MEMORANDUM

January 14, 2021

RESPONSES TO QUESTIONS ON INTERSTATE BRIDGE REPLACEMENT PROGRAM CONCEPTUAL FINANCIAL PLAN

The Interstate Bridge Replacement program submitted a Conceptual Financial Plan to the governors and legislative transportation committees in each state on December 1, 2020. It provides a high-level initial overview of the potential scale of need and a review of the possible funding options that might be available at the federal, state, and local levels. The ultimate funding plan for the program will be developed as part of the federal environmental review process as work progresses to develop alternatives and identify eligible funding sources.

An update on the Conceptual Financial Plan was presented to the Oregon Transportation Commission on Dec. 1, 2020. At that meeting, public comment was given by Mr. Joe Cortright that included questions about the plan, with a commissioner request that the program office follow up with him directly. A meeting was held on Dec. 16, 2020 to hear his concerns, with responses to his specific questions provided below.

RANGE OF COST ESTIMATES

December 16, 2020 Meeting Question: *What is the range of cost estimates and gap?*
Response:
The conceptual capital costs range from $3.2 to 4.8 billion in year of expenditure dollars, depending on scope and transit mode. With the assumptions made for federal and toll funding in the Conceptual Financial Plan, a gap of $1.8 to 2.3 billion is projected.
The cost estimate and funding ranges are summarized in Table 1 on page 4 of the Conceptual Financial Plan, with additional cost detail in Table 3 on page 15 and funding detail in Table 12 on page 30.

December 16, 2020 Meeting Question: *Do you guys really think that the best way to compute the range of cost gaps is to compare the low range of costs with the low range of revenues?*

Response:
Absolutely, yes. There are many choices yet to be made as the IBR program develops; however, the program team would not select the highest capital cost option if the funding projections are pessimistic. We are committed to tailoring the project to funding sources and availability.
This was addressed on slide 8 of the Conceptual Finance Plan presentation discussed at the bi-state legislative committee meeting on Dec. 15, 2020.
Follow-Up Question: *And the high range of costs and high revenues?*

Response:
The high capital cost option with light rail is estimated at $4.8 billion in year of expenditure dollars and the associated high-ending funding for this option is $2.5 billion, leaving a gap of $2.3 billion, as noted above.
This is shown on page 35 of the Conceptual Financial Plan.

December 16, 2020 Meeting Question: *Do you not think that we made a $1.1 billion error in the presentation to the transportation commissions and the two legislatures?*
Response:
No, there are many choices yet to be made as the program develops; however, the program team would not realistically select the highest capital cost option if the funding projections are truly low.
This was addressed on slide 8 of the Conceptual Finance Plan presentation discussed at the bi-state legislative committee meeting on Dec. 15, 2020.

December 16, 2020 Meeting Question: *Why would you not look at low level of revenues and the high end of costs? That's what represents the high end of risks.*
Response:
It is not realistic to assume the highest capital cost program scope of work would be pursued if the funding expectations were at the lowest levels. If the funding outlook proves to be pessimistic, then the program will look for ways to scale to a lower cost and/or construct in phases, while still striving to meet the program's Purpose and Need.
While the gap is theoretically maximized by pairing the lowest funding with the highest capital cost option, this approach disregards that it is not a reasonable path the IBR program team would recommend.
This was addressed on slide 8 of the Conceptual Finance Plan presentation discussed at the bi-state legislative committee meeting on Dec. 15, 2020.

CONSTRUCTION COST INFLATION

December 16, 2020 Meeting Question: *What construction cost inflation factor did you use to compute the increase in costs from the CRC budget? Backed out from calculations that we used 2% inflation rate from each successive year.*
Response:
The cost estimate escalation assumptions are covered in Section 4 on page 13 of the Conceptual Financial Plan. WSDOT's Capital Program Development and Management (CPDM) division maintains historical and forecast cost indices for Preliminary Engineering (PE), Right-of-Way (RW) acquisition, and Construction (CN) activities, using third-party data sources and statewide experience. The values used to escalate fiscal year (FY) 2012 dollars to FY 2020 are based on these indices by the three expenditure types, which include historical data through FY 2019.
Although the program team did not use a single 2% inflation rate assumption, it is correct that the overall effect of the three historical cost indices that were used to inflate from FY 2012 to FY 2020 equates to an average annual inflation rate from 2.0% to 2.2%, depending on which capital cost option

is selected. Projected inflation rates by year beyond FY 2020 vary, averaging between 2.2% and 2.3% when applied to the expenditure schedules for the capital cost options.

December 16, 2020 Meeting Question: *My reading of FHWA's construction cost index is that inflation is running 3%. What is the basis for those cost estimates?*

Response:

The program team looked at the FHWA's National Highway Construction Cost Index (NHCCI) over the period from FY 2012 (Q2 2012) through FY 2020 (Q2 2020) for benchmarking purposes and noted that the average annual inflation rate in the NHCCI over that period was 2.4%. Incidentally, for the period from FY 2014 through FY 2018, the NHCCI average annual increase was only 1.2%.

Please reference FHWA NHCCI here: https://www.fhwa.dot.gov/policy/otps/nhcci/

Follow-Up Questions: *What does it come out of? What does it include?*

Response:

As with the construction cost inflation factor, the program team used WSDOT's Capital Development and Management (CPDM) historical and forecast cost indices for Preliminary Engineering (PE), Right-of-Way (RW) acquisition, and Construction activities (CN), using third-party data sources and statewide experience. The values used to escalate fiscal year (FY) 2012 dollars to FY 2020 are based on these indices by the three expenditure types, which include historical data through FY 2019.

The overall effect of the three historical cost indices that were used to inflate from FY 2012 to FY 2020 equates to an average annual inflation rate from 2.0% to 2.2%, depending on which capital cost option is selected. Projected inflation rates by year beyond FY 2020 vary, averaging between 2.2% and 2.3% when applied to the expenditure schedules for the capital cost options.

COMPONENTS INCLUDED IN COST ESTIMATE

December 16, 2020 Meeting Question: *Oregon and Washington have either jointly or separately have agreed to $86 million in compensation to river users for height limitations that's imposed by a fixed span. No indication of whether it was included or inflated.*

Response:

The base estimates include $30 million in FY 2020 dollars ($25.3 million in FY 2012 dollars) for mitigation costs to river users, which do get inflated to year of expenditure (see pages 13 and 41 of the Conceptual Financial Plan). The high capital cost options for bus rapid transit and light rail transit also include $330 million and $370 million, respectively, for additional risk factors not yet identified that could include river user mitigation.

The Conceptual Financial Plan is intended to give legislators a broad estimate of future costs based on previous planning work assumptions, including costs for river users. These assumptions and costs may be reassessed as part of the IBR Program.

December 16, 2020 Meeting Question: *Your gap estimate counts the $50 million that Oregon and Washington have committed to the revived planning effort. But there's no indication that your cost estimate for the project includes that $50 million…. that the additional $50 million in cost, which was clearly not anticipated in the case of the CRC cost estimates, was included in your gap estimate?*

Response:
All cost estimate scenarios in the Conceptual Financial Plan include costs for planning, program development and preliminary engineering as stated in the appendix (page 40, bullet point #13 and page 41, bullet point #22).

Source of Revenue Estimates in Model

December 16, 2020 Meeting Question: *What is the source of the tolling revenue estimates that are contained in the IBR plan?*

Response:
The toll funding estimates were based on the most recent CRC toll funding scenarios referenced below and documented on pages 21 and 30 of the Conceptual Financial Plan:
https://www.wsdot.wa.gov/accountability/SSB5806/docs/4_Finance/ODOT_CRC_Updates_to_Bonding_Analysis_20131213FINAL.pdf

December 16, 2020 Meeting Question: *Are they taken from CDM Smith investment grade revenue analysis? What levels of traffic do they assume on the I-5 bridge?*

Response:
Yes, the traffic and gross toll revenue underlying the toll funding come from the 2013 CDM Smith investment grade traffic and revenue study, with net toll revenue projections prepared by Parsons Brinckerhoff.
Links to these documents are provided in footnotes on page 21 of the Conceptual Financial Plan. The "Toll Funding" section on pages 32-34 of the Conceptual Financial Plan provides a detailed explanation of why the 2013 CRC funding estimates are still relevant for preliminary financial planning.

Follow-Up Question: *What levels of traffic do they assume on the I-5 bridge?*

Response:
See the documents referenced above on page 21 of the Conceptual Financial Plan (links provided here for convenience):

- https://www.wsdot.wa.gov/accountability/ssb5806/docs/4_Finance/CRC_TollingStudyCommitteeReport.pdf
- http://data.wsdot.wa.gov/accountability/ssb5806/Repository/4_Finance/Investment%20Grade%20Analysis/Investment%20Grade%20Analysis.pdf
- https://wsdot.wa.gov/accountability/ssb5806/docs/4_Finance/CRC_Net_Revenue_Memo_PB_12_27_2013.pdf

Estimates will be updated once current traffic data is collected and analyzed.

Follow-Up Question: And on I-205 Bridge?

Response:
See the CDM Smith Traffic and Revenue Study document referenced on page 21 of the Conceptual Financial Plan.
Estimates will be updated once current traffic data is collected and analyzed.