## I-26 Connector

City of Asheville Buncombe County TIP Project No. I-2513

### Presentation to Asheville City Council

June 26, 2007

## Purpose

- Discuss NCDOT's review of the ADC Alternative
- Explain the transportation decisionmaking process
- Show where we are now and the remaining steps in the process
- Present FHWA's Role in the process



**Goal:** To ensure a transportation improvement meets need in the least environmentally damaging practical way

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## I-26 Connector Role of the Federal Highway Administration (FHWA)

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Geometric Design of Highways and Streets



The National System of Interstate and Defense Highways is the most important in the United States. The highways of this system must be designed in keeping with their importance as the backbone of the nation's highway systems. To this end, they must be designed to ensure safety, permanence, utility, and flexibility to provide for the predicted growth in traffic.

> - AASHTO Policy on Design Standards – Interstate System

### **Design Standards that NCDOT must follow:**

- Lane width
- Shoulder width
- Normal cross slope
- Horizontal curvature
- Superelevation
- Tangent grade
- Vertical curvature

- Vertical clearance
- Stopping sight distance
- Bridge width
- Horizontal clearance
- Structural capacity
  - Design speed

## I-26 Connector Review of the ADC Alternative

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- On (date) NCDOT received conceptual alignment of ADC alternative
- Very little information regarding engineering was provided – centline and double deck bridge concept
- NCDOT directed TGS Engineering to provide and evaluate functional design of the alternative alignment

 Several steps in engineering and design were needed to evaluate the alternative

### **Design Concerns**

1. Clearances

Shoulders Over and under Streets and Railroads

### 2. Horizontal Alignment

Curvature Superelevation

#### 3. Vertical Alignment Grades

Vertical Curves







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Section F At US 19/23 - I-26 Merge

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Section F At US 19/23 - I-26 Merge

### **Environmental Concerns**

**1. Historic Property Impacts** 

a. Montford / Riverside Cemetery (N.R. 1977)

b. Freeman House (D.O.E. 2006)

c.) Worley House (D.O.E. 1999)

2. Stream and Wetlands Impacts - Smith Mill Creek

3. Air and Noise Impacts - Montford Area

4. Construction Impacts - Temporary Detours

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### **Operational Issues**

1. I-240 EB Exit ramp to Patton ? (Plan vs. Model) Yes = Relocations / Historic Impacts

No = Weave Concern @ Exit East of French Broad River

2. I-240 EB Entrance loop from Patton Including I-26 NB Traffic = Short Weave W/O I-26 NB Traffic = RoutesPatton EB traffic to the east side of the French Broad River and adds 2 left turns = Increases EB Traffic on Smoky Park Bridges = Short entrance ramp to US 19-23-70

3. I-240 WB Exit loop to Patton - Short ramp = Queue storage concerns Including I-26 SB Traffic = Short available weaving distance = More traffic making a longer queue W/O I-26 SB Traffic = Routes to east side of French Broad River

= Increases WB Traffic on Smoky Park Bridges

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### **Operational Issues (cont.)**

4. I-240 WB Exit to Hill Street - Short ramp = Queue storage concerns

Longer ramp yields a shorter weave created by Montford entrance

5. I-240 WB Entrance from Hill Street - Short Ramp = Sight Distance Concerns

Longer ramp creates shorter weave across US 19-23-70 to I-240

6. Hill Street Connector - Storage concerns

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![](_page_30_Picture_0.jpeg)

\$ 313,200,000

### **Construction Costs (Updated 6/07)**

Alternate 2. \$ 144,300,000

Alternate 3. \$ 199,300,000

Alternate 4.

Alternate 5. \$ 249,900,000

ADC Alternate\* \$ 260,000,000

\* (Does not include Riverside/RR Relocation)

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# I-26 Connector (TIP I-2513)

### Conclusion of

### Presentation

### **Questions?**

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