

# Comparison of Reasonable Alternatives

| Screening Factor  | No Build                       | Red Adjacent Upstream                   | Yellow Adjacent Upstream Improved Alignment | Preferred Green Adjacent Downstream     |
|---|--------------------------------|---|---|---|
| <b>Estimated Project Cost</b>   |                                |   |   |   |
| Construction cost   | \$0*                           | \$66,071,166                            | \$64,562,684                                | \$50,411,490                            |
| Right-of-way cost   | \$0*                           | \$5,913,000                             | \$5,838,800                                 | \$3,770,100                             |
| Total project cost  | \$0*                           | \$71,984,166                            | \$70,401,484                                | \$54,181,590                            |
|   |                                |   |   |   |
| <b>Public Input</b>   |                                |   |   |   |
| Public input<br>( <i>supports, somewhat supports, doesn't support</i> )   | Doesn't support                | Somewhat supports                       | Somewhat supports                           | Supports                                |
|   |                                |   |   |   |
| <b>Right of Way Impacts</b>   |                                |   |   |   |
| Number of parcels impacts   | 0                              | 16                                      | 18  | 15                                      |
| Residential Relocations   | 0                              | 0                                       | 0   | 0                                       |
| Commercial Relocations  | 0                              | 3                                       | 3   | 1                                       |
|   |                                |   |   |   |
| <b>Right of Way (ROW) Considerations</b>  |                                |   |   |   |
| New ROW anticipated ( <i>acres</i> )  | 0                              | 10.95                                   | 13.24                                       | 10.40                                   |
| Existing ROW use ( <i>acres</i> )   | 0                              | 8.08                                    | 10.23                                       | 8.08                                    |
| Number/type potential displacements   | none                           | 3 businesses                            | 3 businesses                                | 1 business                              |
| Land acquisition from federal agency ( <i>acres</i> )   | 0                              | 5.96                                    | 5.42  | 7.13                                    |
|   |                                |   |   |   |
| <b>Potential Environmental Considerations</b>   |                                |   |   |   |
| Floodplain (1% base; <i>lineal feet crossed</i> )<br>Regulatory floodway ( <i>feet crossed</i> )  | no impact                      | 4,780<br>4,630                          | 5,780<br>5,350                              | 4,055<br>3,920                          |
| Threatened/endangered species <sup>a</sup>  | none                           | 8.3 acres<br>tree clearing <sup>b</sup> | 7.5 acres<br>tree clearing <sup>b</sup>     | 8.5 acres<br>tree clearing <sup>b</sup> |
| Wetlands  |                                |   |   |   |
| Forested wetland ( <i>acres</i> )   | 0                              | 4.31                                    | 3.36  | 6.93                                    |
| Emergent wetland ( <i>acres</i> )   | 0                              | 0.96                                    | 2.05  | 0.39                                    |
| Hazardous waste location (underground tanks)  | not applicable                 | 3 gas stations                          | 3 gas stations                              | 2 gas stations                          |
| Section 4(f) public parks/lands ( <i>acres</i> )  | 0                              | 2.66                                    | 3.56  | 0                                       |
| Farmland ( <i>acres</i> )   | 0                              | <1.0                                    | <1.0  | <1.0                                    |
|   |                                |   |   |   |
| <b>Potential Socioeconomic/Community Considerations</b>   |                                |   |   |   |
| Travel time ( <i>increased, no change, improved</i> )   | no change/may worsen over time | improved                                | improved                                    | improved                                |
| Emergency services ( <i>no change, improved</i> )   | no change/may worsen over time | improved                                | improved                                    | improved                                |
| Public school services ( <i>no change, improved</i> )   | no change/may worsen over time | improved                                | improved                                    | improved                                |
| Business impacts (# of affected businesses & employees)   | none                           | 3 businesses<br>18 employees            | 3 businesses<br>18 employees                | 1 business<br>10 employees              |
| Bicycle/pedestrian access ( <i>no change, improved access</i> )   | no change/may worsen over time | improved                                | improved                                    | improved                                |
| Community access ( <i>no change, improved access</i> )  | no change/may worsen over time | improved                                | improved                                    | improved                                |
| Noise impacts/mitigation considered   | none                           | no mitigation required**                | no mitigation required**                    | no mitigation required**                |
| Navigable Channel   | none                           | slight temporary reduction              | slight temporary reduction                  | slight temporary reduction              |
|   |                                |   |   |   |
| <b>Potential Cultural Resource Considerations</b>   |                                |   |   |   |
| Archaeological sites (total)  | 0                              | 7                                       | 7   | 2                                       |
| National Register of Historic Places(NRHP) eligible / Section 4(f) bridge   | no adverse effect/not a use    | adverse effect/use                      | adverse effect/use                          | adverse effect/use                      |
| Impacts to NRHP listed or eligible / Section 4(f) buildings or historic districts (a direct impact will likely result in a Section 4(f) use of the resource and an adverse effect under Section 106 of the National Historic Preservation Act). | none                           | 1 direct <sup>c</sup>                   | 1 direct <sup>c</sup>                       | 2 indirect <sup>d</sup>                 |
| Cemeteries  | none known                     | none known                              | none known                                  | none known                              |

\*No Build would eventually deteriorate to the point where the existing bridge would require major rehabilitation to remain in service, with costs approximately \$420,000.

<sup>a</sup>Surveys for federally listed threatened or endangered mussel species indicate that they are not present.

<sup>b</sup>Acres of tree clearing represent potential impacts to Indiana bat and northern long-eared bat.

<sup>c</sup>Red and Yellow alternatives— Direct impact to the hotel, which is potentially eligible for the NRHP.

<sup>d</sup>Green alternative – Visual impacts for the hotel and one other building, both potentially eligible for the NRHP; however, based on preliminary consultation there would not be an adverse effect.

\*\*Noise – project type requires no noise study or mitigation (see page 58)