



FRA's Consolidated Rail Infrastructure and Safety Improvements Program

RURAL PROJECTS

Alaska – M.P. 25.7 Trail River Bridge Replacement

Up to \$4,110,480

Alaska Railroad Corporation

Replaces a timber railroad bridge over the Trail River, approximately 23 miles north of Seward, Alaska. The new bridge will support the Alaska Railroad Corporation's freight and passenger rail services and operations by allowing industry standard gross weight capabilities of 286,000-pound railcars and intermodal double-stack cars.

Arkansas – LNW 286K Upgrade (Qualified Opportunity Zone)

Up to \$3,420,224

Louisiana and North West Railroad Company, LLC

Upgrades track and builds additional sidings on the Louisiana and Northwest Railroad's (LNW) McNeil Subdivision in Columbia County, Arkansas. The project consists of improvement to approximately 25 miles of mainline track by installing approximately 9.4 miles of jointed rail along with approximately 7,800 ties, surfacing approximately 17 miles of track, and building three additional sidings. The improvements to the mainline would allow the applicant to handle 286,000-pound tank cars.

Colorado – Animas River Bridge Replacement (Opportunity Zone)

Up to \$1,945,019

Durango & Silverton Narrow Gauge Railroad

Builds a replacement railroad bridge over the Animas River on a tourist narrow gauge rail line that connects Durango and Silverton, Colorado. The new bridge will be built approximately 15 feet upstream of the existing structure, and would allow the applicant to be in full compliance with FRA's Bridge Safety Standards.

Florida – Rail Crossing Improvements and Dynamic Envelope Markings (Multiple Opportunity Zones)

Up to \$2,309,531

Florida Department of Transportation

Designs and constructs dynamic envelope pavement markings, "Do Not Stop on Tracks" signs, and repaving at approximately 13 grade crossings in rural parts of St. Lucie and Palm Beach Counties, Florida, on crossings owned by CSX and South Central Florida Express, a subsidiary of U.S. Sugar. The project aims to reduce the likelihood of drivers stopping on or too close to railroad tracks, and to increase the lifespan of the crossing.



Idaho – Magic Valley Rail Safety & Capacity Expansion (Opportunity Zone)

Up to \$7,491,315

Idaho Department of Transportation

Expands the Eastern Idaho Railroad Gular Yard facility in Rupert, Idaho. Consists of extending the yard track and adding a new passing track to relocate switching operations that currently block the crossing at State Highway 24/8th Street. It also includes rail replacement on the main line track through the yard, removal of two of the four tracks at the 8th Street crossing, and upgrades at the 100 North crossing.

Indiana – Safer Railroad Crossings in Nappanee

Up to \$1,418,000

Civil City of Nappanee, IN

Improves seven at-grade crossings in Nappanee, Indiana. Specifically, this project will fund the installation of Constant Warning Time Circuitry; roadway modifications (including channelization, medians, curbing, or closing commercial driveways); improved vertical geometry for low-ground-clearance vehicle crossings; a safety program to educate drivers about local safety issues related to crossings; and suicide prevention outreach materials along a 2.5-mile rail corridor. Upon completion, the seven public crossings in this corridor, which average 44 trains per day, will meet all requirements to establish a Quiet Zone, with an expected reduction in the FRA Quiet Zone Risk Index by over half.

Iowa – Manly Subdivision Continuous Welded Rail Installation Project

Up to \$3,857,331

Iowa Northern Railway Company

Installs approximately 18.2 miles of new 115-lb. continuous welded rail to replace jointed rail on Iowa Northern Railway Company (IANR) track in north-central Iowa resulting in increased safety and lower maintenance costs.

Iowa – Iowa River Bridge Project

Up to \$5,464,793

Cedar Rapids and Iowa City Railway Co.

Replaces the 118-year-old Iowa River Bridge at MP 18.15 on the Cedar Rapids and Iowa City Railroad's (CRANDIC) Amana Subdivision, spanning the Iowa River near Middle Amana, Iowa. The project consists of raising the new bridge 30 inches to clear the 100-year flood height, lengthening and widening the through truss span of the bridge, and increasing the load capacity to 286,000 pounds, which exceeds the design loads of the existing bridge.



Louisiana – Beaumont Subdivision Corridor Railroad Crossing Safety Improvements Project (Multiple Opportunity Zones)

Up to \$3,949,450

Louisiana Department of Transportation

Installs predictive warning time systems with flashing lights, gate arms, and upgraded motion detectors at approximately 24 crossings along a 157-mile rail corridor on Kansas City Southern’s Beaumont Subdivision between Frierson and Starks, Louisiana. Gates, signals, and predictive controllers will be added to approximately 20 crossings, and aging gates and signals at four crossings would be replaced. In addition, the project will close four crossings with low roadway traffic volumes. The corridor averages 14 trains a day, 79 percent of which carry hazardous products. The project aims to reduce the potential for grade crossing collisions between trains and roadway users, and to provide more consistent crossing signal activation times.

Maine – Pine Tree Corridor 286K Capacity and Safety Improvements (Multiple Opportunity Zones)

Up to \$16,876,760

Springfield Terminal Railway Company (a subsidiary of Pan Am Railways)

Replaces approximately 75 miles of rail, installs approximately 55,000 ties, upgrades approximately 72 grade crossings, and strengthens approximately five bridges in central Maine between Waterville and north to Mattawamkeag. These investments will improve the 110-mile rail corridor while allowing faster speeds (from 10 to 25 miles per hour) and increasing the ability to accommodate 286,000-pound cars on the rail line.

Maryland – Freight Rail Chestertown Line: Worton Track Safety Project

Up to \$2,500,000

Maryland Department of Transportation

Rehabilitates approximately 1,960 feet of track, including installation of new rail, crossties, ballast, and installation of a new Number 8 turnout on track owned by Maryland Department of Transportation and Maryland Transit Administration (Maryland DOT/MTA). The project will also include drainage improvements to address flooding and saturation of the track bed near Worton, on Maryland’s Eastern Shore. The improved track conditions will extend the life of the track, reduce the likelihood of derailments, and sustain safe operation of railroad freight service to shippers on the Chestertown line.

Massachusetts – Pioneer Valley Bridge Strike Prevention, Rehabilitation, and Safety Project

Up to \$1,797,114

Pioneer Valley Railroad

Replaces the 103-year-old East Mountain Road Bridge on the Pioneer Valley Railroad’s (PVRR) mainline in Hampden County, Massachusetts. The project will install beams, signage, and warning lights to reduce vehicular impacts, as well as replace approximately 10,000 feet of rail and ties along the Easthampton Branch, and surface approximately 10.5 miles of track on either side of the bridge. With six reported strikes since May 2017, PVRR predicts that the bridge will be out of service by 2023 due to repeated and future strikes.



Michigan – Trespass Prevention and Pedestrian Safety Enhancements on the Michigan Line (Multiple Opportunity Zones)

Up to \$15,619,365

Michigan Department of Transportation

Seeks to eliminate trespasser hotspots along the rail line from Dearborn to Kalamazoo, Michigan, owned by the Michigan Department of Transportation (MDOT), by improving eight grade crossings, closing another crossing, and installing approximately 157 miles of right-of-way fencing. The hotspot locations are found in downtown Dearborn, Ypsilanti, Ann Arbor, Albion, Augusta, Galesburg, and Kalamazoo. Trespassing incidents have resulted in 12 deaths between 2016 and 2019.

Mississippi – Central Mississippi Rural Safety and Rail Improvement Revitalization Project (Opportunity Zone)

Up to \$6,221,020

Grenada Railroad LLC

Improves infrastructure and equipment for the Grenada Mississippi Railroad (GRYR) between Grenada and Canton, Mississippi, by upgrading approximately 25 railroad bridges to handle 286,000-pound railcars; upgrading/repairing approximately 100 miles of ties and rail; building a locomotive pit; and purchasing tamper, regulator, and tie-inserter equipment. This project will repair existing track and infrastructure, allow for 286,000-pound railcar operations, and more efficient ongoing maintenance.

Missouri – Thayer-North Rail Corridor At-Grade Consolidation and Safety Improvement Project
Up to \$10,357,239

Missouri Department of Transportation

Funds one grade separation and associated road alignments along the U.S. 60 and BNSF Thayer-North Rail Corridor in Webster County, Missouri. The project also closes eight additional at-grade crossings.

Nebraska – Velocity Enhanced Rail Transportation Improving Competitiveness and Logistics Project (Multiple Opportunity Zones)

Up to \$4,505,542

Nebraska Kansas Colorado Railway

Installs approximately 42,595 ties, 15,990 tons of ballast, and resurfaces 562,848 track feet on the Nebraska, Kansas & Colorado Railway (NKCR) in western Nebraska and eastern Colorado. The project allows for removal of slow orders on approximately 106.6 miles of track and restore operating speeds to FRA Class III (40 miles per hour) over most of the line. The improvements would reduce overall trip times along the corridor by a minimum of four hours and reduce operating costs by reducing locomotive utilization and allowing for crews to make a round-trip along the line within one day.



New Hampshire – New Hampshire Northcoast Infrastructure Project (Multiple Opportunity Zones)
Up to \$4,562,905

New Hampshire Northcoast Railroad

Comprises four components along the New Hampshire Northcoast's (NHN) Railroad mainline between Ossipee and Rollinsford, New Hampshire, and Eastern Propane Gas's (EPG) property in North Rochester, New Hampshire. The first component replaces approximately 20,000 ties and replaces four miles of continuous welded rail and associated ballast work; the second equips one locomotive with positive train control (PTC) and three locomotives with Cab Signal Systems; the third upgrades two grade crossings; and the fourth builds two rail spurs, one at the EPG facility and the other along the NHN mainline.

New Mexico – SW Chief Raton Route Modernization Program (Opportunity Zone)
Up to \$5,629,610

National Railroad Passenger Corporation (Amtrak)

Improves Amtrak's *Southwest Chief* between Trinidad, Colorado, and control point (CP) Madrid in New Mexico, located between Lamy and Albuquerque. Specifically, the project converts approximately 12.4 miles of bolted rail to welded rail between Lamy and CP Madrid, installs approximately 14,750 new ties over a 31-mile section south of Raton Pass and a separate 6-mile segment in New Mexico; rebuilds the timber decks of two railroad bridges; and performs rock scaling in Raton Pass, Glorieta Pass, and Shoemaker Canyon. The project also rebuilds three grade crossings where rail, gauge, and the pavement have deteriorated. The project eliminates imminent speed restrictions, generates savings in the maintenance of bolted rail and the close inspection and frequent repairs of aging railroad bridges, improves infrastructure, and reduces the risk of accidents caused by falling rock along the right-of-way.

New Mexico – Santa Teresa At-Grade Separation (Opportunity Zone)
Up to \$1,320,000

County of Doña Ana

Completes preliminary engineering and requirements necessary for Federal environmental review for a grade-separated overpass over the Union Pacific Railroad (UPRR) line at the northern entrance of two industrial parks, in Santa Teresa, New Mexico. Once construction is complete, the project is intended to provide enhanced safety by reducing rail-vehicle conflicts and improve efficiency for movements into and out of the industrial parks, as well as a recently constructed UPRR inland port.

North Carolina – Strategic Railway System Safety State of Good Repair and Congestion Mitigation Program (Multiple Opportunity Zones)
Up to \$13,156,886

Aberdeen, Carolina & Western

Rehabilitates three railroad bridges, constructs two new sidings, installs approximately 83,500 new crossties, replaces rail along approximately 6 miles of track, and constructs two new storage and two new switching yards on the Aberdeen, Carolina & Western Railway (ACWR) located in south central North Carolina. The track improvements will take place along a 70-mile rail segment between Charlotte and Star, North Carolina, and an additional 33 miles from Star to Aberdeen, North Carolina. Enhancements will improve safety, capacity, and efficiency to accommodate growing freight traffic.



Ohio – Linking Lima Project (Multiple Opportunity Zones)

Up to \$4,530,546

Ohio Rail Development Commission

Rehabilitates the Chicago, Ft. Wayne & Eastern Railroad (CFE) between Lima, Ohio, and Ft. Wayne, Indiana. Installs new ballast and ties, converts approximately 10.8 track miles from jointed rail to continuous welded rail, replaces seven turnouts, rehabilitates one turnout, and reconstructs yard tracks. The improvements will increase yard speeds from 5 to 10 miles per hour in the Lima Yard and from 10 to 40 miles per hour on the mainline track, and allow for increased freight gross tonnage for steel, agricultural, energy, and manufactured goods shipments.

Ohio – Youngstown & Southeastern Railroad Company Mahoning Valley Revival

Up to \$700,050

Ohio Rail Development Commission

Rehabilitates approximately 25 miles of mainline rail on the Youngstown & Southeastern Railroad (YSSR), between Struthers, Ohio, and Signal, Ohio. Installs approximately 10,100 ties, as well as surfacing, switch renewal, bolt tightening, and at-grade crossing improvements. The rehabilitation would increase allowable speed on 7 miles of the line from 5 to 10 miles per hour and increase reliability and capacity on a line that experienced two derailments in 2019.

Ohio – Keep Ohio Moving Project (Multiple Opportunity Zones)

Up to \$2,226,315

Ohio Rail Development Commission

Improves four different corridors owned by R.J. Corman Group (RJC) across Ohio. Approximately 28 miles of rail line will be improved: a 2.5-mile segment of the Wooster Branch in Wayne County; a 5-mile segment of the Main Line in Stark County; 6-mile and 3-mile segments of the Spencerville-Elgin (SPEG) Line in Allen County; and a 12-mile segment of the St. Mary's Line in Mercer County. The project will install approximately 20,500 ties and 500 switch ties, and resurface 28 miles of rail along these four lines.

Ohio – Napoleon, Defiance & Western Safety Upgrade (Multiple Opportunity Zones)

Up to \$4,112,452

Ohio Rail Development Commission

Upgrades approximately 10 miles of 80-pound rail with 132-/136-pound rail, and replace approximately 29,000 ties on 29 miles of the Napoleon, Defiance & Western (NDW) Railroad between Woodburn, Indiana and Defiance, Ohio. The project improves the rail line from marginal excepted condition to FRA Class I track to reduce numerous derailments.



Oklahoma – Kiamichi Tri-State Rail Project (Opportunity Zone)

Up to \$10,006,289

Oklahoma Department of Transportation

Improves the Kiamichi Railroad in southeast Oklahoma, northeast Texas, and southeast Arkansas. Most of the project work will be in Oklahoma in Tribal Lands of the Choctaw Nation. The project replaces approximately 23 miles of rail and 15 turnouts, reinforces 31 bridges, resurfaces 17 curves, restores 13 miles of track, and upgrades nearly three dozen road crossings across four subdivisions. The project is part of a multiyear effort to increase speeds to 25 miles per hour and allow 286,000-pound rail carloads across the network.

Tennessee – Cumberland River Bridge Rehabilitation and Automation Project (Opportunity Zones)

Up to \$2,207,206

R.J. Corman Railroad Group

Rehabilitates and automates the Cumberland River Bridge's turning mechanism and remote dispatch integration on the R.J. Corman Memphis Line over the Cumberland River in Clarksville, Tennessee. Repairs the turning mechanism for the drawspan and eliminates turn malfunctions as well as reduces unexpected delays for river and rail traffic across the bridge. As of 2020, approximately 35 percent of bridge turns resulted in failure, with an average time to resolution of 2 hours. Automation and remote dispatch of the turning mechanism will create operational efficiencies and reduce human personnel to manually operate the turning mechanism.

Texas – Henderson Overton Branch Rail Line Rehab and Train Siding Improvement (Opportunity Zone)

Up to \$8,480,323

Blacklands Railroad, Inc.

Improves the safety and reliability of track owned by Rusk County Rural Rail District and operated by the Blacklands Railroad in Rusk County, Texas. Installs new railroad ties to refurbish approximately 13.7 miles of rail between Overton and Henderson; construct three interchange sidings with Union Pacific at Overton; construct one unit train siding at Henderson; and purchase equipment including locomotives, crew cars, and high-railers. Rehabilitation of the line allows for an increase of freight rail speed from 10 to 25 miles per hour, and construction of the sidings will increase operational efficiency and lower operating costs by reducing operating hours by 6 hours every day.

Texas – Harwood Interchange Improvement Project

Up to \$2,223,768

Texas Gonzales and Northern Railway

Improves the Texas, Gonzales, and Northern Railway's (TXGN) interchange point with Union Pacific Railroad (UPRR) at Harwood, Texas. Improves approximately 9,000 feet of track; builds a new siding parallel to TXGN's mainline running south from the interchange along with associated switch improvements; improves road access to the interchange area; and replaces two small wood trestle railroad bridges with concrete culverts. Extending the siding allows TXGN to accommodate UPRR's longer trains, and the bridge upgrades will allow TXGN to handle 286,000-pound rail carloads.



Virginia – Continuous Welded Rail and Corridor Improvement Program on the Buckingham Branch North Mountain Subdivision (Multiple Qualified Opportunity Zones)

Up to \$13,670,000

Buckingham Branch Railroad Co.

Funds improvements to the Buckingham Branch Railroad's line between Charlottesville and Clifton Forge, Virginia. Installs continuous welded rail over approximately 70 miles and improves associated ballast; upgrades approximately 14 grade crossings and five railroad bridges; installs drain systems in the Afton railroad tunnel liner to reduce ice buildup; and improves clearances in two additional railroad tunnels. The project improves reliability and resiliency and opens larger freight car opportunities with the tunnel clearance improvements.

Washington – Elma Junction Safety, Capacity, and Efficiency Project

Up to \$1,374,399

Puget Sound & Pacific Railroad

Constructs a 1-mile-long mainline siding and automates two switches in Elma, Washington, along the Puget Sound and Pacific Railroad (PSAP). Replaces manual switches and constructs a siding to allow for safer and more efficient operations at a capacity-constrained junction point on the PSAP network just north of the BNSF and Union Pacific interchange in Centralia, Washington. Increases operational efficiencies by reducing the frequency and complexity of the railroad's switching movements within downtown Elma thereby reducing blocked crossings where both the community and the railroad project steady growth.

Wisconsin – Twin Cities-Milwaukee-Chicago Intercity Passenger Rail Service Project (Qualified Opportunity Zone)

Up to \$31,800,000

Wisconsin Department of Transportation

Funds six infrastructure improvements in Wisconsin and Minnesota on Canadian Pacific's Soo Line serving Milwaukee, Wisconsin, and Minneapolis/St. Paul, Minnesota, to add the first state-supported intercity passenger rail frequency between the Twin Cities and Milwaukee to contribute to an eighth round-trip on the *Hiawatha* service between Milwaukee and Chicago. The Twin Cities are currently only served by Amtrak's long-distance *Empire Builder* route. Upgrades communication and signaling, extends rail sidings, improves at-grade crossings, extends yard lead track, and reconstructs and modifies new turnouts and mainline track.

Projects eligible under 49 U.S.C. § 22907(c)(2) that require the acquisition of rights-of-way, track, or track structure projects to support the development of new intercity passenger rail service routes

North Carolina – Southeast Corridor Acquisition Project (Multiple Opportunity Zones)**Up to \$47,551,484**

North Carolina Department of Transportation

Purchases right-of-way along CSX's S-Line rail corridor from Raleigh, North Carolina, to Ridgeway, North Carolina, to preserve the corridor for future intercity passenger rail service. The purchase of the S-Line is a first step toward four new state-supported intercity passenger train frequencies operating between Richmond and Raleigh with one-hour shorter trip times. Currently, there is no direct passenger rail or freight service along the CSX S-Line between Richmond, Virginia, and Raleigh, North Carolina, due to approximately 70 miles of the route being out of service between Petersburg, Virginia, and Ridgeway, North Carolina. The project allows for improved freight capacity, reliability, and resiliency on the A-Line. The selected amount also reflects \$2,551,484 in FY 2018 CRISI restoration or initiation carry-over funds.

REMAINING PROJECTS

California – Pedestrian and Vehicle Safety Enhancements to the Intersection of J Street and Prosperity Avenue**Up to \$2,240,077***City of Tulare*

Enhances grade crossing safety at the intersection of J Street and Prosperity Avenue, on Union Pacific's railroad in Tulare, California. Improves pedestrian and vehicle safety, including elements such as a pre-signal for eastbound traffic, advanced pre-emption, traffic signal upgrades, upgrades to the rail crossing infrastructure and signal infrastructure, new pedestrian facilities that are ADA-compliant, new striping, and minor pavement improvements.

Colorado – Front Range Passenger Rail Preliminary Service Development Plan and Railroad Simulation Modeling Study (Multiple Opportunity Zones)**Up to \$548,000***City of Trinidad*

Completes an alternatives analysis and service planning analyses for a future 180-mile intercity passenger rail corridor between Pueblo and Fort Collins, Colorado. Possible future Front Range Passenger Rail Commission (FRPR) alignments are generally within or adjacent to the Class I railroad rights-of-way (BNSF or Union Pacific), or adjacent to the Colorado Department of Transportation-owned Interstate 25 rights-of-way.

Florida – Boca Raton Passenger Rail Station**Up to \$16,350,000***City of Boca Raton*

Constructs a new passenger rail station and parking garage in Boca Raton, Florida. This project will add a station into Brightline's existing train corridor, track improvement work, and construction of a parking garage, which will provide an intermodal connection between vehicles and rail.

Florida - CFRC/SunRail Phase 2 South Capacity Improvements**Up to \$5,653,819***Florida Department of Transportation*

Constructs the last 1.7-mile segment of second track on the 61.3-mile state-owned Central Florida Rail Corridor (CFRC) between Control Point (CP) NE Kissimmee (MP 806.2) near Donegan Avenue and CP Middle Kissimmee (MP 807.9) near Neptune Road in Kissimmee, Florida. Five existing grade crossings will be updated, including modifications to the existing wayside signal and crossing warning systems, as well as Positive Train Control. The single-track segment creates a railroad chokepoint and leads to train meet delays.

Illinois – Springfield Rail Improvements Project - Usable Segment V (Qualified Opportunity Zone)**Up to \$10,000,000***City of Springfield*

Replaces two existing rail bridges at the South Grand Avenue and Cook Street underpasses with double-track bridges, and closes the existing crossing at Jackson Street. The project also constructs double-track bridges for the relocated Union Pacific tracks and includes grading, drainage, and track work from south of Grand Avenue to Capitol Avenue.

Iowa – IANR Education and Training Program**Up to \$5,425,464***Iowa Northern Railway Company*

Funds up to 30 virtual and in-person training classes for a workforce development and safety program for any Class II and III railroad employee to meet FRA safety requirements such as positive train control, track safety standards, and the general code of operating rules. In addition, funds four mobile simulators for use shared among the Class II and III railroads. Developing virtual training for small railroad employees will improve safety for less cost because employees will not need to travel for training. Iowa Northern Railway Company is partnering with the American Short Line and Regional Railroad Association.

Louisiana – New Orleans & Gulf Coast Railway Company (NOGC) Safety and Infrastructure Improvements (Opportunity Zone)**Up to \$8,262,391***New Orleans & Gulf Coast Railway Company*

Improves approximately 24 miles of the NOGC owned Belle Chasse Subdivision and 8 miles of the leased Westwego Subdivision from the Union Pacific Railroad (UP) along the Mississippi River in the Orleans and Delta region of Louisiana. Rehabilitates two railroad lift bridges, replaces embedded rail on a neighborhood road, creates double-main trackage from single-mainline track, completes a tie replacement program, and provides first responder hazardous materials emergency response training.



Maryland – Martin's Yard Northeast Corridor Switch Modernization Project (Opportunity Zone)

Up to \$3,100,000

Maryland Transit Administration

Funds the replacement of a hand-thrown turnout with a power-operated turnout where MARC Commuter trains enter and exit Martin Yard on the Northeast Corridor (NEC) in Middle River, Maryland. The project removes a safety risk for MARC workers, increases intercity passenger rail capacity at Baltimore Penn Station by reducing MARC storage there, and improves the fluidity of the NEC in Maryland north of Baltimore.

Massachusetts – City of Chelsea Quiet Zone (Multiple Opportunity Zones)

(Up to \$1,130,000)

City of Chelsea

Installs four-quadrant gates, grade crossing warning signage, and upgrades pavement markings at six railroad crossings along a 1.47-mile corridor on the MBTA's East Route Main Line in Chelsea, Massachusetts. This rail corridor carries close to 70 freight and passenger trains per day. The installation of these grade crossing safety measures will reduce the FRA Quiet Zone Risk Index by over 80 percent, allowing the City to establish a Quiet Zone.

Ohio – Benchmark River and Rail Terminal: Highway/Rail Grade Crossing Safety Improvements

Up to \$1,083,015

Ohio-Kentucky-Indiana Regional Council of Governments

Funds the design and construction of a new traffic signal with railroad pre-emption and a pedestrian call button/crosswalk, as well as gates, lights, and bells at two at-grade crossings located between a private rail and river terminal facility and a U.S. highway in Cincinnati, Ohio. The project prevents trucks carrying hazardous materials from occupying the crossings while waiting for gaps in traffic to exit the terminal and turn onto a highway, and provides related pedestrian safety improvements.

Ohio – Enhancing Safe and Efficient Freight Rail/Barge Modal Connections (Opportunity Zone)

Up to \$1,235,500

Ohio-Kentucky-Indiana Regional Council of Governments

Constructs an overhead, bi-directional, enclosed conveyer system to transport bulk materials from the Cincinnati Bulk Terminals inland marine port to the Central Railroad of Indiana, located in Cincinnati, Ohio. The overhead conveyer belt would remove over 46,000 annual truck trips (approximately 0.3 miles each way) across a commuter arterial road in Cincinnati between the port and the railyard.

Oregon – Brooklyn Subdivision Rail Corridor Improvement Project (Multiple Opportunity Zones)

Up to \$3,691,900

Oregon Department of Transportation

Rehabilitates an inactive 1-mile-long siding along Union Pacific's single-track mainline on the Pacific Northwest Rail Corridor between Portland and Salem, Oregon. Rehabilitating the siding allows freight and Amtrak passenger trains to operate more efficiently by allowing trains to overtake and pass each other. The project also includes installation of two turnouts and upgrading a signal. Once complete and in service, this project eliminates 6 minutes of delay for northbound trains and 9 minutes of delay for southbound trains.



Pennsylvania – Scranton Area Railroad Improvements (Multiple Opportunity Zones)

Up to \$900,000

Delaware-Lackawanna Railroad Co.

Improves four components at the Delaware-Lackawanna Railroad Company's Green Ridge Yard and at its junction with Class I Norfolk Southern (NS) Railway at Hyde Park in Scranton, Pennsylvania. Constructs connecting track between the South Wye Track and North Wye Track at Hyde Park to allow for a progressive movement from the NS junction to the Diamond Branch; constructs additional working tracks and a crossover at the new locomotive service and inspection facility at Green Ridge; realigns and extends yard tracks at Green Ridge Yard, and provides other site improvements at the locomotive service and inspection facility.

Pennsylvania – Rail Pulse: The Realization of Railcar Location, Condition, Health, and Telematics sensors on the North American Railcar Fleet (Multiple Opportunity Zones)

Up to \$7,895,000

Pennsylvania Department of Transportation

Develops a railcar onboard GPS sensor system to provide real-time information on railcar movements and condition to shippers, car owners, and railroads. With location, condition, and health information for each railcar, operators can better manage consists, incidents, and maintenance needs. The proposed concept is an innovative approach that could have safety benefits in addition to increased visibility regarding shipments.

Texas – Capital Metro Truss & Deck Girder Replacement

Up to \$2,315,570

Capital Metropolitan Transportation Authority

Replaces truss and deck girder spans for an approximately 100-year-old railroad bridge along Capital Metro's East Subdivision short line railroad over Walnut Creek in Austin, Texas. Improves related walkways and handrails, bridge pier and abutment bearings, new bridge ties, and track surface.

Texas – Grade Crossing Improvements at FM 1660 S

Up to \$1,451,250

Texas Department of Transportation

Improves railroad grade crossing intersection U.S. 79 and FM 1660 S in the city of Hutto, Texas. Constructs a median to prevent or limit the opportunity for drivers to circumnavigate the railroad gates and sidewalks to safely channel pedestrians toward a nearby elementary school. Improves the crossing profile to reduce the opportunity for low-ground clearance vehicles to become immobilized. Enhances the railroad pre-emption to safely clear motorists off the crossing intersection prior to trains approaching.

Texas – Improving the Safety at Highway Railroad Grade Crossings Located in Rural Areas Using UAV-CRP Data Analysis

Up to \$241,546

Texas A&M Engineering Experiment Station, College Station, TX

Implements drone technology and three-dimensional mapping to study passive grade crossings in rural areas and determine if unsafe conditions exist for vehicle traffic.



Washington – Pacific Northwest Rail Corridor Reliability - Landslide Mitigation Phase III

Up to \$3,719,000

Washington Department of Transportation

Constructs landslide catchment walls along approximately 1 mile of track at Milepost 25 on the Pacific Northwest Rail Corridor between Seattle, Washington, and Portland, Oregon. This project is Phase 3 of a Landslide Mitigation Plan, identifying short-, intermediate-, and long-term activities needed to reduce rail closures due to landslides. When a landslide occurs, passenger and freight trains are held until the corridor is clear of debris and safe for passage. Passengers must be bussed around the impacted segment for 48 hours and freight trains are held and slowed, causing a ripple effect to freight operations in the region. Over the past 10 years, this area has seen 24 landslides, and passengers have been diverted to other forms of transportation 940 times.