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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<tr>
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<td>6</td>
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<td>7</td>
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**Total** 9.88
## Mainline R/W Impacts

### Alternative 3

<table>
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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
Typical Sections: Central Boulevard

Tight Diamond Urban Interchange – East of I-95

Sdwk  0'-12'  7'  12'  12'  12'  12'  6'
Aux  Lane  Buffered  Lane  Lane  Lane  Lane  Lane

R/W  Varies 60' - 100'  R/W

Varies 60' - 153'

Central Blvd.

Florida Department of TRANSPORTATION
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 12’ Lane 7’ Buffered Bike Lane 6’ Swk

68’-3” (TYP) Central Blvd. 68’-3” (TYP)
Interchange Alternatives

Diverging Diamond
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.
# Interchange R/W Impacts

## Tight Diamond

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<tr>
<th>Parcel</th>
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![Diagram of Tight Diamond Interchange](image-url)
## Interchange R/W Impacts

### Diverging Diamond

<table>
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<tr>
<th>Parcel</th>
<th>Parcel Name</th>
<th>Developed/Undeveloped</th>
<th>R/W Impact (acres)</th>
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<td>Old Palm CDD</td>
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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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<tbody>
<tr>
<td>Alternative 2 (CD Road/TDUI)</td>
<td>$33.9 Million</td>
<td>11.3 ac</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>
<td>$47.3 Million</td>
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<td>Alternative 3A (Braided Ramp System/DDI)</td>
<td>$57.4 Million</td>
<td>12.2 ac</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?