I-65/I-70 North Split Project
Public Open House
October 10, 2018
Alternatives Development Process

1. Define Problems
2. Identify Context Gather Input
3. Define Alternatives
4. Balance Trade-Offs
5. Select Alternative
Alternatives Development Process

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Define Problems – Road and Bridge Conditions

Correct deteriorated pavement and bridge conditions.

- Constructed in the 1960s and 1970s, the pavement is past its life expectancy
- Repairing pavement cracks and potholes leads to frequent lane closures
- Bridge conditions are poor and getting worse:
  - Under 5 years of life (11 bridges)
  - 5 - 10 years of life (16 bridges)
Define Problems – Safety

High Crash Rates

- Over 1,600 crashes from 2012 to 2016
  - Rear-end Crashes – due to congestion and stopped traffic
  - Sideswipe Crashes – due to congestion and weaving movements
- Higher than Indiana urban interstate rates
Define Problems – Safety

Top 4 Crash Locations

- **#1** PENNSYLVANIA RAMP WEAVE SECTION (rear-end/sideswipe)
- **#2** DELAWARE RAMP WEAVE SECTION (sideswipe/rear-end)
- **#3** I-65/I-70 MERGE/LANE DROP (sideswipe/rear-end)
- **#4** I-70 CURVE/MERGE (sideswipe/rear-end)
Define Problems – Weaving Areas

• Highest number of crashes are on west leg of the interchange, in weaving areas:

Pennsylvania Street Exit Ramp: Most frequent crash type:
• Rear-end, followed by sideswipe

Delaware Street Entrance Ramp: Most frequent crash type:
• Sideswipe, followed by rear-end
Define Problems – Operations

North Split Bottlenecks
### Purpose and Need – Performance Measures

<table>
<thead>
<tr>
<th>Project Need</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct Deteriorated Bridge Conditions</td>
<td>- Address deficient structural condition</td>
</tr>
<tr>
<td>Correct Deteriorated Pavement Conditions</td>
<td>- Address deficient pavement condition</td>
</tr>
<tr>
<td>Improve Safety</td>
<td>Alternative must address weaves on the west leg of the North Split:</td>
</tr>
<tr>
<td></td>
<td>1. Eliminate Meridian/Pennsylvania Street exit ramp weave</td>
</tr>
<tr>
<td></td>
<td>2. Eliminate Meridian/Delaware Street entrance ramp weave</td>
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<td>Alternative should include improvements at the following two crash locations:</td>
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<tr>
<td></td>
<td>3. Improve conditions at I-65 southbound/I-70 westbound merge point</td>
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<tr>
<td></td>
<td>4. Improve curvature on I-70 northbound to I-70 eastbound</td>
</tr>
<tr>
<td>Improve Interchange Operations and Reduce Congestion</td>
<td>- Improve Interstate level of service over no-build condition</td>
</tr>
<tr>
<td></td>
<td>- Eliminate “big weave” on I-65/I-70 south of North Split</td>
</tr>
</tbody>
</table>
Define Problems

Define Alternatives

Balance Trade-Offs

Select Alternative

Identify Context
Gather Input
Environmental Resources

North Split Project Area

Environmental Resources

• Historic Districts
• Park Property
• Monon Greenway
• Cultural Trail
• CSX Railroad
Public and Agency Input

Public meetings, community groups, advisory committees, social media - ongoing

Indianapolis Mayor Joe Hogsett - June 2018
- Make necessary bridge repairs to address valid safety concerns, but keep the interstate within the existing road bed
- Strike an appropriate balance between the needs of downtown residents and suburban commuters

Indianapolis Chamber of Commerce - July 2018
- No above-grade walls in legs outside the North Split interchange;
- No expansion of the number of above-grade through lanes
1. **No Build** – Leave the interchange as it is, with no replacement of pavement and bridges, and no safety or operational improvements

2. **Transportation System Management (TSM)** – Policy, strategy, and technology improvements, including traffic demand reduction or diversion

3. **Bridge and Pavement Replacement In-Kind** – Rehab or replace bridges and pavement at their current locations

**Alternatives 1-3 Eliminated** -- they do not meet project purpose and need.
5. Full Interchange Reconstruction – *Eliminated due to added through lanes and large retaining walls near right-of-way lines*
Alternative 4 – Options a, b, and c

4. Efficient Interchange Reconstruction
Reconfigure interchange with no added through lanes

Three options to meet purpose and need by:

• Replacing pavement and bridges
• Addressing major safety problems
• Eliminating bottlenecks and improving level of service
Common Features

- Smaller footprint and modernized design features
- Increase safety at top four crash locations
  - Two weaves, the merge and the curve
- Improve bottlenecks
- Eliminate “big weave” on I-65/I-70
- Opportunities to improve aesthetics and connectivity
Alternative 4 – Improve I-65 / I-70 Merge
Alternative 4 – Improve I-70 Curve
Alternative 4 Options

Where do the options differ?

• West leg of interchange differs
• East and south legs same

Three ways to eliminate weaves on the west leg
Alt. 4a: Pennsylvania and Delaware Ramps Closed

- West Leg of North Split
  - Eliminate existing weaving movements
  - Close Pennsylvania Street exit ramp and Delaware Street entrance ramp
  - Minimal pavement widening and no retaining walls
Alt. 4a: Pennsylvania and Delaware Ramps Closed

I-65 Cross Section View near Central Avenue (looking east)
Alt. 4b: Pennsylvania and Delaware Ramps Open

- West Leg of North Split
  - Eliminate existing weaving movements
  - Maintain full access at Pennsylvania Street exit ramp and Delaware Street entrance ramp
  - Install retaining walls up to 18 feet high north and up to 33 feet high south
Alt. 4b: Pennsylvania and Delaware Ramps Open

I-65 Cross Section View near Central Avenue (looking east)
Alt. 4a: Pennsylvania and Delaware Ramps Closed

I-65 Cross Section View near Central Avenue (looking east)
Alt. 4c: Selected Ramp Access Restrictions

- West Leg of North Split
  - Eliminate existing weaving movements
  - Maintain Pennsylvania Street exit ramp and Delaware Street entrance ramp, except:
    - Eliminate I-70 exit to Pennsylvania Street
    - Eliminate I-65 exit to ramps serving Michigan and Ohio Streets
  - Install retaining walls up to 11 feet high north and 7 feet high south
Alt. 4c: Selected Ramp Access Restrictions

I-65 Cross Section View near Central Avenue (looking east)
Alt. 4a: Pennsylvania and Delaware Ramps Closed

I-65 Cross Section View near Central Avenue (looking east)
## Trade-Offs: Alternative 4 Options and Alternative 5

<table>
<thead>
<tr>
<th>Alternative</th>
<th>To Pennsylvania Street Ramp</th>
<th>From Delaware Street Ramp</th>
<th>To Ohio/Michigan Ramps (via C-D Road*)</th>
<th>Approximate Maximums Wall Height (distance from R/W line)</th>
<th>Added Through Lanes</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I-65</td>
<td>I-70</td>
<td>I-65</td>
<td>I-70</td>
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<td>Alternative 4a:</td>
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<tr>
<td>All Ramps Closed</td>
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<tr>
<td>All Ramps Open</td>
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<tr>
<td>Selected Ramps Closed</td>
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<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
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<tr>
<td>Alternative 5:</td>
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<td>✓</td>
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<td>✓</td>
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<tr>
<td>All Ramps Open + added Through Lanes</td>
<td>✓</td>
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</tbody>
</table>
Trade-Offs: Alternative 4c Exits

From I-65 SB

From I-70 WB
Define Problems

Identify Context Gather Input

Define Alternatives

Balance Trade-Offs

Select Alternative
• Improves safety at the most hazardous locations
• Removes the worst bottlenecks
• Does not add through lanes
• More compact interchange
• Within existing right-of-way
• Minimizes exterior retaining walls on west leg
• Avoids exterior retaining walls on the east and south legs
• Meets project purpose and need
Next Steps
Next Steps

• Gather feedback on preliminary preferred alternative through October 29
• Refine preliminary preferred alternative
• Continue public involvement and feedback
• Analyze impacts in the Environmental Assessment (EA)
• Publish EA in early 2020
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