I-64 Peninsula Widening
Path Forward Discussion

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DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)

- Purpose and Need Analysis
  - Capacity
  - Roadway deficiencies
  - Safety

- Alternatives Analysis
  - Existing conditions
    - Existing limited access ROW
    - Distinct regions/sections
EIS Next Steps

Final EIS
- Alternative 1 as Preferred (CTB endorsed April 2013)
- TPO Board remains valuable / active participant
- Submission/Approval of Final EIS in Nov/Dec 2013

Implementation Strategies
- Phasing for operationally independent sections & fiscal constraints
- Record of Decision dependent on CLRP(s)
- Reevaluation of Final EIS as future segments move into plans

Goal = Develop strategies to effectively utilize funding from HB2313

- Parallel efforts underway with current EIS
- Provide intermediate relief as soon as possible
- Ensure cost effective & efficient implementation plan
- Understand TPO expectations
  - Concerns with tolls
  - Context Sensitive Solutions (CSS)
  - Phased implementation
- Analysis included:
  - Cost
  - Traffic operations
  - Safety
  - Complexity
  - Risks (including environmental impacts)
  - Time to deliver
Focused Attention on 4-Lane Segments

**Rural reach, lower congestion**
- Lightfoot
  VA 199 - Exit 234
- Camp Peary/Colonial Williamsburg
  VA 143 - Exit 238
- Camp Peary/Colonial Williamsburg
  VA 143 - Exit 238
- Humelsine Pkwy
  VA 199 - Exit 242

**Urban reach, higher congestion**
- Humelsine Pkwy
  VA 199 – Exit 242
- Busch Gardens
- US 60 – Exit 243
- Lee Hall / Yorktown
  VA 238 – Exit 247
- Fort Eustis
  VA 105 – Exit 250
- Jefferson Ave
  VA 143 – Exit 255

Potential options to maximize funding
Segment I – Jefferson Ave. through Fort Eustis

**Option #1: 6-Lane Widening in Median**

*Advantages*
- 6-lane section, 12 additional lane miles
- Simple design / construction
- Nominal unexpected risks / avoids RW impacts
- Expandable for managed lanes during peak hours / emergencies

*Approximate planning level estimate $100 million*
- PE = $5 m
- RW = $7 m
- CN = $88 m
- Project Development = 12 – 24 mos.
- Construction = 12 – 24 mos.
Potential options to maximize funding
Segment I – Jefferson Ave. through Fort Eustis

Option #2: 8-Lane Widening in Median / Outside

Advantages
- 8-lane section, 24 additional lane miles
- Rebuilds intelligent transportation systems / signing
- Minor modifications at Jefferson Avenue interchange
- Fort Eustis interchange modification

Approximate planning level estimate $220 million
- PE = $8m
- RW = $7 m
- CN = $205 m
- Project Development = 24 – 36 mos.
- Construction = 24 – 36 mos.

Potential options to maximize funding
Segment I – Jefferson Ave. through Fort Eustis

Option #3: Managed Shoulders w/Emergency Pull Offs

Advantages
- Shoulder reconstruction, 12 additional peak hour lane miles
- Lowest total cost
- Rebuilt shoulders / intelligent transportation systems / signing
- Limited geometric modifications at interchanges

Approximate planning level estimate $60 million
- PE = $5 m
- RW = $9 m
- CN = $46 m
- Project Development = 12 mos.
- Construction = 12 mos.
Potential options to maximize funding Segment II – Fort Eustis to Humelsine Pkwy.

Option #1: 6-Lane Widening in Median

**Advantages**
- 6-lane section, 16 additional lane miles
- Simple design / construction
- Nominal unexpected risks / avoids RW impacts
- Expandable for managed lanes during peak hours / emergencies

**Approximate planning level estimate $160 million**
- PE = $6 m
- RW = $7 m
- CN = $147 m
- Project Development = 12 – 24 mos.
- Construction = 12 – 24 mos.

Option #2: 6 and 8-Lane Widening in Median / Outside

**Advantages**
- 8-lane section, 20 additional lane miles
- Rebuilt intelligent transportation systems / signing
- Geometric modifications at interchanges
- Transitions from 8-Lane section to 6-Lane section at Yorktown

**Approximate planning level estimate $190 million**
- PE = $7 m
- RW = $7 m
- CN = $176 m
- Project Development = 24 – 36 mos.
- Construction = 24 – 36 mos.
Potential Options to maximize funding Segment II – Fort Eustis to Humelsine

Option #3: Managed Shoulders w/Emergency Pull Offs

**Advantages**
- Shoulder reconstruction, 16 additional peak hour lane miles
- Lowest total cost
- Rebuilt shoulders / intelligent transportation systems / signing
- Limited geometric modifications at interchanges

**Approximate planning level estimate $65 million**
- PE = $6 m
- RW = $11 m
- CN = $48 m
- Project Development = 12 mos.
- Construction = 12 mos.

Other Issues to Consider

**Design Considerations:**
- Widening alternatives do not include:
  - Existing concrete pavement reconstruction
  - Major interchange modifications (except where noted)
  - Existing mainline bridge replacements
- Consider Potential use of design build contracting
- Evaluate hardening inside shoulders with 6-lane widening option
- Refine engineering approach to reduce project costs (design exceptions, stormwater management, etc.)

**Potential Funding: Draft SYIP**
- $100 million in allocations (PE, RW and CN)
- FY16 – first “significant” allocation
Options summary to maximize funding
Segments I & II - Jefferson to Humelsine

<table>
<thead>
<tr>
<th>Planning Option</th>
<th>Segment 1</th>
<th>Segment 2</th>
<th>Total</th>
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<tbody>
<tr>
<td>6 Lane</td>
<td>$100 m</td>
<td>$160 m</td>
<td>$260 m</td>
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<tr>
<td>8 Lane</td>
<td>$180 m / $40 m*</td>
<td>$190 m**</td>
<td>$410 m</td>
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<tr>
<td>Managed Shoulders</td>
<td>$60 m</td>
<td>$65 m</td>
<td>$125 m</td>
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<tr>
<td>Interim Ft. Eustis Interchange</td>
<td>$60 m</td>
<td>$40 m</td>
<td></td>
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* 8 Lane option on segment 1 must include Ft. Eustis interchange reconstruction
** 8 lanes only from Ft. Eustis Blvd. to Lee Hall/Yorktown (Exit 247)

Recommended Approach:
- Move aggressively with 6-lane segment 1 (funded via HB2313)
- Develop strategy to fund 6-lane segment 2
- Develop strategy to fund interim improvements at Ft. Eustis interchange