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| **“One-pager”**  **Summary** | **I-4 / 172nd Street Interchange – Interchange Improvements**  **Cost Risk Assessment**  Blues County  *Workshop Date: June 2 & 3, 2018; review comments August 2019* | | | | | | | | | | | | | | | | | | |  | | | |
| **Need**  Provide transportation infrastructure at the I-4/172ndh Street Interchange and vicinity, while minimizing impacts to I-4. Project supports the Blues County Comprehensive Growth Management Plan.  **Description**  Interchange improvements including roundabouts at the ramp terminals, new bridges carrying I-4 traffic over 172nd Street, lengthening of Northern ramps.  **Benefits**   * **Mobility:** improved traffic capacity along 172nd St. supporting future growth. * **Bikes and pedestrians:** added access along NE 172nd Street undercrossing I-4. * **Fish passage:** culvert barrier replaced with open channel, and box culverts on Cripple Creek. * **Economic:** completion of improvements will support development of the surrounding area.   **Key Assumptions**   * Connecting Washington fund ceiling of $40 million. * Construction not likely to begin until 2026. * Existing I-4 bridges replaced by two 2-span bridges with profile raise. * Geometric layout based on design manual criteria. * Profile of NE 172nd Street remains the same. * Area currently under “Urban Holding” designation—no development until interchange improvements are reasonably funded. * Probability of Fish barrier opportunity changed from 30% to 20% per review comment. | | | | | | | **Risk Assessment Cost Range**  Per June 2019 analysis | | | | | | | | | | | | | | | | |
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| **Schedule Range**  10th to 90th percentile | | | | | | | | Ad Date | | | | Operationally Complete | | | | |
| *Jun 2026 – Mar 2029* | | | | *June 2029 – May 2032* | | | | |
|  | | | | | | | | | | | | | | | | |
| **Major Project Risks**  with estimated probability (P) and impact (most likely = M/L) | | | | | | | | | | | | | | | | |
| **Cost Risks:** | | | | | | | | | | | | | | Impact | | |
| P | | **Threats** (may add cost – $ millions) | | | | | | | | | | | | Min | M/L | Max |
| 40% | | Design Build delivery | | | | | | | | | | | | 0.0 | 2.0 | 5.0 |
| 80% | | Liquefaction mitigation | | | | | | | | | | | | 0.5 | 0.7 | 1.2 |
| 50% | | Material price adjustments | | | | | | | | | | | | 0.5 | 0.7 | 1.5 |
|  | | **Opportunity** (may reduce cost – $ millions) | | | | | | | | | | | |  |  |  |
| 20% | | Fish barrier mitigation (elsewhere in watershed) | | | | | | | | | | | | 7.0 | 8.0 | 12.0 |
| 60% | | Long Culvert (in lieu of bridge span) | | | | | | | | | | | | 3.0 | 3.6 | 4.0 |
| 36% | | Design Build delivery advantages | | | | | | | | | | | | 0.0 | 2.0 | 6.0 |
| **Schedule Risks:** | | | | | | | | | | | | | | Impact | | |
| P | | **Threats** (may add time – months) | | | | | | | | | | | | Min | M/L | Max |
| 80% | | Liquefaction mitigation | | | | | | | | | | | | 0 | 3 | 7 |
| 40% | | Timing of ROW acquisition for open channel at Bullion development | | | | | | | | | | | | 0 | 2 | 4 |
|  | | **Opportunity** (may save time – months) | | | | | | | | | | | |  |  |  |
| 60% | | Long Culvert (in lieu of bridge span) | | | | | | | | | | | | 0 | 4 | 6 |
| 25% | | Level of environmental doc. & projects covered | | | | | | | | | | | | 0 | 6 | 13 |
| 20% | | Fish barrier mitigation (elsewhere in watershed) | | | | | | | | | | | | 1 | 4 | 6 |
|  | |  | | | | | | | | | | | |  |  |  |
|  | |  | | | | | | | | | | | |  |  |  |
| **Level of Project Design** | | Low | | | | Medium | | | | | High | | | | |  | June - July  2019 | DOTlogoblack | | | | | |
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