

CHAPTER 4

PROPOSED FREIGHT RAIL IMPROVEMENTS AND INVESTMENTS

INTRODUCTION

The purpose of this chapter is to identify recent capital investment trends and to describe future rail improvements and investments that will address the ongoing freight movement utility, reliability, resiliency, and safety needs of Kentucky. Many of these projects focus on the opportunity for improvements to infrastructure that will enhance the capacity, safety, and efficiency of rail service and operations; climate change adaptation and environmental sustainability; and local economic development opportunities through enhanced rail access for new potential shippers.

Planned and proposed capital projects identified by Kentucky railroads, shippers, economic development agencies, and other stakeholders during the outreach activities conducted as part of the development of the Kentucky Statewide Rail Plan are listed in this chapter. Projects selected to be prioritized for future public funding opportunities will be further detailed in Chapter 5.

4.1. RAIL CARRIER INVESTMENT NEEDS

4.1.1. Class I Railroad Investment Needs

As private entities, Class I railroad companies in Kentucky generally must use private financing to cover the cost of equipment acquisition (such as locomotives and railcars) and infrastructure improvements aimed at renewing, upgrading, or expanding the rail network such as rail, ties, bridges, and signal systems. Railroads rely on a regulatory framework that provides sufficient return on investment as a means to accommodate these capital expenditures. Funding for capital programs can vary from year to year due to fluctuations in freight demand, economic trends, and other considerations.

Capital investment in rail infrastructure in Kentucky by Class I railroads has been ongoing. Work has been performed to modernize and upgrade track structure and bridges to accommodate railcars with a maximum allowable gross weight of 286,000 lbs., and to expand and create new terminal facilities to accommodate new industries.

4.1.2. Class II and Class III Railroad Investment Needs

Class II (regional) and Class III (short line) railroads generally face a different set of challenges meeting their needs than the Class I railroads, since they do not often possess the capital and technical resources, operating capacity and flexibility, or modern infrastructure of the larger Class I railroads.

Class II and Class III railroads typically rely upon private funding, public funding, or some combination of these sources to cover the capital cost of equipment acquisition and general infrastructure improvements. Some programs administered by the State of Kentucky and by the federal government are available to Class II and Class III railroads to help fund rail network improvement projects. The potential for this funding and its applicability to and Class II and Class III railroad improvement projects in Kentucky are discussed further in Chapter 5.

All Class II and Class III railroad line segments in Kentucky were originally constructed and operated by Class I railroads. In the 1980s, Class I railroads began to shed unprofitable branch lines following the passage of the federal Staggers Rail Act.

Typically, the largest constraints on Class II and Class III railroads involve infrastructure-related restrictions that prohibit accommodating railcars with a maximum allowable gross weight of 286,000 lbs. (the current industry standard) and operational chokepoints caused by insufficient operating capacity on main lines, in rail yards, and locations where railroads interchange with each other.

Railcars with larger loading capacity provide greater operating efficiency by reducing labor, fuel, and maintenance costs while increasing capacity and synergy for rail operations and rail shippers. Most Class II and Class III railroads have a legacy infrastructure suited to low-density operations and railcars of lighter weight (gross weight of 268,000 lbs. or less). In order to accommodate the 286,000-lb. cars, Class II and III railroads must make upgrades to the track assets (i.e., rail, ties, and ballast) and bridges to handle the additional stress caused by transporting the heavier cars. Class II and Class III railroads that are unable to make the appropriate upgrades may be at a competitive disadvantage and lose business to transportation competitors, namely to trucks or nearby Class I railroads that are capable of handling the 286,000-lb. cars.

Class II and Class III railroad chokepoints are often attributed to legacy infrastructure tailored to historical railroad practice, which can limit capacity and hamper the efficiency and flexibility of modern operations. Such factors include yard capacity that is insufficient for building longer trains, switching, and staging cars. Commonly, short line railroads also have meet-pass sidings that are of inadequate number, length, or location to accommodate the demands of present-day train operations when multiple trains are operating on the same line.



Source: Kentucky Transportation Cabinet

Some Class II and Class III railroads are further constrained by delays that stem from interchanging railcars with another carrier or in the use of trackage rights to access an isolated segment of their network. Further complicating interchanges between carriers are “paper barriers” or instances where for regulatory or other contractual reasons one railroad is unable to interchange with another railroad to which it physically connects or is limited in the volume of traffic it can interchange. Among other things, operational chokepoints and terminal congestion can harm quality of life in communities where stopped trains result in blocked crossings and cause delays to motorists and pedestrians.

4.2. CURRENT AND ONGOING FREIGHT RAIL PROJECTS IN KENTUCKY

Current and ongoing freight rail projects in Kentucky are mapped in [Interactive Application 4-1](#).

4.2.1. Class I Railroad Projects

NORFOLK SOUTHERN

In 2022, NS agreed to purchase the municipally owned Cincinnati Southern Railway from the City of Cincinnati for \$1.62 billion.¹ The rail corridor extends from Cincinnati, Ohio to Chattanooga, Tennessee. NS and its predecessors had operated the line under lease through a subsidiary railroad known as the Cincinnati, New Orleans & Texas Pacific Railway since 1893.

Cincinnati voters approved the same in November 2023.² The City and NS closed the sale on March 19, 2024.³

NS had indicated that it will make minor upgrades to the line following the completion of the sale.

4.2.2. Class II and Class III Railroad Projects

PADUCAH AND LOUISVILLE RAILWAY

Fostering Economic Sustainability Throughout Kentucky Project

The Paducah and Louisville Railway (PAL) was awarded \$29,563,000 in FY 2022 CRISI program funding from the FRA for the \$62,900,000 Fostering Economic Sustainability Throughout Kentucky Project. PAL is providing \$33,337,000 in matching non-federal funds.

1. Trains News Wire, Norfolk Southern to buy CNO&TP line from city of Cincinnati for \$1.6 billion, November 21, 2022. Retrieved from: <https://www.trains.com/trn/news-reviews/news-wire/norfolk-southern-to-buy-cnotp-line-from-city-of-cincinnati-for-1-6-billion/>
2. Trains News Wire, Voters narrowly approve Cincinnati Southern sale, November 8, 2023. Retrieved from: <https://www.trains.com/trn/news-reviews/news-wire/voters-narrowly-approve-cincinnati-southern-sale/>
3. Progressive Railroading, NS, city close sale of Cincinnati Southern Railway, March 19, 2024. Retrieved from: https://www.progressiverailroading.com/norfolk_southern/news/NS-city-close-sale-of-Cincinnati-Southern-Railway--71494#:~:text=The%20Cincinnati%20Southern%20Railway%20Board,deferred%20transaction%20fees%20from%20NS

The proposed project involves project development, final design, and construction activities for various track improvements in a rail yard, upgrades to multiple bridges along PAL's 280-mile main line, and rehabilitation of 19 locomotives. The project aligns with the CRISI program selection criteria by improving system and service performance, and safety, as it will help improve operations by reducing delays and increase the safety and resiliency with reduced chance of derailments.

Table 4-1. Fostering Economic Sustainability Throughout Kentucky Project Funding

Funding Sources	Type	Amount	Percentage
Federal Railroad Administration	Federal	\$29,563,000	47%
PAL	Non-Federal	\$33,337,000	53%
TOTAL		\$62,900,000	100%

LOUISVILLE AND INDIANA RAILROAD

Safety, Sustainability, and Alternative Energy Project

The Louisville and Indiana Railroad (LIRC) was awarded \$2,685,000 in FY 2022 CRISI program funding from the FRA for the \$5,595,000 Safety, Sustainability, and Alternative Energy Project. The LIRC and the Indiana Department of Transportation are providing a combined \$2,909,400 in matching non-federal funds.

The proposed project includes final design and construction activities for various track-related improvements, upgrades to at-grade crossings, and solar panel installation at certain rail facilities. The project aligns with the selection criteria by improving system and service performance as it will help LIRC to increase reliability of service on the rail line from Indianapolis, Indiana to Louisville, Kentucky, reduce safety risks such as derailments caused by potential rail failures, and implement energy-saving infrastructure.

Table 4-2. Safety, Sustainability, and Alternative Energy Project Funding

Funding Sources	Type	Amount	Percentage
Federal Railroad Administration	Federal	\$2,685,600	48%
LIRC and Indiana Department of Transportation	Non-Federal	\$2,909,400	52%
TOTAL		\$5,595,000	100%

RJ CORMAN

The Bluegrass Multimodal Freight Improvement Project

The RJ Corman Central Kentucky Lines (RJCC) was awarded \$7,380,600 in FY 2021 CRISI program funds from the FRA for the \$12,301,000 Bluegrass Multimodal Freight Improvement Project. RJCC is providing \$4,920,400 in matching non-federal funds.

The project will fund three improvements to the RJCC line between Frankfort and Lexington, Kentucky. Specifically, it will build a new freight rail-to-truck transload facility just outside of Frankfort, rehabilitate

track on the RJCC mainline between Frankfort and Lexington, and make improvements to an existing main yard and transload facility in Lexington, which includes switch replacements, rehabilitated grade crossings and track, expanded transload storage pads, and paving truck and vehicle traffic areas.

Table 4-3. Bluegrass Multimodal Freight Improvement Project Funding

Funding Sources	Type	Amount	Percentage
Federal Railroad Administration	Federal	\$7,380,600	60%
RJCC	Non-Federal	\$4,920,400	40%
TOTAL:		\$12,301,000	100%

TENNKEN RAILROAD

TennKen Revitalization and Safety Improvement Project

The TennKen Railroad (TKEN) was awarded \$7,370,000 in FY 2022 CRISI program funds from the FRA for the \$11,000,000 Tennken Revitalization and Safety Improvement Project. TKEN and the Tennessee Department of Transportation are providing a total of \$3,630,000 in matching non-federal funds.

The proposed project involves final design and construction activities for various track improvements on TKEN's main rail line in parts of Tennessee and Kentucky. The project aligns with the selection criteria by improving safety and increasing ability to meet existing and anticipated demand by accommodating 286,000-pound railcars and improving service performance by upgrading infrastructure from excepted track to FRA Class 1 and 2 track standards. As TKEN prepares for anticipated growth in freight from one new shipper in the area and a new connection to a port, sustaining the interchange connection with Canadian National Railway is also important to TKEN.

Table 4-4. TennKen Revitalization and Safety Improvement Project Funding

Funding Sources	Type	Amount	Percentage
Federal Railroad Administration	Federal	\$7,370,000	67%
TKEN and Tennessee Department of Transportation	Non-Federal	\$3,630,000	33%
TOTAL:		\$11,000,000	100%

4.2.3. Economic Development Authority Projects

GREEN RIVER AREA DEVELOPMENT DISTRICT

Rockport Bridge Rehabilitation Freight Rail Project

The Green River Area Development District (GRADD) was awarded \$17,331,850 in FY 2022 INFRA program funds from the USDOT for the \$36,000,000 Rockport Bridge Rehabilitation Freight Rail Project.

This project will rehabilitate the Paducah & Louisville Railway (PAL) Rockport railroad bridge by replacing the deck, filling in portions of the existing approach with rockfill and culvert pipes,

and upgrading the electrical and mechanical components that allow the bridge to be raised to accommodate river traffic.

This project makes important investments in the 100-year-old existing freight rail line bridge, allowing it to operate at a full level of performance. The bridge is a vital link for the transportation of commodities such as chemicals, grain, coal, lumber, steel, and petroleum on the 280-mile railway, which would be diverted to truck if the bridge were to be closed.

Table 4-5. Rockport Bridge Rehabilitation Freight Rail Project Funding

Funding Sources	Type	Amount	Percentage
USDOT	Federal	\$17,331,850	48%
Paducah & Louisville Railway	Non-Federal	\$18,668,150	52%
TOTAL:		\$36,000,000	100%

SOUTHEAST KENTUCKY INDUSTRIAL DEVELOPMENT AUTHORITY

Southeast Kentucky Industrial Development Authority Corbin Intermodal Feasibility Study

The Southeast Kentucky Industrial Development Authority (SKYIDA) is completing a feasibility study for a potential intermodal facility on the currently under-utilized CSXT property in Corbin, Kentucky.

4.2.4. Other Projects

KENTUCKY TRANSPORTATION CABINET (KYTC)

Reconnecting Northland-Arlington

The KYTC was awarded \$8,120,000 in FY 2023 RAISE program funds from the USDOT for the \$22,110,000 Reconnecting Northland-Arlington project. The KYTC will provide \$13,990,000 in matching non-federal funds.

The project will replace the existing RJ Corman railroad bridge overpass to allow for ADA accessible sidewalks and bicycle facilities, as well as improved sidewalks, accessible transit stops, and stormwater collection along North Broadway (US 27) in Lexington, Kentucky.

The project is strong in mobility and community connectivity, quality of life, safety, environmental sustainability, state of good repair, and partnership. The project addresses state of good repair by replacing an 86-year-old structure that has suffered damage from vehicles and by increasing vertical clearance for truck traffic to more directly access downtown instead of using other local roads.

Table 4-6. Reconnecting Northland-Arlington Project Funding

Funding Sources	Type	Amount	Percentage
USDOT	Federal	\$8,120,000	37%
KYTC	Non-Federal	\$13,990,000	63%
TOTAL:		\$22,110,000	100%

4.3. PROPOSED FREIGHT RAIL PROJECTS

Proposed freight rail projects in Kentucky are mapped in [Interactive Application 4-2](#).

4.3.1. Class I Railroad Projects

CSX TRANSPORTATION

Railroad Crossing Elimination Opportunities

CSXT anticipates pursuing railroad crossing elimination opportunities in partnership with local roadway authorities (including cities, counties, and the KYTC) through the FRA's Railroad Crossing Elimination Program (RCE), as well as other federal discretionary grant programs where projects meet eligibility requirements.

NORFOLK SOUTHERN

Railroad Crossing Elimination Opportunities

NS anticipates pursuing railroad crossing elimination opportunities in partnership with local roadway authorities (including cities, counties, and the KYTC) through the FRA's Railroad Crossing Elimination Program (RCE), as well as other federal discretionary grant programs where projects meet eligibility requirements.

4.3.2. Class II and Class III Railroad Projects

LOUISVILLE AND INDIANA RAILROAD

Louisville and Indiana Railroad Clagg Bridge Lift Span Operations Project

In 2024, the Louisville and Indiana Railroad (LIRC) was awarded FY 2023-2024 CRISI program funding to support the \$13 million project.

The proposed project includes project development, final design, and construction and would rehabilitate the Clagg Lift Span of the Fourteenth Street Bridge, which connects Louisville, Kentucky, and Clarksville, Indiana across the Ohio River.

RJ CORMAN

RJ Corman 2023-2024 CRISI Project

In 2024, RJ Corman Central Kentucky Lines (RJCC) was awarded FY 2023-2024 CRISI program funding to support a proposed \$46 million project.

The proposed project includes final design and construction and will rehabilitate track on three short line corridors in Kentucky. The project will rehabilitate approximately 30 miles of track, replace



Source: Kentucky Transportation Cabinet

crossties, add ballast, surface, and tighten bolts along the Central Kentucky Lines; rehabilitate the 20-mile mainline, replace crossties, add ballast, surface, and tighten bolts along the Bardstown Line; and rehabilitate approximately 14 miles of track, replace approximately 75 specialty railcars with flatcars, and expand track capacity at the Russellville production plant.

TRANSKENTUCKY TRANSPORTATION

Paris to Maysville Railroad Rehabilitation

Transkentucky Transportation (TTIS) has identified an ongoing need to complete a full rehabilitation of its main line between Paris and Maysville, Kentucky. TTIS operations are currently confined to the area immediately in and around Paris, where TTIS interchanges with CSXT.

Restoring service over the line would enable greater economic development opportunities in northeast Kentucky and potentially allow the line to host overhead CSXT freight traffic.

4.3.3. Other Potential Projects

INDUSTRY-DRIVEN PROJECT OPPORTUNITIES

Louisville-Nashville Intermodal Study

One shipper that participated in stakeholder outreach activities for the Kentucky Statewide Rail Plan update suggested that a study be performed to examine the feasibility of expanding rail intermodal service in the Louisville-Nashville corridor. The shipper noted the barriers and challenges that businesses in central Kentucky face in utilizing rail intermodal services, driven by the lack of local container availability. The establishment of a domestic rail intermodal terminal in central Kentucky would solve the local container supply challenges and provide easier access to containerized rail shipping.

Carrollton Railroad Worthville Yard Expansion

One Carrollton-based shipper that participated in stakeholder outreach activities for the Kentucky Statewide Rail Plan update suggested that the multiple shippers served by the CSXT Carrollton Railroad subsidiary would benefit from expansion of the Worthville rail yard, where inbound railcars are staged for placement at shipper facilities and outbound railcars are gathered for interchange to the CSXT network. This project would help reduce yard congestion and shipment delays.



Source: Angela / Adobe Stock