## WELCOME

Public Meeting for ODOT Division 8 project:

## SH-11 JUST EAST OF THE JUNCTION OF SH-11 / SH-123 IN BARNSDALL, OKLAHOMA

EC-1640

## The Purpose of the Public Meeting:

Inform the public of the proposed improvement to $\mathrm{SH}-11$ to widen and overlay the roadway to a minimum of two (2) twelve-foot (12') lanes with eight-foot ( $8^{\prime}$ ) shoulders, improve the roadside safety, replace two (2) narrow bridges, and correct geometric deficiencies.


## The Purpose of the Project:

To improve the safety and sight distance on the roadway while considering cost effectiveness with the least amount of social and environmental impact.


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## The Purpose of the Project:

No shoulders, steep side slopes, poor sight distance.


Poor sight distance at top of hill with side road intersection.


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## The Purpose of the Project:

Replace narrow bridge at Dog Thresher Creek (Constructed in 1973)

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## The Purpose of the Project:

Replace narrow bridge at Little Dog Thresher Creek (Constructed in 1976)


## The Purpose of the Project:

Continue improvements along SH-11.


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## The Purpose of the Project:

To improve the safety and sight distance on the roadway while considering cost effectiveness with the least amount of social and environmental impact.

The following general features / deficiencies are located in the project area:

- Minimal to no paved shoulders
- Steep side slopes
- Unprotected hazards located within the clear zone
- Steep hills and valleys result in:
- Non-compliant horizontal curves
- Non-compliant vertical curves
- No opportunities for passing
- Angled side road connections
- Two (2) narrow bridges


## Current Project Area Information

General Data

- Two 12-foot wide driving lanes
- Minimal to no paved shoulders
- Posted speed 55 mph
- Current Traffic (2017):
- 2,100 vehicles/day
- $15 \%$ trucks
- 20 year projected traffic (2037):
- 2,900 vehicles/day


## Current Proiect Area Information

Collision Data (2011-2015)

- Total: 15 documented accidents
- 6 property damage only
- 7 with injury
- 2 fatalities
- For similar facilities:
- Collision rate is approximately twice the statewide average
- Injury rate is approximately 3 times the state average
- Fatal collision rate is approximately 8 times the state average


## Current Project Area Information



## Project Constraints

- Environmental Considerations
- Cultural Resources
- Hazardous Waste Sites
- Streams, Floodplains and Wetlands
- Listed Species, Migratory Birds and Critical Habitat
- Tribal Property
- Section 4 (f) and 6 (f) Properties
- Airports
- Bridges
- Right-of-Way (Property)
- Relocations
- Residential
- Commercial
- Utilities


## Project Constraints - Oil and Gas Operations



## Project Constraints - Streams and Floodplain



## Project Constraints - Ponds \& Wetlands



## Project Constraints - Bridges



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## Project Constraints

Listed Threatened \& Endangered Species Plus Critical Habitat


- American Burying Beetle
o Historical Range
- Rattlesnake-master Borer Moth
- Interior Least Turn
o aquatic dependent species watershed
- Piping Plover
- Red Knot
- Whooping Crane

- Neosho Mucket
- aquatic species watershed

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## Project Constraints

- Existing and additional right-of-way (property)
- Relocations
- Residential
- Commercial
- Utilities
- Overhead electric lines (with underbuilt communication)
- Underground telephone
- Underground water
- Underground gas


## Design Criteria

- Improve roadway and bridges
$>12$ foot wide driving lanes
$>8$ foot wide paved shoulders
> Improve opportunities for passing
$>$ Design for 65 or 55 mph design speed
$>$ Replace 2 bridges
$>1$ to 2 lanes of traffic during construction


## Design Criteria <br> Proposed 2-Iane Typical Section



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## Alternatives Considered

- Alternative A - Total new alignment $1 / 4$ mile north of existing SH-11
- Alternative B - Improve roadway on or near existing, west mile offset south, east mile offset north, 65 mph design speed, use existing lanes to maintain traffic during construction
- Alternative C - Improve roadway on or near existing, west mile offset south, east mile offset south, 65 mph design speed, use existing lanes to maintain traffic during construction
- Alternative D - Improve roadway on or near existing, west mile offset south, east mile offset south, 55 mph design speed, use existing lanes to maintain traffic during construction
- Alternative E - Do nothing and maintain existing conditions

Alternative A (Total New Alignment - Not Reasonable)

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## Alternative B (65 mph Design Speed)

- West mile offset south, east mile offset north
- Highest construction, property, and utility relocation costs
- New profile grade line through entire project

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## Alternative C (65 mph Design Speed)

- West mile offset south, east mile offset south
- Second highest construction, property, and utility relocation costs
- New profile grade line through entire project


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## Alternative D (55 mph Design Speed)

- West mile offset south, east mile offset south
- Lowest construction, property, and utility relocation costs
- New profile grade line through 75\% of the project

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## Alternative Matrix

To assist in analyzing the options and determining the preferred alternative an evaluation matrix has been developed. Categories of geometric design items, earthwork volumes environmental items, relocations, and estimated costs have been developed and the impacts associated with each alignment have been inserted into the matrix. The matrix is not weighted.

## Alternative Matrix

Osage County - JP20288(04) Alternatives Matrix
New typical includes two-12' driving lanes with 8' shoulders.

|  | Alternative B | Alternative C | Alternative D | Alt. E |
| :---: | :---: | :---: | :---: | :---: |
| Category | West mile offset south, East mile offset north 65 mph | West mile offset south, East mile offset south 65 mph | West mile offset south, East mile offset south 55 mph | No Build |
| Number of Alignment Crossings of Existing C/L | 0 | 3 | 5 |  |
| Vertical Alignment - <br> Number of Vertical Curves | 15 | 15 | 10 | 15 |
| Horizontal Alignment Number of Horizontal Curves | 7 | 8 | 6 | 11 |
| Earthwork | Excavation: 306,700 cy | Excavation: 209,400 cy | Excavation: $132,900 \mathrm{cy}$ |  |
|  | Fill: 129,600 cy | Fill: 151,800 cy | Fill: 134,600 cy |  |
|  | Net: 177,100 cy of excavation | Net: 57,600 cy of excavation | Net: 1,700 cy of fill * |  |
| Construction Traffic Control | Phase Construction. No road closure | Phase Construction. No road closure | Phase Construction. <br> No road closure |  |

## Alternative Matrix

|  | Alternative B | Alternative C | Alternative D | Alt. E |
| :---: | :---: | :---: | :---: | :---: |
| Category | West mile offset south, East mile offset north 65 mph | West mile offset south, East mile offset south 65 mph | West mile offset south, East mile offset south 55 mph | No Build |
| Construction Sequencing | 2-12' driving lanes with phased shoulder construction | 2-12' driving lanes with phased shoulder construction | 2-12' driving lanes with phased shoulder construction |  |
| Phased Bridge Construction | No | No | No |  |
| Historic Properties | None | None | None |  |
| Archeological Sites | None | None | None |  |
| Cemeteries | None | None | None |  |
| O\&G Well Pads | 4 | 1 | 2 |  |
| Abandoned Oil Sludge Pit | Yes | Yes | Yes |  |
| Blue Line Streams (Linear Feet) | 623 | 778 | 763 |  |

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## Alternative Matrix

|  | Alternative B | Alternative C | Alternative D | Alt. E |
| :---: | :---: | :---: | :---: | :---: |
| Category | West mile offset south, <br> East mile offset north <br> 65 mph | West mile offset south, <br> East mile offset south <br> 65 mph | West mile offset south, <br> East mile offset south <br> 55 mph | No Build |
| NWI Wetlands <br> (Acres) | 0.40 | 0.10 | 0.10 |  |
| Floodplain <br> (Acres) | 5.60 | 6.10 | 5.90 |  |
| Channel Change <br> (Linear Feet) | 0 | 224 | Same |  |
| T\&E Species | Same | None | None |  |
| Critical Habitat | None | Same | Same |  |
|  <br> Swallows | Same | None | None |  |
| Tribal Property | None |  |  |  |

## Alternative Matrix

|  | Alternative B | Alternative C | Alternative D | Alt. E |
| :---: | :---: | :---: | :---: | :---: |
| Category | West mile offset south, <br> East mile offset north <br> 65 mph | West mile offset south, <br> East mile offset south <br> 65 mph | West mile offset south, <br> East mile offset south <br> 55 mph | No Build |

## Preferred Alternative D



## Proposed Project Looking East from SH-123


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## West Segment Overview



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## East Segment Overview



Proposed Bridge - Dog Thresher Creek

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Proposed Bridge - Little Dog Thresher Creek and Roadway Re-alignment

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## Proposed Channel Change



## Video

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## What's Next?

1. Public Input
$>$ Today
2. Complete Environmental Studies
> Summer 2018
3. Begin Property Acquisitions
$>$ Fall 2018
4. Construction
$>2021$

## THANK YOU FOR PARTICIPATING IN OUR PUBLIC MEETING

There are many ways you can submit your questions:
Leave your written questions with us tonight.
Download and submit a Comment Form at:
www.odot.org/publicmeetings
\& Mail your written comments to:
Oklahoma Department of Transportation Environmental Program Division 200 NE 21 ${ }^{\text {st }}$ Street Oklahoma City, OK 73105

* Fax your written comments to:
(405) 522-5193
* Email your comments to:

ENVIRONMENT@ODOT.ORG
Please submit your comments by October 12, 2017

## Questions

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