I-95 at Central Boulevard Interchange PD&E
FM No: 413265-1-22-01

Status Review

Presentation to:
Palm Beach Metropolitan Planning Organization and Advisory Committees

TAC – July 6, 2016
BTPAC – July 7, 2016
CAC – July 13, 2016
MPO Board – July 21, 2016
Agenda

• Study Progress
• Mainline Alternatives
• Interchange Alternatives
• Evaluation of Alternatives
• Recommendations
Study Progress

• IJR Approved November 2015
• PD&E Commenced January 2015
• Meetings:
  • District Commissioner Palm Beach County – January 20, 2016
  • Northern Palm Beach County Chamber of Commerce Government Affairs Committee – February 12, 2016
  • Alternatives Public Workshop – February 18, 2016
  • Palm Beach Gardens City Commission - April 7, 2016
  • FHWA – Present Recommended Alternative – April 26, 2016
• Preliminary Engineering Report submitted May, 2016
• Public Hearing scheduled for September 28, 2016
• Refinement of Alternatives
I-95 Mainline Alternatives

Alternative 2: Collector Distributor (CD) Road Option – South of Central Blvd.

Alternative 3: Braided Ramps – South of Central Blvd.
I-95 Mainline Alternatives

North of Central Blvd. – Alternatives 2 & 3
Typical Sections: I-95 South of Central Boulevard

Alternative 2: CD Road Option
Typical Sections: I-95 South of Central Boulevard

Alternative 3: Braided Ramps
Typical Section: I-95 North of Central Boulevard

Alternatives 2 and 3
Mainline R/W Impacts

### Alternative 2

<table>
<thead>
<tr>
<th>Parcel</th>
<th>Parcel Name</th>
<th>Developed/Undeveloped</th>
<th>R/W Impact (acres)</th>
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**Total** 9.88
Mainline R/W Impacts

**Alternative 3**

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Recommendations
I-95 Mainline Alternatives

Alternative 2 – CD Road
• Shorter mainline weave distance
• Lower Ramp operating speeds on CD
• Anticipated to reach capacity in 2060
• Safety
  • Increased side swipe potential
• Lower Cost
• Similar R/W Impacts
• More Publically Acceptable Alternative

Alternative 3 – Braided Ramps
• Longer mainline weave distance – 500 additional feet
• Higher operating speeds
• Higher Operational Life Expectancy
• Safety
  • Less Conflicts - Safer
• Higher Cost - ~$13.5M more
• Similar R/W Impacts

Recommendation: CD Road
Interchange Alternatives

Tight Diamond
Typical Sections: Central Boulevard

Tight Diamond Urban Interchange – West of I-95

- Buffered Bike Lane: 7’
- Lane: 12’
- Lane: 12’
- Lane: 12’
- Lane: 12’
- Aux Lane: 7’
- 0’-12’

R/W

Varies 60’ - 110’

Central Blvd.

Varies 60’ - 155’
Typical Sections: Central Boulevard
Tight Diamond Urban Interchange – East of I-95

R/W

Variates 60’ - 100’

Central Blvd.

Variates 60’ - 153’

R/W
Typical Sections: Central Boulevard

Tight Diamond Urban Interchange – Bridge over I-95

6’ Swk
7’ Buffered Bike Lane
12’ Lane
12’ Lane
12’ Lane
12’ Lane
12’ Lane
12’ Lane
7’ Buffered Bike Lane
6’ Swk

68’-3” (TYP)

Central Blvd.

68’-3” (TYP)
Typical Sections: Central Boulevard

Diverging Diamond Interchange – Bridge over I-95

8’ Shldr | 12’ Lane | 12’ Lane | 7’ Buffered Bike Lane | 6’ Swk

6’ Swk | 7’ Buffered Bike Lane | 12’ Lane | 12’ Lane | 12’ Lane | 8’ Shldr

107’-3” (TYP) Central Blvd. 107’-3” (TYP)
## Tight Diamond Interchange R/W Impacts

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# Interchange R/W Impacts

## Diverging Diamond

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Recommendations

Interchange Alternatives

Tight Diamond Interchange
- Less Capacity – but meets design year demand
- Traditional Configuration – Easier for Drivers
- Traditional Pedestrian and Bicycle Movements
- Safety - More Conflict Points
- Lower Cost
- Less R/W Impacts
- More Publically Accepted Alternative

Diverging Diamond Interchange
- Can Accommodate Higher Turning Movement Volumes
- Better Traffic Operations
- No Benefit in Non-Peak Hours
- Non-traditional Pedestrian and Bicycle Movements
- Safety - Less Conflicts - Safer
- Higher Cost - ~$10M more
- More R/W Impacts – More Parcels

Recommendation:
Tight Diamond Interchange
Summary
Mainline/Interchange Alternatives

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Total Cost</th>
<th>Total R/W</th>
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<tr>
<td>Alternative 2 (CD Road/TDUI)</td>
<td>$33.9 Million</td>
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<td>Alternative 2A (CD Road/DDI)</td>
<td>$43.7 Million</td>
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<td>Alternative 3 (Braided Ramp System/TDUI)</td>
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<td>Alternative 3A (Braided Ramp System/DDI)</td>
<td>$57.4 Million</td>
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- Environmental Impacts Similar and Minimal
- Right of Way Impacts Similar (11.3 ac to 12.2 ac)
- Noise Impact Being Studied

Recommendation: CD Road/Tight Diamond Interchange
Questions?