WELCOME

Public Meeting For
I-40 From East of Douglas Boulevard to I-240
in
Oklahoma County

February 21, 2017
PURPOSE OF THIS MEETING

...is to Inform the Public About Proposed Improvements to I-40 From East of Douglas Boulevard to I-240 in Oklahoma County and Obtain Input
PURPOSE OF THE PROJECT

...is to Accommodate Existing and Future Traffic on I-40 and Provide Adequate Vertical Clearance Under Bridges
PROJECT BACKGROUND

- ODOT is Currently Studying Improvements on I-40 From I-35 to I-240, Including
  - Additional Driving Lanes
  - Frontage Roads (I-35 to Douglas Blvd.)
  - Bridge Improvements

- Projects Currently Scheduled Include
  - I-40 and Scott Street
  - I-40 and Sunnylane Road
  - I-40 and Crutcho Creek & 15th St.
  - I-40 and Sooner Road
  - I-40 and Douglas Boulevard
  - I-40 Between Douglas and I-240
  - I-40 and Choctaw Road
CURRENT PROJECT AREA
INFORMATION

- General Data on I-40
  - Project Length - 4.8 Miles
  - Original Construction 1963
  - 4 Overlays to Date (1975, 1988, 2002, 2015)
  - 4-Lane Divided Freeway With
    - 10-Foot Outside Shoulders
    - 4-Foot Inside Shoulders
    - Grass Median With Cable Barrier
  - Speeds – Posted 70 mph
  - Current Traffic (2015):
    - 44,260 Vehicles/Day (East of Douglas)
    - 37,960 Vehicles/Day (East of Anderson)
  - Projected Traffic (2045):
    - 63,240 Vehicles/Day (East of Douglas)
    - 53,080 Vehicles/Day (East of Anderson)
    - 15% Trucks
EXISTING BRIDGES

- Bridges over I-40
  - Post Road – 16’ 4” Vertical Clearance
  - Westminster Road – 16’ 4” Vertical Clearance
  - SE 59th Street – 17’ 3” Vertical Clearance

Westminster Rd. – Concrete Slab Span Bridge
SE 59th St. – Steel Beam Span Bridge
EXISTING BRIDGES

- **I-40 Bridges**
  - Anderson Road (2 bridges) – 14’ 10” Vertical Clearance
  - Hog Creek – Reinforced Concrete Box
  - I-240 WB Ramp (2 bridges) – 17’ 8” Vertical Clearance
CURRENT PROJECT AREA
INFORMATION

- **Collision Data (2006-2016)**
  - Total: 677 Documented Accidents
    - 448 Property Damage Only
    - 220 Involved Injury (332 People)
    - 9 Fatal (10 People)
  - On Average More Than 1 Accident/Week

- **Most Common Types**
  1. Fixed Objects (Cable Barrier)
  2. Rear Ends
  3. Side Swipes Same Direction

**Overall Accident Rate is 1.4 Times the State Average for Similar Highways.**

**Fatal Accident Rate is Nearly 2 Times the State Average**
EXISTING CONDITIONS
WARRANT IMPROVEMENT

- **Traffic Conditions**
  - Existing Traffic – Level of Service (LOS) D
  - Future Traffic – Level of Service (LOS) F

- **Pavement Condition**

- **Bridge Conditions**
  - Provide Adequate Vertical Clearance of 16’ 9”
  - Provide Adequate Bridge Width for New Lanes
  - SE 59th Street Bridge Recently Replaced – No Additional Work
PROJECT CONSTRAINTS
PROJECT CONSTRAINTS

- Identified Key Project Features/Constraints and Collected Data
  - Utilities
  - Developments
    - Homes
    - Businesses
  - Environmental
    - Cultural Resources
    - Threatened & Endangered Species
    - Waters and Wetlands
    - Sites Containing Potentially Hazardous Materials
  - Noise
PROJECT CONSTRAINTS

- The Project Will Have NO IMPACTS To:
  - Private Property (No Acquisition Required)
  - Wetlands
  - Cultural Resources
  - Historic Sites
  - Parks
  - Farmlands
PROJECT CONSTRAINTS

- **Project Constraints**
  - Utilities
    - Under Ground
      - Electric, Fiber Optic (ODOT Lines)
  - Utility Relocations, if Required, Will Occur Prior to Construction
PROJECT CONSTRAINTS

- Streams
  - Four (4) Identified Streams are Located Within the Study Area.
  - Minimal Impacts May Occur if Culverts are Extended. Appropriate Permits Will be Obtained From the US Army Corps of Engineers.
PROJECT CONSTRAINTS

- Threatened & Endangered Species
  - No Suitable Habitat for Threatened and Endangered Species
  - Bridges may Provide Nesting Habitat for Migratory Birds (Cliff and Barn Swallows)
**PROJECT CONSTRAINTS**

- **Storage Tank Sites or Potentially Hazardous Materials**
  - Seven (7) Low-Risk Sites Were Located Near the Project, but Will not be Affected by the Project
PROPOSED DESIGN
PROPOSED ROADWAY

I-40 Improvements

- Full Pavement Reconstruction
- Roadway Typical Sections
  - Six 12-Foot-Wide Lanes
  - 10-Foot-Wide Outside & Inside Shoulder (or as Wide as Possible)
  - Concrete Median Barrier
- Design Speed – 70 mph
- Extend Acceleration & Deceleration Lanes for Anderson Rd. Interchange
- I-40 Will Remain Open During Construction
PROPOSED ROADWAY

- **I-40 Improvements**
  - Full Pavement Reconstruction
  - Roadway Typical Sections
    - Six 12-Foot-Wide Lanes
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  - Extend Acceleration & Deceleration Lanes for Anderson Rd. Interchange
  - I-40 Will Remain Open During Construction
PROPOSED SPAN BRIDGES

- Proposed Post Road Bridge
  - I-40 Will be Lowered Approximately 6” for Vertical Clearance
  - No Change to Post Road
  - Post Road Will Remain Open During Construction
PROPOSED SPAN BRIDGES

- Proposed Westminster Road Bridge
  - Westminster Road Bridge Will be Raised Approximately 1’ to Provide Vertical Clearance
  - Westminster Roadway Will Tie Back to Existing
  - Temporary Road Closure During Construction – Estimated at 60 Days
PROPOSED SPAN BRIDGES

- Proposed Anderson Road Bridges
  - One Bridge
    - 117 Feet Wide – 6 Lanes
    - 3 Spans – 215 Feet Long
    - Prestressed Concrete Beams
  - Vertical Clearance – 16’-9”
  - Horizontal Clearance for Future Improvements on Anderson Road
  - Phased Construction - I-40 and Anderson Road will Remain Open

Example of a Prestressed Concrete Beam Bridge
PROPOSED SPAN BRIDGES

- Proposed I-240 WB Ramp Bridges
  - One Bridge
    - 117 Feet Wide – 6 Lanes
    - 3 Spans – 202 Feet Long
    - Rolled Steel Beams
  - I-40 and I-240 Ramp Will Remain Open

Example of a Rolled Steel Beam Bridge
PROJECT IMPACTS
A Noise Study was Completed According to Federal Highway Administration (FHWA) Regulations and ODOT Noise Policy

- Existing (2015) and Future (2045) Noise Levels were determined by the FHWA Traffic Noise Model, factoring in roadways, traffic data, terrain and receptor site locations.
- Validation to verify accuracy of Noise Model was completed by taking sample readings with a precision sound level meter.
- Eighty-Nine (89) Noise-Sensitive Receptors (Homes) at various distances adjacent to I-40 were evaluated.
NOISE IMPACTS

- **Existing Noise Condition**
  - Based on Existing I-40 Roadway Features and Traffic Volumes

- **Future Noise Condition**
  - Based on Additional Lanes on I-40 and Increased Traffic Volumes - Will Generate More Noise
  - Traffic Will Not be any Closer to Homes than Today

- **Noise Impacts**
  - An Impact Occurs When Exterior Future Noise Levels are 66 dB(A) or Above, or When Future Levels are 15-dB or More Above Existing Levels
  - For Existing Condition – 38 Homes Impacted
  - For Future Condition – 56 Homes Impacted
  - Future Levels Range 59.9 to 77.2 dB(A)
  - Future Levels over Existing Levels Range +0.9 to +5.4 dB
NOISE WALL CONSIDERATION

- Noise Walls Were Considered for all Impacted Homes – Walls Must Meet ODOT’s Feasible and Reasonable Criteria
  - A Benefitted Receptor Must Achieve at least 5 dB Reduction to be considered Feasible.
  - Reasonableness Means that a Wall Must Achieve at Least a 7 dB Reduction for at Least 75% of Benefitted Receptors, and
  - Noise Wall cost Must not Exceed $30,000 per Benefitted Receptor.

- Modeling Determined that Noise Walls would be Ineffective due to:
  - Not Achieving a Reasonable Acoustic Reduction at a 22-feet Maximum Wall Height
  - High Cost Per Benefitted Receptor - in All Cases Exceeding $100,000
  - Therefore, Noise Walls are Not Recommended for this Project.
PROJECT SUMMARY

- Proposed Improvements
  - New Lanes in the Median
  - New Pavement
  - Lower I-40 Under Post Road
  - Raise Westminster Bridge
  - New Bridges for I-40 Over Anderson Rd. and I-240

- Proposed Improvements – All Within Existing Right-of-Way
CONSTRUCTION SCHEDULE AND COST
I-40 & Douglas Blvd.
Right-of-Way: 2017
Construction: 2020
Cost: Est. $46 M

I-40, Douglas to I-240
No R/W or Utilities
Construction: 2020
Cost: Est. $70.1 M

I-40 & Choctaw Road
Construction: 2017
Cost: Est. $43.5M
THANK YOU!

Please Submit Your Comments by March 7, 2017

- Leave Your Comment Form Here Tonight
- Mail the Comment Form Back to ODOT:
  Environmental Programs Division
  200 NE 21st Street
  Oklahoma City, OK  73105
- Email Your Comments to Environment@ODOT.ORG
- Submit via Internet at www.odot.org\publicmeetings

QUESTIONS?