

# WELCOME



**OKLAHOMA**  
Transportation

## Virtual Open House

SH-28 Improvements “East of US-69” Project  
Adair to Langley, Mayes County, OK  
October 7 - 21, 2020

Welcome to the Oklahoma Department of Transportation’s virtual Open House for the State Highway 28 improvement project located in Mayes County.

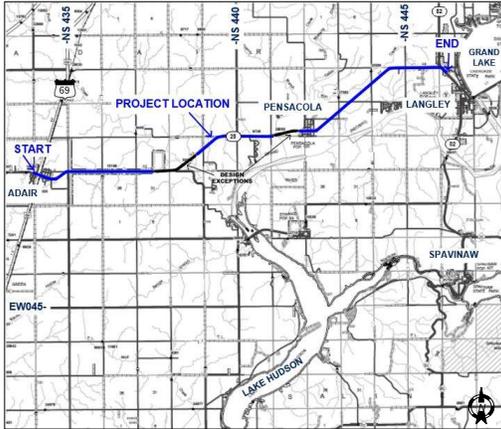
As part of our efforts to keep the public informed about transportation improvements, we developed this slide presentation. Normally, we would host an in-person Open House, but due to ongoing concerns about COVID-19, we opted to host a virtual Open House to protect public safety.

Please note that we have two virtual Open Houses occurring at the same time. This presentation covers the “East of US-69” roadway improvement project that starts near the US-69/SH-28 junction in Adair, OK, and continues east to Langley, OK. A second presentation covers the “West of US-69” roadway improvement project that starts just east of the I-44/SH-28 interchange and extends to US-69 in Adair.

Please take a moment to review this presentation, and feel free to contact us with questions, concerns, and comments. If you would like to view the project in more detail, please visit the Interactive Map on the virtual Open House webpage.

# Purpose of the Open House

To Update the Public About the Proposed Improvements to this Segment of SH-28



- **Project Location & Extent:**
  - Starts west of US-69/SH-28 Junction in Adair
  - Extends east through Pensacola to Langley
  - Ends at SH-82/SH-28 Junction in Langley
- **Objectives:**
  - Present the most recent design
  - Describe the potential environmental impacts
  - Obtain public input
  - Outline the next steps and the proposed project schedule



## Project Location:

The project begins just west of the US-69/SH-28 Junction at William Penn Street in Adair, and extends east through Pensacola and ends at the SH-82/SH-28 Junction in Langley. Review the county road map on this slide for a depiction of the general project location.

## Purpose of the Virtual Open House:

The purpose of this virtual Open House is to provide an update on the proposed highway improvements. Specifically we wanted to:

- Present the most recent design;
- Describe the potential environmental impacts;
- Obtain public input; and
- Outline the next steps and the proposed project schedule.



# Project History

## ODOT Improvement History for the SH-28 Corridor

- **Important Transportation Corridor**
  - Serves Northeastern Oklahoma
    - Begins near Nowata, OK
    - Ends near Jay, OK
    - Inter-county, major collector route
  - Vital Link for Mayes County
    - Provides access for local communities
    - US-69, I-44, SH-82 & Grand Lake
    - Economically important
    - Recreational travel route
- **Grand Lake Area Transportation Study**
  - Completed September 2003
  - Recommended widening & improving highway
- **Needs & Sufficiency Rating Report**
  - Completed 2007
  - Identified segments of SH-28 in need of improvement
- **Engineering Plans & Environmental Assessment**
  - Completed 2010



### Project History:

Improving the safety along the State Highway 28 corridor is a top priority for ODOT. SH-28 serves northeastern Oklahoma and provides local communities access to US-69, I-44, SH-82 and Grand Lake. It is a vital economic corridor and an important recreational travel route.

### Highway Studies:

A transportation study for this corridor was completed in 2003. It recommended widening and improving SH-28. The “Needs & Sufficiency Rating Report” completed in 2007 specifically identified segments of SH-28 that needed improvements. This then led to the development of preliminary engineering plans and an environmental study that culminated in an Environmental Assessment document in 2010.

# Project History

## Recent & Proposed Improvements

- **SH-28 over Big Cabin Creek**

- FFY 2011 project - JP 21909(04)
- Bridge replacement project
- Open to traffic September 2013

- **SH-28 over Rock Creek**

- FFY 2013 project - JP 21910(04)
- Bridge replacement project
- Open to Traffic October 2015

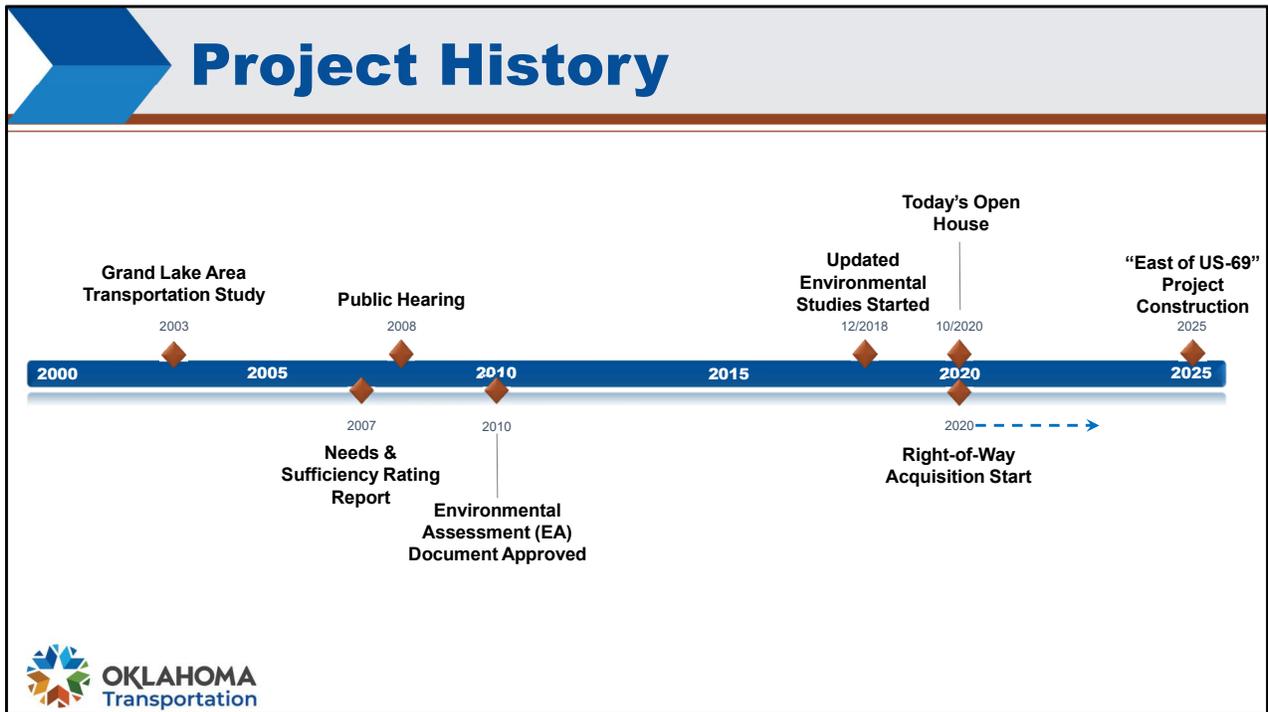
- **“West of US-69 Project”**

- FFY 2025 project – JP 28891(04)
- Highway widening & safety improvement project
- Presentation available: [www.odot.org/SH28Mayes](http://www.odot.org/SH28Mayes)



### Other Projects:

ODOT is improving other portions of the SH-28 corridor. The map on this slide shows previous and proposed projects between I-44 and Langley. The bright green lines represent the extent of the current project. There are two gaps in the green lines that represent two bridge projects that have already been completed. The bridge over Big Cabin Creek was completed and open to traffic in 2013, and the Rock Creek bridge project was completed in 2015. Also, the “West of US-69 Project” is depicted with the pink line. This project is in the development stages, and a similar presentation is available on this virtual Open House webpage.



**Project History & Proposed Project Timeline:**

This slide shows some of the important dates in the SH-28 corridor improvement history, along with the proposed “East of US-69” project anticipated dates.

# Existing Roadway Conditions

- **SH-28 Roadway:**

- Two 12-foot wide paved driving lanes
- 4-foot wide shoulders
- Traffic volume from Adair to Pensacola:
  - 6,800 vehicles per day (2018)
  - 9,795 vehicles per day by 2040
- Traffic volume from Pensacola to Langley:
  - 4,600 vehicles per day (2018)
  - 6,625 vehicles per day by 2040



- **SH-28 Bridges:**

- Two bridges associated with the construction project:
  - Bridge A: over unnamed tributary to Rock Creek
  - Bridge B: over unnamed tributary of Neosho River



## Existing Conditions:

This segment of SH-28 is a two-lane, open section highway with 12-foot wide driving lanes and 4-foot wide shoulders. It has a posted speed limit of 65 MPH. The current traffic volume for the segment of SH-28 from Adair to Pensacola is 6,800 vehicles per day and is projected to increase to almost 9,800 vehicles per day by 2040. From Pensacola to Langley, the current traffic volume is 4,600 vehicles per day and is projected to increase to 6,625 vehicles per day by 2040.

There are two bridges within the project extent: one over a tributary to Rock Creek, and another over a tributary to the Neosho River.

# Purpose & Need for the Project

## To Increase Driver Safety, Correct Roadway Deficiencies, & Efficiently Accommodate Traffic

### • Purpose: What are we trying to do?

- Enhance safety throughout the SH-28 corridor
- Accommodate local & regional travel demands along SH-28
- Upgrade SH-28 to meet current Federal Highway Administration & ODOT standards

### • Need: What we are trying to fix?

- Poor Intersections, Drives & Entrances
  - Congestion
  - Limited sight distances
  - Poor intersection alignments
- Safety Design Issues
  - Lack of turning lanes
  - Narrow shoulders
  - Deteriorating pavement



### Project Purpose & Need:

The important questions associated with every transportation improvement project are:

1. What is ODOT trying to do? and
2. What is ODOT trying to fix?

These questions make up the purpose and need statement which helps decision-makers justify the economic cost associated with construction and the environmental costs associated with impacts to the natural and human environments.

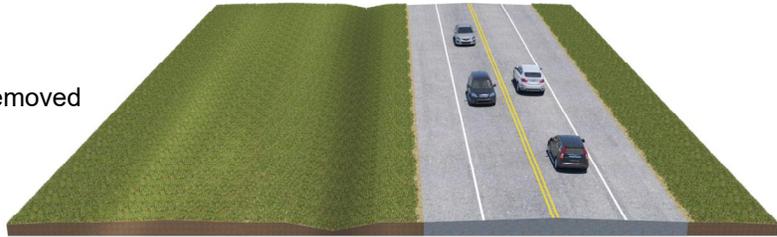
The volume of traffic along the SH-28 corridor will increase over the coming decades. Also, the safety of this segment needs to be improved. There are poor intersections, drives and entrances, which cause congestion and limited sight distances. There is a need for dedicated turning lanes at certain intersections. There is also a need to address narrow shoulders and deteriorating pavement. ODOT needs to address these issues in order to accommodate local and regional travel demands, update infrastructure to meet federal standards, and most importantly, improve driver safety.

# Proposed Improvements

- **SH-28 Rural Roadway:**

- Widening the existing rural sections of the highway to create:
  - Two 12-foot wide driving lanes
  - 10-foot wide paved shoulders
  - 65 mph speed limit
  - Existing SH-28 lanes will be removed

## TYPICAL RURAL ROADWAY CROSS SECTION



2-Lane Typical Roadway Section  
Typical includes: two 12-foot wide driving lanes; 10-foot wide shoulders



### Proposed Improvements:

In order to increase safety, ODOT proposes to widen SH-28. Different portions of the highway will be widened more than others to accommodate the specific needs associated with that section. For instance, the rural segments will not be as wide as the sections through Adair or Pensacola. These rural stretches of SH-28—that is, the roadway between Adair and Pensacola and between Pensacola and Langley—will be widened to create two 12-foot wide driving lanes with 10-foot wide shoulders.

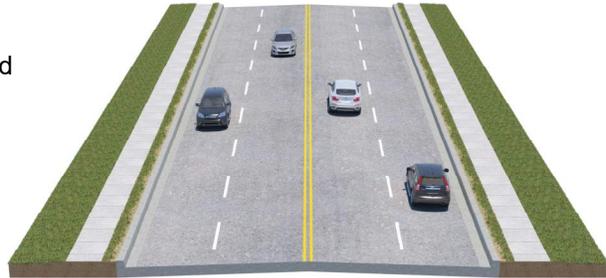
A typical rural roadway cross section is depicted on this slide. The existing SH-28 roadway pavement will be removed but will ultimately remain as ODOT right-of-way.

# Proposed Improvements

- **SH-28 Roadway - Adair:**

- In the town of Adair, the existing highway will be widened to create:
  - Curb-and-gutter section
  - Four 12-foot wide driving lanes
  - 5-foot wide sidewalks on both sides of the road
  - Speed limit varies through town

## TYPICAL 4-LANE CURB & GUTTER WITH SIDEWALKS CROSS SECTION



4-Lane Typical Roadway Section  
Typical includes: curb-and-gutter section with two 12-foot wide driving lanes



### Proposed Improvements (continued):

ODOT proposes to widen the segment of SH-28 through the town of Adair to create a curb and gutter section with four 12-foot wide driving lanes. Five-foot wide sidewalks will be constructed on both sides of the roadway.

# Proposed Improvements

- **SH-28 Roadway - Pensacola:**

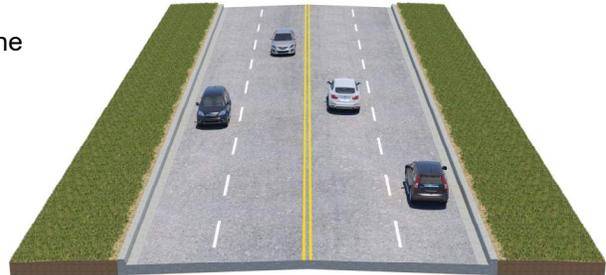
- Through the community of Pensacola, the road will be improved to include:
  - Curb-and-gutter section
  - Four 12 to 14-foot wide driving lanes through the center of town
  - 45 mph speed limit

- **SH-28 Roadway - Langley:**

- East of Pensacola to Langley:
  - Two 12-foot wide driving lanes
  - 10-foot wide paved shoulders
  - 65 mph speed limit
  - Improve the SH-82/SH-28 intersection; add dedicated southbound turning lane



## TYPICAL 4-LANE CURB & GUTTER CROSS SECTION



4-Lane Typical Roadway Section  
Typical includes: curb-and-gutter section with two 12-foot wide driving lanes

### Proposed Improvements (continued):

ODOT proposes to widen the segment of SH-28 through the town of Pensacola to create a curb and gutter section with four 12 to 14-foot wide driving lanes through the center of town. No sidewalks will be added in Pensacola.

Just east of Pensacola, the roadway will return to a two-lane rural or open section two-lane highway. It will be widened to create two 12-foot wide driving lanes with 10-foot wide shoulders from Pensacola to the intersection at SH-82/SH-28 in Langley. This intersection will be improved with dedicated turning lanes.



# Proposed Improvements

- **Bridge Improvements:**

- Bridge A: Replace existing bridge over unnamed tributary to Rock Creek
  - Construct Reinforced Concrete Box (RCB) Bridge
  - Two 12-foot wide lanes & 10-foot wide shoulders
  - 84-foot wide clear roadway width
- Bridge B: Replace existing bridge over unnamed tributary to Neosho River
  - Construct RCB Bridge
  - Two 12-foot wide lanes & 10-foot wide shoulders
  - 179-foot wide clear roadway width



Existing bridge over unnamed tributary to Rock Creek



Existing bridge over unnamed tributary to Neosho River



## Proposed Improvements (continued):

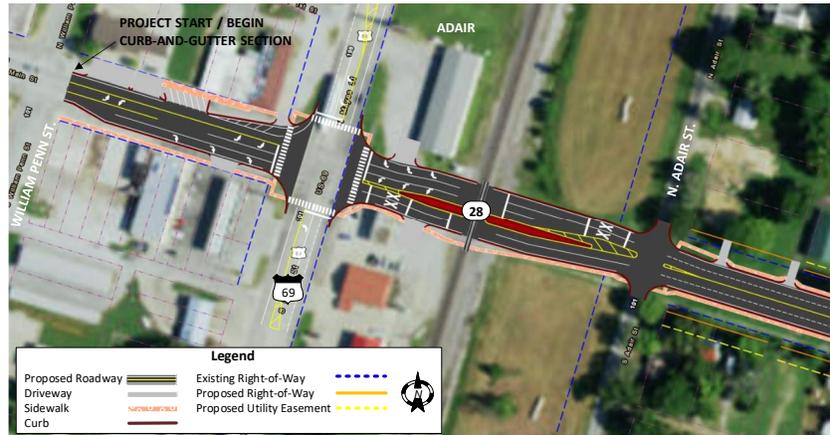
Two bridges (Bridges "A" and "B") will also be improved.

- Bridge A over a tributary to Rock Creek will be replaced with an 84-foot wide Reinforced Concrete Box bridge with two 12-foot wide lanes and 10-foot wide shoulders.
- Bridge B over a tributary to the Neosho River will be replaced with a 179-foot wide reinforced concrete box bridge with two 12-foot wide lanes and 10-foot wide shoulders.

# Proposed Improvements

## Project Walk-Through

- Begin project just east of the US-69/SH-28 Jct. in Adair at William Penn Street
- Curb & gutter section in town
- Dedicated right & left turn lanes onto US-69
- Five lane section over railroad crossing
- Five lanes transitions to four lanes after Adair Street



### Proposed Improvements – Project Walk-Through:

The following slides present the proposed improvements for important locations along the project length. Images of the engineering plans have been super-imposed on top of a recent aerial. The colors and lines presented on the slide depict the proposed work or what the highway would look like once completed.

On each slide there is an inset legend box. The color and line types represent different aspects of the plans.

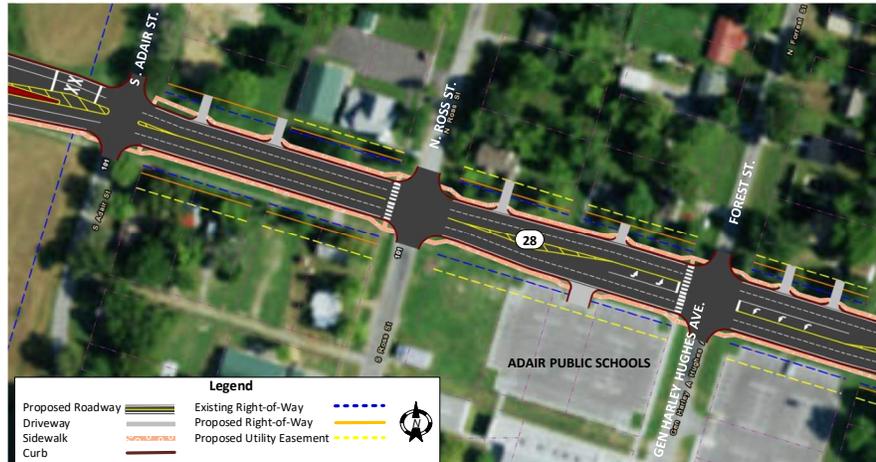
This specific slide shows the improvements in Adair beginning just west of the US-69/SH-28 junction at William Penn Street. Through the town of Adair, ODOT proposes to construct a curb and gutter section with four lanes beginning after Adair St. A five lane section will be constructed over the railroad crossing. There will be dedicated right and left turn lanes onto US-69. Driveways and entrances will be improved and paved.

Access to homes and businesses will be maintained during and after construction.

# Proposed Improvements

## Project Walk-Through

- Four lane curb & gutter section from Adair Street Gen. Harvey Hughes Avenue
- Dedicated left turn lanes onto Forest Street & Gen. Harley Hughes Avenue
- Improved paved driveways, entrances and side streets
- Improved access to Adair school complex



## Proposed Improvements – Project Walk-Through (continued):

This slide shows the continuation of the four-lane curb and gutter section through town.

The road will stay on the existing alignment, but it will be widened to the north and south.

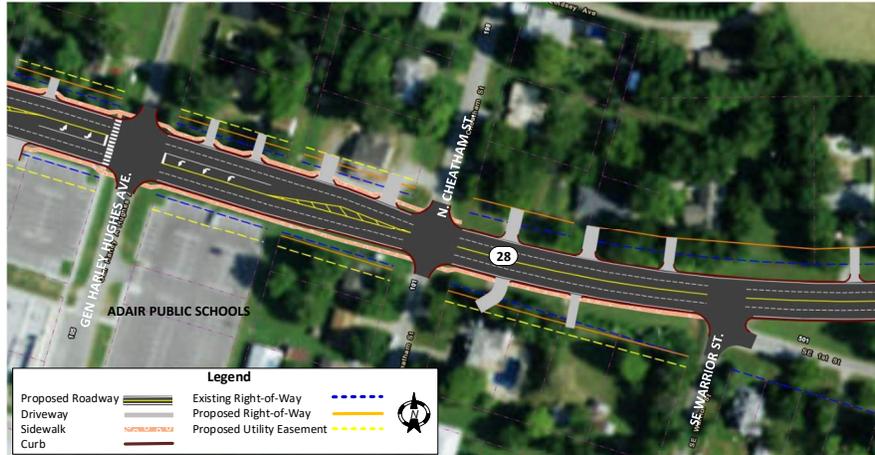
Dedicated left turn lanes onto Forest Street and General Harley Hughes Avenue will be constructed to accommodate school traffic.

Access to homes, business, and Adair Public Schools will be maintained during and after construction.

# Proposed Improvements

## Project Walk-Through

- Four lane curb & gutter section from Gen. Harley Hughes Ave. out of town
- Dedicated left turn lane onto General Harley Hughes Avenue
- Improved paved driveways, entrances and side streets



## Proposed Improvements – Project Walk-Through (continued):

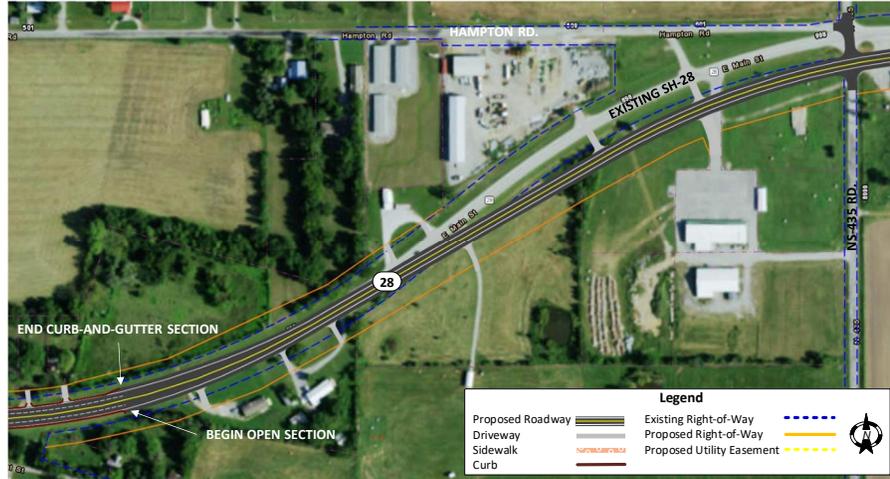
For this slide, the curb and gutter section continues east through Adair.

The road will stay on the existing alignment.

# Proposed Improvements

## Project Walk-Through

- Four lane curb & gutter section ends past Warrior Street
- Transitions to two lane open section highway east towards Pensacola
- Highway shifted to south on offset alignment
- Skewed intersection with Hampton Rd. corrected to make perpendicular
- Skewed drives corrected to make perpendicular



## Proposed Improvements – Project Walk-Through (continued):

As shown on this slide, the curb and gutter section ends just after Warrior Street on the east side of Adair.

The roadway transitions to a two-lane rural or open section highway on a south offset alignment.

The skewed intersection with Hampton Road will be corrected, along with skewed drives and entrances along the segment.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east towards Pensacola, OK
- Highway on south offset alignment
- Skewed drives corrected to make perpendicular
- Remove existing SH-28



## Proposed Improvements – Project Walk-Through (continued):

On this slide, the new roadway continues east towards Pensacola on a south-offset alignment.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east towards Pensacola, OK
- Highway on south offset alignment
- Remove existing SH-28



## Proposed Improvements – Project Walk-Through (continued):

On this slide, the new roadway continues east towards Pensacola on a south-offset alignment.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east towards Pensacola, OK
- Highway on south offset alignment transitions to north offset alignment at County Road NS-436
- Remove existing SH-28



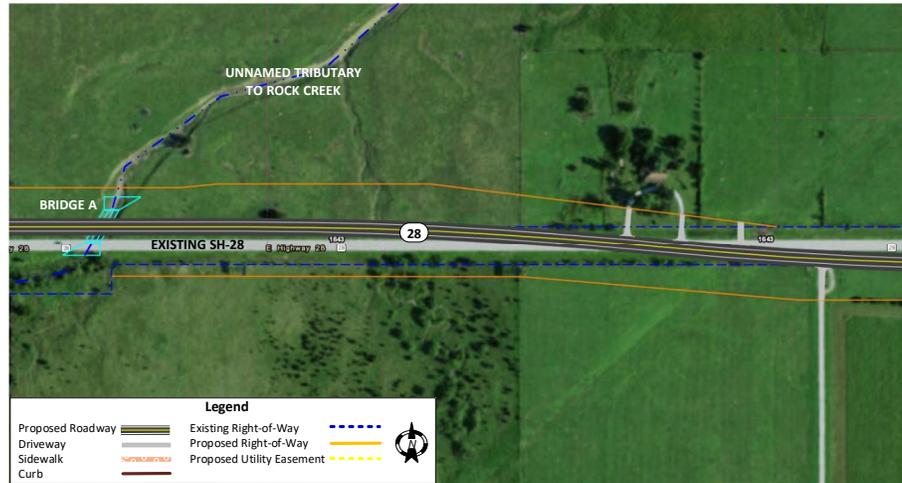
## Proposed Improvements – Project Walk-Through (continued):

As shown on this slide, the two lane open section highway continues east towards Pensacola. The highway is on a south-offset alignment, but transitions to a north-offset alignment at the intersection with County Road NS-436.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east until Pensacola, OK
- Replace bridge over unnamed tributary to Rock Creek (Bridge A). Construct a new 84-ft wide bridge
- Highway on north offset alignment transitions to south offset alignment
- Remove existing SH-28



## Proposed Improvements – Project Walk-Through (continued):

As shown on this slide, the two lane open section highway continues east towards Pensacola.

Bridge A over a tributary to Rock Creek will be replaced with an 84-foot wide Reinforced Concrete Box bridge.

The highway transitions from a north-offset alignment to a south-offset alignment just east of the bridge replacement.

# Proposed Improvements

## Project Walk-Through

- Highway on south offset alignment transitions to existing SH-28 alignment
- Ties into Rock Creek bridge project previously constructed—break in construction
- Remove existing SH-28



## Proposed Improvements – Project Walk-Through (continued):

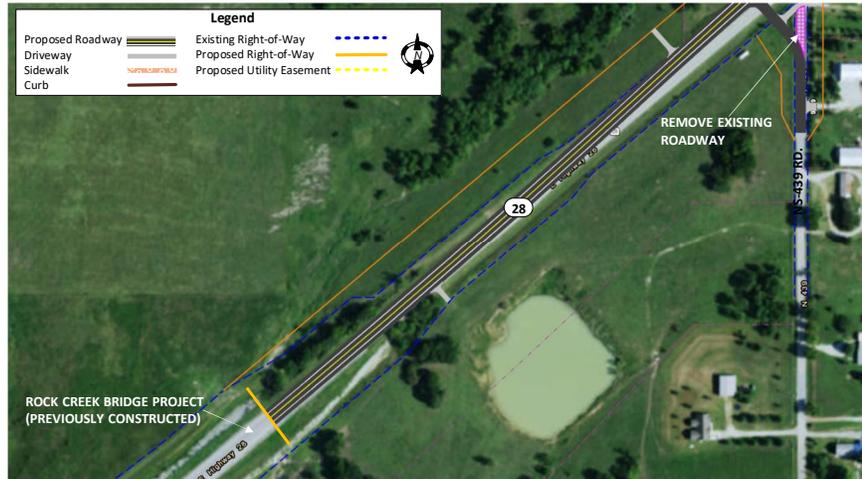
The two lane open section highway continues east towards Pensacola, with the highway transitioning back to the existing SH-28 alignment.

There is a break in the project located at the Rock Creek Bridge. This project was previously constructed in 2015 and is not part of this project.

# Proposed Improvements

## Project Walk-Through

- Construction resumes after Rock Creek bridge project
- Two lane open section highway continues east towards Pensacola, OK
- Remove existing SH-28



### Proposed Improvements – Project Walk-Through (continued):

The two lane open section highway resumes after the previously constructed Rock Creek bridge project, and continues east towards Pensacola.

The highway continues on the existing SH-28 alignment until just west of the intersection with County Road NS-439. Here, it transitions to a north-offset alignment.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east towards Pensacola, OK
- Skewed intersection with County Road NS-439 corrected to make perpendicular
- Highway shifted to north on offset alignment after NS-439
- Remove existing SH-28



### Proposed Improvements – Project Walk-Through (continued):

The two lane open section highway continues east towards Pensacola on a north-offset alignment.

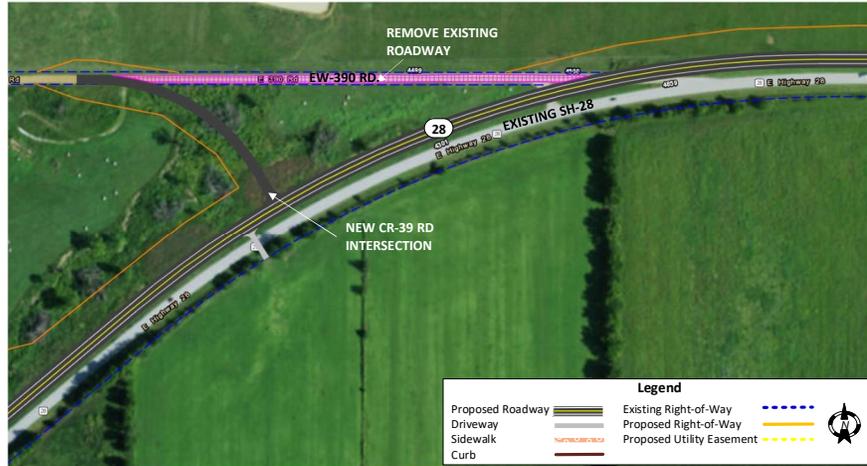
The intersection with County Road NS-439 will be modified to be perpendicular to SH-28.

The existing NS-439 intersection will be removed, but access to businesses and residences along SH-28 and County Road NS-439 will be maintained.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east towards Pensacola, OK
- Highway on north offset alignment
- Skewed intersection with County Road EW-390 corrected to make perpendicular
- Remove existing SH-28



## Proposed Improvements – Project Walk-Through (continued):

The two lane open section highway continues east towards Pensacola on a north-offset alignment.

The skewed intersection with County Road EW-390 will be corrected. A new intersection with County Road EW-390 will be constructed perpendicular to SH-28.

The existing EW-390 roadway and intersection will be removed, but access to businesses and residences along SH-28 and County Road EW-390 will be maintained.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east until Pensacola, OK
- Highway on north offset alignment
- Skewed drives & entrance corrected to make perpendicular
- Improve County Road NS-440 intersection
- Remove existing SH-28



## Proposed Improvements – Project Walk-Through (continued):

The two lane open section highway continues east towards Pensacola on a north-offset alignment.

The intersection with NS-440 Rd. will be corrected, along with other drives and entrances.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east until Pensacola, OK
- Highway on north offset alignment transitions to existing SH-28 alignment
- Skewed drives & entrance corrected to make perpendicular
- Replace bridge over unnamed tributary to Neosho River (Bridge B). Construct 179 ft wide clear roadway width RCB
- Ties into Big Cabin Creek bridge project previously constructed—break in construction



## Proposed Improvements – Project Walk-Through (continued):

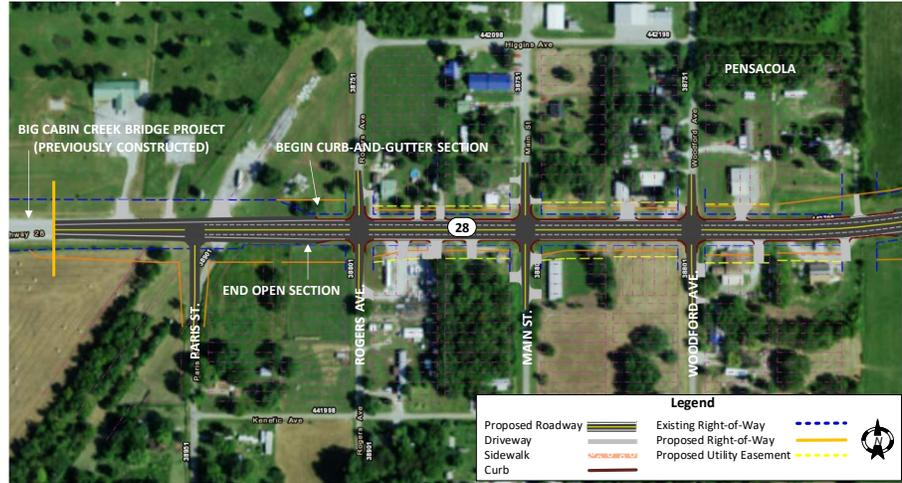
The two lane open section highway continues east towards Pensacola on a north-offset alignment.

Bridge B over a tributary of the Neosho River will be replaced with a 179-foot wide Reinforced Concrete Box bridge. After the Bridge B replacement, the roadway transitions back to the existing SH-28 alignment and ends at the Big Cabin Creek Bridge. This project was previously constructed in 2013 and is not part of this project.

# Proposed Improvements

## Project Walk-Through

- Construction resumes after Big Cabin Creek bridge project
- Two lane open section highway tapers to a four lane curb & gutter section through Pensacola downtown
- Side streets and intersections are widened & improved for turning
- Dedicated drives & entrances are created and paved



## Proposed Improvements – Project Walk-Through (continued):

The two lane open section highway resumes after the Big Cabin Creek bridge, and widens from two lanes into a four lane curb and gutter section that extends through the community of Pensacola.

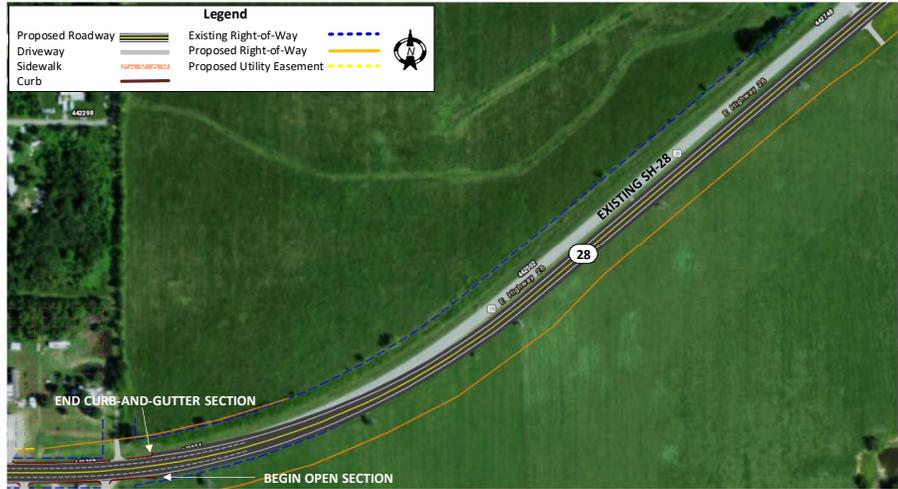
Side streets and intersections are widened and improved, and dedicated drives and entrances are created and paved.

Access to all businesses and homes in Pensacola will be maintained during and after construction.

# Proposed Improvements

## Project Walk-Through

- Four lane curb & gutter section ends outside of town
- Transitions to two lane open section highway east towards Langley
- Highway shifted to south on offset alignment
- Remove existing SH-28



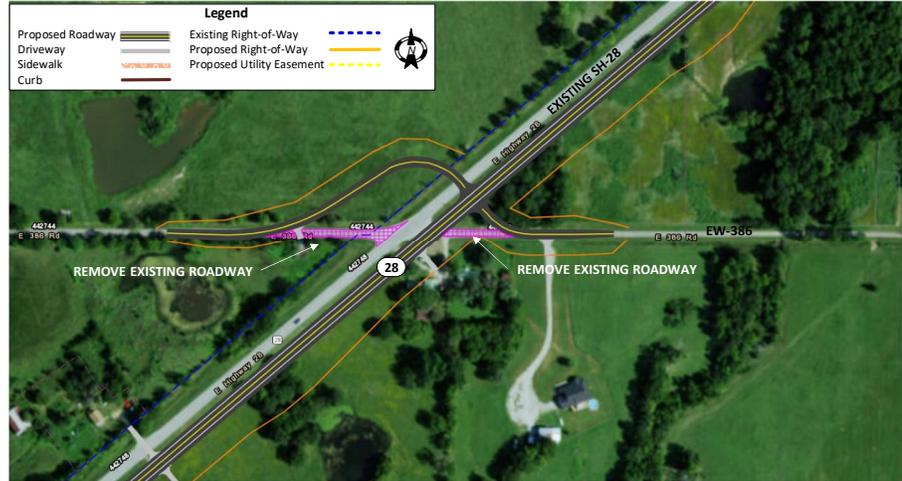
## Proposed Improvements – Project Walk-Through (continued):

The four lane curb and gutter section ends just east of Pensacola, and transitions back to a two lane open section highway and shifts to a south offset alignment going east towards Langley.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east towards Langley, OK
- Skewed intersection with County Road EW-386 corrected to make perpendicular
- Highway continues on south offset alignment
- Remove existing SH-28



### Proposed Improvements – Project Walk-Through (continued):

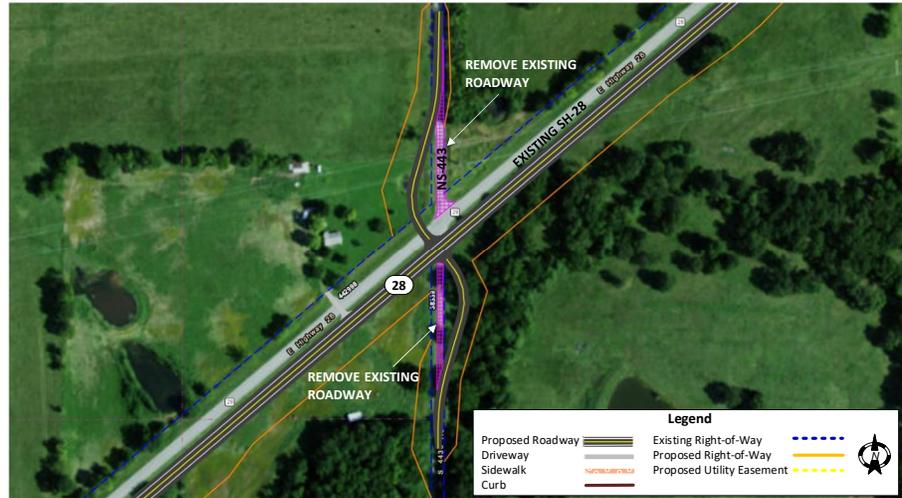
The two lane open section highway continues east towards Langley.

The intersection with County Road EW-386 will be modified to be perpendicular to SH-28.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east towards Langley, OK
- Skewed intersection with County Road NS-443 corrected to make perpendicular
- Highway continues on south offset alignment
- Remove existing SH-28



## Proposed Improvements – Project Walk-Through (continued):

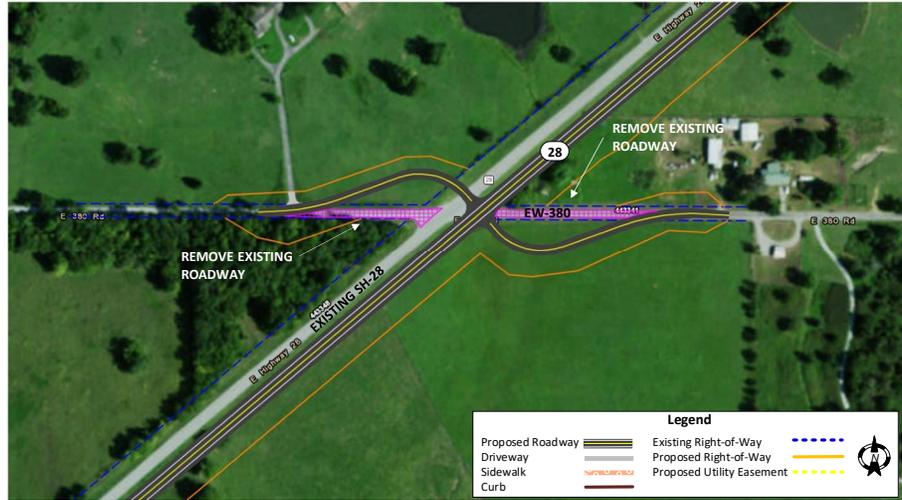
The two lane open section highway continues east towards Langley on a south-offset alignment.

The intersection with County Road NS-443 will be modified to be perpendicular to SH-28.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east towards Langley, OK
- Skewed intersection with County Road EW-380 corrected to make perpendicular
- Highway continues on south offset alignment
- Remove existing SH-28



## Proposed Improvements – Project Walk-Through (continued):

The two lane open section highway continues east towards Langley on a south-offset alignment.

The intersection with County Road EW-380 will be modified to be perpendicular to SH-28.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east towards Langley, OK
- Highway continues on south offset alignment
- Skewed drives & entrance corrected to make perpendicular
- Remove existing SH-28



## Proposed Improvements – Project Walk-Through (continued):

The two lane open section highway continues east towards Langley on a south-offset alignment.

Entrances and drives are improved and paved.

# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east towards Langley, OK
- Highway continues on south offset alignment
- Drives & entrances reconstructed
- Skewed intersection with County Road NS-444 corrected to make perpendicular
- Remove existing SH-28



### Proposed Improvements – Project Walk-Through (continued):

The two lane open section highway continues east towards Langley on a south-offset alignment.

The intersection with County Road NS-444 will be modified to be perpendicular to SH-28.



# Proposed Improvements

## Project Walk-Through

- Two lane open section highway continues east towards Langley, OK
- Highway continues on south offset alignment
- Drives & entrances reconstructed
- Remove existing SH-28



## Proposed Improvements – Project Walk-Through (continued):

The two lane open section highway continues east towards Langley on a south-offset alignment.

Entrances and drives are improved and paved.

# Proposed Improvements

## Project Walk-Through

- Highway on south offset alignment transitions to existing SH-28 alignment at County Road NS-445
- Drives & entrances reconstructed
- Remove existing SH-28



## Proposed Improvements – Project Walk-Through (continued):

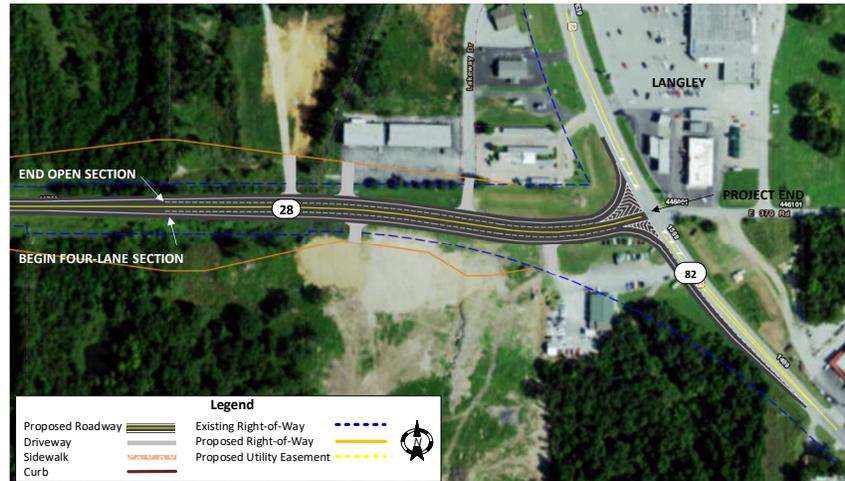
The two lane open section highway continues east towards Langley, but transitions from a south-offset alignment to the existing alignment at the intersection with County Road NS-445.

The intersection with County Road NS-445 will be modified to be perpendicular to SH-28.

# Proposed Improvements

## Project Walk-Through

- Two lane open section transitions to four lane section
- Drives & entrances reconstructed
- SH-82/SH-28 intersection improvements include:
  - Dedicated turning lanes onto SH-28 from SH-82
  - Improved clear right turn lane onto SH-82



## Proposed Improvements – Project Walk-Through (continued):

The highway continues on the existing SH-28 alignment, but the two lane open section highway transitions to a four lane section just west of the SH-28/SH-82 junction in Langley.

The SH-28/SH-82 intersection will be improved to include dedicated turning lanes on to SH-28, and a clear right turn lane on to SH-82.

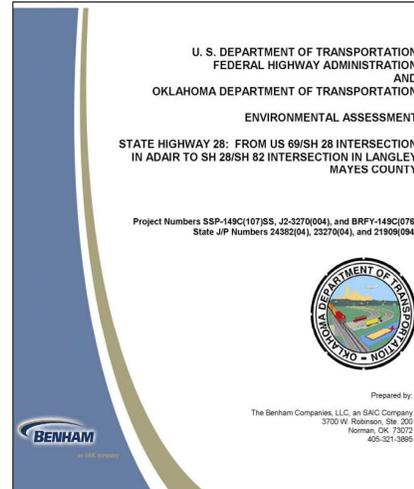
The project ends at the SH-28/SH-82 intersection.

# Environmental Compliance

## Environmental Compliance History

- **Environmental Assessment Completed:**

- In 2010 ODOT completed an extensive environmental review of this segment SH-28 in compliance with the National Environmental Policy Act (NEPA).
- In July 2010, an Environmental Assessment (EA) document was approved.
- As part of ODOT's commitment to environmental compliance, the project area was re-evaluated over the past 18 months.
- Environmental studies and reviews were updated and reassessed.
- Proposed improvements are consistent with original EA.



### Environmental Compliance History:

As mentioned earlier in this presentation, ODOT completed a thorough environmental study in 2010. This was required as part of the compliance with the National Environmental Policy Act (NEPA) of 1970.

Since 2010, ODOT has re-evaluated the project area, and additional studies, assessments and reviews were completed over an eighteen-month period starting in 2018.



# Environmental Compliance

## Detailed Environmental Studies & Reassessments

- **ODOT Completed Studies & Assessments of:**

- Threatened & Endangered Species Assessments
- Waters & Wetlands Reviews
- Cultural Resources Studies
  - Historic & Archaeological
- Floodplains
- Hazardous Materials Assessment
- Traffic Noise Studies



- Commitments to avoid and/or minimize impacts to the environment will be included in the project in accordance with National Environmental Protection Act.



### Environmental Compliance:

As part of ODOT’s commitment to protecting the environment, detailed environmental studies and assessments were completed along the proposed alignment.

Studies and reassessments of threatened and endangered species, waters and wetlands, cultural resources, floodplains, hazardous materials, and traffic noise were completed. ODOT consulted with the appropriate state and federal agencies and Tribes for compliance approval.

As a result of these studies, additional commitments to avoid and/or minimize impacts to the environment will be added to the project design plans and environmental document.

The Federal Highway Administration must approve the environmental document before the project can proceed.

# Environmental Compliance

## Studies & Reassessments Results

- **Threatened, Endangered, & Listed Species**
  - There are several federally protected species within the general project area—including birds, bats, fish, insects and clams.
  - Measures to avoid or minimize impacts to protected species will be added to the project plans.
- **Waters & Wetlands**
  - Impacts to waters & wetlands will be coordinated with the US Army Corps of Engineers.
  - A Clean Water Act Section 404 permit will be obtained for the project impacts.



See the “Environmental Studies” section of the Virtual Open House website for more details.

### Environmental Studies & Assessment Results:

The detailed studies and reassessments resulted in the finding of federally protected species within the area. Threatened and endangered species, such as bats, birds, fish, insects and clams, use the forest and aquatic habitats associated with the new highway alignment. Measures to avoid or minimize impacts to protected wildlife species will be added to the project plans. More detail on the environmental studies can be found on the “Environmental Studies” section of this website.

Also, the new alignment will cross several streams and creeks which are regulated by the US Army Corps of Engineers. Impacts to waters and wetlands will be coordinated with the U.S. Army Corps of Engineers, and ODOT will obtain a Clean Water Act Section 404 permit for the project.

# Environmental Compliance

## Studies & Reassessments Results

- **Cultural Resources**

- This project will have no effect on historic properties.
- Impacts to a National Register of Historic Places (NRHP) eligible property were avoided.
- There are potentially significant archeological resources within the general vicinity of the project.
  - Environmental Mitigation Notes will be included in the project plans to avoid areas of concern.

- **Floodplain**

- Portions of the project are located in special flood hazard areas (Zone AE).
- Appropriate measures will be taken to avoid adverse flood impacts.



See the “Environmental Studies” section of the Virtual Open House website for more details.

### Environmental Studies & Assessment Results (continued):

Cultural resources—including both historic and archaeological aspects—were evaluated. Initial field results indicate that there are pre-historic archeological sites within the new alignment. Environmental avoidance notes will be included in the project plans to protect these areas of concern.

A significant historic property is located at 102 Warrior Rd. in Adair. The project is not anticipated to have an adverse effect on this property.

A portion of the project is located within a floodplain. Appropriate measures will be taken to avoid adverse flood impacts.

# Environmental Compliance

## Studies & Assessments Results

- **Hazardous Waste Sites**

- Several active & closed filling stations
  - Leaking underground tank site
  - Abandoned / derelict tanks sites
- Several car & motor repair shops along SH-28
- Potential impacts are being evaluated



See the "Environmental Studies" section of the Virtual Open House website for more details.

### **Environmental Studies & Assessment Results (continued):**

There are several sites within the project footprint that have potentially hazardous materials associated with them. There are several active and inactive gas stations, some with leaking underground fuel tanks or abandoned tanks. There are also several car and motor repair shops along SH-28. ODOT is currently assessing the potential impacts, but these sites are not considered to be high-risk. No adverse impacts are anticipated.



# Environmental Compliance

## Noise Study Results

- **Traffic Noise Study**
  - A traffic noise study was completed according to FHWA Regulations & ODOT Noise Policy.
  - Noise modeling was performed to predict sound levels for the existing condition year 2018 and the future condition design year 2040 based on roadway geometry, traffic volumes, terrain and receiver site locations.
  - A total of 44 noise receivers were evaluated representing 43-residential single-family dwellings and 1-place of worship
- **Noise Impacts Occur When:**
  - Exterior future noise levels are 66 decibels (dB) or above. *-OR-*
  - Exterior future noise levels are 15 dB or more above existing levels, even if future levels are below 66 dB
- **Traffic Noise Analysis Results**
  - Future sound levels are expected to range from 54.7 to 73.1 dB
  - 10 residential receivers were determined to be impacted with future levels meeting or exceeding 66 dB
  - No receivers are anticipated to experience a substantial noise increase in future levels over existing levels with a maximum of +6.7 dB



### Environmental Studies & Assessment Results (continued):

ODOT completed a traffic noise study according to Federal Highway Administration and ODOT Noise Policy. The study utilized the FHWA Traffic Noise Model to predict future noise levels, factoring in 2040 traffic volumes, terrain, and receptor site locations. Forty-four receptor locations were modeled, representing 43 homes and 1 place of worship.

Noise Impacts occur when future noise levels are at least 66 decibels; or future noise levels are 15 decibels or more above existing levels. The predicted sound level in the corridor is expected to range from 54.7 to 73.1 decibels.

Based on the proposed project, noise impacts are expected.

More detail on the Noise Study can be found in the “Frequently Asked Questions” section of this website.



# Environmental Compliance

## Noise Study Results

- **Traffic Noise Mitigation**

- Noise mitigation in the form of a free-standing noise wall placed within the highway's right-of-way is considered the most appropriate form of noise abatement measure for impacted receivers involved
- All affected noise receivers have direct driveway access to SH-28, requiring gaps in the noise wall making noise level reduction ineffective. Therefore, mitigation is determined not feasible



### **Environmental Studies & Assessment Results (continued):**

Noise Mitigation—Since all affected noise receptors within the project area have direct driveway access to SH-28, building a sound barrier wall is considered ineffective, as gaps would be required in the wall to accommodate driveways. A noise wall will not be constructed as part of this project.

# Right-of-Way Impacts

## To Accommodate Highway Widening, Additional Right-of-Way will be Required

- **Right-of-Way Impacts**
  - 15 residential displacements are anticipated.
  - 15 commercial and 2 private property relocations are anticipated.
  - Additional frontage along SH-28 and side roads will be required.
- **Interact with ODOT**
  - For more information on property rights and impacts:
    - View your property on the “Interactive Map”
    - Property owners affected by the project will be contacted by ODOT representatives



See the “Right-of-Way” section of the Virtual Open House website for more details.

### Right-of-Way Impacts:

Often, transportation projects require additional property to construct safe and efficient highways. Adverse effects to property owners are weighed heavily by ODOT. The designers looked at several alternatives to minimize impacts, and balanced that with the primary purpose of improving highway safety. Any properties being impacted by the proposed right-of-way on this project may be eligible for compensation or relocation benefits. The eligibility of each property impacted will be determined through the right-of-way process. Property owners affected by the project will be contacted by ODOT representatives.



## Construction

- Construction is anticipated to begin in 2025.
- The project will be constructed in phases.
- During some phases, traffic may be reduced to one lane and controlled with a traffic signal.
- Traffic will crossover between old and new alignment sections during construction.
- SH-28 will remain open.
- Access will be maintained to all residences, businesses, and Adair schools.

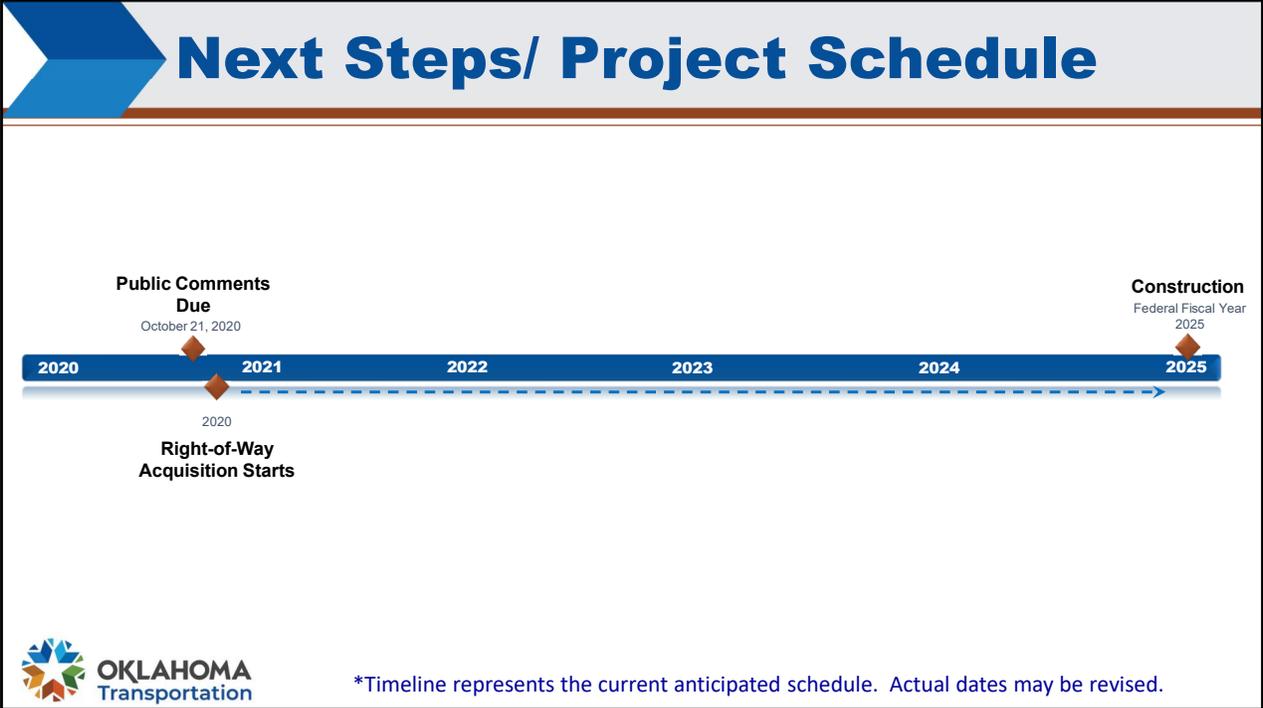


### **Construction:**

At this time, construction is anticipated to start in 2025. The actual start date is dependent on several factors, including the availability of funds, but right now the project appears to be on schedule.

During construction, some segments will be constructed in phases. Traffic may be reduced to one lane and controlled with a traffic signal.

SH-28 will remain open throughout the entire construction process and access to all residences, businesses, churches and schools will be maintained.



**Next Step & Schedule:**

This slide shows the next steps for the project. We ask that you submit your comments by **October 21<sup>st</sup>** so that we may incorporate your feedback and finalize the design plans. If your property is affected by the project, you can expect to hear from ODOT right-of-way agents beginning in late 2020 or 2021.

Currently, construction of the project is anticipated to begin in 2025.



# Thank You!

## Thank You for Participating in ODOT's Virtual Open House!

- **Please visit other areas of the website for more information.**

- **Interactive Map** - view the design on an aerial photograph, zoom in & out, find your property, etc.
- **Right-of-Way Acquisition** - information for right-of-way acquisition & relocations
- **Environmental Studies** - more information about the studies and environmental commitments
- **Frequently Asked Questions** - for common questions and answers about the project
- **Submit a Comment** - submit your comments or questions on this page or send by email or US mail

**The best way to leave a comment or ask a question is to submit a written comment at the "Submit a Comment" page, or via email:**

[environment@odot.org](mailto:environment@odot.org)

**For more information on this project call (405) 521-3050**



Please go to [www.odot.org/SH28Mayes](http://www.odot.org/SH28Mayes) for more information.

Thank you for participating! Please visit the other areas of this website for more information. This concludes the presentation portion of the Virtual Open House.