

FY 2022 USDOT RAILROAD CROSSING  
ELIMINATION PROGRAM GRANT APPLICATION

# SYMMES ROAD GRADE SEPARATION PROJECT



## Cover Page

Project Title	Symmes Road Grade Separation Project
Applicant	Butler County Transportation Improvement District
Federal Funding Requested Under this NOFO	\$3,000,000
Proposed Non-Federal Match	\$750,000
Does some or all of the proposed Non-Federal Match for the total project cost consist of preliminary engineering costs incurred before project selection?	No
Other Sources of Federal funding, if applicable	\$0
Total Project Cost	\$3,750,000
Was a Federal Grant Application Previously Submitted for this Project?	No
City(-ies), State(s) Where the Project is Located	Fairfield, Ohio
Congressional District(s) Where the Project is Located	Ohio's 8 <sup>th</sup> Congressional District
Is this project identified in: <ul style="list-style-type: none"> <li>• The freight investment plan component of a State freight plan, as required under Section 70202(b)(9),</li> <li>• A State rail plan prepared in accordance with Chapter 227; or</li> <li>• A State highway-rail grade crossing action plan, as required under section 11401(b) of Passenger Rail Reform and Investment Act of 2015 (title XI of Public Law 114-94)</li> </ul>	This project has been identified in the Ohio State Rail Plan as a project to consider for federal grant applications.
Is the Project Located in a Rural Area or on Tribal Land?	No
Is the project eligible for a funding set-aside in Section B.1?	Yes
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	No
U.S. DOT Crossing Number(s) (if applicable)	152389P – Symmes Road 152388H – N Gilmore Road
Is the Project located on real property owned by someone other than the applicant?	Yes, a portion of the project is located on property owned by CSX Transportation



## Executive Summary

The Butler County Transportation Improvement District (BCTID), in partnership with the City of Fairfield, Ohio (the City) and CSX Transportation (CSX), is requesting \$3 million in FY 2022 Railroad Crossing Elimination Program (RCE) funding for planning and project development activities for safety and mobility improvements at two adjacent crossings – Symmes Road and North Gilmore Road (collectively referred to as the Project). This Project is a component of a broader corridor improvement effort, with the City of Hamilton (immediately north of Fairfield) submitting a companion application for the North Hamilton Crossing – Butler Street Rail Project.

The BCTID proposes to advance project development and environmental review activities for highway-rail grade separation on Symmes Road and evaluate the feasibility of closing the North Gilmore Road crossing. These crossings are located along the CSX Cincinnati Terminal Subdivision – a vital thoroughfare connecting Louisville, Cincinnati, Dayton, Toledo, and Detroit. (as well as daily Amtrak service connecting New York and Chicago). In response to this challenge, the City has completed conceptual design for two highway-rail grade separation alternatives; and regionally tens of millions of dollars have been invested in crossing closures and grade separation projects along the corridor. This project offers the following benefits:

- **Safety:** The Symmes Road and North Gilmore Road crossings have seen a combined 16 crashes, eight fatalities and nine injuries according to the FRA Grade Crossing Inventory. Grade separation and closure of these crossings, respectively, will eliminate two conflict points while improving emergency response times both within the City and regionally.
- **Congestion:** Reduced congestion, delay, and emissions from over 40 train movements per day on roadways with annual average daily traffic of approximately 13,000 (Symmes Road) and 9,000 vehicles (North Gilmore Road). Trains frequently block one or both crossings for several hours at a time.
- **Equity:** The benefits characterized above will be concentrated within a Census tract with a 9.5% poverty rate and a median annual household income of under \$50,000. The project location qualifies as a Justice40 Community and Federal Opportunity Zone.
- **Rail Operations:** Improved reliability of rail movements along one of the most important freight corridors in the Midwest, connecting several major industrial cities along the I-75 highway corridor. Completion of this project will provide over 4.5 miles of track space without at-grade crossing interference north of the CSX Queensgate Yard, the fifth largest by volume in the CSX network.
- **Economic Development:** With more than 36,000 jobs within three miles of the Symmes Road crossing, the corridor provides critical access to the region's workforce. Several industrial properties surrounding the Symmes Road crossing present new job attraction and retention opportunities, with some served directly by rail access.

The BCTID and the City greatly appreciate the FRA's consideration of this request for RCE funding. The BCTID and the City anticipates continuing its strong working relationship with FRA and USDOT in building and sustaining the nation's infrastructure and achieving USDOT's programmatic goals of promoting safety, state of good repair, economic development and freight movement, addressing climate change, and promoting resiliency, equity, and innovation in transportation.

## Contents

1.0	Project Summary .....	1
2.0	Project Funding .....	1
3.0	Applicant Eligibility .....	2
4.0	Detailed Project Description .....	2
5.0	Project Location .....	4
6.0	Grade Crossing Information .....	5
7.0	Evaluation and Selection Criteria.....	6
7.1	Evaluation Criteria.....	6
7.2	Technical Merit .....	10
7.3	Selection Criteria .....	11
8.0	Safety Benefit .....	12
9.0	Project Implementation and Management .....	12
10.0	Environmental Readiness .....	13

## Figures

Figure 1: Project Location .....	4
----------------------------------	---

## Tables

Table 1: Project Funding Sources.....	1
Table 2: Project Budget by Major Activity .....	2
Table 3: FRA Rail Crossing Inventory Data .....	5
Table 4: Industry Sector Employment within Three Miles of Symmes Road Crossing .....	9
Table 5: FRA Technical Merit Summary .....	10
Table 6: FRA Selection Criteria Summary .....	11
Table 7: FRA GradeDec Crash Prediction Results.....	12
Table 8: APS Grade Crossing Hazard Ranking .....	12

## Appendices

Appendix A: Statement of Work
Appendix B: Letters of Support
Appendix C: Letters of Funding Commitment

## 1.0 Project Summary

The Butler County Transportation Improvement District (BCTID), in partnership with the City of Fairfield, Ohio (the City) and CSX Transportation (CSX), is requesting \$3 million in FY 2022 Railroad Crossing Elimination Program (RCE) funding for planning and project development activities for safety and mobility improvements at two adjacent crossings – Symmes Road and North Gilmore Road (collectively referred to as the Project). This Project is a component of a broader corridor improvement effort, with the City of Hamilton (immediately north of Fairfield) submitting a companion application for the North Hamilton Crossing – Butler Street Rail Project.

The BCTID proposes to advance project development and environmental review activities for highway-rail grade separation on Symmes Road and evaluate the feasibility of closing the North Gilmore Road crossing. These crossings are located along the CSX Cincinnati Terminal Subdivision – a vital thoroughfare connecting Louisville, Cincinnati, Dayton, Toledo, and Detroit. This rail line also serves as a link within Amtrak’s Cardinal train, with daily service from New York to Chicago via Cincinnati. In response to this challenge, the City has completed conceptual design for two highway-rail grade separation alternatives; and regionally tens of millions of dollars have been invested in crossing closures and grade separation along the corridor.

## 2.0 Project Funding

The BCTID, in partnership with the City of Fairfield and CSX Transportation (CSX), is requesting \$3 million in FY 2022 Railroad Crossing Elimination Program (RCE) funding for planning and project development activities to advance grade separation of Symmes Road and study the feasibility of closing the North Gilmore Road crossing.

As a Project Partner, the City will contribute \$750,000 in matching funds towards the Total Project Cost. Butler County TID may contribute towards the Total Project Cost as a Project Partner. CSX Transportation may contribute a private match as an additional Project Partner. The total non-Federal contribution in the amount \$750,000 represents 20 percent of the \$3.75 million Total Project Cost; requested RCE funding in the amount of \$3 million represents 80 percent of the Total Project Cost.

Table 1 shows the total funding contribution from each Project funding source. Letters of Funding Commitment from each non-Federal funding partner are included in Appendix B.

*Table 1: Project Funding Sources*

Funding Source	Funding Type	Description	Amount	Percentage of Total Project Cost
City of Fairfield	Non-Federal	Project Partner	\$750,000	20%
Butler County TID	Non-Federal	Applicant	\$0	0%
CSX Transportation	Non-Federal	Private Partner	\$0	0%

USDOT Federal Railroad Administration	Federal	Grant Funds Administrator	\$3,000,000	80%
<b>Total Project Cost</b>	-	-	<b>\$3,750,000</b>	<b>100%</b>

*Table 2: Project Budget by Major Activity*

Project Component/Task	Cost	Percentage of Total Project Cost
Task 1: Project Administration, Detailed Project Work Plan, Schedule and Budget	\$200,000	5%
Task 2: Symmes Road Engineering Design	\$3,000,000	80%
Task 3: Symmes Road Environmental Review	\$250,000	7%
Task 4: North Gilmore Road Feasibility Study	\$300,000	8%
<b>Total Project Cost</b>	<b>\$3,750,000</b>	<b>100%</b>

### 3.0 Applicant Eligibility

The Butler County Transportation Improvement District, a legal applicant pursuant to Ohio Revised Code 5540, as a political subdivision of the state of Ohio, is an eligible applicant based on the criteria identified in Section C.1.b of the Notice of Funding Opportunity for the Railroad Crossing Elimination Program.

### 4.0 Detailed Project Description

The purpose of this project is to advance planning, project development and environmental review activities for safety and mobility improvements at two adjacent crossings – Symmes Road and North Gilmore Road in Fairfield, Ohio. This Project is a component of a broader set of improvements along the CSX Cincinnati Terminal corridor, with the City of Hamilton submitting a companion application for the North Hamilton Crossing – Butler Street Rail Project. The Symmes Road and Gilmore Road rail crossings present the following key challenges to the City and the region:

- Both highway-rail interchanges are ranked in the top 10% most hazardous crossings nationwide according to the FRA Accident Prediction and Severity (APS) model. The two facilities have seen a combined 16 crashes, eight fatalities and nine injuries according to the FRA Grade Crossing Inventory. The North Gilmore Road crossing is directly adjacent to Fairfield's freshman and high school K-12 school campus.
- Over 40 traffic interruptions per day, with some blocking one or both crossings for several hours at a time. Travel time reliability is especially impaired for adjacent industrial employers, who note employees are frequently late to work due to crossing delays. Frequent congestion also contributes to increased emissions.

- Delayed emergency response times throughout the Cities of Fairfield and Hamilton.

Notably, many of these challenges are borne primarily by economically disadvantaged communities, with the project location qualifying as a Justice40 Community.

This project builds upon broader planning, design, and implementation of corridor-wide improvements which have resulted in grade separation of nine crossings between I-275 and the City of Hamilton, totaling tens of millions of dollars in investment. Additionally, the City has invested in planning and design activities related to grade separation of the Symmes Road crossing, which resulted in two conceptual alternatives: 1) an overpass with mechanically stabilized earth (MSE) retaining walls following an alignment similar to the current roadway to minimize impacts on nearby businesses and 2) an angled overpass constructed with minimal MSE walls but requiring the purchase of up to six adjacent structures. Road tunneling under the existing tracks was considered but not evaluated due to poor soil conditions, higher expense to meet CSX criteria for maintaining rail traffic, and the need to pump water from the tunnel to prevent flooding at an elevation below the FEMA Base Flood Elevation.

RCE funding will be used for two activities. First, the Symmes Road grade separation concept will be advanced by completing the development of a 30% design plan set, cost estimates, the identification of any necessary agreements, and National Environmental Policy Act (NEPA) documentation. The BCTID will work with FRA to determine the appropriate scope of NEPA documentation through completion of a Class of Action recommendation; for this round of application the BCTID assumes it will qualify as a Categorical Exclusion based on past experience with similar projects.

Second, project funding will be used to evaluate improvement to and/or closure of the North Gilmore Road crossing. This will include a feasibility study, development of alternatives, and public outreach and stakeholder engagement within the Fairfield community. The BCTID will emphasize consideration and mitigation of impacts to economically disadvantaged communities in and around the crossing. Additional detail about the project scope is provided in Appendix A.

The expected outcome of the planning, project development and NEPA documentation components of the project scope will be to advance the BCTID closer to construction, resulting in the closure of at least one at-grade crossing and consideration of the closure of a second. The primary beneficiaries of this improvement will include the following:

- Employees and freight users making east-west movements between I-75 and Ohio SR 4 on Symmes Road
- Freight rail operators and customers requiring rail spur access
- Student accessing schools in Fairfield (serving both the City of Fairfield and Fairfield Township)
- Residents of the Fairfield Acres mobile home park
- First responders, crash and fire victims, and medical patients

Specific performance measures will be determined as part of the planning process. Potential post-construction performance measures include:

- Rail Track Grade Separation: The number of automobile crossings anticipated to be eliminated at an at-grade crossing as the result of a new grade separation

## 5.0 Project Location

A map of the project corridor is provided in Figure 1. This application seeks planning funding for project development and environmental review activities related to grade separation of the Symmes Road crossing ([39.34873, -84.52851](#)) and a feasibility assessment of the closure of the North Gilmore Road crossing ([39.34253, -84.52050](#)). Note that the City of Hamilton, to the north of the City of Hamilton, is submitting a companion grant application for the North Hamilton Crossing – Butler Street Rail Project.

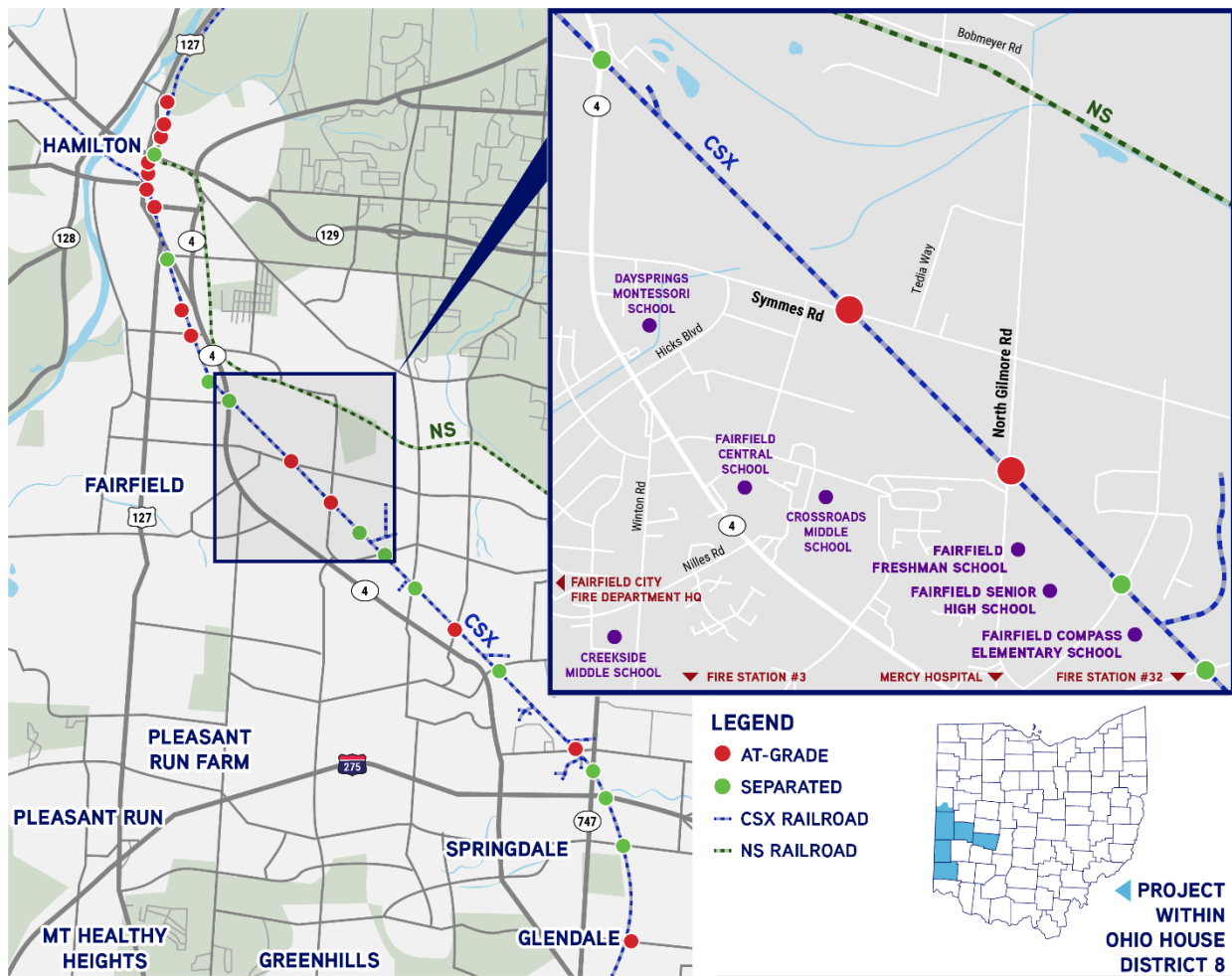


Figure 1: Project Location



## 6.0 Grade Crossing Information

Both the Symmes Road and North Gilmore Road crossings (detailed in Table 3) are skewed, which limits the visibility of approaching drivers. Neither crossing has advanced warning devices or remote health monitoring, but the North Gilmore Road crossing is equipped with an event recorder. Both Symmes Road approaches are lit as is the Gilmore Road southern approach, but the flashing lights have not been upgraded to LED bulbs and side lights are not present.

*Table 3: FRA Rail Crossing Inventory Data*

Field	Symmes Road	North Gilmore Road
Crossing ID	152389P	152388H
Type	At-Grade	At-Grade
Owner/Operator	CSX	CSX
Division	Louisville	Louisville
Subdivision	Cincinnati Terminal	Cincinnati Terminal
Milepost	21.81	21.21
Trains per Day	40+	40+
Roadway AADT	12,510	2,962
Crossing Angle	30° – 59°	60° – 90°
Gate Configuration	Quad gate with one arm per approach	Quad gate with one arm per approach
Warning Devices	Incandescent flashing lights and bell per approach	Incandescent flashing lights per approach, single bell
Recorded Crashes	5	11
Recorded Injuries	1	8
Recorded Fatalities	0	8

## 7.0 Evaluation and Selection Criteria

The following sections detail how the proposed project addresses the evaluation criteria, followed by tables summarizing technical merit and selection criteria.

### 7.1 EVALUATION CRITERIA

#### IMPROVES SAFETY AT HIGHWAY-RAIL OR PATHWAY RAIL GRADE CROSSINGS

The current Symmes Road crossing is skewed at an angle of 30 to 59 degrees, which limits the visibility of trains to oncoming vehicles. The current at-grade crossing also lacks advanced warning lights and side lights. ***There have been five recorded crashes at the highway-rail interchange, with one crash resulting in an injury.*** All five crashes occurred at night and in dry conditions, which can be indicative of visibility issues. In addition to roadway safety deficiencies, the current crossing does not have sidewalks or pedestrian gates. A 2008 study further attributed 19 crashes (7 likely and 12 possible) over the previous four years to congestion caused by backups at the Symmes Road crossing.

The current North Gilmore Road Crossing is skewed at an angle of approximately 60 to 90 degrees, which similarly limits visibility. The current at-grade crossing lacks advanced warning lights and side lights. ***There have been 11 recorded crashes at the highway-rail interchange, with a total of eight fatalities and eight injuries.*** The vast majority of these crashes have occurred on a dry road with relatively evenly distributed visibility conditions. In addition to roadway safety deficiencies, the current crossing does not have sidewalks or pedestrian gates. ***The North Gilmore Road Crossing is located directly adjacent to a Fairfield 9-12 grade campus which includes freshman and senior high school buildings for both the City and Fairfield Township.***

#### PROPOSES TO GRADE SEPARATE, ELIMINATE, OR CLOSE ONE OR MORE HIGHWAY-RAIL OR PATHWAY-RAIL GRADE CROSSINGS

The requested project development funding will directly address the safety challenges noted above by advancing the BCTID closer to construction of countermeasures. Construction of grade separation at Symmes Road will significantly increase the safety of this busy highway-rail interchange by eliminating potential conflicts between the 40 trains and 13,000 vehicles crossing paths daily. Pedestrian safety will also be enhanced by constructing new sidewalks on each side of the overpass. As part of this study, the BCTID will evaluate permanent closure of the North Gilmore Road crossing, with the same volume of trains and approximately 9,000 vehicles per day.

#### IMPROVES THE MOBILITY OF BOTH PEOPLE AND GOODS

The current Symmes Road at-grade crossing is identified in the Fairfield Comprehensive Plan as the cause of over 40 traffic interruptions per day. Stop-delay analysis conducted by City of Fairfield Public Works indicated a maximum stop time of 4 minutes and 36 seconds with a maximum queue of over 80 vehicles. Both the Symmes Road and North Gilmore Road crossings are frequently blocked, resulting in long delays and the need for detours. According to the FRA

Blocked Crossing Database, the Symmes Road crossing has 25 recent entries totaling 13.75-32.5 hours, while the North Gilmore Road crossing has two recent entries totaling 2.25-6.5 hours.

Many workers travel from the Route 4 corridor across Symmes Road to reach industrial jobs, and companies regularly report employees being late for work (losing pay or incentives) due to trains blocking this route. Grade separation of the Symmes

Road crossing will prevent this issue, while serving current North Gilmore Road traffic more reliably.



Completion of the Symmes Road grade separation and North Gilmore Road closure will significantly improve rail operations on the Cincinnati Terminal line by providing over 4.5 miles of track uninterrupted by at-grade crossings immediately north of Queensgate Yard.

***Queensgate Yard is the fifth largest by volume on the entire CSX network, with over 650,000 carloads per year passing through the terminal.***

### REDUCES EMISSIONS, PROTECTS THE ENVIRONMENT, AND PROVIDES COMMUNITY BENEFIT (INCLUDING NOISE REDUCTION)

Grade separation of Symmes Road and closure of North Gilmore Road will offer emissions benefits related to reduced congestion, delay at crossings, and detours around blocked crossings. In addition to the associated environmental benefits, the new configuration will improve community benefits associated with noise reductions (removal of crossing bells) and improved emergency response times as discussed in the following section.

### IMPROVES ACCESS TO EMERGENCY SERVICES

Situated on a busy rail line, the Symmes Road and North Gilmore Road crossings interrupt traffic throughout the day, with one or both crossings commonly experiencing prolonged blockages sometimes lasting several hours. This creates several challenges related to emergency response times:

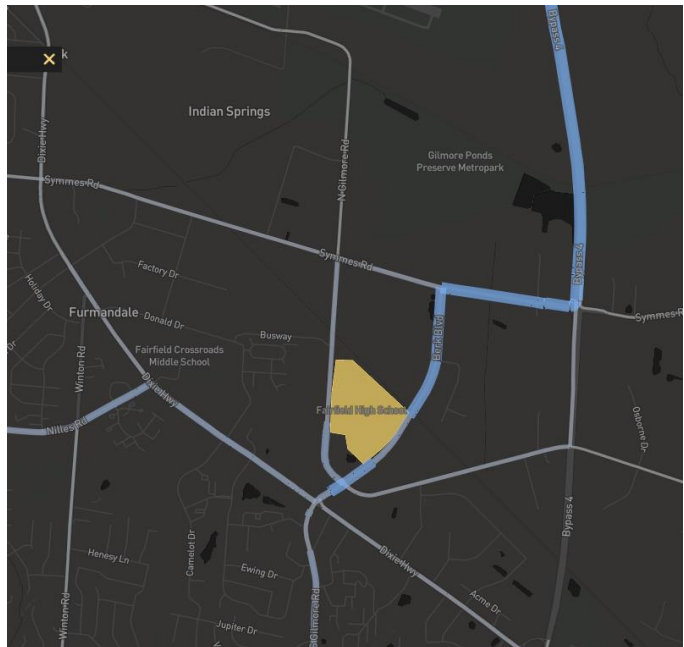
- The Fairfield Fire Department assumes a train will be present and consistently uses alternate routes to bypass the Symmes Road and North Gilmore Road crossings, which impairs emergency response times.

- Traffic back-ups on Symmes Road and North Gilmore Road (both of which are two-lane roads) causes delays to emergency runs to nearby homes and businesses, and motor vehicle crashes occurring on either road.
- Trains frequently block access to the Butler County Airport, which impedes the Department's ability to respond to fires and medical emergencies in the area. The airport is also used to transport acute trauma patients to nearby hospitals. Ambulances transporting patients to Bethesda Butler Hospital, University of Cincinnati Health-West Chester Hospital, Christ Hospital Medical Center-Liberty Township, and Cincinnati Children's Hospital-Liberty Campus.
- For structure fires, Department policy dictates response from opposite directions to secure water from two different sources; blockage of the Symmes Road crossing prevents this at certain locations, including M. Bohlke Veneer (manufacturer of wood products) and Tedia (chemical plant).
- Reduced emergency access is also acute in the City of Hamilton to the north, where the fire station is located on the east side of the CSX line.

Grade separation of the Symmes Road crossing will allow more reliable emergency response times, resolving each issue noted above. Closure of the Gilmore Road crossing will also allow additional queuing space for stopped trains, improving access to emergency services at the Butler County Airport and to within the City of Hamilton to the north.

### IMPROVES ACCESS TO COMMUNITIES

Grade separation of the Symmes Road crossing will improve community access for residents and employees of Fairfield by helping remove a functional barrier to opportunity, the burden of which is disproportionately borne by economically disadvantaged community members. The benefits will be concentrated within a Census tract with a 9.5% poverty rate and a median annual household income of under \$50,000. The project location qualifies as a Justice40 Community, Federal Opportunity Zone, Community Reinvestment Area and Low-Moderate Income Community eligible for Community Development Block Grant funding.



The City has utilized Streetlight data to assess the impact of closing the North Gilmore Road crossing, which provides north-south access to the City's 9-12 grade school campus. This analysis showed that most travelers accessing the campus are currently using Bilstein Boulevard, which will provides redundant north-south travel and is already grade separated from the CSX line. Due to typical levels of congestion in the approaches to the North Gilmore Road crossing,



this detour is projected to have minimal or even positive impacts on travel times to the 9-12 grade school campus.

### **PROVIDES ECONOMIC BENEFIT**

Symmes Road is an important east-west corridor crossing the major industrial districts of the Cities of Fairfield and Hamilton. The corridor connects I-75 with Ohio SR 4, linking these facilities to the Interstate system. The corridor is also critical for workforce access, with approximately 36,000 employees within three miles of the Symmes Road crossing (see Table 4)<sup>1</sup>.

*Table 4: Industry Sector Employment within Three Miles of Symmes Road Crossing*

Industry Sector	Total Employment
Manufacturing	5,866
Finance & Insurance	5,027
Health Care & Social Assistance	4,759
Retail Trade	4,642
Wholesale Trade	3,335
Waste Management and Remediation Services	2,533
Accommodation & Food Services	2,425
Educational Services	1,790
Transportation & Warehousing	1,787
Construction	1,075
Other	2,935
<b>Total</b>	<b>36,174</b>

The Symmes Road rail crossing directly abuts a former General Motors facility known as Fisher Body that once employed 5,000 local residents. Over the last 34 years, Fairfield and Hamilton rebuilt the communities' industrial base with redevelopment efforts at the former Fisher Body campus and surrounding sites. Recent and upcoming nearby job creation includes Koch Foods (~2,300 jobs); Pacific Manufacturing (~1,000 jobs); and ThyssenKrupp Bilstein (~800 jobs). Additionally, several developers have built new speculative industrial buildings in the area, with one of the last greenfield sites in Fairfield immediately adjacent to the Symmes Road crossing. A recent assessment of this property recommended recruiting a rail user to the site, noting that a rail spur is feasible but would result in additional blockages of the Symmes Road crossing.

<sup>1</sup> Q1 2022 Quarterly Census of Employment and Wages, Ohio Kentucky Indiana Regional Council of Governments

## **USES CONTRACTING INCENTIVES TO EMPLOY LOCAL LABOR, TO THE EXTENT PERMISSIBLE UNDER FEDERAL LAW**

The BCTID is committed to utilizing local labor to the extent practical and will consider how specific incentives may be used to encourage local contractors to bid on future procurements.

### **7.2 TECHNICAL MERIT**

*Table 5: FRA Technical Merit Summary*

<b>FRA Evaluation Criteria</b>	<b>Project Attributes Meeting this Goal</b>
The tasks and subtasks outlined in the statement of work (SOW) are appropriate to achieve the expected outcomes of the proposed project	As presented in Appendix A, the BCTID has identified the supporting tasks and work products required to advance the proposed countermeasures at the Symmes Road and North Gilmore Road crossings.
The application demonstrates strong project readiness and ability to meet RCE Program requirements	The BCTID is ready to build upon previous work developed by the City for two potential conceptual design alternatives to advance the project development of the Symmes Road grade separation and North Gilmore Road grade crossing closure.
The technical qualifications and experience of key personnel the applicant proposes to lead and perform the technical efforts, including the qualifications of the primary and supporting organizations, demonstrates the ability to fully and successfully execute the proposed project within the proposed time frame and budget	The City of Fairfield and Butler County Transportation Improvement District (BCTID) are both certified by the Ohio Department of Transportation (ODOT) to execute and administer federal-aid projects. BCTID, a partner on this project, has led similar projects including the \$26 million South Hamilton crossing project to provide grade separation of Central Avenue.
The project is identified in the freight investment plan component of a state freight plan, a state rail plan, a state highway-rail grade crossing action plan, a state freight plan, or other equivalent document	Grade separation of the Symmes Road crossing is identified in the Ohio State Rail Plan – Appendix C (projects to consider for federal grant applications). Closure of the North Gilmore Road crossing is consistent with the safety objectives identified in this plan.
The project will use innovative technologies, innovative design and construction techniques, or construction materials that reduce greenhouse gas emissions	Construction of the Symmes Road overpass will be phased to allow continuous operation of the CSX rail line; innovative design and delivery techniques will be explored in preliminary engineering/project development phases.
The project will use financial support from impacted rail carriers	CSX, the owner and operator of the rail line impacted by this project, is supportive of the project. The BCTID/City will consider how to leverage their financial support for construction phases.
Provides economic benefit	In addition to travel time savings related to blocked crossings, the project location is surrounded by many of the City's most economically productive land uses.

The project will improve the mobility of multiple modes of transportation, including ingress and egress from freight facilities, or users of nonvehicular modes of transportation such as pedestrians, bicycles, and public transportation

Current and future freight rail users will benefit from improved operations of rail spurs due to the ability to stop trains without impeding traffic. Non-vehicular modes of transportation will also be enhanced by newly constructed sidewalks on the Symmes Road overpass.

## 7.3 SELECTION CRITERIA

*Table 6: FRA Selection Criteria Summary*

FRA Evaluation Criteria	Project Attributes Meeting this Goal
Safety	The Symmes Road and North Gilmore Road crossings have seen a combined 16 crashes, eight fatalities and nine injuries according to the FRA Grade Crossing Inventory. Grade separation and closure of these crossings, respectively, will eliminate two conflict points while improving emergency response times regionally. New sidewalks on the overpass will also safely accommodate pedestrians.
Equitable Economic Strength and Improving Core Assets	With more than 36,000 jobs within three miles of the project, the Symmes Road corridor provides critical east-west access to the region's workforce. Several industrial properties surrounding the Symmes Road crossing, including the former General Motors Fisher Body plant which employed 5,000 local residents prior to its closure, present new job attraction and retention opportunities. Many of these sites can be served by rail, with grade separation of Symmes Road better accommodating rail spur operations.
Equity and Barriers to Opportunity	The costs of current safety and mobility challenges and the benefits of resolving them are concentrated within a Census tract with a 9.5% poverty rate and a median annual household income of under \$50,000. The project location qualifies as a Justice40 Community. Benefits of the Symmes Road grade separation will flow to this community by helping to enhance equitable access to jobs and removing a functional barrier for the community. The BCTID is committed to conducting thoughtful outreach and engagement to communities impacted by potential closure of the Gilmore Road crossing as part of the feasibility study.
Climate Change and Sustainability	While not quantified as part of this application, traffic interruptions resulting from passing and stopped trains contributes to emissions resulting from slowed and idling traffic and detours around the impacted crossings. Improving east-west travel time reliability through grade separation of Symmes Road will mitigate the delay contributing to emissions. The ability for sites surrounding the Symmes Road crossing to use rail for shipments will also reduce emissions compared to shipping by truck.
Transformation of Our Nation's Transportation Infrastructure	Completion of this project supports a state of good repair by potentially eliminating one highway rail interchange and

	constructing a new overpass, which the BCTID/City is committed to maintaining for the duration of the new asset's life cycle.
Eliminating Crossings and Making Corridor-Wide Improvements	The proposed project will eliminate up to two at-grade crossings. This application is a companion project to the North Hamilton Crossing – Butler Street Rail Project, both of which build upon tens of millions of dollars in rail crossing upgrades and closures on this busy CSX corridor.

## 8.0 Safety Benefit

The USDOT has recently updated the Accident Prediction and Severity (APS) model which was used for the Symmes Road grade separation project to assess accident risk at highway-rail grade crossings. Output from the FRA GradeDec tool is provided below for each crossing in Table 7. While there are no FRA-reported crashes in the past five years for either crossing, Symmes Road has experienced five crashes (including one injury) and North Gilmore Road has experienced 11 crashes (including eight fatalities and eight injuries) over the history of the FRA Grade Crossing Inventory.

*Table 7: FRA GradeDec Crash Prediction Results*

	Fatal	Injury	Property Damage Only	Total
<b>Symmes Road</b>	0.0011854518	0.002595516	0.0054583796	<b>0.009239348</b>
<b>North Gilmore Road</b>	0.00077481807	0.0017294636	0.0037922221	<b>0.006296504</b>

Each crossing's relative ranking according to the APS model is provided in Table 8. Symmes Road and Gilmore Road are within the top 10% of most hazardous crossings nationally, with Symmes Road also ranking in the top 5% within the State of Ohio.

*Table 8: APS Grade Crossing Hazard Ranking*

	National Rank (126,333 crossings)	State Rank (5,611 crossings)
<b>Symmes Road</b>	# 9169	# 299
<i>Percentile</i>	<i>Top 7.3%</i>	<i>Top 5.3%</i>
<b>North Gilmore Road</b>	# 12,360	# 457
<i>Percentile</i>	<i>Top 9.8%</i>	<i>Top 8.1%</i>

## 9.0 Project Implementation and Management

The BCTID will be responsible for Project implementation and management, including Project contracting, contract oversight and control, change-order management, risk management, and conformance to Federal requirements for Project progress reporting. The BCTID is committed to



working with its partners, including CSX, to advance the planning and design activities in a manner that meets stakeholder expectations.

The City of Fairfield and Butler County Transportation Improvement District (BCTID) are both certified by the Ohio Department of Transportation (ODOT) to execute and administer federal-aid projects. BCTID, the lead agency on this project, has led similar projects including the \$26 million South Hamilton crossing project to provide grade separation of Central Avenue. The BCTID and its project partners, through the forthcoming agreement, will commit to following established FRA processes and procedures supporting planning and project development activities, including key milestones, public outreach and formalized deliverables.

## 10.0 Environmental Readiness

The BCTID is requesting RCE funds to complete project development activities, including NEPA analysis, for the Symmes Road grade separation and the potential closure of the Gilmore Road at-grade crossing. BCTID anticipates FRA will evaluate the grade separation using a Categorical Exclusion under 23 CFR 771; as “the construction of roadway overpasses to replace at-grade crossings” (23 CFR 771.116 (c) (17). As part of the project scope and to support preparation of Task 1 Detailed Project Work Plan, Schedule and Budget, the BCTID will prepare background information to support a Class of Action recommendation for FRA concurrence on the environmental approach. In the event that FRA determines an Environmental Assessment (EA) resulting in a Finding of No Significant Impact (FONSI) is the appropriate Class of Action, the BCTID will prepare scope documents accordingly. No significant environmental analysis will be undertaken until FRA determines the appropriate Class of Action.