

# Project Description of MPDG US 412 Project 

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## Project Description

The Infrastructure Investment and Jobs Act (IIJA) of 2021 designated US-412 from I-35 to I-49 in Oklahoma and Arkansas as a future interstate on the National Highway System (p. 169). The Oklahoma Department of Transportation (ODOT) is seeking funding to begin this conversion starting with:

- Reconstructing a portion of the system-to-system interchange at SH-66,
- Constructing five new interchanges that are currently at-grade intersections, and
- Reconstructing a six-mile segment of the U.S. 412 network from I-44 to Verdigris River


## The US-412 Priority Improvements for Interstate Designation Program of Projects is estimated to cost $\$ 205$ million.

The designation of US-412 to an interstate is mandated at the federal level in the IIJA, which signals the importance of US-412 to the nation. Achieving the corridor's full interstate potential and design standards will serve future passenger and freight traffic needs, improve safety along the Project corridor, strengthen the resiliency of the nation's east/west interstates, and facilitate economic growth and quality of life for the region. Numerous entities in the region support the Project through formal letters, all of which are uploaded to grants.gov and can also be found on the US-412 Grant website.

Figure 1: US-412 Regionwide Improvement Scope


Source: ODOT

The projects identified in this grant are part of a larger effort to improve US-412 to interstate standards ultimately connecting I-35 and I-49. Figure 1 above identifies the segment of US-412 from I-35 to I-49 that is identified for interstate redesignation. The red box identifies where proposed improvements outlined in this grant will occur. The various interchange and pavement improvements are located to the east of Tulsa and are identified in Figure 2.

## Transportation Challenges and Solutions

The existing US-412 is currently a high-speed corridor with posted speed limits ranging from 65 mph to 70 mph . Five out of the six interchange locations being constructed currently have at-grade intersections as shown in the photo to the right. Because access control is inconsistent for the entirety of US412, drivers within the corridor experience unexpected slowing and accelerating, passing and weaving, and dangerous access points that do not allow for safe acceleration or deceleration onto or off of US-412.


Example of an at-grade intersection on US-412 in the corridor. Source: ODOT

The at-grade intersections on U.S. 412 that are identified in this grant must be upgraded to handle the increased freight traffic that is projected to affect marine port terminals of Catoosa, Inola and Oakley Port 33 as well as the Mid America Industrial Park, all along the U.S. 412 corridor. The ports are a part of the McClellanKerr Arkansas River Navigation System (MKARNS), which transports billions of dollars' worth of commodities every year from barge to truck and rail for distribution throughout the United States. MidAmerica Industrial Park is home to many alternative energy source manufacturers including Canoo Electric, which has created over 1,500 new jobs at the facility, and Panasonic, who is projected to bring in around 3,500 new jobs (See Economic Outcome Criteria).

Upgrading to an interstate will create a safer environment for the traffic demand that US-412 and supporting industries will create. Removing the at-grade turning movements and constructing interchanges will ensure free-flow speeds on the facility and improve travel times.

## Project Location

The various projects seeking funding in the following MPDG narrative are part of an overall program of projects to upgrade US-412 to an interstate. One project, the SH 66 interchange, is located on the border of the Tulsa designated urban area. All other projects are in locations considered rural. The improvements span a 26 -mile segment of US-412, east of Tulsa, with six out of the seven improvements occurring west of State Highway 88 and one improvement just east of U.S. Highway 69. The locations of each US-412 project, from west to east, are as follows:

- SH-66 \& I-44/US-412, upgrade system to system interchange - 36.163392, -95.752495
- I-44 to Verdigris River, pavement reconstruction - $36.164586,-95.679037$ (midpoint)
- $265^{\text {th }}$ E. Avenue, construct new service interchange - $36.164565,-95.681697$
- S.H. 412P, construct new service interchange - $36.164578,-95.636939$
- 4170 Road, construct new service interchange - 36.171026, -95.583066
- 4190 Road, construct new service interchange - 36.169341, -95.547239
- S.H. 412B, construct new service interchange - $\underline{36.176788, ~-95.279274}$

Figure 2: Project Area


Source: ODOT

All project locations are within Census Tracts that are considered Historically Disadvantaged Communities (HDC). Two locations are considered to be in Areas of Persistent Poverty (APP). The table below identifies the Census tracts containing project locations that are considered HDC and APP. Figure 3 also identifies the Census tracts surrounding the U.S. 412 corridor.

Indian nations located in within or directly adjacent to the Project area include:

1. Alabama-Quassarte Tribal Town (Peoples: Alabama, Coushatta)
2. Cherokee Nation (Peoples: Cherokee, Cherokee Freedmen, Natchez)
3. The Muscogee (Creek) Nation (Peoples: Muscogee Creek, Yuchi)

Table 1: APP and HDC Census Tracts within Project Limits

| Tract Number | Historically Disadvantaged <br> Community? | Area of Persistent Poverty? |
| :---: | :---: | :---: |
| 304.03 | Yes | Yes |
| 504.09 | Yes | No |
| 505.01 | Yes | No |
| 404.00 | Yes | Yes |

Sources: CEJST, DOT DataHub

Figure 3: Census Tracts within Project Limits


## Detailed Statement of Work

Below is a detailed statement of work for each of the seven proposed projects:

- SH-66 \& I-44/US-412, upgrade system to system interchange - The improvements include straightening and widening US-412 for a 75 mph design speed. Add a two-lane ramp from US-412 eastbound to SH-66 northbound, which exits on the right from US412. A flyover ramp then connects to SH-66. Add an on-ramp from 193rd East Avenue to US-412 eastbound and SH-66 northbound. Add a collector distributor road along US412 westbound for the SH-66 southbound merge and 193rd East Avenue exit. Add a turn-around at 193rd East Avenue for SH-66 southbound to US-412 eastbound.
- I-44 to Verdigris River, pavement replacement - This six-mile section will undergo a complete pavement reconstruction in both the east and westbound direction.
- $265^{\text {th }}$ E. Avenue, construct new service interchange - The new interchange will be a full service, tight diamond that will be signal controlled at both intersections. US-412 will pass over $265^{\text {th }} \mathrm{E}$. Avenue.
- S.H. 412P, construct new service interchange - The new interchange will be full service, with a diamond configuration in the eastbound direction and a folded diamond configuration in the westbound direction. The folded ramp is in the northwest quadrant.
- 4170 Road, construct new service interchange - The new interchange will be a full service, diamond that will be signal controlled at both intersections. US-412 will pass over 4170 road.
- 4190 Road, construct new service interchange - The new interchange will be a full service, diamond that will be signal controlled at both intersections. Preliminary design is still determining if US-412 will pass over or under 4190 Road.
- S.H. 412B, construct new service interchange - The new interchange will be full service. The project team is determining if the interchange type will be a standard diamond with signals at ramp terminals, a diamond with roundabouts or trumpet design.

