Continuous Flow Intersections

High Capacity Design Alternatives

Regional Road

Motorway

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Underlying Principle

Fewer phases is better

Fewer conflicts is better
The Network
The Main Bottleneck

Legend
- Main Bottleneck
- Key Routes
2016 Traffic Conditions
2031 Traffic Conditions
Option 1: Conventional Grade-Separation
Continuous Flow Intersection

Regional Road

Motorway
Continuous Flow Intersection
Signal Phasing with RBC
2031 Traffic Conditions
Option 2: Continuous Flow Intersection

08:00:20
Congestion Heat Map

Conventional

06:00 - 07:00 am
07:00 - 08:00 am
08:00 - 09:00 am

CFI

06:00 - 07:00 am
07:00 - 08:00 am
08:00 - 09:00 am
## Benefits

<table>
<thead>
<tr>
<th>Category</th>
<th>Option 1 (Conventional)</th>
<th>Option 2 (CFI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersection Demand (vph)</td>
<td>5,082</td>
<td>5,141</td>
</tr>
<tr>
<td>Intersection Delay and LoS</td>
<td>88.41</td>
<td>F</td>
</tr>
<tr>
<td>Travel Time - NB</td>
<td>05:08</td>
<td>03:47</td>
</tr>
<tr>
<td>Travel Time - SB</td>
<td>15:50</td>
<td>2:41</td>
</tr>
<tr>
<td>Average Speed - NB</td>
<td>62 Km/h</td>
<td>84 Km/h</td>
</tr>
<tr>
<td>Average Speed - SB</td>
<td>8 Km/h</td>
<td>47 Km/h</td>
</tr>
</tbody>
</table>
US 550 CFI, Durango, Colorado
US 550 CFI, Durango, Colorado

**Benefits**

- **Stops/ Vehicle**
  - 0%
  - AM Peak: Red
  - Inter-Peak: Black
  - PM Peak: Yellow

- **Delay per Vehicle**
  - -50%
  - AM Peak: Red
  - Inter-Peak: Black
  - PM Peak: Yellow

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**CRASHES**

- Before: 19
- After: 7

**AFTER**
US 550 CFI, Durango, Colorado
Questions?