Public Meeting

SH-99 over the Arkansas River
Proposed Bridge Replacement
02/18/2016 @ 6:00pm
Cleveland Community Center
Before we get started...

…Please turn off or mute any electronic devices, and make sure you have a Handout and Comment Form available. Please hold your questions until after the presentation has ended.
Division 8

Counties Serviced: 11 Counties
Total Road Miles*: 1,664 Miles
Total Interstate Miles*: 40 Miles
Total Bridges: 1,118 Bridges

* Does not include Turnpike Mileage
Presentation Outline…

- Meeting and Project Purpose
- Existing Conditions
- Highway Traffic Volumes
- Project Scope
- Project Constraints
- Bridge Replacement Options
- Project Timeline
- General Questions & Comments
Project Location…
Purpose of this Meeting…

…is to inform the public & solicit comments about the Department’s proposed plan to replace the SH-99 bridge over the Arkansas River and the consideration to close the bridge during construction.

Purpose of this Project…

…is to improve the safety and functionality of the SH-99 crossing over the Arkansas River.
Existing Conditions...

- Built in 1963
- Two (2) lane bridge
  - 28 foot wide clear roadway
  - 12 foot wide driving lanes
  - 2 foot wide shoulder width
- Substandard Bridge Rail
- 1,019 foot long structure
  - 6 spans total
- Bridge is currently rated as Structurally Deficient.
- Approach Roadway Width
  - 44 foot wide
Existing Conditions (cont.)
Highway Traffic Volume...

  - 4,100 Vehicles Per Day
  - 11% Truck Traffic

- Future Traffic Volume (2035)
  - 5,800 Vehicles Per Day
  - 11% Truck Traffic
Project Scope…

- Widen Bridge Approach to match new bridge
- 44’ Clear Roadway
- Includes: two 12-foot driving lanes & two 10-foot shoulders
- Replace Guardrail
Project Constraints...
Project Constraints...

• Potential Threatened & Endangered Species Habitat Impact:
  o Interior Least Tern (May to August)
  o Migratory Species
    • Swallows (April to August)

• Flood Storage Area
• Wetlands
• Section 4(f) property (Wildlife Management Area)
• Compensatory Storage within river
## SH-99 over Arkansas River Matrix

<table>
<thead>
<tr>
<th></th>
<th>Existing Alignment</th>
<th>Offset Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Road closed during construction</td>
<td>Road open during construction</td>
</tr>
<tr>
<td>Road User Cost (Citizens)</td>
<td>Most</td>
<td>Least</td>
</tr>
<tr>
<td>Wetlands Impact (Acres)</td>
<td>0.5</td>
<td>19.52</td>
</tr>
<tr>
<td>New Right-of-Way Required Keystone WMA (Acres)</td>
<td>0</td>
<td>6.75</td>
</tr>
<tr>
<td>Compensatory Flood Storage for Keystone Lake (Cubic Yards)</td>
<td>None</td>
<td>Impacted</td>
</tr>
<tr>
<td>Threatened and Endangered Species - Interior Least Tern (seasonal restrictions May to August)</td>
<td>Minimized</td>
<td>Most Impact</td>
</tr>
<tr>
<td>Swallows (April to August)</td>
<td>Similar</td>
<td>Similar</td>
</tr>
<tr>
<td>Section 4(f) Resource - Keystone Wildlife Management Area (USACE)</td>
<td>Avoided</td>
<td>Impacted</td>
</tr>
<tr>
<td>Historic Properties (National Register Historic Places) - Mullendore Mansion</td>
<td>Not Impacted</td>
<td>Not Impacted</td>
</tr>
<tr>
<td>Archeological Sites</td>
<td>Not Impacted</td>
<td>Not Impacted</td>
</tr>
<tr>
<td>Relocations</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>FEMA Flood Plain</td>
<td>Least Impact</td>
<td>Most Impact</td>
</tr>
<tr>
<td>Construction Cost</td>
<td>$8,550,000.00</td>
<td>$12,400,000.00</td>
</tr>
<tr>
<td>Mitigation Cost</td>
<td>None</td>
<td>$500,000 to $1 million</td>
</tr>
<tr>
<td>Right-of-Way Acquisition Cost</td>
<td>None</td>
<td>$500,000 to $1 million</td>
</tr>
<tr>
<td>Utility Cost</td>
<td>Similar</td>
<td>Similar</td>
</tr>
</tbody>
</table>
Bridge Replacement Options…

Option Considered

- **Reconstruct on offset alignment:**
  - Shift centerline of roadway approximately 40 feet
- Increased impact and mitigation to environmentally sensitive areas
- Increased construction cost:
  - Right of way needed to tie existing roadway to new bridge
  - Embankment construction on South end is needed to tie existing roadway to new bridge
  - Rock excavation on north side of river
- Undesirable “Reverse Curves” to connect to existing roadway
Bridge Replacement Options...

Option Considered

- **Reconstruct on a partial offset alignment (Phased Construction):**
  - Shift centerline of roadway approximately 10 feet
- Increased impact and mitigation to environmentally sensitive areas
- Increased construction cost:
  - Right of way needed to tie existing roadway to new bridge
  - Embankment construction on South end is needed to tie existing roadway to new bridge
  - Rock excavation on north side of river
- Increased construction time of approximately 15 months
- Undesirable “Reverse Curves” to connect to existing roadway
- Concerns about the life of the bridge due to phased construction
Bridge Replacement Options…

Option Considered

• **Reconstruct on existing alignment (Temporary Bridge):**
  - Build temporary one-lane bridge offset to the existing bridge
• Increased impact and mitigation to environmentally sensitive areas
• Increased construction cost:
  - Temporary bridge would require construction and removal of piers and other substructure items.
• Increased construction time of approximately 10 months
Bridge Replacement Options…

**Recommended Option**

- *Reconstruct on existing alignment (Construction Road Closure)*
- Close road during construction:
  - Approx. 240 calendar days
  - Provide alternate route during construction
  - Signed highway detour = 67 miles
- Utilize bridge design that would allow minimal road closure to approximately 90 days
- Least impact to environmentally sensitive areas
- Least construction cost
- Most impact to road users
- Utilize a performance incentive / disincentive to reduce closure time
- Improved workzone safety for both users and workers
Project Timeline…

- 8-Year Construction Work Program:
  - Construction:
    - Programmed Federal Fiscal Year 2020
    - Programmed cost: $9.8 Million
General Questions & Comments

Do you have any general questions or comments about the information presented?
Submit your comments...

• Leave your written comments with us tonight.
• Download and submit a comment form at:
  o www.odot.org/publicmeetings
• Submit your written comments by mail to:
  o Oklahoma Department of Transportation
  o Environmental Programs Division
  o 200 N.E. 21st Street
  o Oklahoma City, OK 73105
• Fax your written comments to:
  o (405) 522-5193
• Email your comments to:
  o odot-environment@odot.org

• Please submit your comments by March 3rd, 2016.