# Build Kansas Fund | Fiscal Year 2024 Application Package | Memo



To: Representative Troy Waymaster, Chair, Build Kansas Advisory Committee Murl Riedel, Kansas Legislative Research Department Shauna Wake, Office of the Kansas State Treasurer

From: Matthew A. Volz, PE, Executive Director, Kansas Infrastructure Hub

RE: Build Kansas Fund Application #2024-051-GP

Date: June 17, 2024

Attached, please find an application made to the Build Kansas Fund by the City of Dodge City, Kansas. The application packet includes the following items:

- Coversheet provides a high-level overview of the application including a unique identification number, page 1 of 37 of the Build Kansas Fund Application Package.
- Build Kansas Fund Application includes information submitted with the Build Kansas Fund Application, pages 2-7. Page 7 provides the table of funding sources.
- Attachments Draft CRISI Application, pages 8-37.

#### **Project Overview**

The City of Dodge City seeks funding from the U.S. Department of Transportation for funding available through the Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program for the Dodge City Corridor Planning and Design Project which will enable, in partnership with BNSF, a study to evaluate and prioritize grade crossing investments along the La Junta Subdivision which is also serves by Amtrak's Southwest Chief's passenger service.

This opportunity is a discretionary BIL program with a local match requirement of 20% of the total project cost. The entity is requesting \$354,000.00 from the Build Kansas Fund. This request has the potential to unlock \$1,416,000.00 in federal funds.

The federal deadline was May 28, 2024, and this Build Kansas Fund application was received on May 17, 2024.

#### **Build Kansas Fund Steering Committee Recommendation**

The Build Kansas Fund Steering Committee reviewed this application on June 12, 2024, following a successful completeness check. The Steering Committee **RECOMMENDS APPROVAL** of Build Kansas Funding to the Build Kansas Advisory Committee for final advice.

# Build Kansas Fund | Fiscal Year 2024 Application Package | Coversheet



Build Kansas Fund Application Number	2024-051-GP	
Project Name	Connecting Dodge City – Corridor Planning and Design Project	
Entity Type	Local Government	
Economic Development District (EDD) Planning Commission	GP – Great Plains Region	
Infrastructure Sector(s)	Transportation	
BIL Program	Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program	
BIL Program Type	Discretionary	
BIL Application Deadline	5/28/2024	
Build Kansas Fund Request	\$354,000.00	
Technical Assistance Received	GeneralYesBIL ApplicationNoBuild Kansas Fund ApplicationNoOther (Brief Description):General support to Dodge City has been provided.	
Application Notes	Build Kansas Fund contribution of \$354,000 will unlock \$1,416,000 in federal BIL funding.	

Steering Committee Funding Recommendation	June 12, 2024   Recommend
Advisory Committee Funding Recommendation	DATE   Recommend or Decline

#### **Completeness Review Data**

Date Build Kansas Application Received: Date Of Completeness Check: Date Forwarded to Steering Committee:

5/17/2024	
5/17/2024	
5/17/2024	

05/17/2024

id. 46540341

05/17/2024

Title

# City of Dodge City

by lisa koch in Build Kansas Fund Fiscal Year 2024 Application

lskoch@transystems.com

# **Original Submission**

Score	n/a
	Part 1: Applicant Information
The name of the entity applying for the Build Kansas Fund:	City of Dodge City
Project Name:	Connecting Dodge City - Corridor Planning and Design Project
Entity type:	Local Government
Applicant Contact Name:	Melissa McCoy
Applicant Contact Position/Title:	Assistant City Manager/Public Affairs
Applicant Contact Telephone Number:	+16202258100
Applicant Contact Email Address:	melissam@dodgecity.org
Applicant Contact Address:	806 N 2nd Ave
Applicant Contact Address Line 2 (optional):	
Applicant Contact City:	Dodge City
Applicant Contact State:	Kansas
Applicant Contact Zip Code:	67801

Contact the same as the Applicant Contact?	
	Part 2: Build Kansas Fund - Eligibility Criteria
Certify that you are pursuing a viable Bipartisan Infrastructure Law (BIL) funding opportunity for which your entity is eligible:	Yes
Certify that the Bipartisan Infrastructure Law (BIL) funding opportunity you are pursuing has a required non-federal match component:	Yes
What is the primary county that the project will occur in?	Ford County

The Build Kansas Fund is intended to support Kansas-based infrastructure projects. Please provide a list of all the zip codes this project will be located in, along with an estimated percent [%] of the project located in that zip code. For example, if seeking funding for road infrastructure, provide a rough percent of the roads expected in each zip code:

## Zip Code Percentage.xlsx

Is the Project

Yes

	Part 3: Bipartisan Infrastructure Law (BIL) - Grant Application Information Please Note: This information is related to the federal Bipartisan Infrastructure Law (BIL) funding opportunity to which you will apply. This is NOT information for the Build Kansas Match Fund.
Please enter the Bipartisan Infrastructure Law (BIL) funding opportunity title that the entity is applying for:	CRISI
What is the funding agency for this Bipartisan Infrastructure Law (BIL) funding opportunity?	U.S. Department of Transportation

What is the Assistance Listing Number (ALN) for this Bipartisan Infrastructure Law (BIL) funding opportunity?	20.325
What is the application due date for this Bipartisan Infrastructure Law (BIL) funding opportunity?	5/28/2024
What is the federal fiscal year for this Bipartisan Infrastructure Law (BIL) funding opportunity?	2024
Enter the amount of funding being applied for, from the Bipartisan Infrastructure Law (BIL) funding opportunity:	\$1,416,000.00
Enter the total project cost:	\$1,770,000.00
Enter the required non-federal match percentage:	20.0
	Part 4: Build Kansas Fund - Match Application Information
Enter the non-federal match amount being requested from the Build Kansas Fund:	\$354,000.00
Is the project able to move forward with a lesser match amount than requested?	Yes

If you are awarded 0.0 less match than the amount requested, at what amount would your project NOT be able to move forward?

Expected breakdown of funding sources to support the project: Enter the funding source and projected amount from each source to support this project:

## Kansas+DOT+table.xlsx

	Part 5: Build Kansas Fund - Means Test
Confirm that there are no available funding sources currently planned to go unused by your entity that could be leveraged for this project:	Yes
Confirm there are no available American Rescue Plan Act (ARPA) or Coronavirus State & Local Fiscal Recovery Fund monies that could be used for this match:	Yes
Confirm that you have explored other readily available funding sources (federal or non- federal) to be used for this match:	Yes
Briefly describe your efforts to find other available funding sources for this project:	The City of Dodge City and their partner, BNSF, will accommodate the cost share for this project if Build Kansas is not available, however this funding would reduce the available resources for subsequent work efforts.

Part 6: Additional Information

Please upload a copy of the Bipartisan Infrastructure Law (BIL) program application associated with this request OR a 2-page executive summary providing an overview of the project:

FY23\_FY24\_CRISI\_DodgeCity\_DRAFT\_v2.pdf

	Part 7: Terms and Conditions
Understanding of Fund Release Requirements:	checked
Understanding of Use of Funds:	checked
Understanding of Reporting Requirements:	checked
Authority to Make Grant Application:	checked
Persons and Titles: The following persons are responsible for making this Build Kansas Fund application.	Melissa McCoy
Position/Title:	Assistant City Manager
Additional:	
Position/Title:	
Additional:	
Position/Title:	
Additional:	
Position/Title:	

# **Internal Form**

Score	n/a
	Pre-Award Information:
	Post-Award Information:
	Deviation Report:

			% of project in
Source	Amount	Zip Code	zip code
BIL Federal Funds (applied for)	\$1,416,000.00	67801	100
Build Kansas Funds (non-federal match)	\$ 354,000.00		in Kansas
Additional Project Contribution (if applicable)			
TOTAL PROJECT COST	\$1,770,000.00		

# Project Narrative (Sections i. – ix.)

# i. Cover Page

	Connecting Dodge City - Corridor
Project Title	Planning and Design Project
Applicant Name	City of Dodge City
Amount of CRISI Program Funding Requested under this	
NOFO	\$ 1,416,000.00
Amount of Proposed Non-Federal Match	\$ 354,000.00
Other Sources of Federal funding, if applicable Provide	
funding source and amount	\$0
	Dodge City - \$254,000 [General Funds]
Source(s) of Proposed Non-Federal Match	BNSF Railway - \$100,000 [Private Funds]
Total Project Cost	\$ 1,770,000.00
Was a Federal Grant Application Previously Submitted	
for this Project?	No
City(ies), County(ies), State(s) Where the Project is	Dodge City, Ford County, Kansas
Located	
Is the Project Located in a Rural Area?	Yes
Congressional District(s) Where the Project is Located	1st Congressional District of Kansas
Application Track(s) proposed to be funded by this	Track 1 – Systems Planning and Project
NOFO?	Planning
Lifecycle Stage(s) proposed to be funded by this NOFO?	Systems Planning, Project Planning, and
	Project Development
Current Lifecycle Stage and Anticipated completion of	Systems Planning – May 2027
current Lifecycle Stage?	
Is the Project located on real property owned by	If yes, list real property owners and the
someone other than the applicant?	nature of the property interest.
Host Railroad/Infrastructure Owner(s) of Project Assets;	BNSF
Other impacted Railroad(s)	Amtrak
Tenant Railroad(s), if applicable	
If applicable, is a 49 U.S.C. 22905-compliant Railroad	No
Agreement executed or pending?	
Is the project currently programmed in ANY medium- or	Ves Kansas State Bail Plan Dodge City
long-range planning document: For example State rail	2030: Comprehensive Plan
plan. or interregional intercity passenger rail systems	
planning study, State Freight Plan, TIP, STIP, MPO Long	
Range Transportation Plan, State Long Range	
Transportation Plan, etc.?	
Is the project located on a potential corridor selected	No
for the Corridor Identification and Development	
Program?	

Is this a project eligible under 49 U.S.C. 22907(c)(2) that supports the development of new intercity passenger rail service routes including alignments for existing routes?	Νο
Is this a project eligible under 49 U.S.C. 22907(c) (11) that supports the development and implementation of measures to prevent trespassing and reduce associated injuries and fatalities?	Νο
If YES to the previous question, is this project located in a county identified in FRA's National Strategy to Prevent Trespassing on Railroad Property?	Νο
Is the application seeking consideration for funding under the Maglev Grants Program?	No



Figure 1: Train at Wyatt Earp Boulevard

# ii. Project Summary

The City of Dodge City, Kansas is seeking \$1,416,000 in federal assistance through the Track 1, Systems Planning, Project Planning, and Project Development of the Fiscal Year (FY) 2023-2024 Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program for the *Connecting Dodge City - Corridor Planning and Design Project*. This project qualifies for the required set-aside for rural investment. The proposed project involves project planning and project development activities for grade crossings of the BNSF La Junta subdivision corridor in Dodge City, Kansas. In partnership with BNSF, the city will conduct a study to evaluate and prioritize grade crossing investments along the La Junta subdivision which is also served by Amtrak's Southwest Chief's passenger service. The 2.4-mile study area features six highway-rail crossings that will be evaluated to identify strategies that enhance north-south connectivity while supporting rail operations through town. When constructed, this project will improve safety, increase multi-modal access, strengthen community cohesion, increase rail operational efficiency, improve traffic flow, and reduce greenhouse gas (GHG) emissions from idling vehicles.

# iii. Grant Funds, Sources, and Uses of Project Funds

The total project cost for planning and project development is \$1,770,000. The City of Dodge City is seeking \$1,416,000 in Fiscal Year (FY) 2023-2024 Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program grant funds, representing 80% of the estimated project cost. Dodge City and BNSF Railway (BNSF) will provide the 20% matching funds of \$354,000. Dodge City's local match of \$254,000 will come from their general fund. BNSF will contribute \$100,000 from private matching funds. The funding sources and tasks are summarized in **Table 1**.

The Kansas Department of Transportation (KDOT) has active Cost Share and Build Kansas Matching Fund (Build Kansas Fund) programs available for state matching funds. While the City of Dodge City has committed to the non-federal share, they will seek additional KDOT funds for this expense after the grant submittal.

## Project Funding Table

Table 1: Project Funding

Task #	Task Name/Project Component	Cost	Percentage of Total Cost	Source of Funds and Citation, as applicable
1	Project Administration and Management	\$70,000.00		
2	Concept Stage	\$200,000.00		
3	Engineering Design (Up to 60%)	\$1,500,000.00		
Total Proje	ect Cost	\$1,770,000.00	100%	
Federal Funding Requested in this Application (CRISI Program Request)		\$1,416,000.00	80%	FY2023- FY2024 CRISI Grant
Non-Federal Funding (State)		Cash: \$0 In-Kind: \$0	-	

Non-Federal Funding (Private Sector) –	Cash: \$100,000.00 In-Kind: \$0	6%	BNSF: \$100,000
Non-Federal Federal Funding (Local) –	Cash: \$254,000.00 In-Kind: \$0	14%	City of Dodge City: \$254,000
Other Committed Federal Funding (e.g., Federal Highway Administration, congressionally directed/ earmark, other FRA grant program funds—including previous CRISI grants, etc.) Note: If there are multiple sources of other federal funding, please break funding down by each source.	\$0	N/A	N/A
Other Pending Federal Funding Requests	\$0	N/A	N/A
Amount (if any) of funding request eligible for set- aside funds as described in section B(1)	\$1,770,000.00 (Rural set-aside)	100%	N/A
Portion- of Total Project Costs Spent in a Rural Area, if applicable	\$1,770,000.00	100%	N/A
For Highway-rail grade crossing and trespass prevention projects only. 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)?	No	N/A	N/A

# iv. Applicant Eligibility Criteria

The applicant meets the eligibility criteria as defined in the Notice of Funding Opportunity (NOFO) Section C. The lead applicant for this grant is the City of Dodge City, Kansas, which functions as a public agency with its own municipal government that is responsible for providing essential services and governing local affairs within its boundaries. The City operates within the legal framework established by Kansas state law and the state constitution, with elected officials, administrative staff, and departments responsible for managing city operations and serving the needs of its residents.

The primary contact for this application is:

### The City of Dodge City

Public Agency (Applicant) Melissa McCoy, Assistant City Manager/Public Affairs 806 N. 2nd Avenue Dodge City, Kansas 67801 620.225.8100 | <u>melissam@dodgecity.org</u>

# v. Project Eligibility Criteria

The *Connecting Dodge City - Corridor Planning and Design Project* ("Project") is an eligible project as defined in section C(3) of the NOFO. This is a highway-rail grade crossing improvement project in the Project Planning lifecycle stage which will ultimately include improvements to highway-rail crossings when the project moves to the construction lifecycle stage.

# vi. Detailed Project Description

The proposed Project involves project planning and project development activities for grade crossings of the BNSF La Junta subdivision corridor in Dodge City, Kansas. In partnership with BNSF, the city will conduct a study to evaluate and prioritize grade crossing investments along the La Junta subdivision which is also served by Amtrak's Southwest Chief passenger service. The 2.4-mile study area features six highway-rail crossings that will be evaluated to identify strategies that enhance north-south connectivity while supporting rail operations through town. When constructed, this project will improve safety, increase multi-modal access, strengthen community cohesion, increase rail operational efficiency, improve traffic flow, and reduce greenhouse gas (GHG) emissions from idling vehicles.

## **Project Components**

This grant request is for the following activities. The specific components and elements of this Project include Corridor Evaluation, Corridor Planning, and Project Design up to 60% Plans. A more detailed description of the Project is described in the **Statement of Work**.



#### Figure 2: Lifecycle Stages

This Project will include Systems Planning, Project Planning, and Project Development. More information about project components is detailed in the Statement of Work in *Appendix B*.

- **Systems Planning** will include a corridor planning study and will identify the best-fit project(s).
- **Project Planning** will include conceptual engineering, stakeholder engagement, and other planning elements for the selected project(s).
- **Project Development** will include environmental analysis, engineering design up to 60%, and other project development elements for the selected project(s).

# Project Background

### Project History

Dodge City is well known for its "Wild West" history. Chief Deputy Marshall Wyatt Earp's gunslinging approach to law and order is a local legend and to this day brings thousands of tourists to the many historic attractions, including the Boot Hill Museum.

However, the history of Dodge City started before Earp's famous battle at the O.K. Corral on October 26, 1881. Fort Mann was established in 1847 as a trade settlement on the Santa Fe Trail, the United States' first commercial highway, driving members of the Comanche, Kiowa, and Apache Native American tribes from the area. Served by horse and buggy, Dodge City flourished as a shipping point for cattle drives from Texas. The construction of the Santa Fe Railroad in 1872 replaced the Santa Fe Trail and increased Dodge City's trade prominence.

More than 150 years after the construction of the Santa Fe Railroad, its successor, BNSF, plays an important economic role in the success of many agricultural and industrial businesses in Dodge City and Ford County. Dodge City continues to have a booming agricultural and industrial economy and is home to several meatpacking plants, including National Beef – Dodge City and Cargill Meat Solutions. A new cheese processing facility (Hilmar Cheese Company, Inc.) also recently broke ground in Dodge City.

This Project was identified through BNSF's Grant Prioritization Project. The Program identified various rail projects in BNSF's Kansas Division that would provide more efficient, resilient, and sustainable transportation on the combined public and private network. This corridor study and design Project was identified as a potential opportunity to advance both BNSF and Dodge City goals. Through strategic planning, the Project scope was created.

Enhancing connectivity and mobility across the BNSF railroad and Wyatt Earp Boulevard has been a continuing trend through each comprehensive plan Dodge City has completed. Dodge City's 1999 Comprehensive Plan discussed the lack of a defined north-south connection. The Dodge City 2030 Comprehensive Plan recommends improvements to the cluster of intersections near Wyatt Earp Boulevard and 2nd Avenue.<sup>1</sup> Dodge City is currently completing a Safe Street for All (SS4A) study to complete a comprehensive review of crash reduction strategies to eliminate all fatal and serious injury crashes. The city is prioritizing transportation safety, with multimodal safety enhancements across the BNSF tracks being one. This Project will complete all necessary work of the Project Planning stage including a purpose and need statement, alternatives development, conceptual engineering, environmental resource inventory, cost estimates, and extensive public engagement to meet the community's goal of improved north/south connectivity over the BNSF railroad tracks. The study area,

#### Sidebar: An excerpt from Dodge City, 2030: Comprehensive Plan – Planning for Tomorrow

"The cluster of intersections [Wyatt Earp Boulevard, 2nd Avenue, 1st Avenue and Central Avenue] and the railroad that closely parallels Wyatt Earp Blvd. presents several points of congestion. Part of the problem is the diversion of north-south bound traffic from 2nd Ave. to Central Ave. at Wyatt Earp Blvd. This two-block jog can cause the traffic to back up. This problem could potentially increase once the Central Ave. reconstruction project is completed and is opened to two-way from Wyatt Earp Blvd. and Central Ave."

<sup>&</sup>lt;sup>1</sup> <u>https://www.dodgecity.org/DocumentCenter/View/10079/Dodge-City-2030-Comprehensive-</u> <u>Plan#:~:text=Population%20has%20consistently%20grown%20in,has%20grown%20by%20approximately%203</u> <u>0%25.&text=This%20level%20of%20growth%2C%20without,continue%20in%20the%20foreseeable%20future</u>.

shown in *Figure 3*, includes a 0.5-mile buffer around the BNSF corridor between Underpass Road and 14th Avenue.



Figure 3: Connecting Dodge City - Corridor Planning and Design Project Study Area

### Rail Infrastructure in the Study Area

The BNSF La Junta Subdivision provides regional freight service between southern Colorado and south-central Kansas. While most of the subdivision is single tracked, the area through Dodge City is double tracked to support switching at their rail yard, which is located between 1<sup>st</sup> Avenue on the west and Underpass Road on the east. The double track portion divides east of 4<sup>th</sup> Avenue with the northern track continuing west as the La Junta Subdivision, parallel to Wyatt Earp Boulevard, and the south track traveling southwest as the East CV Industry Spur before becoming the Cimarron Valley Railroad north of US-56 at US-400.

### Grade Crossing Information

The exact locations and USDOT inventory numbers are detailed in **Table 2**. The Project corridor is approximately 2.4 miles in length and features six highway-rail grade crossings. Five of the six highway-rail crossings are at-grade and one is grade separated (rail over roadway). Because the

Project is still in the Project Planning lifecycle stage, proposed investments are yet to be determined. Details about the six highway-rail grade crossings are in *Table 3*.

Table 2: USDOT Grade Crossing Information

US DOT Grade Crossing Inventory #	Proposed Improvement	Rail Operator(s)	Railroad Owner	Latitude Coordinate (at least five decimal places of precision)	Longitude Coordinate (at least five decimal places of precision)
009103F	To be determined based on study results	BNSF, ATK	BNSF	37.7507891	-99.9891569
009104M	To be determined based on study results	BNSF, ATK	BNSF	37.7523011	-100.018141
009105U	To be determined based on study results	BNSF, ATK	BNSF	37.7523581	-100.019271
009106B	To be determined based on study results	BNSF, ATK	BNSF	37.7524819	-100.021531
009107H	To be determined based on study results	BNSF, ATK	BNSF	37.7528315	-100.029311
009108P	To be determined based on study results	BNSF, ATK	BNSF	37.7530416	-100.032951

The rail crossings in the study area are directly south of Wyatt Earp Boulevard, the main east-west thoroughfare in Dodge City. As shown in **Table 3**, the distance between crossings on the east side of the study area and Wyatt Earp Boulevard's south edge of the roadway is thirty-six (36) feet, substantially less than the recommended 200-foot Clear Storage Distance identified by the Manual on Uniform Traffic Control Devices. The crossing features identified in **Table 3** include signal interconnection and pre-emption intended to clear vehicles that are stored in the rail crossing area, and enhanced lighting and gates. The number of travel lanes and the Annual Average Daily Traffic (AADT) at the highway-rail crossing are also included in **Table 3**.

#### Table 3: Additional Grade Crossing Information

US DOT Grade Crossing Inventory #	Roadway Crossed	Travel Lanes	Annual Average Daily Traffic (AADT)	Distance between Wyatt Earp (edge of roadway) and Crossing	Current Crossing Features
009103F	Underpass Road	2	3,140	440 feet	Grade Separation (railroad over roadway)
009104M	1 <sup>st</sup> Avenue	3	2,635 (2021)	36 feet	2 Quad Gates, 2 Cantilevered Flashing Light Structures, 4 Mast Mounted LED Lights, Signal Interconnection with Highway
009105U	2 <sup>nd</sup> Avenue	4	13,295 (2021)	36 feet	3 Quad Gates, 3 Cantilevered Flashing Light Structures, 6 Mast Mounted LED Lights, Signal Interconnection with Highway
009106B	4 <sup>th</sup> Avenue	3	2,385 (2021)	36 feet	2 Quad Gates, 2 Cantilevered Flashing Light Structures, 4 Mast Mounted LED Lights, Signal Interconnection with Highway
009107H	11 <sup>th</sup> Avenue	2	755 (2021)	180 feet	2 Quad Gates, 2 Mast Mounted LED Lights
009108P	14 <sup>th</sup> Avenue	4	11,335 (2021)	175 feet	2 Quad Gates, 2 Cantilevered Flashing Light Structures, 4 Mast Mounted LED Lights, Signal Interconnection with Highway

#### Rail Service in the Study Area

BNSF's La Junta Subdivision through Dodge City serves six freight trains per day. Through a trackage rights agreement with BNSF, Amtrak provides passenger rail service via the Southwest Chief route with two trains per day. Two mainline tracks feed the Dodge City Yard located within the Project area. The rail corridor currently serves approximately four freight trains per day with an average operating

speed of 12 miles per hour. Each day, trains between Kansas City and Denver set out and pick up cars. Additionally, a local train is assembled on Tuesday, Wednesday, Saturday, and Sunday.

No capital work is anticipated through this Project. However, the agricultural businesses are very active in rail transport. Within the previous five years, the area has experienced growth from both existing and new customers. With the average train length of 6,000 feet, rail operations within the Dodge City Yard impact each at-grade highway-rail grade crossing from 1st Avenue to 14th Avenue. As a result, every at-grade crossing in the city can be occupied for up to an hour at a time. Dodge City established a 24-hour Quiet Zone on April 20, 2018, which encompasses six highway-rail crossings. The quiet zone was achieved through the installation of alternative safety measures that brough the quiet zone risk index (QZRI) below the risk index with horns. Dodge City submitted affirmation letters in January 2023 to continue the Quiet Zone for an additional three years. The project will improve crossing safety and further reduce the QZRI.

# Challenges and Expected Outcomes

The project aims to address several challenges related to highway-rail crossings in Dodge City including safety, connectivity, and barriers to economic development. With six highway-rail crossings along a 2.4-mile corridor, this project is necessary to reduce existing barriers and improve community cohesiveness. The project is expected to result in many benefits including reduced crash risk, increased multi-modal access, strengthened community cohesion, improved traffic flow, increased rail operational efficiency, and a stronger state of good repair. The FRA documents railroad project performance measures in Article 7 of the Grant Agreement (see *Appendix B*). Performance measures, once the project is completed, are identified within each project benefit.

### Safety

As shown in *Figure 4*, 840 crashes occurred in the study area in the previous five years (2019-2023). One crash occurred in 2023 at the 2nd Avenue highway-rail crossing (DOT #009105U). Of these crashes, the vast majority of crashes were identified as property damage only, with only 66 identified minor injuries in the crash report. There are crash hot spots within the environs of the at-grade highway-rail crossings at 2<sup>nd</sup> Avenue, 4<sup>th</sup> Avenue, and 14<sup>th</sup> Avenue, as well as at the grade separation at Underpass Road. The lack of adequate north-south connectivity in Dodge City funnels traffic to 2<sup>nd</sup> Avenue and 14<sup>th</sup> Avenue, which had the second and third highest traffic volumes in the city, respectively, in 2022. The presence of the at-grade crossing increases the likelihood of conflicts on these heavily trafficked corridors. The speed differential caused by both crossing closures and vehicles that are required to stop at all crossings may be a contributing circumstance in crashes adjacent to highway-rail crossings. Rear ends are a common crash trend along the corridor due to the backup of traffic from the trains and the close spacing for turning vehicles. The proximity of the highway-rail crossing to the 2<sup>nd</sup> Avenue/Wyatt Earp intersection, the city's highest volume intersection, increases the risk of crashes.



#### Figure 4: Five-Year Study Area Crashes (2019-2023)

**Expected Outcomes:** The Project will evaluate crashes in and around the grade crossing locations to identify patterns, with a specific focus on vehicle-vehicle crashes, as these make up the vast majority of the crashes at and around crossing locations. This output will be used to identify corridor-wide north-south throughput strategies, as well as investments at specific crossings. When implemented, identified countermeasures will reduce the risk of conflicts at crossing locations.

#### **Performance Measures:** (after full implementation of the project)

- Number of vehicle-vehicle crashes reported near highway-rail crossings.
- Number of buses/heavy duty trucks vehicle crashes reported near highway-rail crossings.
- Severity of crashes near highway-rail crossings.
- Number of crashes occurring when crossings are blocked.

#### **Multi-Modal Access**

Currently, three of the six at-grade highway-rail crossings have sidewalks (2<sup>nd</sup> Avenue, 4<sup>th</sup> Avenue, and 14<sup>th</sup> Avenue). While sidewalks are present at the crossing location, the network traveling away from crossings is incomplete. For example, 2<sup>nd</sup> Avenue, which has an AADT of over 13,000, only has sidewalk connectivity on the east side of the crossing. Traveling south, the sidewalks are consistent, but

directly adjacent to the roadway. There are several locations where utility poles are placed in the footprint of the sidewalk, which limits the potential use by individuals with mobility devices. Wide driveway aprons at several businesses along the corridor create conflict points.

#### Figure 5: Dodge City Bike Path Master Plan

Underpass Road, the only grade separated crossing in the city limits, narrows underneath the bridge, causing pedestrians to travel in the roadway.

Dodge City has a growing cycling population, with many residents traveling by bicycle as their main mode of transportation. The City has adopted a <u>Trails Master Plan</u> and is continually implementing trail projects. The existing trail network is north of the study area, with future trails planned that will connect north and south at 4<sup>th</sup> Avenue.

The Dodge City Public Transportation System's Green Route crosses from north-south at 2<sup>nd</sup> Avenue and at 14<sup>th</sup> Avenue and the Blue Route crosses at 2<sup>nd</sup> Avenue. Regular crossing closures cause service delays. Additionally, buses must stop at the crossing, even when not blocked, to be compliant with the Federal Motor Carrier Administration's regulations for commercial motor vehicles. Stopping in these locations causes conflicts, as drivers may not expect vehicles to stop.

**Expected Outcomes:** During the Project Planning stage of the lifecycle, crossing strategies will consider multi-modal connectivity, with a focus on travel patterns that connect users to destinations north and south of the corridor.





Figure 6: Dodge City Fixed Route Transit

#### **Performance Measures:** (after full implementation of the project)

- Number of pedestrians crossing at project locations.
- Number of bicyclists crossing at project locations.
- On-time performance of transit routes crossing the rail corridor.
- Crashes involving pedestrians, bicyclists, and transit in the study area.

### **Community Cohesion**

The city has historically been divided by the railroad and Wyatt Earp Boulevard corridor. The railroad can be a physical and psychological barrier that hinders community cohesion. The presence of rail lines bisecting the community creates divisions, limited social interaction, and connectivity challenges between residents on either side of the tracks. Crossing rail lines can be challenging, particularly in the absence of safe and accessible pedestrian crossings, further isolating neighborhoods and impeding access to amenities and essential services.

**Expected Outcomes:** By improving or consolidating highway-rail grade crossings, the project would enhance safety, connectivity, and accessibility within the community. Improved transportation networks facilitate easier movement between neighborhoods and districts, strengthening social ties and promoting community cohesion.

#### **Performance Measures:**

- Number of participants in community engagement
- Level of support for the project
- Number of available bicycle and pedestrian connections (after full implementation of the project)
- Level of satisfaction with the project (after full implementation of the project)

### Traffic Flow

Since the FRA's Public Blocked Crossing Incident Reporter went live, there have been 31 blocked crossings reported.<sup>2</sup> On four occasions, first responders were observed unable to cross the tracks. Frequently, employees of nearby businesses are impacted by unexpected, blocked crossings, restricting their ability to return to work after lunch breaks. With slow-moving trains averaging 6,000 feet in length and regularly scheduled hour-long stops, rail crossings are frequently occupied. The most reported reason for blocked crossings is a stationary train. Due to rail operations, blocked crossings can last for up to an hour or longer. Blocked crossings typically occur from 1st Avenue to 14th Avenue, resulting in a detour length of 3.7 miles for travelers using the city's busiest roadway, 2nd Avenue.

In addition to travel delay, the close proximity of Wyatt Earp Boulevard to the north of the rail corridor complicates traffic movements. As travel demand continues to rise in Dodge City, comprehensive solutions are required to accommodate future needs.

**Expected Outcomes:** The project would address constraints created by the proximity of Wyatt Earp Boulevard and the La Junta Subdivision. A future grade separation project would enable the area to function when trains are present. People could better access services, amenities, and employment opportunities and first responders would have a guaranteed route to every neighborhood. The reduction in detour-related vehicle miles traveled and idling time would reduce GHG emissions. The project will result in 825,945 hours of avoided delay and 4,436 metric tons of avoided CO<sub>2</sub> emissions.

### **Performance Measures:** (after full implementation of the project)

<sup>&</sup>lt;sup>2</sup> <u>https://www.fra.dot.gov/blockedcrossings/</u>

- Level of Service for roadways in the Project area
- Travel time reliability
- Number of blocked crossing reports
- Average Speed of travelers

#### **Rail Operations**

Rail operations along the corridor and within the Dodge City Yard are inefficient due to the frequency and proximity of at-grade crossings. The La Junta corridor through Dodge City is speed-restricted so trains cannot travel above 20 mph, however, average speeds are only 12mph. Train volume and train length are anticipated to continue to grow as the sector experiences growth. Alternatives to prevent trains from blocking the crossing requires the separation of railcars, a lengthy process, or consideration of regulations to limit allowable train length. Both alternatives reduce rail operation efficiency and effectiveness.

**Expected Outcomes:** The project would result in at least one grade separation and several crossing closures to increase the distance between the Dodge City Yard and the next closest at-grade crossing. The project contributes toward managing rail traffic and yard operations as train length and train volume increase.

#### **Performance Measures:** (after full implementation of the project)

- Number of highway-rail grade crossings in Dodge City
- Average speed of trains
- Number of daily trains

#### State of Good Repair

The existing structure of Underpass Road, a rail over roadway bridge, is aging. The structure was built in 1980. The structure has low clearance restrictions (14'3") and is at risk of being struck due to the heavy freight movements that frequent the roadway. The bridge structure also limits the roadway width. The existing drainage and retaining walls also require improvements. A good state of repair is important to provide a safe mode of transportation for freight and passenger rail and roadway users.

**Expected Outcomes:** The Project would assess the current conditions of the study area and identify preferred alternatives for improvement. The Project would support this important freight and passenger rail corridor by keeping it in a state of good repair.

#### **Performance Measures:** (after full implementation of the project)

- Asset condition index
- Annual maintenance costs
- Frequency of maintenance-related disruptions

## Expected Beneficiaries and Users

Multiple groups and users that would benefit from the project, including:

**Freight Rail:** The La Junta Subdivision is owned by BNSF which operates approximately four trains per day. Rail operations at the Dodge City Yard would be optimized with additional space for track

expansion as well as potential industrial development. A reduction in the number of at-grade crossings will improve the fluidity of the BNSF trains.

**Passenger Rail:** The Amtrak Southwest Chief passenger rail route utilizes the rail corridor approximately two times per day. The Amtrak Southwest Chief is a passenger rail route that travels between Chicago, Illinois, and Los Angeles, California, covering approximately 2,265 miles. The Southwest Chief's stop in Dodge City plays a significant role in enhancing transportation access, supporting tourism and economic development, facilitating connectivity to major cities, and improving community accessibility for residents of Dodge City and surrounding areas. The project would eliminate conflict points and improve safety for Amtrak passengers traveling along the rail corridor.

**Residents:** According to the Census Bureau, Dodge City has a population of approximately 27,471 people, 39 percent of whom are low-income and 68 percent identify as people of color (U.S. Census Bureau, American Community Survey (ACS) 2017 -2021). Like many rural communities, Dodge City has a relatively youthful population, with a significant proportion of residents under the age of 18, Table 4 shows highlighted demographic statistics for the city. Residents and visitors alike would benefit from reduced emissions and improved safety and connectivity.

Population	27,471
People of Color	68%
Youth (Under Age 18)	31%
People Living with a Disability	11%
Low-Income	39%
Unemployment	4%
Limited-English Households	14%

Table 4: Dodge City Demographics

**Businesses and Employees:** Similar to residents, employees and nearby businesses will specifically benefit from this project. According to the Census Bureau's OnTheMap Tool, approximately 21% of all jobs in Dodge City are located within 0.5 miles of the Project area (14th Avenue to Underpass Road).<sup>3</sup> Often, employees who leave work for lunch are delayed from returning by blocked crossings. Employees and businesses would benefit from improved safety and connectivity.

**Emergency Services:** Dodge City emergency services (EMS) are strategically located on both the north and south sides of Wyatt Earp Boulevard and the BNSF railroad to provide service during a blocked crossing instance. However, if the crossings between the 1st and 14th Avenues are blocked, EMS requires several additional minutes and miles to cross at an existing grade separation. The project would provide at least one additional key grade separated route across the rail corridor to ensure critical, time-sensitive, reliable fire and medical service to the entire community.

"My biggest concern is the scenario where our Station 2 truck, located on South 14<sup>th</sup> Ave., is north of the tracks, which happens daily due to response districts, and it gets stopped by a train blocking all

<sup>&</sup>lt;sup>3</sup> <u>https://onthemap.ces.census.gov/</u>

crossings. If this occurs, it would force all fire units to take alternative routes to get to anything in South Dodge and would delay response times significantly, negatively impacting the outcome of the incident." - Dodge City Fire Chief Ken Spencer- April 17, 2024 \*

**Dodge City School District (USD 443):** Trains blocking the crossings between 1st and 14th Avenues, particularly during the morning, can cause students and school faculty to be late. In November 2022, 13 school buses and three city buses were significantly late arriving at 11 schools due to the trainblocked crossing. On March 18, 2024, a train blocking Wyatt Earp Boulevard caused four buses to be 40 minutes late. This delay can cause missed instructional time, delayed food preparation, and emotional distress. This Project will identify solutions to provide consistent crossing times for USD 443 students and staff and mitigate the negative externalities delayed school buses cause.

# vii. Project Location

The Project is located in Dodge City, Kansas – the county seat of Ford County. According to the 2020 U.S. Census, Dodge City is the 15th largest city in Kansas. The Project area follows the BNSF La Junta Subdivision through the middle of the city (parallel to Wyatt Earp Boulevard), from Milepost (MP) 350.95 to MP 353.44. **Figure 3** shows the Project location, located within the 1st Congressional District of Kansas.

Figure 3: Project Location



	Latitude	Longitude		Latitude	Longitude
Starting			Ending		
Coordinates:	37.7507891	-99.9891569	Coordinates:	37.7530416	-100.032951

# viii. Evaluation and Selection Criteria

The *Connecting Dodge City - Corridor Planning and Design Project* effectively meets the criteria identified in the Notice of Funding Opportunity, as shown in this section.

### **Project Readiness**

The proposed Project request is for activities categorized in Track 1 – Systems Planning and Project Planning, with additional activities in Tract 2 – Project Planning. The Statement of Work, provided in *Appendix B*, details the requested activities, which are summarized in *Table 5*.

Table 5: Statement of Work Summary

|--|

1 – Corridor Evaluation – Goal setting, baseline	1 – Systems Planning	All crossings
condition analysis	and Project Planning	
2 – Corridor Planning – Screening methodology,	1 – Systems Planning	All crossings
crossing toolbox development, crossing strategy	and Project Planning	
development, engagement, identification of corridor		
strategy, and implementation plan.		
3 – Project Design up to 60% Plan Development –	2 – Project Planning	Identified
preliminary engineering, roadway and structural design,		crossing
railroad consultation, NEPA completion, cost		location(s)
estimation, financing strategy, and initial right-of-way		
evaluation.		

The City of Dodge City is interested in thoroughly evaluating the network of highway-rail crossings that run parallel to Wyatt Earp Boulevard before identifying a project or projects to progress through design and construction. This evaluation will include a screening methodology that sets a future project up for environmental review by identifying the potential benefits and consequences of the Project to the human and natural environment. For example, a grade separation project on the east side of town allows for the most direct link to the historic downtown area, but the proximity of the crossing to Wyatt Earp Boulevard and the tight downtown grid adds substantial complexity to the project design.

As the project progresses into design, the city will work closely with FRA on their determination of the NEPA Class of Action and will develop the appropriate NEPA evaluation and documentation as part of this funded Project.

The City of Dodge City is committed to working closely with its rail partners, BNSF and Amtrak, through the corridor planning and design process to develop an implementation strategy that reflects the current and future needs of the area. This grant request will progress the project(s) through 60% of plan preparation and completion of NEPA. It is expected that the designed projects will be included in a subsequent federal discretionary funding request for right-of-way acquisition, final design, PS&E, construction, and construction inspection. The development and execution of the 22905 Agreement between the City of Dodge City and BNSF will be programmed into the subsequent grant request as part of the right-of-way acquisition.

Amtrak and BNSF have both provided letters in support of this Project, as found in *Appendix A*. Additionally, BNSF is committed to providing a portion of the non-federal share of this Project. Details of their commitment are presented in the Grant Funds, Sources, and Uses Section. This Project has received extensive support from the community. Letters of support have been received from Jerry Moran (U.S. Senator), Roger Marshall (U.S. Senator), Ron Ryckman (Kansas State Senator), Gary White (Kansas State Representative), Jason Goetz (Kansas State Representative), Dodge City Unified School District (USD) 443, Ford County Fire and EMS, and Dodge City/Ford County Development Corporation.

#### **Technical Merit**

#### Statement of Work

The Project has a fully developed statement of work, provided in *Appendix B*, that reflects the discrete elements of the Project. The scope, schedule, and budget identified in the Statement of Work were

evaluated and are consistent with similar efforts undertaken by the city and its partners. There is a limited risk of cost overruns or schedule delays.

#### Applicant Experience and Capacity

The City of Dodge City has experience managing a variety of federal grant awards, including USDOT Federal Discretionary Grants. The Project Implementation and Management Section of this grant request details the City's experience and expertise in implementing federal grant projects, as well as their processes for grant administration. The City has ample capacity to manage both the technical and administrative functions of this grant, which is also detailed in the Project Implementation and Management Section.

#### Business Plan

As part of this planning grant award, the city will work closely with industry partners, including partner railroads BNSF and Amtrak. Additionally, education and workforce development partners, including the Dodge City USD 443 and Dodge City Community College, and business and economic development partners, including the Dodge City/Ford County Economic Development Corporation and their members, will be engaged to develop strategies that best serve the current and future needs of the community and identify opportunities to participate in the Project implementation. This active engagement will be a substantial input into the Business Plan, which will detail the implementation strategy for the entire lifecycle of all projects identified in the corridor planning process. This strategy will include prioritization, phasing, financing, and action steps associated with each of the future projects. The city is proactive in identifying non-traditional funding sources to implement infrastructure projects. For example, the city used State of Kansas Sales Tax and Revenue (STAR) Bonds for infrastructure and streetscape projects in the historic downtown. The city will also coordinate closely with private sector partners to identify opportunities to leverage the support of private sector partnerships in financing, construction, and operations that will be evaluated at the corridor level and for each independent project.

Dodge City will incorporate successful strategies to receive public feedback that were employed during its 2023-2030 Comprehensive Plan process. The previous process had well-attended meetings, including a broad demographic of residents, and provided valuable feedback. A concerted effort to engage as many stakeholder communities/groups as possible, with meetings in English or Spanish as needed. The city will:

- Make at least two **public presentations/workshops** at convenient/accessible locations.
- Conduct stakeholder group **interviews**.
- Conduct an **online community survey**, through the City's website that will be placed on the City's social media platforms.
- **Rural-specific public engagement strategies** will be used, making a concerted effort to engage communities of color and underserved populations. This may include attending existing meetings like Rotary and Kiwanis, and events like Final Friday, Main Street Festival, Dodge City Days Kidfest, and the Dodge City International Festival to interact with the public and provide feedback.

#### Legal, Financial, and Technical Capacity

The City of Dodge City has the legal, financial, and technical capacity to carry out the proposed Project. The city has satisfactory continuing control over the use of the equipment and facilities, and the capability and willingness to maintain the equipment and facilities, in conjunction with BNSF and Amtrak as the railroad operators. The City of Dodge City, Kansas, has the financial system and adequate staff to properly manage this grant. Its financial software can segregate and separately manage the grant funds from other revenues and expenses related to the Project and it can easily produce the data needed for the required financial reports. Dodge City maintains a financial management system that will safeguard grant funds, has appropriate policies and procedures for funds to be used for allowable costs, and uses an accounting system that assures financial information is reported accurately and timely. Dodge City has established administrative safeguards to ensure the Project activities are accounted for separately and distinctly from non-grant-related activities.

#### Innovative Approaches

The Project will identify opportunities for project delivery innovation as part of the development of the implementation strategy. This will include identifying potential project bundling options and opportunities to leverage diverse financing sources. The corridor evaluation plan and follow-up design will leverage the City's innovative approach to community engagement. Dodge City's <u>Strategic</u> <u>Plan for Welcoming and Integration</u> outlines a series of strategies that are used to engage with residents and partners. This approach is centered on the following pillars:

- Equitable Access,
- Civic Engagement,
- Refugee and Immigrant Integration,
- Safe and Healthy Community, and
- Economic Opportunity and Education.

To encourage civic engagement, the city and its partners identified the barriers to engagement that specifically impact their large immigrant population. Increasing access to public transportation, internet access, and translation services reduces the engagement gap. Community Ambassadors that reflect the diversity of the city work closely with the city to provide information and seek engagement with members of the community that are hardest to reach. These strategies, and many others identified in the Strategic Plan for Welcoming and Integration, will be used to engage with the community throughout this Project.

#### Consistency with USDOT Planning Guidance

The Project is consistent with planning guidance and documents set forth by USDOT. Needs associated with this Project have been identified through several planning documents, including the <u>Kansas State Rail Plan</u>, completed in 2022. As a critical station on the Southwest Chief Amtrak service, the State Rail Plan identifies strategies to improve access to the passenger rail station in Dodge City and increase service efficiency through infrastructure investments. The 1999 and <u>2030</u> Dodge City Comprehensive Plans identify goals of improving north-south connectivity. This project will fulfill the intentions outlined within the city's long-range plans.

### **Project Benefits**

The project is expected to yield significant benefits, resulting in a **benefit-cost ratio (BCR) of 1.90**. The benefit-cost summary is shown in **Table 6**. A detailed benefit-cost analysis (BCA) is included in **Appendix C**.

Description	Undiscounted	Discounted
Net Benefits	\$195,671	\$91,191
Costs	\$60,035	\$48,047
Benefit-Cost Ratio (BCR)	3.26	1.90
Net Present Value (NPV)	\$135,637	\$43,144

Table 6: Benefit-Cost Analysis Summary (2022 Dollars in Thousands)

#### System and Service Performance

This project will significantly enhance system and service performance across multiple transportation modes. Several at-grade highway-rail crossings will be eliminated, helping to mitigate traffic congestion, reduce travel times, and improve overall traffic flow. Additionally, this project improves rail operations on the BNSF La Junta Subdivision which hosts Amtrak service. The Project was selected through BNSF's grant prioritization process and is highly supported by BNSF staff. The project will impact both Dodge City operations and overall La Junta operations. The nearby Dodge City Yard will also experience benefits from the project.

#### Effects on safety, competitiveness, reliability, trip or transit time, and resilience

The project is anticipated to improve safety, travel time reliability, and economic competitiveness. Per the BCA, the project will result in a reduction of 825,945 hours of total person-hours of delay. By consolidating and closing multiple railroad crossings, safety measures such as grade separations can be implemented more effectively. Fewer crossings reduce the likelihood of crashes. This reduces the crash risk, especially in communities where pedestrian and vehicle traffic intersect with railroad tracks frequently as is the case in Dodge City. In addition to safety, the project would benefit travel time reliability for Amtrak passengers. Reducing the number of at-grade crossings would reduce the likelihood of passenger rail disruption. The economic competitiveness of the corridor would also be increased, strengthening the resiliency of the rail network in Kansas.

#### Efficiencies from improved integration with other modes

Benefits to non-rail travel modes will be substantial, including improved connectivity for roadway users and non-motorized travelers. As a result of the planning process, crossings will be identified for removal or improvement. The construction of a grade separated crossing would offset any reductions in connectivity as a result of crossing closure. Currently, no grade separated crossings exist in the downtown core of Dodge City, posing a significant barrier to travelers. A grade separated crossing will allow roadway users and non-motorized travelers to cross the railroad tracks at any time, regardless of rail operations. Pedestrian and bicycle user accessibility will be considered during the project selection process.

#### Ability to meet existing or anticipated demand

The proposed project would accommodate the anticipated demand for roadway and rail capacity. The roadway network will be analyzed during the planning study to determine appropriate current and future capacity needs. Agricultural customer demand continues to grow, therefore increasing rail demand. The project will support efficient operations in the future.

# Administrative Priorities

### Safety

The project would address safety by assessing alternative highway-rail grade crossing improvements. Improvements may include proposing enhancements, closures, or a grade separation. An in-depth crash review will be completed to understand and implement applicable crash mitigation strategies. Since 2019, 840 crashes occurred in the study area. Of these, 66 were injury crashes and none were fatalities. The highest concentration of crashes is along 2nd Avenue.

A reduction in the amount of at-grade railroad crossings would result in fewer vehicle-rail and pedestrian-rail conflict points. By reducing the number of access points along the tracks, the risk of crashes decreases, enhancing overall safety for both rail operations and the surrounding community. The project is also anticipated to reduce crash risk for vehicle-vehicle and vehicle-pedestrian due to the improved network connectivity and roadway realignment. The street network, particularly surrounding the intersection of 2nd Avenue and Wyatt Earp Boulevard, will be improved to make the roadways safer. All of the proposed project designs will align with the ongoing Fiscal Year 23 Safe Street for All (SS4A) planning grant that was awarded to Dodge City. Multi-modal improvements, including sidewalks, will be considered to provide safe, separated lanes for non-motorized users. Other potential design elements known to improve safety are adequate signage, pavement markings, ADA crosswalks/curb ramps, landscaping, and improved traffic signal timing.

The project will also improve operations for Dodge City EMS. Blocked crossings can significantly impact response time. Current fire, medical, and police services must utilize the existing grade separations (on the east and west ends of town) to navigate across Wyatt Earp Boulevard and the BNSF railroad during a blocked crossing event. If the crossings are blocked between the 1st and 14th Avenues, one alternative route is to drive an additional two miles, adding another three to four minutes to the response time. Another alternative route is driving east to Overpass Road, which adds several miles and minutes to the response time. Every minute counts in an emergency. This project will improve response times and allow better outcomes for people needing emergency services.

#### Climate Change and Sustainability

This project would support efforts to reduce the harmful effects of climate change through transportation network improvements. The results of this planning Project would be proposed improvements for grade crossings, including a potential grade separation project. Grade separated crossings play a pivotal role in reducing the harmful effects of climate change by improving traffic flow, thereby reducing braking, idling, and overall vehicle emissions. This project will increase rail efficiency and encourage businesses to have a modal shift to more sustainable transportation modes.

Grade separated crossings, such as overpasses or underpasses, can contribute to mitigating the harmful effects of climate change in several ways, particularly by reducing GHG emissions and improving fuel efficiency for rail operators. Grade separated crossings eliminate the need for vehicles

to wait at railroad crossings for trains to pass and additional vehicle miles driven from detour routes. The project will result in 4,436 metric tons of avoided CO<sub>2</sub> emissions. This leads to smoother traffic movement, reduced congestion, and improved fuel efficiency for vehicles traveling through the area. Reduced congestion results in less stop-and-go traffic, which can lead to lower fuel consumption and emissions from vehicles. Idling vehicles emit significant amounts of GHGs such as carbon dioxide (CO<sub>2</sub>) and other pollutants, contributing to air pollution and climate change. By reducing congestion and idling at railroad crossings, grade separated crossings help decrease overall vehicle emissions in the surrounding area.

Grade separated crossings allow trains to pass through intersections without stopping which improves rail efficiency and reduces fuel consumption for locomotives. Trains can maintain a consistent speed, avoiding the need to slow down or stop on at-grade crossings. This increased efficiency leads to lower fuel consumption per unit of freight transported, resulting in reduced GHG emissions from rail operations. Grade separated crossings provide a safer and more efficient infrastructure for rail transportation, making rail travel more attractive compared to road transport for both passengers and freight. As a result, there may be a shift toward increased utilization of rail transportation, which generally emits fewer GHGs per ton-mile compared to road transportation. This modal shift can further contribute to reducing overall emissions from the transportation sector.

The project increases the community's ability to respond to potential stresses – whether natural disasters such as flooding or manmade hazards such as crashes, hazardous conditions, or long-term maintenance. Additionally, grade separated crossings are designed to accommodate future growth and development, providing a long-term solution to transportation challenges. By investing in infrastructure that promotes efficient and sustainable transportation, communities can reduce their dependence on fossil fuels and minimize their contribution to climate change over the long term. The project selection will take environmental considerations into account when selecting the best location and project type. The project's design will work to enhance environmental resiliency for the area, including, but not limited to, providing access across the tracks in a high-water scenario.

Landscaping, drainage enhancements, and construction best practices would support the protection of local ecosystems. Overall, the project would improve the functionality of the transportation system without increasing impermeable surface and minimizing impacts to adjacent land. There would be no anticipated adverse impacts to air or water quality as a result of the project. During the planning process, potential environmental impacts would be identified along with mitigation steps.

### **Equity and Justice40**

Dodge City has historically been cut in half due to the Wyatt Earp Boulevard and BNSF railroad corridor. People living in the southern part of Dodge City, most of whom are considered historically disadvantaged, often feel disconnected from the rest of the city. This project will help the community through improved safety, reduced noise and air pollution, and enhanced connectivity. The community will experience safety benefits as a result of grade crossing improvements proposed from the planning study. Closed or improved crossings would reduce the risk of crashes, enhancing overall safety for vehicles and non-motorized travelers. Consolidating grade crossings can mitigate noise and air pollution generated by passing trains and idling roadway vehicles. By reducing noise levels and air emissions, the project can contribute to a healthier and more pleasant living environment. Lastly,

through a grade-separation project or other proposed improvements as a result of the planning study, connectivity will be improved for crossing the railway for both vehicles and non-motorized travelers.

The project poses potential short-term and long-term burdens to the community which would be mitigated during the planning process. Potential burdens include disruption of transportation routes, environmental impacts, financial impacts, and construction nuisances. The project may result in railroad crossing closures which could disrupt transportation routes within the community, leading to longer travel times and increased congestion on alternative routes. Crossing closures or grade-separation projects can affect access to businesses located near the improved crossings. Reduced visibility, changes in traffic patterns, or limited access can lead to decreased foot traffic and potential loss of customers.

Railroad crossing improvement projects can have environmental consequences, such as habitat disruption. Construction activities associated with the project may also result in temporary disturbances to local ecosystems, air quality, and water resources. Railroad crossing improvement projects require significant financial investment for planning, design, construction, and maintenance. These costs would not be the sole responsibility of Dodge City taxpayers, BNSF would bear a portion of project costs as well. Indirect financial impacts are possible from future construction projects, for example, changes in land value near improved crossings. Lastly, construction impacts may temporarily burden the community. Noise, heavy-vehicle traffic, and other temporary nuisances could occur. During the planning process, steps to mitigate negative impacts would be identified.

The benefits and potential burdens of the project would be experienced by Dodge City residents, visitors, and businesses operating in the city. Dodge City has a history of attracting immigrants, particularly from Mexico and Central America, drawn by opportunities in the agriculture and meatpacking industries. Industries located adjacent to the railway would be most affected by the proposed project, experiencing both the short-term impacts of construction and the long-term impacts of improved connectivity.

Consolidating railroad crossings can mitigate noise and air pollution generated by passing trains and idling vehicles, which may disproportionately impact low-income or minority neighborhoods located near railways. By reducing noise levels and air emissions, the project could contribute to a healthier and more pleasant living environment for residents. Benefits to safety, emissions, and connectivity are anticipated to outweigh disbenefits. Ultimately, proposed improvements would result from a planning study that will include extensive community engagement to identify potential benefits and burdens.

According to the Justice40 Rail Explorer Tool, most of the Project area is within Census Tract 2005796210, a DOT Disadvantaged tract in the 95th percentile on the disadvantaged community index, as shown in Figure 5. The Project also includes two highway-rail crossings in Census Tract 20057962000. According to the Climate and Economic Justice Screening Tool (CEJST), both Project area census tracts are identified as disadvantaged.<sup>4</sup> The tracts are considered disadvantaged because

<sup>&</sup>lt;sup>4</sup> <u>https://screeningtool.geoplatform.gov/en/</u>

they meet more than one burden threshold and the associated socioeconomic thresholds for climate change, workforce development, and legacy pollution indicators.



Figure 7: Disadvantaged Census Tracts

To assess how the entire study area scores across different measures, the USDOT Equitable Transportation Community (ETC) explorer was utilized. The ETC indicates the two census tracts included in the study area experience social vulnerability (92nd percentile) but are not identified as disadvantaged for climate and disaster risk burden (40th percentile), environmental burden (62nd percentile), health vulnerability (46th percentile), or transportation insecurity (48th percentile). The overall disadvantage component scores by national percentile are shown in *Figure* 8



*Figure 8: Justice40 Disadvantage Scores by National Level* 

#### Source: USDOT Equitable Transportation Community Explorer (2024)

There are many social vulnerability indicators identified as disadvantaged for the study area. The percentages of people at 200% of the poverty line, people without a high school diploma, and/or unemployed are all above the 80th percentile. Lack of internet access, limited English proficiency, and people uninsured are also disadvantaged indicators. Social vulnerability indicators from the study area are shown in *Figure 9*.



Figure 9: Social Vulnerability Indicators (Percentile Risk)

Source: USDOT Equitable Transportation Community Explorer (2024)

### Workforce Development, Job Quality, and Wealth Creation

Dodge City and Ford County have strong ongoing workforce development efforts. The Dodge City/Ford County Development Corporation assists existing and new businesses with recruitment

efforts. They host the DodgeCityHasJobs.com website and offer multiple job fairs each year. The Development Corporation assists new and existing businesses with new investment and expansion and facilitates incentive programs through the local, state, and federal government. Dodge City and Ford County hosts a seven-county Small Business Development Center (SBDC) to advise new and existing small businesses. The SBDC provides no-cost advising and hosts workshops and training opportunities.

The Rural Education and Workforce Alliance (REWA) works with Dodge City local high schools, community colleges, and universities throughout the state to provide the education and training needs of our businesses to our community. This is accomplished by hosting bachelor- and master-level courses, associate degree programs, technical programs, and a variety of workshops and certifications.

Through apprenticeships and an education workforce alliance, Dodge City has a strong workforce development program. This project will align with the existing efforts of both Ford County and Dodge City. Additionally, local consultants may be used to complete planning and engineering design and will be included during stakeholder engagement efforts. With the intent of this project eventually advancing to construction, the project will create high-paying construction jobs for the local community.

# ix. Project Implementation and Management

The City of Dodge City has extensive experience managing and overseeing projects for intersection and highway-rail grade crossing improvements. The city will implement and manage the project while working closely to manage funding provided by FRA and BNSF. A project management plan will be created for the management and implementation of the proposed project, including the management and mitigation of project risks.

**Project Contracting:** The City of Dodge City will procure all contractual services associated with the grant requested Project in a fashion that is consistent with the Uniform Administrative Requirements, Cost Principles, and Audit Requirements of Federal Awards. The procurement method will be based on the estimated value of the contract and the services offered. Documentation of the procurement process will be maintained based on the document retention requirements stipulated in the Grant Agreement. The requested Project is for planning and design activities, therefore there will be no construction, maintenance, or operations activities procured through the requested Project.

**Contract Oversight and Control:** The City will be responsible for all related matters such as utilities, environmental assessment and mitigation, engineering services, construction responsibilities, and any right-of-way or real property acquisition.

**Change-Order Management:** Administration of the Project/contract includes the responsibility for construction engineering and for issuance of any change orders, supplemental agreements, amendments, or additional work orders that may become necessary.

**Risk Management:** Outlined in *Table 10*, the city has identified the following potential project risks and associated mitigation measures.

**Conformance with Requirements for Progress Reporting:** The City and all contractors will adhere to all federal progress reporting requirements and compliance as well as local ordinances. During the term of the agreement, the City will submit the following to maintain conformance with federal requirements, FRA Quarterly Progress Reports Federal Financial Report SF-425, and the Final Performance Report.

# Past Experience

Dodge City has considerable experience managing and executing a wide variety of capital improvement projects that have received local, state, and federal funding. In the previous four years, Dodge City was awarded seven grants in 2023, totaling \$16,233,005; eight grants in 2022, totaling \$5,537,375; 12 grants in 2021, totaling \$3,517,877; and seven grants in 2020, totaling \$3,388,551. Some of the most notable recent federal and state grant awards include:

- US Environmental Protection Agency (EPA) FY22 Wastewater Reuse via Managed Aquifer Recharge (MAR) Grant [\$60,000,000.00 with a \$25,500,000.00 local match, ongoing]
- Kansas Department of Transportation STAR Bond-Fund [\$2,000,000.00, ongoing]
- US Department of Transportation (DOT) FY 22 Safe Streets for All (SS4A) [\$345,651.00 with a \$57,608.50 local match, ongoing]

The City of Dodge City is also currently pursuing several key federal grant opportunities. All of these projects, including this Project, are anticipated to be fully and successfully executed within the proposed timeframe and budget.

Dodge City was recently identified as a second-place winner for the under 50,000 population group in the National League of Cities (NLC) 2024 City Cultural Diversity Awards.<sup>5</sup> The City was celebrated for pioneering an innovative program demonstrating its cultural diversity and promoting inclusive community engagement through its *Engage Dodge* program. The NLC selected Dodge City because of its efforts in the *Engage Dodge* interactive educational opportunity. The *Engage Dodge* program is designed to introduce residents to city services, programs, and employees and provide a better understanding of local government.<sup>6</sup> This success shows Dodge City's capability to have meaningful, comprehensive public engagement. All information was provided in both English and Spanish to fit the languages of the residents.

**Completed Project Public Engagement:** The City of Dodge City held public engagement activities on Tuesday, May 14 and Wednesday, May 15 with the *Engage Dodge* classes. Currently, 102 residents are enrolled in this program, including students from the Adult Learning Center, the English for Speakers of Other Languages (ESOL) and Diversity, and community members at large.

The students were asked if the congestion caused by the train at major intersections affected their quality of life and their ability to get to work and school. The answer was a resounding yes. The students expressed that they experience constant challenges with the congestion at the railroad

<sup>&</sup>lt;sup>5</sup> https://www.nlc.org/post/2024/03/11/nlc-celebrates-innovative-programs-promoting-cultural-diversity/

<sup>&</sup>lt;sup>6</sup> <u>https://www.dodgecity.org/1016/Engage-Dodge</u>

crossings making them late for work and school. They were supportive of the City and BNSF's efforts to find solutions to this growing issue.



Figure 10: Engage Dodge Public Engagement Classes

#### Key Staff Melissa McCoy

City of Dodge City – Assistant City Manager

**Description** 

#### Tanner Rutschman, PE

City of Dodge City - City Engineer

**Description** 

#### Ray Slattery, PE

City of Dodge City - Director of Engineering Services

#### **Description**

The City will hire a consultant to perform the planning study, engineering conceptual design, and environmental compliance.

Table 107: Potential Risks and Mitigation Strategies

Risk	Description	Mitigation Strategy
Lack of funding	Not securing adequate	A funding package is being developed, but is
	funding for Project scope	dependent on several sources (Federal,
		Local, and Private).

Right-of-Way (ROW)	Identifying and acquiring	This Project will identify the necessary ROW.
Acquisitions	the necessary ROW for	Dodge City owns a substantial amount of
	construction (in a later	ROW near the BNSF ROW, so a limited
	phase)	amount of ROW is anticipated.
Environmental	Identifying and completing	This Project will complete NEPA
Permits and	necessary Federal	documentation and other permitting
Approvals	environmental compliance	necessary. This is anticipated to be a
	documents	Categorical Exclusion (CE).
Not Receiving Public	Obtaining public support	Dodge City has extensive experience with
Support	through public engagement	quality community engagement. The public
	efforts	is in support of improved mobility across the
		Wyatt Earp Boulevard and BNSF corridor.
Roadway Design	Meeting or upgrading	The Project will address geometric issues and
Standards	existing roadway	follow KDOT design standards.
	geometrics to meet current	
	design standards	
Railroad	Coordinating with BNSF	BNSF has been an active participant in this
Coordination	about Project status	Project and no schedule delays are expected
		due to coordination.