

## COMPARISON OF PREVIOUS ALTERNATIVE (MODIFIED DIAMOND WITH SEMI-DIRECTIONAL FLYOVER RAMP) AND THE NEW DIVERGING DIAMOND INTERCHANGE

CONSIDERATION:	Previous Alternative: Modified Diamond with Semi-Directional Fly-Over Ramp	Current Preferred Alternate: Diverging Diamond Interchange (DDI)
<b>Safety</b>	<ul style="list-style-type: none"> <li>• More conflict points (32 in total, where vehicles merge, diverge or cross paths)</li> <li>• Higher risk of angle accidents and head-on collisions</li> <li>• Greater bridge surface area subject to icing during the winters</li> </ul>	<ul style="list-style-type: none"> <li>• Fewer conflict points (18)</li> <li>• No angle conflicts exist, all traffic merges</li> <li>• Improves sight distance at turns</li> <li>• Wrong way entry to ramps extremely difficult</li> <li>• 50% to 60% fewer accidents anticipated</li> </ul>
<b>Operations</b>	<ul style="list-style-type: none"> <li>• Single-lane, flyover ramp addressed only one of the three most heavily traveled movements and only in the morning peak period</li> <li>• Left turns onto I-66 must wait for green light (except the southbound Route 15 to eastbound I-66)</li> </ul>	<ul style="list-style-type: none"> <li>• Improves Route 15 weaving condition between Route 55 and I-66 eastbound on-ramp</li> <li>• Adds spur ramp to eliminate weaving maneuver from I-66 westbound off-ramp to Heathcote Boulevard westbound (Hospital)</li> <li>• Provides two-lane, I-66 eastbound entrance ramp from Route 15 southbound</li> <li>• Route 15 traffic signals to operate with two phases and shorter cycle lengths</li> <li>• Increases the capacity of turning movements to and from the ramps</li> <li>• Better storage between the ramp terminals</li> </ul>
<b>Maintenance</b>	<ul style="list-style-type: none"> <li>• <u>Four</u> bridges = more \$ in long term maintenance</li> <li>• Snow removal presents greater challenges on flyover ramp</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Two</u> bridges = less \$ in long term maintenance</li> </ul>
<b>Visual Impacts</b>	<ul style="list-style-type: none"> <li>• Flyover ramp adds third level to the interchange</li> <li>• More overall area available for landscaping</li> <li>• Bridges will be architecturally treated</li> </ul>	<ul style="list-style-type: none"> <li>• DDI is a two level interchange</li> <li>• Smaller areas for landscaping, but more suitable (subject to more natural light and rainfall)</li> <li>• Bridges will be architecturally treated</li> </ul>
<b>Right of Way Impacts</b>	<ul style="list-style-type: none"> <li>• 22 parcels affected</li> <li>• 5 parcels (residences) were total acquisitions</li> </ul>	<ul style="list-style-type: none"> <li>• 16 parcels affected</li> <li>• 3 parcels (with residences) are total acquisitions</li> </ul>
<b>Budget to Construct</b>	<ul style="list-style-type: none"> <li>• \$59 Million*</li> </ul>	<ul style="list-style-type: none"> <li>• \$43 Million</li> </ul>
<b>Time to Construct</b>	<ul style="list-style-type: none"> <li>• Approx. 1,250 days to construct</li> </ul>	<ul style="list-style-type: none"> <li>• Approx. 860 days to construct</li> </ul>
<b>Pedestrians</b>	<ul style="list-style-type: none"> <li>• Crossings would be at signalized intersections and two high volume, unsignalized ramps</li> </ul>	<ul style="list-style-type: none"> <li>• Crossings at signalized intersections and one low-volume, unsignalized ramps</li> </ul>

\*Based on Modified Diamond Interchange with Flyover Ramp Concept shown at the Public Hearing in March 2013.