



# ***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***

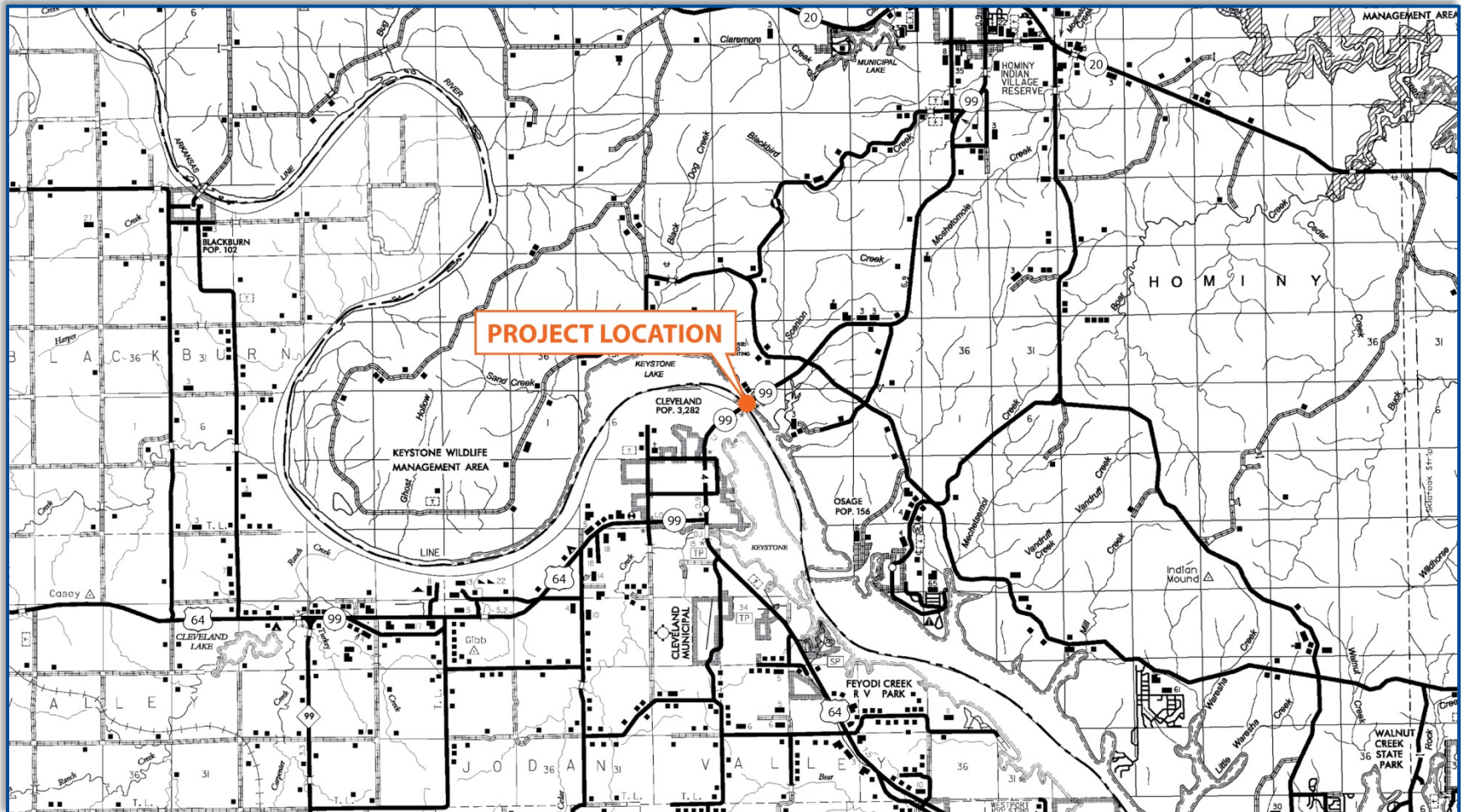
Counties Serviced	11 Counties
Total Road Miles*	1,664 Miles
Total Interstate Miles*	40 Miles
Total Bridges	1,118 Bridges

\* 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...***

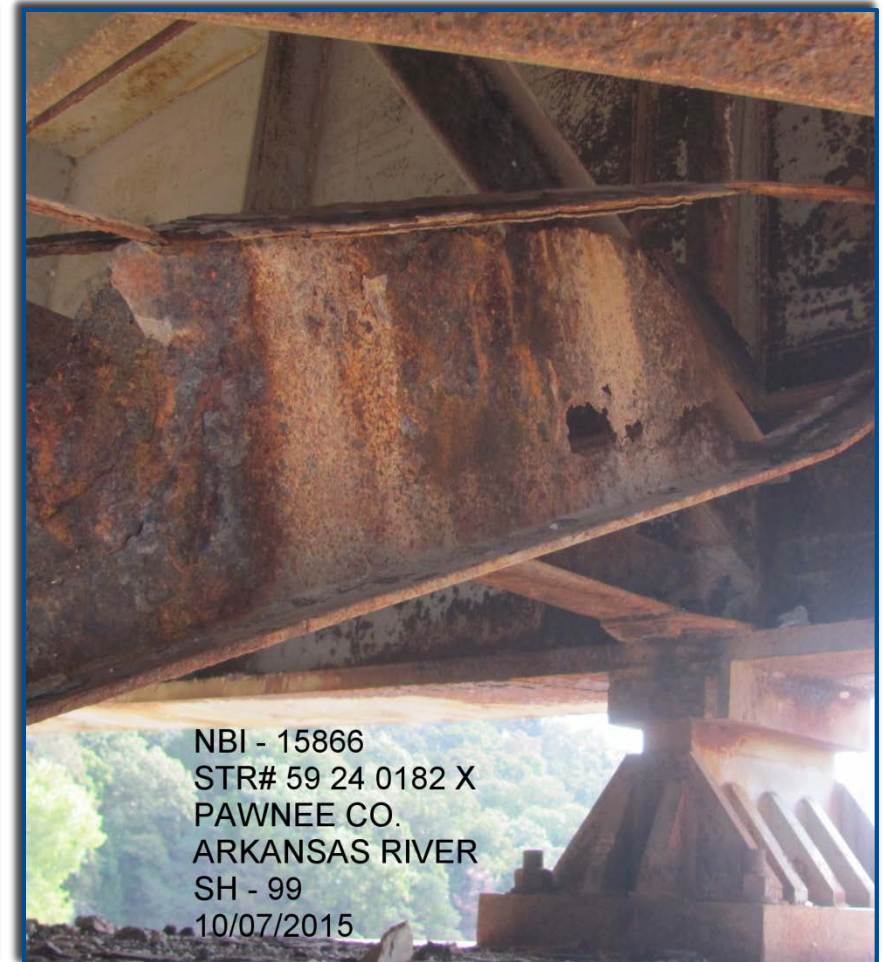
...is to improve the safety and functionality of the SH-99 crossing over the Arkansas River.

# *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.) ●●●

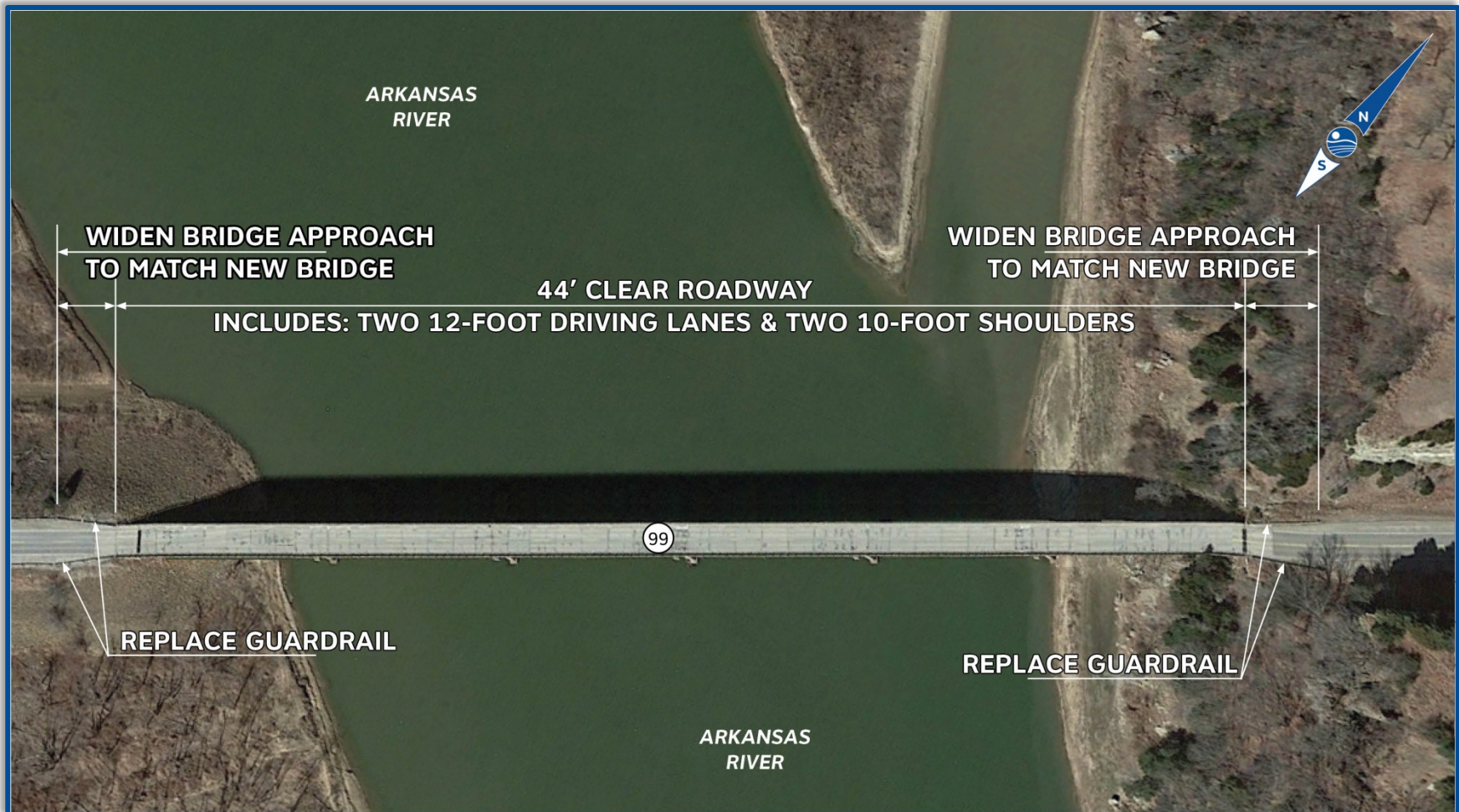




# ***Highway Traffic Volume...***

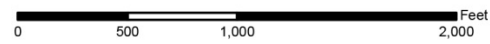
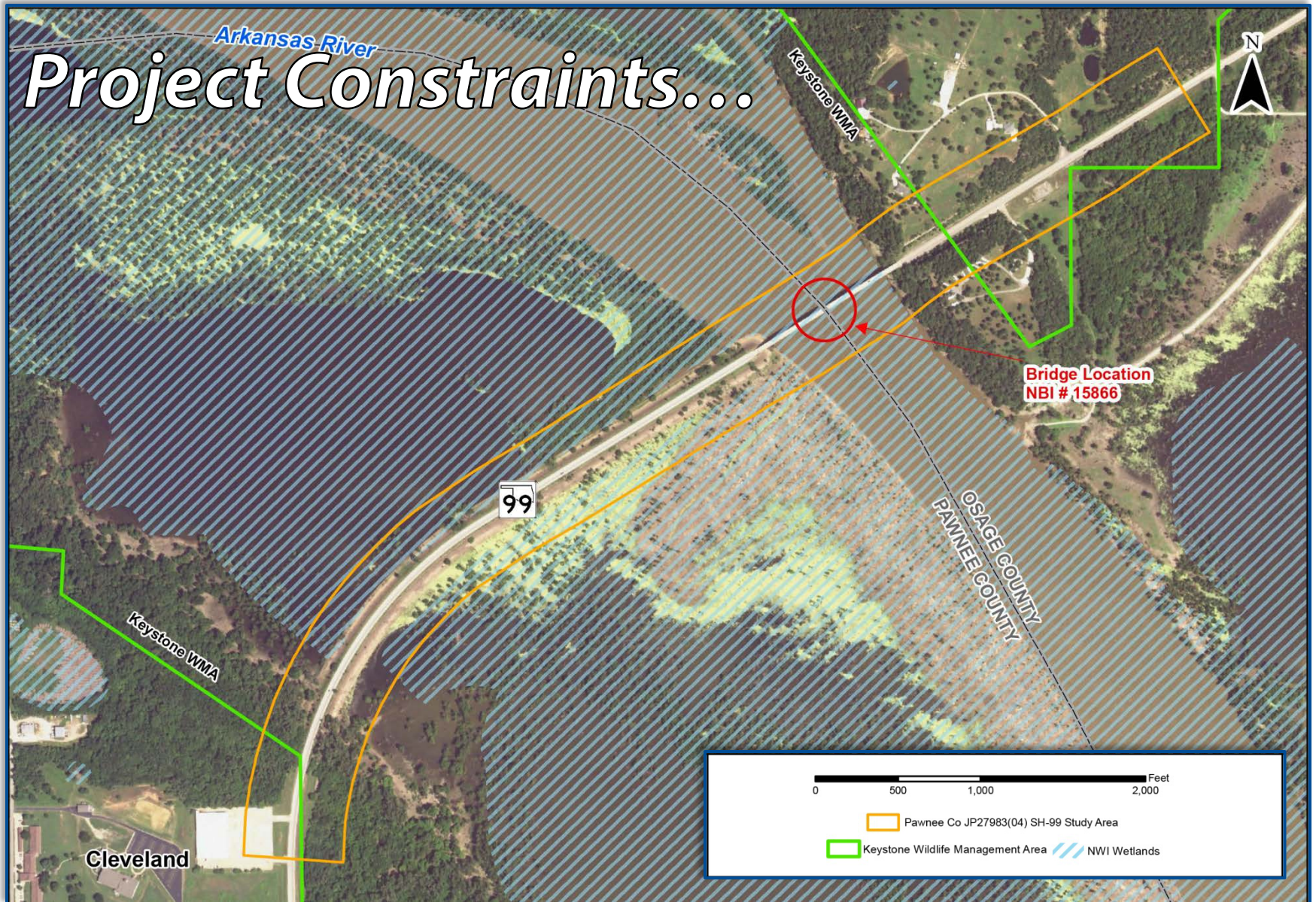
- Current Traffic Volume (2015)
  - 4,100 Vehicles Per Day
  - 11% Truck Traffic
  
- Future Traffic Volume (2035)
  - 5,800 Vehicles Per Day
  - 11% Truck Traffic

# Project Scope...





# Project Constraints...



- Pawnee Co JP27983(04) SH-99 Study Area
- Keystone Wildlife Management Area
- NWI Wetlands

# ***Project Constraints...***

- Potential Threatened & Endangered Species Habitat Impact:
  - Interior Least Tern (May to August)
  - 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

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

# ***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:
  - [www.odot.org/publicmeetings](http://www.odot.org/publicmeetings)
- Submit your written comments by mail to:
  - Oklahoma Department of Transportation
  - Environmental Programs Division
  - 200 N.E. 21<sup>st</sup> Street
  - Oklahoma City, OK 73105
- Fax your written comments to:
  - (405) 522-5193
- Email your comments to:
  - [odot-environment@odot.org](mailto:odot-environment@odot.org)
- **Please submit your comments by March 3<sup>rd</sup>, 2016.**