

Railroad Crossing Elimination Grant Program

# Occupied Crossing Mitigation Project

Davis, Oklahoma



September 2024



**OKLAHOMA**  
Transportation



## Project Narrative

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# Railroad Crossing Elimination Grant Program Occupied Crossing Mitigation Project | Davis, Oklahoma

## 1. COVER PAGE

<b>Project Title</b>	Occupied Crossing Mitigation Project
<b>Applicant Name</b>	Oklahoma Department of Transportation (ODOT)
<b>FUNDING</b>	
<b>Amount of RCE Program Funding Requested under this NOFO</b>	\$25.45 million
<b>Amount of Proposed Non-Federal Match</b>	\$6.36 million
<b>Does some or all of the proposed Non-Federal Match for the total project cost consist of Preliminary Engineering costs incurred before project selection (but after November 15, 2021)?</b>	No
<b>Other Sources of Federal funding, if applicable</b>	N/A
<b>Source(s) of Proposed Non-Federal Match</b>	ODOT and Burlington Northern Santa Fe (BNSF)
<b>If applicable, are set-aside funds requested? Is the Project eligible for a funding set-aside in Section B.1?</b>	Yes — Rural
<b>If “Yes,” amount of set-aside funds requested:</b>	\$25.45 million
<b>Total Project Cost</b>	\$31.81 million
<b>PREVIOUS FEDERAL GRANTS</b>	
<b>Was a Federal Grant Application Previously Submitted for this Project?</b>	Yes: CRISI – FY24, NAE – FY23, RCE – FY22
<b>LOCATION</b>	
<b>City(ies), County(ies), State(s) Where the Project is Located</b>	Davis, Oklahoma
<b>Is the Project Located in a Rural Area or on Tribal Lands?</b>	Yes — Rural
<b>If the Project is located in a Rural Area or Tribal Land, is the Project Located in a county with 20 or fewer residents per square mile, according to the most recent decennial census?</b>	No
<b>Congressional District(s) Where the Project is Located</b>	Oklahoma’s 4th Congressional District
<b>APPLICATION TRACKS/PROJECT LIFECYCLE STAGES</b>	
<b>Application Track(s) proposed to be funded by this NOFO?</b>	Track 2 and Track 3
<b>Lifecycle Stage(s) proposed to be funded by this NOFO</b>	Project Development, Final Design, and Construction
<b>Current Lifecycle Stage and Anticipated completion of current Lifecycle Stage?</b>	Project Development, 2025



RAIL LINE INFORMATION	
Is the Project located on real property owned by someone other than the applicant?	Yes — Burlington Northern Santa Fe (BNSF) Railway
Host Railroad/Infrastructure Owner(s) of Project Assets;	BNSF
Other impacted Railroad(s)	Amtrak
Tenant Railroad(s), if applicable	Amtrak
If applicable, is a 49 U.S.C. 22905-compliant Railroad Agreement executed or pending?	Pending
PLANNING CONSIDERATIONS	
Is the Project currently programmed in ANY medium or long-range planning document: <i>For example, State rail plan, or interregional intercity passenger rail systems planning study, State Freight Plan, TIP, STIP, MPO Long Range Transportation Plan, State Long Range Transportation.?</i>	Yes — 2021 Oklahoma State Rail Plan
Is the Project located on a potential corridor selected for the Corridor Identification and Development Program?	Yes — Heartland Flyer Extension



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## 2. PROJECT SUMMARY

The Oklahoma Department of Transportation (ODOT), in collaboration with Burlington Northern Santa Fe (BNSF) Railway, is proposing the Occupied Crossing Mitigation Project (Project) in the City of Davis, Oklahoma, where the railroad tracks run directly through the center of the community, effectively bisecting the city. The Project will include constructing approximately 9,920 feet of track siding to the south and removal of 4,170 feet of existing siding from Benton Avenue and Main Street. All siding and industry operations will be south of Main Street and about 300 feet north of the Haliburton Road/County Road N-3310 railroad crossings. The Project will also see the closure of two at-grade railroad crossings along the BNSF railroad line at Atlanta Avenue and Hanover Road. ODOT will also consider safety improvements at the Benton Avenue, Main Street, and Haliburton Road at-grade crossings to support safe and reliable movements of goods, people, and services.

## 3. GRANT FUNDS, SOURCES, USES OF PROJECT FUNDS

Table 1 provides a general budget summary for Project construction. BNSF has estimated the Project budget at \$31.81 million based on preliminary design and has included a generous contingency of \$7.32M to allow for any changes in that estimate as design progresses. The requested Railroad Crossing Elimination (RCE) Grant amount is \$25.45 million, or roughly 80% of the Project costs. The remaining 20% of the Project will be equally funded by local funds and private-sector contributions from BNSF. Please refer to Attachment 1 for the funding commitment letter.

Table 2 identifies the Project costs by component. Table 3 provides the Project funding details.

*Table 1. Project Funding*

Project Construction Phase	Estimated Cost or Contribution
Labor	\$5.41 million
Materials	\$6.86 million
ROW Acquisition	\$0.66 million
Bridge Replacement	\$2.13 million
Other	\$9.42 million
Contingencies	\$7.32 million
<b>Total Project Cost</b>	<b>\$31.81 million</b>
<b>Funding Sources and Contributions</b>	
ODOT – State Revenues	\$3.18 million
Private Sector – BNSF <sup>a</sup>	\$3.18 million
Non-Federal Subtotal	\$6.36 million
RCE Federal Grant	\$25.45 million
<b>Total Project Cost</b>	<b>\$31.81 million</b>

<sup>a</sup> BNSF will also make a payment in the amount of \$200,000 to Murray County to assist with its roadway improvements associated with closing the Hanover Road railroad crossing.

ROW = right of way



Table 2. Project Budget by Component

Task No.	Task Name/ Project Component	Cost	Percentage of Total Cost	Source of Funds and Citation
1 – Tracks 2 and 3	Project Administration and Management	\$150,000	0.5%	
2 – Track 2	Design and Environmental	\$300,000	0.9%	
3 – Track 3	ROW	\$660,000	2.1%	
4 – Track 3	Construction	\$30,700,000	96.5%	
<b>Total Project Cost</b>		<b>\$31.81 million</b>	<b>100%</b>	
Federal Funding Request under this Notice of Funding Opportunity (NOFO)		\$25.45 million	80%	RCE Funds
Total Non-Federal Match		\$6.36 million	20%	
Non-Federal Funding (State)	Cash: \$3.18 million		10%	Rebuilding Oklahoma Access and Driver Safety (ROADS) Funds
	In-Kind: \$0			
Non-Federal Funding (Private Sector)	Cash: \$3.18 million		10%	BNSF
	In-Kind: \$0			
Non-Federal Funding (Local)	Cash: \$0			
	In-Kind: \$0			
Other Committed Federal Funding		\$0	0%	
Other Pending Federal Funding Requests		\$25.45 million (CRISI)	80%	CRISI
Amount (if any) of Funding Request Eligible for Set-aside Funds as Described in Section B(1)		\$31.81 million	100%	
Portion of Total Project Costs Spent in a Rural Area, if Applicable		\$31.81 million	100%	
Does some or all the proposed Non- Federal Match for the total Project cost consist of Preliminary Engineering costs incurred before Project selection (but after November 15, 2021)?		\$0	0%	





Table 3: Proposed Project Funding Details

Lifecycle Stage	RCE			Other Federal			Total (\$)	
	Federal	Non-Federal		Federal	Non-Federal		Cost	Percent of Total Project Cost
		ODOT (State)	BNSF (Private Sector)		Source 1	Source 2		
Project Development including NEPA and ROW	\$120,000	\$15,000	\$15,000	\$0	\$0	\$0	\$150,000	0.5%
Final Design	\$240,000	\$30,000	\$30,000	\$0	\$0	\$0	\$300,000	0.9%
Construction	\$25,088,000	\$3,136,000	\$3,136,000	\$0	\$0	\$0	\$31,360,000	98.6%
Totals	\$25,448,000	\$3,181,000	\$3,181,000	\$0	\$0	\$0	\$31,810,000	100%

#### 4. APPLICANT ELIGIBILITY CRITERIA

ODOT, a State agency, is the Project sponsor. A State is an eligible recipient under 49 U.S. Code (U.S.C.) § 22909(c).

#### 5. PROJECT ELIGIBILITY CRITERIA

This Project is eligible under the following section in the RCE Program NOFO:

*C(3)(a)(v). A group of related projects described in paragraphs (i) through (iv) that would collectively improve the mobility of people and goods.*

The Project track is identified as Track 2 – Project Development and Track 3 – Final Design/Construction.

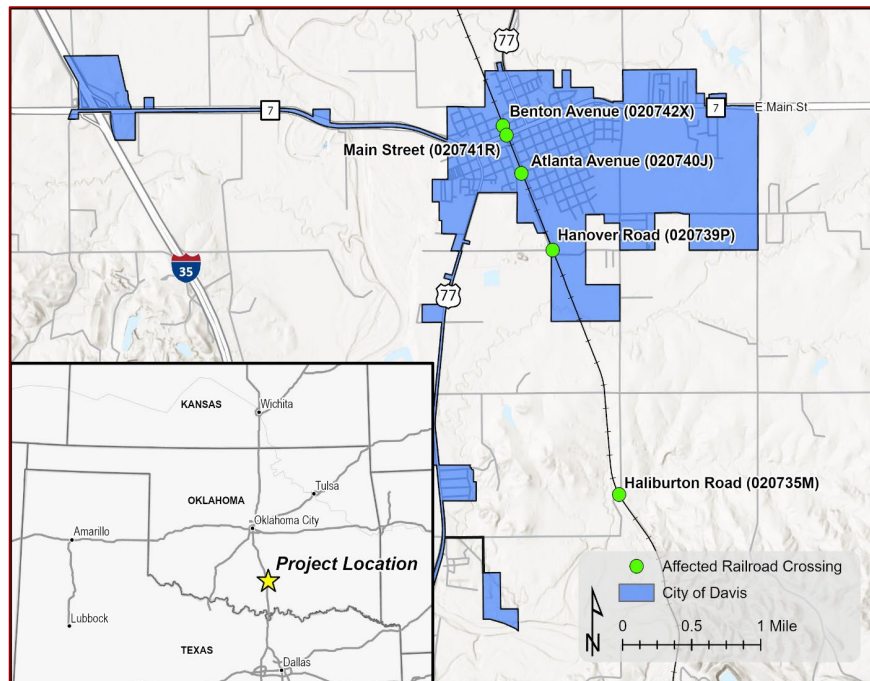
The Project will remove and relocate siding track from within the City limits and across at-grade crossings, resulting in the closure of two at-grade railroad crossings and providing safety improvements at three at-grade crossing locations. These project improvements constitute an eligible project under 49 U.S.C. § 22909(d).

#### 6. DETAILED PROJECT DESCRIPTION

The Project will address the issue of prolonged blocked railroad crossings in Davis, a city effectively bisected by railroad tracks, and ensure the road network remains safe and efficient for all users. The five railroad crossings included in the Project scope are located at Benton Avenue (020742X), Main Street (020741R), Atlanta Avenue (020740J), Hanover Road (020739P), and Haliburton Road/County Road N-3310 (020735M) (refer to Figure 1). The Project consists of the removal of siding track from Benton Avenue to Main Street (U.S. Highway 77 [US-77]) and Oklahoma State Highway 7 [SH-7]) and the relocation of siding and industry operations south of Haliburton Road/CR-3310 by providing about 2 miles of new siding to reduce instances of trains on sidings that occupy multiple crossings in the City. This includes closing the at-grade crossings at Atlanta Avenue and Hanover Road. Additionally, the Project will implement safety improvements at Benton Avenue, Main Street, and Haliburton Road/CR-3310, such as additional lighting and improved pedestrian crossing gates and fencing, to support the safe and reliable movement of goods, people, and services (refer to Figure 2).



Figure 1. Project Location Map



A coalition of stakeholders, including the City of Davis, ODOT, and BNSF, has come together to accelerate the funding and construction of the Project. BNSF supports the Project for its potential to improve the safety and efficiency of their freight train operations. Davis residents and the business community have also shown widespread support as indicated by the Letters of Support attached to this application. The Project scope consists of the construction of approximately 9,920 feet of track siding to the south and the removal of 4,170

feet of existing siding from Benton Avenue and Main Street, with all siding and industry operations situated south of Main Street and about 300 feet north of the Haliburton Road/County Road N-3310 railroad crossings. The Project will also consist of the closure of two at-grade railroad crossings along the BNSF railroad line at Atlanta Avenue and Hanover Road.

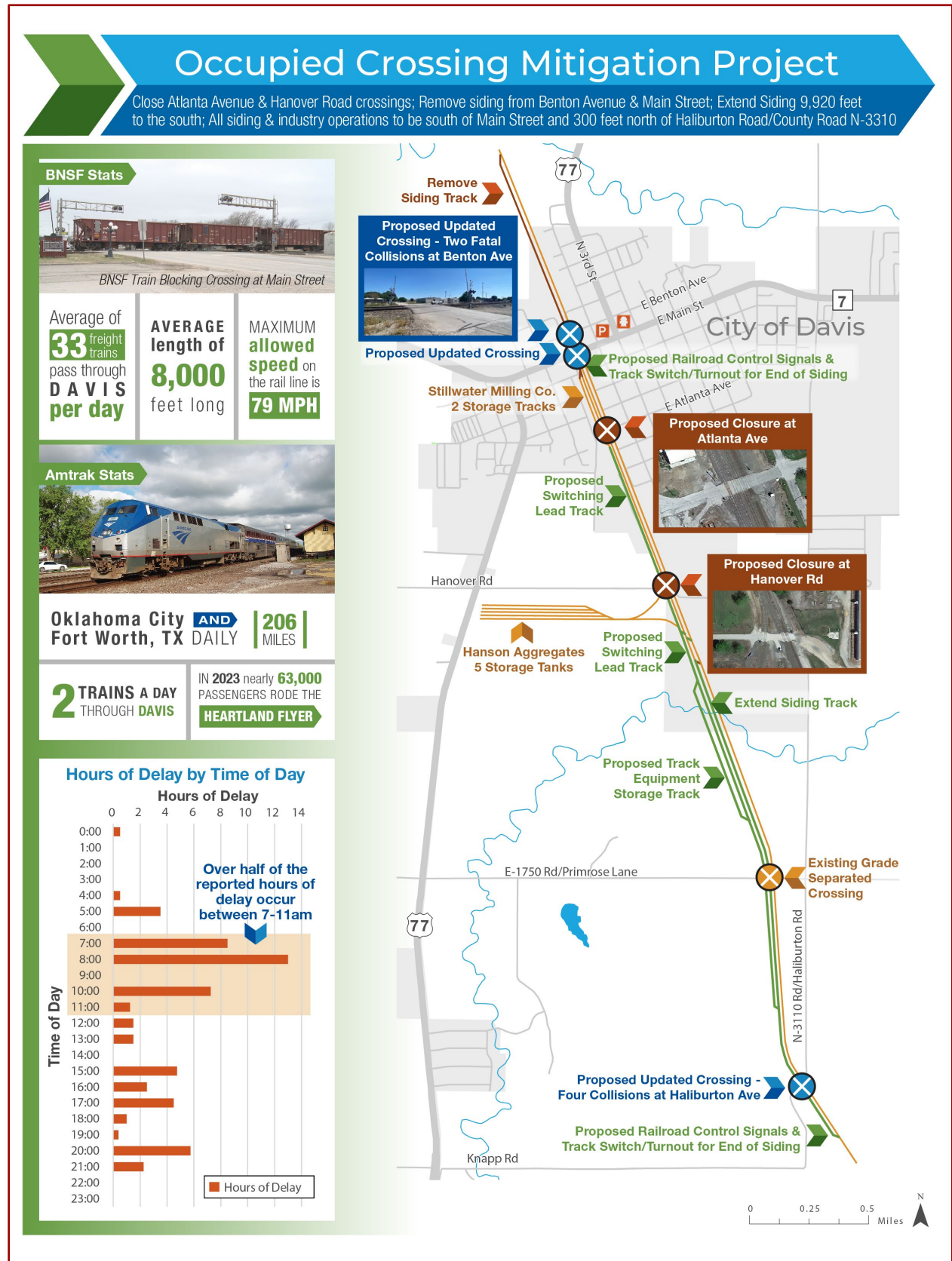
The City of Davis, BNSF, and ODOT have all made sacrifices and compromises to reach a viable solution that ensures passenger and freight traffic on the rail and roadways is not impeded. The proposed solution allows crucial industries to operate without impacting motorists, thereby supporting the community's economic viability. While various alternatives, including a grade separation roadway, were considered, the construction of new sidings and the relocation of industry operations were deemed the only viable options to address the blocked railroad crossings in Davis. This configuration allows for all industry operations at Stillwater Milling Company and Hanson Aggregates, which have limited onsite capacity for freight cars, to be relocated south of Main Street, while also allowing for additional freight capacity in the future.

#### Reasons for Not Choosing Grade Separation:

- **Real Estate Loss:** The community would face prohibitive real estate losses, as many businesses rely on Main Street/SH-7/US-77 in the four-block stretch across the tracks.
- **Traffic Flow:** While grade separation would improve east/west traffic flow, it would cut off one-third of the north/south traffic flow in the community.
- **Maintenance:** Long-term maintenance of the bridge and potential sub-pump operations would be required.
- **Junction Issues:** Meeting grades at the junction of Main Street/SH-7/US-77 and 3rd Street/US-77 would be problematic for the overall efficiency and cost of rail operations.
- **Blocked Crossings:** Conflict points at Atlanta Avenue and Hanover Road would still be active, leading to long durations of blocked crossings for Stillwater Milling Company and Hanson Aggregates.



Figure 2. Project Overview Map





## 6.1 Challenges the Project Will Address

The Occupied Crossing Mitigation Project will address the issue of blocked railroad crossings within the City of Davis, Oklahoma. The City has long struggled with the safety challenges posed by these blockages, as it is bisected by railroad tracks serving both BNSF freight trains and Amtrak's Heartland Flyer passenger service. Frequent traffic delays occur due to BNSF freight train crossings, exacerbated by the limited onsite capacity for freight cars at local industries such as Stillwater Milling Company and Hanson Aggregates. These industries rely on bulk materials and commodities that are not time-sensitive, leading to frequent railroad crossing blockages and subsequent traffic delays. On December 6, 2019, a BNSF freight train blocked all three railroad crossings in the City for more than 3 hours, highlighting the persistent problem that significantly impacts the quality of life, economic vitality, and safety of Davis residents (refer to Figure 3).

*Figure 3. Main Street Crossing Blocked with Cars Queueing*



Blocked railroad crossings in Davis severely impact residents' daily lives, causing traffic congestion, travel delays, and mobility issues. These persistent blockages lead to risky behaviors, increasing collision risks and endangering both motorists and train passengers. Notably, in 2017, a motorist was killed by an Amtrak Heartland Flyer train, and in 2014, a freight train struck a tractor-trailer, killing the driver. Residents have been forced to navigate around blocked crossings, further compromising safety. The Federal Railroad Administration (FRA) identifies blocked crossings as a significant rail safety issue, citing incidents of pedestrians crawling under trains, delayed emergency vehicles, and drivers bypassing closed gates to avoid delays.

### *Challenges for Emergency Vehicles*

Although blocked railroad crossings pose a significant problem for all road users in Davis, they are particularly problematic for emergency responders in the City. Emergency services, including medical, fire, and police, require swift access to destinations, which is often hindered in Davis. Both the Davis Police and Fire Departments are located east of the railroad tracks that cut through the community. Consequently, emergency service vehicles can take nearly 37 minutes to reach locations just 2.5 blocks away when blocked crossings force them onto alternate routes. In one instance, a halted BNSF freight train obstructed all three railroad crossings in the City, and it took the Davis Police Department approximately 20 minutes to respond to a suicide threat, even though the individual was less than three blocks from the local police station. For an ambulance

*Consequently, emergency service vehicles can take nearly 37 minutes to reach locations just 2.5 blocks away when blocked crossings force them onto alternate routes.*



rushing to aid victims of a heart attack or car accident, even a brief delay from a passing train can be the difference between life and death. Similarly, a fire engine forced onto an alternate route because of a stationary train may arrive at a fire too late to prevent significant damage, injuries, or fatalities. Delayed police response times can diminish the likelihood of apprehending a criminal or preventing more serious crimes.

Blocked railroad crossings also negatively impact the local Davis economy by disrupting local businesses and increasing transportation costs. Frequent and prolonged blockages deter customers from accessing businesses, leading to a decline in sales and revenue. When BNSF trains block crossings, significant delays occur for customers and employees trying to reach these businesses. Additionally, delays caused by blocked crossings increase transportation costs for businesses relying on timely deliveries and shipments. Reducing these blockages can improve accessibility and convenience, potentially increasing foot traffic and sales.

## 6.2 Current and Proposed Railroad Operations in the Project Area

The existing railroad accommodates freight and passenger rail service, including BNSF and Amtrak's Heartland Flyer route. The City of Davis has grappled with the ongoing issue of blocked railroad crossings and the accompanying safety challenges for an extended period. The City is bisected by railroad tracks that serve both BNSF freight trains and Amtrak's Heartland Flyer passenger service. Consequently, whenever a train obstructs a railroad crossing, it leads to delays and congestion for both motorists and pedestrians throughout the City. On December 6, 2019, a BNSF freight train blocked all three railroad crossings within the City for more than 3 hours. These persistent blocked crossings represent a continual problem that significantly impacts the quality of life, economic vitality, and safety of City residents.

### *BNSF Freight Service*

BNSF operates and maintains the railroad line in Davis as part of its Red Rock Subdivision. According to data provided by BNSF, an average of 33 freight trains passes through the City each day. The freight trains are about 8,000 feet in length, with a maximum speed of 79 miles per hour on the rail line.

BNSF's freight trains frequently cause traffic delays at Davis's railroad crossings (refer to Figure 4). Stillwater Milling Company and Hanson Aggregates have limited onsite capacity for freight cars, leading to blockages. Stillwater Milling has two storage tracks with a 2,000-foot capacity, while Hanson Aggregates has five tracks with a 12,024-foot capacity. Loading and unloading at these businesses block traffic citywide. Additionally, Amtrak's Heartland Flyer, which shares the track and has priority, often causes BNSF trains to stop, further blocking traffic due to limited siding tracks nearby.

*Figure 4. BNSF Freight Train Blocking Main Street Crossing (020741R)*





### *Amtrak's Heartland Flyer Service*

The Heartland Flyer, operated by Amtrak, is the sole intercity passenger rail service in Oklahoma. It runs daily on BNSF-owned tracks between Oklahoma City, Oklahoma, and Fort Worth, Texas, with stops in Norman, Purcell, Pauls Valley, and Ardmore. The southbound train departs Oklahoma City at 8:25 a.m., while the northbound train leaves Fort Worth in the evening, arriving in Oklahoma City at 9:23 p.m.

In 2023, the service saw over 63,000 passengers, with an average trip distance of 182 miles. Although Amtrak manages the Heartland Flyer, its funding is a collaborative effort between Oklahoma and Texas.

The Heartland Flyer is essential for smaller communities like Davis, linking them to larger urban centers such as Oklahoma City and Fort Worth. This connectivity is vital for residents who depend on the train for healthcare, education, employment, and other essential services.

Future plans include extending the train's northern terminus from Oklahoma City to Newton, Kansas, and increasing service frequency along the original route. Amtrak aims to enhance the Heartland Flyer by boosting service between Fort Worth and Oklahoma City, introducing service to Wichita, and improving connectivity via Newton and the Southwest Chief route. These upgrades will strengthen rail connections between smaller cities and major hubs like Wichita, Oklahoma City, and Fort Worth, enhancing mobility and providing residents with better access to education and employment opportunities. In Davis, these improvements will increase the daily round trips on the Heartland Flyer route from one to three.

*Figure 5. Amtrak's Heartland Flyer Train Traveling through Davis*



### 6.3 Primary Expected Outcomes

The Project's expected outcomes and opportunities stem from the proposed siding relocation and expansion from Benton Avenue and Main Street, along with the closure of the railroad crossings at Hanover Road and Atlanta Avenue. By adding 9,920 feet of track siding to the south and removing 4,170 feet of existing siding from Benton Avenue and Main Street, lengthy blockages in Davis will be eliminated. All siding and industry operations will be south of Main Street and approximately 300 feet north of the Haliburton Road/County Road N-3310 railroad crossings. This will ensure a unified street



network, allowing for nearly uninterrupted accessibility across the City. Although the tracks will still accommodate 33 BNSF trains and 2 Amtrak passenger trains daily, the lengthy delays common in Davis will be eliminated.

### 6.4 Expected Users and Beneficiaries

The Occupied Crossing Mitigation Project will enhance safety, efficiency, and collaboration for various stakeholders and organizations, both within Davis and across the region. By addressing the lengthy blockages within Davis, the Project creates a unique scenario where all parties will benefit.

- **BNSF:** BNSF supports the Project as it will reduce exposure between trains and the public, thereby increasing safety, improving connectivity and mobility, and reducing emissions.
- **Amtrak:** Amtrak supports the Project as it will enhance the busy Heartland Flyer corridor, which is challenged for capacity, thereby supporting on-time train performance.
- **Emergency Responders:** Eliminating blocked railroad crossings enhances the safety, efficiency, and effectiveness of emergency response efforts, making it a high priority for many communities and their first responders. Blocked railroad crossings can significantly delay emergency vehicles such as ambulances, fire trucks, and police cars, where every second counts, and delays can mean the difference between life and death. Additionally, blocked crossings can lead to dangerous situations where emergency responders are unable to reach the scene of an accident or fire promptly, resulting in increased damage, injuries, or fatalities. By eliminating blocked crossings, the likelihood of vehicle-train collisions, which are often severe and can involve emergency vehicles, is reduced. Ensuring that crossings are not blocked helps maintain access to all parts of a community, allowing residents to reach hospitals, schools, and other critical services without unnecessary delays. For emergency responders, having a reliable and predictable route is crucial, as blocked crossings can force them to take longer, less direct routes, wasting valuable time and resources.
- **Local Businesses:** Supporting the Project aligns with the interests of local businesses by fostering a safer, more accessible, and economically vibrant community. When trains block crossings, significant delays for customers and employees trying to reach businesses can be created. Reducing these blockages can improve accessibility and convenience, potentially increasing foot traffic and sales. Blocked crossings can be dangerous, leading to crashes and emergency response delays. For instance, there have been instances where emergency vehicles in Davis were significantly delayed due to blocked crossings. Resolving this accessibility challenge can enhance overall safety for the community. Frequent train blockages can disrupt the flow of goods and services, affecting local businesses' operations. By eliminating these blockages, businesses will be able to operate more smoothly, contributing to the economic vitality of the area. Reducing train blockages can also improve the overall quality of life in Davis. Less congestion and fewer delays can make the town more attractive to residents and visitors alike, benefiting local businesses.
- **Davis Residents:** The Project will address several key issues that impact the daily lives of Davis residents, making it a highly beneficial initiative for the community. By reducing traffic congestion caused by trains blocking crossings, significant traffic delays will be alleviated, improving daily commutes and the overall flow of traffic in the town. This is particularly beneficial for residents needing to get to work, school, or other important destinations. Additionally, reducing these delays can enhance the efficiency of local businesses and attract more economic activity to the area, making the town more appealing to potential new residents and businesses. Furthermore, eliminating blocked crossings can improve the overall quality of life for residents by reducing noise, pollution, and the stress associated with long waits at crossings.



### 6.5 Specific Components and Elements of the Project

The Project scope involves five railroad crossings located at Benton Avenue (020742X), Main Street (020741R), Atlanta Avenue (020740J), Hanover Road (020739P), and Haliburton Road/County Road N-3310 (020735M). The Project will focus on constructing and relocating sidings to enhance the safety and railroad capacity for local industries served by BNSF freight service. This will involve the construction of approximately 9,920 feet of track siding to the south and the removal of 4,170 feet of existing siding from Benton Avenue and Main Street. All siding and industry operations will be situated south of Main Street and about 300 feet north of the Haliburton Road/County Road N-3310 railroad crossings. Additionally, the Project will close two at-grade railroad crossings along the BNSF railroad line at Atlanta Avenue and Hanover Road. Safety improvements at the Benton Avenue, Main Street, and Haliburton Road at-grade crossings will also be considered to support the safe and reliable movement of goods, people, and services. Table 4 presents the proposed performance measures.

### 6.6 Proposed Performance Measures

Table 4: Proposed Performance Measures

Rail Measures	Unit Measures	Temporal	Primary Administration Goal	Secondary Administration Goal	Description
Reduced Grade Crossing Incidents	Count	Annual	Safety	Equity and Barriers to Opportunity	The number of grade crossing incidents at the grade crossings addressed by the Project. Comparison of actual versus baseline and expected post-project number of incidents.
Reduced Blocked Crossing Times	Count	Annual	Economic Strength	Safety	Average amount of time trains block the at-grade crossings addressed by the Project. Comparison of actual performance versus baseline and expected post-project performance.
Improved Emergency Vehicle Response Times due to Reduced Blocked Crossings	Time/Trip	Annual	Safety	Equity and Barriers to Opportunity	Measures how improvements impact emergency service vehicle response operations. Comparison of actual performance versus baseline and expected post-project performance.

## 7. HIGHWAY-RAIL GRADE CROSSING SAFETY INFORMATION AND EDUCATION PROGRAMS:

Not applicable for this project.





## 8. PROJECT LOCATION

### 8.1 Geospatial Data

The Project is located within the City of Davis and just outside the city limits in Murray County. The five railroad crossings affected by this Project are located on the BNSF rail line between railroad mileposts 475.380 and 478.129, as shown in Table 5. Three of the five railroad crossings affected by this Project are located within the City, while the crossings at Hanover Road (020739P) and Haliburton Road/County Road N-3310 (020735M) are located in unincorporated Murray County.

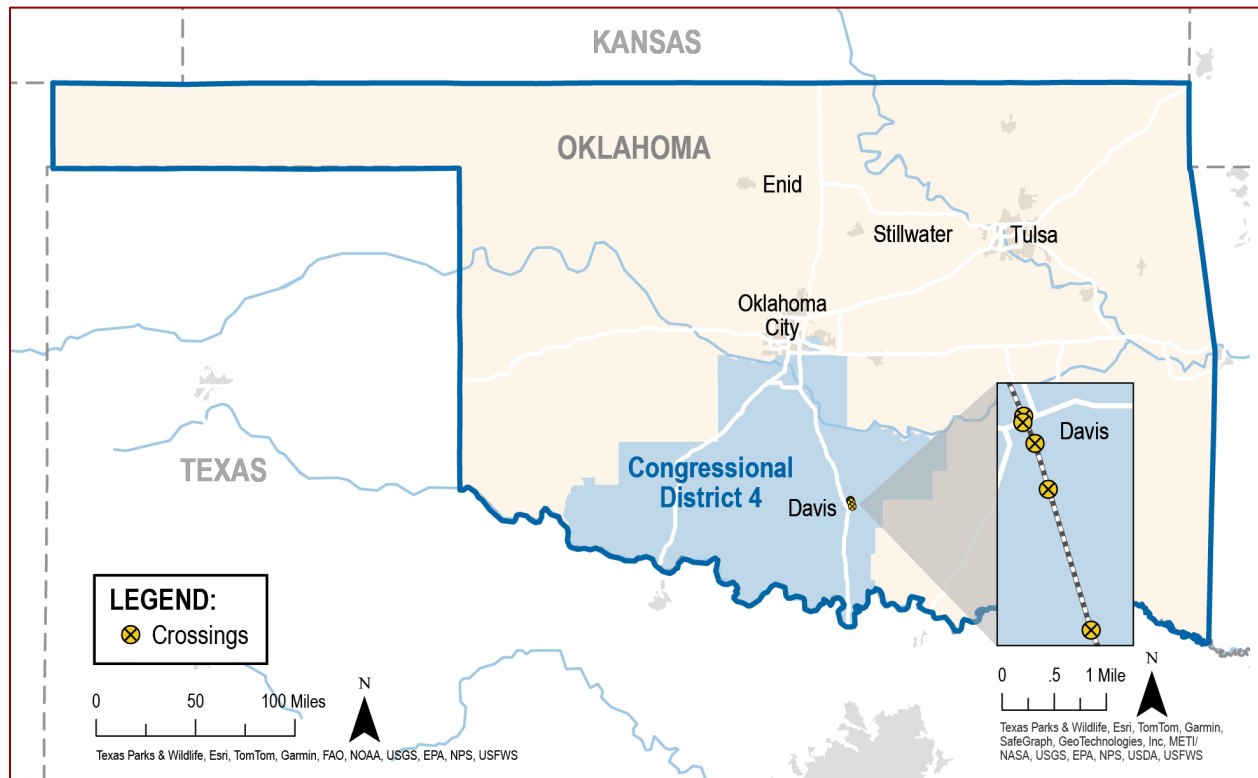
Table 5. Affected Railroad Crossings

USDOT Crossing Inventory Number	Railroad Milepost	Street Name	Crossing Position	Latitude	Longitude
020742X	478.129	Benton Avenue	At Grade	34.50462980	-97.1226630
020741R	478.060	Main Street	At Grade	34.50366130	-97.12222180
020740J	477.775	Atlanta Avenue	At Grade	34.49975940	-97.12037650
020739P	477.242	Hanover Road	At Grade	34.4919270	-97.116509
020735M	475.380	Haliburton Road / County Road N-3310	At Grade	34.4670270	-97.1083549

### Congressional District

The Project is located within Oklahoma’s 4th Congressional District (Figure 6).

Figure 6. Regional Location Map





### Community Profile

The City of Davis is located in Murray County in rural, south-central Oklahoma (Figure 7). As with many communities that sprang up around the railroad in Oklahoma, Davis owes its existence to the Atchison, Topeka, and Santa Fe Railway. Today, the railroad maintains its local presence, as tracks run right through the middle of and effectively bisect the City. The City is also home to the oldest state park and the tallest waterfall in Oklahoma, Turner Falls (Figure 8). Davis is located at the intersection of Benton Avenue and Main Street (US-77/SH-7). Interstate 35 (I-35) is 2 miles west of Davis and provides access to Oklahoma City (76 miles north) and Dallas (134 miles south).

Figure 7: City of Davis Downtown



Figure 8: Turner Falls State Park



As of the [2020 Census](#), Davis had a population of 2,853. Within Davis households, the median annual income stands at \$45,536, which is less than the national median annual income of \$64,994. Approximately one quarter of the City's residents live below the poverty line. In 2020, the median property value in the City was \$99,800, and the homeownership rate was 5%.

Davis's economy sustains employment for 1,180 individuals, with the most significant sectors encompassing retail trade (employing 191 individuals), accommodation and food services (with 122 employees), and health care and social assistance (encompassing 101 workers). The top-paying industries in Davis include wholesale trade (with an average annual income of \$65,208), transportation and warehousing, and utilities (offering an average income of \$100,977), as well as agriculture, forestry, fishing, hunting, and mining (with an average income of \$55,691). In comparison to other areas in Oklahoma, Davis exhibits a higher-than-expected concentration of residents employed in transportation occupations (2.59 times higher), material moving occupations (2.07 times higher), and production occupations (1.66 times higher).

## 9. GRADE CROSSING INFORMATION

The at-grade crossing information for this Project is provided in Table 6.



*Table 6. Grade Crossing Information*

USDOT Grade Crossing Inventory Number	Proposed Improvement	Primary Rail Operator	Property Owner	Infrastructure Owner	Roadway at Crossing	Coordinates
020742X	Remove Siding; Additional Safety Improvements	BNSF	BNSF	BNSF	Benton Avenue	Latitude: 34.50462980 Longitude: -97.1226630
020741R	Remove Siding; Additional Safety Improvements	BNSF	BNSF	BNSF	Main Street	Latitude: 34.50366130 Longitude: -97.12222180
020740J	Close Crossing	BNSF	BNSF	BNSF	Atlanta Avenue	Latitude: 34.49975940 Longitude: -97.12037650
020739P	Close Crossing	BNSF	BNSF	BNSF	Hanover Road	Latitude: 34.4919270 Longitude: -97.116509
020735M	Additional Safety Improvements	BNSF	BNSF	BNSF	Haliburton Road / County Road N-3310	Latitude: 34.4670270 Longitude: -97.1083549

## 10. SAFETY BENEFIT DATA

The Project will provide safety benefits, including the elimination of vehicle-train interactions and potential for future crashes given the higher traffic volume along Main Street (SH-7). Persistent blocked crossings in Davis have led residents to take greater safety risks through speeding activities, increasing the likelihood of collisions with trains, and endangering both motorists and train passengers. In Davis, there have been seven crashes at the Project’s five affected railroad crossings in the past decade, including two fatal crashes. In 2017, a motorist was struck and killed at a blocked railroad crossing by a northbound Amtrak Heartland Flyer train. In 2014, at the same crossing, a freight train struck a tractor-trailer, killing the driver. Table 7 shows the 10-year history of crashes at the subject crossings.

*Table 7. 10-Year (2014–2023) Crash History at Railroad Crossings*

USDOT Crossing Inventory Number	Street Name	Date	Time	Total Crashes	Total Killed	Total Injured
020742X	Benton Avenue	10/24/2014	12:05 a.m.	1	1	0
020742X	Benton Avenue	4/21/2017	7:47 p.m.	1	1	0
020741R	Main Street	4/16/2023	N/A	1	0	0



USDOT Crossing Inventory Number	Street Name	Date	Time	Total Crashes	Total Killed	Total Injured
020740J	Atlanta Avenue	-	-	0	0	0
020739P	Hanover Road	-	-	0	0	0
020735M	Haliburton Road/ County Road N-3310	10/25/2014	8:04 p.m.	1	0	0
020735M	Haliburton Road/ County Road N-3310	12/15/2016	6:59 p.m.	1	0	0
020735M	Haliburton Road / County Road N-3310	1/11/2020	3:39 a.m.	1	0	0
020735M	Haliburton Road / County Road N-3310	6/28/2023	N/A	1	0	0
<b>Total</b>				<b>7</b>	<b>2</b>	<b>0</b>

N/A = not applicable

The closure of both the Atlanta Avenue and Hanover Road rail crossings will bring about a substantial reduction in the risk of serious vehicle-train collisions. Out of the 3,639 public at-grade rail crossings in Oklahoma, over 55% of crashes occur at sites equipped with active crossing devices. This overrepresentation in crash statistics is due to only 50% of crossings across the state having active control mechanisms. Despite the absence of reported incidents at the Atlanta Avenue and Hanover Road rail crossings in recent history, their closure will proactively diminish the risk of potential future incidents.

In addition to enhancing safety for motorists, the Project will significantly benefit pedestrians and bicyclists. The FRA identifies blocked crossings as a major rail safety issue, highlighting incidents where pedestrians crawl under or through trains, emergency vehicles face delays, and drivers maneuver around closed gates or race to beat trains to avoid lengthy waits. The proposed improvements aim to mitigate such risks, ensuring safer and more efficient crossings for all.

## 11. EVALUATION AND SELECTION CRITERIA

### 11.1 Evaluation Criteria

#### *Project Readiness*

##### A. National Environmental Policy Act

ODOT and BNSF have a successful history of completing environmental permitting for projects awarded grant funding. While the Project has not completed any environmental work to date, ODOT will coordinate with FRA to complete the appropriate environmental studies so that FRA can conduct consultations with the appropriate environmental agencies. ODOT understands that the FRA is the federal nexus and ODOT has not been granted any consultative authority for FRA-funded projects. ODOT will begin the National Environmental Policy Act (NEPA) process upon award of the grant.

##### B. Status and Timeline of Agreements

Following the grant award, ODOT expects to finalize the grant obligation within six months, by September 2025. After obtaining NEPA clearance, ROW clearance is anticipated by June 2025. The final design will also be completed by June 2025. Construction is scheduled to begin in June 2025 and is expected to finish by March 2026.



### C. Lifecycle Stage

The current lifecycle stage is Project Development. The grant request is for a Track 2 and Track 3 grant. The Project is currently at 60% design and is ready to proceed to final design completion and construction. The Project Development lifecycle stage is expected to be complete in 2025.

### D. Partner Coordination and Commitments

ODOT has partnered with BNSF, securing a financial commitment for the Project. BNSF supports the Project for its safety and efficiency improvements and will contribute \$3.18 million in private matching funds toward the \$31.81 million total Project cost, contingent on receiving \$25.45 million in RCE funds. In addition, BNSF has pledged an additional \$200,000 designated for Murray County to support the roadway improvements linked to the closure of the Hanover Road railroad crossing. A letter of commitment is attached. Additional letters attached indicate strong community, business, and coordinating agency support for the Project.

### *Technical Merit*

#### E. Tasks and Subtasks Outlined in the SOW Are Appropriate to Achieve the Expected Outcomes

Please refer to Attachment 2 for the Statement of Work (SOW) detailing the Project components.

ODOT estimates that the Project period of performance will be complete in March 2026. The breakdown of Project tasks is as follows:

- Task 1: Project Administration and Management
- Task 2: NEPA Clearance (June 2025 completion)
- Task 3: ROW Clearance (June 2025 completion)
- Task 4: Final Design (June 2025 completion)
- Task 5: Construction (March 2026 completion)

#### F. Technical Qualifications and Experience of Key Personnel

As the Project sponsor, ODOT brings decades of experience in managing federal transportation funds and has a proven track record of delivering similar projects. ODOT is committed to enhancing safety on Oklahoma's roads and bridges, with a focus on rail safety. In the last 5 years, ODOT has invested over \$100 million in railroad crossing improvements, enhancing safety at approximately 300 crossings. Collaborative efforts with railroad companies and the federal government, including adherence to the Oklahoma Highway-Rail Grade Crossing State Action Plan, have improved safety at the state's 3,450 public at-grade crossings.

ODOT manages a large portfolio of federal funds that are programmed within the ODOT Eight Year Construction Work Plan. Specific to competitive federal grant funding, ODOT has experience with multiple large infrastructure projects funded in part by USDOT, such as Infrastructure for Rebuilding America (INFRA), Rebuilding American Infrastructure with Sustainability and Equity (RAISE), Better Utilizing Investments to Leverage Development (BUILD), Competitive Highway Bridge Program (CHBP), and Transportation Investment Generating Economic Recovery (TIGER) Grants. ODOT has a successful history of partnering with other agencies, including local governments and tribal nations, to complete projects.

ODOT and BNSF are collaborating closely on the design plans for this Project. As of now, the preliminary engineering plans are approximately 60% complete. ODOT and BNSF have experience with



environmental reviews for grants. ODOT will collaborate with USDOT to complete the studies for consultations with environmental agencies after the grant is awarded.

ODOT has qualified personnel to manage the Project effectively. Jared Schwennesen, P.E., will serve as the project manager. Named Multi-Modal and Planning Division Manager in June 2022, Schwennesen began his tenure with ODOT in 2009 as an Engineer in Training. He has held roles in the Bridge, Traffic, Maintenance (ITS and Fiber Optics), and Environmental Programs Divisions, and recently served as assistant to the Director of Capital Programs. Schwennesen earned his B.S. in Civil Engineering in 2007 and his M.S. in Civil Engineering in 2008, both from the University of Oklahoma. He obtained his professional engineering license in 2012. With experience as a manager and designer in various ODOT divisions, Schwennesen is well prepared to lead the Rail Division in improving Oklahoma's passenger and freight rail systems. During his time at ODOT, Schwennesen contributed to initiatives such as updating ODOT's Strategic Plan, launching OKroads.org, installing electric vehicle charging stations, and managing grant applications and bundling projects. He also served as the Oklahoma Director of the Board for ITS Heartland.

### G. Project Identified in State Plans

The Project is consistent with planning guidance and documents set forth by USDOT, including those required by law or State rail plans developed under Title 49, U.S.C., Chapter 227. The Project is consistent with the *Oklahoma Highway-Rail Grade Crossing State Action Plan*.

### H. Deployment of Innovative Technology

The Project will utilize flash butt welding, which offers several advantages over traditional thermitic welding. Flash butt welding produces smoother rail compared to mechanically joined rail as there are no gaps between sections, reducing wear and tear and minimizing the need for inspections and maintenance. This smoother rail also results in lower maintenance costs. Additionally, flash butt welding is versatile, as it can be used to create long welded rails (LWRs), convert short rails into LWRs, and transform LWRs into continuous welded rails. The welding process ensures high-quality joints with consistent hardness. Flash butt welding machines are mobile and can be transported to a site by road or rail, enhancing efficiency. Moreover, flash butt welding can join dissimilar metals, including non-ferrous metals, allowing switches and crossings to be welded to carbon steel rail.

### I. Financial Support from Impacted Rail Carrier(s)

ODOT has partnered with BNSF, securing a financial commitment for the Project. BNSF supports the Project for its safety and efficiency improvements and is willing to contribute \$3.18 million in private matching funds toward the \$31.81 million total Project cost, contingent on receiving \$25.45 million in RCE funds. A letter of commitment is attached.

### J. Improved Mobility

The Project will improve accessibility and mobility throughout the City of Davis and have a positive effect on transportation efficiency, safety, and economic growth. The project will reduce vehicle hours of delay per year by 38,953 hours for motorists in Davis, and 37 vehicle-hours of delay per year for trains. The City's division by railroad tracks often results in restricted access, primarily from the frequent blockages at three key railroad crossings: Benton Avenue, Main Street, and Atlanta Avenue. The Project, situated on BNSF-owned railroad tracks, aims to eliminate the occurrence of blocked crossings at Benton Avenue and Main Street, guaranteeing uninterrupted accessibility across the City. Improved accessibility will benefit the everyday lives of Davis residents currently required to travel circuitous routes to bypass the blocked railroad crossings. The community's access to public health services will also improve as Davis first responders, for example, must currently take an alternate 6-mile route to bypass the blocked railroad crossings, rather than a direct 0.25-mile trip.



The Project is a locally significant capital project to the preservation of the reliability of the rail line and maintenance of safe transportation for motorists in Davis, while ensuring the main local industries can maintain and expand their operations. The Project addresses the main challenges of the City's existing transportation network, such as relieving traffic congestion and ensuring motorist and pedestrian safety without limiting the operational efficiency of BNSF freight trains. The roadway network within the City plays a significant role in the daily movement of people and goods. Due to the rural character of the area and the existing road network, blocked railroad crossings frequently reduce accessibility. This Project addresses and improves the mobility of people and goods within the City. Without intervention, the ongoing blocked railroad crossings will persistently disrupt businesses in Davis, causing delays in delivering goods and services. This disruption negatively affects productivity and profitability of local businesses, potentially resulting in lost sales and revenue as customers prefer to avoid the inconvenience.

### *Project Benefits*

#### **K. Improves Safety at Highway-Rail or Pathway-Rail Grade Crossings**

The Project will enhance safety for all users by closing the railroad crossings at Atlanta Avenue and Hanover Road and addressing the longstanding issue of lengthy crossing delays in Davis. The closure of these crossings will eliminate the risk of vehicle-train collisions, removing vehicle-train interactions and the potential for future crashes, especially given the higher traffic volume along Main Street (SH-7). For the other three railroad crossings that will remain open, safety is a fundamental aspect of the design, with additional safety improvements incorporated. Persistent blocked crossings in Davis lead residents to take greater risks, increasing the likelihood of collisions with trains and endangering both motorists and train passengers. These risks can be mitigated through additional safety measures.

The Project will also yield additional safety benefits, such as reducing travel delays for emergency services. The railroad tracks bisect the City, and lengthy blocked crossings create a barrier that can force emergency service vehicles in Davis to take almost 37 minutes to reach sites just 2.5 blocks away due to the need to use a circuitous alternate route.

#### **L. Proposes to grade separate, eliminate, or close one or more Highway-Rail or Pathway-Rail Grade Crossings**

The Project will result in the elimination of two at-grade railroad crossings along the BNSF railroad line at Atlanta Avenue (020740J) and Hanover Road (020739P).

#### **M. Improves the Mobility of both People and Goods**

*The Project is expected to reduce nearly 39,000 (38,953) vehicle-hours of delay per year for cars and trucks, and 37 vehicle-hours of delay per year for trains.*

The Project will improve accessibility and mobility throughout the City of Davis and have a positive effect on transportation efficiency, safety, and economic growth. The Project is expected to reduce nearly 39,000 (38,953) vehicle-hours of delay per year for cars and trucks, and 37 vehicle-hours of delay per year for trains. The Project, situated on BNSF-owned railroad tracks, aims to eliminate the occurrence of blocked crossings at Benton Avenue and Main Street, guaranteeing uninterrupted accessibility across the City. Enhanced accessibility will significantly improve the daily lives of Davis residents who currently must take longer routes to avoid blocked railroad crossings. According to 2020 population estimates, this will save each Davis resident nearly 14 hours annually in vehicle delays.

The Project is a locally significant capital project to the preservation of the reliability of the rail line and maintenance of safe transportation for motorists in Davis, while ensuring the main local industries can



maintain and expand their operations. The Project addresses the main challenges of the City's existing transportation network, such as relieving traffic congestion and ensuring motorist and pedestrian safety without limiting the operational efficiency of BNSF freight trains.

#### N. Reduces Emissions, Protects the Environment, and Provides Community Benefit (including noise reduction)

The Project will significantly reduce transportation-related air pollution and greenhouse gas emissions by decreasing vehicle miles traveled (VMTs), commute time, and congestion. The proposed improvements will reduce vehicle idling, thereby lowering emissions. The Project is expected to prevent the release of approximately 139 metric tons of carbon dioxide (CO<sub>2</sub>) annually from cars and trucks. Improved air quality and reduced greenhouse gas emissions contribute to both local and global efforts to combat climate change. Reducing idling will reduce vehicle emissions, particularly beneficial as idling is detrimental to fuel economy, incurs costs, and generates pollution.

*The Project is expected to prevent the release of approximately 139 metric tons of carbon dioxide (CO<sub>2</sub>) annually from cars and trucks.*

By eliminating the need for extra driving to circumvent railroad crossings, the Project will prevent vehicles from taking longer, indirect routes, thus saving fuel and reducing emissions. Pedestrians and bicyclists, who currently face restrictions due to blocked railroad tracks, will benefit from more convenient and direct routes, further reducing the need for car travel.

#### O. Improves Access to Emergency Services

Frequent railroad crossing blockages challenge Davis emergency responders. The Project will enhance access to emergency services and reduce response times for Davis's first responders by eliminating delays caused by freight trains. Both the Davis Police and Fire Departments are east of the crossings. When crossings are blocked, first responders must take a 6-mile alternative route instead of a 0.25-mile journey. For instance, a BNSF freight train once caused a 20-minute delay for the Davis Police Department to respond to a crisis just three blocks away. This Project will minimize such delays, improving mobility and safety in Davis. Currently, emergency vehicles can take up to 37 minutes to reach locations just 2.5 blocks away due to blocked crossings. The new roadway network will remove the need for a 6-mile detour, ensuring faster response times.

#### P. Improves Access to Communities

Access is crucial, especially for residents of rural and underserved areas in Oklahoma. This Project aims to enhance transportation options and overall mobility in Davis. By creating a more interconnected roadway network, the Project will encourage less driving for motorists and increase bicycle and pedestrian accessibility within the City. The main roads in Davis are frequently blocked at the railroad crossings, isolating the eastern side from the western side unless bypassed with a circuitous route. Constructing approximately 9,920 feet of track siding to the south and removing 4,170 feet of existing siding track from Benton Avenue and Main Street will prevent these railroad crossings from being blocked by the City's rail-dependent industries while making active mobility more attractive.

The Project will significantly improve access to emergency services and reduce response times for Davis's first responders, who will no longer have to wait for freight trains to clear the crossings. Currently, emergency vehicles can take almost 37 minutes to reach sites 2.5 blocks away due to blocked crossings. The new roadway network will eliminate the need for a lengthy 6-mile detour, ensuring quicker response times. Overall, this Project will ensure that first responder delays are minimized, enhancing overall mobility and safety in Davis.





**Q. Provides Economic Benefit**

The Project will serve as a significant economic generator for the City of Davis by addressing transportation and accessibility issues, which will facilitate the expansion of the City's two largest companies, Stillwater Milling Company and Hanson Aggregates. These companies, reliant on rail, require solutions to the current limitations in loading and unloading capacity and the existing siding track. The Project will enhance the operations and reliability of the BNSF railroad and its freight delivery service. Decreased healthcare costs due to improved air quality will likewise provide an economic benefit for the healthcare system and the government.

Located a few miles west of Davis, I-35 is a crucial transportation corridor with local, state, national, and international significance for passengers and goods. It is one of Oklahoma's most critical links both socially and economically. Over the next 25 years, considerable growth in freight volumes is projected along the I-35 corridor south of Davis in Texas, driven by the rapid population growth within the Texas Triangle—the urban megaregion encompassing Dallas-Fort Worth, Houston, San Antonio, and Austin.

**R. Uses contracting Incentives to employ local labor, to the extent permissible under federal law.**

ODOT has instituted equity-focused policies related to project procurement and construction to ensure equity in the overall project delivery and implementation. The mission of ODOT's Contract Compliance Division is to ensure equal employment opportunity within ODOT, to level the playing field for Disadvantaged Business Enterprises (DBEs) by providing full and meaningful participation opportunities in ODOT's federally funded highway projects and to plan, implement and provide guidance to prevent discrimination in federal aid programs and activities. ODOT Contract Compliance Division (CCD) implements and oversees the ODOT DBE Program and the Unified Certification Program for USDOT funded recipients, assuring compliance with 49 CFR Part 26. Both consultants and construction contractors are required to meet the stated DBE commitments. ODOT CCD conducts reviews of contractors and subcontractors at any time to ensure compliance. In addition, ODOT requires the verbatim attachment of Appendices A & E of the Title VI Program Manual to all federally assisted contracts. The appendices specifically and directly address the non-discrimination efforts required.

## 11.2 Selection Criteria

### *FRA Preference*

- B. Close grade crossings through track relocation; or
- C. Result in corridor-wide grade crossing improvements

### *Administration Priorities*

#### SAFETY

The primary goal of the Project is safety, aligning with the FRA's safety priorities and offering significant benefits to all Davis residents. As the FRA notes, the safest grade crossing is one that does not exist. This Project achieves this by closing the railroad crossings at Atlanta Avenue and Hanover Road.

For the other three railroad crossings in this Project, safety is a fundamental aspect of the design, with additional safety improvements incorporated. Significant work related to the construction and removal of siding tracks will shift all railroad operations south of Main Street, eliminating vehicle-train interactions and reducing the potential for future crashes, especially given the higher traffic volume along Main Street (SH-7). Persistent blocked crossings in Davis have led residents to take greater risks, increasing the likelihood of collisions with trains and endangering both motorists and train passengers. This is evidenced by the seven crashes at the Project's five affected railroad crossings in the past decade, including two fatal crashes.



### CLIMATE CHANGE AND SUSTAINABILITY

The Project offers significant climate change and sustainability benefits for the City of Davis. These include the following:

- **Reduction in Air Pollution and Greenhouse Gas Emissions:** By decreasing vehicle miles travelled (VMTs), commute times, and congestion, the Project will significantly reduce transportation-related air pollution and greenhouse gas emissions by an estimated 139 metric tons annually. This contributes to both local and global efforts to combat climate change.
- **Decrease in Idling Vehicle Emissions:** Reducing idling vehicle emissions is crucial as idling is detrimental to fuel economy, incurs costs, and creates pollution. The Project will help mitigate these issues.
- **Elimination of Extra Driving:** The Project will eliminate the need for extra driving to circumvent blocked railroad crossings. Currently, vehicles take longer, indirect routes, wasting fuel and extending travel times. This Project will streamline routes, saving fuel and reducing emissions.
- **Improved Pedestrian and Cyclist Accessibility:** Pedestrians and bicyclists currently face restrictions due to blocked railroad tracks. The Project will provide more convenient walking routes throughout the City, making existing alternate routes more practical.
- **Promotion of Sustainability:** By creating a more interconnected roadway network, the Project will reduce car dependence and improve pedestrian accessibility. This will conserve energy by shortening travel distances, reducing fuel consumption, and improving air quality.
- **Enhanced Community Connectivity:** The Project will address the isolation caused by the railroad bisecting the City. Increased accessibility for motorists and pedestrians will ensure shorter travel distances, conserving energy and improving air quality for Davis.

### EQUITY AND JUSTICE

The City of Davis falls within Census Tract 7907.01 in Murray County, Oklahoma. According to the [Climate and Economic Justice Screening Tool \(CEJST\)](#) and [USDOT Equitable Transportation Community \(ETC\) Explorer](#), the City meets several criteria to be considered disadvantaged. The territory under the jurisdiction of the federally recognized Chickasaw Nation, which includes this area, is also considered disadvantaged. The Project will address the City's transportation insecurity by improving the local roadway network, lowering VMTs, and improving pedestrian and bicycle access within the City. The Project also will improve safety for pedestrians and motorists by reducing the risk of collisions, enhancing traffic flow, and providing safer alternatives for crossing tracks. The Project has the potential to save lives, reduce the number of future crashes, and improve the overall transportation experience in affected areas. Enhancing the overall quality of life and economic well-being within the City of Davis will also contribute to mitigating the social vulnerability disadvantage.

According to CEJST, Davis is categorized as disadvantaged in three key areas: climate change, housing, and health. This disadvantaged classification arises because the census tract satisfies multiple burden thresholds, as well as associated socioeconomic criteria. Specifically, in this dataset, the socioeconomic criterion is "low income," and Davis ranks in the 73rd percentile for this category. Low income refers to individuals residing in households with incomes less than or equal to twice the federal poverty level.

According to the findings from the USDOT ETC Explorer, the City of Davis falls within the 81st percentile for transportation insecurity ranking. In essence, this designation implies that Davis residents face challenges in consistently, dependably, and safely reaching their destinations for their daily necessities. A growing body of research underscores that transportation insecurity is a significant contributor to the perpetuation of poverty.



The transportation insecurity category encompasses three key indicators: transportation access, transportation cost burden, and traffic safety. Davis is deemed disadvantaged in these aspects, ranking in the 86th percentile for transportation access and the 69th percentile for traffic safety. The transportation access indicator signifies that communities with higher scores may have longer commute times and difficulties reaching their desired destinations via various means, including driving, walking, and taking public transit. Prolonged commutes and limited access to personal vehicles or public transportation can create formidable barriers to employment and access to essential resources. Moreover, communities with higher traffic safety scores experience a higher rate of motor-vehicle crash-related fatalities per 100,000 residents.

Furthermore, the City of Davis is in the 69th percentile for the social vulnerability category, underscoring yet another area of disadvantage. This category measures socioeconomic factors that directly influence an individual's quality of life, including unemployment rates, educational attainment, poverty levels, housing stability, access to broadband, housing affordability, and characteristics of households, such as age, disability status, and English proficiency.

Individuals from various socioeconomic backgrounds will directly experience the advantages of the Project. This Project is poised to enhance the City's overall quality of life and bolster its economic prospects by tackling Davis's primary transportation challenge.

The Project will also improve safety as discussed in the [Safety Section](#), removing vehicular train conflicts to help ODOT and BNSF reach Vision Zero (zero roadway fatalities). This investment will improve mobility as road traffic will no longer need to waste time waiting for trains to pass by. According to the FRA's Justice40 Rail Explorer Tool, the Project community is transportation disadvantaged due to historical underinvestment in transportation. Improved mobility for all traffic will therefore be an equitable investment that will help mitigate past inequities.

### WORKFORCE DEVELOPMENT, JOB QUALITY, AND WEALTH CREATION

ODOT is firmly dedicated to creating good-paying, safe jobs with a free and fair choice to join a union, promoting investments in high-quality workforce development programs, adopting local and economic hiring preferences for the Project workforce, and promoting local inclusive economic and entrepreneurship programs.

The ODOT DBE Program and the Unified Certification Program ensure adherence to *49 Code of Federal Regulations Part 26*, which outlines regulations for DBE participation. Both consultants and construction contractors are obligated to fulfill their stated DBE commitments. Initiatives such as ODOT's On-Boarding Program provide valuable resources to DBEs, Small Businesses, and Women Owned Businesses. The program's primary goal is to nurture these businesses into self-sustaining entities capable of effectively competing for and executing federally assisted highway projects. In support of DBE firms, the Project incorporates strategies for nondiscrimination and actively promotes local DBE firms in state contracts, adhering to Oklahoma law that requires justifying the selection of non-local companies unless they present the lowest bid.

Furthermore, the State of Oklahoma has [103 registered apprenticeship programs](#), overseen by the U.S. Department of Labor, which are pivotal to enhancing workforce skills, particularly in key sectors like transportation. The Project could leverage and benefit from the state's workforce development initiatives, particularly in terms of employing skilled workers from apprenticeship programs and contributing to local economic growth through job creation and infrastructure improvement.

Like ODOT, BNSF is firmly dedicated to USDOT workforce development goals. The average BNSF rail worker stays on the job for well over a decade and receives competitive compensation and world-class benefits from healthcare to retirement. BNSF also offers technical training and high-quality apprenticeship programs to help employees build lifelong careers with the railroad.



## 12. PROJECT IMPLEMENTATION AND MANAGEMENT

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Rail safety is a critical component of ODOT's mission. ODOT, which oversees rail safety within the state, has invested over \$100 million in railroad crossing improvements during the past 5 years. About 300 railroad crossings like the ones included within the Project scope will be improved with safety devices thanks to a \$100 million initiative by ODOT. ODOT has successfully worked in partnership with the railroad companies and federal government, including the federally mandated Oklahoma Highway-Rail Grade Crossing State Action Plan, to make continued safety improvements with its 3,450 public at-grade crossings. A Letter of Support for the Project from Oklahoma Secretary of Transportation Tim J. Gatz can be found in Appendix A.

ODOT can complete all pre-construction activities outlined in this narrative by the first half of 2025.

### 12.1 Project Contracting Arrangements and Contract Oversight

ODOT will be responsible for management of the RCE grant and all associated administration, while BNSF will be responsible for the delivery of the grant funded project including procurement, construction, and project management. Project administration of the Project will be undertaken by ODOT in collaboration with BNSF. Project administration will include documentation of the project and reporting through visual, verbal, or written format. ODOT will oversee the quarterly reports, reimbursement requests, and grant closeout, with support from BNSF as necessary. Project and construction management of the grant funded project will be undertaken by BNSF. Controlling project management oversight will be provided by BNSF. BNSF will ensure control processes are carried out as required for the successful delivery of the tasks of the project. Project management will also put in place procedures and controls around the Project's various tasks to ensure the accurate and timely completion of deliverables as well as the integration of team efforts and stakeholder feedback throughout.

### 12.2 Change-Order Management

Change-order management will be handled by BNSF and/or ODOT, who will initiate communication through written or verbal means. All change orders will require formal approval from leadership and the FRA if necessary. Once approved by all necessary parties, written approval will be sent to BNSF via email, and the reasons for approval will be recorded in the permanent records.

### 12.3 Risk Management

ODOT will be responsible for risk management and has budgeted a contingency for unexpected costs and budget overruns.

### 12.4 Conformance to Federal Requirements for Reporting

ODOT will ensure timely fulfillment of all reporting requirements. The ODOT's fiscal team and experienced grants personnel will assist in administering federal grant funds, ensuring the Project is delivered within budget. The Project Management Plan will include procedures for reporting and grant close-out milestones.

### 12.5 Plan to Employ Small Businesses

ODOT has a robust DBE program and local hiring policy as discussed in the Workforce Development, Job Quality, and Wealth Creation Section. ODOT serves as the Unified Certification Program (UCP) for the State of Oklahoma, providing a one-stop-shop where disadvantaged businesses that meet the DBE certification requirements and become certified are eligible to be used to meet the DBE goal requirements on any project with funding from the USDOT. ODOT's 2023-2025 Triennial DBE goal is 16.0 percent and the FFY 2023 goal attainment was 17.33 percent. Total dollars to DBEs increased



almost 40 percent from 2022 to 2023. ODOT offers DBE Supportive Services to help certified DBE firms in Oklahoma develop into self-sufficient businesses, capable of competing on federally funded highway projects.