis as well as the USCG Work Plan should help assess this risk and any associated mitigation measures.
- Ø It is the PMOC's opinion that CRC's drilled shaft test program will reduce both design and construction risks.
- Ø It is the PMOC's opinion that resolution of the final location of the Multi-use Path (MUP) and the cross-section for the arterial bridge serving Hayden Island has further reduced project risk.
- Ø It is the PMOC's opinion that completing the location and mapping of subsurface utilities and the subsequent conflict resolution workshops will help alleviate a significant risk to the project.
- Ø It is the PMOC's opinion that the governors' bridge type decision on April 25, 2011 has eliminated a major risk element.
- Ø It is the PMOC's opinion that the decision to use a DT bridge type has reduced design related risk as compared to the previous Open Web Box (OWB) design.
- Ø It is the PMOC's opinion that the results obtained from CRC's test pile program have reduced schedule risks previously associated with environmental limitations on in-water work.

7.0 LIST OF ACTION ITEMS

The following listing covers concerns and recommendations outstanding from previous Quarterly Reports that will be monitored and closed when a satisfactory result is in place. Items will be added to the list in future reports as appropriate for further monitoring and reporting.

QR#14

14.02 – CRC to report on the status of State Safety Oversight and the associated term sheet. *[In Progress]*

QR#15

15.01 – CRC to brief FTA, FHWA and the PMOC on the results of the Cost Estimate Review upon completion. *[Complete]*

15.02 – FTA, CRC and the PMOC to have a conversation on the path forward under MAP-21. *[Complete]*

15.03 – CRC to provide an Attorney General's opinion on the use of state funds to acquire transit right-of-way. *[In Progress]*

15.04 – CRC to provide the FTA and FHWA with a timeline for the NEPA Re-evaluation by November 23, 2012. *[Complete]*

15.05 – CRC to provide the federal partners with a summary of the comments received at the November 14, 2012 Bridge Height Open House as soon as possible. *[Complete]*

15.06 – CRC to include C-TRAN in future meetings related to small/disadvantaged business utilization and outreach. *[In Progress]*

APPENDIX A – LIST OF ACRONYMS

BA	Biological Assessment
BERP	Bridge Expert Review Panel
BFMP	Bus Fleet Management Plan
BNSF	Burlington Northern Santa Fe Railroad
BO	Biological Opinion
CEVP	Cost Estimate Validation Process
CIP	Contract Implementation Plan
CLIN	Contract Line Item Number
CO	Contracting Officer
COTR	Contracting Officer's Technical Representative
COP	City of Portland
COV	City of Vancouver
CRB	Columbia River Bridge
CRA	WSDOT's Cost Risk Assessment
CRC	Columbia River Crossing
C-TRAN	Clark County Public Transportation Benefit Area Authority
D-B	Design-Build
DT	Deck Truss
DEIS	Draft Environmental Impact Statement
DHAP	Department of Archeology and Historic Preservation
DOT	Department of Transportation
FAA	Federal Aviation Administration
FD	Final Design
FEIS	Final Environmental Impact Statement
FFGA	Full Funding Grant Agreement
FHWA	Federal Highway Administration
FMP	Fleet Management Plan
FTA	Federal Transit Administration
<i>GBP</i>	<i>U.S. Coast Guard General Bridge Permit</i>
GFI	Gannett Fleming, Inc.
IGA	Inter-governmental Agreement
IPS	Integrated Project Sponsors Council Staff
I-5	Interstate Highway No. 5
IAMR	Interchange Access Modification Request
ICP	Initial Construction Program
ISO	International Organization for Standardization
IWWW	In-Water Work Window
LONP	Letter of No Prejudice
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
LUBA	Oregon's Land Use Board of Appeals
LUFO	Land Use Final Order
MAP-21	Moving Ahead for Progress in the 21 st Century
MC	Mainland Connector Construction Package
MCA	Master Cooperative Agreement
MD	Marine Drive Construction Package
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding

MPS	Master Project Schedule
MPSR	Monthly Project Status Report
MUP	Multi-use Path
NB/SB	North Bound/South Bound
NEPA	National Environmental Policy Act
NIR	Navigation Impact Report
NTP	Notice to Proceed
ODOT	Oregon Department of Transportation
PDPP	Project Delivery and Procurement Plan
PE	Preliminary Engineering
PIP	Project Implementation Plan
PMOC	Project Management Oversight Contractor
PMP	Project Management Plan
PSC	Project Sponsors Council
QA/QC	Quality Assurance/Quality Control
QAP	Quality Assurance Plan
RA	Risk Assessment
RAMP	Real Estate Acquisition and Management Plan
RC	River Crossing Construction Package
RCMP	Risk and Contingency Management Plan
RFP	Request for Proposal
RFQ	Request for Qualifications
RFMP	Rail Fleet Management Plan
ROD	Record of Decision
ROW	Right Of Way
RSD	Revenue Service Date
RTP	Regional Transportation Plan
SCC	Standard Cost Categories
SEPA	Washington's State Environmental Policy Act
SHPO	State Historic Preservation Office
SSMP	Safety and Security Management Plan
SR	State Route
SUE	Subsurface Utility Engineering
TBD	To Be Determined
TCC	Technical Capacity and Capability
TIFIA	Transportation Infrastructure Finance and Innovation Act
TOM	Task Order Manager
TriMet	Tri-County Metropolitan Transportation District of Oregon
TS&L	Type, Size and Location
UDAG	Urban Design Advisory Group
UGB	Metropolitan Portland's Urban Growth Boundary
UMP	Utility Management Plan
UMS	Utility Monitoring Service
USACE	US Army Corps of Engineers
USCG	US Coast Guard
VE	Value Engineering
WSDOT	Washington State Department of Transportation
WBS	Work Breakdown Structure
YOE	Year of Expenditure

APPENDIX B – PRESIDENT’S DASHBOARD

PRESIDENT’S DASHBOARD – CRC PROJECT (8-20-2012)					
<i>Status of Activities (by PMOC) as of December 2012</i>					
TITLE	AGENCY	ACTUAL START DATE	ACTUAL COMPLETION DATE	TARGET START DATE	TARGET COMPLETION DATE
Section 404 Permit - Columbia River Bridge	USACE	11/30/2012		11/30/2012	7/30/2014
Section 408 Permit - Hayden Island Connector/Marine Drive - Levee System	USACE			12/10/2014	8/31/2015
USCG Bridge Permit - Columbia River Bridge	USCG			1/30/2013	9/30/2013
FAA Form 7460 Notice of Proposed Construction or Alteration	FAA			7/31/2013	10/31/2013
Section 404 Permit - Hayden Island Connector/Marine Drive	USACE			7/31/2014	8/31/2015
Section 408 Permit - Columbia River Bridge - Navigation Channel	USACE			11/19/2013	7/30/2014
USCG General Bridge Permit - Hayden Island Connector/Marine Drive	USCG			4/30/2014	5/1/2015
Tolling Expression of Interest	FHWA	8/1/2012		8/1/2012	7/1/2013
Initial Finance Plan	FHWA			7/1/2013	12/31/2013
Project Management Plan	FHWA			1/1/2013	7/1/2013
TIFIA Master Credit Agreement Letter of Interest	DOT			12/31/2012	12/31/2013
Navigation Impact Analysis	CRC	11/2/2012		11/2/2012	11/2/2012
Complete Bridge Permit Application Submitted to Coast Guard	CRC			1/30/2013	1/30/2013
DOT/USCG/USACE Coordination on Wetland Mitigation	DOT/USCG/USACE			8/30/2013	8/30/2013

APPENDIX C – RISK REGISTER (2009) STATUS

The following FTA Risk Register was produced in July 2009. The status of risks was last updated August 13, 2012. This Risk Register is outdated and will be replaced in the near future with an updated comprehensive Risk Register which combines the risks identified in the 2009 FTA risk workshop with those identified in subsequent WSDOT Cost Estimate Validation Process (CEVP) workshops. The new Risk Register is currently undergoing internal review.

PMOC FTA Risk Assessment July 2009 Risk Mitigation Matrix Results					
	Risk Event	Mitigation Strategy	Status	Results	PMOC Comment
1	East/West alignment shift to south 16th Ave or 17th (tunnel not an option)	Coordination with COV, community outreach, COV Council, and C-TRAN board for corridor analysis and comparison of east/west alternatives including McLoughlin.	Retired	17th St was chosen as the preferred location as supported through support from the COV Council and C-TRAN Board as well as community outreach.	Retired
2	Shift to 16th and Tunnel	Study 17th St and McLoughlin, high cost of tunnel	Avoided / Retired	Tunnel was too expensive, corridor analysis between 17th St and McLoughlin. See results above.	Retired
3	Rail Crossing Approvals	Coordination with the COV two locations that require the investigation of gates. At McLoughlin crossover and Touchdown at 5th St.	Retired	Gates included in both locations for 25% design, investigation ongoing to mitigate noise associated with concerns for residents dealing with bells and whistles. Ongoing analysis for inclusion of gates at 5th St. COV is reluctant. Developing MOU for design approvals.	Verify in Capital Cost Estimate
4	Cost of complete street rebuild along transit corridor per CEVP #95	Incorporate cost of a complete street rebuild in base project budget.	Accepted	Complete street rebuild included in base project costs	Verify in Capital Cost Estimate

**PMOC FTA Risk Assessment July 2009
Risk Mitigation Matrix Results**

	Risk Event	Mitigation Strategy	Status	Results	PMOC Comment
5	Conflicts and interfaces with other major construction projects per CEVP #96	Obtain major projects schedule from cities, transit agencies, and DOTs, incorporate any major project by others into master schedule, general conditions. Deliverable: Show Major Projects in Master Schedule (MOU)	Active	Ongoing, on Risk Register with Risk ID (TRAN_80) 2012 Risk Register 44, 120	
6	Three Bridge Option	Follow the NEPA process and support decision through the FEIS results	Retired	FEIS identifies the 2 bridge option as LPA along with additional support from both Governors, Bridge Review Panel, Expert Review Panel, and PSC	Retired
7	Cost Allocation Agreements	Develop term sheets. Recognize FTA guidelines on financial match and associated milestones. Deliverable: MOU between Transit and Highway addressing the approach.	Active	See Risk Register Agreements 19 2012 Risk Register has 2, 6, 102, 103, 104 covering agreements and cost for a variety of factors from FD to FFGA as well as tolling commitments.	
8	More restrictive constraints on IWWW than in estimate	Biological Opinion	Retired	BO received 1/19/2011	Retired
9	Signature Bridge per CEVP #87 plus aesthetic elements	Follow the NEPA process and support decision through the FEIS results	Transferred	See Risk ID (Struc2a) 2012 Risk Register 79	Verify risk status in next risk register

**PMOC FTA Risk Assessment July 2009
Risk Mitigation Matrix Results**

	Risk Event	Mitigation Strategy	Status	Results	PMOC Comment
10	Packaging of historical impact (HI), S.R. 14 in with Bridge River Crossing	No adverse impacts on HI, adverse impacts to Ft Vancouver for SR-14 construction visual, highway and access to post hospital.	Active	Mitigations identified in the ROD and Section 106 MOU 2012 Risk Register 27	Verify risk and status
11	Compliance with Permitting Requirements for Work in Water per CEVP #155	Place permits into bid packages, highlight need for compliance, and penalties for lapses. Place permits into bid packages, highlight need for compliance, and penalties for lapses.	Active	See Risk ID (Env25) 2012 Risk Register is 25	
12	Construction for Work Windows in downtown Vancouver	Early coordination with COV and business owners in downtown Vancouver to identify acceptable opportunities for reduced construction duration. Deliverable: IGA	Retired	2012 Risk Register 105, Retired based on a constricted work window, potential opportunity if the businesses are willing to loosen up the current planned	<i>Verify in project schedule</i>
13	River Traffic Accidents	Supplement tug and river pilots; provide construction schedule and staging plan to barge companies. Deliverable: Conduct of Construction Plan for River Crossing	Active	See Risk ID (Construction 9) 2012 Risk Register 12	
14	Guideway: Retained cut or fill unforeseen site conditions	Complete Geotechnical Baseline Report, incorporate in contract provisions. Review history of trolley lines in Vancouver to identify possible conflicts. Deliverable: Geotech Report, Phase I Environmental Review, Utility Report	Active	See Risk ID (Tran72) Geotech Reports expected at the end of February 2012. 2012 Register 114 Captures P&R	

**PMOC FTA Risk Assessment July 2009
Risk Mitigation Matrix Results**

	Risk Event	Mitigation Strategy	Status	Results	PMOC Comment
15	Track: Direct fixation market price	Assess / Buy long lead items early and just in time delivery. Incorporate approval processes. Routine conversations with rail vendors, inclusion of escalation clause in procurement contract. Strategy matrix. Incorporate procurement of long lead items in CIP. Deliverable: Contract Implementation Plan	Active	See Risk ID (Tran73) 2012 Risk Register 194	
16	Track: Embedded Market Price Exceeds Escalation	Assess / Buy long lead items early and just in time delivery. Incorporate approval processes. Routine conversations with rail vendors, inclusion of escalation clause in procurement contract. Strategy matrix. Incorporate procurement of long lead items in CIP. Deliverable: Contract Implementation Plan	Retired	See Risk ID (Tran74) 2012 Risk Register. Risk 116 retired based on requirement to use T-RAIL, potential opportunity should Girder Rail become available. (Buy America)	
17	Track: Special (switches, turnouts) Market Price Exceeds Escalation	Assess / Buy long lead items early and just in time delivery. Routine conversations with rail vendors, inclusion of escalation clause in procurement contract. Incorporate approval processes. Strategy matrix. Incorporate procurement of long lead items in CIP. Deliverable: Contract implementation Plan	Active	See Risk ID (Tran75) 2012 Risk Register 194	

**PMOC FTA Risk Assessment July 2009
Risk Mitigation Matrix Results**

	Risk Event	Mitigation Strategy	Status	Results	PMOC Comment
18	Track: Additional Operations Requirements (Special Track Work)	Additional operations requirements. Plans review by operations in conjunction with Fleet Management Plan. Routine conversations with rail vendors inclusion of escalation clause in procurement contract. Deliverable: Contract Implementation Plan	Active	See Risk ID (Tran76) 2012 Risk Register 194	
19	Provision to add a fifth station east-west on 17th St	Some corridor analysis as well as a TOD charette within the Mill District during Railvolution that shows 2 stations already within the 1/2 mile TOD development radius.	Retired	COV has backed off from exploring a 5th station but the CRC has agreed to place conduits along the proposed location to not preclude a future station being developed in that location.	Retired - verify conduits in plans & estimate
20	Replacement of eliminated parking	Work with COV and C-TRAN to develop a Parking Mitigation and Management Plan options being explored to mitigate loss of parking included P&R shared use and conversion of existing parking. Deliverable: Tied to MOU and Parking Management/Mitigation Plan	Retired	See Risk ID (Tran63) 2012 Register 109 \$6 million was built into the base.	<i>Verify in cost estimate</i>
21	At Grade/Aerial: Added Aesthetics Station Features	Early communication with COV, COP, input from VTAC and PWG, Station design recommendations being established. Deliverable: Conceptual Design Reports	Active	See Risk ID (Tran77) 2012 Register 119	

**PMOC FTA Risk Assessment July 2009
Risk Mitigation Matrix Results**

	Risk Event	Mitigation Strategy	Status	Results	PMOC Comment
22	Interchange moves south and impacts existing Expo Station		Retired		Risk avoided
23	Park and Ride: City requires ground floor retail / architectural features	COV has City Code requiring active uses on the ground floor of any parking structures or park and rides facilities within downtown.	Accepted	A high level of architectural finishes as well as retail storefronts are already included in the cost estimates used in the basis of the FEIS Financial Plan for transit at the Mill and Columbia P&R sites. Deliverable: Detailed list of cost estimate assumptions.	
24	Park and Ride: Unfavorable geotechnical conditions	Complete Geotechnical Baseline Report, incorporate in contract provisions. Review history of trolley lines in Vancouver to identify possible conflicts. Deliverable: Geotech Report, Phase I Environmental Review, Utility Report	Retired	See Risk ID (Tran 72) Geotech Reports available at the end of February 2012.	Verify conclusions from geotech reports
25	Park and Ride: Parking Reconfigure for SR 14 and Mill Station	Mill Station will not be reconfigured, Lower Vancouver Design study to analyze options and community outreach for preferred option	Retired	Lower Vancouver Design Study as well as community and COV support for relocation of SR-14 park and ride to 5th and Columbia.	Retired

**PMOC FTA Risk Assessment July 2009
Risk Mitigation Matrix Results**

	Risk Event	Mitigation Strategy	Status	Results	PMOC Comment
26	Light Maintenance Facility: PMLR doesn't go forward	Milwaukee project is moving forward however there is an adjustment in projected cost sharing. Griffiths to produce a financial plan for Ruby Junction Maintenance Facility Split with TriMet's Portland to Milwaukee. Deliverable: Road Map A.2.5 / Milwaukee FFGA	Retired	PMLRT is moving forward, risk retired.	Retired
27	Light Maintenance Facility: Cost sharing differs from the estimate	Make adjustments as needed based on funding permitted to PMLR. Come to agreement on fair distribution of added costs.	Accepted	Griffiths to produce a financial plan for Ruby Junction Maintenance Facility Split with TriMet's Portland to Milwaukee. (IGA)	Phase 2 costs will be included in PE cost estimate.
28	Site Utilities, Utility Relocation: Undergrounding of overhead utilities on McLoughlin	Avoid (Conduct an analysis to identify any benefits of taking on the responsibility of undergrounding utilities to be able to package utilities together and develop a plan for the transit corridor (per CEVP discussion April '12))	Active	See Risk ID (UT17) 2012 Risk Register 113	
29	Hazardous Material, Contaminated Soil removal, mitigation, ground water treatments Unforeseen Site	Complete Geotechnical Baseline Report, incorporate in contract provisions. Review history of trolley lines in Vancouver to identify possible conflicts. Deliverable: Geotech Report, Phase I Environmental Review,	Active	See Risk ID (Tran72) 2012 Risk Register 114, 19	

**PMOC FTA Risk Assessment July 2009
Risk Mitigation Matrix Results**

	Risk Event	Mitigation Strategy	Status	Results	PMOC Comment
	Conditions	Utility Report			
30	Utility Relocation will be difficult in congested downtown area/reliability of as-builts	Potholing and site investigation, traffic control planning with COV / COP. Deliverable: Conduct of Construction Agreement with Cities.	Active	See Risk ID (UT 18) 2012 Risk Register 129 - 135 sans 133	
31	Potential Change in Environmental Regulations	Track draft rules and policy changes through construction. Continued coordination with regulatory agencies.	Active	See Risk ID (ENV 15) 2012 Risk Register 21	
32	Limited in-Water Barge Time Tied to CEVP #66	Covered Above			
33	Community Objections per CEVP #69	Community outreach, public meetings, open houses, VWG, PWG, VTAC, and general community involvement, property owners stakeholders etc... ongoing	Retired	Covered by CTRAN vote and other permit issues.	Verify disposition in updated risk register
34	Extended Consultation with NMFS	Biological Opinion	Retired	BO received 1/19/2011	Retired

**PMOC FTA Risk Assessment July 2009
Risk Mitigation Matrix Results**

	Risk Event	Mitigation Strategy	Status	Results	PMOC Comment
35	Archeological Discoveries per CEVP #45-55	Consultation with tribes and stakeholders	Active	Inadvertent discovery plan as well as curation facility and Section 106 MOA completed. 2012 Risk Register 24, 27	
36	Tribal Agreements	Ongoing coordination and discussions with tribes, NPS, DAHP, SHPO to identify areas where there might be difficult discussions and begin these conversations early. Deliverable: Section 106 MOA	Retired	See Risk ID (ENV 19)	Retired

APPENDIX D – CRC INTER-GOVERNMENTAL AND THIRD-PARTY AGREEMENTS

Data Date: 1/3/2013 CRC Agreements Tracking

	TS #	Agreement #	Name	Scope summary	Responsible Team Lead	Term Sheet status	Agreement Notes/Current Status	
WSDOT	4		WSDOT - C-Tran Coordination Agreement	Between WSDOT and C-Tran for the distribution of maintenance and operations responsibilities for LRT and related equipment.	Scott Patterson, C-Tran; Mike Palazzo, WSDOT	Under FTA Review as of 9/12/12	Under development	
	9		WSDOT/BNSF Construction and Maintenance	Reference the easement/airspace in this agreement. The term sheet should include minimum clearance requirement. This includes the land swap on HWY 14	Mike Palazzo, Ahmer Nizam	Final draft	Under development	
	16a		TriMet/WSDOT Master Transfer Agreement	Grantee (WSDOT) transfers transit assets to C-Tran and TriMet, Asset Ownership, Assignment of Warranties, Share of bridge maintenance costs between transit district and DOTs.	Palazzo	Draft under negotiation	Under development	
	16b		C-Tran/WSDOT Master Transfer Agreement	Grantee (WSDOT) transfers transit assets to C-Tran and TriMet, Asset Ownership, Assignment of Warranties, Share of bridge maintenance costs between transit district and DOTs.	Palazzo	Draft under negotiation	Under development	
	17c		WSDOT/C-Tran Transit Continuing Control of Transit ROW	Allows transit facilities to exist and operate when not the underlying property owner. Example track in the street of Vancouver, city retains ownership, allows use by transit agency and agrees not to allow any development or closure to disrupt transit operations.	Palazzo	Draft under negotiation	Under development	
	61		WSDOT - COV Stormwater O&M	For the discharge of runoff originating outside the WSDOT right of way and draining onto WSDOT right of way or into the proposed new WSDOT conveyance system and water quality facilities.	George Humphrey	Draft under negotiation	Under development	
	63		C-TRAN & WSDOT Right of Way Agreement	Local Agency Agreement for WSDOT to acquire on behalf of C-Tran	Palazzo	Final draft	Under development	
	64		TRIMET & WSDOT Right of Way Agreement	Task assignment for right of way funding and acquisition procedures.	Jillian Detweiler, TriMet; Mike Palazzo, WSDOT	Draft under negotiation	Under development	
	67		COV & WSDOT Right of Way Agreement	Will include C-Tran's excess right of way; COV/WSDOT Right of Way transaction requirements are satisfied by turn back agreements.	Palazzo	Draft under negotiation	Under development	
			WSDOT/CCV Project Development Agreement		Palazzo/Doyle	N/A	Under development	
			WSDOT/ COP Project Development Agreement		Palazzo/Doyle	N/A	Under development	
		GCA 5736 Am 3	WSDOT/National Parks Service	Add curation facility mitigation to the master agreement	Heather Wills	N/A	Requires negotiation with NPS and plan for moving forward	
		GCA 6624 Am 8	WSDOT/TriMet	Additional TriMet Staff and Updated rates	Gary Fieck	N/A	TriMet draft under internal review	
		GCA 6697 am 5	Metro/WSDOT	Support for New starts submittal	Casoy Liles	N/A	Metro drafting scope	
		GCB 1182	Multi Co Drainage Dist/WSDOT	New Master Agreement for technical review and alteration of the stormwater drainage system to comply with MCDD and USACE regulations	Doyle Dilley	N/A	CRC Resolving indemnity, planning to meet with MCDD	
		GCB 1188	TriMet/WSDOT	New Master Agreement for services through the end of the project. Work by task order.	Gary Fieck	N/A	Currently shelved. To be re-opened for construction and acquisition	
		GCB 1315	C-TRAN/WSDOT	Master agreement for continuation of C-Tran's services through FFGA	Contracts	N/A	CRC responded to AGO comments 12/20/12	
		TB4-0111	WSDOT/COV Turnback	Transfers maintenance and ownership of parcels from WSDOT to the City	George Humphrey	N/A	Under development	
	ODOT	3		TriMet - ODOT Coordination Agreement	Between ODOT and TriMet for the distribution of maintenance and operations responsibilities for LRT and related equipment.	Gary Fieck	Final draft	Under development
		7		CDOT - MCDD Coordination Agreement	Between ODOT and MCDD for the distribution of maintenance and operations responsibilities for LRT and related equipment.	Palazzo	Under FTA Review as of 9/12/12	Under development
17b			CDOT/TriMet Continuing Control	Allows transit facilities to exist and operate when not the underlying property owner. Example track in the street of Vancouver, city retains ownership, allows use by transit agency and agrees not to allow any development or closure to disrupt transit operations.	Palazzo	Draft under negotiation	Under development	

WSDOT/ODOT	8	WSDOT/ODOT State Safety Oversight	Agreement between states to establish one State Safety Oversight authority for LRT operations. ODOT will have primary role with reporting relationship to WSDOT. ODOT already has responsibility for 50+ miles of LRT. Howard Gard to sign for Oregon	WSDOT Public Transportation office and Mike Palazzo	Draft under negotiation	Under development
	10	Bi-State DOT Project Development Agreement (IGA)	Will include Bi-State Tolling and Funding and Interagency Project Development Agreement. Agreement topics include, Ownership, Project organization and management, Administration of funds, Right of Way Acquisition, Vehicle (LRT) Acquisition, Construction Administration, Design, and Charge Order decision-making	Carley Francis	Draft under negotiation	Under development
Utilities	18	City of Vancouver (COV) - WSDOT Water, Sewer and Public Utilities	Included in WSDOT/COV Development Agreement. Between City and WSDOT to outline responsibilities and process for dealing with City Utilities within City or State right-of-way.	Palazzo/Doyle	Final draft	Under development
	38	COP Bureau of Environmental Services - ODOT	Included in WSDOT/COP Development Agreement. Between City and ODOT to outline responsibilities with regards to City utilities within City or State right-of-way. Under permit within State right-of-way. Identify major conflicts and resolutions.	Palazzo/Doyle	Draft under negotiation	Under development
	39	COP Water Bureau - ODOT	Included in WSDOT/COP Development Agreement. Between City and ODOT to outline responsibilities with regards to City utilities within City or State right-of-way. Under permit within State right-of-way. Identify major conflicts and resolutions.	Palazzo/Doyle	Final draft	Under development
Other	1	COV - C-Tran Coordination Agreement	Between City of Vancouver and C-Tran for the distribution of maintenance and operations responsibilities for LRT and related equipment.	Matt Ransom, COV, Scott Patterson, C-Tran	Final draft	Under development
	3	TriMet - COP Coordination Agreement	Between City of Portland and TriMet for the distribution of maintenance and operations responsibilities for LRT and related equipment.	Gary Ficek	Final draft	Under development
	14	Transit Agreement - Operations (IGA)	Bi State Transit Operations, Operations and Maintenance, Operation Funding, Bi State Legal enforcement. Includes TriMet and C-Tran	Carley Francis	Final draft	Under development
	17a	Transit Continuing Control of Transit ROW COP/TriMet	Allows transit facilities to exist and operate when not the underlying property owner. Example track in the street of Vancouver, city retains ownership, allows use by transit agency and agrees not to allow any development or closure to disrupt transit operations.	Palazzo	Draft under negotiation	Under development
	17d	Transit Continuing Control of Transit ROW COV/C-Tran	Allows transit facilities to exist and operate when not the underlying property owner. Example track in the street of Vancouver, city retains ownership, allows use by transit agency and agrees not to allow any development or closure to disrupt transit operations.	Palazzo	Draft under negotiation	Under development

APPENDIX E – PROPOSED CONTRACT PACKAGING

The following summary of proposed contract packages is taken from CRC’s Project Delivery and Procurement Plan dated September 2012. *CRC continues to review and refine its strategy.*

Package Title	Procuring Agency	Delivery Method
River Crossing (RC) Package	WSDOT	DB
Columbia River Interstate Bridge Removal (BR) Package	WSDOT	DBB
Mainland Connector (MC) Package	ODOT or TriMet	DBB
Marine Drive (MD) Package	ODOT	DBB
Oregon Transit (OT) Package	TriMet	DBB
Washington Transit (WT) Package	WSDOT	DBB or GC/CM
Park-and-Ride (PR) Package	WSDOT	DB
Transit Systems (TS) Package	TriMet	DFI
Transit Other (TO) Package		
Ruby Junction Maintenance Facility Modifications	TriMet	DBB
Steel Bridge Modifications	TriMet	DBB
Light Rail Vehicle Procurement	TriMet	DFI
Command Center Upgrades/Modification	TriMet	DFI
Legend: DBB – Design-Bid-Build; DB – Design-Build; GC/CM - General Contractor/Construction Manager; DFI – Design, Furnish & Install		

APPENDIX F – REAL ESTATE ACTIVITY TRACKING MATRIX (FUTURE)

APPENDIX G – LESSONS LEARNED TABLE

LL #	Date	Phase	Category	Subject	Lesson Learned
1					No lessons learned reports were generated during this reporting period.
2					
3					

Funding and Costs

The report cut-off date is the 10th. Amounts shown are reconciled back to the grantee’s accounting system on a monthly basis.

Funding

State Funds	\$60.7M
FHWA Funds	\$163.3M
FTA Funds	\$0.0M
Total Project Funding Net Award Total:	\$224.0M

Design and Planning Costs

Total Costs incurred to date	\$168.5M
Total Committed Funds to date (as of 11/30/12)	\$186.8M

Estimated Capital Cost

Total cost for Initial Construction Program Fall of 2012 ** 1

Highway AA, DEIS, Engineering and Construction:	\$1,872,000,000
Transit PE, Engineering and Construction:	\$858,100,000
<u>Interim Finance Costs:</u>	<u>\$66,900,000</u>
Total Initial Construction Program Cost	\$2,797,000,000

Transit Only Cost for Initial Construction Program Fall of 2012 1

Transit PE, Engineering and Construction	\$858,100,000
<u>Interim Finance Costs</u>	<u>\$66,900,000</u>
Total Project Capital Cost	\$925,000,000

Total Project Cost Fall of 2011 2

Highway AA, DEIS, Engineering and Construction	\$2,819,300,000
Transit PE, Engineering and Construction	\$874,700,000
<u>Interim Finance Costs</u>	<u>\$69,600,000</u>
Total Project Capital Cost	\$3,763,600,000

Transit Only Project Cost Fall of 2011 2

Transit PE, Engineering and Construction	\$874,700,000
<u>Interim Finance Costs</u>	<u>\$69,600,000</u>
Total Project Capital Cost	\$944,300,000

**** The Initial Construction Program is the first/initial phase of the LPA; the full LPA will be constructed, subject to availability of funds.**

¹ Data date: September 2012, date of New Starts submittal

² Data date: September 2011, date of New Starts submittal