Eagle Road (Idaho 55) & Idaho 44 Intersection Improvement

Business & Community Workshop
September 18 & 19
Welcome

• Thank you for attending today’s meeting
• Introductions
  Project team
  Participants
• ITD values community input
Purpose of today’s meeting

- Introduce the project and work completed to-date
- Explain the new intersection design
- Hear your thoughts
Project Purpose & Need

- **Alleviate Congestion**: Ease current and future congestion at the intersection

- **Improve Operations**: Serve a high volume of left-turning vehicles

- **Increase Safety**: Improve intersection safety for motorists
Existing Conditions

• Operations - During peak afternoon hours
  – Traffic at the intersection of Eagle Road and Idaho 44 operates at a Level of Service (LOS) D
  – Average delay is 46 seconds per vehicle
  – Motorist turning left at this intersection experience delays that warrant LOS ratings of E and F
  – Average delay of the eastbound left-turning movement is nearly two minutes.
• Safety
  – The intersection has been designated a high accident location involving predominantly non-injury, property damage only collisions.
Work to Date

• ITD has completed:
  • Traffic Analysis
    o In 2040 the existing intersection average delay is expected to be 87 seconds (LOS F). This is twice as much time as the current delay during peak afternoon traffic.
  • Concept Alternative Analysis
    1. Conventional Alternative – 6 lanes on Idaho 44
    2. Innovative Alternative – Half Continuous Flow Intersection (CFI)
       o Used in multiple states (New Jersey, New York, Maryland, Louisiana, Utah, Missouri, Ohio, Mississippi, Colorado, and Texas)
       o Utah Department of Transportation has constructed more than 10 CFIs
       o Good performance record
    3. No Action
## Operational Comparison

<table>
<thead>
<tr>
<th>Movement</th>
<th>Half CFI Delay/LOS (seconds)</th>
<th>Conventional Widened to 6 Lanes Delay/LOS (seconds)</th>
<th>No Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>NB Left</td>
<td>44.4 / C</td>
<td>125 / F</td>
<td>133.5 / F</td>
</tr>
<tr>
<td>NB Thru</td>
<td>82.5 / F</td>
<td>123 / F</td>
<td>148 / F</td>
</tr>
<tr>
<td>NB Right</td>
<td>23.3 / C</td>
<td>&lt;10 / A</td>
<td>90.5 / F</td>
</tr>
<tr>
<td>SB Left</td>
<td>29.9 / C</td>
<td>247 / F</td>
<td>90.5 / F</td>
</tr>
<tr>
<td>SB Thru</td>
<td>49.4 / D</td>
<td>65.6 / E</td>
<td>64.4 / F</td>
</tr>
<tr>
<td>SB Right</td>
<td>&lt;10 / A</td>
<td>40.9 / D</td>
<td>34.7 / C</td>
</tr>
<tr>
<td>WB Left</td>
<td>46.1 / D</td>
<td>69.7 / E</td>
<td>77.9 / E</td>
</tr>
<tr>
<td>WB Thru</td>
<td>31.0 / C</td>
<td>45.6 / D</td>
<td>79.5 / E</td>
</tr>
<tr>
<td>WB Right</td>
<td>&lt;10 / A</td>
<td>22.7 / C</td>
<td>58 / E</td>
</tr>
<tr>
<td>EB Left</td>
<td>49.3 / D</td>
<td>118 / F</td>
<td>82.2 / F</td>
</tr>
<tr>
<td>EB Thru</td>
<td>26.8 / C</td>
<td>55.2 / E</td>
<td>60.4 / E</td>
</tr>
<tr>
<td>EB Right</td>
<td>23.1 / C</td>
<td>14.5 / B</td>
<td>28.8 / C</td>
</tr>
<tr>
<td>Overall Average</td>
<td>40.7 / C</td>
<td>79.9 / E</td>
<td>87.3 / F</td>
</tr>
</tbody>
</table>
Alternative – Conventional Intersection with 6-Lanes on Idaho 44
Alternative – Continuous Flow Intersection (CFI)
Half CFI design

- Concept Recommendation
  - Innovative Alternative – Half Continuous Flow Intersection (CFI)
    - Improved traffic operations
    - Improved safety
    - Cost effective
    - Minimal property impacts
Benefits of a CFI

- High capacity intersection
  - All left and through moves on Idaho 44 go together
  - Eliminates signal phase
  - Reduces conflict points and improves safety
- More “green time” for other legs
- Does not require additional through lanes on Idaho-44
Next steps

• Complete preliminary design (2018)
• Host public meeting (2018)
• Complete final design (2019)
• Construction (FY 2021)
Discussion groups

• ITD would like to hear your thoughts
• Materials at your table
  – Graphic (roll plot)
  – Comment sheet
  – Sign in sheet
• ITD would like to know
  – Your concerns with the CFI design
  – What you like and dislike about the CFI design
Thank you

For more information and to stay involved
• Visit: www.itdprojects.org/Eagle44CFI
• Email: Eagle44CFI@itd.idaho.gov
• Call: 208-377-9688

Thank you for your comments