Interchange
US-412 at 4170 Road
Rogers County

Virtual Public Open House, June 17 – July 8, 2025

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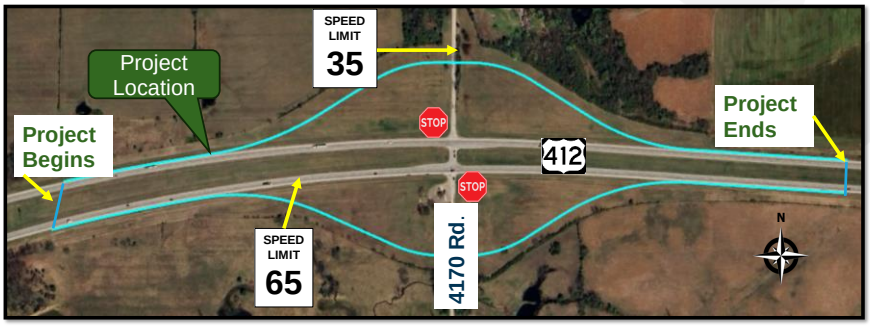
Welcome to the virtual public open house for the new US-412 interchange at 4170 Road in Rogers County, Oklahoma.

What is the Purpose of the Meeting?

- To present the proposed improvements for the new US-412 interchange at 4170 Rd in Rogers County and obtain public input.



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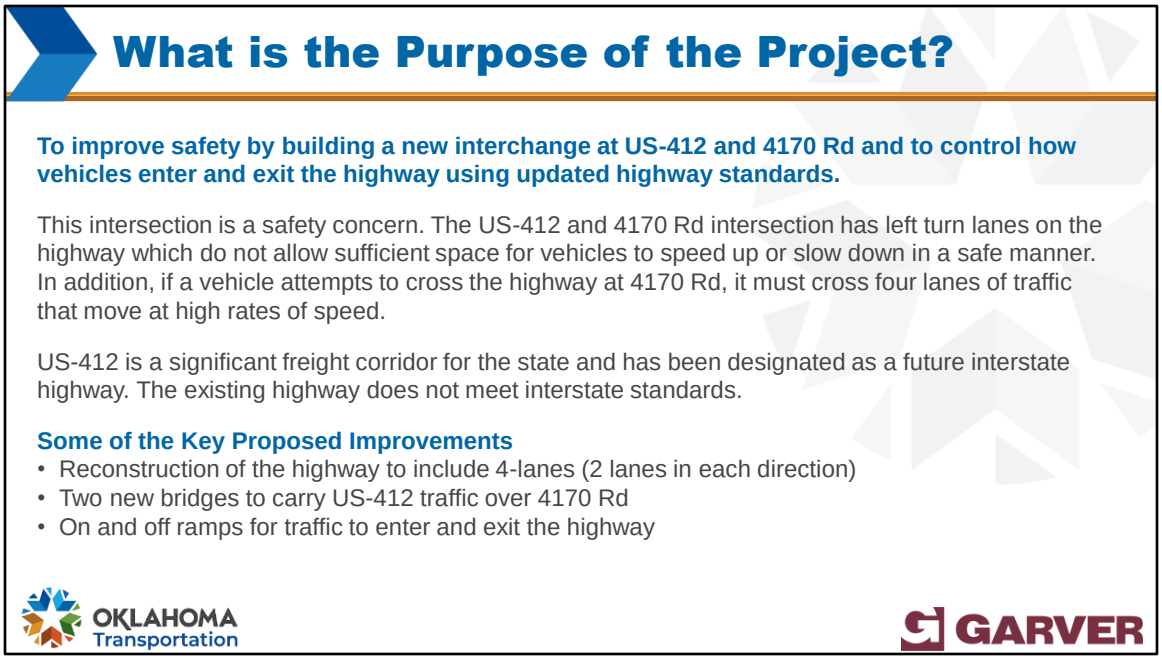
The purpose of today's meeting is to present the proposed improvements for the new US-412 interchange at 4170 Rd in Rogers County and to gather your input about the project. The location of the interchange is shown on the map.



The purpose of the US-412 and 4170 Rd interchange is to improve safety and control how vehicles enter and exit the highway using updated highway standards.

This intersection is a safety concern. The US-412 and 4170 Rd intersection has left turn lanes on the highway which do not allow enough space for vehicles to speed up or slow down in a safe manner. In addition, if a vehicle attempts to cross the highway on 4170 Rd, it must cross four lanes of traffic that move at high rates of speed.

US-412 is a significant freight corridor for the state and has been designated as a future interstate highway. The existing highway does not meet interstate standards. Some of the the key proposed improvements include reconstruction of the highway to include 4-lanes (2 lanes in each direction) and new bridges on US-412 over 4170 Road. On and off ramps will provide access for vehicles to enter and exit the highway.

Initial Data Collection

Next, we will talk about the initial data collection.

Environmental Considerations

Environmental Issues Considered, Studied, and Evaluated:

- Stream and Wetland Impacts
- Threatened & Endangered Species
- Hazardous Waste Sites
- Noise Impacts
- Historic Properties and Archeological Sites
- Socioeconomic Impacts

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ODOT started by reviewing the project area for environmental considerations. Environmental issues considered, studied, and evaluated for this project include stream and wetland impacts, threatened and endangered species, hazardous waste sites, noise impacts, historic properties and archeological sites, and socioeconomic impacts.

Traffic Data and Intersection Characteristics

US-412

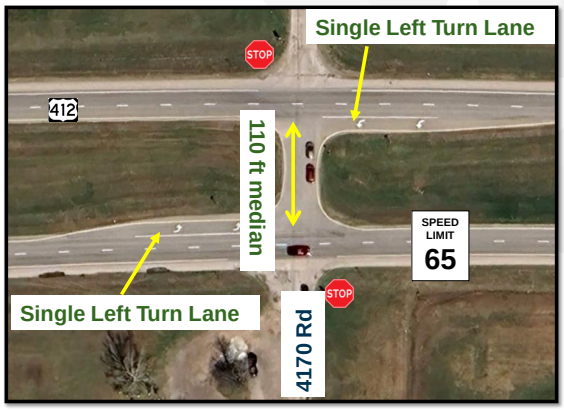
- 24,000 Vehicles/Day (2023)
- 40,656 Vehicles/Day (2045)

4170 Rd

- 650 Vehicles/Day (2023)
- 1,101 Vehicles/Day (2045)

Intersection Features

- 110- foot median
- 4170 Rd is a two-lane road
- No traffic lights at the intersection
- Two lanes on eastbound and westbound of US-412 and a left turn lane on the left side.



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Next, ODOT evaluated the traffic in the area. For US-412, the current traffic count is 24,000 vehicles per day. ODOT estimates traffic to grow to 40,656 vehicles per day by 2045. For 4170 Rd, the current traffic count is 650 vehicles per day, and by 2045, it is estimated to be 1,101 vehicles per day. The predicted increase of traffic in the future means that crossing US-412 at 4170 Rd will become even more difficult if the current intersection design were to remain. Future traffic projections allow ODOT to design highways to accommodate traffic for at least the next 20 years.

US-412 has two lanes of traffic in each direction with a 110-foot median. There are left turn lanes in each direction at 4170 Road. 4170 Road has one lane in each direction. Traffic on 4170 Road must stop at US-412 to cross or turn.

The single left turn lane on US-412 means vehicles on the highway wanting to make a left turn onto 4170 Rd are required to slow down in the left lane of the highway. The left lane of a highway is normally used for faster vehicles and for vehicles to pass slower vehicles in the right lane. The left-turning vehicles then have to wait in line in the 110-ft median before crossing two lanes of high-speed traffic to get to the other side of US-412 and continue on 4170 Rd. The

width of the median has enough room for only three vehicles to wait in line at a time. Vehicles lining up in the median can cause confusion if there are vehicles making a left turn from US-412 while the median is at capacity. Crashes can potentially occur when the US-412 lefts are crossing at the same time vehicles on 4170 Rd are crossing to the median. In addition, if the median is full, vehicles then must wait in the left turn lane of US-412 while fast vehicles are approaching them from behind.

The single lane on 4170 Rd means if a vehicle is needing to make a left turn onto US-412, it can cause a back up on 4170 Rd because vehicles must wait till there is a safe gap on US-412 between fast moving vehicles in order to cross two-lanes of traffic to the median. The vehicle then must make a left turn and merge into highway traffic from a stop, causing a potential unsafe merging situation.

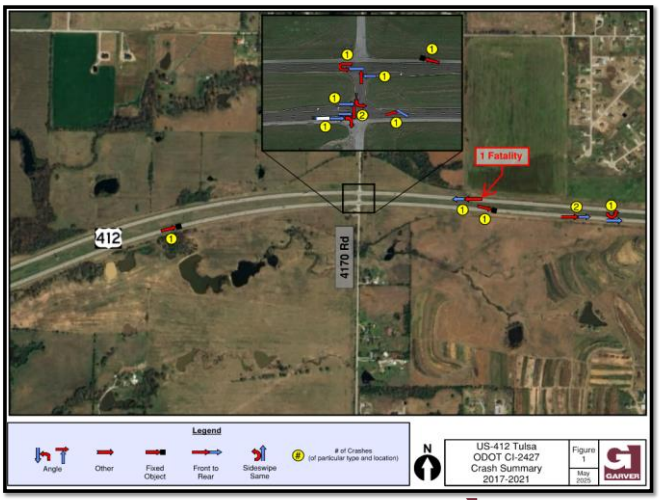
Collision Data

Crash Data for 2017 - 2021

- Crashes – 14
- Fatalities – 1

Types of Crashes

- Angle (front to side collision)
- Fixed Object (Examples: tree, sign, barrier)
- Rear end
- Sideswipe (side to side collision)
- Other



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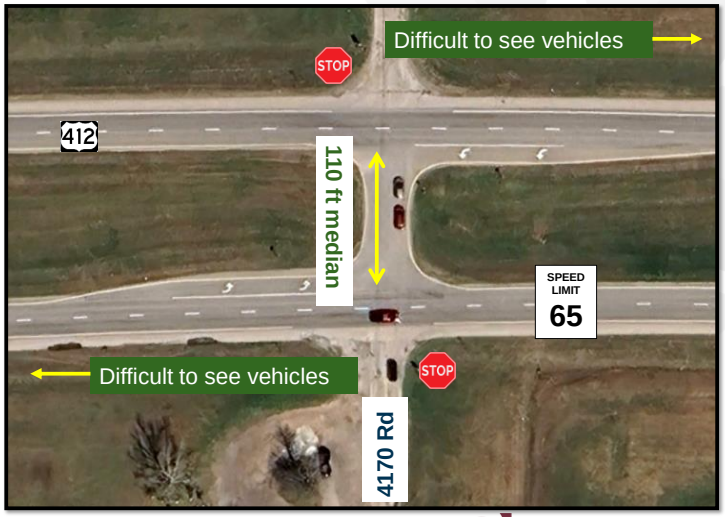
On the right side of the screen is a crash map for the project area. From 2017 – 2021, 14 crashes and 1 fatality occurred within the project area. The one fatal crash involved a rear-end collision followed by the vehicle leaving the roadway. As you can see, the majority of crashes occurred at the intersection of US-412 and 4170 Rd. These crash numbers support the need to make safety improvements at this intersection and to update it to newer highway standards.

The map also shows angle, or front to side crashes, fixed object, rear end, and sideswipe, or side to side crashes.

Roadway

Challenges

- 4170 Rd vehicles have difficulty turning onto US-412
  - It can be difficult for drivers to see cars coming towards them
  - High speeds on US-412
- 110-foot median
  - Only three vehicles can be lined up at a time in the median.
  - This increases the potential for a car crash.



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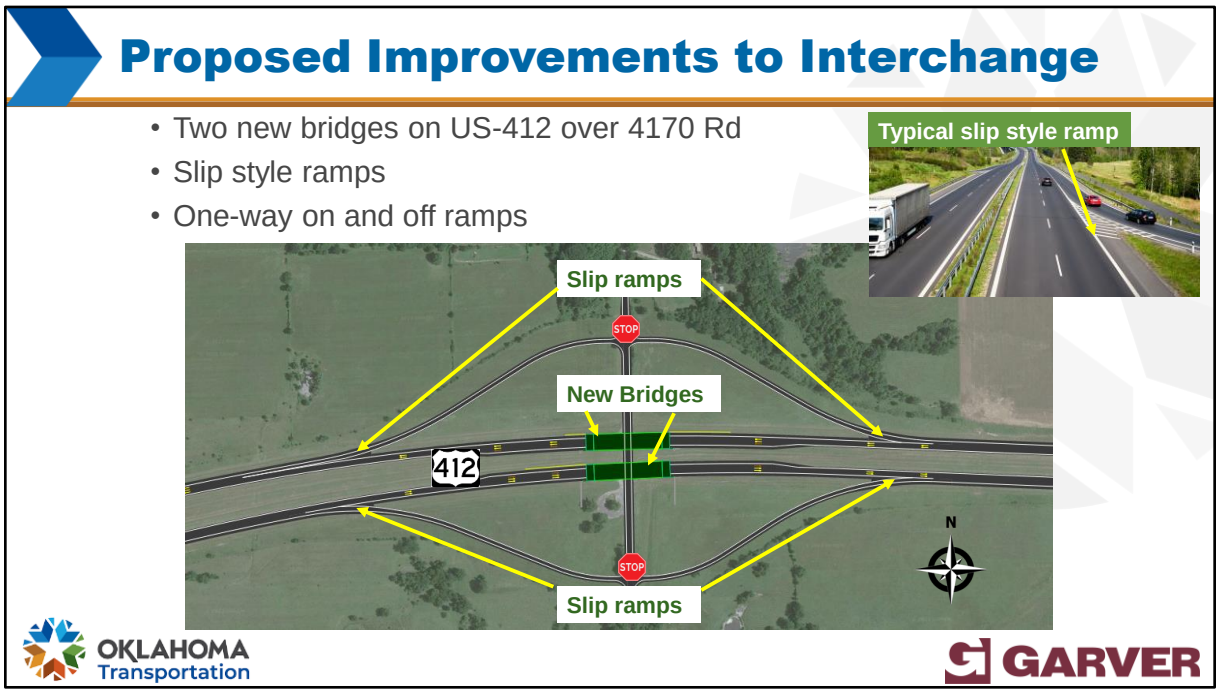
ODOT analyzed the existing conditions to determine what needs to be fixed to create a safer crossing. Vehicles waiting at the stop sign at 4170 Rd have a difficult time seeing vehicles on the highway coming towards them. This can make it difficult when determining a safe time to cross US-412 to get to the median. Also, the 110-foot median only has enough capacity to allow for three vehicles to line up at a time. This can cause vehicles in the left turn lanes of US-412 to back up on the highway. In addition, the high speed of traffic on US-412 also makes the crossing a potentially unsafe condition.

Proposed Interchange Improvements

Now we are going to discuss the proposed interchange improvements studied for the project.



Next, we are going to show you an overview of the proposed interchange improvements.

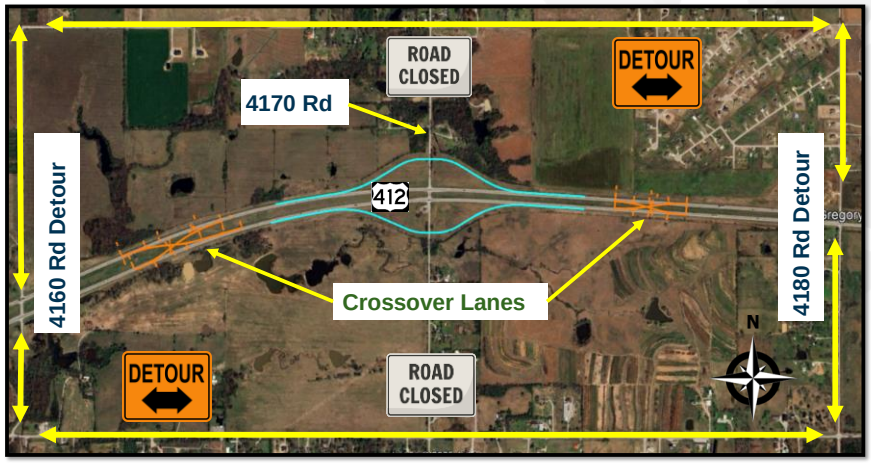
Two new bridges will be constructed to carry US-412 traffic over 4170 Rd. Slip style ramps will be constructed for traffic to exit and enter the highway. An example of what a typical slip style ramp looks like can be found on the top right-hand corner of the screen. A slip style ramp is a short ramp used to enter and exit a highway. They help drivers merge with other cars in a safe manner. Many highways and interstates in Oklahoma have slip style ramps.

Two-way stop signs will be at the intersections of the on and off ramps and 4170 Rd. Roundabout intersections were also considered, but ODOT would have had to purchase additional right-of-way, increasing the cost, impacts, and construction time.

With the addition of the stop signs, slip style ramps, new bridges, and one-way ramps, we can expect crashes to be reduced by up to 40%.

Traffic During Construction

- US-412 will remain open during construction and construction will be in phases
- Crossover lanes will be used to shift traffic
- 4170 Rd will be closed during construction
- Traffic on 4170 Rd will be detoured to either 4160 Rd or 4180 Rd



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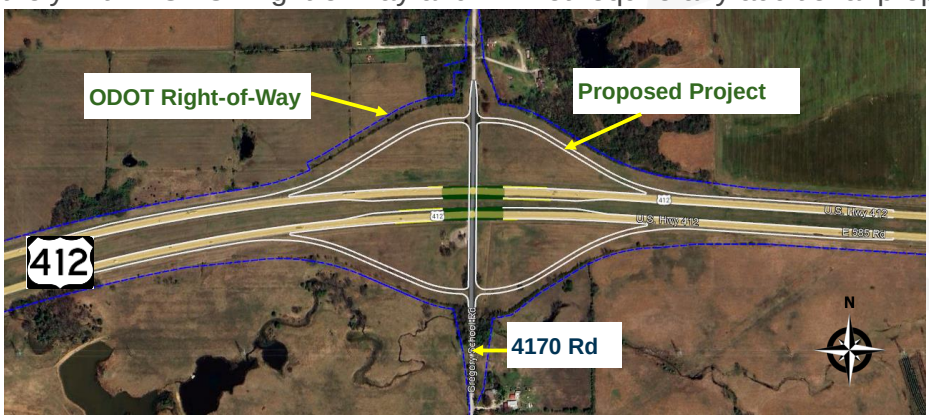
US-412 will remain open during construction. Crossover lanes, shown as orange lines in the map, will be used on US-412 to shift traffic to one side of the highway while construction occurs on the other side. 4170 Rd will be closed during construction. Traffic may use either 4160 Rd or 4180 Rd as detours.

Right-of-Way

The design for the new interchange at US-412 and 4170 Rd will be built entirely within ODOT right-of-way and will not require any additional property.



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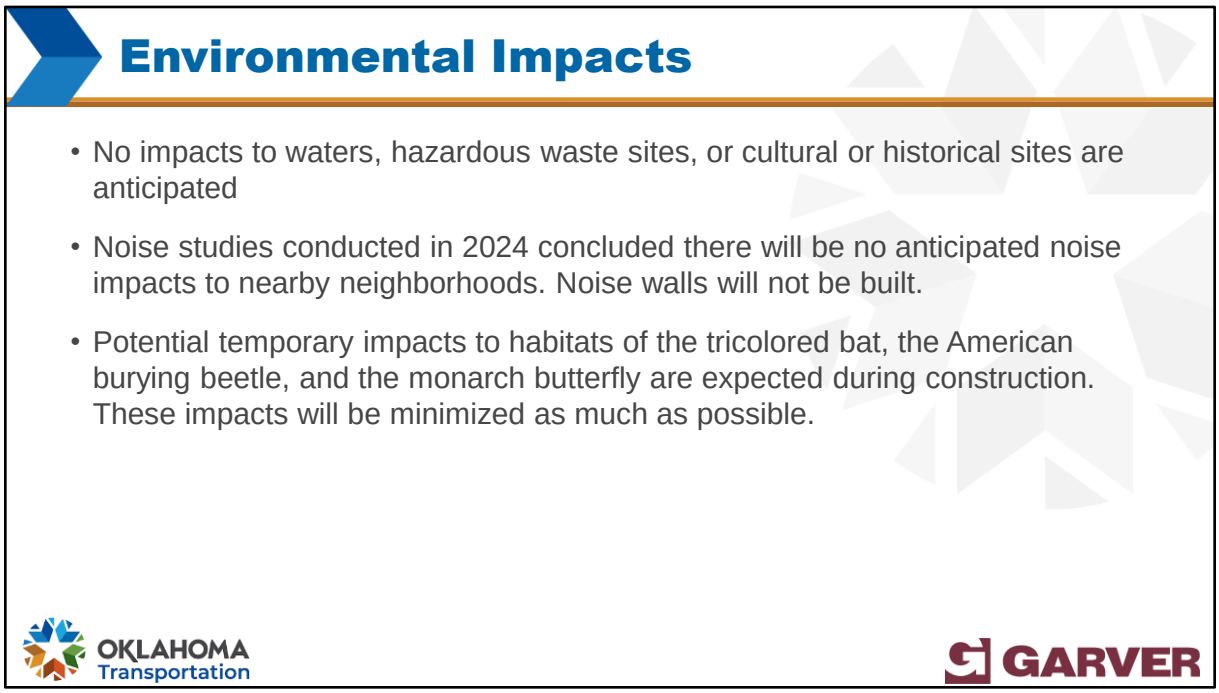
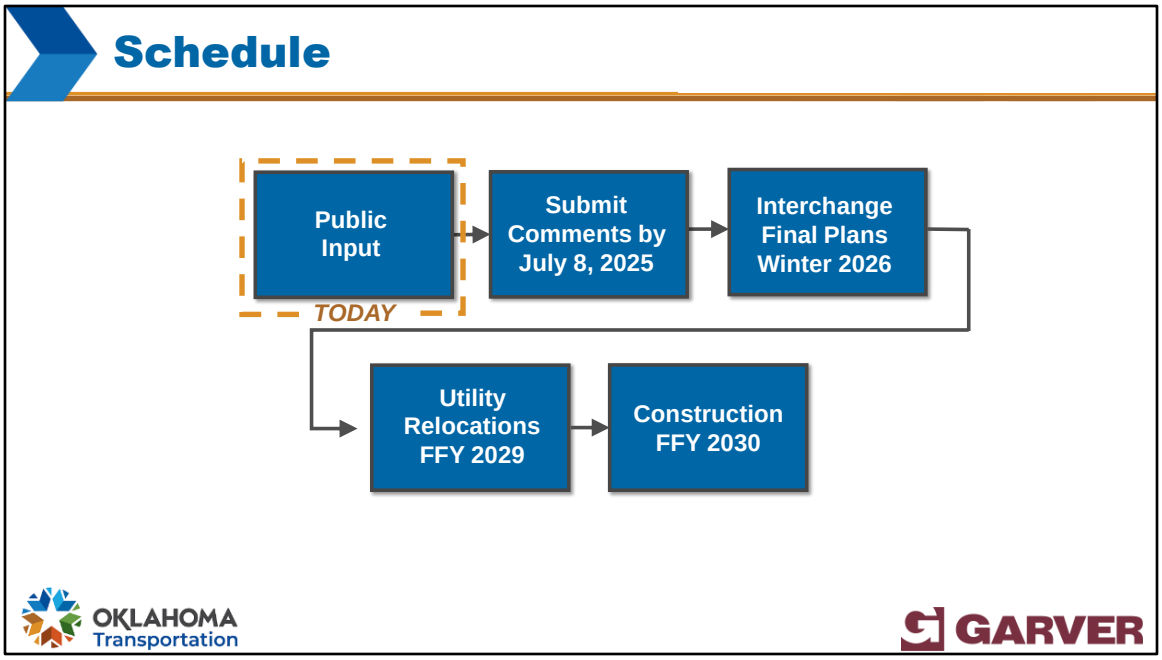
The project will be constructed entirely within ODOT right-of-way and no additional property will be required.



Environmental impact studies concluded the project will cause no impacts to waters, hazardous waste sites, or cultural or historical sites.
A noise study was conducted, and the conclusion was that there will be no noise impacts to nearby neighborhoods. Noise walls will not be built as part of the project. Potential temporary impacts to tricolored bats, the American burying beetle, and the monarch butterfly are expected during construction. These impacts will be minimized as much as possible.



This slide shows the next steps for the new bridge and interchange at US-412 Interchange at 4170 Rd. in Rogers County. ODOT requests that you submit your comments by July 8, 2025, so that we can compile and respond to all the feedback. The project plans will be finalized in 2026, and utility relocations will begin in 2029. Construction for the new interchange and bridge is programmed for 2030. The schedule is based on funding availability and subject to change.

Thank you for viewing the presentation. Again, please submit your comments by July 8, 2025. You can do that by submitting a form on the website or you can download the form and mail it back to ODOT. You can also submit comments by sending an email to the email address shown on the slide.