

# 2024 KENTUCKY STATEWIDE RAIL PLAN



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# EXECUTIVE SUMMARY

## INTRODUCTION

The Kentucky Transportation Cabinet (KYTC) has developed this Kentucky Statewide Rail Plan (SRP) to guide the commonwealth's freight and passenger rail planning activities and project development plans over the next 20 years.

This SRP describes the commonwealth's existing rail network and rail-related economic and socioeconomic impacts. It also describes the SRP process, Kentucky's rail vision and supporting goals, proposed short- and long-range capital improvements, and related studies. This SRP is intended to meet the requirements established by the federal Passenger Rail Investment and Improvement Act of 2008 (PRIIA), as amended by the Fixing America's Surface Transportation Act of 2015 (FAST Act). The 2024 SRP provides an updated state vision for rail transportation to the year 2045 and strategies to achieve that vision.

## STATE RAIL PLAN VISION AND GOALS

The KYTC developed the following vision statement for rail transportation in the commonwealth:

***Kentucky's State Rail Plan Vision is to support and work with rail carriers to provide a safe, reliable, efficient, and effective rail transportation system for the movement of passengers and freight within the commonwealth, as well as to connect Kentucky to domestic and international markets.***

The Kentucky SRP vision is supported by the following goals and objectives:

**Goal #1 – Support the Preservation and Enhancement of the Network**

Objective 1.1 – Support service preservation or rail right-of-way where it serves the public interest

Objective 1.2 – Identify funding to preserve and enhance the existing network

**Goal #2 – Promote Rail System Safety and Reliability**

Objective 2.1 – Support rail safety programs, including grade-crossing safety programs

Objective 2.2 – Identify and fund grade crossing safety enhancements

**Goal #3 – Facilitate Economic Development and Connectivity**

Objective 3.1 – Promote rail and intermodal connectivity through communication, planning, and funding

Objective 3.2 – Support economic development efforts related to rail served sites and businesses

**Goal #4 – Encourage Communication Between Railroads, Customers, and Public Agencies**

Objective 4.1 – Involve and share information with the railroads regarding planning initiatives

Objective 4.2 – Continue to facilitate interagency and rail coordination activities and meetings



## KENTUCKY'S RAIL SYSTEM

Kentucky's rail system plays an essential role in linking the commonwealth's key industries with markets throughout North America. The agriculture, automotive, chemical, coal, and manufacturing industries are particularly dependent on rail for their freight transportation needs. Although Amtrak's long-distance passenger rail services in the commonwealth are limited, Amtrak provides essential transportation services for Kentuckians.

### Freight Rail System

The Kentucky freight rail system, as shown in **Figure ES-1**, is operated by five Class I railroads, one Class II regional railroad, and 12 Class III or short line railroads. The system consists of approximately 2,800 total active rail miles in 2024.

In 2021, Kentucky's freight railroads carried close to 200 million tons of freight, or over 3.5 million railcars, which either originated and/or terminated within or traveled through the commonwealth. The leading commodity group originating in Kentucky by tonnage is coal, followed by transportation equipment then by chemicals or allied products. For inbound and intrastate movements, the top commodities by tonnage included coal, chemical or allied products, and petroleum or coal products.

Total rail freight flows in Kentucky are forecasted to increase through 2045 at a rate of one percent per year.

### Passenger Rail Service

Two long-distance Amtrak trains serve the commonwealth. There is currently no commuter or intercity corridor service provided in Kentucky, either by Amtrak or by other operators. There are four recreational or heritage railroads offering excursion trips.

Amtrak operates entirely over the trackage of the Class I freight railroads CSX and Canadian National (CN). The two long-distance trains are:

- The Cardinal, which operates three days per week between Chicago and New York City, with local stops in Maysville, South Shore-South Portsmouth, and Ashland.
- The City of New Orleans, which operates daily between Chicago and New Orleans and serves Fulton.

Nearly 9,000 passengers boarded and alighted at the four Kentucky Amtrak Stations in 2023. Of these, more than 4,000 boardings and alightings were at the Fulton Station.

**Figure ES-2** shows the two Amtrak long-distance train routes, five Amtrak passenger rail stations, and four tourist railroads in Kentucky.





Figure ES-2. Passenger Rail Lines in Kentucky

# KENTUCKY PASSENGER RAIL LINES



Source: Kentucky Transportation Cabinet, 2024

## RAIL IMPACTS

Rail service is vital to Kentucky's economy. Freight and passenger rail service directly generates 2,229 jobs. However, when rail freight shipper and rail passenger visitor user impact activities and multiplier impacts are included, rail-related employment in Kentucky totals 129,953 jobs, which represents nearly eight percent of the 1.6 million jobs in the commonwealth. These jobs resulted in \$7.7 billion earned by employees, representing 9.6% of Kentucky's total labor income. A combined value-added impact of \$17.2 billion is associated with rail services and users, representing seven percent of the commonwealth's Gross State Product (GSP).

In addition to direct employment benefits, the availability of rail transport provides cost and logistical advantages that enable businesses in Kentucky to compete effectively in the global marketplace. Railroads are nearly four times more fuel efficient than trucks on the basis of ton-miles transported. The diversion of freight traffic to rail also increases the safety of Kentucky's highway system and reduces wear on highway infrastructure.

Amtrak long-distance passenger rail service connects the commonwealth to major urban areas in the Midwest and the South, supplementing passenger air travel. Passenger rail travel generates income not only for rail operators, but also for restaurants, hotels, and other service establishments within station areas.

## RAILROAD FUNDING IN KENTUCKY

There is currently no dedicated source of consistent state funding for rail projects. Any rail funding provided by the state originates from the Kentucky General Fund and competes against other statewide needs. There are various federal grant programs available to fund rail infrastructure projects.

Signed into law in 2021, the Infrastructure Investment and Jobs Act (IIJA – also known as the Bipartisan Infrastructure Law [BIL]), established more than \$1.2 trillion in US infrastructure investments and established significant programs and policies to guide the development of infrastructure improvements. The IIJA significantly increased authorizations, and in some instances provided advance appropriations, for existing discretionary programs that fund freight rail projects, both for those programs administered by the Office of Multimodal Freight Infrastructure and by the Federal Rail Administration.

## PROPOSED RAIL IMPROVEMENTS AND INVESTMENTS

The commonwealth's prioritization of projects for future investment is informed by targeted stakeholder outreach to identify project opportunities, the status of existing assets, and current trends and forecasts. The rail project inventory in this SRP lists projects in terms of funded projects that are currently in progress and stakeholder proposed projects that do not yet have funding identified but may potentially be initiated within the next 20 years as funding is secured. The SRP categorizes specific needs and associated opportunities and identifies the policies, programs, strategies, and funding necessary to achieve the State's Rail Vision.

The sum of the estimated total project costs for each of the projects within the current funded program of projects for which estimated total project costs are known at this time exceeds \$149 million. Total funding for the currently funded program includes over \$97 million in federal investment, over \$43 million in private investment, and \$7.50 million in grants from the commonwealth.

The sum of the estimated total project costs for each of the projects within the current unfunded program of future projects for which estimated total project costs are known at this time exceeds \$4.3 million.

Project funding sources for future projects, inclusive of federal, state, local, and private or other non-federal funding, will be determined as funding opportunities are made available in order to optimize overall funding leverage and to maximize public benefit.

## RAIL PLAN DEVELOPMENT PROCESS

This SRP was developed under the authority and guidance of the KYTC Modal Programs Branch within the Division of Planning. The Modal Programs Branch is responsible for rail planning, including conducting passenger rail studies and administering federal rail funding programs.

The KYTC actively engaged stakeholders throughout the SRP update process. Key stakeholders included all railroads operating within the state, as well as rail shippers. Other stakeholders included local, regional, and state government staff, elected officials, economic development agencies, special interest and advocacy groups, and the public. Stakeholders participated in freight and passenger rail planning activities, helping identify freight and passenger rail priorities and goals for Kentucky and identifying needs, issues, and potential future rail investments to achieve improved freight and passenger rail service.

Stakeholder engagement activities included:

- Individualized interview discussions with key project staff and advisors.
- Three in-person public open house meetings at locations throughout the state. Meetings were widely promoted via press release, an email list, and social media posts. Attendees included rail shippers, economic development agencies, local government staff, elected officials, special interest and advocacy groups, and other interested members of the public.
- A detailed online survey offering stakeholders the opportunity to provide input on passenger and freight rail service in Kentucky.
- A virtual stakeholder meeting for railroad representatives to review the initial findings of the Draft SRP. The draft results from Chapters 1 and 2 of the SRP were presented, and the stakeholders were provided an opportunity to comment on the document.
- A virtual stakeholder meeting held in early 2025 in conjunction with a Kentuckians for Better Transportation (KBT) Rail Committee meeting. During the meeting, the Draft SRP chapters were presented, and stakeholders were given an opportunity to comment.
- A virtual presentation to the Kentucky Association of Manufacturers (KAM) that included all chapters of the SRP.

- A virtual open house presenting the Draft SRP chapters and providing information about the Rail Plan through a question-and-answer session. The virtual open house was promoted through a press release, social media posts, and on the SRP website, and questions for the question-and-answer session were solicited from the public. The Draft SRP chapters were also uploaded to the SRP website, where comments were accepted via a virtual comment form.

The KYTC solicited input throughout the SRP process via the project website and through ongoing contact with stakeholders who participated in earlier phases of engagement.

## KEY STAKEHOLDER INPUT ON RAIL ISSUES, CHALLENGES, AND OPPORTUNITIES

Key stakeholders provided input throughout the SRP process on multiple issues related to rail in Kentucky. Listed below are key themes identified during stakeholder outreach activities:

- Railroads would find it helpful if Kentucky offered financial assistance to short line railroads, similar to what the adjacent states of Tennessee and Ohio provide. (Note: beyond this suggestion, railroads had limited requests for state government changes to help their operations.)
- A significant challenge facing many shippers is the reduction in service frequency and reliability of Class I railroads.
- Shippers desire to increase their use of rail shipping but are constrained by a combination of infrastructure and rail service availability.

Most of the public comments received were related to passenger rail service. Key input includes the following:

- Amtrak users commented that more frequent or better-timed service would increase ridership.
- Improvements are needed to the existing Amtrak station in Fulton, Kentucky.
- There is a desire for new passenger rail service to numerous regional destinations.
- There is a desire for new commuter rail service within Kentucky.

## CONCLUSION

The KYTC has undertaken a comprehensive study of its freight rail network and has identified key issues and opportunities through a wide-ranging rail stakeholder and public outreach process. This SRP serves to document this information and establish a direction for future rail planning and project development while meeting the federal requirements to qualify potential projects in the commonwealth for any future federal rail funding opportunities.

The development of this SRP would not have been possible without the participation of key rail stakeholders and interested members of the public. The KYTC expresses gratitude to all individuals and organizations that participated in this effort.

# CHAPTER 1

# THE ROLE OF RAIL IN STATEWIDE TRANSPORTATION

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## INTRODUCTION

The 2024 Kentucky Statewide Rail Plan (SRP) highlights the goals, objectives, and system level strategies necessary to promote safe, reliable, efficient, and effective rail transportation in Kentucky. The SRP is designed to help Kentucky achieve key statewide transportation goals as outlined in the 2022-2045 Long-Range Statewide Transportation Plan (LRSTP) and other statewide planning documents, including supplementing the goals in the Statewide Freight Plan. In addition, it follows the Federal Railroad Administration (FRA) recommended guidelines for state rail planning by providing detailed information about Kentucky's railroad system and identifying potential future rail projects.

Chapter 1 highlights the role of the rail industry within Kentucky's economic, social, and cultural landscape. Identifying the role of the rail industry helps provide a basis for the Kentucky SRP vision, goals, and objectives, within the larger LRSTP framework. It also supports the development of the state rail investment program.

## 1.1. KENTUCKY'S RAIL SYSTEM VISION AND GOALS

### 1.1.1. Long-Range Statewide Transportation Plan Vision and Goals

Kentucky's 2022-2045 LRSTP outlines a clear multimodal vision along with goals, guiding principles, and an implementation plan to achieve that vision.

***The Kentucky LRSTP Vision is for a viable, reliable, and resilient multimodal transportation system to provide access and mobility for all users for the safe movement of people and goods.***

The five interconnected LRSTP goals that support this vision include:



Enhance safety



Deliver a high level of maintenance and resiliency



Establish a reliable flow of people and freight





Provide local, regional, and global connectivity for communities



Deliver and operate a system that protects or enhances the natural and human environment

The plan's five guiding principles provide the process framework for the delivery of improvements and the development of policies designed to achieve the five LRSTP goals. They include:



**Quality of Life** – Create a clean and efficient system that promotes healthy and fully engaged lifestyles while protecting the natural and human environment



**Equity** – Seek fairness in mobility and accessibility to meet the needs of all community members



**Adaptability/Sustainability** – Develop and operate a system that can adjust to the potentially disruptive forces of advances in technology, funding challenges, or human-made and natural disasters



**Seamlessness** - Integrate connectivity across all modes to provide reliable trip choices for people and freight



**Economic Vitality** - Deliver and operate a system that improves the ability of the state to provide employment and market opportunities

### 1.1.2. State Rail Plan Vision and Goals

The Kentucky Transportation Cabinet (KYTC) recognizes that an efficient and effective rail system will help alleviate highway congestion, contribute to economic development, improve public safety, improve energy efficiency, and enhance quality of life and the environment for all Kentuckians.

Kentucky's SRP vision aligns with the LRSTP vision and goals:

***Kentucky's State Rail Plan Vision is to support and work with rail carriers to provide a safe, reliable, efficient, and effective rail transportation system for the movement of passengers and freight within the commonwealth, as well as to connect Kentucky to domestic and international markets.***

The SRP goals and objectives supporting this vision include:

**Goal #1** – Support the Preservation and Enhancement of the Network

Objective 1.1 – Support service preservation or rail right-of-way where it serves the public interest

Objective 1.2 – Identify funding to preserve and enhance the existing network

**Goal #2** – Promote Rail System Safety and Reliability

Objective 2.1 – Support rail safety programs, including grade-crossing safety programs

Objective 2.2 – Identify and fund grade crossing safety enhancements

**Goal #3** – Facilitate Economic Development and Connectivity

Objective 3.1 – Promote rail and intermodal connectivity through communication, planning, and funding

Objective 3.2 – Support economic development efforts related to rail served sites and businesses

**Goal #4** – Encourage Communication Between Railroads, Customers, and Public Agencies

Objective 4.1 – Involve and share information with the railroads regarding planning initiatives

Objective 4.2 – Continue to facilitate interagency and rail coordination activities and meetings

**Table 1-1** illustrates how the rail plan goals support the goals of the LRSTP.

**Table 1-1. State Rail Goals Compared to LRSTP Goals**

State Rail Goals	Long-Range Statewide Transportation Plan Goals				
	Safety	Maintenance & Resiliency	Reliability	Connectivity	Environment
Support the Preservation and Enhancement of the Network	✓	✓	✓	✓	✓
Promote Rail System Safety and Reliability	✓	✓	✓		
Facilitate Economic Development and Connectivity			✓	✓	✓
Encourage Communication Between Railroads, Customers, and Public Agencies	✓	✓	✓	✓	✓

### 1.1.3. Coordination with Other State and Federal Plans

In developing Kentucky's SRP, KYTC has considered and integrated several other state transportation plans (see list in sidebar). This is essential to achieving the system level goals and coordinating across modes and topics.

In particular, the goals of the various plans have been considered as well as the high-level strategies for accomplishing those goals. Some key coordination areas include: Safety, Resiliency, Multimodal Integration, and Economic Development.

- **2022 State Freight Plan** – Provides an overview of the rail system. Addresses rail at a high-level in the statewide freight goals, objectives, and performance measures.
- **2020 Riverports, Highway & Rail Freight Study** – Highlights the importance of the rail connections to inland ports. Recommends on and off-site rail improvements.
- **2022 Highway-Rail Grade Crossing Action Plan** – Focuses on where and how Kentucky can improve grade crossing safety.
- **2024-2030 Highway Plan** – Includes funding for projects related to at-grade and grade-separated rail crossings. There is also funding in a separate bill for rail infrastructure upgrades.

- **2022 Transportation Asset Management Plan** – Is focused on system maintenance and preservation and refers to the State Rail Plan as a key modal transportation system plan.
- **2023 Transportation Resilience Improvement Plan** – Considers the impact of natural disasters (e.g., seismic activity or flooding) on the rail transportation system.
- **2020-2024 Strategic Highway Safety Plan** – Focuses on identifying and outlining approaches to address the critical highway safety issues in the state.
- **2023 Highway Safety Plan and Strategies** – Outlines specific strategies, actions, and projects to address key highway safety issues in the state.
- **MPO Freight Plans** – Several Metropolitan Planning Organizations (MPOs) in the state have freight plans including: Ohio-Kentucky-Indiana Regional Council of Governments (OKI), Kentuckiana Regional Planning and Development Agency (KIPDA), and the Kentucky-Ohio-West Virginia Interstate Planning Commission (KYOVA), which as a freight plan for Greenup and Boyd Counties in Kentucky. All of these plans address rail and its role in the regional freight system. MPOs also address rail freight planning through their regional long-range plans.

#### Other Kentucky Plans:

- 2022 State Freight Plan
- 2020 Riverports, Highway & Rail Freight Study
- 2022 Highway-Rail Grade Crossing Action Plan
- 2024-2030 Highway Plan
- 2022 Transportation Asset Management Plan
- 2023 Transportation Resilience Improvement Plan
- 2020-2024 Strategic Highway Safety Plan
- 2023 Highway Safety Plan and Strategies
- MPO Freight Plans



Source: Kentucky Transportation Cabinet

Table 1-2. State Rail Goals and Other State Planning Documents

Planning Documents	Rail Plan Goals			
	Preservation & Enhancement	Safety & Reliability	Economic Development & Connectivity	Communication & Coordination
2022 State Freight Plan	•	•	•	•
2020 Riverports, Highway & Rail Freight Study	•			•
2022 Highway-Rail Grade Crossing Action Plan		•		•
2024-2030 Highway Plan	•	•	•	
2022 Transportation Asset Management Plan	•			
2023 Transportation Resilience Improvement Plan		•		
2020-2024 Strategic Highway Safety Plan		•		
2023 Highway Safety Plan and Strategies		•		
MPO Freight Plans	•	•	•	•

#### 1.1.4. Federal and Multi-State Freight Plans

**National Rail Plan** – The FRA published the National Rail Plan Progress Report in 2010. It specified two long-term high-performance freight rail system goals: 1) Support the current freight rail market share and growth and 2) Develop strategies to attract 50 percent of all shipments 500 miles or greater to intermodal rail. It also outlined one long-term passenger rail goal 1) Connect communities with High-speed and Intercity Passenger Rail where population densities and competitive trip times create markets for success. The document also addressed the need for improvements to capacity, safety, system connectivity, and intermodal linkages.

**National Passenger Rail Study** – The Amtrak Daily Long-Distance Service Study is ongoing as of the date of this rail plan. That study was authorized by the 2021 Bipartisan Infrastructure Law (BIL) and seeks to identify routes that would 1) serve as part of a regional rail network, 2) advance the economic and social well-being of rural areas, 3) enhance connectivity for the national passenger rail system, and 4) reflect public engagement and local and regional support.

**Regional plans** – Two relevant regional plans were completed in the early 2020s: Southeast Regional Rail Planning Study (2020) and the Midwest Regional Rail Planning Study (2021). Kentucky was considered a border state for both studies but was not directly included in either. They both recommended long-term plans with passenger rail service through Kentucky (generally Chicago – Indianapolis – Louisville – Nashville – Atlanta). A multi-state High-Speed Rail Planning Service Study was also completed in 2012, which proposed a similar route.

This SRP addresses all of the above topics at a scale appropriate to the state and in line with the authority of the Kentucky Transportation Cabinet.



## 1.2. RAIL'S ROLE IN THE STATE'S TRANSPORTATION SYSTEM

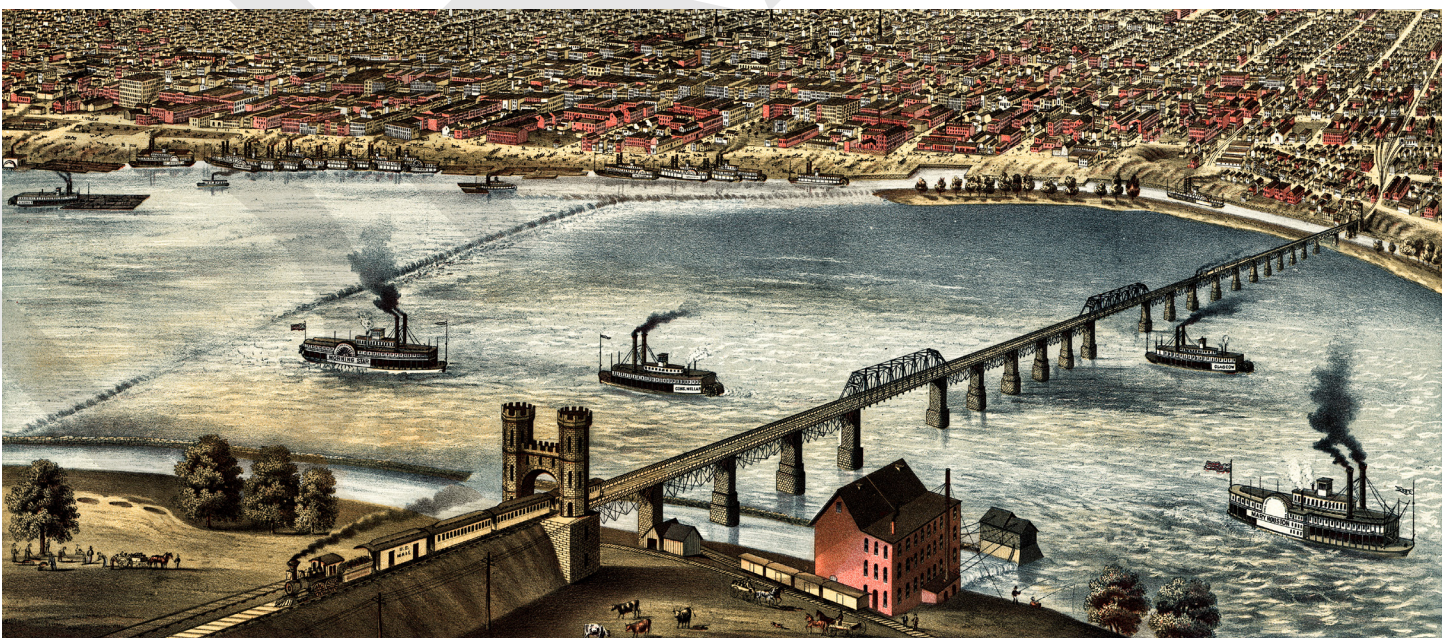
### 1.2.1. History of Rail in Kentucky

Kentucky has a rich railroading heritage dating back to the 1830s when the Lexington and Ohio Railroad was chartered with state dollars. The charter called for building the railroad from Lexington to the Ohio River. By 1834, the railroad had reached Frankfort, but not without setbacks. When disagreements on the Ohio River landing point near Louisville were finally settled, local opposition had prevailed and sections west of Frankfort were not fully connected to those near Louisville. The railroad changed ownership during economic hard times and ultimately failed. The state confiscated its assets as repayment.

The Louisville and Nashville (L&N) Railroad, an iconic railroad name, was chartered in 1850 by Kentucky with state dollars and grew into one of the most successful private businesses of its day. The railroad provided both passenger and freight services continuously under one name in the Southeastern United States for 132 years, surviving the Civil War as well as national economic boom and bust cycles including the Great Depression.

After the Civil War, the 1870s were the dawn of a new era in Kentucky's transportation history. More markets in Kentucky, the South, and the Eastern Seaboard, cheaper goods, and expanded shopping facilities combined to produce the "Age of Railroading." Railway mileage in Kentucky tripled between 1870 and 1900. Many new railway companies were created, connecting even the smallest towns to the national rail network.

As with most states, railroads contributed significantly to the early economic growth of Kentucky. They provided a cost-effective means to transport tobacco and other agricultural products from farms to eastern markets and to ports for shipment to global markets. The railroads provided access to Kentucky's natural resources of coal and limestone deposits, stimulating the growth of the mining industry in the state. Thanks to improved rail transportation, total coal production rose to one million





tons in 1879. By the end of the century, the output equaled more than five million tons. The eastern coal industry welcomed the railroads as an alternative to the uncertainties of slack water navigation. Due to topography, the mountain railroads had to follow the course of the waterways, with tracks often clinging to riverbanks.

Railroads also greatly altered the lifestyles of all but the most isolated Kentuckians by stimulating the industrial and economic development of the state. In addition to facilitating the movement of goods, the railroads also improved the mobility of people living in or visiting the state. The ability of people to move fluidly among economic centers improved commerce among those centers and also supported population migration to areas of increasing activity.

In the 19th and 20th centuries, the railroads provided needed linkages for both passengers and freight across Kentucky, complementing the newly constructed roadways. Following World War II, trucks and personal vehicles proved to be too much competition for some railroad companies and particularly for lightly used rail lines. Rail companies suffered financially and many that were not profitable went out of business.

In 1970, Congress passed the Rail Passenger Service Act, which created the National Railroad Passenger Corporation, commonly known as Amtrak. On May 1, 1971, Amtrak took over most of the remaining intercity passenger rail services that were operated by private railroad companies throughout the U.S.

The Staggers Rail Act of 1980 removed many regulatory restraints on the freight rail industry, providing railroads with increased flexibility to adjust their rates and tailor services to meet shipper needs and their own revenue requirements.<sup>1</sup> In the years that followed, financial performance of Class I railroads improved significantly as operations became more optimized. During this time, many new Class II and Class III railroads were formed to take over operations of lighter-density railroad lines and preserve local rail service.

Despite the development of the interstate and state highway systems and the growth of the motor carrier industry, freight railroads still play an important role in the economy of Kentucky. Improvements in service, successful efforts to reduce costs, and growing recognition of the economic, safety, and environmental benefits of rail transportation have increased the demand for transporting freight by rail.

### 1.2.2. Rail in Kentucky in 2024

Kentucky is presently served by five Class I railroads, one Class II railroad, nine Class III railroads, and six riverport, recreational, and passenger railroads. These railroads operate over approximately 2,800 miles of track across the state.

Freight rail is essential to Kentucky's daily industrial and commercial activity. Rail moved over 22 million tons of freight out of Kentucky and near 20 million into Kentucky in 2021. This included large quantities of coal, but it also included chemicals and automotive manufacturing shipments. Without rail, many of

1. Federal Railroad Administration, Impact of the Staggers Rail Act of 1980. Retrieved from: [https://railroads.dot.gov/sites/fra.dot.gov/files/fra\\_net/1645/STAGGER\\_%20RAIL\\_ACT\\_OF\\_1980\\_updated\\_31811.pdf](https://railroads.dot.gov/sites/fra.dot.gov/files/fra_net/1645/STAGGER_%20RAIL_ACT_OF_1980_updated_31811.pdf)

Kentucky's largest industries and employers would not be able to get their products produced and to market. According to the Association of American Railroads (AAR), there are 2,457 railroad industry employees in Kentucky, as of 2021.<sup>2</sup>

Amtrak passenger rail service in the state is limited to four locations. Fulton has daily service (served by Amtrak's City of New Orleans long distance service) while Ashland, South Shore, and Maysville currently have service three times per week (served by Amtrak's Cardinal long distance service). Amtrak Thruway Connecting Service offers bus services between Louisville's Greyhound station and the Indianapolis Amtrak station. There is also Amtrak service in Cincinnati directly across the river from urban areas in northern Kentucky.

Additional details on the rail service in the state are provided later in this chapter and in Chapter 2.

**Table 1-3. Kentucky Railroads, 2024**

Class I Railroads	Class II Railroads	Class III Railroads	Riverport, Recreational, and Passenger Railroads
<ol style="list-style-type: none"> <li>1. BNSF Railway (BNSF)*</li> <li>2. Canadian National Railway (CN)</li> <li>3. CSX Transportation (CSXT)</li> <li>4. Norfolk Southern Railway (NS)</li> <li>5. Union Pacific Railroad (UP)*</li> </ol> <p>* Trackage rights only</p>	<ol style="list-style-type: none"> <li>1. Paducah and Louisville (PAL)</li> </ol>	<ol style="list-style-type: none"> <li>1. Fredonia Valley Railroad (FVRR)</li> <li>2. Kentucky and Tennessee Railway (KT)</li> <li>3. Kentucky and West Tennessee Railway (KWT)</li> <li>4. Louisville and Indiana Railroad (LIRC)</li> <li>5. Paducah and Illinois (PI)</li> <li>6. RJ Corman – Bardstown Line (RCJR)</li> <li>7. RJ Corman – Central Line (RJCC)</li> <li>8. RJ Corman – Memphis Line (RJCM)</li> <li>9. RJ Corman – Knoxville and Cumberland (KXCG)</li> <li>10. Tennken (TKEN)</li> <li>11. Transkentucky Transportation (TTIS)</li> <li>12. West Tennessee Railroad (WTNN)</li> </ol>	<ol style="list-style-type: none"> <li>1. Big South Fork Scenic Railway (BSFX)</li> <li>2. Bluegrass Railroad Museum (BRMI)</li> <li>3. Kentucky Railway Museum (KRM)</li> <li>4. Louisville Riverport (LORJ)</li> <li>5. My Old Kentucky Dinner Train (KDT)</li> <li>6. National Railroad Passenger Corporation (Amtrak)</li> </ol>

2. Association of American Railroads, Kentucky State Fact Sheet, 2021. Retrieved from: <https://www.aar.org/wp-content/uploads/2021/02/AAR-Kentucky-State-Fact-Sheet.pdf>

## 1.3. INSTITUTIONAL GOVERNANCE STRUCTURE OF KENTUCKY'S STATE RAIL PROGRAM

### 1.3.1. Kentucky Transportation Cabinet Organization and Roles

The KYTC is led by the Secretary of Transportation, which is a cabinet-level position that reports directly to the Governor of Kentucky.

The KYTC Modal Programs Branch within the Division of Planning administers rail programs for the commonwealth. Modal Programs staff are responsible for prioritizing safety upgrades to public rail/highway crossings and the programming of funds for the work done to maintain and upgrade the crossings. Modal Programs Branch staff also maintain all rail GIS datasets and maps for the cabinet. Datasets include but are not limited to: active and abandoned rail centerlines, active railyards, and rail transload facilities.

The Utilities and Rail Branch within the KYTC Division of Right of Way and Utilities inventory the location, condition, and other information for all public highway-rail grade crossings in Kentucky. The Utilities and Rail Branch staff also administer the federal Section 130 program that funds the improvements of railway-highway crossings. The Utilities and Rail Branch within the KYTC Division of Right of Way and Utilities administers the Railroad Crossing Safety Program and Rail Coordination Program. The Utility and Rails Branch supports projects identified throughout the state and work towards implementing highway-rail grade crossing safety improvement projects. The staff reviews plans and proposals, and drafts agreements involving railroad companies. The projects funded through the Kentucky Rail Crossing Improvement (KCRI) program are jointly administered by the Modal Programs Branch and the Utilities and Rail Branch. The Utilities and Rail Branch assists with railroad agreements, paying of invoices, and coordinating construction work with other agencies and other Cabinet Divisions.

### 1.3.2. Kentucky Legislation Relating to Railroads

Following the abolition of the Kentucky Railroad Commission in 2000, the KYTC has been tasked with the responsibility of regulating railroads within the commonwealth, pursuant to Kentucky Revised Statute (KRS) 174.057, as described below:

#### **174.057 Railroad regulation – Division of Planning – Administrative regulations.**

The Transportation Cabinet shall have the responsibility of regulating railroads within the Commonwealth. The cabinet shall delegate to the Division of Planning within the Department of Highways' Office of Project Development the powers necessary to carry out the provisions of this section. The secretary may employ such personnel as necessary to perform the duties, functions, and responsibilities associated with the regulation of railroads. The division shall have all the powers previously vested in the Kentucky Railroad Commission. The cabinet shall promulgate administrative regulations under KRS Chapter 13A to carry out the provisions of this section.

Effective: June 25, 2009

History: Amended 2009 Ky. Acts ch.13, sec 6, effective June 25, 2009 – Created 2000 Ky. Acts ch. 417, sec 1, effective December 1, 2000.

Legislative Research Commission Note (12/1/2000). The contingency on the effectiveness of this statute set by 2000 Ky. Acts ch. 417, sec. 18, was met, the voters of the Commonwealth having ratified at the general election on November 7, 2000, a constitutional amendment (see 2000 Ky. Acts ch. 399) abolishing the Railroad Commission.

Within the KRS and the Kentucky Administrative Regulations (KAR) are a number of statutes and regulations that relate directly to the rail system, rail safety, and the Rails to Trails Program.

## CONSTITUTIONAL CONSTRAINTS

The state highway fund is constitutionally mandated to be used only on highways, via Section 230 of the Kentucky Constitution, as listed below:

### **Section 230: Money not to be drawn from Treasury unless appropriated – Annual publication of accounts – Certain revenues usable only for highway purposes.**

No money shall be drawn from the State Treasury, except in pursuance of appropriations made by law; and a regular statement and account of the receipts and expenditures of all public money shall be published annually. No money derived from excise or license taxation relating to gasoline and other motor fuels, and no moneys derived from fees, excise or license taxation relating to registration, operation, or use of vehicles on public highways shall be expended for other than the cost of administration, statutory refunds and adjustments, payment of highway obligations, costs for construction, reconstruction, rights-of-way, maintenance and repair of public highways and bridges, and expense of enforcing state traffic and motor vehicle laws.

There is currently no dedicated source of consistent state funding for rail projects. Any rail funding provided by the state originates from the Kentucky General Fund and competes against other statewide needs.

## KAR TITLE 603, CHAPTER 7, SECTION 090

In order to monitor Kentucky's rail system, the KYTC promulgated KAR Title 603, Chapter 7, Section 090 to regularly update railroad data. This regulation requires that all freight railroads must submit the following information to the KYTC:

- Kentucky Railroad Annual Report (Form TC 59-102);
- Map/GIS data of all active routes;
- Written notice of abandonments; and,
- Reports of accidents resulting in a loss of life.

The annual report and map of all active routes are to be submitted to the KYTC's Division of Planning on or before March 31<sup>st</sup> of each year. With these procedures in place, the KYTC has information readily available for reference purposes, mapping updates, future updates of the Kentucky Statewide Rail Plan, and other planning efforts the KYTC may pursue.

### HOUSE BILL 1 (2024 LEGISLATIVE SESSION)<sup>3</sup>

House Bill 1 (HB1) enacted during in the 2024 Kentucky Legislative Session allocates a total of \$15 million in fiscal years 2024-2025 and 2025-2026 to the Department of Highways budget to implement the Short Line Infrastructure Preservation Pilot Project. The bill states that the KYTC shall coordinate with and make grants to Class II and Class III railroads to preserve and enhance existing rail lines and corridors, retain existing rail-served industries and attract new industries, and preserve and modernize Kentucky's rail system. Funds from the pilot project shall be used for equipment, construction, reconstruction, improvement, or rehabilitation of rail facilities or engineering work associated with capital projects. No funds shall be expended from the pilot project unless matched with non-state funds equaling at least 50 percent of the total amount for any individual project. No single project shall receive more than \$2,000,000 in grant funds from the pilot project. Notwithstanding KRS 45.229, any portion of these funds that have not been expended by the end of fiscal year 2024-2025 shall not lapse and shall carry forward into fiscal year 2025-2026. The KYTC shall submit a report to the Legislative Research Commission and the Interim Joint Committee on Appropriations and Revenue by September 1, 2025, detailing the disbursement of funds in this subsection.

Further, HB 1 allocates an additional \$15 million total in fiscal years 2024-2025 and 2025-2026 to the Department of Highways budget to implement the Industrial Access and Safety Improvement Pilot Project. The bill states that the KYTC in conjunction with the Cabinet for Economic Development shall coordinate with and make grants to Class I, II, or III railroads, as well as to any Railroad Authority, Port Authority, rail-served industries, and Industrial and Economic Development Authority Board to expand rail access, enhance the marketability of available industrial sites, increase job creation and capital investment, and increase safety. Funds from the pilot project shall be used for equipment, construction, reconstruction, improvement, or rehabilitation of rail facilities or engineering work associated with capital projects. No funds shall be expended from the pilot project unless matched with non-state funds equaling at least 50 percent of the total amount for any individual project. No single project shall receive more than \$2,000,000 in grant funds from the pilot project. Notwithstanding KRS 45.229, any portion of these funds that have not been expended by the end of fiscal year 2024-2025 shall not lapse and shall carry forward into fiscal year 2025-2026. The KYTC shall submit a report to the Legislative Research Commission and the Interim Joint Committee on Appropriations and Revenue by September 1, 2025, detailing the disbursement of funds in this subsection.



3. Kentucky General Assembly, House Bill 1 (DRAFT), January 22, 2024. Retrieved from: [https://apps.legislature.ky.gov/recorddocuments/bill/24RS/hb1/orig\\_bill.pdf](https://apps.legislature.ky.gov/recorddocuments/bill/24RS/hb1/orig_bill.pdf)



## 1.4. STATE AUTHORITY FOR GRANT, LOAN, AND OTHER FINANCING

There is currently no dedicated source of state funding for rail projects. As noted in Section 1.3.2, Kentucky's state highway fund is constitutionally mandated to be used only on highways. However, the Kentucky General Fund provides the mechanism for state funding for rail projects on a competitive basis with other statewide needs. Any rail funding provided by the state originates from the Kentucky General Fund and competes against other statewide needs.

Historically, the Kentucky Legislature has made funding from the Kentucky General Fund available for short line railroad improvements through the Kentucky Short Line Railroad Assistance Fund program, discussed in Section 1.4.1.

The Kentucky Legislature has also made state funding available for highway-rail grade crossing improvements through the Kentucky Railroad Crossing Improvement Program, discussed in Section 1.4.2.

### 1.4.1. Kentucky Short Line Railroad Assistance Fund

In May 2011, the Kentucky Legislature voted to make Highway Construction Contingency Funds available through the Kentucky Short Line Railroad Assistance (KSRA) Fund, administered by the KYTC. Grants totaling \$3,138,726 were awarded under this program for fiscal year 2011-2012. All but one of the grants represented 50 percent of the cost of a project, with each railroad providing the remainder as a match.

Kentucky statute continues to permit the KRSA to be funded from the General Fund. However, since the 2011-2012 round, no additional funding has been made available for the KRSA.

### 1.4.2. Kentucky Railroad Crossing Improvement Program

In October 2013, the state announced that \$3.2 million in grants would be made available through FY 2014 to short line railroads to help fund safety improvements at highway-rail at-grade crossings in Kentucky. The grants, all of which required a dollar-for-dollar match from the applicants, were funded through the Kentucky Railroad Crossing Improvement (KRCI) Program, administered by the KYTC.

In FY 2024, the KYTC processed applications for 33 crossing locations. These projects included 15 crossing rehabilitations, 17 crossing safety improvements, and 1 crossing rehabilitation and safety improvements, including upgrades to existing signage, equipment, and light emitting diode (LED) lighting. Since FY 2018, the KYTC has processed applications for a total of 140 KRCI projects.

Since 2014, the Kentucky Legislature has consistently funded the KRCI in the amount of approximately \$1.6 million annually to allow the KYTC to continue to make additional rail safety improvements statewide. These funds are restricted to public safety improvements to at-grade crossings, railroad bridge overpasses, and railroad crossing safety equipment. The funding is available to support projects with an 80 percent state share and requires a 20 percent local match.

### 1.4.3. Kentucky Tax Credits

#### ECONOMIC DEVELOPMENT TAX CREDIT

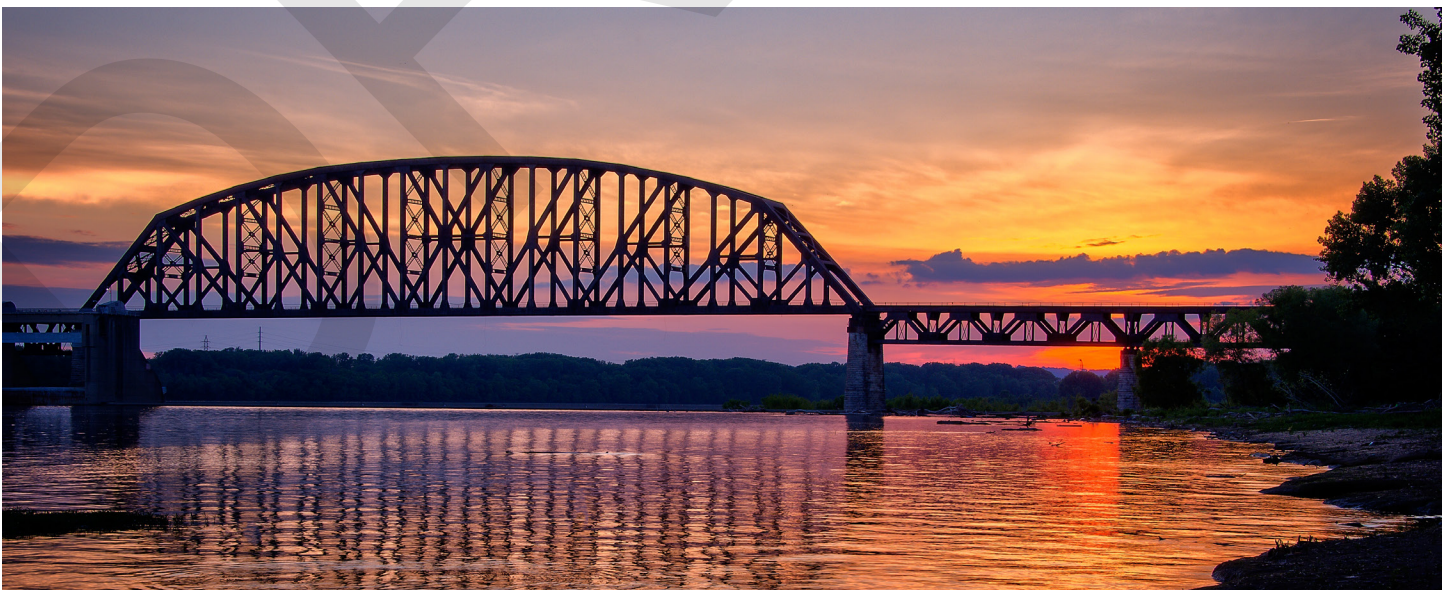
KRS 154.32-010(14)(a)7 establishes a tax credit is for corporations, LLCs, Partnerships, Limited partnerships, Sole Proprietorships, Business Trusts or other entities in manufacturing, agribusiness, non-retail service, technology or national or regional headquarters operations for the construction and installation of railroad spurs as needed to connect Economic Development projects to existing railroads.

#### NONREFUNDABLE TAX CREDIT FOR RAILROAD IMPROVEMENT (50% TAX CREDIT)

KRS 141.385 establishes a 50 percent tax credit is for Class II & Class III railroads, or any person who transports property using the rail facilities of a Class II railroad or Class III railroad located in Kentucky or furnishes railroad-related property or services to a Class II railroad or Class III railroad located in Kentucky, to maintain or improve railroads located in Kentucky, including roadbeds, bridges, and related structures.

#### NONREFUNDABLE TAX CREDIT FOR RAILROAD EXPANSION OR UPGRADE TO ACCOMMODATE TRANSPORTATION OF FOSSIL ENERGY RESOURCES OR BIOMASS RESOURCES (25% TAX CREDIT)

KRS 141.386 establishes a 25 percent tax credit is for corporations that owns fossil energy resources or biomass resources and transports these resources using rail facilities; or for railway companies that serve a corporation that owns fossil energy resources to expand or upgrade railroad track, including roadbeds, bridges, and related track structures, to accommodate the transport of fossil energy resources or biomass resources.



## 1.5. SUMMARY OF RAIL SERVICES, INITIATIVES, AND STUDIES

### 1.5.1. Passenger Rail Services and Initiatives

Kentucky is currently served by the national intercity passenger rail carrier Amtrak with two long distance routes:

- The Cardinal (Chicago, Illinois – New York, New York)
- The City of New Orleans (Chicago, Illinois – New Orleans, Louisiana)

Amtrak trains serve four stations in Kentucky, which include:

- Ashland
- Fulton
- Maysville
- South Shore-South Portsmouth

**Table 1-4** lists ridership (boardings plus alightings) at Kentucky Amtrak stations in 2021.

**Table 1-4. Kentucky Amtrak Stations, Service Frequency, and Ridership**

Station	Route	Service Frequency	Annual Ridership (2021)
Ashland	Cardinal	3x/week	1,165
Fulton	City of New Orleans	Daily	1,864
Maysville	Cardinal	3x/week	1,174
South Shore-South Portsmouth	Cardinal	3x/week	643
<b>TOTAL</b>			<b>4,846</b>

Source: Amtrak<sup>4</sup>

Amtrak previously operated a third route in Kentucky, known as the Kentucky Cardinal, with service between Chicago, Illinois and Louisville, Kentucky via Indianapolis, Indiana. Amtrak discontinued the Kentucky Cardinal in 2003. Amtrak Thruway Connecting Service offers bus services between Louisville's Greyhound station and the Indianapolis Amtrak station.

In 2021, Amtrak proposed reinstating intercity passenger rail service between Chicago, Indianapolis, and Louisville as part of its Amtrak Connects US vision.<sup>5</sup> In 2023, this corridor was accepted into the FRA Corridor Identification and Development Program (Corridor ID) for detailed service development planning to move forward.

4. Amtrak, Commonwealth of Kentucky Fact Sheet, Fiscal Year 2021. Retrieved from: <https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/KENTUCKY21.pdf>

5. Amtrak, Amtrak Connects US Vision, June 2021. Retrieved from: [https://www.amtrakconnectsus.com/wp-content/uploads/2021/06/Amtrak-2021-Corridor-Vision\\_2021-06-01\\_web-HR-maps-2.pdf](https://www.amtrakconnectsus.com/wp-content/uploads/2021/06/Amtrak-2021-Corridor-Vision_2021-06-01_web-HR-maps-2.pdf)



The urban areas in northern Kentucky have access to Amtrak service at the Cincinnati Union Terminal, directly across the Ohio River. The Cincinnati Union Terminal currently receives service from the Cardinal three times weekly.

### 1.5.2. Freight Rail Services and Initiatives

Kentucky plays an important role in the U.S. rail network. According to the AAR, in 2021 Kentucky ranked 26<sup>th</sup> among all states for total rail mileage, 24<sup>th</sup> for originated carloads/units, and 21<sup>st</sup> for originated tonnage.<sup>6</sup> Kentucky is served by five Class I railroads, one Class II (regional) railroad, and nine Class III (short line) railroads that each provide common-carrier freight transportation with access to the entire North American freight rail network spanning the United States, Mexico, and Canada.<sup>7</sup> The North American rail network is closely integrated with coastal seaports and inland river ports to facilitate import and export of raw materials and finished products to and from overseas trading partners.

Freight rail service is provided exclusively by privately owned railroad companies that own, lease, or have joint-use agreements for all of the track that they operate on. Large Class I railroads typically achieve a sufficient return on investment to maintain rail infrastructure and other assets in a state of good repair to support ongoing operations and are expected to remain self-sufficient or attract additional private investment to meet their capital needs. Regional and short line railroads, by contrast, continue to be faced with unmet needs due to having legacy infrastructure inherited from prior Class I railroad owners where underinvestment or deferral of routine maintenance have created capital improvement backlogs that may potentially exceed the smaller railroads' own funding capabilities.

Current initiatives include ongoing work to ensure that the freight rail network is maintained in a state of good repair and is capable of accommodating loaded railcars with a maximum gross weight of 286,000 lbs. These efforts are being directly supported through recent federal grant awards. There are also initiatives underway to develop customizable industrial sites with direct rail access in order to accommodate new businesses.



Source: Kentucky Transportation Cabinet

6. Association of American Railroads, State Rankings 2021. Retrieved from: <https://www.aar.org/wp-content/uploads/2023/03/AAR-State-Rankings-2021.pdf>

7. Surface Transportation Board Adopts Final Rule Amending Thresholds for Classifying Rail Carriers, April 5, 2021. Retrieved from: <https://prod.stb.gov/news-communications/latest-news/pr-21-16/>

### 1.5.3. Previous Kentucky Rail Studies

#### KENTUCKY FREIGHT PLAN (2022)<sup>8</sup>

The 2022 Kentucky Freight Plan (KFP) approved in May 2023 was designed to supplement the KYTC's 2022 Long-Range Statewide Transportation Plan (LRSTP). The freight plan considers highway, rail, aviation, and waterway needs as they relate to freight transportation and goods movement.

The 2022 KFP serves as an update to the 2017 plan, as such, it includes new State Freight Plan requirements found in the 2021 Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL). A summary of the specific IIJA requirements and where they are addressed in this plan is included as an attachment.

The IIJA requires state freight plans to include supply chain cargo flows, an inventory of commercial ports, findings and recommendations from any multi-state freight compacts, the impacts of e-commerce on freight infrastructure, the considerations of military freight, and an assessment of truck parking facilities in the state.

The Kentucky Freight Plan has a long-term outlook and is intended to serve the needs of the KYTC and its partners to improve freight transportation by accomplishing the following process:

- Documenting freight assets.
- Defining freight goals and performance measures.
- Identifying future needs.
- Recommending strategic initiatives.
- Devising implementation strategies.

#### KENTUCKY RIVERPORTS, HIGHWAY AND RAIL FREIGHT STUDY (2020)<sup>9</sup>

The KYTC Riverports, Highway & Rail Freight Study's focus was to better understand the breadth and depth of Kentucky's multimodal freight infrastructure, recommend a priority list of waterway improvements based on potential return, identify potential partnerships and funding sources, and better communicate overall strengths with businesses who have a need for these services. One of the outcomes was a riverport marketing toolkit for economic development leaders, riverport managers, local governments, and others to use to promote the network for both foreign and domestic commerce.

#### KENTUCKY HIGHWAY-RAIL GRADE CROSSING STATE ACTION PLAN (2022)

The KYTC Division of Right of Way, Utility and Rails recently developed a Highway-Rail Grade Crossing State Action Plan (SAP) that evaluated highway-rail grade crossing safety across the commonwealth and identified actions that could help improve safety at crossings. The FRA required each state to complete and submit an SAP by February 14, 2022.

8. Kentucky Transportation Cabinet, Kentucky Freight Plan, 2022. Retrieved from: <https://transportation.ky.gov/MultimodalFreight/Documents/2022%20Kentucky%20Freight%20Plan.pdf>

9. Kentucky Transportation Cabinet, Kentucky Riverports, Highway and Rail Freight Study, 2022. Retrieved from: <https://transportation.ky.gov/MultimodalFreight/Pages/Kentucky-Riverports,-Highway-and-Rail-Freight-Study.aspx>



# CHAPTER 2

## KENTUCKY'S EXISTING RAIL SYSTEM

### INTRODUCTION

This chapter provides an assessment of Kentucky's existing rail system, describes the current condition and performance of rail operations on the current rail system, and identifies the current needs and opportunities for rail service in Kentucky.

All railroads operating in Kentucky were contacted to provide updated details on their operations, needs, and proposed projects.

### 2.1. DESCRIPTION AND INVENTORY OF KENTUCKY'S EXISTING RAIL SYSTEM

This section provides a detailed analysis of current Kentucky rail assets and rail operations to create a profile of Kentucky freight and passenger rail systems.

#### 2.1.1. Overview of Existing Rail Network

##### FREIGHT RAIL NETWORK

The Kentucky rail network is comprised of approximately 2,800 total active rail miles in 2024. The majority of these rail miles are privately owned and operated by 16 common carrier railroads, including five Class I railroads, one Class II or regional railroad, and 12 Class III or short line railroads.

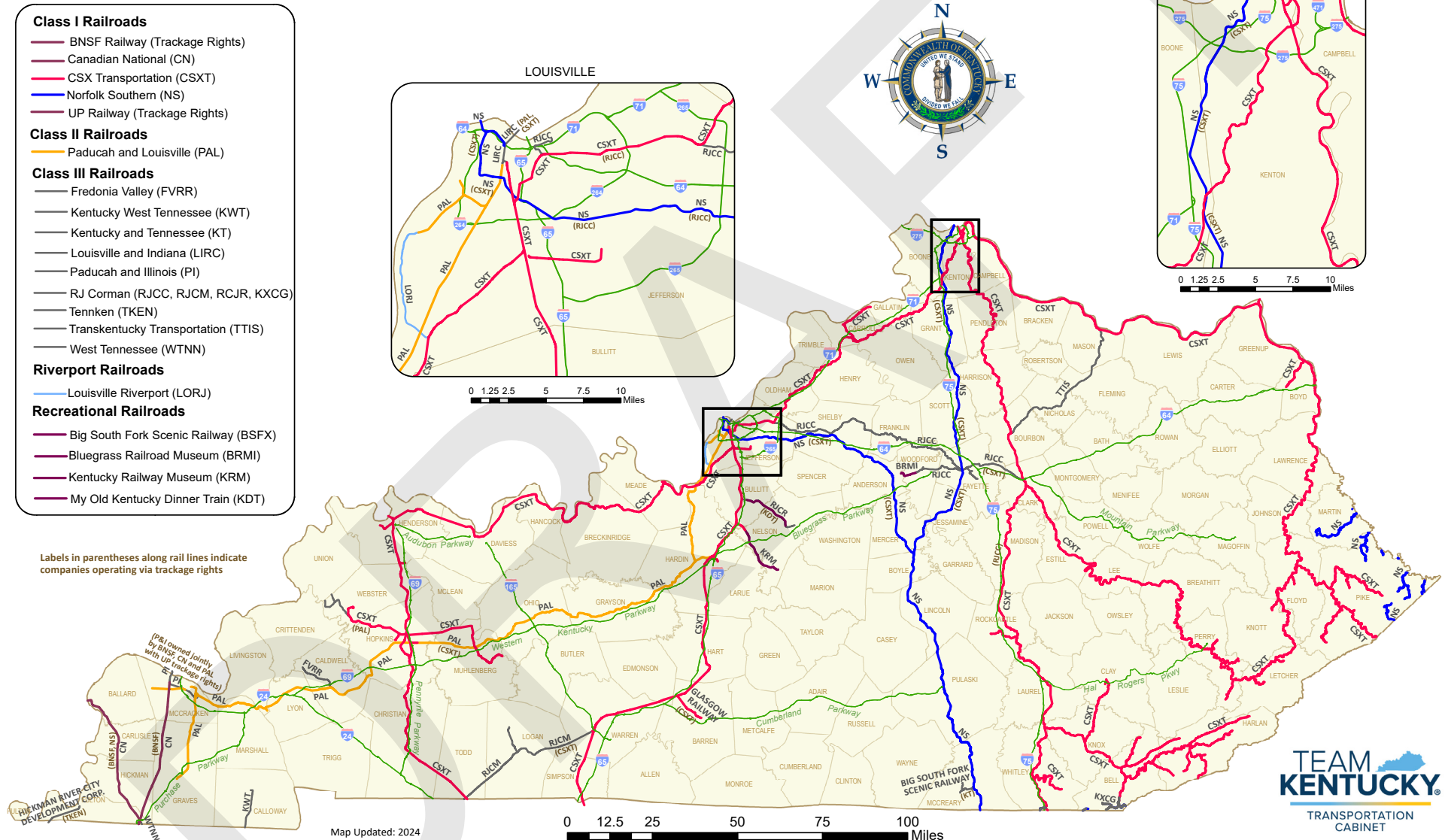
**Figure 2-1** provides an overview of the state's existing rail network.

The freight railroad infrastructure in Kentucky is mapped in **Interactive Application 2-1**.

**Table 2-1** illustrates the rail mileage owned and operated (via lease or trackage rights) for each of these railroads in Kentucky as of 2024. This table does not include United States Department of Defense (USDOD) railroad facilities at Fort Knox (7 miles), Fort Campbell (20 miles), or Blue Grass Army Depot (23 miles).

Figure 2-1. Active Rail Lines in Kentucky

# KENTUCKY ACTIVE RAIL LINES



Source: Kentucky Transportation Cabinet, 2024

Table 2-1. Kentucky Freight Railroad Network Summary

Railroad	Reporting Mark	Railroad Classification	Route Miles Owned in Kentucky	Trackage Rights Miles in Kentucky
BNSF Railway	BNSF	I	0	85
Canadian National Railway	CN	I	86	0
CSX Transportation	CSX	I	1,492+17*	49
Norfolk Southern Railway	NS	I	366	63
Union Pacific Railroad	UP	I	0	12
Paducah & Louisville Railroad	PAL	II	265	15
Fredonia Valley Railroad	FVRR	III	10	0
Kentucky and Tennessee Railway	KT	III	0	8
Kentucky and West Tennessee Railway	KWT	III	12	0
Louisville & Indiana Railroad	LIRC	III	4	0
Paducah & Illinois	PI	III	15	0
RJ Corman – Bardstown Line	RJCR	III	20	0
RJ Corman – Central Line	RJCC	III	114	0
RJ Corman – Memphis Line	RJCM	III	63	0
RJ Corman – Knoxville and Cumberland	KXCG	III	22	0
TennKen	TKEN	III	12	0
Transkentucky Transportation	TTIS	III	50	0
West Tennessee Railroad	WTNN	III	1	0
Louisville Riverport	LORJ	N/A	13	0

\*Note 1: CSX mileage includes the 17-mile Carrollton Railroad, a CSX subsidiary.

\*\*Note 2: NS no longer leases the CNO&TP Railroad Corridor from the City of Cincinnati as it completed the purchase of the corridor in 2024.

### Class I Railroads

As of 2024, Class I railroads are defined as those railroads that have an annual carrier operating revenue of \$1.032 billion or more, according to the Surface Transportation Board (STB).<sup>1</sup> There are seven Class I railroads in the U.S. and Canada, some of which also have transportation linkages to Mexico. Five of these Class I railroads have connections to Kentucky.

1. U.S. Surface Transportation Board, Economic Data, Revenue Deflators and Classification Thresholds. Retrieved from: [https://www.stb.gov/reports-data/economic-data/#:~:text=Current%20thresholds%20establish%20Class%20I,revenue%20less%20than%20\\$2446.3%20million.](https://www.stb.gov/reports-data/economic-data/#:~:text=Current%20thresholds%20establish%20Class%20I,revenue%20less%20than%20$2446.3%20million.)

- **BNSF Railway (BNSF)**

- BNSF is one of the largest Class I railroads in North America in terms of track-miles and market share. BNSF is headquartered in Fort Worth, Texas. As of 2021, BNSF operated about 32,500 miles of track in 28 states and three Canadian provinces. About 23,191 route-miles are owned by BNSF systemwide, with the remainder operated by the railroad pursuant to trackage rights or leases.
- The Burlington Northern Santa Fe Railway, now rebranded as BNSF Railway, was created on September 22, 1995, from the merger of the Burlington Northern Railroad and the Santa Fe Pacific Corporation (parent company of the Atchison, Topeka & Santa Fe Railway), further expanding the reach of Kentucky rail shippers to a greater array of origins and destinations in the larger combined network. Since 2010, BNSF has been a subsidiary of Omaha, Nebraska-based investment firm, Berkshire Hathaway.
- BNSF owns 0 miles of track in Kentucky, but accesses Paducah, Kentucky from Illinois via trackage rights over the CN.

- **Canadian National Railway (CN)**

- Canadian National (CN) is a North American rail carrier based in Montreal, Quebec, Canada. CN operates approximately 20,000 route-miles of track spanning both Canada and the central United States.
- CN gained entry to Kentucky through its 1998 acquisition of the Illinois Central Railroad (IC) which had constructed a principal main line route spanning from Chicago, Illinois to New Orleans, Louisiana via Memphis.
- CN owns 86 miles of track in Kentucky.

- **CSX Transportation (CSX)**

- Headquartered in Jacksonville, Florida, the CSX Transportation (CSX) network encompasses approximately 36,752 track miles in 23 states, the District of Columbia, and Canada, serving 70 ports and major markets in the eastern U.S. CSX serves thousands of production and distribution customers through connections to more than 240 short line and regional railroads.
- CSX has a large presence in Kentucky. The Kentucky portion of CSX, as it stands today, mainly consists of lines that were once operated by the Louisville and Nashville Railroad (L&N).
- CSX owns 1,509 miles of track in Kentucky.



Source: Kentucky Transportation Cabinet

- **Norfolk Southern Railway (NS)**
  - Headquartered in Atlanta, Georgia, the Norfolk Southern (NS) network encompasses approximately 36,119 track miles in 22 states and the District of Columbia, serving 43 ports and major markets in the eastern United States. NS has thousands of production and distribution customers through connections to more than 262 short line and regional railroads.
  - The Kentucky portion of the NS system, as it stands today, consists of the surviving lines that were primarily operated by the Southern Railway (SOU). The NS network has coverage mainly in central Kentucky. NS does not serve western Kentucky.
  - NS owns 154 miles of track in Kentucky.
- **Union Pacific Railroad (UP)**
  - Union Pacific Railroad (UP) possesses a North American rail network that encompasses 32,452 route-miles of track in 23 states. UP's network links Pacific Coast and Gulf Coast ports with gateways in the Midwest, providing access to other rail carriers serving the eastern United States. UP also operates several routes to key Mexican and Canadian gateways. The Omaha, Nebraska-based railroad handled 8.0 million carloads in 2021 and invested \$3 billion into its network.
  - UP owns 0 route-miles of track in Kentucky, but it interchanges unit coal trains with the Paducah & Louisville Railway (PAL) in Paducah, Kentucky.

#### Class II Railroads

As of 2024, the STB defines Class II railroads as those earning annual operating revenue between \$46.3 million and \$1.032 billion.

- **Paducah & Louisville Railway (PAL)** – The Paducah & Louisville Railway (PAL) is a Class II regional railroad operating in central and western Kentucky. PAL was established in 1986 through acquisition of a line owned by the Illinois Central Railroad. PAL operates over 280 route miles within Kentucky. In Paducah, PAL is part owner of the Paducah & Illinois Railroad (PI) and interchanges with BNSF, CN, and UP in Paducah. PAL also interchanges with CSX and NS in Louisville.

#### Class III Railroads

- **Fredonia Valley Railroad (FVRR)** – The Fredonia Valley Railroad (FVRR) is an industrial railroad that operates 10 route miles in Western Kentucky. It is owned by Holcim US, which owns and operates a rock quarry in Fredonia. The FVRR interchanges with the PAL in Princeton.
- **Kentucky and Tennessee Railway (KT)** – The Kentucky and Tennessee Railway (KT) is a Class III short line railroad that operates 8 route miles of track out of Stearns, Kentucky in McCreary County. In addition to serving freight shippers in Stearns, the KT operates the Big South Fork Scenic Railway over its line as a tourist attraction.
- **Kentucky West Tennessee Railway (KWT)** – The Kentucky West Tennessee Railroad (KWT) is a Class III short line railroad that owns and operates 12 route miles of track in Kentucky and 72 total route miles, with its principal line extending north from Bruceton, Tennessee to Murray, Kentucky. The KWT is owned by Genesee and Wyoming, a short line railroad holding company.



- **Louisville & Indiana Railroad (LIRC)** – The Louisville & Indiana Railroad (LIRC) is a Class III short line railroad that operates 4 route miles in Kentucky and 113 total route miles. The LIRC route spans from Indianapolis, Indiana to Louisville, Kentucky. LIRC is a subsidiary of Anacostia Rail Holdings. Of note, the LIRC hosts CSX freight trains between Indianapolis and Louisville as overhead traffic in addition to its own local freight operations.
- **Paducah & Illinois (PI)** – The Paducah and Illinois (PI) is a Class III short line railroad that owns 15 route miles in the vicinity of Paducah, Kentucky, which includes an important crossing of the Ohio river into Illinois. The PI is equally owned by CN, BNSF, and PAL. Additionally, UP has trackage rights over the PI to access Paducah via Illinois.
- **RJ Corman (RJC)** – The RJ Corman Railroad Group owns four Class III short line railroad properties in Kentucky:
  - RJ Corman Bardstown Line (RJCR) — The RJ Corman Bardstown Line (RJCR) is a Class III short line railroad that owns and operates 20 route miles between Bardstown Junction (near Shepherdsville, Kentucky) and Bardstown, Kentucky. The RJCR interchanges with CSX at Bardstown Junction.
  - RJ Corman Central Kentucky Lines (RJCC) — The RJ Corman Central Kentucky Lines (RJCC) is a Class III short line railroad that owns and operates 114 route miles between Louisville, Kentucky and Lexington, Kentucky. The RJCC interchanges with CSX in Louisville and Winchester and with NS in Lexington.
  - RJ Corman Memphis Line (RJCM) – The RJ Corman Memphis Line (RJCM) is a Class III short line railroad that owns and operates 113 route miles between Bowling Green, Kentucky and Cumberland City, Tennessee (63 route miles in Kentucky). The RJCM interchanges with CSX at Bowling Green.
  - RJ Corman Knoxville and Cumberland Gap Line (KXCG) – The RJ Corman Knoxville and Cumberland Gap Line (KXCG) is a Class III short line railroad that owns and operates 131 route miles in Northern Tennessee and Southern Kentucky (approximately 22 miles are in Kentucky). The KXCG line was acquired in 2022 from NS. It interchanges with NS in Middlesboro and Knoxville, TN.



Source: Kentucky Transportation Cabinet

- **TennKen (TKEN)** – The TennKen Railroad (TKEN) is a Class III short line railroad established in 1983 that operates between Dyersburg, Tennessee and Hickman, Kentucky. The TKEN owns and operates 12 route miles within Kentucky and interchanges with CN at Dyersburg. The TKEN is owned by the West Tennessee Railroad.
- **Transkentucky Transportation (TTIS)** – Transkentucky Transportation (TTIS) is a Class III short line railroad which owns and operates 50 route miles between Paris and Maysville, Kentucky. TTIS interchanges with CSX at Paris.
- **West Tennessee Railroad (WTNN)** – The West Tennessee Railroad (WTNN) is a Class III short line railroad that operates between Corinth, Mississippi and Fulton, Kentucky. The WTNN owns and operates only one mile of track within Kentucky, reaching Fulton. The WTNN interchanges with CN at Fulton.

#### Non-Operating Rail Owners

- **Louisville Riverport (LORJ)** – The Louisville Riverport Authority owns 13 miles of track in and around the Louisville Riverport complex. Freight switching operations on the property are performed by CSX, NS, and PAL. One locomotive is operated by a tenant on the line, the Port of Louisville.

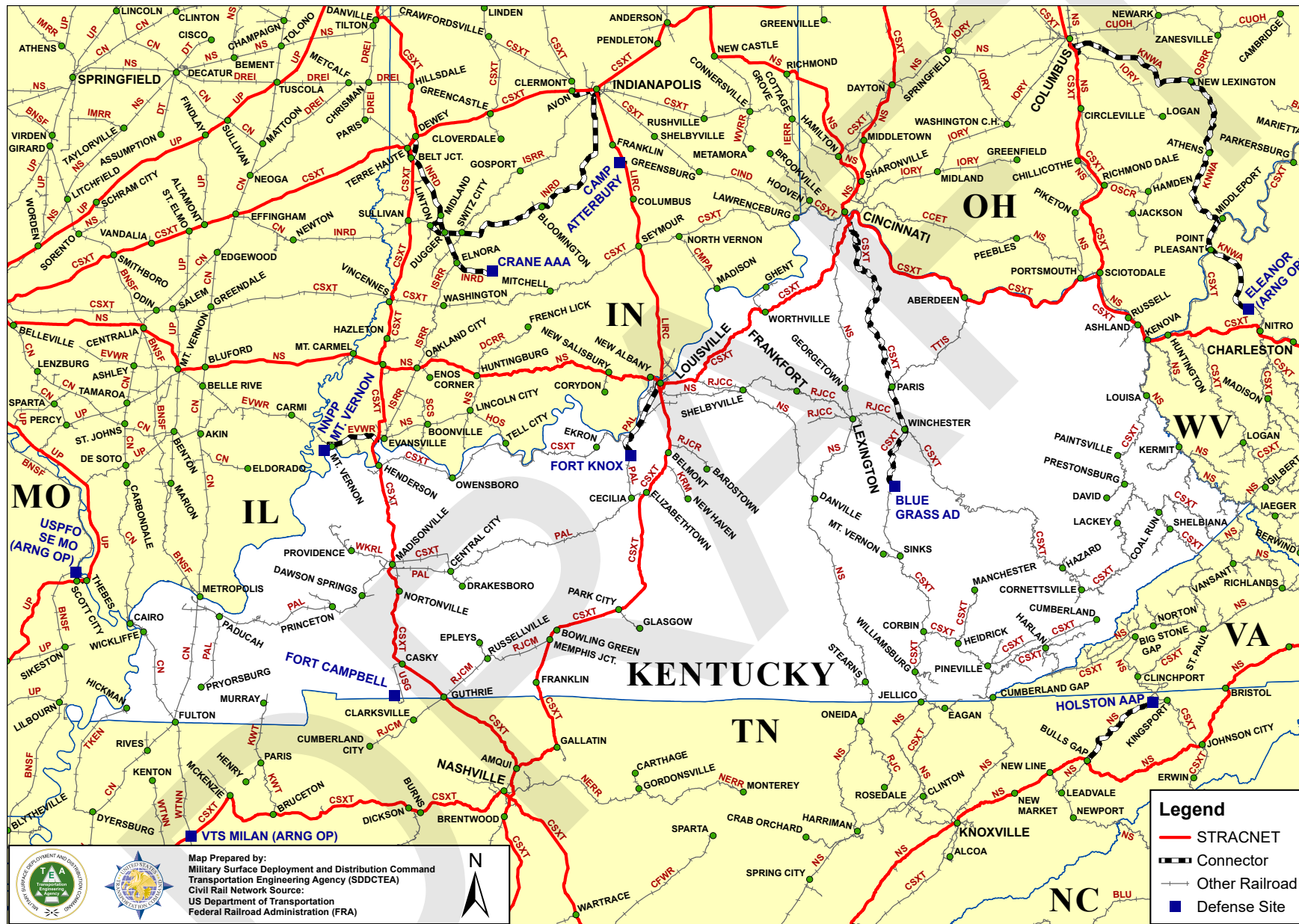
#### Strategic Rail Corridor Network (STRACNET)

The United States Department of Defense (DoD) has designated the Strategic Rail Corridor Network (STRACNET), a network of 30,000 miles of rail corridors that are considered important to national defense. The STRACNET was developed through analysis of mobilization needs, deployment needs, and peacetime traffic. The FRA has designated a rail main line to satisfy each STRACNET corridor. Also designated are connector rail lines to provide links between the STRACNET and military installations or activities that require rail service.

STRACNET lines are required to be maintained to at least FRA Track Class 2 Standards, with a minimum speed of 25 mph for freight. The low-density lines connecting STRACNET routes to military installations are to be maintained to at least FRA Track Class 1 Standards with a minimum speed of 10 mph for freight. STRACNET lines must be able to accommodate railcars that are 12 feet wide and 16.92 feet tall.

STRACNET main lines pass through Kentucky, and connectors provide rail access to Fort Knox, Fort Campbell, and the Blue Grass Army Depot. **Figure 2-2** shows the state's STRACNET lines and military installations in Kentucky.

Figure 2-2. STRACNET Rail Lines in Kentucky



Source: Military Surface Deployment and Distribution Command Transportation Engineering Agency (SDDCTEA), 2024

## PASSENGER RAIL NETWORK

Passenger rail service in Kentucky consists of intercity passenger rail service provided by Amtrak and recreational excursion trains provided by four different tourist/excursion train operators.

Amtrak passenger trains serve four cities in Kentucky via two long-distance train routes. (Long-distance trains are Amtrak passenger trains that operate on routes of more than 750 miles in length.) Amtrak's long-distance Cardinal operates three days per week in each direction between Chicago, Illinois, and New York, New York, via Cincinnati, Ohio, and stops in the Kentucky cities of Ashland, South Shore-South Portsmouth, and Maysville. Northern Kentucky urban areas are served by the stop at the Cincinnati Union Terminal, directly across the Ohio River. The long-distance City of New Orleans operates daily between Chicago, Illinois, and New Orleans, Louisiana, and stops in the city of Fulton, Kentucky. In addition, Amtrak Thruway motorcoach service (provided by Greyhound) is provided at Louisville, Kentucky, on a route connecting Nashville, Louisville, and Indianapolis to Chicago. **Figure 2-3** shows the two Amtrak long-distance train routes, five Amtrak passenger rail stations, and four tourist railroads in Kentucky.

The passenger rail infrastructure in Kentucky is mapped in **Interactive Application 2-2**.



Figure 2-3. Passenger Rail Lines in Kentucky

# KENTUCKY PASSENGER RAIL LINES



Source: Kentucky Transportation Cabinet, 2024

## Historical Intercity Passenger Rail Operations

By the end of the 19th century, railroads had established themselves as the predominant mode for transporting people and freight by land. However, with the improvement of roadways and the affordability of automobiles, starting in the 1920s, passenger rail ridership in Kentucky and across the country began to decline. Following World War II, national transportation policy emphasized the development of federally funded air and highway systems, which provided public access to transportation infrastructure and which could be used by both individuals and private transportation providers. With a broader range of transportation options available, ridership on passenger trains declined even further. In 1967, the U.S. Postal Service discontinued many of its mail haulage contracts with railroads, opting to use air and truck transportation instead. The loss of the mail haulage contracts, which had contributed needed revenue to passenger trains, resulted in the discontinuance of numerous passenger services that year.

Despite the emergence of alternative, government-funded passenger transportation systems and the resulting loss of passenger train revenue, railroad companies often were required to maintain passenger rail services and routes, regardless of their financial performance. Under regulations imposed by the Interstate Commerce Commission (ICC), railroads that intended to terminate a passenger service had to go through a petition process. The ICC would then investigate whether or not the service was still required for the public convenience and necessity, and then issue a ruling. Throughout the 1960s, railroads worked through the petition process to end passenger trains.

Ultimately, Congress acted to shift the obligation for providing intercity passenger services from the private railroads to the National Railroad Passenger Corporation, now known as Amtrak, under the Rail Passenger Service Act of 1970. The act was signed into law by President Richard Nixon, and Amtrak began service on May 1, 1971, with 185 trains serving 314 destinations.

## Amtrak Operations

Amtrak provides intercity passenger rail services connecting more than 500 communities in 46 states, the District of Columbia, and three Canadian provinces. In addition to its intercity services, Amtrak also provides contract commuter rail service for state and regional authorities. In 1971, Amtrak's nationwide monthly ridership was over 1.2 million passengers, or over 14.8 million passengers annually. In Fiscal Year (FY 2023), with intercity travel still rebounding from the COVID-19 pandemic, Amtrak's monthly ridership had grown to more than 2.3 million passengers, on average, and more than 28.5 million passengers annually. By comparison, the Kentucky total of 8,774 Amtrak passengers in FY 2023 represented 0.03 percent of Amtrak's total ridership that year.

The two Amtrak trains that operate in Kentucky are long-distance trains with routes exceeding 750 miles. Long-distance trains are funded predominantly by Amtrak through annual grants provided by



Source: Kentucky Transportation Cabinet

Congress and administered by the Federal Railroad Administration. Congress also provides funding to Amtrak for operations and maintenance along the Northeast Corridor. This is an electrified, multiple-track rail line between Washington, D.C. and Boston, Massachusetts, with connecting branch lines, that is primarily owned by Amtrak. In accordance with the Passenger Rail Investment Act of 2008 (PRIIA), states are responsible for funding the operation of Amtrak trains on routes of 750 miles or less. There are no state-supported Amtrak passenger services in Kentucky.

Ninety-seven percent of the route-miles traveled by Amtrak trains are on tracks owned by other entities, such as freight railroads, commuter railroads, or public agencies, which are collectively referred to as hosts.<sup>2</sup> In most cases, hosts operate, dispatch, and maintain the tracks that Amtrak trains use, and Amtrak pays the hosts for the incremental costs incurred by Amtrak's use of the tracks and other associated resources or services.

### Amtrak Trains Serving Kentucky

- Cardinal** – Amtrak's long-distance Cardinal train operates three days per week in each direction between Chicago and New York City over a route approximately 1,147 miles long, of which approximately 151 miles are in Kentucky. The principal intermediate cities served by the Cardinal are Indianapolis, Indiana, Cincinnati, Ohio, Charleston, West Virginia, White Sulphur Springs, West Virginia, Charlottesville, Virginia, and Washington, D.C. The Cardinal takes its name from the state bird of six states (including Kentucky) that are served by the train. In Kentucky, the Cardinal follows the south bank of the Ohio River and makes three station stops, in the cities of Maysville, South Shore-South Portsmouth, and Ashland. The Cardinal uses tracks that are owned and operated by CSXT while traveling in Kentucky. Under the current schedule (in effect in early 2024), the train has a scheduled end-to-end trip time of 28 hours, 15 minutes westbound and 27 hours, 28 minutes eastbound. The westbound Cardinal, Amtrak train No. 51, departs New York City in the early morning on Sunday, Wednesday, and Friday, operates through Kentucky during the late evening hours on Sunday, Wednesday, and Friday, and the No. 51 arrives in Chicago at mid-morning the following day. The eastbound Cardinal, Amtrak train No. 50, departs Chicago in the early evening and makes overnight stops in Indianapolis and Cincinnati prior to operating through Kentucky during the early morning hours on Sunday, Wednesday, and Friday. After spending the rest of the day traveling eastward,



Source: Kentucky Transportation Cabinet

2. <https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/reports/Amtrak-General-Legislative-Annual-Report-FY2025-Grant-Request.pdf>



the Cardinal arrives in New York in the late evening on Sunday, Wednesday, and Friday. The Cardinal operates with single-level coaches, a café car, a sleeping car, and a baggage car.

- **City of New Orleans** – The City of New Orleans train operates daily in each direction, making an overnight trip between Chicago and New Orleans over a route approximately 934 miles long, of which approximately 41 miles are in Kentucky. The principal cities served by the City of New Orleans are Champaign-Urbana, Illinois, Carbondale, Illinois, Memphis, Tennessee, Jackson, Mississippi, and Hammond, Louisiana. The train's name was made famous in a hit song written and first recorded in the early 1970s. The train serves one station in Kentucky, in the city of Fulton, stopping both ways in the middle of the night. The City of New Orleans uses tracks that are owned and operated by Canadian National Railway for nearly its entire route. Under the current schedule (in effect in early 2024), the train has a scheduled end-to-end trip time of 19 hours, 42 minutes southbound and 19 hours, 30 minutes northbound. The southbound City of New Orleans, Amtrak train No. 59, departs Chicago in the evening and arrives at New Orleans in the afternoon on the following day. The northbound City of New Orleans, Amtrak train No. 58, departs New Orleans at midday and arrives in Chicago the next morning. The City of New Orleans operates with double-deck Superliner equipment that includes coaches, a diner-lounge car, and sleeping cars.
- **Kentucky Cardinal** – Between 1999 and 2003, Amtrak also operated the Kentucky Cardinal, which ran daily between Louisville and Chicago, on an overnight trip by way of Jeffersonville and Indianapolis, Indiana. (When service first began in December 1999, the train ran only from Jeffersonville to Chicago. In December 2001, the train was extended to Louisville's Union Station, its intended southern terminus.) The Kentucky Cardinal was combined with the Cardinal between Indianapolis and Chicago on the three days per week that the Cardinal operated and ran as a standalone Louisville-Chicago train on the other days. The service was ultimately discontinued in July 2003, owing to delays crossing the Ohio River, low track speeds, and low revenue and ridership. Riders in Louisville may now take a connecting Amtrak Thruway bus to Indianapolis to meet the Cardinal.

#### Amtrak Thruway Bus Services

Amtrak Thruway motorcoach services, operated by Greyhound, provide bus connections from Amtrak stations to other communities not currently served by Amtrak trains. Guaranteed connections to an Amtrak train, through-fares, and common ticketing are provided in most cases. In Kentucky, Amtrak provides a Thruway bus connection at Louisville, on a bus route between Nashville and Chicago, with additional intermediate stops at Indianapolis, and Lafayette. Buses operate twice per day in each direction, stopping at the Louisville Greyhound Station on West Broadway, with one bus providing daytime service along the route and a second bus making an overnight trip.

#### Recreational Railroads and Excursion Trains

Four recreational/excursion trains operate in Kentucky, as described below.

- **Big South Fork Scenic Railway** – Located in Stearns, Kentucky, the Big South Fork Scenic Railway is an excursion railroad that operates on seven miles of Kentucky & Tennessee Railway trackage, taking passengers on a 14-mile round-trip tour that passes through the Daniel Boone National Forest and the Big South Fork National River and Recreation Area. The rail line is owned by the McCreary County Heritage Foundation in McCreary County. Excursion trains



make nonstop trips lasting 45 minutes in each direction that include a narrated history of the area. (Trains no longer stop at the Barthell Coal Camp.) Trains operate from April through December.<sup>3</sup> The railroad also operates seasonal special event trains, such as the Polar Express train ride. The first mile of the train's route uses Kentucky & Tennessee Railway yard track to connect the station at Stearns to the Heritage Foundation mainline track.



- **Bluegrass Scenic Railroad and Museum** – Located near downtown Versailles, the Bluegrass Scenic Railroad and Museum offers an 11-mile round-trip ride through the Bluegrass Region of Kentucky, from Versailles to the Kentucky River, along the only railroad line in Kentucky not used to transport freight. The museum owns and maintains a 5.5-mile rail line, which was the former main line of the Louisville Southern Railroad (a Norfolk Southern predecessor) connecting Louisville and Lexington. The line passes horse farms, then descends through deep limestone cuts to the palisades of the Kentucky River, where travelers may disembark to photograph the famed Young's High Bridge, built in 1889 to span the river at Tyrone, and see the Wild Turkey Distillery on the opposite bank. In addition to train rides, the museum exhibits include a display car. Regularly scheduled trains operate 90-minute round-trip excursions on weekends from May through October.<sup>4</sup> The railroad also hosts special events, including Easter Bunny trains, pumpkin patch trains, and Santa Claus trains. Through a partnership with Rail Explorers, visitors can also participate in seasonal scheduled rail bike tours of the line.
- **Kentucky Railway Museum** – Located in New Haven, Kentucky, the Kentucky Railway Museum owns 17 miles of track that had been part of the Lebanon Branch, one of the oldest and most historic segments of the former Louisville & Nashville Railroad (a CSX predecessor). The line follows the Rolling Fork River Valley through Nelson and LaRue Counties, and passes the home of the Log Still Distillery campus. Two types of regular excursions are offered, a 22-mile, 90-minute round trip from New Haven to Boston, and a 45-minute round trip from New Haven to Gethsemane. The railroad also offers special event trains, a Day Out with Thomas, train robberies, pumpkin patch expresses, Santa Trains, wine and cheese trains, and more. The museum in New Haven has more than 100 pieces of rolling stock (cars, locomotives, and other railroad equipment), as well as train memorabilia, artifacts, and a gift shop. Train rides are offered from April through mid-December, but the museum is open year-round.<sup>5</sup>

3. Big South Fork Scenic Railway, <https://bsfsry.com/>. Accessed March 2024.

4. Bluegrass Scenic Railroad and Museum, <https://www.bluegrassrailroad.com/>. Accessed March 2024.

5. Kentucky Railway Museum, <https://www.kyrail.org/>. Accessed March 2024.

- **My Old Kentucky Dinner Train** – Located in Bardstown, Kentucky, My Old Kentucky Dinner Train operates on the R.J. Corman Railroad Group's Bardstown Line in Nelson County, offering lunch and dinner excursions aboard restored 1940s dining cars, featuring gourmet meals and scenic views of the Kentucky countryside. The line was originally constructed by the Bardstown and Louisville Railroad in 1860, then was acquired by the Louisville & Nashville Railroad in 1864. R.J. Corman purchased the 20-mile branch line from CSXT in 1987 and established the dinner train in 1988. Dinner trains make a 32-mile round trip, originating at the historic Bardstown depot built in 1860, then traveling through Bernheim Forest and the Jim Beam property to Limestone Springs, and then returning to Bardstown. Lunch train excursions last 2 hours and dinner train excursions last 2.5 hours. My Old Kentucky Dinner Train regularly schedules excursions on Fridays and Saturdays. Schedules change seasonally, and some special excursions are offered on other days.<sup>6</sup> In addition to lunch and dinner excursions, murder mystery trains, bourbon excursions, special event trains, and special children's excursions are also operated.

## RAILROAD ABANDONMENTS AND RAILBANKED LINES

This section identifies the recent abandonment filed through the STB, and known railbanked line segments and major rail trails.

Abandoned railroad corridors and rails-to-trails corridors in Kentucky are mapped in **Interactive Application 2-3**.

An abandoned rail line is a railroad right of way corridor on which rail service has been discontinued and the STB has approved the abandonment. If an abandoned rail corridor is not preserved, the property may revert to adjacent landowners or may be sold and used for other purposes, rendering the corridor no longer intact. Loss of the linear integrity of the rail corridor may render the corridor unsuitable for any potential future reinstatement of rail operations. Railbanking is a method of preserving rail right of way for interim trail use while giving the railroad the option to potentially reinstall the tracks and reactivate service at a later date. Once the abandonment or railbanking process is complete and track materials are removed, a trail can be created along the corridor.

As of 2024, Kentucky has more than 2,400 miles of active main line track, down from over 4,000 miles at its peak in the 1930s, resulting in more than 1,000 miles of abandoned railroad beds in the state.<sup>7</sup> In some cases, the lines supported industries that no longer exist. In other cases, the condition of the lines deteriorated to such an extent that restoration was considered uneconomical by rail line owners. State regulations regarding the abandonment process in Kentucky are covered in KRS 277.400 and KRS 277.402. More information on alternatives to abandonment is available on the Rails-to-Trails Conservancy's website – typically, railbanked corridors are converted to multi-use trails or pathways for non-motorized users.<sup>8</sup>

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6. My Old Kentucky Dinner Train, <https://www.kydinnertrain.com>. Accessed March 2024.

7. Kentucky's Abandoned Railroad Corridor Inventory Project

8. <https://www.railstotrails.org/>

## Railroad Abandonments

In order to officially abandon a rail line, railroads must either go through the STB abandonment procedure or be granted an exemption from it. An exemption may be granted when the railroad can demonstrate that the line has been out of service for two years, any overhead freight traffic on the line has been or can be rerouted and no complaints over service are pending. An exemption can also be granted for rail lines with so little traffic on the line that the railroad cannot make a profit on it. If a railroad is granted an exemption, the requirement of public notification of intent to abandon is removed. Procedures are available for parties who wish to challenge the STB exemption.

Corridors that have been abandoned through the STB process within the last decade include the following:

- **CSX Merna Spur (Abandonment)** – On July 18, 2017, CSX filed a Petition for Exemption with the STB to abandon common carrier service on an approximately 1.6-mile rail line on its Northern Region, Huntington Division, CY Subdivision, Engineering Appalachian Division, also known as the Merna Spur. This section is between milepost OMV 250.1, at the end of the line, and milepost OMV 248.5 at the wye connecting to the CSXT Glidden Siding in Harlan County, Kentucky.<sup>9</sup> The spur is now privately owned by the shipper that it serves and the track remains in place.

## Railbanked Corridors and Rails-to-Trails

Recreational trails along former railroad rights-of-way in Kentucky include the following:

- **Benham Trail (Harlan County)** – The Benham Trail, also known as the Benham Walking Trail and Coal Miners Walking Trail is located in Harlan County, with approximately 2.5 miles of crushed stone trail allowing walking, horseback riding, and biking on an abandoned CSX line.
- **Bernheim Bike Hike Trail (Bullitt County)** – The Bernheim Hike Bike Trail is a rail-with-trail that runs along Lick Creek and generally parallels KY 245. It is a 3.2-mile trail allowing biking and walking with endpoints at the Bernheim Forest and KY 1604 at Lotus. The surface of this trail is crushed stone.
- **Big Four Bridge, (Louisville, Jefferson County)** – The Louisville Big Four Bridge is a former Penn Central railroad truss bridge that crosses the Ohio River, connecting Louisville with



9. U.S. Surface Transportation Board, Docket No. AB-55 (Sub-No. 773X) CSX TRANSPORTATION, INC. -ABANDONMENT EXEMPTION-IN HARLAN COUNTY, KY. Retrieved from: <https://dcms-external.s3.amazonaws.com/MPD/17248/B1258536A631830A85258161006BD7B9/243963.pdf>



Jeffersonville, Indiana. It has been converted to a multi-use path, allowing only bicyclists and pedestrians. The bridge is 0.5 mile in length.

- **Blue Heron Trail (McCreary County)** – This rail trail is part of the Blue Heron Loop trail in the Big South Fork National River and Recreation Area. The Blue Heron Loop is a 6.5-mile hiking trail with about two miles of rail trail on former Big South Fork Railroad railbed. The trail surface type is unknown.
- **Brighton East Rail Trail (Fayette County)** – The Brighton East Rail Trail, located on the east side of Fayette County, is 1.8 miles long. It begins at the intersection of Man O' War Boulevard and Bryant Road and ends at Walnut Grove Lane. It is a 12-foot-wide asphalt/concrete trail intended for non-motorized traffic on former CSX railbed. It was partially funded by KYTC via FHWA Transportation Enhancement Funds.
- **Cadiz Railroad Trail (Trigg County)** – The Cadiz Railroad Trail, located in downtown Cadiz, is 1.5 miles long. The surface is asphalt, and it is used for hiking, jogging, bicycling, rollerblading, and skateboarding. This rail trail is the site of the former Cadiz Railroad that connected with the Illinois Central and Louisville & Nashville Railroads. The rail trail was dedicated in 1989, making it the first rail trail in Kentucky.
- **Carter County Rail Trail (Carter County)** – The Carter County Rail Trail consists of 0.5 mile of rail trail located in Olive Hill on the site of the former Eastern Kentucky Railroad allowing walking and biking. The city of Olive Hill was selected and approved for Recreation Transportation Program funding in 2012 to provide maintenance of the existing trail and acquire 0.75 miles of additional rail trail.
- **Cathy Crockett Memorial Trail (McCreary and Pulaski Counties)** – The Cathy Crockett Memorial Trail begins in Sloans Valley and ends in McCreary County. The trail is currently about 1.5 miles long with a gravel surface. Most of this trail is on remnants of the old Cincinnati-Southern rail bed and is used for walking, running, and bicycling.
- **Clarks River National Wildlife Refuge Rail Trail (Marshall County)** – This crushed stone rail trail is located in the city of Benton and runs along 1.5 miles of the Clarks River used for walking on the site of the former Western Kentucky Railway.
- **Clear Creek Trail (Bell County)** – The Clear Creek Trail traverses through the campus of Clear Creek Baptist Bible College, in the Kentucky Ridge State Forest, adjacent to the Pine Mountain State Resort Park. There are approximately 1.6 miles of existing crushed stone trail along what was formerly a spur from the Louisville & Nashville Railroad. It is commonly used by hikers, runners, mountain bikers, and fishermen.
- **Dawkins Line Rail Trail (Breathitt, Johnson, and Magoffin Counties)** – The Dawkins Line Rail Trail is a 36-mile asphalt and crushed stone rail trail stretching from Hager Hill in Johnson County to Evanston in Breathitt County. The entire trail is now opened to hikers, cyclists, and horseback riders. The rail trail follows the old Dawkins Line railroad bed, most recently owned by the R.J. Corman Railroad Group before the company abandoned it in 2004. The Dawkins Line Rail Trail is the largest rail-to-trail in the state and is open year-round.
- **Fredonia Trail (Caldwell County)** – The Fredonia Trail is a 0.2-mile paved rail trail located in Caldwell County. This trail is open to waking and is on the former Fredonia Valley Railroad line.
- **Highway 109 Rail Trail (Webster County)** – This rail trail is crush-stone and 0.5 miles in length



and lies within the City of Wheatcroft. This trail is open to walking and biking and is on a former CSXT line.

- **Hopkinsville Rail Trail (Christian County)** – On September 27, 2014, 3.15 miles of this proposed 15-mile trail using the abandoned Fort Campbell rail spur owned by the US Army was opened for public use. Approximately 4.75 miles are currently open. It runs from the Hopkinsville Riverwalk trailhead at North Street southward to Pardue Lane. This trail is paved with concrete pavement and used for biking, walking, and skating.
- **Industrial Park Rail Trail (Madison County)** – The Industrial Park Rail Trail is a 0.6-mile paved rail trail in Madison County. This trail is on former CSXR railbed and is open to walking. It is also referred to as the Duncannon Walking Trail by the City of Richmond.
- **Lafayette Lochdale Rail Trail (Fayette County)** – The Lafayette Lochdale Rail Trail, located on the south side of Fayette County, is paved and approximately 0.75-miles long. This rail is on former Norfolk Southern railbed and open to biking and walking.
- **Louisville Riverwalk (Jefferson County)** – The Louisville Riverwalk is located in Louisville, predominantly along the Ohio River. This trail is now part of a larger trail, known as the Louisville Loop. The Louisville Loop is an approximately 100-mile trail that is planned to eventually encircle Louisville. The rail trail portion of the plan is 0.5-miles long, adjacent to downtown Louisville along the Ohio River between 16<sup>th</sup> Street and 22<sup>nd</sup> Street. The surface is paved asphalt and concrete and is constructed adjacent to Norfolk Southern rail.
- **Mammoth Cave Hike and Bike Trail (Barren and Edmonson Counties)** – The Mammoth Cave Trail is eight miles long and paved with crushed stone used for walking and biking. A five-mile segment of the trail extends from Park City to Mammoth Cave National Park, and three miles of the trail follow an old rail corridor of the Mammoth Cave Railroad.
- **Marion Crittenden County Park Trail** – This paved trail in the city of Marion is approximately 0.4 mile long and is part of a larger loop trail around the inside of the Marion Crittenden County Park. The trail is used for walking and biking. It is located along a section of rail bed that was operated by the Western Kentucky Railway.
- **Muhlenberg County Rails to Trails (Muhlenberg County)** – This rail trail is located on right of way previously owned by PAL, with the end points in Central City and Greenville. The asphalt paved rail trail is approximately six miles long and is used for biking, walking, and skating.
- **Prestonsburg Passage Rail Trail (Floyd County)** – Occupying a former CSX railroad bed, this paved 8.6-mile-long rail trail meanders between Prestonsburg and the town of David. This rail trail also boasts six restored bridges with one of them featuring the roof and sides of a retired school bus serving as a bridge cover.



- **Purple People Bridge (Campbell County)** – The Purple People Bridge is a 0.3-mile-long bridge across the Ohio River and connects the proposed Ohio River Trail in Cincinnati with the proposed River Path in Kentucky. The bridge is open to pedestrians and bicyclists. On the Cincinnati side, a rail trail connects the Great American Ball Park with the Theodore Berry International Friendship Park and a bike path. The rail bridge was most recently owned by CSX.
- **Riney B Park Trail (Jessamine County)** – This is a one-mile paved and crushed stone rail trail located in Jessamine County is utilized for walking and biking. The trail is located along rail formerly owned by Louisville & Nashville Railroad.
- **Rucker Park Rail Trail (Johnson County)** – This approximately 0.2-mile unpaved rail trail in Johnson County is owned by the Van Lear Historical Society and is a former Chesapeake and Ohio corridor. The trail is used for walking and biking.
- **Sheltowee Trace (McCreary, Lee, and Jackson Counties)** – The Sheltowee Trace is a 307-mile national recreation trail that runs through the Daniel Boone National Forest, Big South Fork National Recreation Area, Natural Bridge, Cumberland Falls, and Pickett State Parks in Kentucky and Tennessee. Currently, 3.6 miles of the trail located in McCreary County, near Whitley City, is a rail trail along Railroad Fork and Barren Fork. The right of way was part of the Barren Fork Coal Camp. It is in Section 30 of Sheltowee Trace and horses are permitted. Another 9.6 miles of rail trail are located in Lee and Jackson counties.
- **South Elkhorn Trail (Lexington, Fayette County)** – This is a 0.4-mile asphalt rail trail that extends from Man O' War Boulevard to Waveland State Historic Site, south of Shillito Park, near the Norfolk Southern railroad tracks on a former Norfolk Southern spur. The trail is utilized for biking, walking, and skating.
- **Stanford Depot and Rail Trail (Lincoln County)** – This is a 0.3-mile asphalt rail trail that extends two city blocks in downtown Stanford. It includes the historic restored Louisville & Nashville Depot. The trail is used for biking, walking, and skating.
- **Sturgis Trail (Union County)** – This paved rail trail is located in southern Union County in the community of Sturgis and is approximately 0.5 mile in length on the former Western Kentucky Railroad. The trail is used for walking and hiking.
- **Town Branch Trail (Fayette County)** – The Town Branch Trail, located on the west side of Fayette County, extends 1.8 miles from Masterson Station to Alexandria Drive. Another section of this trail was completed in 2022 along Manchester St (KY-1681) with an approximate length of 1.2 miles. The trail is asphalt paved and used for biking, walking, and skating.
- **Tradewater (Blackford Bridge) Rail Trail (Webster and Crittenden Counties)** – This rail trail is approximately 0.5 mile in length and utilizes an abandoned Kentucky Western Railroad bridge across the Tradewater River in Blackford, providing pedestrian access for both sides. The Tradewater River separates Crittenden and Webster counties in western Kentucky. This trail is now known as the Veterans Walk of Honor. The project was funded through the KYTC via the FHWA Transportation Enhancements Program.
- **Uniontown Trail (Union County)** – The Uniontown Rail Corridor Trail is an existing 0.35-mile-long asphalt trail that lies in northern Union County in western Kentucky. It is used for walking, jogging, rollerblading, skateboarding, in-line scooters, and bicycling. This trail, located on the former Western Kentucky Railroad, was funded through the KYTC Recreational Trails Program and the KYTC via the FHWA Transportation Enhancements Program.

- **White Plains Trail (Hopkins County)** – This 1.5-mile paved trail is located in White Plains on the former Paducah and Louisville Railway, which lies in southeastern Hopkins County. The trail is used for biking, walking, and skating.
- **Whitesburg Railroad Trail (Letcher County)** – A one-mile asphalt paved rail trail located within the west side of Whitesburg. This trail is located on the former Louisville & Nashville Railroad.
- **Whittleton Branch Trail (Powell County)** – This rail trail is a 1.8-mile asphalt paved section of the Whittleton Branch Trail that begins at the Natural Bridge camping area and extends northward to an intersection with KY 15. This trail is located on the former Lexington & Eastern Railroad and used for walking and biking.
- **Wingo Trail (Graves County)** – The Wingo Trail is located in Graves County in western Kentucky. This rail trail is asphalt paved and 1.3 miles in length and is built on an Illinois Central abandonment. The trail is used for walking and biking.

## 2.1.2. Major Freight and Passenger Terminals

### RAILROAD YARDS AND MAINTENANCE FACILITIES

The major freight railroad yard and maintenance facility infrastructure in Kentucky is mapped in **Interactive Application 2-1**. A list of these major facilities is included below; however, the list does not contain all notable facilities in Kentucky.

#### Canadian National Railway

- Fulton

#### CSX Transportation

- Bowling Green
- Casky
- Corbin
- Decoursey
- Hazard
- Louisville
- Loyall
- Madisonville
- Martin
- Russell
- Shelbyana

#### Norfolk Southern Railway

- Danville
- Georgetown
- Louisville





#### Paducah and Louisville Railroad

- Louisville
- Paducah

### INTERMODAL TERMINALS

#### CSX Transportation

- Louisville

#### Norfolk Southern Railway

- Appliance Park (Louisville)
- Georgetown

### EXISTING PASSENGER FACILITIES

The passenger rail infrastructure in Kentucky is mapped in **Interactive Application 2-2**.

**Table 2-2** provides a profile of the four intercity passenger rail stations in Kentucky. The station types are a mix of historic structures (the Maysville depot was built in 1918 by the Chesapeake & Ohio Railway), utilitarian shelters, and a brand-new station facility in South Shore, which was completed in 2023. Amtrak worked with the City of South Shore on the \$3.5 million station accessibility improvement project, which included constructing a new platform, heated shelter building, ramp, guardrails, signage, lighting, passenger drop off aisle, and upgrades to the parking lot in accordance with the Americans with Disabilities Act (ADA).<sup>10</sup> The new, 230-foot-long concrete platform features a level surface for wheeled mobility devices, strollers and rolling luggage. A new detectable warning system also runs along the full length of the platform and provides a tactile surface detectable by passengers with vision disabilities. Amtrak also installed additional parking lot lighting at the request of the city. All of the Amtrak stations in Kentucky are unstaffed, and do not have Amtrak ticket agents, checked baggage service, or ticketing kiosks. The closest staffed Amtrak station to Kentucky with a ticket office and checked baggage service is Cincinnati Union Terminal in Ohio. At the Fulton, Maysville, and South Shore stations, a caretaker opens the station waiting rooms in advance of train arrivals and closes up after the train has departed.

10. <https://media.amtrak.com/2023/09/amtrak-upgrades-celebrated-at-south-shore-south-portsmouth-station-in-kentucky/>



Table 2-2. Amtrak Passenger Rail Stations in Kentucky

Station Feature	Station			
	Fulton	Maysville	South Shore-South Portsmouth	Ashland
Station Code	FTN	MAY	SPM	AKY
Address	21 Newton Road, Fulton, KY 42041	West Front Street & Rosemary Clooney Street, Maysville, KY 41056	Main Street & US 23, South Shore, KY 41174	99 15th Street, Ashland, KY 41101
Served By	City of New Orleans	Cardinal	Cardinal	Cardinal
Service Frequency	Daily	Triweekly	Triweekly	Triweekly
Station Location Type	Rural	Rural	Rural	Urban
Ownership	Amtrak (facility), CN (platform and parking lot)	CSXT	Amtrak (facility), CSXT (platform and parking lot)	City of Ashland
Shelter	Station building with waiting room	Station building with waiting room	Station platform with shelter	Station platform with shelter
Waiting Room Hours	2:00 PM to 4:00 AM daily	Sun., Wed., and Fri.: 4:30 AM to 6:00 AM, and 11:00 PM to 12:30 AM the next day	Sun., Wed., and Fri.: 5:00 AM to 8:30 AM, and 9:00 PM to 11:00 PM	Monday to Saturday 8:30 AM to 5:00 PM (Ashland Transportation Center)
ADA	Accessible platform and parking; no wheelchair or wheelchair lift	Accessible platform, waiting room, and parking; wheelchair lift available	Accessible platform, waiting room, and parking; wheelchair lift available	Accessible platform, shelter, and parking; wheelchair lift available
Station Services	Unstaffed station	Unstaffed station	Unstaffed station	Unstaffed station
Ticketing	No	No	No	No
Baggage Services	No	No	No	No
Restrooms	No	Yes	No	Yes (ATC)
Parking	Day and overnight (12 spaces)	Day and overnight (25 spaces?)	Day and overnight	Day and overnight (9 spaces)
Bicycle Rack	No	No	No	No
Intercity Bus Connections	No	No	No	Greyhound
Transit Connections	Fulton County Transit Authority demand response buses will serve the Amtrak station	Maysville City Transit bus	Scioto County Public Transit demand response buses will serve the Amtrak station on weekdays	Ashland Transportation Center (adjacent to Amtrak station) serves Greyhound and the Ashland Bus System

Source: Amtrak and [www.greatamericanstations.com](http://www.greatamericanstations.com)

## FORMER PASSENGER FACILITIES

The historic Union Station in Louisville, built in 1891, hosted Amtrak's Chicago-Miami Floridian train from 1971 to 1976, after which Amtrak moved its Louisville station to a property near the Louisville airport, adjacent to what is now CSXT's Osborn Yard, in order to operate a Louisville section of the Auto Train from Florida. Amtrak canceled the Floridian in 1979, but Union Station in downtown Louisville still stands. Today, the building is owned by the Transit Authority of River City, the region's bus transit agency, which has restored the grand structure and houses its administrative offices inside.<sup>11</sup> Between 2001 and 2003, Amtrak's Kentucky Cardinal served Union Station, using a stub-end track on the west side of the station parking lot.

Amtrak's Floridian also served Bowling Green, Kentucky, stopping at a historic station built by the Louisville & Nashville Railroad in 1925. Service ended in 1979. After having several different owners, the station was purchased by Warren Fiscal Couty and the City of Bowling Green, and a restoration effort was begun. Today, the station houses the Historic RailPark & Train Museum, which hosts exhibits, interactive events, and catered events inside the restored station building and also maintains several pieces of historic railroad equipment.<sup>12</sup>

The former Chesapeake & Ohio Railway depot in Catlettsburg, which dates to the turn of the twentieth century and was used by Amtrak from 1971 to 1975, has been restored and now contains the Russell E. Compton Civic Center & Museum.<sup>13</sup> There are several other historic passenger rail stations remaining across Kentucky, including those in La Grange, Buechel, Paris, Cynthiaana, and Frankfort. The Baxter Avenue elevated station remains on the CSXT mainline through Louisville. These stations were served by the Louisville & Nashville Railroad until 1971.

### 2.1.3. Objectives for Passenger Service in Kentucky

Intercity passenger rail service in Kentucky consists of long-distance trains, which are operated by Amtrak and funded through Congressional appropriations made to Amtrak. The goals and objectives for Amtrak's long-distance services are set primarily by Congress and by Amtrak with Congressional support. The Infrastructure Investment and Jobs Act (IIJA) includes a provision stating that "Amtrak may not discontinue, reduce the frequency of, suspend, or substantially alter the route of rail service on any segment of any long-distance route in any fiscal year in which Amtrak receives adequate Federal funding for such route on the National Network."<sup>14</sup> In a Final Rule published in 2020, the FRA established metrics and minimum standards for measuring the performance and service quality of Amtrak's intercity passenger train operations, in accordance with Section 207 of PRIIA.<sup>15</sup> Section 207 also states that, to the extent practicable, Amtrak and its host rail carriers should incorporate the

11. <https://historiclouisville.com/union-station/>. Accessed March 2024

12. <https://www.historicrailpark.com/>. Accessed March 2024

13. Trowbridge, David J., Savannah Wheeler, and Clio Admin. "Catlettsburg Train Depot." Clio: Your Guide to History. May 28, 2020. <https://theclio.com/entry/96803>. Accessed March 2024.

14. 49 U.S.C. § 24706(b)

15. <https://www.federalregister.gov/documents/2020/11/16/2020-25212/metrics-and-minimum-standards-for-intercity-passenger-rail-service>

metrics and standards into their access and service agreements. Part 273 of the Final Rule established an on-time performance standard for Amtrak intercity passenger trains and routes of 80 percent for any two consecutive calendar quarters, as measured by customer on-time performance, which is the percentage of all customers on an intercity passenger rail train who arrive at their detraining point no later than 15 minutes after their published scheduled arrival time.

#### 2.1.4. Kentucky Passenger Rail Performance Evaluation

This section provides ridership and performance statistics of the Amtrak intercity passenger rail services operating in Kentucky. Except where noted, performance statistics are reported on a route-level basis, since the passenger trains operating in Kentucky serve multiple states.

**Table 2-3** illustrates the ridership on the passenger trains serving Kentucky over the past five Amtrak Fiscal Years (October 1 through September 30). The table shows total annual ridership on the route as well as the number of riders on each route that boarded or disembarked trains (ons and offs) at stations in Kentucky.

**Table 2-3. Amtrak Ridership on Routes Serving Kentucky, FY 2019-2023**

Route	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
<b>Cardinal</b>					
Ons and Offs in Kentucky	5,010	3,343	2,982	3,609	4,560
Change in Kentucky Ridership		-33%	-11%	+21%	+26%
Total Ridership	105,364	63,233	69,098	80,322	82,705
Change in Total Ridership	+8.9%	-40.0%	+9.3%	+16.2%	+3.0%
<b>City of New Orleans</b>					
Ons and Offs in Kentucky	3,357	2,199	1,864	2,511	4,214
Change in Kentucky Ridership		-34%	-15%	+35%	+68%
Total Ridership	228,831	132,656	100,816	155,618	233,876
Change in Total Ridership	-4.0%	-42.0%	-24.0%	+54.4%	+50.3%

Source: Amtrak fiscal year ridership reports and annual operations reports

As can be seen in the table above, the COVID-19 pandemic caused significant declines in ridership on Amtrak trains serving Kentucky during FY 2020 and FY 2021. In October 2020, Amtrak reduced the frequency of the City of New Orleans from daily to three days per week in each direction, owing to a decrease in travel demand resulting from the COVID-19 pandemic. With COVID relief funding from Congress, Amtrak was able to restore daily service on the City of New Orleans in May 2021.<sup>16</sup> When the Omicron variant caused a new increase in COVID-19 cases in January 2022, Amtrak reduced

16. Amtrak. Updates to Amtrak Service, January 27, 2021. Retrieved from: <https://media.amtrak.com/2021/01/updates-to-amtrak-service/>

the frequency of the City of New Orleans to five days per week in each direction, which lasted until October 2022 when daily service resumed.<sup>17</sup> During the pandemic, Amtrak continued operating the Cardinal on its regular three-day-per-week schedule, with seating capacity set at two coaches and one sleeping car. (Before COVID, the train had operated at times with three coaches.) In FY 2023, ridership on the City of New Orleans, both overall and in Kentucky, had exceeded its pre-COVID level from 2019. Ridership on the Cardinal remained below 2019 levels, although ridership at Kentucky stations nearly reached the 2019 volume. Amtrak ridership systemwide reached 89 percent of its pre-COVID level in FY 2023.<sup>18</sup>

**Table 2-4** illustrates the total boardings and alightings at each intercity passenger rail station in Kentucky, as well as the nearby stations of Cincinnati, Ohio, and Indianapolis, Indiana, both of which are served by the Cardinal. The significant decline in station ridership at Indianapolis after 2019 can be attributed to the cancellation of a state-supported train that had operated between Indianapolis and Chicago on the four days of the week that the triweekly Cardinal did not run.

**Table 2-4. Amtrak Ridership by Station, FY 2019-2023**

Station	Route	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
<b>Kentucky Stations</b>						
Fulton	City of New Orleans	3,357	2,199	1,864	2,511	4,214
Maysville	Cardinal	1,993	1,475	1,174	1,527	2,111
South Shore-South Portsmouth	Cardinal	1,052	658	643	732	870
Ashland	Cardinal	1,965	1,210	1,165	1,350	1,579
<b>KENTUCKY TOTAL</b>		<b>8,367</b>	<b>5,542</b>	<b>4,846</b>	<b>6,120</b>	<b>8,774</b>
<b>Regional Stations</b>						
Cincinnati, Ohio	Cardinal	8,641	5,451	7,164	8,374	8,303
Indianapolis, Indiana	Cardinal	24,937	7,373	9,847	10,881	18,466
<b>REGIONAL TOTAL</b>		<b>42,945</b>	<b>18,366</b>	<b>21,857</b>	<b>25,375</b>	<b>35,543</b>

Source: Amtrak state facts sheets

**Table 2-5** identifies the population within 25 and 50 miles of a passenger rail station in Kentucky, as well as the percentage of Kentucky's total 2020 population within a 25- and 50-mile proximity to an Amtrak station, based on U.S. Census data. The average distance between Amtrak stations along the Cardinal's route through Kentucky is 40 miles, resulting in some overlap of population at the 50-mile radius. Because all of Kentucky's passenger rail stations are located within at least 50 miles of a state line, the rail stations also attract passengers from the neighboring states of Illinois, Missouri, Ohio, Tennessee, and West Virginia, as shown in **Table 2-6**.

17. <https://www.annistonla.gov/wp-content/uploads/2022/10/MA-NOL-Service-Restoration.pdf>

18. <https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/reports/Amtrak-General-Legislative-Annual-Report-FY2025-Grant-Request.pdf>



Table 2-5. Kentucky Population in Proximity of an Amtrak Station

Station	Population Served by Station (KY Residents Only)			
	Within 25 Miles	Percent of Kentucky Population (2020)	Within 50 Miles	Percent of Kentucky Population (2020)
All Amtrak Stations	597,299	13%	1,044,012	23%

Source: Railroad Passengers Association

Table 2-6. Regional Population in Proximity of Amtrak Stations

Station	Population Served by Station (Resident of Any State)	
	Within 25 Miles	Within 50 Miles
<b>Kentucky Stations</b>		
Fulton	93,340	487,212
Maysville	95,219	1,004,605
South Shore–South Portsmouth	186,022	697,597
Ashland	304,429	733,364
<b>Regional Stations</b>		
Cincinnati, Ohio	1,847,737	2,860,305

Source: Railroad Passengers Association

**Table 2-7** compares key service, financial, and performance measurements for the Cardinal over the previous five fiscal years. On-time performance and financial recovery both improved in 2023 from the previous year. Customer service has improved from the low point of 2019 but remains below the target scoring threshold. On-board food service consistently ranks as the lowest-scoring service category on



Source: Kentucky Transportation Cabinet

the Cardinal. The most common causes of delay to the Cardinal for the past three years have been freight train interference (FTI) and slow order delays (DSR). Other causes, including passenger train interference (PTI) and commuter train interference (CTI) were common in earlier years. (These causes of delay are route-wide and not isolated to Kentucky.)

**Table 2-7. Cardinal Performance Measures**

Measurement	Target	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Passenger-Miles		37,535,416	22,554,489	27,625,763	29,637,049	32,195,738
Passenger-Mile per Train-Mile (4th Quarter of FY)		109 (2-year avg.)	86 (2-year avg.)	95	97	98
Revenue-to-Cost Ratio		0.34	0.20	0.26	0.30	0.31
Loss per Passenger-Mile		(\$0.43)	(\$0.99)	(\$0.66)	(\$0.64)	(\$0.61)
Customer On-Time Performance (passenger arrivals no more than 15 minutes late)	80%	52.7%	65.8%	54.1%	48.4%	54.8%
All-Stations On-Time Performance (train arrivals no more than 15 minutes late)	80%	50.0%	66.1%	55.3%	49.5%	53.4%
Endpoint On-Time Performance	80%	52.1%	69.6%	58.5%	55.0%	59.2%
Top Causes of Delay (4th Quarter of FY)		FTI, CTI	PTI, FTI	FTI, DSR	FTI, DSR	FTI, DSR
Customer Satisfaction Index Score (4th Quarter of FY)	82	63	73	73	76	74
Customer Service Failure (4th Quarter of FY)	Score Below 80	Personnel, Information, Comfort, Cleanliness, Food service	Information, Comfort, Food service	Information, Comfort, Cleanliness, Food service	Information, Comfort, Cleanliness, Food service	Information, Comfort, Cleanliness, Food service

Source: Amtrak and FRA

**Table 2-8** compares key service, financial, and performance measurements for the City of New Orleans over the previous five fiscal years. In four of the past five years, the City of New Orleans has achieved the highest customer on-time performance among Amtrak's 15 long-distance trains and ranked second best in 2022. In all five years, the City of New Orleans had the highest endpoint on-time performance of any long-distance Amtrak train. The train's financial performance has steadily improved since 2020. Customer service scores have met or exceeded the target in three of the past five years. On-board food service consistently ranks as the lowest-scoring service category on the City of New Orleans. The most common causes of delay to the City of New Orleans are freight train interference (FTI) and slow order delays (DSR), although Amtrak-responsible other issues (OTH) impacted performance in 2020.

Table 2-8. City of New Orleans Performance Measures

Measurement	Target	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Passenger-Miles		86,598,147	53,320,372	40,974,327	63,822,334	96,171,671
Passenger-Mile per Train-Mile (4th Quarter of FY)		141 (2-year avg.)	106 (2-year avg.)	103	143	156
Revenue-to-Cost Ratio		0.44	0.29	0.34	0.36	0.43
Loss per Passenger-Mile		(\$0.26)	(\$0.53)	(\$0.46)	(\$0.39)	(\$0.29)
Customer On-Time Performance (passenger arrivals no more than 15 minutes late)	80%	60.8%	86.7%	85.0%	60.2%	76.2%
All-Stations On-Time Performance (train arrivals no more than 15 minutes late)	80%	54.1%	74.1%	73.8%	54.0%	65.9%
Endpoint On-Time Performance	80%	81.8%	92.8%	94.2%	75.7%	85.6%
Top Causes of Delay (4th Quarter of FY)		FTI, DSR	DSR, OTH	FTI, DSR	FTI, DSR	FTI, DSR
Customer Satisfaction Index Score (4th Quarter of FY)	82	74	82	86	79	82
Customer Service Failure (4th Quarter of FY)	Score Below 80	Information, Comfort, Cleanliness, Food service	Food service	Food service	Information, Food service	Food service

Source: Amtrak and FRA

**Table 2-9** identifies Amtrak's expenditures on goods and services in Kentucky, including expenditures on salaries, as well as the number of Amtrak employees residing in Kentucky from FY 2019 through FY 2023.

Table 2-9. Amtrak Expenditures on Goods and Services in Kentucky, FY 2019-2023

Expenditure	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Goods and Services	\$7,952,426	\$6,555,656	\$5,298,419	\$7,643,182	\$8,795,545
Employee Wages	\$187,783	\$190,341	\$190,341	\$284,740	N/A
Amtrak Kentucky Employees	2	2	2	3	4

N/A = not available

Source: Amtrak state facts sheets

### 2.1.5. Public Financing for Rail Projects

The following section describes grant programs that are available to Kentucky and at the federal level, specifically for rail assistance as of 2024, as well as those programs that might be eligible for rail-related funding in particular applications.

#### STATE RAIL FUNDING PROGRAMS

- **Kentucky Short Line Railroad Assistance Fund** – In May 2011, the Kentucky Legislature voted to make Highway Construction Contingency Funds available through the Kentucky Short Line Railroad Assistance (KSRA) Fund, administered by the KYTC. Grants totaling \$3,138,726 were awarded under this program for fiscal year 2011-2012. All but one of the grants represented 50 percent of the cost of a project, with each railroad providing the remainder as a match. Kentucky statute continues to permit the KRSA to be funded from the General Fund. However, since the 2011-2012 round, no additional funding has been made available for the KRSA.
- **Kentucky Railroad Crossing Improvement Program** – In October 2013, the state announced that \$3.2 million in grants would be made available through FY 2014 to short line railroads to help fund safety improvements at highway-rail at-grade crossings in Kentucky. The grants, all of which initially required a dollar-for-dollar match from the applicants and currently require a 20% match, were funded through the Kentucky Railroad Crossing Improvement (KRCI) Program, administered by the KYTC. Over the past five years KYTC has processed a total 140 project applications:
  - **FY 2024** – 33 Projects
  - **FY 2023** – 22 Projects
  - **FY 2022/2021** – 44 Projects
  - **FY 2019** – 20 Projects
  - **FY 2018** – 18 Projects

In FY 2024, of the 33 applicant projects, 11 projects were selected. This includes six upgrades to the crossing signals and lights and five crossing rehabilitations. Since 2014, the Kentucky Legislature has consistently funded the KRCI in the amount of approximately \$1.6 million annually to allow the KYTC to continue to make additional rail safety improvements statewide. These funds are restricted to public safety improvements to at-grade crossing reconstruction, the removal of obstructive vegetation, and railroad crossing safety equipment improvements. The funding is available to support projects with an 80 percent state share and requires a 20 percent local match.

- **Short Line Infrastructure Preservation Pilot Project** – House Bill 1 (HB1) of the Kentucky 2024 legislative session provides \$15 million over two fiscal years in funding and directs the KYTC to coordinate with and make grants to Class II and Class III railroads to preserve and enhance existing rail lines and corridors, retain existing rail-served industries and attract new industries, and preserve and modernize Kentucky's rail system. Funds from the pilot project shall be used for equipment, construction, reconstruction, improvement, or rehabilitation of rail



facilities or engineering work associated with capital projects. The program requires a minimum 50 percent non-state fund match, and no single project can receive more than \$2 million in grant funds. The funds not expended in 2024-2025 roll over to 2025-2026.

- **Industrial Access and Safety Improvement Pilot Project** – House Bill 1 (HB1) of the Kentucky 2024 legislative session provides \$15 million over two fiscal years in funding and directs the KYTC to coordinate with and make grants to Class I, II, or III railroads, as well as to any Railroad Authority, Port Authority, rail-served industries, and Industrial and Economic Development Authority Board, to expand rail access, enhance the marketability of available industrial sites, increase job creation and capital investment, and increase safety. Funds from the pilot project shall be used for equipment, construction, reconstruction, improvement, or rehabilitation of rail facilities or engineering work associated with capital projects. The program requires a minimum 50 percent non-state fund match, and no single project can receive more than \$2 million in grant funds. The funds not expended in 2024-2025 roll over to 2025-2026.

## FEDERAL RAIL FUNDING PROGRAMS

On November 15, 2021, President Biden signed into law the Infrastructure Investment and Jobs Act (IIJA – also known as the Bipartisan Infrastructure Law [BIL]), a comprehensive legislative package establishing more than \$1.2 trillion in US infrastructure investments and establishing significant programs and policies to guide the development of infrastructure improvements.

Pertinent to transportation and rail, the IIJA funds existing discretionary programs administered by the U.S. Department of Transportation (U.S. DOT) at markedly higher levels, and creates authorization for new discretionary programs aimed at delivering improvements to the nation's transportation infrastructure, including highways, freight rail, passenger rail, transit systems, multimodal facilities, and ports.

The IIJA significantly increased the authorizations, and in some instances provided advance appropriations, for existing discretionary programs that fund freight rail projects, both for those programs administered by the Office of Multimodal Freight Infrastructure and by the FRA. For instance, U.S. DOT competitive discretionary grant programs including the Consolidated Rail Infrastructure and Safety Improvements program (CRISI), Infrastructure for Rebuilding America (INFRA) and Rebuilding American Infrastructure for Safety and Equity (RAISE – now part of the National Infrastructure Project Assistance Program) all received substantial funding increases, with at least \$18 billion available over five years just through those programs, at appropriated funding levels. Additional funding is authorized but subject to future appropriations.



Source: Kentucky Transportation Cabinet

Notably, IIJA also established new programs targeting rail improvements, including the Railroad Crossing Elimination Program, to be administered by the FRA. The IIJA authorized and appropriated \$300 million annually, over the five-year authorization, for a total of \$1.5 billion available through Fiscal Year (FY) 2026 to fund highway-rail or pathway-rail grade crossing improvement projects, including rail line relocation, crossing elimination, and installation of advanced signaling, warning devices, and signage.

The IIJA also delivers funding and establishes program requirements designed to support investment in and expansion of the nation's passenger rail network.

Select provisions of the IIJA relevant to the potential establishment of passenger rail in Kentucky include:

- Establishment of a competitive grant program that makes available federal funding to support the establishment of, and pay the select administration expenses of, interstate rail compacts (modeled after the Southern Rail Commission / Gulf Coast Working Group) (Section 22306).
- Establishment of a program to identify, add and improve intercity passenger rail corridors. Corridors identified would work with U.S. DOT, states and relevant stakeholders to prepare planning documentation supporting the establishment or improvement of services (Sec. 22308) – see FRA Corridor Identification and Development Program.<sup>19</sup> Two Corridor Identification and Development Program studies involving Kentucky were selected by FRA:
  - Louisville-Indianapolis Passenger Rail Corridor
  - Daily Cardinal Service

#### FRA Competitive Discretionary Grant Programs

To develop safety improvements and encourage the improvement and expansion of passenger and freight rail infrastructure and services, the FRA supports the nation's rail network through a variety of competitive and dedicated grant programs. These include:

- **Consolidated Rail Infrastructure and Safety Improvements Program (CRISI)<sup>20</sup>** – The CRISI program provides funding for capital projects that will improve passenger and freight rail transportation systems in terms of safety, efficiency, and/or reliability. The following Kentucky projects have been funded through this program:
  - **FY21** – Bluegrass Multimodal Freight Improvement Program (RJCC)
  - **FY22** – Foster Economic Sustainability Throughout Kentucky Project (PAL)

19. Federal Railroad Administration, Corridor Identification and Development Program. Retrieved from: <https://railroads.dot.gov/corridor-ID-program>

20. Federal Railroad Administration, Consolidated Rail Infrastructure and Safety Improvements Grant Program. Retrieved from: <https://railroads.dot.gov/grants-loans/competitive-discretionary-grant-programs/consolidated-rail-infrastructure-and-safety-2>

- **Railroad Crossing Elimination Program (RCE)<sup>21</sup>** – The Railroad Crossing Elimination Program (RCE) is a new, competitive discretionary grant program established under the IIJA that provides funding for highway-rail or pathway-rail grade crossing improvement projects that focus on improving the safety and mobility of people and goods.
- **Federal-State Partnership for Intercity Passenger Rail (FSP)<sup>22</sup>** – The FSP program provides funding for capital projects that reduce the maintenance (state of good repair) backlog, improve performance, and/or expand or establish new intercity passenger rail service.

#### FRA Financing Programs

The FRA, through the Build America Bureau, offers two loan financing programs to support railroad capital projects:

- **Transportation Infrastructure Finance and Innovation Act (TIFIA)<sup>23</sup>** – The TIFIA program provides credit assistance for qualified projects of regional and national significance. Many large-scale, surface transportation projects -- highway, transit, railroad, intermodal freight, and port access -- are eligible for assistance. Eligible applicants include state and local governments, transit agencies, railroad companies, special authorities, special districts, and private entities. The TIFIA credit program is designed to fill market gaps and leverage substantial private co-investment by providing supplemental and subordinate capital. Each dollar of federal funds can provide up to \$10 in TIFIA credit assistance and support up to \$30 in transportation infrastructure investment.
- **Railroad Rehabilitation & Improvement Financing (RRIF)<sup>24</sup>** – Under this program, the FRA Administrator is authorized to provide direct loans and loan guarantees up to \$35.0 billion to finance development of railroad infrastructure. Up to \$7.0 billion is reserved for projects benefiting freight railroads other than Class I carriers. Direct loans can fund up to 100% of a railroad project with repayment periods of up to 35 years and interest rates that are equal to the cost of borrowing to the government. Eligible borrowers include railroads, state and local governments, government-sponsored authorities and corporations, joint ventures that include at least one railroad, and limited option freight shippers who intend to construct a new rail connection.



Source: Kentucky Transportation Cabinet

- 
21. Federal Railroad Administration, Railroad Crossing Elimination Grant Program. Retrieved from: <https://railroads.dot.gov/grants-loans/competitive-discretionary-grant-programs/railroad-crossing-elimination-grant-program>
  22. Federal Railroad Administration, Federal State Partnership for Intercity Passenger Rail Grant Program. Retrieved from: <https://railroads.dot.gov/federal-state-partnership-intercity-passenger>
  23. Build America Bureau, TIFIA Program Overview. Retrieved from: <https://www.transportation.gov/buildamerica/financing/tifia>
  24. Build America Bureau, Railroad Rehabilitation & Improvement Financing (RRIF). Retrieved from: <https://www.transportation.gov/buildamerica/financing/rrif>



## Maritime Administration Competitive Discretionary Grant Programs

- **Port Infrastructure Development Program (PIDP)<sup>25</sup>** – Funds for the PIDP are awarded on a competitive basis by the U.S. DOT Maritime Administration (MARAD) to projects that improve the safety, efficiency, and/or reliability of the movement of goods into, out of, around, or within a port. PIDP grants support efforts by ports and industry stakeholders to improve port, and related freight, infrastructure to meet the nation's freight transportation needs and ensure our port infrastructure can meet anticipated freight volume growth. The PIDP provides funding to ports in both urban and rural areas for planning and capital projects. It also includes a statutory set-aside for small ports to continue to improve and expand their capacity to move freight reliably and efficiently and support local and regional economies. Ports in Kentucky have received several PIDP grants, but none have been rail focused.

## U.S. DOT Competitive Discretionary Grant Programs

- **Multimodal Project Discretionary Grant (MPDG)<sup>26</sup>**
  - **Mega Grant Program<sup>27</sup>** – The Mega Program (the National Infrastructure Project Assistance program) supports large, complex projects (with total costs greater than \$100 million) that are difficult to fund by other means and likely to generate national or regional economic, mobility, and/or safety benefits.
  - **Infrastructure for Rebuilding America (INFRA)<sup>28</sup>** – The INFRA Program provides funding for highway and freight projects of national or regional significance. U.S. DOT seeks INFRA applications for projects that apply innovative technology, delivery, or financing methods with proven outcomes to deliver projects in a cost-effective manner. The following Kentucky rail or rail-involved projects have been funded through this program:
    - **INFRA FY18** – Boone County I-71/I-75 Interchanges (Grade Crossing Removal)
    - **INFRA FY22** – Rockport Bridge Rehabilitation Freight Rail Project
  - **Rural Surface Transportation Grant<sup>29</sup>** – The Rural Surface Transportation Grant Program supports projects that improve and expand the surface transportation infrastructure in rural areas to increase connectivity, improve the safety and reliability of the movement of people and freight, and generate regional economic growth and improve quality of life.

25. U.S. Department of Transportation, Mega Grant Program. Retrieved from: <https://www.maritime.dot.gov/PIDPgrants>

26. U.S. Department of Transportation, Multimodal Project Discretionary Grant. Retrieved from: <https://www.transportation.gov/grants/mpdg-program>

27. U.S. Department of Transportation, Mega Grant Program. Retrieved from: <https://www.transportation.gov/grants/mega-grant-program>

28. U.S. Department of Transportation, INFRA Grant Program. Retrieved from: <https://www.transportation.gov/grants/infra-grant-program>

29. U.S. Department of Transportation, Rural Surface Transportation Grant Program. Retrieved from: <https://www.transportation.gov/grants/rural-surface-transportation-grant-program>



- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)<sup>30</sup> – The RAISE Program invests in road, rail, transit and port projects that promise to achieve national objectives. Previously known as the Better Utilizing Investments to Leverage Development (BUILD) and Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants, Congress has dedicated nearly \$14.3 billion for 15 rounds of National Infrastructure Investments to fund projects that have a significant local or regional impact. The following Kentucky rail or rail-involved projects have received funding through this program:
  - Tiger I – Appalachian Regional Short-Line Rail Program
  - Tiger 2011 – Muldraugh Bridge Replacement
  - KY331/Industrial Drive and Rinaldo Road (Grade Crossing Upgrade)
  - US 79 Bridge Replacement (Bridge Over Rail)

Federal Highway Administration Formula Funding:

- Section 130 Railway-Highway Crossings Program (RCP)<sup>31</sup>
  - The Section 130 Program provides funds for the elimination of hazards at railway-highway crossings. The funds are set-aside from the U.S. DOT Federal Highway Administration (FHWA) Highway Safety Improvement Program (HSIP) apportionment and the funds are apportioned to States by formula.
  - Kentucky Section 130 funds are administered by the KYTC Modal Programs staff. Modal Programs staff prioritize safety upgrades to public rail/highway crossings and the programming of funds for the work done to maintain and upgrade the crossings.



Source: Kentucky Transportation Cabinet

30. U.S. Department of Transportation, RAISE Discretionary Grants. Retrieved from: <https://www.transportation.gov/RAISEgrants/about>

31. Federal Highway Administration, Railway Highway Crossing Program Overview. Retrieved from: <https://highways.dot.gov/safety/hsip/xings/railway-highway-crossing-program-overview>

## 2.1.6. Rail Safety and Security Programs

### HIGHWAY-RAIL GRADE CROSSING SAFETY

Highway-rail grade crossing safety is a primary focus of rail safety and security at the local, state, and national level. The term highway-rail grade crossing refers to all intersections of the rail network with non-rail pathways, including streets, highways, shared-use paths, and private driveways or access roads. These intersections create the potential for conflict and possible collisions between trains or other on-track equipment and vehicles or pedestrians.

The KYTC acts as a liaison between communities and local roadway authorities in Kentucky and the FRA. The KYTC also administers the federal Railway-Highway Crossings Program (or Section 130) funding that is made available to each state by the FHWA to implement targeted safety improvements at highway-rail grade crossings and highway-rail grade separations (i.e., separating the railroad from the highway or path using a bridge or tunnel).

An inventory of highway-rail grade crossings involving public roadways and pathways is maintained by the KYTC. Potential projects are identified by reviewing accident/incident history and through requests from local roadway authorities, railroads, and other internal KYTC personnel that have knowledge of safety risks, driver behavior, changes necessary for pedestrian movements, a need for grade separation, or changes in highway or railroad operations. Once projects have been identified, they are prioritized according to the type of project and available funding. Projects selected and programmed for funding are then listed in the Statewide Transportation Improvement Program (STIP).

The KYTC also funds highway-rail grade crossing improvements through the Kentucky Rail Crossing Improvement Program (KRCI) using state funding.

Highway-rail grade crossings in Kentucky are mapped in [Interactive Application 2-4](#).

#### Operation Lifesaver

The Operation Lifesaver Program is one of the most widely known and effective programs working to make railroads and highways safer. It is a nationwide, non-profit organization dedicated to ending collisions, deaths, and injuries at highway-rail at-grade crossings and along railroad corridors. Operation Lifesaver works to accomplish its task through promoting education, engineering, and enforcement. Their programs are co-sponsored by federal, state and local governmental agencies, highway safety organizations, and individual railroad companies.

Kentucky's Operation Lifesaver Program is funded by federal, state, local, and private partners. The KYTC, the Kentucky Department of Agriculture, the Kentucky Community and Technical College System, and the Kentucky Fire Commission each have a spot on the Kentucky Operation Lifesaver Board of Directors. Kentucky



Source: Kentucky Transportation Cabinet

currently participates in Operation Lifesaver through its School Bus Driver Training, Safety Blitz, and Officers on Trains programs. The target audiences for Operation Lifesaver programs are school groups, driver education classes, professional drivers, law enforcement officers, and emergency responders. The KYTC has provided funding for educational materials and printing services for Kentucky's Operation Lifesaver since 2011.

## HOMELAND SECURITY

Rail security is a concern for both passengers and freight. In the wake of the U.S. terrorist attacks of September 11, 2001, and recent train derailments involving hazardous cargo, the discussion of rail security has received more attention at the national and state levels. Rail security is generally a federal responsibility through the Interstate Commerce Clause and related acts.

Within the railroad industry, there is a specific focus on the safe transportation of hazardous materials. The FRA issued Emergency Order No. 28 following the July 6, 2013, catastrophe in Lac-Mégantic, Quebec, a derailment which resulted in an explosion, a massive crude oil spill, and the deaths of 47 people. Emergency Order No. 28 established additional requirements for the monitoring and security of certain freight trains and vehicles on main line track or siding outside of a yard or terminal. The FRA also began working on regulations governing the importance of proper characterization, classification, and selection of a packing group for Class 3 materials, and the corresponding requirements in the federal hazardous materials regulations for safety and security planning. In addition, the FRA emphasized its expectation for shippers and rail carriers to revise safety and security plans required by the federal hazardous materials regulations. This included completion of required risk assessments and addressing safety and security issues identified in the FRA's Emergency Order No. 28 and the Safety Advisory issued jointly with the Pipeline and Hazardous Materials Safety Administration (PHMSA) on August 7, 2013.

Passenger rail security is overseen at the federal level by the Transportation Security Administration (TSA), which routinely provides security and random checks of passengers and luggage on the Amtrak system at various locations and on select transit systems across the United States. These checks can match passengers' identification with issued tickets, checked bags, and other belongings, providing a basic line of security at stations and aboard vehicles.

### 2.1.7. Economic Impact of Rail Transportation

The economic impact of rail transportation in Kentucky in 2021 was estimated using Regional Input-Output Modeling System (RIMS II) multipliers from the Bureau of Economic Analysis (BEA). The input data and assumptions included freight data, value of commodity shipments, and passenger rail operations. Freight data was estimated using STB Waybill Sample data for shipments, focusing on freight traffic originating in Kentucky. The value of rail commodity shipments originating in Kentucky (in 2021 dollars per ton) were estimated based on freight data from FHWA's Freight Analysis Framework (FAF).

The impacts of Kentucky's rail industry considered in this analysis come from organizations providing freight and passenger transport services, as well as industries using rail freight services to trade goods (i.e., shippers of goods or commodities).



An extensive review was conducted examining how rail operations impacted Kentucky's economy in 2021. The impacts were estimated using:

- Activity (service provision and rail users)
- Type (direct, indirect, induced, and total), and
- Measure (employment, income, value added, and value added)

The results are presented in **Table 2-10**.

**Table 2-10. Rail Economic Impacts in Kentucky**

Impact Metric	Transportation Services		Transportation Users	Total Service		Total
	Freight	Passenger		Freight	Passenger	
Output (\$M)						
Direct	\$1,173.7 M	\$42.3 M	\$20,264.8 M	\$21,438.5 M	\$42.3 M	\$21,480.8 M
TOTAL	\$2,111.1 M	\$76.1 M	\$35,224.0 M	\$37,335.1 M	\$76.1 M	\$37,411.2 M
Employment (Jobs)						
Direct	2,159	70	49,119	51,279	70	51,349
TOTAL	7,091	248	122,615	129,706	248	129,953
Employment Income (\$M)						
Direct	\$210.6 M	\$7.6 M	\$3,539.8 M	\$3,750.4 M	\$7.6 M	\$3,758.0 M
TOTAL	\$458.1 M	\$16.5 M	\$7,255.7 M	\$7,713.8 M	\$16.5 M	\$7,730.3 M
Value Added (\$M)						
Direct	\$609.3 M	\$22.0 M	\$292.5 M	\$901.8 M	\$22.0 M	\$923.7 M
TOTAL	\$1,073.0 M	\$38.7 M	\$16,157.3 M	\$17,230.3 M	\$38.7 M	\$17,269.0 M

Note: All monetary values presented in the table are in 2021 dollars.

Based on the economic analysis results:

- **Output:** The rail-related industries generated an estimated \$37.4 billion in total output, of which, \$37.3 billion was associated with freight rail operations and services.
- **Employment:** Rail supported over 51,000 jobs directly in the provision of rail transportation (both freight and passenger). Including other trickle-down impacts, rail-related operations supported almost 130,000 jobs.
- **Employment Income:** Rail-related industries supported \$7.7 billion in total earnings for almost 130,000 employees. These earnings include employee compensation and proprietary income. Employee compensation includes wages or salary payments, employee benefits, and employer paid payroll taxes. Proprietary income consists of payments received by self-employment individuals and unincorporated business owners.



- **Value Added:** The combined value-added impact of rail-related activity amounts to nearly \$17.3 billion, which is approximately 7.3 percent of Kentucky's Gross Domestic Product (GDP) in 2021.<sup>32</sup>

A full description of the methodology, data sources, and detailed economic impact analysis results can be found in Appendix A.

## 2.2. TRENDS AND FORECASTS

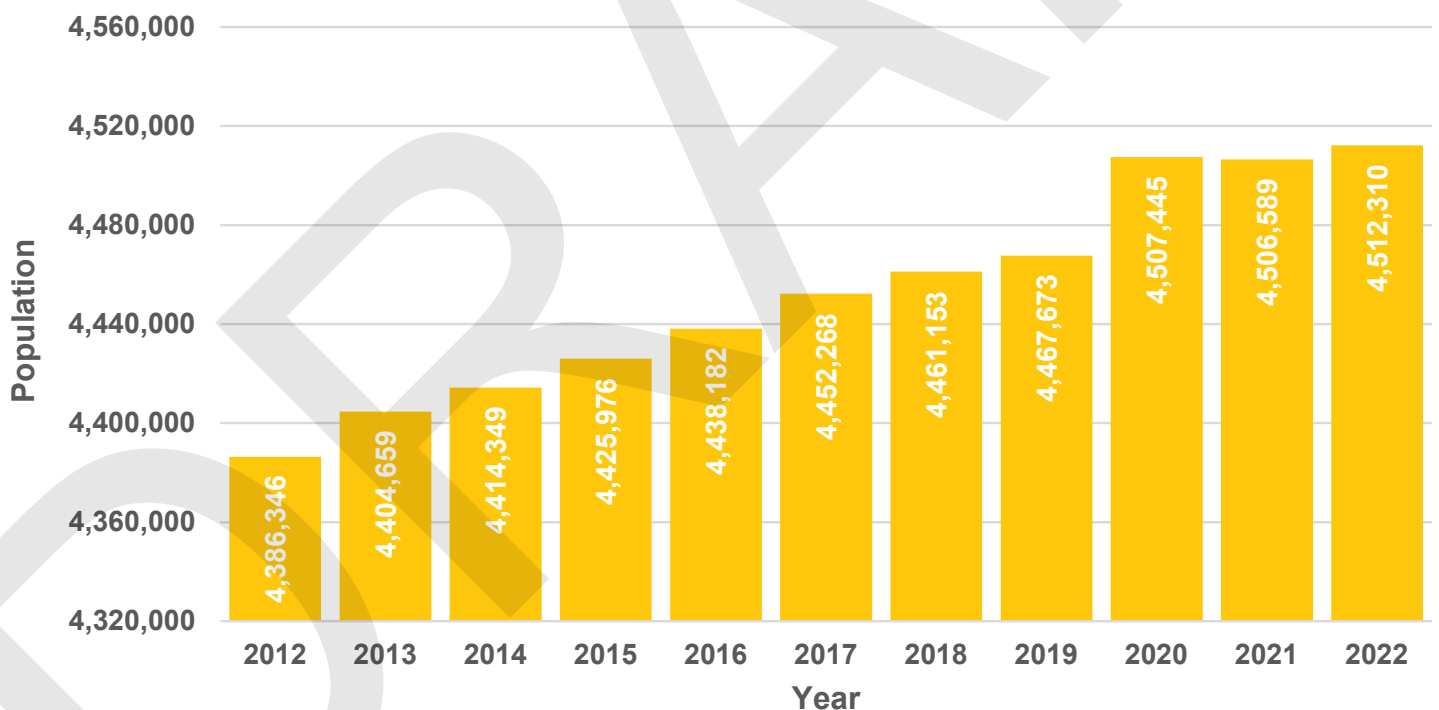
### 2.2.1. Demographic and Economic Growth Factors

#### POPULATION

Kentucky has a steadily growing population, which increased approximately 1.1 percent from 2018 to 2022, or an average annual growth of 0.3 percent.

**Figure 2-1** shows the cumulative population growth from 2012 through 2022.

**Figure 2-4. Population Growth in Kentucky, 2012-2022**



Source: U.S. Census Bureau

32. Based on a GDP of \$237,928.9 million for Kentucky in 2021. Data extracted from: U.S. Bureau of Economic Analysis, Gross Domestic Product: All Industry Total in Kentucky [KYNGSP], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/KYNGSP>, March 1, 2024.

## EMPLOYMENT

As of 2022, total employment in Kentucky was estimated at 2,658,979 jobs<sup>33</sup>, which is a 4.4 percent increase over employment levels in 2018.

**Table 2-11** lists the total employment in Kentucky for the years 2018 through 2022.

**Table 2-11. Kentucky Employment, 2018-2022**

Measure	2018	2019	2020	2021	2022
Employment	2,546,178	2,549,943	2,471,693	2,558,304	2,658,979

Source: Bureau of Economic Analysis

## PERSONAL INCOME

As of 2022, the per-capita personal income in Kentucky was \$51,921, with Kentucky ranking 48th out of 50 states in the U.S.<sup>34</sup>

## INDUSTRIAL OUTLOOK BY SECTOR

### Automotive

In 2022, Kentucky was ranked 3rd in the U.S. for car and truck production, producing almost 1.1 million vehicles, and over 5.7 million vehicles over the past five years.<sup>35</sup> Moreover, in 2022, Kentucky was the 3rd largest exporter of motor vehicles by dollar value, exporting over \$2.9 billion in motor vehicles. Including vehicle parts, total exports values over \$4.5 billion, with products being shipped to over 105 different countries.<sup>36</sup>

While the state has been known for its strength in the automotive industry, it was further strengthened by additional investments made within the industry. In particular, Kentucky's automotive industry has announced more than \$13.0 billion in investments since 2020 with over \$11.6 billion focused on electric-vehicle-related investments.<sup>37</sup> **Figure 2-5** highlights some of these investments, their location within the state and the additional jobs these investments support.



Source: Kentucky Transportation Cabinet

33. Bureau of Economic Analysis, Regional Data – GDP & Personal Income – Kentucky.

34. Ibid.

35. Kentucky Cabinet for Economic Development. Automotive Industry in Kentucky. Retrieved from: [https://cedky.com/cdn/11288\\_CED\\_Automotive\\_Guide\\_061523.pdf](https://cedky.com/cdn/11288_CED_Automotive_Guide_061523.pdf). Accessed: November 2023.

36. Ibid.

37. Ibid.

Figure 2-5. Automotive Investments in Kentucky



Source: Kentucky Cabinet for Economic Development. Automotive Industry in Kentucky

## Manufacturing

Manufacturing is one of Kentucky's largest industries, accounting for 17.4 percent of the state's total output and employing about 13.2 percent in 2021.<sup>38</sup> Based on the value of goods produced in 2021, the top three products manufactured in Kentucky are: 1) food, beverage and tobacco products, 2) motor vehicles and parts, and 3) chemicals, for a combined total of \$18.7 billion in value.<sup>39</sup> In total, Kentucky's manufacturing output reached \$41.2 billion in 2021, which was a 9.2 percent increase from 2020.<sup>40</sup>

38. National Association of Manufacturers. 2022 Kentucky Manufacturing Facts. Retried from: <https://nam.org/state-manufacturing-data/2022-kentucky-manufacturing-facts/>. Accessed: November 2023.

39. Ibid.

40. Ibid.

In 2022, the industry supported over 250,000 jobs and exported \$34.4 billion of Kentucky-made goods globally in 2022.<sup>41</sup> Over the past five years, more than \$28 billion was invested in the industry with over 900 facility locations or expansions and supporting almost 39,000 additional jobs.<sup>42</sup>

#### Aerospace

Aerospace is one of Kentucky's key industries, with more than 100 aerospace-related facilities employing over 23,000 people and nearly \$10.5 billion in exported goods in 2022.<sup>43</sup>

#### Food and Beverage

Supporting over 57,000 jobs, Kentucky's food and beverage industry is another notable sector within the state.<sup>44</sup> The industry ranges from the production of agricultural goods to the production of food products, beverages, spirits, animal feed and others. Since 2017, Kentucky invested more than \$8.1 billion in the industry, which added over 9,300 additional jobs.<sup>45</sup>

As of 2022, Kentucky ranks 7th in the nation for the number of farms with 73,500 farms operating on a combined 12.9 million acres of land.<sup>46</sup> **Table 2-12** below presents the key agricultural goods produced in Kentucky.



**Table 2-12. Agricultural Crop Production in Kentucky, 2018-2022 (Bushels)**

Crop	2018	2019	2020	2021	2022
Corn	213,500,000	245,050,000	250,240,000	276,480,000	210,600,000
Soybeans	98,430,000	77,740,000	101,200,000	103,040,000	98,940,000
Wheat	19,800,000	25,080,000	21,420,000	30,450,000	30,000,000

Source: USDA National Agricultural Statistics Service

41. Kentucky Cabinet for Economic Development. Manufacturing. Retrieved from: [https://ced.ky.gov/Existing\\_Industries/Manufacturing](https://ced.ky.gov/Existing_Industries/Manufacturing). Accessed: November 2023.
42. Ibid.
43. Kentucky Cabinet for Economic Development. Aerospace. Retrieved from: [https://ced.ky.gov/Existing\\_Industries/Aerospace](https://ced.ky.gov/Existing_Industries/Aerospace). Accessed: November 2023.
44. Kentucky Cabinet for Economic Development. Food & Beverage. Retrieved from: [https://ced.ky.gov/Existing\\_Industries/Food\\_Beverage](https://ced.ky.gov/Existing_Industries/Food_Beverage). Accessed: November 2023.
45. Ibid.
46. United States Department of Agriculture. Farms and Land in Farms 2022 Summary. February 2023.

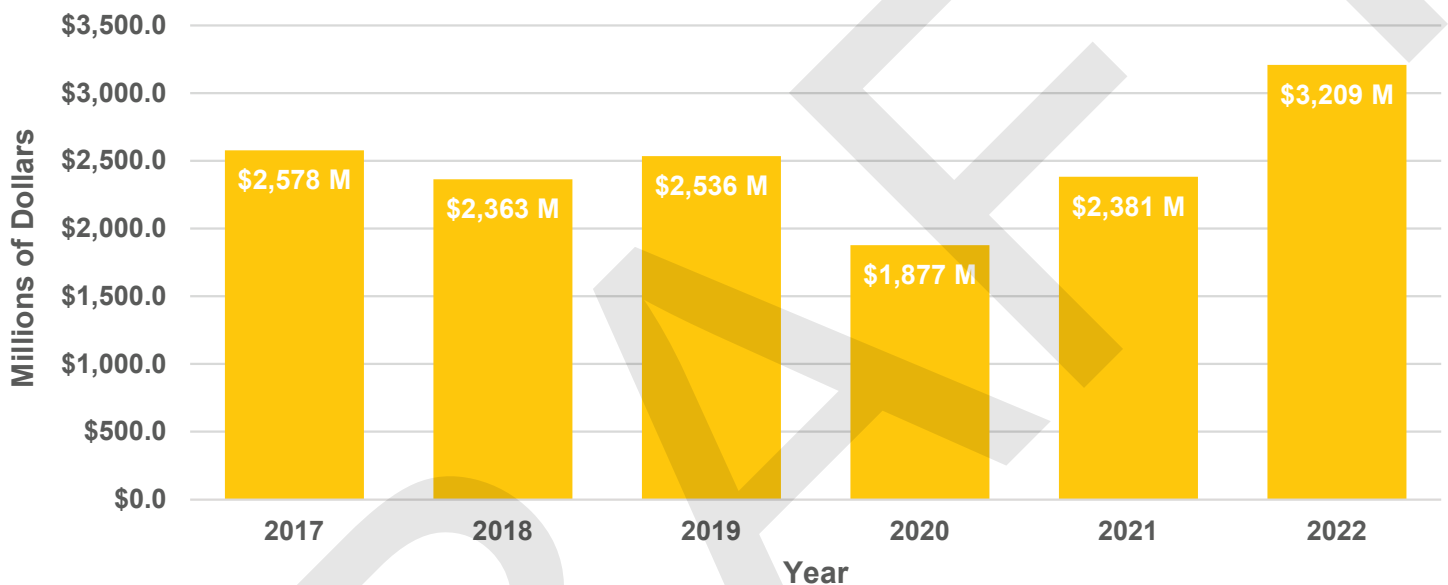


Beyond agricultural production, Kentucky is famous for their bourbon. According to the Kentucky Distillers' Association, 95 percent of the world's bourbon supply is crafted in Kentucky, with an industry that supported over 22,500 jobs in 2022.<sup>47</sup> Moreover, the bourbon industry in Kentucky is expected to continue to grow, with over \$5.2 billion in additional projects over the next five years.<sup>48</sup>

### Primary Metals

Kentucky's primary metal industry focuses on a key select metals including aluminum, copper, and steel.

**Figure 2-6. Gross Domestic Product: Primary Metal Manufacturing in Kentucky**



Source: Federal Reserve Bank of St. Louis. Gross Domestic Product: Primary Metal Manufacturing (NAICS 331) in Kentucky, Millions of Dollars, Annual, Not Seasonally Adjusted

Kentucky's aluminum and copper sector employs over 21,000 full-time workers and has over 180 related facilities.<sup>49</sup> This industry is supported by a demand for products that are lightweight and fuel efficient and can be manufactured using innovative methods. Steel production is also important in Kentucky, with over 40 steel and iron companies, supporting almost 6,400 full-time employees.<sup>50</sup>

47. Kentucky Distillers' Association. 2022 Unfiltered- The Proof is Here. 2023. Retrieved from: [https://kybourbon.com/wp-content/uploads/2023/08/2023-UNFILTERED\\_final.pdf](https://kybourbon.com/wp-content/uploads/2023/08/2023-UNFILTERED_final.pdf).

48. Kentucky Distillers' Association. Retrieved from: <https://kybourbon.com/industry/impact/>. Accessed: November 2023.

49. Kentucky Cabinet for Economic Development. Primary Metals. Retrieved from: [https://ced.ky.gov/Existing\\_Industries/Primary\\_Metals](https://ced.ky.gov/Existing_Industries/Primary_Metals). Accessed: November 2023.

50. Ibid.

## Chemicals

Kentucky is home to over 240 chemical manufacturing companies, and the chemical industry supports around 17,000 workers.<sup>51</sup> In 2021, Kentucky's chemical manufacturing sector produced almost \$2.9 billion in output.<sup>52</sup> The top chemicals manufactured in Kentucky are listed in **Table 2-13** below.

**Table 2-13. Kentucky Chemical Manufacturing**

Chemical	Use
Silicones	Manufacture sealants, cooking utensils, adhesives, lubricants, medicines
Polymers of Vinyl Chloride	Manufacture of PVC for pipes, wire coatings, and packaging materials
Ethylene	Plastics, Textiles, Antifreeze, Solvents
Ethanol	Production of Gasoline
Vinyl Acetate	Manufacture of PVA for adhesives, wood glues, gum base, and automotive parts

## Plastics and Rubber

In line with the automotive industry, the state has a notable plastic and rubber industry as well. The industry not only supports the production of vehicles and vehicle parts, but it supports other sectors as well. Kentucky is home to over 260 plastic and rubber manufacturers, employing over 30,000 workers.<sup>53</sup> In 2021, Kentucky manufactured almost \$2.0 billion in plastic and rubber products.<sup>54</sup>

## Distribution and Logistics

Kentucky is positioned within 600 miles of over half of the nation's population and manufacturing, as seen in **Figure 2-7**.<sup>55</sup> Moreover, the state has:

- An extensive system of interstates and parkways;
- Five Class I railroads, One Class II railroad, and Nine Class III railroads;
- Connections to the Ohio River, Mississippi River, and Tennessee River;
- Six commercial airports; and,
- Around 41,000 total miles of pipeline.<sup>56</sup>

51. Kentucky Cabinet for Economic Development. Chemicals. Retrieved from: [https://ced.ky.gov/Existing\\_Industries/Chemicals](https://ced.ky.gov/Existing_Industries/Chemicals). Accessed: November 2023.

52. National Association of Manufacturers. 2022 Kentucky Manufacturing Facts.

53. Kentucky Cabinet for Economic Development. Plastics and Rubber. Retrieved from: [https://ced.ky.gov/Existing\\_Industries/Chemicals](https://ced.ky.gov/Existing_Industries/Chemicals). Accessed: November 2023.

54. National Association of Manufacturers. 2022 Kentucky Manufacturing Facts.

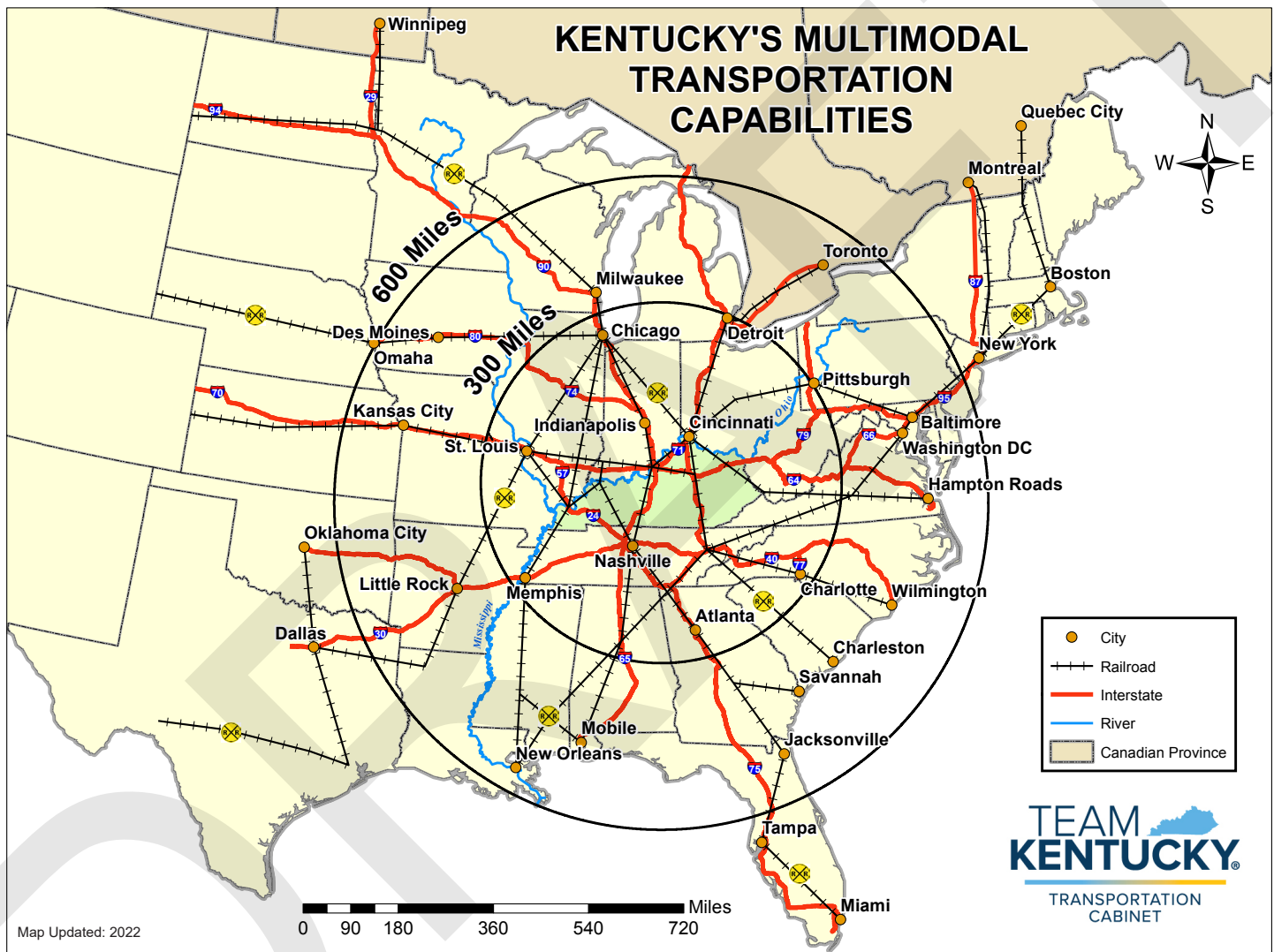
55. Kentucky Transportation Cabinet. 2022 Kentucky Freight Plan. May 3, 2023. Retrieved from: <https://transportation.ky.gov/MultimodalFreight/Pages/FREIGHT.aspx>. Accessed: November 2023.

56. Ibid.

Therefore, the distribution and logistics industry is one of Kentucky's key industries. Based on FHWA's FAF, in 2022, over 662.7 million tons of freight were transported to or from Kentucky.<sup>57</sup>

Moreover, Kentucky is home to over 600 distribution and logistics facilities employing over 91,000 workers.<sup>58</sup> Additionally, since 2017, more than \$5.7 billion has been invested into the industry, which is expected to support more than 18,600 jobs.<sup>59</sup>

Figure 2-7. Kentucky's Multimodal Transportation Capabilities



Source: Kentucky Transportation Cabinet

57. Federal Highway Administration. Freight Analysis Framework 5.0. July 28, 2023. Accessed: November 2023.

58. Kentucky Cabinet for Economic Development. Distribution & Logistics. Retrieved from: [https://ced.ky.gov/Existing\\_Industries/Logistics\\_Distribution](https://ced.ky.gov/Existing_Industries/Logistics_Distribution). Accessed: November 2023.

59. Ibid.

### 2.2.2. Freight Demand and Growth

The freight demand trends analysis is intended to establish a clear understanding of the types and volumes of commodities that are currently transported by rail in Kentucky, whether they are originating, terminating, intrastate, or through movements. This information, combined with an evaluation of the share of freight transportation by each mode (i.e., road, rail, pipeline, air, and water), facilitates a broader understanding of intermodal connectivity and potential opportunities to maximize the utility of the rail network.

Freight demand trends in Kentucky are mapped in **Interactive Application 2-5**.

#### DATA SOURCES

Two primary data sources were used in the analysis of Kentucky's commodity flows: the STB Carload Waybill Sample and the FAF.

**Carload Waybill Sample:** The Carload Waybill Sample is a representative sample of shipment data reported by railroads that deliver more than 4,500 railcars per year. Freight railroads that deliver (terminate) less than 4,500 railcars annually do not contribute to this dataset. However, shipments originating or terminating on non-repeating railroads may still be reported by a connecting railroad interchange partner. The Carload Waybill Sample is considered representative of all freight transported by rail and provides insight into inbound, outbound, internal, and through movements.

Each record describes the origin and destination stations, the commodity type, the number of carloads, and the tonnage of an individual shipment. The dataset also provides an expansion factor for each record that allows the data to be extrapolated to represent total annual volumes.

**Freight Analysis Framework:** FAF is a publicly available national freight database with geographic coverage of all state and major trade zones. FAF provides data classified by freight tonnage and freight value as well as mode share. The dataset also includes a forecast of freight tonnage and value for each mode.

All freight data recorded in the Carload Waybill Sample classify freight using a seven-digit Standard Transportation Commodity Code (STCC), which provides a detailed commodity description. Meanwhile, FAF uses a two-digit Standard Classification of Transportation Goods, which only describes the general category of the commodity.



Source: Kentucky Transportation Cabinet



## FREIGHT RAIL COMMODITY FLOWS BY DIRECTION

Recent freight rail transportation data for Kentucky was derived from the 2021 STB Carload Waybill Sample. Rail movements were categorized by direction (i.e., inbound, outbound, intrastate, and through) and commodities, which are measured in both tonnage and carloads. The four directional categories are:

- **Inbound:** Freight originating outside of the state with a destination in Kentucky.
- **Outbound:** Freight originating within the state and destined for outside Kentucky.
- **Intrastate:** Freight originating in the state and terminating at another station in the state.
- **Through:** Freight originating and destined outside of the state but traveling along Kentucky's rail network to reach its destination.

### Overview

As presented in **Table 2-14**, approximately 200 million tons and 3.5 million carloads/containers were transported over the Kentucky rail network. Of all rail movements, through movements (i.e., volumes originating and terminating outside of Kentucky) represent the largest share of freight traffic. Specifically, about 80 percent of the freight volumes (in tons) and 83 percent of the carload/container volumes in Kentucky were transported through the state. Outbound freight rail traffic represents the second highest volume of Kentucky freight rail movements, with almost 19 million tons and 335 thousand carloads/containers transported out of the State. This corresponds to approximately nine percent of the State's total volume in both tonnage and carloads/containers. Inbound movements are slightly smaller in magnitude, comprising approximately seven percent of the volume transported and six percent of all carload/container movements. Finally, the intrastate movements represented the smallest share of freight rail volumes transported within the State. Only three percent of the total volume transported, and two percent of the total carloads/containers were within the State.

Additionally, the majority of the volumes transported through Kentucky in 2021 were non-containerized commodities, with 183.3 million tons of carload freight compared to 16.5 million tons of containerized commodities (intermodal units).



Source: Kentucky Transportation Cabinet

Table 2-14. Kentucky Freight Rail Movement by Direction, 2021

Traffic Type	Total Tonnage (in thousands)	Percentage	Total Carloads or Containers (in thousands)	Percentage	Tons per Carload or Container
<b>Carloads</b>					
Inbound	13,977	8%	141	7%	99
Outbound	18,021	10%	253	12%	71
Intrastate	5,832	3%	62	3%	94
Through	145,450	79%	1,601	78%	91
<b>TOTAL</b>	<b>183,281</b>	<b>100%</b>	<b>2,059</b>	<b>100%</b>	<b>89</b>
<b>Intermodal Containers</b>					
Inbound	852	5%	77	5%	11
Outbound	794	5%	82	6%	10
Intrastate	0	0%	0	0%	0
Through	14,814	90%	1,316	89%	11
<b>TOTAL</b>	<b>16,460</b>	<b>100%</b>	<b>1,475</b>	<b>100%</b>	<b>11</b>
<b>Total Carloads and Containers</b>					
Inbound	14,829	7%	218	6%	68
Outbound	18,815	9%	335	9%	56
Intrastate	5,832	3%	62	2%	94
Through	160,264	80%	2,917	83%	55
<b>TOTAL</b>	<b>199,741</b>	<b>100%</b>	<b>3,534</b>	<b>100%</b>	<b>57</b>

Source: 2021 STB Carload Waybill Sample

### Major Commodities

The Kentucky rail network handles a wide range of freight commodities but coal, chemicals or allied products, and farm products were the largest by tonnage in 2021. **Table 2-15** lists the top commodities transported by rail in Kentucky.

For inbound and intrastate movements, coal and chemical or allied products were the top two commodities, followed by petroleum or coal products. The top three commodities transported out of Kentucky were coal, transportation equipment, and chemicals or allied products. For commodities transported through Kentucky, the top three were coal, chemicals or allied products, and farm products.

Table 2-15. Kentucky Major Commodities Railed by Direction, 2021 (in Thousands of Tons)

STCC*	Commodity Description	Inbound	Outbound	Intrastate	Through	Total
11	Coal	5,786	8,319	3,505	37,973	55,582
28	Chemicals or Allied Products	2,369	2,146	1,468	30,620	36,602
1	Farm Products	288	785	18	25,199	26,289
20	Food or Kindred Products	809	402	37	16,627	17,875
33	Primary Metal Products	1,368	679	2	8,844	10,892
46	Misc Mixed Shipments	735	481	0	9,534	10,749
29	Petroleum or Coal Products	1,693	408	252	5,707	8,060
37	Transportation Equipment	184	2,581	212	3,853	6,830
26	Pulp, Paper or Allied Products	570	282	5	5,856	6,713
14	Nonmetallic Minerals	75	850	240	3,277	4,442
32	Clay, Concrete, Glass or Stone	140	756	6	2,972	3,874
24	Logs, Lumber, Wood Prod.	361	69	74	2,851	3,356
40	Waste or Scrap Materials Not Identified by Producing Industry	352	626	12	1,895	2,886
10	Metallic Ores	29	0	1	1,315	1,345
13	Petroleum Prod, Natural Gas	0	9	0	1,217	1,226
23	Apparel or Related Products	0	0	0	542	542
36	Electrical Equipment	31	265	1	235	532
25	Furniture or Fixtures	0	22	0	361	383
42	Shipping Containers	0	72	0	303	375
30	Rubber or Misc Plastics	0	0	0	313	314
44	Unknown	0	12	0	158	170
35	Machinery	6	2	0	147	155
41	Misc Freight Shipments	30	24	0	91	145
48	Waste Hazardous Materials or Waste Hazardous Substances	0	8	0	122	131
27	Printed Matter	0	0	0	56	56
34	Fabricated Metal Products	2	8	0	45	55
39	Misc Manufacturing Products	0	1	0	43	43
19	Ordinance or Accessories	0	9	0	34	43
22	Textile Mill Products	0	0	0	28	29
45	Unknown	0	0	0	24	24
8	Forest Products	0	0	0	11	11
38	Instruments	0	0	0	5	5
47	Small Pig Freight Shipments	0	0	0	2	2
9	Fresh Fish or Marine Products	0	0	0	1	1
31	Leather or Leather Products	0	0	0	1	1
21	Tobacco Products	0	0	0	1	1
<b>TOTAL</b>		<b>14,829</b>	<b>18,815</b>	<b>5,832</b>	<b>160,264</b>	<b>199,741</b>

\*Standard Transportation Commodity Code

Source: 2021 STB Carload Waybill Sample

## Inbound Freight Movement

**Table 2-16** presents the top freight rail commodities by weight destined for Kentucky. Coal is the largest inbound commodity into Kentucky, used mainly for electric power generation<sup>60</sup>. Following coal, the next largest inbound commodity is chemicals or allied products, followed by petroleum or coal products, primary metal products, and food or kindred products to round out the top five inbound commodities.

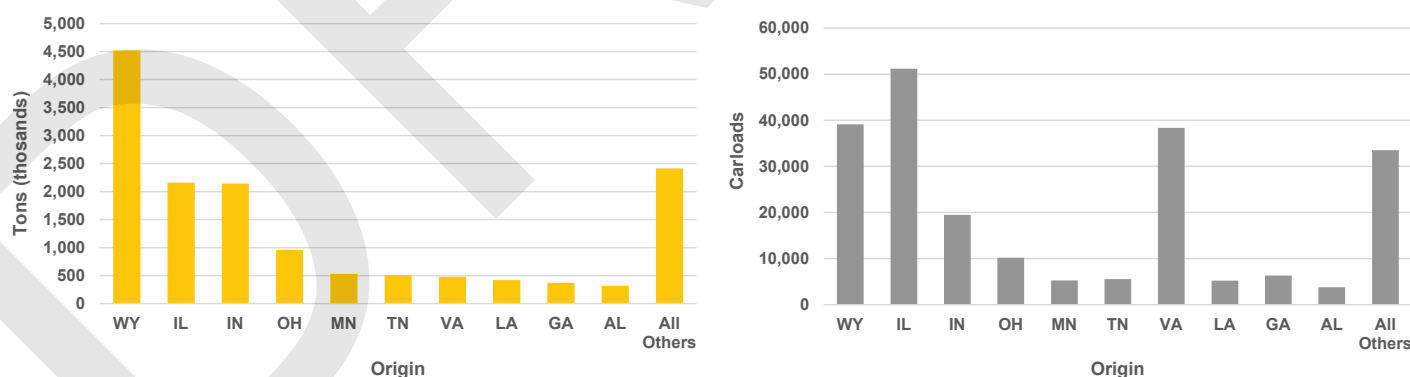
**Table 2-16. Top Inbound Freight Commodities, by Weight (2021)**

STCC	Commodity Description	Tons (in thousands)
11	Coal	5,786
28	Chemicals or Allied Products	2,369
29	Petroleum or Coal Products	1,693
33	Primary Metal Products	1,368
20	Food or Kindred Products	809
46	Misc Mixed Shipments	735
26	Pulp, Paper or Allied Products	570
24	Logs, Lumber, Wood Prod.	361
40	Waste or Scrap Materials Not Identified by Producing Industry	352
1	Farm Products	288
All Other Commodities		499
<b>TOTAL</b>		<b>14,829</b>

Source: 2021 STB Carload Waybill Sample

**Figure 2-8** presents the top 10 states of origin for inbound rail traffic terminating in Kentucky by tonnage. Wyoming is the largest source of inbound rail traffic in terms of tonnage, followed by Illinois.

**Figure 2-8. Origins of Inbound Rail Traffic Destined for Kentucky, 2021**



Source: 2021 STB Carload Waybill Sample

60. U.S. Energy Information Administration. Profile Analysis – Kentucky. September 21, 2023. Accessed: December 2023. Retrieved from: <https://www.eia.gov/state/analysis.php?sid=KY>



## Outbound Freight Movement

**Table 2-17** presents the top freight rail commodities originating in Kentucky, by weight. Interestingly, coal is the largest commodity shipped into and out of Kentucky, by volume. The coal shipped into Kentucky is used mainly for electricity generation purposes. Coal extracted from mines in Kentucky is shipped to other states to support electricity generation.<sup>61</sup> Rounding out the top five commodities shipped out of Kentucky are transportation equipment, chemical or allied products, nonmetallic minerals, and farm products.

**Table 2-17. Top Freight Commodities Originating in Kentucky, by Weight (2021)**

STCC	Commodity Description	Tons (in thousands)
11	Coal	8,319
37	Transportation Equipment	2,581
28	Chemical or Allied Products	2,146
14	Nonmetallic Minerals	850
1	Farm Products	785
32	Clay, Concrete, Glass or Stone	756
33	Primary Metal Products	679
40	Waste or Scrap Materials Not Identified	626
46	Misc Mixed Shipments	481
29	Petroleum or Coal Products	408
All Other Commodities		1,185
<b>TOTAL</b>		<b>18,815</b>

Source: 2021 STB Carload Waybill Sample

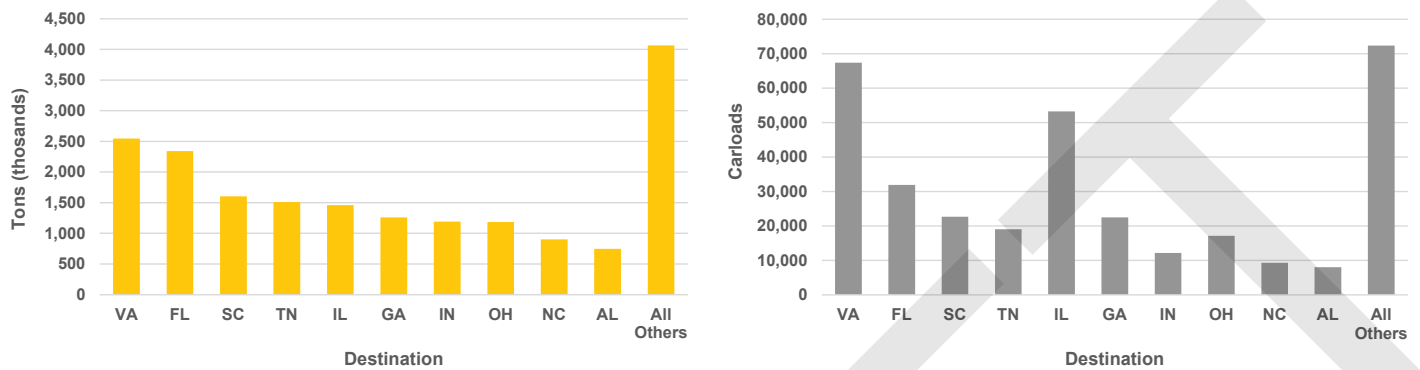
**Figure 2-9** highlights the top 10 destinations for outbound rail traffic originating in Kentucky. Virginia receives the largest share of freight rail traffic from Kentucky in terms of tonnage, followed by Florida, South Carolina, Tennessee, and Illinois. The top commodity transported to Virginia from Kentucky is coal, over two million tons, comprising the majority of total tonnage transported. This is followed by miscellaneous mixed shipments and transportation equipment that represent approximately 327,000 and 51,000 tons, respectively.



Source: Kentucky Transportation Cabinet

61. U.S. Energy Information Administration. Profile Analysis – Kentucky. September 21, 2023.

Figure 2-9. Destination of Outbound Rail Traffic Originating in Kentucky, 2021



Source: 2021 STB Carload Waybill Sample

### Intrastate Freight Movement

**Table 2-18** presents the intrastate rail tonnage by commodity in Kentucky. Coal is the largest commodity transported within the state. Approximately two-fifths of the coal mined in Kentucky remains in the state.<sup>62</sup> The next four largest commodities transported within Kentucky include chemicals or allied products, petroleum or coal products, nonmetallic minerals, and transportation equipment.

Table 2-18. Top Freight Commodities Traveling Within Kentucky, by Weight (2021)

STCC	Commodity Description	Tons (in thousands)
11	Coal	3,505
28	Chemicals or Allied Products	1,468
29	Petroleum or Coal Products	252
14	Nonmetallic Minerals	240
37	Transportation Equipment	212
24	Logs, Lumber, Wood Prod.	74
20	Food or Kindred Products	37
1	Farm Products	18
40	Waste or Scrap Materials Not Identified	12
32	Clay, Concrete, Glass or Stone	6
All Other Commodities		9
<b>TOTAL</b>		<b>5,832</b>

Source: 2021 STB Carload Waybill Sample

### Through Freight Movement

**Table 2-19** presents the top freight rail commodities traveling through Kentucky, by weight. Coal was the largest commodity, at almost 38.0 million tons, shipped through the state in 2021. Rounding out the top five commodities passing through Kentucky, were chemicals or allied products, farm products, food or kindred products, and miscellaneous mixed shipments.

62. U.S. Energy Information Administration. Profile Analysis – Kentucky. September 21, 2023.

Table 2-19. Top Freight Commodities Traveling Through Kentucky, by Weight (2021)

STCC	Commodity Description	Tons (in thousands)
11	Coal	37,973
28	Chemicals or Allied Products	30,620
1	Farm Products	25,199
20	Food or Kindred Products	16,627
46	Misc Mixed Shipments	9,534
33	Primary Metal Products	8,844
26	Pulp, Paper or Allied Products	5,856
29	Petroleum or Coal Products	5,707
37	Transportation Equipment	3,853
14	Nonmetallic Minerals	3,277
All Other Commodities		12,775
<b>TOTAL</b>		<b>160,264</b>

Source: 2021 STB Carload Waybill Sample

## FREIGHT TRANSPORTATION BY MODE

In 2021, 19.6 billion tons of freight were shipped in the United States, of which 1.5 billion tons were shipped by rail, representing 7.7 percent of the total freight moved in the United States. In Kentucky, 656 million tons of freight were shipped in 2021. Approximately, 48.0 million tons were shipped by rail, representing 7.3 percent of Kentucky's total freight volume.

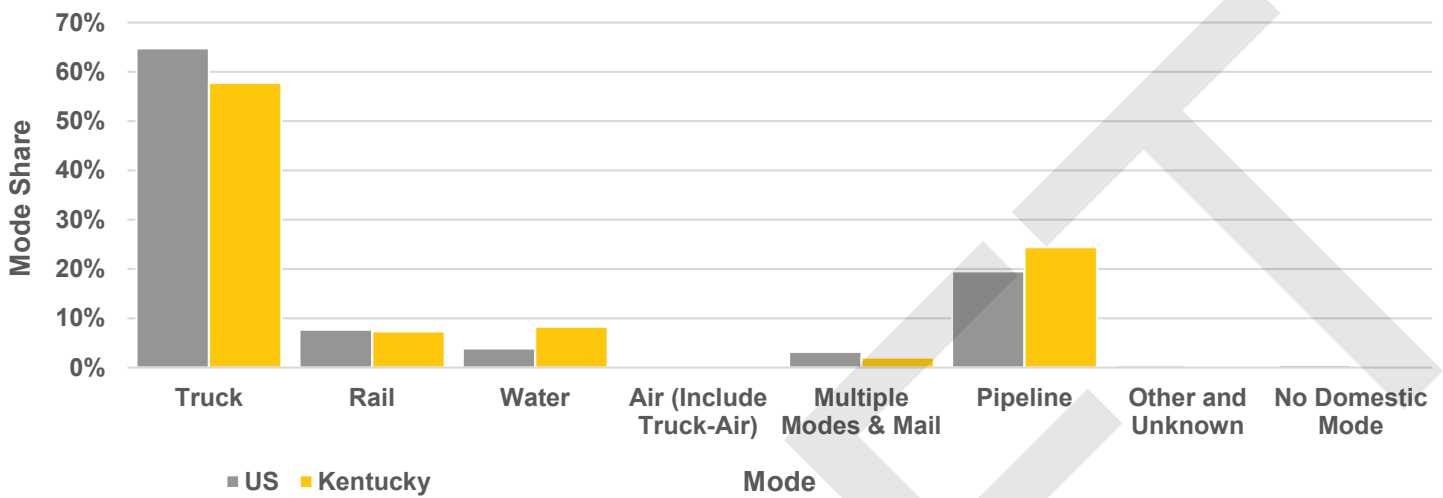
In terms of tonnage, most of Kentucky's freight was shipped by truck; the remainder traveled mostly by pipeline, water, or rail.

**Figure 2-10** illustrates the share of freight tonnage carried by mode in Kentucky and across the United States in 2021, with detailed results presented in **Table 2-20**. Kentucky transports a larger share of its total freight by water and pipeline, and a smaller share by truck, compared to the United States overall.

**Table 2-21** presents the value of all freight shipped in 2021 by mode for Kentucky and the United States. The total value of freight shipped through Kentucky was \$691.5 million, of which rail transported \$16.3 million (2.4%).



Figure 2-10. Distribution of Freight Tonnage by Mode for Kentucky and the U.S., 2021



Source: Federal Highway Administration Freight Analysis Framework 5.0

Table 2-20. Freight Tonnage by Mode for Kentucky and the U.S., 2021

Mode	U.S. Tonnage	U.S. Percentage	KY Tonnage	KY Percentage
Truck	12,677,556,364	64.7%	379,002,602	57.8%
Rail	1,508,867,390	7.7%	48,000,166	7.3%
Water	761,471,769	3.9%	54,205,385	8.3%
Air	7,433,804	0.0%	673,778	0.1%
Multiple Modes and Mail	617,902,864	3.2%	13,248,949	2.0%
Pipeline	3,817,315,565	19.5%	160,236,559	24.4%
Other and Unknown	85,220,610	0.4%	619,084	0.1%
No Domestic Mode	105,619,299	0.5%	0	0.0%
<b>TOTAL</b>	<b>19,581,387,663</b>	<b>100.0%</b>	<b>655,986,521</b>	<b>100.0%</b>

Source: Federal Highway Administration Freight Analysis Framework 5.0

Table 2-21. Freight Value (in Millions) by Mode for Kentucky and the United States, 2021

Mode	U.S. Value	U.S. Percentage	KY Value	KY Percentage
Truck	\$13,415,010	72.5%	\$437,408	63.2%
Rail	\$558,653	3.0%	\$16,258	2.4%
Water	\$245,972	1.3%	\$6,254	0.9%
Air	\$658,396	3.6%	\$110,656	16.0%
Multiple Modes and Mail	\$2,557,626	13.8%	\$83,103	12.0%
Pipeline	\$1,013,678	5.5%	\$37,576	5.4%
Other and Unknown	\$28,990	0.2%	\$317	0.0%
No Domestic Mode	\$36,959	0.2%	\$0	0.0%
<b>TOTAL</b>	<b>\$18,515,284</b>	<b>100.0%</b>	<b>\$691,572</b>	<b>100.0%</b>

Source: Federal Highway Administration Freight Analysis Framework 5.0



## FREIGHT FORECAST ANALYSIS (TO 2045)

The Carload Waybill Sample data provides the starting point for building forecasts of future rail movements in Kentucky by direction and by commodity. In deriving the 2045 movements, growth rates between 2021 and 2045 were applied by direction and commodity. The compound annual growth rate (CAGR) was calculated for the total rail freight movement based on the direction. The overall freight volumes are expected to grow. Outbound and through freight volumes are projected to experience the greatest growth. The forecast predicts a potential slight decrease for intrastate volumes, driven by the FAF assumption of decreasing coal volumes transported within Kentucky.

**Table 2-22. Kentucky Rail Freight Forecast Summary 2021-2045**

Traffic Type	2021 Tonnage (in thousands)	2021 Percent	2045 Tonnage (in thousands)	2045 Percent	Compound Annual Growth Rate
Inbound	14,829	7.4%	16,633	6.5%	0.5%
Outbound	18,815	9.4%	25,155	9.8%	1.2%
Intrastate	5,832	2.9%	5,575	2.2%	-0.2%
Through	160,264	80.2%	208,384	81.5%	1.1%
<b>TOTAL</b>	<b>199,741</b>	<b>100.0%</b>	<b>255,748</b>	<b>100.0%</b>	<b>1.0%</b>

Source: 2021 STB Carload Waybill Sample and Federal Highway Administration Freight Analysis Framework 5.0



Source: Kentucky Transportation Cabinet

### 2.2.3. Fuel Cost Trends

Historic fuel prices (gasoline and diesel) are shown in **Figure 2-11**. In 2022, fuel prices reached an all-time high due to market forces. Higher fuel costs tend to increase the cost of trucking more than the cost of shipping by rail. As a result, rail may become more attractive for many shippers if fuel costs remain elevated over a long period of time.

**Figure 2-11. Midwest Weekly Retail Gasoline and Diesel Prices, 1995 to 2023**



Source: U.S. Energy Information Administration

### 2.2.4. Rail Congestion Trends

Average railroad traffic density ranges from 0 to 27 trains per day across principal main line subdivisions within Kentucky. **Table 2-23** lists the average number of trains per day across each principal subdivision. None of the railroad owners in Kentucky identified any existing railroad throughput bottlenecks. The freight railroad infrastructure in Kentucky is mapped in **Interactive Application 2-1**.

Table 2-23. Average Trains per Day by Railroad Subdivision

Railroad	Subdivision	Average Trains Per Day
CN	Cairo	14
CN	Chiles	14
CN	P&I	11
CSX	Big Sandy	4
CSX	Cincinnati	4
CSX	Cincinnati - Corbin	5
CSX	Cincinnati Terminal	13
CSX	Henderson	14
CSX	Kanawha	18
CSX	KD	6
CSX	Louisville - Cincinnati	7
CSX	Louisville Terminal	7
CSX	Main Line	7
CSX	Northern	12
CSX	Russell	10
LIRC	Louisville Secondary	8
NS	CNO&TP North	27
NS	CNO&TP South	16
NS	Harrodsburg	9
NS	Louisville	10
NS	Pocahontas	3
PAL	Louisville	8
PAL	Paducah	3
RJCC	Old Road	4
RJCC	Versailles	4
All Other Railroads	All Other Subdivisions	2 or fewer

Source: Federal Railroad Administration, Highway-Rail Grade Crossing Inventory Database

## 2.2.5. Highway and Airport Congestion Trends

### HIGHWAYS

According to the Kentucky's Long Range Transportation Plan (LRTP), the state is ranked 18th in interstate lane-miles and has over 80,000 miles of public roadways, of which, 80 percent are in rural

areas.<sup>63</sup> Of the total public roads:

- Half are maintained by individual county governments;
- One-third are maintained by the State;
- 13 percent are maintained by city or municipal governments; and,
- 2 percent are owned and maintained by other Federal, State, or local agencies.<sup>64</sup>

Though interstate highways only reflect 10 percent of Kentucky's roadway infrastructure, it is the most used roadway infrastructure accounting for over 35 percent of the State's vehicle-miles traveled (VMT). This is followed by principal arterials, which account for 34 percent of the State's VMT.<sup>65</sup> In total, the annual VMT on all roads in Kentucky in 2021 was 48.1 billion miles.<sup>66</sup>

A 2022 study by TRIP highlighted that 28 percent of the State's major roads are in poor or mediocre condition.<sup>67</sup> Meanwhile, for Kentucky's locally and state-maintained roads, seven percent are categorized as being in poor condition and 21 percent are in mediocre condition. **Table 2-24** highlights the pavement condition for major roadways in urban areas and statewide. For the State's bridges, the report indicated that seven percent are rated poor or structurally deficient, 65 percent are rated fair, and 28 percent are rated good. Finally, the report stated that roadway congestion in Kentucky resulted in an annual estimated \$1.8 billion in lost travel time and wasted fuel.<sup>68</sup>

**Table 2-24. Kentucky Road Pavement Condition, by Region (2022)**

Location	Poor	Mediocre	Fair	Good
Bowling Green	2%	11%	15%	72%
Lexington	7%	13%	22%	58%
Louisville	19%	25%	20%	36%
Northern Kentucky	19%	19%	20%	43%
Owensboro	19%	29%	28%	24%
<b>Kentucky Statewide</b>	<b>7%</b>	<b>21%</b>	<b>24%</b>	<b>48%</b>

Source: TRIP, Kentucky Transportation by the Numbers: Meeting the State's Need for Safe, Smooth and Efficient Mobility, February 2022

63. Kentucky Transportation Cabinet, 2022-2045 Kentucky Long-Range Statewide Transportation. Retrieved from: <https://transportation.ky.gov/Planning/Pages/Long-Range-Statewide-Transportation-Plan.aspx>

64. Ibid.

65. Ibid.

66. U.S. Federal Highway Administration, Highway Statistics 2021, Functional System Travel – 2021. Retrieved from: <https://www.fhwa.dot.gov/policyinformation/statistics/2021/pdf/vm2.pdf>

67. TRIP, Kentucky Transportation by the Numbers: Meeting the State's Need for Safe, Smooth and Efficient Mobility. February 2022. Retrieved from: [https://tripnet.org/wp-content/uploads/2022/02/TRIP\\_Kentucky\\_Transportation\\_by\\_the\\_Numbers\\_Report\\_February\\_2022.pdf](https://tripnet.org/wp-content/uploads/2022/02/TRIP_Kentucky_Transportation_by_the_Numbers_Report_February_2022.pdf)

68. Ibid.



## AIRPORTS

Kentucky has six active commercial service airports which two are international airports located in Northern Kentucky (Cincinnati area) and Louisville. The other four airports are regional airports with limited operations. Kentucky's commercial air service primarily exists for the convenience of the traveling public, but some freight and mail are hauled on commercial flights. The Louisville Muhammad Ali International Airport (formerly Standiford Field) in Louisville processes the largest share of both freight and mail tonnage. It is the home of UPS's main hub, Worldport. The Cincinnati/Northern Kentucky International Airport, in Boone County, handles most of the remaining tonnage. It is home to large hubs for both Amazon Air and DHL. **Table 2-25** shows commercial airline traffic statistics for Kentucky's commercial service airports in 2022.

**Table 2-25. Commercial Air Traffic by Airport, 2022**

City	Airport	Code	Passengers	Freight Tons	Mail Tons
Bowling Green	Bowling Green-Warren County Regional	BWG	146	22	0
Cincinnati	Cincinnati/Northern Kentucky International	CVG	2,715,019	538,272	2,006
Lexington	Blue Grass	LEX	428,748	56	1
Louisville	Muhammad Ali International	SDF	1,406,579	1,206,840	87,128
Owensboro	Owensboro Daviess County	OWB	7,892	0	0
Paducah	Barkley Regional	PAH	11,233	0	0
<b>TOTAL</b>			<b>4,569,617</b>	<b>1,745,190</b>	<b>89,135</b>

Source: Bureau of Transportation Statistics, U.S. Airline Traffic by Airport

Two of Kentucky's commercial service airports (Owensboro and Paducah) are Essential Air Service (EAS) communities. The EAS program is intended to provide reliable commercial air service to more isolated, rural communities throughout the U.S. by providing subsidies to airlines that serve them through a competitive bid process.

Additionally, Kentucky is home to Campbell Army Airfield near Hopkinsville, Kentucky. Campbell Army Airfield is a military airport in Fort Campbell which recorded over 7,000 passengers and over 400 freight tons in 2022.<sup>69</sup>

### 2.2.6. Land Use Trends

Kentucky is primarily a rural state, with forested mountains in the east (forming part of the Appalachian Range) and rolling hills, farmland, and forests in the central and western regions.

Industrial land uses are present within both urban and rural areas.

69. Bureau of Transportation Statistics. U.S. Airline Traffic by Airport. Retrieved from: <https://www.bts.gov/browse-statistical-products-and-data/state-transportation-statistics/us-airline-traffic-airport>. Accessed: November 2023.

The Mississippi River runs along the state's westernmost border, and the Ohio River forms the state's northern border with Illinois, Indiana, and Ohio. Both of these navigable rivers enable water transportation and attract industrial uses.

Major cities include Louisville and Lexington. Kentucky also encompasses part of the greater Cincinnati, Ohio metropolitan area. Other metropolitan areas within Kentucky include: Ashland (within the Huntington, West Virginia area), Fort Campbell (within the Clarksville, Tennessee area), Henderson (within the Evansville, Indiana area), Bowling Green, Elizabethtown, Owensboro, and Paducah.

## 2.3. RAIL SERVICE NEEDS AND OPPORTUNITIES

This section highlights Kentucky's critical rail system challenges, service gaps, and improvement needs. The needs identification takes into account the current system, expected growth, future market and technology changes, and the potential for emerging markets. Chapters 3 and 4 present possible approaches and rail improvement strategies that could address the identified needs.

### 2.3.1. Trends Impacting Freight Rail Needs and Opportunities

#### NORFOLK SOUTHERN ACQUISITION OF CNO&TP CORRIDOR

In November of 2022, NS announced that it was executing a purchase agreement to acquire all assets of the 337-mile Cincinnati Southern Railway (CSR) between Cincinnati, Ohio and Chattanooga, Tennessee.<sup>70</sup> The CSR was constructed by and has continued to be owned by the City of Cincinnati. NS and its predecessors had operated the line under lease since 1893 through a subsidiary railroad known as the Cincinnati, New Orleans and Texas Pacific (CNO&TP). The \$1.62 billion transaction was recently completed in 2024.

Once under full NS ownership, NS plans to make some additional improvements and investments along the corridor.

#### DOMESTIC MANUFACTURING AND INDUSTRIAL DEVELOPMENT

Domestic manufacturing continues to be strong in Kentucky. According to the Kentucky Cabinet for Economic Development, Kentucky's ideal location, skilled workforce and business-friendly environment make the commonwealth a great place for manufacturing companies to make and ship products to every corner of the globe.<sup>71</sup>

Other notable industrial activity present in Kentucky is the production and processing of raw materials, including chemicals, primary metals, and plastics.

In the past five years, manufacturers announced over 900 facility location or expansion projects with a reported capital investment of more than \$28 billion and nearly 39,000 additional jobs. There are over

70. Railway Age, NS to Acquire Cincinnati Southern for \$1.62B, November 21, 2022. Retrieved from: <https://www.railwayage.com/freight/class-i/ns-to-acquire-cincinnati-southern-for-1-62b/>

71. Kentucky Cabinet for Economic Development, Manufacturing. Retrieved from: [https://ced.ky.gov/Existing\\_Industries/Manufacturing](https://ced.ky.gov/Existing_Industries/Manufacturing)

6,000 manufacturing related facilities in Kentucky, many of which are directly or indirectly served by rail.

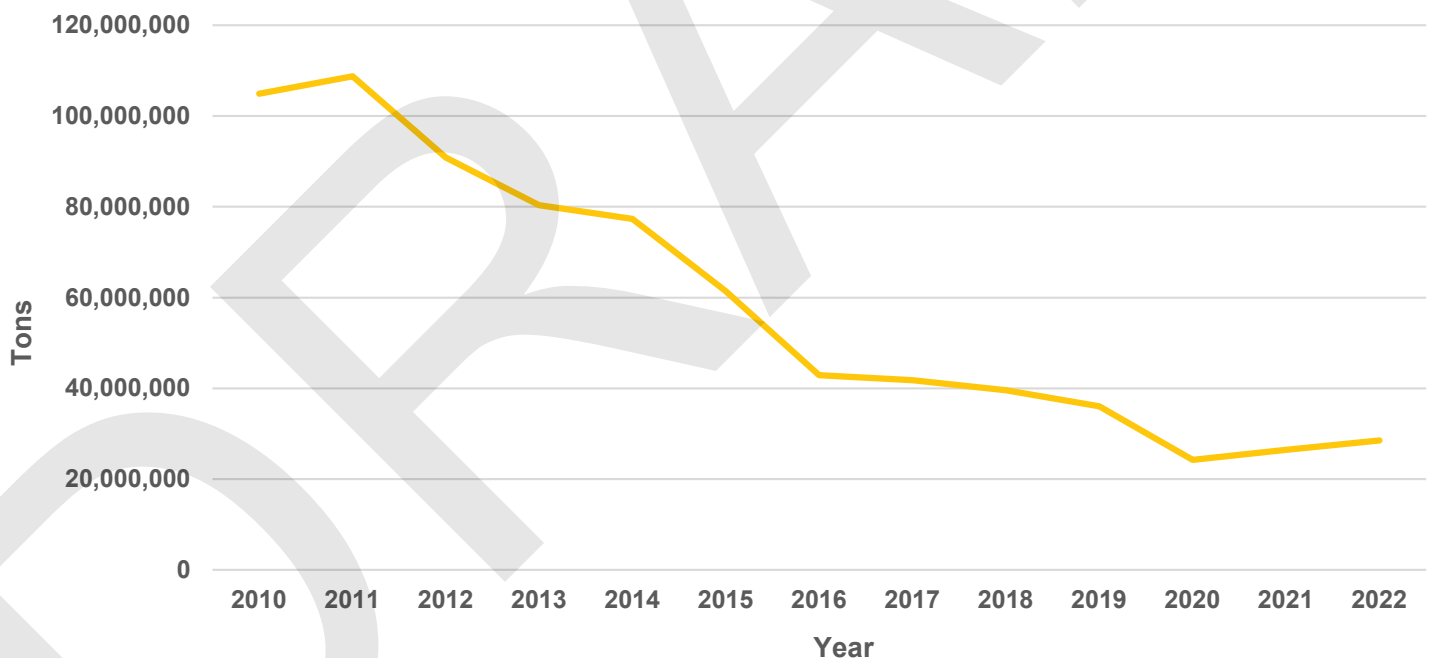
Many prospective firms interested in developing new manufacturing sites that require rail access prefer greenfield sites or shovel-ready sites in a rail-served industrial park. Railroads continue to collaborate with firms on industrial development opportunities and can aid in the site selection process.

Traffic growth from new shipper facilities continues to drive the need for infrastructure investment across each railroad's network to ensure network capacity and fluidity.

### DECLINING COAL MINING ACTIVITY IN KENTUCKY

Historically, coal mining has been a major industry in Kentucky, with major coalfields in both the eastern and western areas of the state. Since 2010, there has been a precipitous decline in coal production in Kentucky. **Figure 2-12** illustrates the trend in statewide coal production from 2010 to 2022. This has a direct impact on freight rail traffic and transportation demand, as most coal is shipped by rail due to its large volumes often being transported over long distances. The reduction in outbound coal shipments may potentially lead to surplus rail network capacity and reduced railroad operations over specific corridors and at some yard and terminal facilities.

**Figure 2-12. Total Annual Coal Production in Kentucky, 2010 to 2022**



Source: U.S. Energy Information Administration

### 2.3.2. Trends Impacting Passenger Rail Needs and Opportunities

#### STATE FUNDING SOURCES

The Kentucky 2022-2045 LRSTP identifies transportation needs and opportunities that impact

passenger rail.<sup>72</sup> Foremost among them is the need to establish a state funding source for rail, which would facilitate the opportunity to make public investments in rail to achieve public objectives. Currently, the state does not have dedicated funding sources for either freight or passenger rail development projects, including the need for Amtrak station upgrades. The development of a rail fund would allow public and private entities to work together to address passenger rail upgrades, freight rail improvements, and rail safety and security enhancements. This funding would help the rail industry in Kentucky to meet important industry standards.

## DEMOGRAPHIC CHANGES

The long-range statewide transportation identifies demographic changes that are occurring in Kentucky that could increase the demand for passenger rail transportation in the future. These include Kentucky's aging population. By 2030, more than 30 percent of the state's population is projected to be over the age of 55. The projected growth rate of population groups over the age of 65 between 2010 and 2040 is significantly higher than for younger age groups. The 85+ age group has the highest projected growth rate in Kentucky, with a 15.7 percent growth projection over this time horizon. In addition, Kentucky has a high per-capita percentage of persons with disabilities compared to other states. Currently, nine percent of Kentucky's population is disabled, and most of them are dependent on public transportation for trips to jobs, school, or healthcare facilities.

## REGIONAL GROWTH

Kentucky is along the southern edge of the Great Lakes megaregion, one of 11 regions in the United States identified by the Regional Plan Association where population and employment is projected to be concentrated in the future. Louisville and Northern Kentucky are just inside the region, but the remainder of the state falls between the Great Lakes and Piedmont Atlantic regions. **Figure 2-13** shows the U.S. megaregions. More than 70 percent of the nation's population growth and economic growth from 2000 to 2050 is expected to take place in megaregions, which are extended networks of metropolitan regions linked by environmental systems, transportation networks, economies, and culture.<sup>73</sup> Megaregions will be dependent on multimodal transportation systems that can efficiently move people and goods between metropolitan areas to support economic growth, global competitiveness, and quality of life. Kentucky's location along the edge of the Great Lakes megaregion presents a long-term need as well as an opportunity. The need is to accommodate anticipated increases in travel demand, while the opportunity is to plan for growth and leverage national funding programs to improve multimodal transportation systems in and through the state.

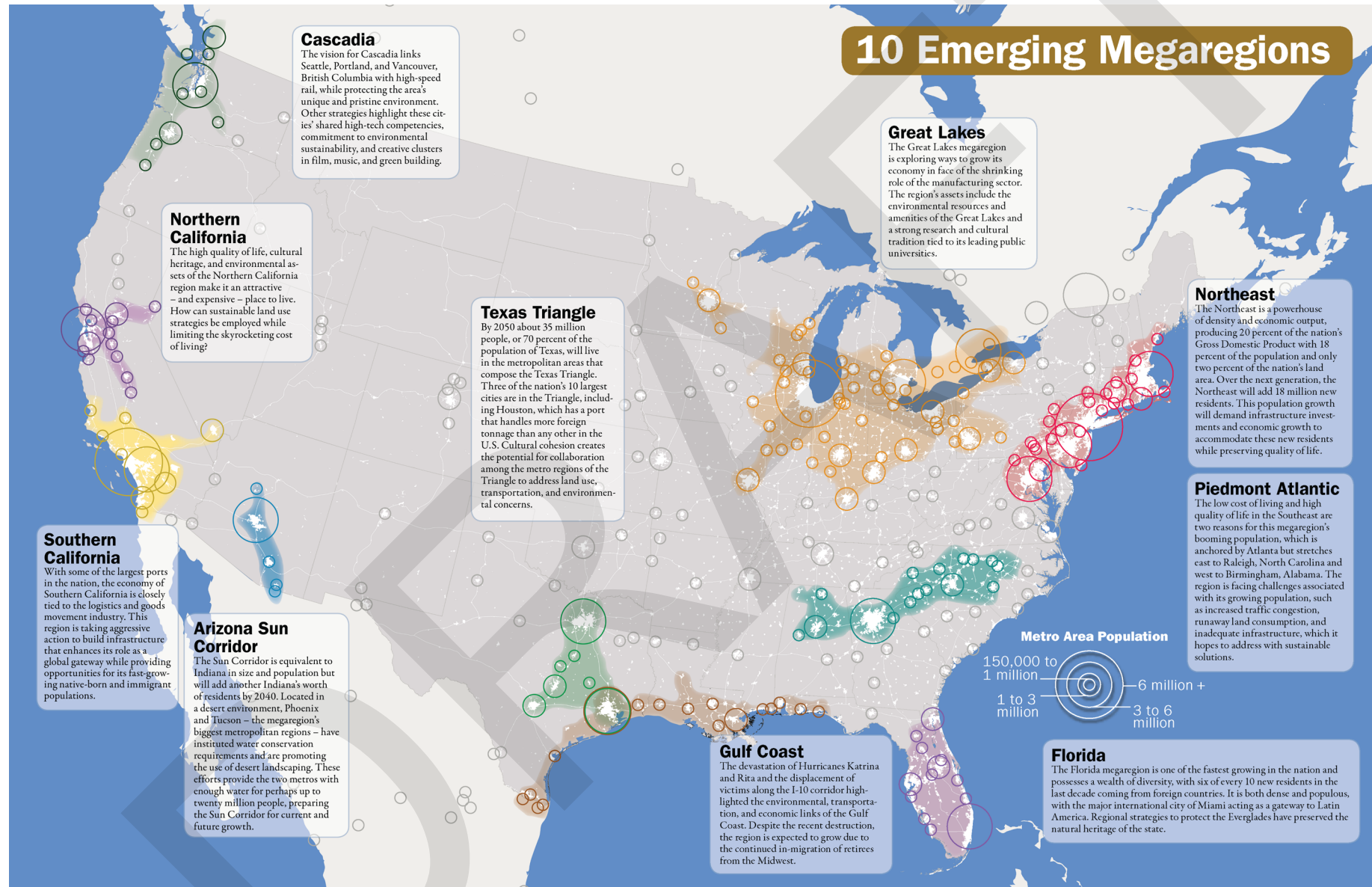
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72. Kentucky Transportation Cabinet, Kentucky 2022-2045 Long Range Statewide Transportation Plan. Retrieved from: <https://transportation.ky.gov/Planning/Long%20Range%20Plans%20Documents/2022-2045%20LRSTP%20Documents/2022-2045%20LRSTP%20Long-Range%20Statewide%20Transportation%20Plan.pdf>. Accessed March 2024

73. Regional Plan Association, America 2050 – A Prospectus. Retrieved from: <https://s3.us-east-1.amazonaws.com/rpa-org/pdfs/2050-Prospectus.pdf>. Accessed March 2024



Figure 2-13. U.S. Megaregions



Source: America 2050, Regional Plan Association

# CHAPTER 3

## PROPOSED PASSENGER RAIL IMPROVEMENTS AND INVESTMENTS

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### INTRODUCTION

This chapter describes ongoing, proposed, and potential initiatives to develop or expand passenger rail services in Kentucky.

### 3.1. FEDERAL PROGRAMS TO FUND PASSENGER RAIL

#### 3.1.1. Passenger Rail Funding in the IIJA

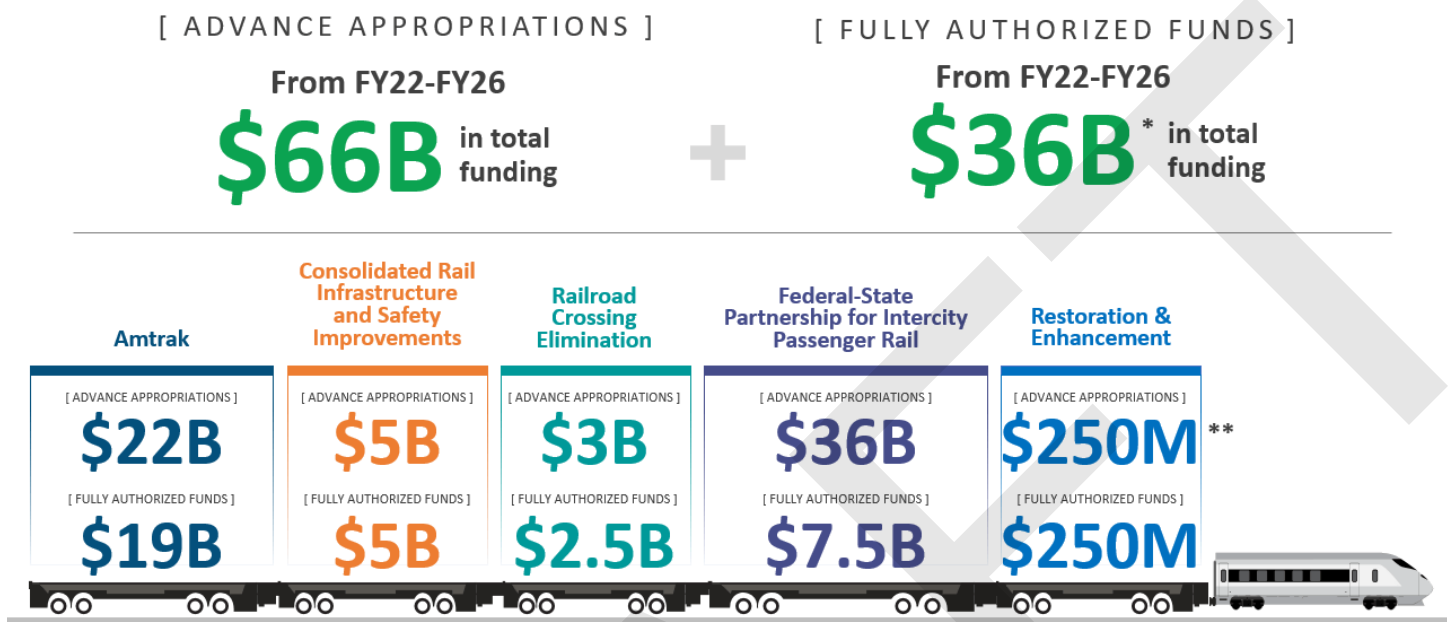
The Infrastructure Investment and Jobs Act (IIJA), signed on November 15, 2021, established new federal programs and funding mechanisms to develop and implement intercity passenger rail service in the U.S. The law also significantly increased the levels of funding for all types of rail transportation, including freight, intercity passenger, commuter, and transit services. Funding for freight and intercity passenger rail projects will be funneled through programs administered by the Federal Railroad Administration (FRA), of which the primary ones are: (1) Amtrak, (2) the Federal-State Partnership for Intercity Passenger Rail Grant Program, (3) the Consolidated Rail Infrastructure and Safety Improvements Grant Program, (4) the Railroad Crossing Elimination Grant Program, and (5) the Restoration and Enhancements Grant Program.

The IIJA contains \$102 billion in total rail funding, including \$66 billion from advanced appropriations, and \$36 million in authorized funding for the Department of Transportation's rail programs (see **Figure 3-1**). This includes funding to modernize Amtrak's Northeast Corridor and bring new or expanded intercity passenger rail service to areas outside the northeast and mid-Atlantic; refurbish Amtrak's fleet and facilities; and upgrade freight rail service in rural communities and on shared freight-passenger routes.<sup>1</sup>

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1. Retrieved from: [Bipartisan Infrastructure Law Information from FRA | FRA \(dot.gov\)](#). Retrieved in June 2024.

Figure 3-1. IIJA Funding for Rail Programs



\* Authorized funds represent an up to amount that require annual appropriations to set funding levels for each fiscal year.  
 \*\* \$34.5 billion for grant programs; additional \$1.5 billion is authorized for FRA operations and R&D – not included in this graphic. Grants for Restoration & Enhancement (advance appropriations portion) are funded through “takedowns” from Amtrak NN account; not included in totals to avoid double-counting.

Source: Federal Railroad Administration

The Federal-State Partnership for Intercity Passenger Rail Grants program provides funding for intercity passenger rail transportation projects and was significantly revised in Section 22307 of the IIJA. Changes involved broadening project eligibility to include projects to expand or establish new intercity passenger rail services and fund pre-construction project planning, expanding eligible project locations to include the entire intercity passenger rail network. While there is only a single grant program, the funding is divided into two categories: Northeast Corridor, and non-Northeast Corridor Projects.<sup>2</sup>

The Federal-State Partnership program also provides the funding for the FRA’s Corridor Identification and Development Program, a grant program that make available federal funds for pre-construction activities to carry out the planning, preliminary engineering, and environmental evaluation of new or expanding intercity passenger rail routes. The FRA’s Restoration and Enhancements Grant Program provides operating assistance to initiate, restore, or enhance intercity passenger rail service.<sup>3</sup> The Consolidated Rail Infrastructure and Safety Improvements (CRISI) program also provides funding for capital projects that will improve passenger and freight rail transportation systems, including the improvement of intercity passenger rail transportation corridors.<sup>4</sup>

- Retrieved from: [Federal-State Partnership for Intercity Passenger Rail Grant Program Fact Sheet | FRA \(dot.gov\)](#). Retrieved June 2024.
- Retrieved from: [Restoration and Enhancement Grant Program | FRA \(dot.gov\)](#). Retrieved in June 11, 2024..
- Retrieved from: Federal Railroad Administration, Consolidated Rail Infrastructure and Safety Improvements Grant Program: <https://railroads.dot.gov/grants-loans/competitive-discretionary-grant-programs/consolidated-rail-infrastructure-and-safety-2>. Retrieved in June 2024.

### 3.1.2. Corridor ID Program

The Corridor Identification and Development (Corridor ID) Program is a comprehensive intercity passenger rail planning and development program designed to help guide intercity passenger rail development throughout the country and create a pipeline of intercity passenger rail projects ready for implementation. The IIJA authorized the Secretary of Transportation to establish the program to facilitate the development of intercity passenger rail corridors, and the FRA was delegated the authority to create and administer the program. The Corridor ID Program is intended to become the primary means for directing Federal financial support and technical assistance toward the development of proposals for new or improved intercity passenger rail services throughout the United States.

Public entities seeking to create or expand intercity passenger rail routes are eligible to apply for funding from the program. A passenger corridor that is accepted into the program will advance through a three-step development process that includes:

- **Step 1 – Scoping:** The sponsor develops the scope, schedule, and budget to prepare a Corridor Service Development Plan (see Step 2), accounting for work on-going and/or undertaken to date.
- **Step 2 – Service Development Plan Preparation:** The sponsor prepares a service development plan (SDP) in accordance with the scope, schedule, and budget developed in Step 1 and in coordination with the FRA. The SDP will determine and document how the corridor will be implemented. The Final SDP will include a Capital Project Inventory as part of the Phased Implementation Plan.
- **Step 3 – Preliminary Engineering/NEPA:** In coordination with the FRA, the sponsor completes preliminary engineering and a National Environmental Policy Act (NEPA) environmental review for capital projects identified in the SDP (Step 2). Corridors that complete Step 3 will move into the Corridor ID capital project pipeline and may be prioritized for Final Design and Construction funding under the Federal-State Partnership Program or other FRA financial assistance programs.

The FRA's selection of a corridor to participate in the program reflects the agency's interest in advancing the corridor to implementation and ultimately to operation. In December 2023, the FRA announced its selection of initial corridors for acceptance into the Corridor ID Program for Fiscal Years 2022-2023. The FRA selected 69 corridors across 44 states, with the goal of upgrading 15 existing rail routes, adding or extending service on 47 new routes, and advancing seven new high-speed rail projects.<sup>5</sup> Each selected corridor was awarded up to \$500,000 for the completion of Step 1 activities. Several of the initial corridors that were selected for the program either pass through Kentucky or serve areas in close proximity to Kentucky. These include the following:

- **Louisville-Indianapolis Passenger Rail Corridor**, sponsored by the Kentuckiana Regional Planning and Development Agency (KIPDA). This proposed corridor would connect Louisville, Kentucky to Indianapolis, Indiana, and provide new service on an existing alignment over which Amtrak discontinued service in the early 2000s. The KIPDA will enter Step 1 of the program to

5. Retrieved from: <https://railroads.dot.gov/sites/fra.dot.gov/files/2023-12/FRA%2013-23.pdf>. Retrieved in June 2024.



develop a scope, schedule, and cost estimate for preparing, completing, or documenting its service development plan. The Kentucky Transportation Cabinet (KYTC) assisted with the grant application for this project and provided a letter of support to KIDPA.

- **Daily Cardinal Service**, sponsored by Amtrak. This proposed corridor would provide improvements to the existing Amtrak Cardinal service between New York City and Chicago, Illinois, via Philadelphia and Washington, D.C., and the States of Virginia, West Virginia, Kentucky, Ohio, Indiana, and Illinois (including Cincinnati, Ohio, and Indianapolis, Indiana) by increasing service frequency from three days per week to daily. Amtrak will enter Step 1 of the program to develop a scope, schedule, and cost estimate for preparing, completing, or documenting its service development plan.
- **Indianapolis-Chicago**, sponsored by the Indiana Department of Transportation. This proposed corridor would supplement service provided by the existing Amtrak long-distance Cardinal train between Indianapolis, Indiana, and Chicago, IL, by adding new round-trip trains within the corridor and improving travel times. The Indiana Department of Transportation will enter Step 1 of the program to develop a scope, schedule, and cost estimate for preparing, completing, or documenting its service development plan. This effort is being undertaken in coordination with Amtrak's Corridor ID project to increase service frequency on the entirety of the New York-Chicago Cardinal route from thrice weekly to daily. The KYTC provided a letter of support to KIDPA.
- **Cleveland-Columbus-Dayton-Cincinnati (3C&D) Corridor**, sponsored by the Ohio Rail Development Commission. This proposed corridor would connect Cleveland, Columbus, Dayton, and Cincinnati, Ohio, and provide new service on an existing alignment. The Ohio Rail Development Commission will enter Step 1 of the program to develop a scope, schedule, and cost estimate for preparing, completing, or documenting its service development plan.
- **Atlanta-Chattanooga-Nashville-Memphis Corridor**, sponsored by the City of Chattanooga, Tennessee. This proposed corridor would connect Atlanta, Georgia, to Chattanooga, Nashville, and Memphis, Tennessee, and provide new service on existing alignments. The City of Chattanooga will enter Step 1 of the program to develop a scope, schedule, and cost estimate for preparing, completing, or documenting its service development plan.
- **Chicago to Carbondale Corridor**, sponsored by the Illinois Department of Transportation. The proposed corridor would provide improvements to the existing Illini/Saluki service between Chicago and Carbondale, Illinois, by improving travel times and reliability. The Illinois Department of Transportation will enter Step 1 of the program to develop a scope, schedule, and cost estimate for preparing, completing, or documenting its service development plan.

Although there are some long-distance train routes and potential future high-speed rail routes that have been selected for Corridor ID funding, the majority of the services that will be developed under the program are new conventional-style passenger rail corridors or extensions of existing passenger rail corridors on routes of 750 miles or less.

Under the terms of the Passenger Rail Investment and Improvement Act of 2008 (PRIIA), states (or groups of states) are responsible for funding the costs of Amtrak trains that operate on routes of 750 miles or less. (Amtrak trains that operate on routes of more than 750 miles are defined as long-distance trains, which are funded predominantly by Amtrak through annual grants provided by Congress and

administered by the FRA.) Kentucky currently is served only by long-distance Amtrak trains. Any future effort that results in the introduction of an Amtrak service in Kentucky on a route of 750 miles or less will require the state, perhaps in partnership with regional or local entities, to provide public money to support the operation.

### 3.1.3. Daily Long-Distance Service Study

Section 22214 of the IIJA required the FRA, under delegation from the Secretary of Transportation, to conduct an Amtrak Daily Long-Distance Service Study to evaluate the restoration of daily intercity passenger rail service and the potential for new Amtrak long-distance routes.

Long-distance routes are Amtrak routes over 750 miles that connect a mix of urban and rural areas; these routes typically operate one trip per day in each direction, and Amtrak receives annual support from Congress for operating costs associated with long-distance routes. The FRA's Amtrak Daily Long-Distance Service Study is intended to create a foundation for further planning of potential future long-distance services.<sup>6</sup> Under IIJA stipulations, the FRA is required to conduct a study to assess the restoration of daily intercity rail passenger service along any Amtrak long-distance routes that were discontinued, as well as any Amtrak long-distance routes with nondaily service. The FRA may also assess potential new Amtrak long-distance routes in its evaluation, taking into consideration whether those new routes would:

- Link and serve large and small communities as part of a regional rail network
- Advance the economic and social well-being of rural areas of the United States
- Provide enhanced connectivity for the national long-distance passenger rail system
- Reflect public engagement and local and regional support for restored passenger rail service

The FRA launched the study in October 2022. Stakeholder engagement comprises a significant component of the study, and the FRA has solicited comments and study participation from state DOTs, Amtrak, Class I freight railroads, short line railroads, metropolitan planning organizations, regional passenger rail authorities, local officials, federally recognized tribes, and the broader stakeholder community. A key part of the process has involved holding four different sets of regional working group meetings in six locations across the country at various points during the study's development. The FRA held a total of 24 regional working group meetings between January 2023 and June 2024, divided among four series of meetings. The KYTC participated in working group meetings held for the Southeast region and for the Midwest region. The third meeting series, held in February 2024, presented a proposed network of "preferred routes" for future planning and development. Among the 15 long-distance routes identified as preferred routes, two pass through Kentucky, and a third serves cities in close proximity to Kentucky. These routes are:

- Chicago – Miami (serving Louisville, Bowling Green, and Nashville)
- Detroit – New Orleans (serving Cincinnati, Louisville, Bowling Green, and Nashville)
- Dallas/Fort Worth – New York (which would not pass directly through Kentucky but would serve Indianapolis and Cincinnati)

6. Retrieved from: <https://fralongdistancerailstudy.org/>. Retrieved in June 2024.

The final meeting series, held in June 2024, included a list of recommended actions, after which the FRA will submit a final report to Congress. **Figure 3-2** shows a map of the proposed network of preferred long-distance routes serving Kentucky and other Midwest and Southeast states. The proposed Detroit – New Orleans route through Kentucky is shown in gold, and the proposed Chicago – Miami route through Kentucky is shown in blue.

**Figure 3-2. Preferred Routes from Long-Distance Service Study in Kentucky**



Source: Federal Railroad Administration

The development and implementation of any preferred long-distance routes identified by the study will require significant additional time, resources, and analysis to further identify and refine infrastructure improvements, equipment needs and other capital projects, as well as costs, funding sources, and other key items needed for implementation. Currently, there is no financial support to further advance the preferred route options to be identified by the FRA's Amtrak Long-Distance Service Study.

## 3.2. REGIONAL PASSENGER RAIL STUDIES

### 3.2.1. FRA Midwest Regional Rail Planning Study

In 2021, the FRA released the Midwest Regional Rail Planning Study, a multi-state planning effort to develop a comprehensive vision and governance model for an integrated regional rail network to advance passenger rail planning, procurement, and operations in the Midwest.<sup>7</sup> The study established a strategic 40-year vision for the Midwest’s passenger rail network, addressing topics including network configuration, service levels, financing, and governance. The KYTC participated in this study as a complementary jurisdiction for the planning and development of a regional rail network.

The Midwest regional plan was one of several regional passenger rail plans prepared by the FRA, under requirements set forth in PRIIA; others included the Southwest Regional Rail Planning Study and the Southeast Regional Rail Planning Study. These regional rail planning efforts are intended to support existing state rail plans and long-range transportation plans.

As part of the Midwest Regional Rail Planning Study, an extensive 12-state market assessment was conducted to evaluate the current travel market and demand to understand travel patterns by mode between major markets. The study utilized the FRA’s CONceptual Network Connections Tool (CONNECT), which serves as the analytical foundation for FRA-led regional passenger rail planning studies, to develop an initial network of potential corridors where intercity passenger rail could provide a feasible passenger transportation alternative. The study established three “service tiers” to define the types of service frequencies, service characteristics, and infrastructure levels proposed for each proposed corridor. The service tiers can be summarized as follows:

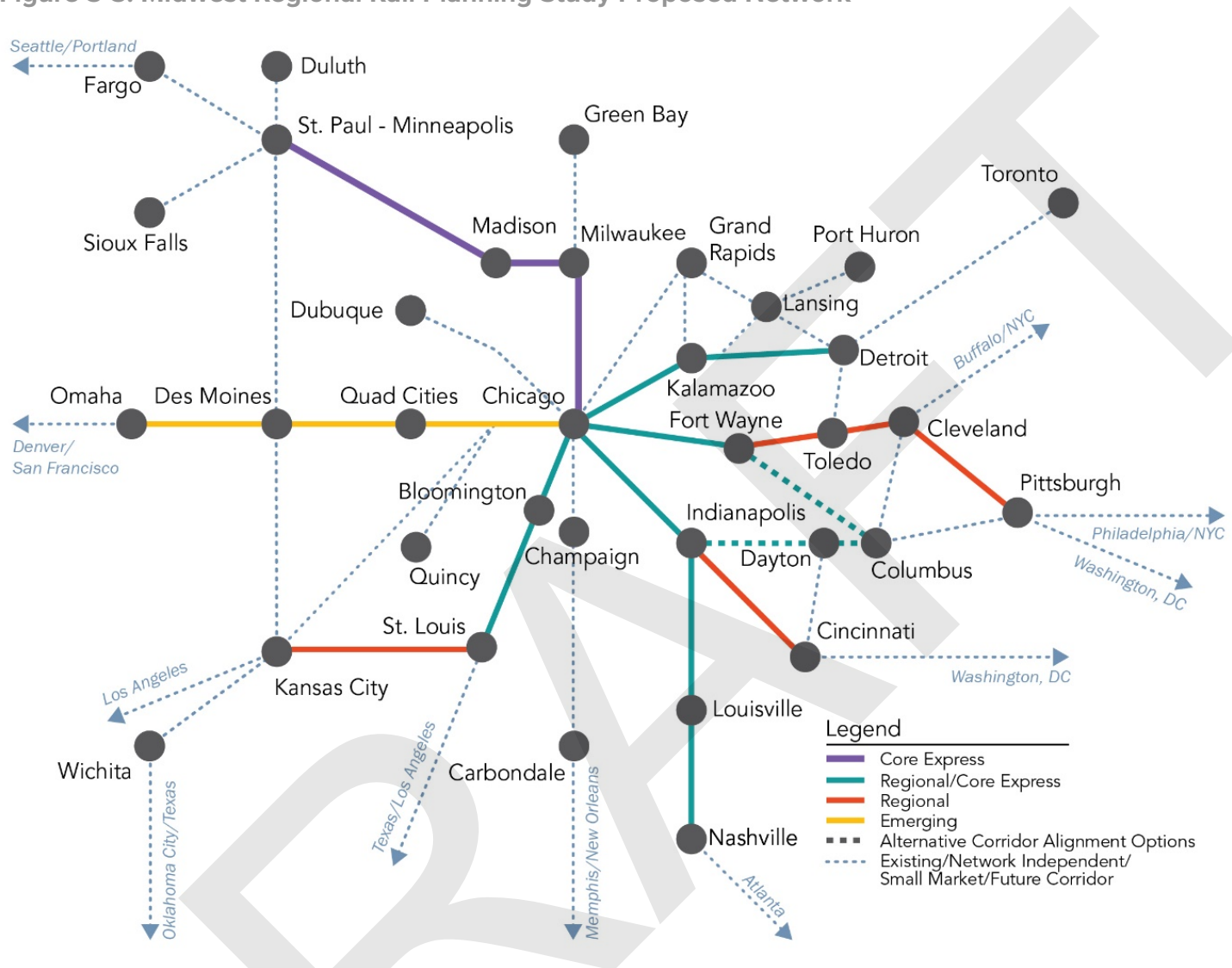
- **Core Express:** Core express service would operate on corridors serving major metropolitan centers. Trains would operate under electric power on dedicated tracks except in terminal areas at speeds of 125 mph or higher, with frequent service provided.
- **Regional:** Regional services would operate on corridors connecting mid-size urban areas with each other or with larger metropolitan areas. Trains could operate under electric or diesel power, using both dedicated and shared tracks, at speeds between 90 and 125 mph, with frequent service provided.
- **Emerging:** Emerging services would operate on corridors connecting mid-sized and smaller urban areas with each other or with larger metropolitan areas. Trains would operate on shared tracks at speeds of up to 90 mph.

The study’s initial set of corridors and proposed service levels are shown in **Figure 3-3**. The study does not identify specific routes or alignments for each corridor, however. Estimated costs, benefits, and funding of the network plan will drive decisions regarding future investments, environmental studies, and planning activities.

7. Retrieved from: <https://railroads.dot.gov/sites/fra.dot.gov/files/2021-10/Final%20Report-MWRRP%20with%20Appendices%20PDFa.pdf>. Retrieved in June 2024.



Figure 3-3. Midwest Regional Rail Planning Study Proposed Network



Source: Federal Railroad Administration

As seen in Figure 3-3, Kentucky would be served by a Regional/Core Express route (defined as a proposed regional route with Core Express potential) extending from Nashville through Louisville and Indianapolis to Chicago. In addition, Kentuckians also could be expected to use the proposed regional corridor connecting Cincinnati and Indianapolis. The study anticipates that the identified corridors and services will require long-term implementation and an incremental phasing of construction and service frequencies, based on the results of additional in-depth planning efforts and available funding sources.

### 3.2.2. Tennessee Passenger Rail Study

In June 2023, the Tennessee Advisory Commission on Intergovernmental Relations (TACIR) released a study that evaluated and prioritized intercity passenger rail corridors for potential future development

in Tennessee. The report, entitled “Back on Track? Intercity Passenger Rail Options for Tennessee,”<sup>8</sup> was prepared in response to legislation passed by the Tennessee General Assembly and signed by the Governor in 2022 (Public Chapter 1114 and Public Chapter 1124, Acts of 2022), which directed TACIR to study and make recommendations regarding the potential for passenger rail service or other suitable alternatives for linking the major cities in each region of the state and beyond. The state General Assembly action was prompted by an evaluation of future traffic conditions on Tennessee highways conducted by the Tennessee Department of Transportation, which found that trip times between Tennessee’s most populous cities could increase by up to an hour in coming years.

To identify potential passenger rail routes, TACIR began with the conclusions and recommendations from two regional intercity passenger rail studies sponsored by the FRA, the Southeast Regional Rail Plan and the Midwest Regional Rail Planning Study. TACIR then conducted additional analysis that included stakeholder interviews, a route’s use of the existing freight rail network, a route’s ability to connect the most populated cities in the state’s different with each other and with population centers in other states, and whether the route would connect to the existing national rail network. After completing its analysis, TACIR concluded that intercity passenger rail service has the potential to improve mobility and the state’s economy, and selected five corridors for further study, with a prioritization ranking based on tiers, with Tier 1 being the highest priority. **Table 3-1** depicts the plan’s selected corridors, ranked by tier.

**Table 3-1. Tennessee Passenger Rail Corridors by Tier**

<b>Tier 1 Route</b>
Nashville, TN to Chattanooga, TN to Atlanta, GA
<b>Tier 2 Routes</b>
Memphis, TN to Nashville, TN
Chattanooga, TN to Knoxville, TN to Bristol, VA
<b>Tier 3 Routes</b>
Memphis, TN to Carbondale, IL to Chicago, IL
Nashville, TN to Louisville, KY

Source: Tennessee Advisory Commission on Intergovernmental Relations

In addition, the study recommended that:

- The TDOT submit data and documentation to the FRA to support the FY 2022 Corridor ID Program application from the City of Chattanooga for development of an Atlanta-Chattanooga-Nashville-Memphis intercity passenger rail corridor.
- The TDOT submit Corridor ID Program applications to the FRA for the Chattanooga to Knoxville to Bristol route and consider submitting applications for the other Tier 3 routes at the next funding opportunity.
- The State of Tennessee create an office of rail and public transportation within the TDOT;

8. Retrieved from: [https://www.tn.gov/content/dam/tn/tacir/2023publications/2023\\_PassengerRail.pdf](https://www.tn.gov/content/dam/tn/tacir/2023publications/2023_PassengerRail.pdf). Retrieved in June 2024.

collaborate with Virginia to identify opportunities to maximize the viability of rail corridors that might connect with that state and the wider Amtrak network; and evaluate intercity bus service options along certain key routes (Memphis-Nashville via US-64, and Memphis-Nashville-Knoxville-Bristol via I-40 and I-81) in coordination with the goals of the Transportation Modernization Act.

### 3.2.3. High Speed Rail Planning Study

The KYTC participated in a 2012 High Speed Rail Planning Study with the states of Georgia, Alabama, and Tennessee.<sup>9</sup> The study was undertaken by the Georgia Department of Transportation. The purpose of the study was to evaluate the need for, and effectiveness of, high-speed rail for three corridors in the southeastern United States:

- Atlanta, GA to Birmingham, AL
- Atlanta, GA to Macon, GA to Jacksonville, FL
- Atlanta, GA to Chattanooga, TN to Nashville, TN to Louisville, KY

Three types of technologies were evaluated: Emerging High Speed Rail (90-110 mph) using existing rail corridors owned and operated by freight railroads; Express High Speed Rail (180-220 mph) using newly constructed dedicated, electrified, grade-separated track; and a maglev alternative (more than 220 mph) in the Atlanta-Louisville corridor. (Maglev, a term derived from magnetic levitation, is a method of propulsion that uses magnetic levitation to propel trains with magnets rather than with steel wheels, axles, and bearings.) A representative route was identified for each corridor and service type. These routes were not intended to be the preferred or recommended alternative, but served as representative examples to evaluate high-speed rail performance in the corridors. With respect to Kentucky, the Atlanta-Louisville corridor would extend from Hartsfield-Jackson Atlanta International Airport to downtown Louisville, as shown in **Figure 3-4**.

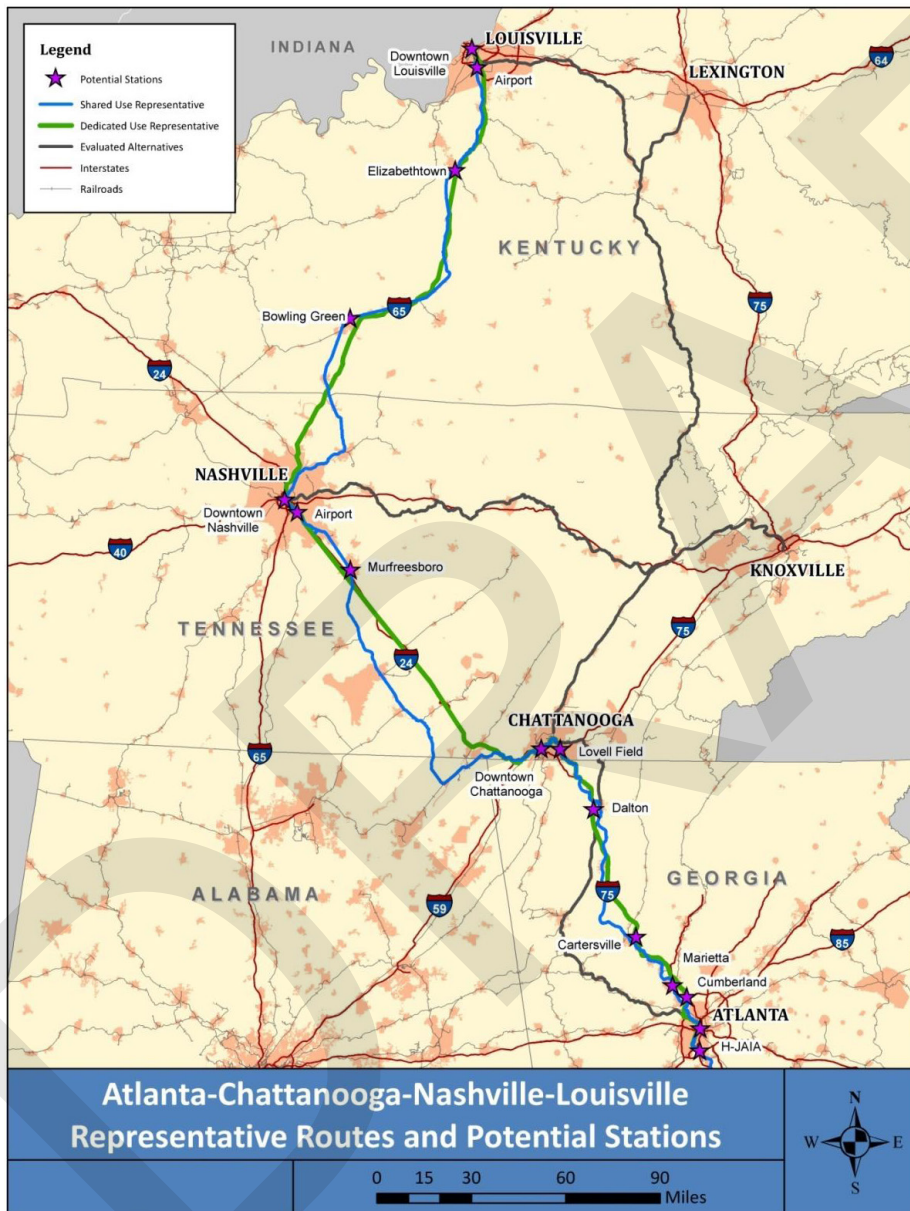


9. <https://transportation.ky.gov/MultimodalFreight/Documents/GA,%20AL,%20TN,%20KY%20High%20Speed%20Rail%20Study%20-%202012.pdf>. Retrieved in August 2024.



The Emerging High Speed Rail service, a shared route, was proposed to follow a CSXT line. One dedicated route was proposed for both the Express High-Speed Rail alternative and the maglev alternative. This route would follow I-75 from Atlanta, Georgia to Chattanooga, Tennessee; I-24 from Chattanooga to Nashville, Tennessee; and I-65 from Nashville to Louisville, Kentucky. Proposed station stops are identified with a star symbol on the map in **Figure 3-4**. With the exception of Marietta, Georgia, which would only have a station under the Emerging High Speed Rail alternative, all alternatives would have stations at the locations identified on the map.

**Figure 3-4. Proposed High-Speed Rail Route from Atlanta to Louisville**



Source: Atlanta to Chattanooga to Nashville to Louisville High Speed Rail Study, Georgia Department of Transportation, 2012

**Table 3-2** depicts the estimated service characteristics, ridership and revenue, capital costs, and



operations and maintenance costs for each corridor alternative for the years 2021 to 2040.

**Table 3-2. Estimated Costs and Operational Statistics for Atlanta to Louisville High Speed Rail Scenarios, 2021-2040**

Scenario Characteristic	Emerging High Speed	Express High Speed	Maglev
Distance (Atlanta-Louisville)	489.8 miles	422.2 miles	422.2 miles
Trip Time (Atlanta-Louisville)	6 hours, 55 minutes	3 hours, 32 minutes	3 hours, 2 minutes
Avg. Speed (Atlanta-Louisville)	72 mph	122 mph	143 mph
Frequency (Atlanta-Louisville)	5 round trips	12 round trips	12 round trips
Ridership	102.0 million	110.7 million	116.2 million
Capital Costs (\$2010)	\$11.6 billion	\$32.7 billion	\$43.0 billion
O&M Costs (\$2010)	\$2.8 billion	\$5.8 billion	\$4.4 billion
Revenue (\$2010)	\$4.2 billion	\$6.4 billion	\$6.8 billion
Avg. Fare (\$2010)	\$41.22	\$57.87	\$58.57

Source: Atlanta to Chattanooga to Nashville to Louisville High Speed Rail Study, Georgia Department of Transportation, 2012

The study concluded that high-speed rail service in the Atlanta-Chattanooga-Nashville-Louisville corridor presents an opportunity to provide needed transportation solutions and promote economic development. While high-speed rail is not the only transportation solution, the study showed that high-speed passenger rail would give consumers improved mobility and transportation mode choices, with connectivity to major cities such as Atlanta, Chattanooga, Nashville, and Louisville through commercial centers and national destinations.

### 3.3. AMTRAK INITIATIVES

In addition to the Federal and regional projects discussed in this chapter, Amtrak is also advancing initiatives to improve existing services and plan for future service expansions.

#### 3.3.1. Amtrak Five Year Strategic Plan

Each year, Amtrak releases a five-year strategic plan to satisfy requirements under United States Code, Title 49, Section 24320. In March 2024, Amtrak released its Fiscal Year (FY) 24-29 “Five Year Plans,” which outline strategic five-year initiatives for each service line and asset line between FY 2024 and FY 2029. These plans do not identify initiatives for individual trains but focus on overall improvements that benefit particular types of services, including long-distance trains and state-supported regional trains, regardless of location.

Amtrak’s Five-Year Service and Asset Line Plan summarizes the strategies, opportunities, and needs

facing the railroad's different service offerings and resources.<sup>10</sup> The plan does not identify the establishment of new long-distance routes as a strategy or initiative. It does, however, support the introduction and expansion of regional, state-supported passenger rail corridors of up to 750 miles in length. Amtrak's five-year plan for the Long-Distance Service Line, which includes the Cardinal and City of New Orleans trains that serve Kentucky, lists the following four major initiatives:

- **Traditional Dining Expansion:** On long-distance trains equipped with dining cars, Amtrak provides a traditional dining experience for First Class passengers that features seasonal menus with a variety of entrée selections for breakfast, lunch, and dinner, and a complimentary alcoholic beverage served with dinner. Traditional dining was extended to the Silver Meteor and Silver Star trains in 2023, bringing the total of routes offering traditional dining services to eight. Other trains offering traditional are the Auto Train, California Zephyr, Coast Starlight, Empire Builder, Southwest Chief, and Sunset Limited. Passengers ticketed on the Texas Eagle through cars that are transported by the Sunset Limited also can experience traditional dining between San Antonio and Los Angeles. Amtrak also returned traditional dining to the Crescent in 2024.
- **Enhancement to Fleet:** Amtrak has embarked on several programs to enhance the equipment used on its long-distance trains. Major initiatives include the following:
  - During FY23, Amtrak began an interior refurbishment of the bi-level Superliner Fleet that operates on nine of Amtrak's 15 long-distance routes. The Superliner Project will enhance nearly 400 passenger cars, over 100 of which have already been refreshed and are in revenue service. Additionally, this latest phase of the project formally expanded the scope of the refresh beyond Coach and Business Class cars by including Sleeping Cars, Dining Cars, and Superliner bi-level Sightseer Lounge cars.
  - Amtrak will begin a refresh of all Viewliner I Sleeping Cars in 2024, to better align the in-room experience between the Viewliner I and the newer Viewliner II Sleeping Cars that both operate on eastern routes with single-level equipment, including the Cardinal.
  - In addition to its fleet refurbishment programs, Amtrak has begun a two-year program to accelerate the restoration to service of cars in need of repair or overhaul. Over a dozen long-distance cars have re-entered service under the program, with a total of 63 cars projected to be restored.
  - Amtrak has also ordered 125 ALC-42 locomotives (see **Figure 3-5**)—the most energy-efficient in the industry—aimed to reduce emissions and consume less fuel while reaching a top speed of 125 mph. Over three dozen engines are now in service.
- **Improved Accessibility:** Strategies to improve access to Amtrak equipment for mobility impaired passengers include the following:

10. Retrieved from: <https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/businessplanning/Amtrak-Service-Asset-Line-Plans-FY24-29.pdf>. Retrieved in June 2024.

- A redesigned accessible bathroom is being added to 23 Superliner I Coach cars. These new rooms accommodate larger wheelchairs and include a changing room.
- An initial investment of \$560 million brought 103 Amtrak stations to full compliance with the Americans with Disabilities Act (ADA). Amtrak is on track to make all stations for which it has ADA responsibility fully compliant by 2028.
- **New Product Launches:** During 2023, several programs were introduced to improve customers' experiences prior to travel, at the station, and on the train. In Spring 2023, Amtrak launched a comprehensive notification service that relays key updates to customers via email, text messages, and push notifications through the Amtrak mobile app. This allows Amtrak customer service teams to notify customers of any service disruptions whether at the station or on the train. Amtrak installed 200 new ADA-compliant ticketing kiosks across over 150 stations. These ticketing kiosks offer customers an updated user interface and “minimum touch” features that allow for a more enjoyable and seamless experience.

Figure 3-5. Figure 3-5 Amtrak ALC-42 Locomotive



Source: Amtrak

The five-year plan for the Long-Distance Service Line also includes the following overall strategies:

- **Empower People:** Key activities in the next five years include developing tools and training for front-line employees and the operational teams.
- **Pursue Product Initiatives:** Amtrak is enhancing the private room and long-distance coach products to better meet current customer needs, and will pursue the following other product initiatives to improve the customer experience and attract new riders:
  - Refresh the interiors of long-distance cars. Upgrades include enhancing nearly 400 passenger cars in the Superliner fleet and undertaking a Viewliner I refresh (49 Sleepers), which is scheduled to begin in FY24.
  - Improve food and beverage offerings. Amtrak will address recommendations and opportunities for improvement identified by its Food and Beverage Working Group study, such as reintroducing traditional dining on additional long-distance routes and redefining the Food and Beverage vision for the Long-Distance Service Line.

- Improve accessibility. Better accessibility will result from redesigned accessible bathrooms being added to 23 Superliner I Coach cars that will accommodate larger wheelchairs and include a changing room; and 100% ADA compliance by 2028 at all Amtrak-responsible stations.
- Focus on communications. Improve communication with customers during delays and service disruptions, especially via email, text message, and push notifications via the Amtrak App.
- Install Wi-Fi equipment on the remainder of the Superliner cars used on long-distance trains in the West. Enhance Wi-Fi on the eastern long-distance trains that use single-level equipment.
- Emphasize the benefits of private sleeping compartments as an accommodation that offers physical distancing space, privacy, comfort, club access, complimentary meals, priority boarding, and more. Efforts to promote these benefits include new promotional media campaigns, new experiential travel landing pages on Amtrak.com, flash sales offering free companion travel, and more prominent display of room choices when passengers book travel on Amtrak.com and the Amtrak app.
- **Invest in a New Long-Distance Fleet:** In addition to interior refreshes and the ongoing entry of new locomotives into service, Amtrak initiated a procurement process in CY22 for the new Long-Distance fleet. With funding provided by the Infrastructure Investment and Jobs Act (IIJA), Amtrak is seeking competitive bids from car builders to replace long-distance rail car fleets. Amtrak released a Request for Proposals (RFP) in late 2023, and based on the RFP schedule, target to negotiate terms and secure final funding approval by year-end CY24. The acquisition of new equipment will provide the opportunity to accomplish several goals, including:
  - Modernizing equipment and amenities to support the future Long-Distance Value Proposition, meet the updated operating model for improving customer satisfaction and financial performance.
  - Improving the customer experience with private room beds that can be self-deployed when passengers wish; offering a better experience for the disabled community with a fully accessible core trainset that includes coaches, private rooms and dining and lounge cars; and providing new onboard services.
  - Redesigning train consists to match passenger demand, create operating efficiencies, and reduce capital needs.
  - Reducing car and locomotive maintenance and turnaround costs.
  - Reducing engine and car related mechanical delays to improve on-time performance.
  - Improving sustainability with more sustainable materials, less trash, and reduced fuel consumption and emissions of greenhouse gases and other pollutants.
- **Improve Long-Distance Utility and Reliability:** Continue to use a data-driven approach to address host railroad and Amtrak-related delays, and work with the host railroads to



understand the causes of host railroad and Amtrak responsible delays, opportunities to mitigate them, and the actions required to improve on-time performance. The release of revised Metrics and Standards for measuring the performance of Amtrak services by the FRA in FY 2021 and the requirement of all host railroads and Amtrak to either certify the viability of Amtrak operating schedules is providing a framework for enforcing Amtrak's right of preference over freight transportation and offers a path for addressing on-time performance issues.

- **Further Deploy New ALC-42 Locomotives:** Amtrak will continue to add new ALC-42 locomotives to its equipment fleet in FY24 and beyond. By the end of FY23, 38 ALC-42 locomotives had been deployed, and the balance of the entire 125 ALC-42 locomotive order is projected to be deployed by FY31.
- **Increase Operational Resilience, Efficiency, and Effectiveness:** With the addition of new equipment, Amtrak will look for ways to optimize its business model, with a focus on reducing car and locomotive maintenance costs and turnaround times. The evolution of the operating model is also expected to improve fleet availability.
- **Improve Asset Utilization:** Amtrak is identifying and undertaking initiatives to improve asset utilization and fleet availability on the existing long-distance network to increase and better deploy capacity to meet demand.
- **Grow the Business:** Amtrak sees opportunities for growth in its long-distance business by incrementally increasing capacity and ridership while controlling costs, including:
  - Increasing ridership incrementally on existing trains by restoring 63 long-distance cars to service, which will increase capacity to capture additional ridership demand. Currently planned equipment restorations on existing long-distance routes within the Five-Year Plan time frame include:
    - Restoring a Viewliner II dining car to the Crescent in FY24
    - Restoring a Superliner sightseer lounge car to the Texas Eagle beginning in Q1 FY25
    - Operating a transition sleeper on all Superliner long-distance routes except the Auto Train by Q1 FY26
    - Adding coaches and sleeping cars on routes throughout the long-distance network with the highest passenger demand and revenue potential



Source: Kentucky Transportation Cabinet

- Supporting the implementation of expanded long-distance service, based on the results of the FRA Long-Distance Service Study (see Section 3.1) and the availability of funding and equipment.

Amtrak will prioritize the increase to daily frequency of its two existing tri-weekly long-distance routes, the Cardinal and the Sunset Limited.

**Table 3-3** depicts the strategic plan’s projections for ridership on the two long-distance trains serving Kentucky.

**Table 3-3. Projected Ridership of Long-Distance Amtrak Trains Serving Kentucky**

Route	FY24	FY25	FY26	FY27	FY28	FY29
Cardinal	94,000	94,600	95,600	96,500	97,700	98,500
City of New Orleans	257,600	259,400	262,100	264,700	267,800	270,000
All Long-Distance Trains	4,426,400	4,519,900	4,565,100	4,610,500	4,666,500	4,703,200

Note: Ridership projections for the Cardinal and City of New Orleans are for the entire national route  
Source: Amtrak FY24-29 Five-Year Service Line Plans

### 3.3.2. Amtrak Station Improvements

The five-year plan also documents Amtrak’s plans to improve stations to make them compliant with Americans With Disability Act (ADA) requirements.<sup>11</sup> Amtrak’s ADA Stations Program focuses on stations for which Amtrak has ADA responsibility. Out of the 515 train stations in the U.S. used by Amtrak trains, Amtrak has sole ADA responsibility at 147 stations and shared ADA responsibility at another 238 stations.

The three top priority efforts in this plan include (1) improving station platform accessibility for people who use wheeled mobility devices at the stations where Amtrak has ADA responsibility for platforms; (2) installing or improving Passenger Information Display Systems (PIDS) and audible public address systems at stations for which Amtrak has ADA responsibility; and (3) improving accessibility to or within station buildings at stations where Amtrak has ADA responsibility. Out of the 385 stations where Amtrak has some type of ADA responsibility, Amtrak has identified the following needs among its top priority efforts:

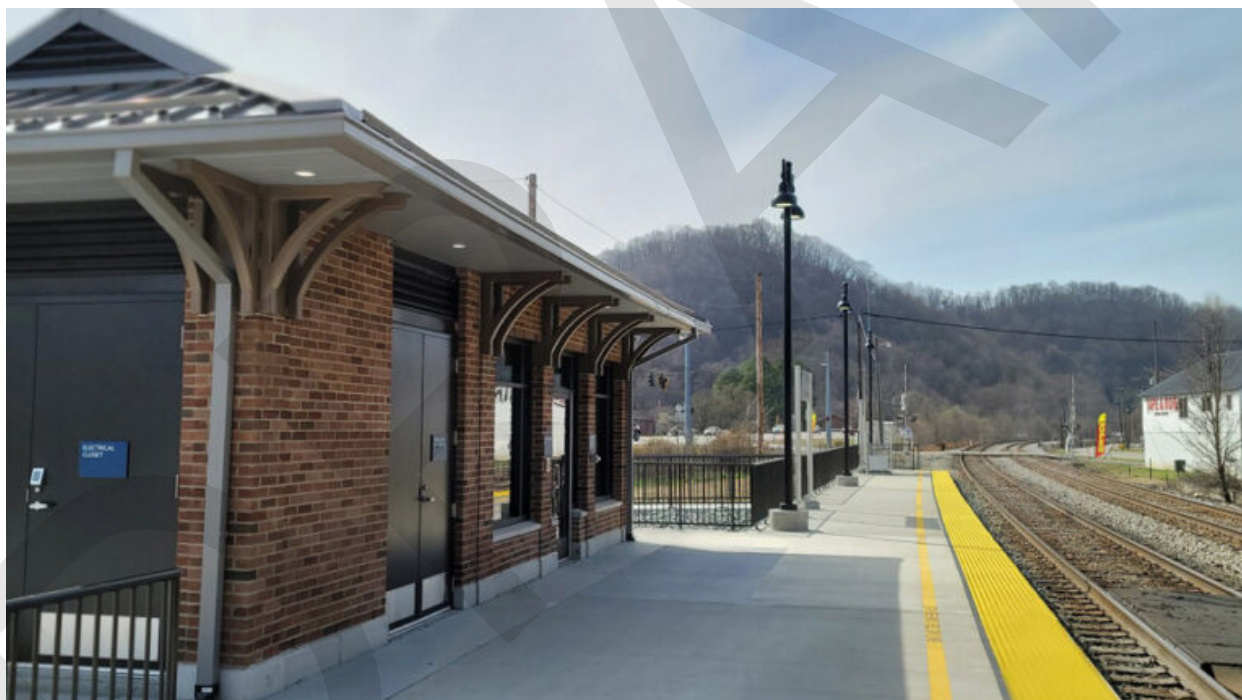
- Identified 30 stations with known or potential train access deficiencies, and completed improvements at 18 of those stations to date
- Identified 120 stations with known or potential PIDS deficiencies, and completed improvements at 96 of those stations to date
- Identified 47 stations with known or potential station access and/or key amenity deficiencies, and completed improvements at all 47 of those stations

11. Retrieved from: <https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/businessplanning/Amtrak-Stations-ALP-Appendices-FY24-29.pdf>. Retrieved in June 2024.

Additional initiatives include adding level boarding platforms, where required by law, and pursuing more integrated boarding solutions (based on Amtrak's Platform Design Policy) where level boarding is not required by law due to the presence of existing freight traffic adjacent to the platform. Platform projects, which may include level boarding platform projects and low-level platform projects, will be funded after stations with conditions in the three highest priority categories are addressed. Amtrak's ADA Stations Program is currently advancing 148 station designs, with 58 additional designs set to begin in FY24, and 91 station construction projects, with 23 additional projects set to begin in FY24, as part of the railroad's commitment to working toward 100% accessibility program completion by 2029.

Among the four passenger rail stations served by Amtrak trains in Kentucky, Amtrak has full ADA responsibility for three stations (Fulton, Maysville, and South Shore).<sup>12</sup> In 2023, Amtrak and the City of South Shore opened a new fully compliant station platform and shelter at South Shore (see **Figure 3-6**). Both the Fulton and Maysville stations will be receiving ADA improvements within the next five years. Amtrak expects to begin construction in Fiscal Year 2025 on a modern, ADA-compliant passenger station with parking, accessible platform access, and improved lighting to replace the existing obsolete facility in Fulton.<sup>13</sup> Amtrak also plans to replace the platform at the Maysville station with an ADA-compliant boarding platform.

**Figure 3-6. ADA-Compliant Platform and Shelter at South Shore**



Source: [www.greatamericanstations.com](http://www.greatamericanstations.com)

12. Retrieved from: <https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/businessplanning/Amtrak-Stations-ALP-Appendix-FY21-26.pdf>. Retrieved in June 2024.
13. Retrieved from: <https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/KENTUCKY23.pdf>. Retrieved in June 2024.

# CHAPTER 4 PROPOSED FREIGHT RAIL IMPROVEMENTS AND INVESTMENTS

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## 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.<sup>1</sup> 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.<sup>2</sup> The City and NS closed the sale on March 19, 2024.<sup>3</sup>

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

Foster 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 Foster 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](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. The project also strongly meets the administration priority of promoting equitable economic strength.

**Table 4-1. Foster 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%
<b>TOTAL</b>		<b>\$62,900,000</b>	<b>100%</b>

#### LOUISVILLE AND INDIANA RAILROAD COMPANY

##### 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%
<b>TOTAL</b>		<b>\$5,595,000</b>	<b>100%</b>

#### 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%
<b>TOTAL:</b>		<b>\$12,301,000</b>	<b>100%</b>

## 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%
<b>TOTAL:</b>		<b>\$11,000,000</b>	<b>100%</b>

## 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%
<b>TOTAL:</b>		<b>\$36,000,000</b>	<b>100%</b>

#### 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

KYTC was awarded \$8,120,000 in FY 2023 RAISE program funds from the USDOT for the \$22,110,000 Reconnecting Northland-Arlington Project. 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%
<b>TOTAL:</b>		<b>\$22,110,000</b>	<b>100%</b>

## 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 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 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 2023-2024 CRISI Project

In 2024, Louisville and Indiana Railroad (LIRC) submitted an application for FY 2023-2024 CRISI program funding to complete rehabilitation of an existing movable bridge in Louisville, Kentucky.



#### RJ CORMAN

##### RJ Corman 2023-2024 CRISI Project

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

The project will facilitate industrial rail facility improvements at Logan Aluminum, one of RJCC's principal customers. This includes a 1,200-ft main line extension, 1,000-ft ingot rail spur into Logan Aluminum's facility, and main line track rehabilitation (ties, surfacing and switch replacement). The project will also construct an 800-foot siding extension, a new 1,000-foot siding, and main line track rehabilitation (ties and surfacing) in Russellville. Finally, the project will perform rehabilitation of five rail bridges and main line track along the RJCC Bardstown Line.

## 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.





# CHAPTER 5

# KENTUCKY'S RAIL SERVICE AND INVESTMENT PROGRAM

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## INTRODUCTION

Chapter 5 addresses the specific projects, programs, policies, laws, and funding necessary to achieve the State's Rail Vision and describes the related financial and physical impacts of these proposed actions.

The identification of potential project opportunities through targeted stakeholder outreach, along with a clear understanding of the status of existing assets and consideration of current trends and forecasts, will guide the prioritization of projects for future funding that may come from legislative appropriations at the state level, or through federal grants.. This chapter contains a project inventory that lists the currently funded projects that are ongoing as well as other potential projects that have been identified by stakeholders during this Statewide Rail Plan (SRP) update but are not yet funded and are intended for implementation within the next 20 years. The advancement of stakeholder-proposed projects for future funding opportunities will consider public benefits and impacts related to safety, resiliency, economic development and employment, rail capacity and congestion by corridor, the environment, equity, energy consumption, greenhouse gas emissions, and regional balance.

State funding programs that can benefit the rail industry are identified and discussed, as well as opportunities to leverage federal funding. Strategies to maintain federal funding compliance and maintain compliance with other USDOT and FRA mandates, guidelines, and requirements are described. Predicated on rail needs and issues, this chapter categorizes specific needs and associated opportunities and identifies the policies, programs, strategies, and funding necessary to achieve the State's Rail Vision.

### 5.1. KENTUCKY'S STATE RAIL VISION

The KYTC recognizes that an efficient and effective rail system will help alleviate highway congestion, contribute to economic development, improve public safety, improve energy efficiency, and enhance quality of life and the environment for all Kentuckians.

Kentucky's SRP vision aligns with the Long-Range Statewide Transportation Plan (LRSTP) vision and goals:

***Kentucky's State Rail Plan Vision is to support and work with rail carriers to provide a safe, reliable, efficient, and effective rail transportation system for the movement of passengers and freight within the commonwealth, as well as to connect Kentucky to domestic and international markets.***



The SRP goals and objectives supporting this vision include:

**Goal #1 – Support the Preservation and Enhancement of the Network**

- Objective 1.1 – Support service preservation or rail right-of-way where it serves the public interest
- Objective 1.2 – Identify funding to preserve and enhance the existing network

**Goal #2 – Promote Rail System Safety and Reliability**

- Objective 2.1 – Support rail safety programs, including grade-crossing safety programs
- Objective 2.2 – Identify and fund grade crossing safety enhancements

**Goal #3 – Facilitate Economic Development and Connectivity**

- Objective 3.1 – Promote rail and intermodal connectivity through communication, planning, and funding
- Objective 3.2 – Support economic development efforts related to rail served sites and businesses

**Goal #4 – Encourage Communication Between Railroads, Customers, and Public Agencies**

- Objective 4.1 – Involve and share information with the railroads regarding planning initiatives
- Objective 4.2 – Continue to facilitate interagency and rail coordination activities and meetings

## 5.2. PROGRAM COORDINATION

Kentucky's long-term rail vision is intended to integrate with other statewide transportation planning efforts, including the state's LRSTP, the state rail plans of neighboring states, and regional multi-state rail plans, as appropriate.

### 5.2.1. Integration with Other State Planning Efforts

In developing Kentucky's SRP, the KYTC has considered and integrated several other state transportation plans (see list below). This is essential to achieving the system level goals and coordinating across modes and topics.

- **2022 State Freight Plan** – Provides an overview of the rail system. Addresses rail at a high level in the statewide freight goals, objectives, and performance measures.
- **2020 Riverports, Highway & Rail Freight Study** – Highlights the importance of the rail connections to inland ports. Recommends on- and off-site rail improvements.
- **2022 Highway-Rail Grade Crossing Action Plan** – Focuses on where and how Kentucky can improve grade-crossing safety.

In particular, the goals of the various plans have been considered as well as the high-level strategies for accomplishing those goals. Some key coordination areas include safety, resiliency, multimodal integration, and economic development.

### 5.2.2. National and Regional Rail Planning Integration

#### NATIONAL STRATEGIC RAIL CORRIDOR NETWORK

Kentucky will continue to coordinate as necessary with the U.S. Military Surface Deployment and Distribution Command's Transportation Engineering Agency (TEA) that oversees the federal National

Strategic Rail Corridor Network (STRACNET). The STRACNET is comprised of an approximately 41,300-mile national, interconnected network of rail corridors and associated connector lines most important to national defense. STRACNET-designated routes provide main-line-rail throughput capability as well as access to major defense contractors, logistics sites, and military facilities critical to national defense. STRACNET main lines pass through Kentucky, and connectors provide rail access to Fort Knox, Fort Campbell, and the Blue Grass Army Depot.

## REGIONAL RAIL PLANNING

The KYTC will continue to coordinate as necessary with regional rail planning efforts, such as those led by the Midwest Interstate Passenger Rail Commission (MIPRC), or any future multi-state working group established to study freight or passenger rail needs in Kentucky and beyond.

Two relevant regional studies were completed in the early 2020s: the Southeast Regional Rail Planning Study (2020) and the Midwest Regional Rail Planning Study (2021). Kentucky was considered a border state for both studies but was not directly included in either. Both studies recommended long-term plans with passenger rail service through Kentucky (generally Chicago – Indianapolis – Louisville – Nashville – Atlanta). A multi-state High-Speed Rail Planning Service Study was also completed in 2012 and proposed a similar route.

## NEIGHBORING STATE RAIL PLANNING

The KYTC is routinely given the opportunity to review the state rail plans of neighboring states and will provide neighboring states the reciprocal opportunity to review a draft of this SRP.

## 5.3. RAIL AGENCIES

### 5.3.1. Kentucky Transportation Cabinet

The KYTC is led by the Secretary of Transportation, which is a cabinet-level position that reports directly to the Governor of Kentucky.

The KYTC Modal Programs Branch within the Division of Planning administers rail programs for the commonwealth. Modal Programs Branch staff are responsible for rail planning, including passenger rail studies and federal rail funding programs such as the Transportation Investment Generating Economic Recovery (TIGER) grant program, the Congestion Mitigation and Air Quality (CMAQ) Program, and the Railroad Rehabilitation and Improvement (RRIF) Program. Modal Programs Branch staff also maintain all rail GIS datasets and maps for the cabinet. Datasets include but are not limited to active and abandoned rail centerlines, active railyards, and rail transload facilities.



Source: Kentucky Transportation Cabinet

The Utilities and Rail Branch within the KYTC Division of Right of Way and Utilities inventories the location, condition, and other information for all public highway-rail grade crossings in Kentucky. The Utilities and Rail Branch staff also administer the federal Section 130 program that funds the improvements of railway-highway crossings. The Utilities and Rail Branch within the KYTC Division of Right of Way and Utilities administers the Railroad Crossing Safety Program and Rail Coordination Program. The Utility and Rails Branch prioritizes and supports projects identified throughout the state and works toward implementing highway-rail grade crossing upgrades and safety improvement projects. The staff reviews plans and proposals, and they draft agreements involving railroad companies. The projects funded through the Kentucky Rail Crossing Improvement (KCRI) program are jointly administered by the Modal Programs Branch and the Utilities and Rail Branch. The Utilities and Rail Branch assists with railroad agreements, paying of invoices, and coordinating construction work with other agencies and other Cabinet Divisions.

The KYTC Office of Transportation Delivery is comprised of two branches and is responsible for seeking grant funds, overseeing and implementing various statewide public transit grants, and coordinating human service transportation. Transportation Delivery staff coordinate with the Division of Planning on passenger rail studies and efforts.

This SRP update does not recommend any changes to the KYTC rail program organizational structure at this time.

## 5.4. PROGRAM EFFECTS

The projects listed in Section 5.8 of this chapter are based on those activities that improve rail safety, support economic development, maintain the well-being of short line railroads operating in the state, and support the reduction or elimination of major freight bottlenecks. These projects and later projects resulting from future studies may potentially offer substantial public socioeconomic benefits.

As the majority of intercity rail passengers are diverted from personal automobiles, any future passenger rail service expansion efforts would result in a more extensive and inclusive intercity transportation network, enhanced mobility, increased tourism and access to job opportunities, and increased energy efficiency compared to other modes.

For freight rail improvements, the public benefits involve increased transportation competition resulting in lower costs to shippers, less highway congestion and roadway surface damage, and reduced environmental and energy impacts compared to other modes. Highway-rail grade crossing improvement projects, as well as other rail-related infrastructure improvements aimed at maintaining a state of good repair, serve to increase transportation safety and efficiency.

## 5.5. PASSENGER ELEMENT

### 5.5.1. Description of Passenger Rail Capital Projects

The existing Amtrak stations in Fulton and Maysville stations will be receiving ADA compliance improvements within the next five years. Amtrak expects to begin construction in Fiscal Year 2025 on a new, modern, and ADA-compliant passenger station with parking, accessible platform access, and

improved lighting to replace the existing obsolete facility in Fulton. Amtrak also plans to replace the platform at the Maysville station with an ADA-compliant boarding platform.

Any passenger rail capital projects necessary to implement new or expanded intercity passenger rail service will be identified through passenger rail studies, which are ongoing.

### 5.5.2. Capital Financing Plan

The KYTC does not have a funding source for passenger rail projects. Any funding for support of existing passenger rail services or for additional passenger rail services must be authorized and appropriated by the Kentucky Legislature. Any capital investments related to overall corridors must be made at the regional level with concurrence by Amtrak, the rail line owners, and other states as applicable.

The Infrastructure Investment and Jobs Act (IIJA), signed on November 15, 2021, established new federal programs and funding mechanisms to develop and implement intercity passenger rail service in the U.S. The law also significantly increased the levels of funding for all types of rail transportation, including freight, intercity passenger, commuter, and transit services. Intercity passenger rail projects will be funded primarily through programs administered by the Federal Railroad Administration (FRA), such as the FSP and CRISI programs.



Source: Kentucky Transportation Cabinet

Non-federal matching funds for passenger rail capital projects will need to be provided by corridor sponsors. State sponsorship for intercity passenger rail service investments may require legislative action to approve the use of existing state funds or to create new state or local revenue streams dedicated to supporting intercity passenger rail.

### 5.5.3. Operating Financing Plan

The Passenger Rail Improvement and Investment Act of 2008 (PRIIA) mandates that passenger rail services of 750 miles or less in length operated by Amtrak must be state supported. The operations and maintenance costs associated with state-supported routes must be funded by the state or by a coalition of states that requested the service. By contrast, operating costs associated with long-distance Amtrak routes in excess of 750 miles are funded directly by Congress through routine budget authorizations. However, no new long-distance Amtrak routes have been established in over 20 years.

Amtrak has sole responsibility for funding the operation of the two long-distance trains serving Kentucky: the Cardinal and the City of New Orleans.



At this time, there are no state funding mechanisms in place to fund a Kentucky-supported passenger rail service. A decision to establish such a funding mechanism would be deferred until after future studies have been completed to determine the feasibility of state-supported passenger rail service and the anticipated benefits associated with a specific route structure and service plan, to be identified through future planning efforts.

#### 5.5.4. Economic Benefits

As the majority of enhanced, expanded, or reinstated intercity rail passengers would be diverted from the automobile, passenger rail service expansion efforts would result in a more extensive and inclusive intercity transportation network, enhanced mobility, increased tourism and access to job opportunities, and increased energy efficiency compared to other modes.

Additionally, passenger rail service restoration can potentially trigger the adaptive reuse of historic intercity passenger rail facilities, including expansion into multimodal hubs that can connect rail passengers with other non-rail modes, such as local and regional bus service. Other urban revitalization efforts centered around transit hubs, known as transit-oriented development, can result in increased neighborhood property values and improved community vitality.

### 5.6. FREIGHT ELEMENT

#### 5.6.1. Financing Plan

The project inventory contains freight rail projects identified for the short-range and long-range planning horizons that pertain to improvements to Kentucky's rail network.

Class I railroads are generally considered capable of funding their own capital projects; however, potential future investments to be made to the state's rail network that were identified through coordination with the state's Class I railroads and identified by the KYTC or other stakeholders are shown in the list of potential future passenger and freight rail projects and studies in the project inventory later in this chapter.

Such self-funding is more challenging for Class II and Class III railroads, which tend to have a smaller customer base, thus limiting opportunities to generate revenue. Class II and Class III railroads usually earn a fee for picking up and delivering rail carloads to and from Class I railroads, which then forward them to other destinations on the national rail network. Often, these railroads are dependent on aging infrastructure that has been inherited from prior Class I railroad owners. Class II and Class III railroads often lack the internal cash flow needed to enhance yard and line capacity to accommodate more efficient train operations; provide improved rail access via enhanced or new transload facilities or industrial trackage; or upgrade legacy track and bridges to handle heavier loaded car weights of 286,000 pounds, which has become the standard for the national rail system.

Many states, including Kentucky, have opted to provide support to their Class II and Class III railroads to upgrade their lines via state and federal funding mechanisms. The KYTC can help sponsor applications for federal funding through programs such as RAISE (formerly known as BUILD and TIGER), CRISI, INFRA, and others. Such investments ensure that these railroads can continue to serve

their shippers, thus helping to retain businesses and employment and prevent the diversion of freight from rail to truck and the consequent maintenance impacts to the state highway system. Projects seeking competitive federal discretionary grant funding under many of the available programs are typically subjected to a rigorous benefit-cost analysis (BCA) to quantify specific public benefits needed to justify the investment, in addition to narrative description of project merits.

Another key area for state and federal investment is highway-rail grade crossing safety. Improvements include upgrades to warning devices and crossing surfaces, as well as crossing closures and grade separations where appropriate. These projects may be funded through the long-running FHWA Railway-Highway Crossings Program (Section 130) or the FRA's Railroad Crossing Elimination Program (RCE), which was launched in 2022. The impacts of such investments are the prevention and reduction of accidental deaths and injuries at highway-rail grade crossings.

The main financing mechanisms for state investments in rail lines and in highway-rail grade crossing safety improvements were identified in Chapter 2.

State funding mechanisms, as well as federal grant programs and local matching contributions, can together potentially support the planned and proposed investments in the state rail network described in Section 5.8 of this chapter.

#### KENTUCKY SHORT LINE INFRASTRUCTURE PRESERVATION (KSLIP) GRANT PROGRAM

House Bill 1 (HB1), enacted during in the 2024 Kentucky Legislative Session, allocates a total of \$15 million in fiscal years 2024-2025 and 2025-2026 to the Department of Highways budget to implement the Short Line Infrastructure Preservation Grant Program. The bill states that the KYTC shall coordinate with and make grants to Class II and Class III railroads to preserve and enhance existing rail lines and corridors, retain existing rail-served industries and attract new industries, and preserve and modernize Kentucky's rail system. Funds from the program shall be used for equipment, construction, reconstruction, improvement, or rehabilitation of rail facilities or engineering work associated with capital projects. No funds shall be expended from the program unless matched with non-state funds equaling at least 50 percent of the total amount for any individual project. No single project shall receive more than \$2,000,000 in grant funds from the program. Notwithstanding KRS 45.229, any portion of these funds that have not been expended by the end of fiscal year 2024-2025 shall not lapse and shall carry forward into fiscal year 2025-2026. The KYTC shall submit a report to the Legislative Research Commission and the Interim Joint Committee on Appropriations and Revenue by September 1, 2025, detailing the disbursement of funds in this subsection.



## KENTUCKY INDUSTRIAL ACCESS AND SAFETY IMPROVEMENT (KIASI) GRANT PROGRAM

HB 1 also allocates an additional \$15 million total in fiscal years 2024-2025 and 2025-2026 to the Department of Highways budget to implement the Industrial Access and Safety Improvement Grant Program. The bill states that the KYTC in conjunction with the Cabinet for Economic Development shall coordinate with and make grants to Class I, II, or III railroads, as well as to any Railroad Authority, Port Authority, rail-served industries, and Industrial and Economic Development Authority Board to expand rail access, enhance the marketability of available industrial sites, increase job creation and capital investment, and increase safety. Funds from the program shall be used for equipment, construction, reconstruction, improvement, or rehabilitation of rail facilities or engineering work associated with capital projects. No funds shall be expended from the program unless matched with non-state funds equaling at least 50 percent of the total amount for any individual project. No single project shall receive more than \$2,000,000 in grant funds from the program. Notwithstanding KRS 45.229, any portion of these funds that have not been expended by the end of fiscal year 2024-2025 shall not lapse and shall carry forward into fiscal year 2025-2026. The KYTC shall submit a report to the Legislative Research Commission and the Interim Joint Committee on Appropriations and Revenue by September 1, 2025, detailing the disbursement of funds in this subsection.

### 5.6.2. Economic Benefits

Through this state rail planning process, the KYTC has developed a better understanding of the rail industry's plans for growth within the state and the projects deemed necessary to facilitate this growth. Therefore, private sector rail projects, if deemed to provide sufficient public benefits in the future, may receive increased public financial assistance should additional funding become available.

As most proposed long-range projects have yet to be analyzed regarding their economic feasibility, it is premature to identify any correlation between the level of public investment and expected benefits.

## 5.7. RAIL STUDIES AND REPORTS

### 5.7.1. Passenger Rail Studies

#### CORRIDOR ID PROGRAM

The Corridor Identification and Development (Corridor ID) Program is a comprehensive intercity passenger rail planning and development program designed to help guide intercity passenger rail development throughout the country and create a pipeline of intercity passenger rail projects ready for implementation. The IIJA authorized the Secretary of Transportation to establish the program to facilitate the development of intercity passenger rail corridors, and the FRA was delegated the authority to create and administer the program. The Corridor ID Program is intended to become the primary means for directing federal financial support and technical assistance toward the development of proposals for new or improved intercity passenger rail services throughout the United States.

Public entities seeking to create or expand intercity passenger rail routes are eligible to apply for funding from the program.



The FRA selected 69 corridors across 44 states, with the goal of upgrading 15 existing rail routes, adding or extending service on 47 new routes, and advancing seven new high-speed rail projects. Each selected corridor was awarded up to \$500,000 for the completion of Step 1 activities. Several of the initial corridors that were selected for the program either pass through Kentucky or serve areas in close proximity to Kentucky. These include the following:

- Louisville-Indianapolis Passenger Rail Corridor, sponsored by the Kentuckiana Regional Planning and Development Agency (KIPDA). This proposed corridor would connect Louisville, Kentucky, to Indianapolis, Indiana, and provide new service on an existing alignment over which Amtrak discontinued service in the early 2000s. The KIPDA will enter Step 1 of the program to develop a scope, schedule, and cost estimate for preparing, completing, or documenting its service development plan. The KYTC assisted with the grant application for this project and provided a letter of support to KIDPA.
- Daily Cardinal Service, sponsored by Amtrak. This proposed corridor would provide improvements to the existing Amtrak Cardinal service between New York City and Chicago, Illinois, via Philadelphia and Washington, D.C., and the states of Virginia, West Virginia, Kentucky, Ohio, Indiana, and Illinois (including Cincinnati, Ohio, and Indianapolis, Indiana) by increasing service frequency from three days per week to daily. Amtrak will enter Step 1 of the program to develop a scope, schedule, and cost estimate for preparing, completing, or documenting its service development plan.
- Indianapolis-Chicago, sponsored by the Indiana Department of Transportation (INDOT). This proposed corridor would supplement service provided by the existing Amtrak long-distance Cardinal train between Indianapolis, Indiana, and Chicago, Illinois, by adding new round-trip trains within the corridor and improving travel times. The Indiana Department of Transportation will enter Step 1 of the program to develop a scope, schedule, and cost estimate for preparing, completing, or documenting its service development plan. This effort is being undertaken in coordination with Amtrak's Corridor ID project to increase service frequency on the entirety of the New York-Chicago Cardinal route from thrice weekly to daily. The KYTC provided a letter of support to INDOT.
- Cleveland-Columbus-Dayton-Cincinnati (3C&D) Corridor, sponsored by the Ohio Rail Development Commission. This proposed corridor would connect Cleveland, Columbus, Dayton, and Cincinnati, Ohio, and provide new service on an existing alignment. The Ohio Rail Development Commission will enter Step 1 of the program to develop a scope, schedule, and cost estimate for preparing, completing, or documenting its service development plan.
- Atlanta-Chattanooga-Nashville-Memphis Corridor, sponsored by the City of Chattanooga, Tennessee. This proposed corridor would connect Atlanta, Georgia, to Chattanooga, Nashville, and Memphis, Tennessee, and provide new service on existing alignments. The City of Chattanooga will enter Step 1 of the program to develop a scope, schedule, and cost estimate for preparing, completing, or documenting its service development plan.
- Chicago to Carbondale Corridor, sponsored by the Illinois Department of Transportation. The proposed corridor would provide improvements to the existing Illini/Saluki service between Chicago and Carbondale, Illinois, by improving travel times and reliability. The Illinois Department of Transportation will enter Step 1 of the program to develop a scope, schedule, and cost estimate for preparing, completing, or documenting its service development plan.



## DAILY LONG-DISTANCE SERVICE STUDY

Section 22214 of the IIJA required the FRA, under delegation from the Secretary of Transportation, to conduct an Amtrak Daily Long-Distance Service Study to evaluate the restoration of daily intercity passenger rail service and the potential for new Amtrak long-distance routes.

Long-distance routes are Amtrak routes over 750 miles that connect a mix of urban and rural areas; these routes typically operate one trip per day in each direction, and Amtrak receives annual support from Congress for operating costs associated with long-distance routes. The FRA's Amtrak Daily Long-Distance Service Study is intended to create a foundation for further planning of potential future long-distance services. Under IIJA stipulations, the FRA is required to conduct a study to assess the restoration of daily intercity rail passenger service along any Amtrak long-distance routes that were discontinued, as well as any Amtrak long-distance routes with nondaily service. The FRA may also assess potential new Amtrak long-distance routes in its evaluation, taking into consideration whether those new routes would:

- Link and serve large and small communities as part of a regional rail network
- Advance the economic and social well-being of rural areas of the United States
- Provide enhanced connectivity for the national long-distance passenger rail system
- Reflect public engagement and local and regional support for restored passenger rail service

The FRA launched the study in October 2022. Stakeholder engagement comprises a significant component of the study, and the FRA has solicited comments and study participation from state DOTs, Amtrak, Class I freight railroads, short line railroads, metropolitan planning organizations, regional passenger rail authorities, local officials, federally recognized tribes, and the broader stakeholder community. A key part of the process has involved holding four different sets of regional working group meetings in six locations across the country at various points during the study's development. The FRA held a total of 24 regional working group meetings between January 2023 and June 2024, divided among four series of meetings. The KYTC participated in working group meetings held for the Southeast region and for the Midwest region. The third meeting series, held in February 2024, presented a proposed network of "preferred routes" for future planning and development. Among the 15 long-distance routes identified as preferred routes, two pass through Kentucky, and a third serves cities in close proximity to Kentucky. These routes are:



Source: Kentucky Transportation Cabinet

The FRA held a total of 24 regional working group meetings between January 2023 and June 2024, divided among four series of meetings. The KYTC participated in working group meetings held for the Southeast region and for the Midwest region. The third meeting series, held in February 2024, presented a proposed network of "preferred routes" for future planning and development. Among the 15 long-distance routes identified as preferred routes, two pass through Kentucky, and a third serves cities in close proximity to Kentucky. These routes are:

- Chicago – Miami (serving Louisville, Bowling Green, and Nashville)
- Detroit – New Orleans (serving Cincinnati, Louisville, Bowling Green, and Nashville)
- Dallas/Fort Worth – New York (which would not pass directly through Kentucky but would serve Indianapolis and Cincinnati)

5.7.2. Freight Rail Studies

The KYTC has not completed or been involved in any freight rail studies in Kentucky.

5.8. RAIL PROJECT INVENTORY

This section identifies the current program of rail projects that are either funded or under consideration for future funding in Kentucky. The projects are prioritized in terms of projects which are currently selected for funding or already in construction, as well as those that could be considered over a 20-year period, if a funding source is provided. The funded projects are limited to those for which funding has been identified based on legislative budget allocations, awards from the HB 1 Grant Programs that were established in 2024, and projects selected for federal grant awards. Unfunded potential future projects include specific projects or prospective project concepts for which funding has not yet been committed or secured but have been deemed important as part of a multi-year program. A brief project summary, anticipated public benefit categories, and a generalized cost estimate are provided for each project listed in the project inventory.

5.8.1. Current and Ongoing Projects

Kentucky’s current (1-4-year time frame) program of funded and ongoing freight rail projects is described in this section. Projects identified for funding have been selected on the basis of preserving the state’s past investments and improving the levels of service and financial performance of the railroads in the state, as well as the anticipated benefits expected for projects in terms of freight system capacity, efficiency, and safety; rail network access; economic development and competitiveness; job creation and retention; transportation savings; energy and environmental benefits; resiliency; and other program-specific benefits.

**Table 5-1** lists the current program of funded and ongoing projects.

The sum of the estimated total project costs for each of the projects within the currently funded program of projects for which estimated total project costs are known at this time exceeds \$149 million. Total funding for the current program includes over \$72 million in federal investment.



Source: Kentucky Transportation Cabinet

Table 5-1. Current and Ongoing Rail Projects in Kentucky

Railroad/Project Name	Description	Project Benefits	Project Status	Federal Funding	Non-Federal Funding	Total Project Cost	Funding Source(s)
KYTC – Reconnecting Northland-Arlington	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.	Safety, State of Good Repair	Active	\$8,120,000	\$13,990,000	\$22,110,000	RAISE (FY 2023)
LIRC – Safety, Sustainability, and Alternative Energy Project	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 along the LIRC.	Safety, System and Service Performance	Active	\$2,685,600	\$2,909,400	\$5,595,000	CRISI (FY 2021)
LIRC – Clagg Bridge Lift Span Operations Project	The proposed project involves project development, final design, and construction for improvements to the Clagg Lift Span of the Fourteenth Street Bridge, which connects Louisville, Kentucky, and Clarksville, Indiana.	Safety, State of Good Repair	Active	\$6,492,000	\$6,492,000	\$12,984,000	CRISI (FY 2023-2024)
LIRC – Network Security and Communications Project	The proposed LIRC project will upgrade existing 900MHz network data radios for the Fourteenth Street Bridge (Clagg Lift Span) over the Ohio River. The current system will be upgraded to fiber in conduit to improve signal system infrastructure security and upgrade of existing vessel traffic voice communications equipment to network capable equipment to improve operational communications capabilities.	Safety, State of Good Repair	Active	-	\$550,316	\$1,954,572	KSLIP (FY 2025)
PAL – Fostering Economic Sustainability Throughout Kentucky Project	The proposed project involves project development, final design, and construction activities for various track improvements in a rail yard, upgrades to multiple bridges along the PAL's 280-mile main line, and rehabilitation of 19 locomotives.	Safety, System and Service Performance, Equitable Economic Strength	Active	\$29,563,000	\$33,337,000	\$62,900,000	CRISI (FY 2022)



PAL – Rockport Bridge Rehabilitation Freight Rail Project	This project will rehabilitate the 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.	Safety, State of Good Repair, Equitable Economic Strength	Active	\$17,331,850	\$18,668,150	\$36,000,000	INFRA (FY 2022)
PAL – Elizabethtown Crosstie Rehab Project	The proposed PAL project will replace crossties on approximately twenty miles of track, including the Elizabethtown Branch, Cecilia Siding, Tank Siding, and surrounding mainline track with approximately 1,500 crossties per mile. All damaged, worn, or ineffective crossties will be removed from the track structure and replaced with 20,000 new crossties. The track surface will then be renewed with a tamper and ballast regulator.	Safety, State of Good Repair, Equitable Economic Strength	Active	-	\$1,352,700	\$2,705,400	KSLIP (FY 2025)
PAL – Renewal of Princeton Yard Tracks Project	The proposed PAL project will replace the switching ladders on the North and South ends of the Princeton Yard with modern #8 115 RE self-guarded turnouts, reconnect Tracks 9, 10, and 11 to the ladders (these tracks currently are out of service), and reestablish track access through the existing maintenance-of-way shop building. The project will eliminate and replace several very old turnouts, retired fasteners, outdated 85 lb. and 90 lb. rail, and ties in poor condition. Additionally, the project will remove and replace fouled ballast and implement other measures to improve inadequate drainage throughout the Princeton Yard.	Safety, State of Good Repair, Equitable Economic Strength	Active	-	\$2,000,000	\$4,196,700	KSLIP (FY 2025)
PAL – Paducah & Louisville Railway Infrastructure Project	The proposed project will provide upgrades to the PAL rail infrastructure including upgrading 180,000 linear feet of rail on the entire 280-mile line. The project also includes Traffic Control System upgrades between Louisville and Gilbertsville, acquisition and installation of a Wheel Truing System at the Paducah Roundhouse, and the rehabilitation of five bridges.	Safety, State of Good Repair, Equitable Economic Strength	Active	\$33,780,304			INFRA (FY 2026)



RJCC – The Bluegrass Multimodal Freight Improvement Project	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 main line 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.	System and Service Performance, Equitable Economic Strength	Active	\$7,380,600	\$4,920,400	\$12,301,000	CRISI (FY 2021) and KSLIP (FY 2025)
RJCC – Kentucky Freight Rail Improvement Program	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 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.	State of Good Repair, Equitable Economic Strength	Proposed	\$32,183,290	\$10,727,763	\$42,911,053	CRISI (FY 2023-2024)
RJCM – Track Rehab Project	The proposed RJC project consists of the following work on the Memphis Line: replacing 1,400 crossties, replacing 500 tons of ballast, 100 track feet of crossing renewal, track extension of 200 track feet, a rail upgrade of 1,800 linear feet, and 10,000 linear feet of surfacing.	Safety, State of Good Repair, Equitable Economic Strength	Active	-	\$484,950	\$969,900	KSLIP (FY 2025)
SKYIDA – 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 CSX property in Corbin, Kentucky.	System and Service Performance, Equitable Economic Strength	Active	-	-	-	SKYIDA

TKEN – TennKen Revitalization and Safety Improvement Project	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.	Safety, State of Good Repair, Equitable Economic Strength	Active	\$7,370,000	\$3,630,000	\$11,000,000	CRISI (FY 2022)
TKEN – TennKen Rail Improvement Project	This proposed project matches an awarded federal CRISI grant. See above the above project description. Much of the awarded CRISI project work would be done in Tennessee, as Kentucky did not have any matching funds available at the time. The proposed project would expand on the work done in Kentucky by adding the replacement of 1.5 miles of worn and undersized rail to the original CRISI project scope.	Safety, State of Good Repair, Equitable Economic Strength	Active	N/A	\$500,100	\$1,000,200	KSLIP (FY 2025)
TTIS – Infrastructure Rehabilitation and Operational Improvement Project	The proposed TTIS project addresses a variety of maintenance needs including, spot tie replacement and surfacing and tamping in the Paris Yard, rock distribution, and brush cutting for entire rail line. Other project elements include ditching a ravine, bridge tie deck replacement, and a new siding.	Safety, State of Good Repair, Equitable Economic Strength	Active	-	\$875,548	\$1,751,096	KSLIP (FY 2025)
TTIS – Track Expansion Project	The proposed TTIS project would construct approximately 4 new tracks (estimated at 7,400 track feet) that will supplement the current construction of a new siding and track. This expansion will accommodate a newly acquired business and potential future business opportunities at the Bourbon/Nicholas County Industrial Park, which is located adjacent to this TTIS property.	Safety, State of Good Repair, Equitable Economic Strength	Active	-	\$736,386	\$1,472,772	KSLIP (FY 2025)

### 5.8.2. Future Projects

Kentucky's current program of unfunded potential future (5-20-year time frame) projects is comprised of projects identified by the KYTC and other rail stakeholders to address rail user and community needs, rail system access, infrastructure enhancement or replacement, and to promote economic development. These projects, however, are not guaranteed to be implemented due to a lack of designated funding or due to the need for further analysis, planning, or programming before funding can be committed.

The unfunded project inventory includes prospective rail projects proposed during the stakeholder and public outreach process, regardless of funding availability at this time and without detailed technical analysis. These projects will be subject to additional verification of feasibility and evaluation of potential public and private benefits to determine each project's suitability for receiving public funding resources.

Estimated total project costs for future freight rail projects may not be known at this time. Upon completion of these analyses, future Statewide Rail Plan updates will reflect more current and accurate information, including capital cost estimates for implementation. Upon the availability or award of state or federal funding resources, projects selected for implementation may be moved to the current and ongoing project list of funded projects in the future. Proposed long-range projects and studies that remain unfunded will be included in future iterations of the Statewide Rail Plan as long as they remain relevant to affected stakeholders and continue to be necessary to help achieve Kentucky's State Rail Vision.

An inventory of potential freight rail projects identified by stakeholders is listed in **Table 5-2**.

Project funding sources for all future projects, inclusive of federal, state, local, and private or other non-federal funding, will be determined as funding opportunities are made available in order to optimize overall funding leverage and to maximize public benefit.

Table 5-2. Proposed Future Rail Projects in Kentucky

Project Name	Description	Project Benefits	Project Status	Estimated Federal Funding	Estimated Non-Federal Funding	Estimated Total Project Cost	Potential Funding Source(s)
TTIS – Paris to Maysville Railroad Rehabilitation	This proposed project would reopen the entire 50-mile TTIS rail corridor from Paris to Maysville, Kentucky. This would allow for a direct connection between CSX lines and better freight flow across the commonwealth. Project elements include track, tie, drainage and structure repairs, and general improvements.		Proposed	TBD	TBD	TBD	State, federal, and private sources
Louisville-Nashville Intermodal Study	TBD		Proposed	TBD	TBD	TBD	
CSX – Carrollton Railroad Worthville Yard Expansion	This proposed project would expand the undersized CSX Worthville Yard in Worthville, Kentucky. The expansion would allow for increased service to industrial customers in Carrollton, including Nucor Steel.	System and Service Performance, Equitable Economic Strength	Proposed	TBD	TBD	TBD	State, federal, and private sources
RJCC – Fayette County Track Rehab Project	The proposed RJCC project consists of rehabilitation on three portions of the Central Kentucky Lines in Fayette County. For the Old Road subdivision, it would replace 6,750 ties. The work for the Beltline and Versailles subdivisions would include replacing ties, 4,000 and 600, respectively, along with two switch installations in each subdivision. The Beltline would also receive 80 switch ties. Surfacing and ballast would be done at all project locations.	Safety, State of Good Repair	Proposed	TBD	TBD	\$2,481,376	State, federal, and private sources
P&L –Acquisition of Railcar Movers for Paducah & Louisville Yards	The proposed project would add two Boss MX mobile railcar movers to P&L's fleet. One railcar mover would be used in P&L's Paducah Yard and the other would be used in the Louisville Yard. The railcar movers would replace functionally obsolete equipment, which is currently being used to move railcars within the yards.	System and Service Performance	Proposed	TBD	TBD	\$1,224,000	State and private sources



KRM – Railroad Defective Tie Replacement	The proposed KRM project would replace old, worn and defective ties at selected locations within the 17 plus miles of KRM track.	Safety, State of Good Repair	Proposed	TBD	TBD	\$50,000	State, federal, and private sources
LORJ – Loop Track Rehabilitation Project	The 14-mile LORJ railroad includes two parallel loop tracks, each two miles in length. Currently only one mile of each loop is utilized for service and the remainder is out of service due to cross tie conditions. The proposed project will restore the entire loop track system to FRA inspected status by replacing approximately 2,250 crossties and ballast.	Safety, State of Good Repair, Equitable Economic Strength	Proposed	TBD	TBD	\$567,750.00	State, federal, and private sources
KYTC – Upton Rail Crossing Elimination Project	The proposed FY 2023-2024 RCE project would construct a bridge over the CSX mainline from Quarry Road and Highway U.S. 31 W near Upton, Kentucky.	Safety, System and Service Performance	Proposed	TBD	TBD	TBD	State, federal, and private sources
NS – LIRC/NS Connection Project	The proposed NS project would realign the triple S-curve in Louisville where NS connects to the LIRC. The realignment would allow for longer rail cars to be used and for trains to travel at an increased speed through this urban location.	Safety, System and Service Performance, Equitable Economic Strength	Proposed	TBD	TBD	TBD	State, federal, and private sources

# CHAPTER 6

## COORDINATION AND REVIEW

### INTRODUCTION

This chapter describes how the Kentucky Transportation Cabinet (KYTC) involved stakeholders and the public in the coordination necessary to develop the Kentucky Statewide Rail Plan (SRP).

The KYTC actively engaged stakeholders at the earliest stages of the project. Key stakeholders included all railroads operating within the state, as well as rail shippers. Other stakeholders involved were local, regional, and state government staff, elected officials, economic development agencies, special interest and advocacy groups, and the general public. Stakeholder involvement included participation in freight and passenger rail planning activities, identifying the freight and passenger rail priorities and goals for Kentucky, and identifying needs, issues, and potential future investments for rail to ensure improved freight and passenger rail service moving forward.

The KYTC facilitated specific, targeted outreach efforts to encourage participation from key stakeholders. Stakeholders were contacted by email or phone to coordinate individualized interview discussions with key project staff and advisors.

The KYTC then held three in-person public open house meetings at locations throughout the state which were widely promoted via press release, an email list, and social media posts. Attendees at these meetings included rail shippers, economic development agencies, local government staff, elected officials, special interest and advocacy groups, and other interested members of the public. Those who attended the public meetings, as well as those who were unable to attend, were encouraged to complete a detailed on-line survey to provide their opinions on passenger and freight rail service in Kentucky. The on-line survey, offered in both English and Spanish, was left open for 30 days following the final in-person public open house meeting. During that time KYTC received 2,847 survey responses. The summary of those responses is included in Appendix B.



Source: Kentucky Statewide Rail Plan Team

Later, the KYTC held a virtual rail stakeholder meeting to review the initial findings of the Draft SRP. The meeting was attended by railroad representatives. The draft results from Chapters 1 and 2 of the SRP were presented, and the stakeholders were provided an opportunity to comment on the document.

A final in-person stakeholder meeting was held in early 2025, in conjunction with a Kentuckians for Better Transportation (KBT) Rail Committee meeting. During the meeting, the Draft SRP chapters were presented, and stakeholders were given an opportunity to provide comments.

A second round of public engagement was also held following completion of the Draft SRP. A virtual open house was held that presented the Draft SRP chapters and provided information about the Rail Plan through a question-and-answer session. The virtual open house was promoted through a press release, social media posts, and on the SRP website. The questions for the question-and-answer session were solicited from the public as part of the meeting promotion. The Draft SRP chapters were uploaded to the SRP website, where comments were accepted via a virtual comment form.

The KYTC continued to solicit input throughout the process via the project website and through ongoing coordination with contacts who participated in the earlier phases of engagement.



Source: Kentucky Statewide Rail Plan Team

## 6.1. APPROACH TO PUBLIC AND AGENCY PARTICIPATION

This section describes the approach to public and agency participation in the development of the SRP, including public notices, opportunities for public and agency participation, and how comments were collected.

Stakeholder engagement activities were important in order for the project team to understand current rail operations throughout Kentucky and to gain a better understanding of the needs and opportunities that affect various parties who all have a vested interest in rail transportation.

### 6.1.1. Initial Stakeholder Outreach

In the initial phases of the project, the project team conducted virtual, individualized interviews with primary railroad industry stakeholders, as identified through coordination with the KYTC.

The project team then asked each interviewee a series of questions related to:

- Perceived status of rail infrastructure in Kentucky generally. This question was intended to qualitatively assess the condition of rail infrastructure, operations, and funding in Kentucky while highlighting particular areas of concern on a corridor, project, or policy level.
- Perceived strengths of the KYTC's rail investment programs and perceived limiting factors. This question enabled evaluation of the KYTC's current practices and policies for rail investment.

- Past successes and challenges experienced in implementing investments for rail improvement projects, both for state-owned and privately held assets. This question illustrated through examples how policies and projects intersect through established project delivery practices.
- Concerns or considerations associated with the state and federal policies affecting rail development options within Kentucky. Responses to this question were intended to ensure that the documents address policy shortcomings or provide appropriate policy clarifications.

The overall intent of the stakeholder interview process was to gather information to describe the economic function of rail operations in the state and gain insight into the challenges facing the rail industry in Kentucky from both regulatory and economic perspectives. The project team documented stakeholder interviews by producing detailed meeting notes for internal use.

## STAKEHOLDER INTERVIEWS COMPLETED

### Railroad Representatives

All railroads currently operating in Kentucky were invited to participate in the initial stakeholder outreach phase. Railroad representatives including local management, public projects staff, and government affairs personnel were interviewed in order to gather insight and perspective on current railroad needs and opportunities in Kentucky.

Members of the project team arranged and conducted the interviews. Each potential interviewee received an initial contact email or phone call with details and background about the Kentucky SRP, an explanation of how the interview process would be conducted, and an invitation to participate.

A total of 13 different railroads participated in the confidential, virtual interviews conducted from August through October 2023. The interviews lasted approximately 30 to 60 minutes each.

### Freight Shippers

Project team staff identified current freight rail shippers to be interviewed in order to gather insight and perspective on the current state of freight rail service in Kentucky. Members of the project team arranged and conducted the interviews. Each potential interviewee received an initial contact email or phone call with details and background about the Kentucky SRP, an explanation of how the interview process would be conducted, and an invitation to participate. Four Kentucky rail shippers participated in the confidential, virtual interviews in May 2024. The interviews lasted approximately 30 minutes each. Participants included two agricultural shippers, a manufacturer, and a logistics and warehousing provider. Shippers that were interviewed used a mix of Class I, Class II, and Class III railroads, as well as trucks to transport their freight.

## 6.1.2. Public and Stakeholder Open House Meetings

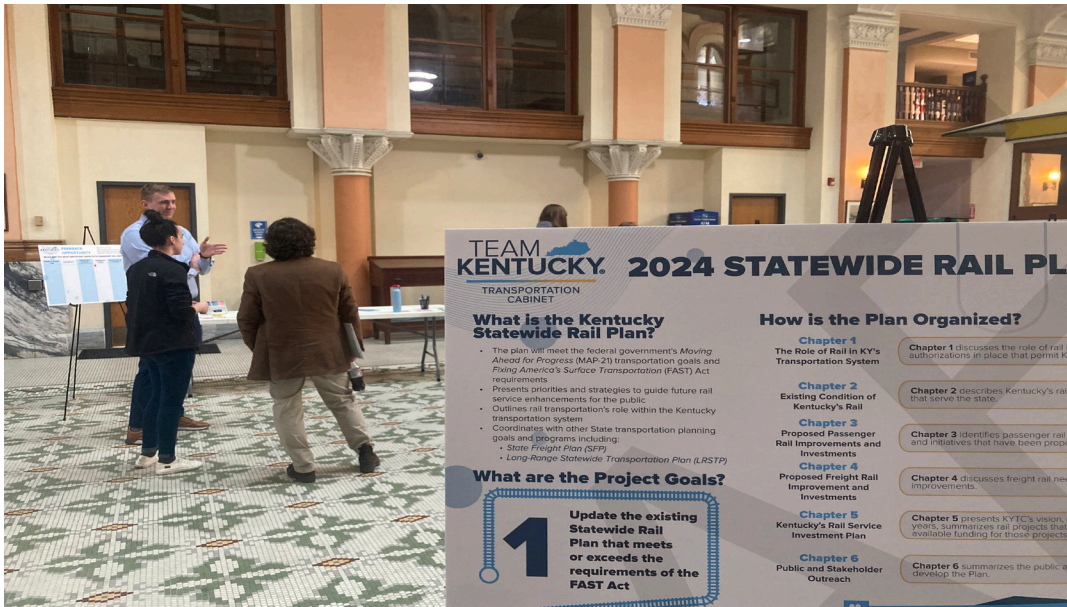
After the initial stakeholder engagement phase, the KYTC held three in-person public and stakeholder open house meetings throughout the state to support the development of the SRP in Fulton, Louisville, and Ashland, Kentucky. Details of these meetings are provided in the sections below.

At each of the three open house meetings, the project team presented information about the purpose of state rail planning, the FRA requirements for state rail plans, an overview of the history and existing



conditions of the rail network in Kentucky, and a discussion of current needs and opportunities related to rail. A picture from the open house meeting held in Louisville at Louisville Union Station on March 12, 2024, is included as **Figure 6-1** below.

**Figure 6-1. Open House Meeting**



Source: Kentucky Statewide Rail Plan Team

Meetings and communications were designed to facilitate participation and foster meaningful engagement. The format of the meeting was an open house setting allowing attendees to work through the various stations at their own pace. Project team members, including both KYTC and consultant staff, were available for questions and small discussions. All meeting attendees were encouraged to complete the on-line survey, and tablet computers were provided to allow attendees to complete the survey while at the open house. The results of the survey are shown in Appendix B.

### 6.1.3. Draft State Rail Plan Workshop

Following the preparation of the Draft SRP, the KYTC held an additional in-person workshop in Frankfort, Kentucky, to review the findings of the draft plan and solicit further input from stakeholders. This meeting was held in conjunction with a KBT Rail Committee meeting. Representatives from all the railroads operating in Kentucky were invited to attend.

The project team presented key themes from each chapter of the Draft SRP and placed Kentucky's current rail needs and opportunities in the context of the multiple targeted federal funding opportunities available from 2022 through 2026 due to the Bipartisan Infrastructure Law (BIL). The project team emphasized that this update to the rail plan



Source: Kentucky Statewide Rail Plan Team

is a tool that the KYTC and other stakeholders can use to strategize how best to leverage funding opportunities available over the next four to five years.

#### 6.1.4. State Rail Plan Website

A project webpage ([kyrailplan.com](http://kyrailplan.com), shown in **Figure 6-2** below) served as an online information center for all potential stakeholders by providing ongoing information about the Kentucky SRP process and progress.

The website included information related to the goals and objectives for the state rail planning process, the timeline for plan development, existing documents and resources, event details, contact information, and a comment form. The website hosted links to the survey during the initial round of public engagement and the virtual open house during the second round of engagement. The website also included a tool for members of the public to sign up for a mailing list for project updates and other information.

**Figure 6-2. State Rail Plan Website**

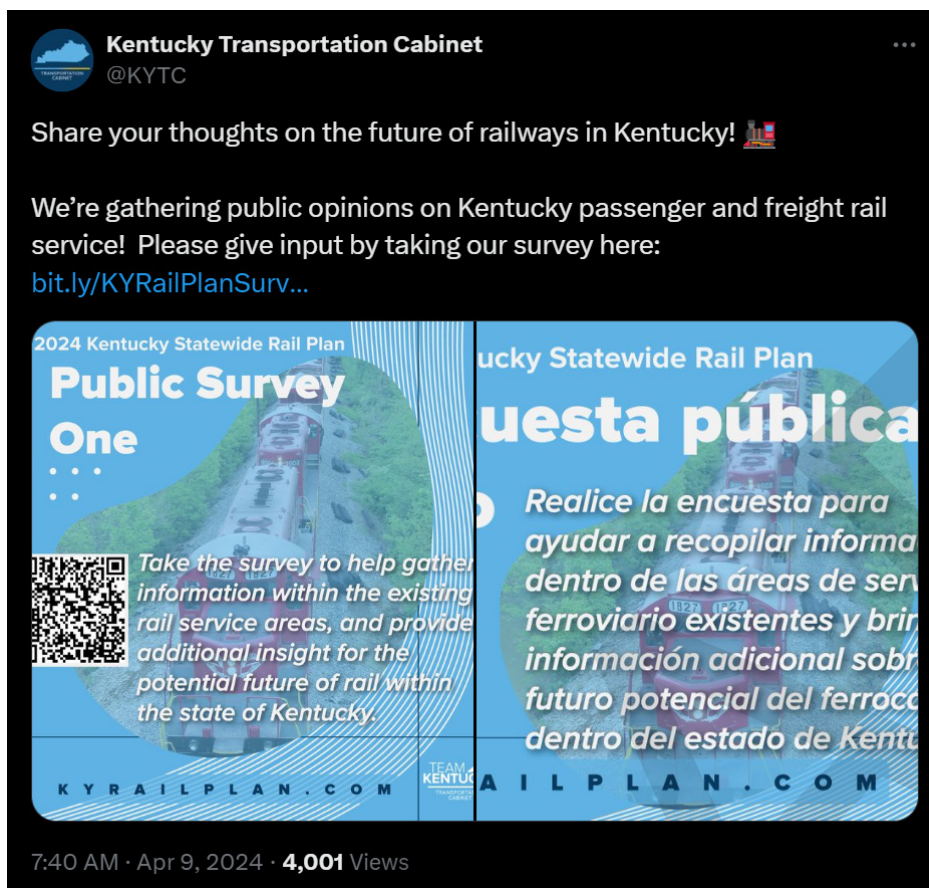


#### 6.1.5. Social Media Promotion

Public engagement opportunities, including in-person meetings and workshops and the virtual open house, were promoted via the KYTC's official social media accounts on Facebook, X, and LinkedIn.

Example X posts are shown in **Figure 6-3** below.

Figure 6-3. Social Media Promotion



## 6.2. COORDINATION OF STATE RAIL PLAN WITH NEIGHBORING STATES

The KYTC is in regular contact with neighboring state partners. Neighboring state DOTs, including Tennessee, Indiana, and Ohio, were invited to review a draft of the Kentucky SRP and provide comments prior to its finalization.

## 6.3. STAKEHOLDER PARTICIPATION DURING PREPARATION AND REVIEW

Railroads, rail shippers, public entities within the state, units of local government, and other interested parties were involved in the preparation and review of the SRP.

The project team initially identified and contacted key stakeholders and industry representatives early in the information-gathering phase of the project. Later, the team invited representatives of the railroads operating in the state, staff from federal and state agencies, local and regional governments, regional railroad authorities, and general public groups (including advocacy organizations interested in passenger rail) to participate in the next phases of the engagement process. Meetings and communications were designed to facilitate participation and foster meaningful engagement.



## 6.4. ISSUES RAISED DURING THE PREPARATION OF THE STATE RAIL PLAN

During both stakeholder and public outreach activities, input from these groups were collected via surveys, comment forms, and meeting notes. Key themes from stakeholder and public comments are summarized below.

### 6.4.1. Key Themes from Stakeholder Discussions

- Railroads would find it helpful if Kentucky offered financial assistance to shortline railroads similar to what the adjacent states of Tennessee and Ohio provide. (Note: beyond this suggestion, railroads had limited requests for state government changes to help their operations.)
- A significant challenge facing many shippers is the reduction in service frequency and reliability of Class I railroads.
- Shippers desire to increase their use of rail shipping but are constrained by a combination of infrastructure and rail service availability.

### 6.4.2. Public Comments Received

The majority of the public comments received were related to passenger rail services and were obtained from the on-line survey. Full results of the survey are included in the appendix to this chapter.

- Amtrak users commented that more frequent or better-timed service would increase ridership.
- Improvements are needed to the existing Amtrak station in Fulton, Kentucky.
- There is a desire for new passenger rail service to numerous regional destinations.
- There is a desire for new commuter rail service within Kentucky.



Source: Kentucky Statewide Rail Plan Team

## 6.5. INCLUSION OF RECOMMENDATIONS IN THE STATE RAIL PLAN

Recommendations made by participants such as railroads, agencies, authorities, and municipalities were appropriately considered and presented in the SRP. Specifically, current and future projects identified by stakeholders formed the basis for the State's updated project inventory presented in Chapter 5. The state rail planning process provided a venue for these potential projects to be identified and documented. The project concepts that are included in the SRP may potentially be eligible for future funding opportunities. Inclusion of a project in the SRP is an eligibility requirement for some federal funding programs and serves as an important indicator of project readiness.



## 6.6. STATE COORDINATION OF STATE RAIL PLANNING WITH OTHER TRANSPORTATION PLANNING PROGRAMS

The state coordinates statewide rail planning with other transportation planning programs and activities of the state and metropolitan areas. The KYTC Division of Planning administers the State's rail programs and serves as the KYTC's railroad liaison. Rail management responsibilities within KYTC are divided between the Division of Planning and the Division of Right of Way and Utilities. The SRP informs and is informed by the State's other transportation planning documents, including the Long-Range Statewide Transportation Plan (LRSTP), the Statewide Transportation Improvement Plan (STIP), and the Kentucky Freight Plan (KFP).

The KYTC will consider all relevant and applicable federal laws, regulations, policies, and Executive Orders related to equity considerations or establishing/supporting equitable practices in the management of state rail programs and implementation of rail projects within the state.



# APPENDIX A ECONOMIC IMPACT ANALYSIS

## EXECUTIVE SUMMARY

The economic impact of rail transportation to Kentucky in 2021 were estimated using Regional Input-Output Modeling System (RIMS II) multipliers from the Bureau of Economic Analysis (BEA) with input data and assumptions on:

- Freight movements, based on data derived from the STB 2021 Waybill Sample data of shipments originating in Kentucky as described in Chapter 2, Section 2.2.2 of the Kentucky State Rail Plan;
- Values of commodity shipments extracted from the Federal Highway Administration's (FHWA's) Freight Analysis Framework (FAF) data base for rail shipments originating in Kentucky in 2021, converted to a value (2021 dollars) per ton; and
- Rail transportation operations.

Impacts of the rail industry in Kentucky considered in this analysis stem from organizations providing freight and passenger transport services, as well as industries using rail freight services to trade goods (i.e., shippers of goods or commodities).

Impacts were estimated and present by activity (service provision and rail users), type (direct, indirect, induced, and total), and measure (employment, income, value added, and value added) for 2021 to provide an extensive review of how rail operations in Kentucky impacts the State's economy. The table below provides a summary of the economic impacts which include the follow:

- **Output:** In terms of total revenue, the rail-related industries generated an estimated \$37.4 billion in output, of which, \$37.3 billion is contributable to freight rail operations and services.
- **Employment:** The economic impact of rail supported over 51,000 jobs directly in the provision of rail transportation (both freight and passenger). If including other trickle-down impacts, rail-related operations supported almost 130,000 jobs.
- **Employment Income:** In total, the rail-related industries supported \$7.7 billion in earnings for the almost 130,000 employees. These earnings include employee compensation and proprietary incomes. Specifically, employee compensation includes wages or



Source: Kentucky Transportation Cabinet



salary payments, employee benefits, and employer paid payroll taxes. Meanwhile, proprietary incomes consists of payments received by self-employment individuals and unincorporated business owners.

- **Value Added:** The combined value-added impact of rail-related activity amount to nearly \$17.3 billion, which is approximately 7.3 percent of Kentucky's Gross Domestic Product (GDP) in 2021.<sup>1</sup>

Table A-1. Economic Impacts for Rail Transportation in Kentucky

Impact Metric	Transportation Services		Transportation Users	Total Service		Total
	Freight	Passenger		Freight	Passenger	
Output (\$M)						
Direct	\$1,173.7 M	\$42.3 M	\$20,264.8 M	\$21,438.5 M	\$42.3 M	\$21,480.8 M
TOTAL	\$2,111.1 M	\$76.1 M	\$35,224.0 M	\$37,335.1 M	\$76.1 M	\$37,411.2 M
Employment (Jobs)						
Direct	2,159	70	49,119	51,279	70	51,349
TOTAL	7,091	248	122,615	129,706	248	129,953
Employment Income (\$M)						
Direct	\$210.6 M	\$7.6 M	\$3,539.8 M	\$3,750.4 M	\$7.6 M	\$3,758.0 M
TOTAL	\$458.1 M	\$16.5 M	\$7,255.7 M	\$7,713.8 M	\$16.5 M	\$7,730.3 M
Value Added (\$M)						
Direct	\$609.3 M	\$22.0 M	\$292.5 M	\$901.8 M	\$22.0 M	\$923.7 M
TOTAL	\$1,073.0 M	\$38.7 M	\$16,157.3 M	\$17,230.3 M	\$38.7 M	\$17,269.0 M

Note: All monetary values are in 2021 dollars



Source: Kentucky Transportation Cabinet

1. Based on a GDP of \$237,928.9 million for Kentucky in 2021. Data extracted from: U.S. Bureau of Economic Analysis, Gross Domestic Product: All Industry Total in Kentucky [KYNGSP], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/KYNGSP>, March 1, 2024.

## A.1. INTRODUCTION

Economic impacts for the rail transportation industry in Kentucky assessed in this analysis stems from (1) railroads providing freight and passenger rail services, and (2) industries using such services to trade or transport goods (i.e., the shippers of good or commodities).

This Appendix outlines the methodology of quantification of these impacts together with input data and results. The methodology represents an input-output approach that captures and quantifies the flow of goods and services (expenditures) between various industries in the economy arising from technical requirements of one industry for inputs provided by another industry. These inter-industry requirements for input supplies and labor create rounds of expenditures and impacts that – when added throughout the economy – exceed the initial expenditure.

The analysis is implemented on the basis of STB 2021 Waybill Sample data of shipments originating in Kentucky and using Regional Input-Output Modeling System (RIMS II) multipliers from the Bureau of Economic Analysis (BEA) referred to as RIMS II multipliers. The remainder of this document is organized as follows:

- **Section A.2, Methodology, Data Sources, and Assumptions:** Introduces the conceptual framework used in the Benefit-Cost Analysis (BCA).
- **Section A.3, Results:** Provides an overview of RIISE, including a brief description of existing conditions and proposed alternatives; a summary of cost estimates and schedule; and a description of the types of effects that RIISE is expected to generate.
- **Section A.4, Summary of Impacts:** Discusses the general assumptions used in the estimation of project costs and benefits.

## A.2. METHODOLOGY, DATA SOURCES, AND ASSUMPTIONS

### A.2.1. Key Concepts and Modeling Tools

Economic impact analysis (or assessment) is a type of conceptual analysis that identifies and quantifies the economic activity that is generated or can be attributed and linked to an investment project, government policies, events, etc. being evaluated. These projects, policies, or events have some underlying change in the stream of expenditures in an economy and lead to a change in the demand for goods and services. This has implications on the number of jobs and other measures of economic activity in the local, regional, and national economy.

Traditionally, economic impact analysis involves the estimation of



Source: Kentucky Transportation Cabinet



three distinct types of economic activity, commonly referred to as “direct impacts”, “indirect impacts”, and “induced impacts” that are attributable to an initial stream of incremental capital of operating expenditures. These are defined as follows:

- **Direct impacts** refer to the initial economic effects occurring as the result of capital of operating expenditures directly related to the project, policy, or event being evaluated. Direct spending results in the employment of workers, business output, and sales of locally produced goods or services.
- **Indirect impacts** refer to the “spin-off” economic activities that result from purchases of production inputs, goods and services, by businesses that are impacted by the initial expenditures. The spending by the supplier firms on their labor, production inputs, goods and services that they require creates output of other firms further down the production chain, bringing about additional business output, employment, and earnings. The sum of these effects across the supply chain is the indirect impact.
- **Induced impacts** represent the increase in business output, employment, and earnings over and above the direct and indirect impacts, generated by re-spending of employment income derived from the direct and indirect employment. Induced impacts are thus changes in economic activity that are the result of personal (household) spending for goods and services by employees comprising the direct and indirect impacts.
- **Total economic impact** is the sum of the direct, indirect, and induced impacts for the activity being evaluated.

Each of the direct, indirect, and induced impacts defined is estimated in terms of the various measures of economic activity that include the following:

- **Output:** Is the total gross value of all business revenue. Output represents the total sum of all economic activity that has taken place in connection with it. This is the broadest measure of economic activity.
- **Employment:** The number of incremental jobs created as a result of all expenditures related to the activities evaluated.<sup>2</sup>
- **Salaries and Wages:** Is the additional salaries and wages that would be paid to above employees.
- **Value Added:** The value added represents the unduplicated measure of the total value of economic activity. This is also sometimes referred to as the gross domestic product (GDP), the “value added” to the economy, or the value of output minus value of purchased goods and services used in the production process.

Indirect and induced impacts are often referred to as “multiplier effects,” since they increase the overall economic impacts of the original expenditure that initiated the rounds of spending and effects described above.

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2. In economic impact analysis, employment impacts are typically estimated in terms of job-years which expresses the number of jobs created multiplied by the length of time, in years, that they would last for. Example, 1 job-year is 1 job created for 1 year. For simplicity, as the analysis is conducted for a single year, we will refer to job-years as jobs.

The above analysis is made operational via an input-output methodology that captures and quantifies the flow of goods and services between various industries in an economy arising from technical requirements of one industry for inputs produced by another industry (supply-purchase relationships).

Aggregate measures of the requirements of one industry from all other industries (per \$1 of output) represent indirect multipliers. Own industry requirements for labor and operational profile (wages and salaries paid, use of production inputs) represent direct multipliers. Indirect multipliers can be used to estimate indirect impacts, direct multipliers can be used to estimate direct effects (or its missing components, e.g. employment from given expenditure amount). Induced impacts are estimated based on profile of consumer expenditures on goods and services.



Source: Kentucky Transportation Cabinet

Economic impacts of transportation are direct by both transportation services and the choice of rail transportation made by users of these services themselves. That is, Kentucky rail-related economic impacts are categorized into service product and user impacts. Rail transportation services would be curtailed in the absence of rail activity (elimination of goods or passenger movements). Transportation user focuses on the impacts pertain to industries using freight rail to transport goods. The nature of these impacts is briefly discussed below:

- **Transportation Service Providers:** Impacts associated with the provision of rail transportation include a wide range of primarily model transport activity, but also may include other support and administrative operations. In particular, it reflects freight and passenger railroad operations.
- **Transportation Users (Freight Users):** Impacts associated with shippers of freight and the industries that supply goods and services to them. Specifically, this reflects the impacts associated with shippers using freight rail for goods movement, except for the rail industry itself.

Rail users have several options available to transport freight and can substitute this service with other modes, such as truck or barge, if rail services were unavailable. However, the choice to use rail service to ship freight indicates cost and/or logistical advantages in a competitive marketplace. Loss of rail service could negatively affect its current users. In this sense, rail contributes to the vitality of the state economy and supports jobs and economic activity of its users involved in the production of goods shipped.

This analysis focuses on the impacts to shippers as captured by outbound freight that originated within Kentucky. Although receivers may also benefit by being able to obtain their orders by rail at a lower cost, including many production inputs and supplies, this impact is

difficult to quantify without a risk of over-stating the impact. For example, the receivers of production supplies may then themselves ship final goods they produce by rail as well. The economic activity and contribution to the state economy corresponding to the production of those final goods will be accounted for under outbound freight. Including impact due to being able to obtain production supplies by rail as well carries a high risk of double counting as those supplies may be used to produce the goods already captured under the outbound freight.

The above analysis is implemented and estimated using RIMS II multiplier from the BEA. RIMS II multipliers are widely used in economic impact modeling to forecast the effect of a given change in the economy's activity on the local, regional, and national economy.

The activity is specified in terms of incremental expenditures related to the activity, such as revenue of the industry that receives orders of its goods and services, or number of workers that will be required to complete the order. The multipliers are then applied for each of the metrics discussed above to obtain direct, indirect, and induced impacts, all in terms of business output, jobs, employment income, and value-added. The approach is based on classic input-output modeling principles. This analysis used the state-wide multipliers for Kentucky for a combination of summary-level aggregation of industries. The multipliers are based on 2021 regional data and 2012 Benchmark Input-Output table for the nation.

Estimation of economic impacts with RIMS II multipliers involved the following key steps:

- **Step 1:** Identify the streams of revenues directly related to the activity being analyzed (i.e., freight shippers' sales by commodity) and classify them into industrial sectors.
- **Step 2:** Identify BEA RIMS II industries that most closely correspond to the industrial sectors of revenues listed in Step 1, based on the type and nature of commodities involved.
- **Step 3:** Develop impact mode, compile multipliers by identified industries, match with streams of revenues, code all direct, indirect, and induced impacts.
- **Step 4:** Run model simulations and analyze results.

The specific data and methodological assumptions used develop the streams of expenditures generating economic impacts are discussed in the next section.

## A.2.2. Data and Input Assumptions

### RAIL SERVICE PROVISION

Estimation of economic impacts of passenger rail services in Kentucky are based on information on direct industry employment. Per Amtrak's 2016 fact sheet outlining its contribution to Kentucky's economy indicated employment of 70 jobs as employment supported by Amtrak in Kentucky.<sup>3</sup>

Meanwhile, the estimation of economic impacts of freight rail services were estimated based on railroad revenues provided in the STB 2021 Waybill Sample data for each record together with other shipment details, such as weight, number of carloads, and commodity classification.

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3. Amtrak, Kentucky. Amtrak's Contributions to Kentucky, 2016.



To align this analysis with the scope of impacts to transportation users, the focus is on impacts due to outbound and interstate shipping and corresponding railroad revenues. It is recognized that some of this revenue would likely accrue to destination states, rather than Kentucky. However, railroad revenues in Kentucky, and thus economic impacts, may also accrue via services provided to inbound and through shipments. Overall, given the tonnage of inbound and through shipments, economic impacts based on railroad revenues from outbound and intrastate shipping are likely to represent a conservative estimate of impacts.

## FREIGHT MOVEMENTS

The STB 2021 Waybill Sample data of rail shipments originating in Kentucky described in Chapter 2, Section 2.2.2 provided the volume of shipments of goods originating in Kentucky. Meanwhile, FAF was leveraged to extract values of shipments by rail in million of 2021 dollars that originate in Kentucky. The total shipment values were converted to average commodity value, by commodity, in terms of value per ton in 2021 dollars. These were then matched to commodity categories in the STB 2021 Waybill Sample data.

Multiplying the tonnage of shipments from the Waybill data by the average value of goods provided the total value of commodities shipped from a Kentucky origin. As mentioned in the previous section, this is interpreted as shippers' revenue, or the value of production, supported (facilitated or made more competitive) by the presence of rail transportation. The employment and income related to these shipments are interpreted as the economic impacts related to rail.

It is noted that in practice in that many shipments may represent movement of goods from warehousing and distribution centers, rather than manufacturing establishments. In particular, the analysis of 2017 Commodity Flow Survey data reveals that, by value, 39.2 percent of shipments are shipped by manufacturing industries, and about 54.9 percent are shipped by wholesale trade and warehousing and storage industries.<sup>4</sup> Based on this analysis, 54.9 percent of all commodity shipments by value were assigned to wholesale trade and the remaining share were assigned to the BEA RIMS II input-output industry that best matched the particular commodity group.

**Table A-2** presents the results of this analysis.

The volume of goods shipped from Kentucky origins amount to over 24.2 million tons, with a total value of \$39.5 billion. Of this value, almost \$21.8 billion is assumed to represent shipments by wholesale trade, while the remaining \$17.8 billion represents various relevant industries presented in **Table A-2**.



Source: Kentucky Transportation Cabinet

4. Calculated based on United States 2017 Economic Census: Transportation, Table A7a.



The table also indicates that the top 3 shipments, in terms of tonnage, were coal (48.8 percent of total tonnage), following by chemicals or allied products (14.9 percent of total tonnage), and transportation equipment (11.5 percent of total tonnage). Meanwhile, in terms of value, the top 3 shipments were transportation equipment (\$10.3 billion), natural gas (\$5.3 billion), and petroleum or coal products (\$3.4 billion).

**Table A-2. Freight Shipments Assessed in the Economic Impact Analysis**

Commodity Group	Outbound and Intrastate Volumes (thousand tons)	Commodity Value (\$/ton)	Shipment Value (\$ Millions)	Value to Allocated to Wholesale Trade (\$ Millions)	Value to Allocated to RIMS II I-O Industries (\$ Millions)	RIMS II Industry Assigned (Other Than Wholesale)	Industry Code
Coal	11,824	\$52.80	\$624.3	\$343.0	\$281.3	Petroleum and coal products manufacturing	24
Chemicals or Allied Products	3,613	\$1,129.54	\$4,081.3	\$2,242.2	\$1,839.1	Chemical manufacturing	25
Farm Products	803	\$242.68	\$194.8	\$107.0	\$87.8	Farms	1
Food or Kindred Products	439	\$1,681.50	\$738.1	\$405.5	\$332.6	Food and beverage and tobacco product manufacturing	19
Primary Metal Products	681	\$1,379.31	\$939.0	\$515.9	\$423.1	Primary metal manufacturing	10
Misc Mixed Shipments	481	\$2,789.64	\$1,340.7	\$736.6	\$604.1	Miscellaneous manufacturing	18
Petroleum or Coal Products	660	\$3,364.78	\$2,221.9	\$1,220.7	\$1,001.2	Petroleum and coal products manufacturing	24
Transportation Equipment	2,793	\$10,253.61	\$28,634.5	\$15,731.4	\$12,903.1	Other transportation equipment manufacturing	16
Pulp, Paper or Allied Products	287	\$538.00	\$154.5	\$84.9	\$69.6	Paper manufacturing	22
Nonmetallic Minerals	1,090	\$246.65	\$268.9	\$147.7	\$121.2	Nonmetallic mineral product manufacturing	9
Clay, Concrete, Glass or Stone	761	\$3.09	\$2.4	\$1.3	\$1.1	Nonmetallic mineral product manufacturing	9
Logs, Lumber, Wood Prod.	144	\$396.73	\$56.9	\$31.3	\$25.7	Wood product manufacturing	8

Waste or Scrap Materials Not Identified by Producing Industry	639	\$354.47	\$226.5	\$124.4	\$102.0	Not included in assessment	0
Metallic Ores	1	\$954.44	\$0.9	\$0.5	\$0.4	Mining (except oil and gas)	4
Petroleum Prod, Natural Gas	9	\$5,302.81	\$47.1	\$25.9	\$21.2	Petroleum and coal products manufacturing	24
<b>TOTAL</b>	<b>24,224</b>		<b>\$39,531.6</b>	<b>\$21,718.1</b>	<b>\$17,813.4</b>		

Note: All monetary values are in 2021 dollars

## A.3. RESULTS

### A.3.1. Rail Transportation Service Impacts

**Table A-3** below presents the impacts of rail transportation services provision in Kentucky in 2021. The rail transportation services industry in Kentucky supported over 2,200 jobs, which comprised of almost 70 passenger rail related jobs and over 2,100 freight transportation related jobs. The indirect and induced effects in other related industries, due to spending on rail operations, supported an additional 5,100 jobs (2,600 indirect jobs and 2,500 induced jobs) throughout the State. Combined, in 2021 an estimated over 7,300 number of jobs related in some way to the provision of freight and passenger rail services.

Other industry impacts included:

- \$2.2 billion in output
- \$474.6 million in employment income
- \$1.1 billion in value added

**Table A-3. Economic Impact of Rail Transportation Service, 2021**

Category of Impact	Output (\$ Million)	Employment (Jobs)	Employment Income (\$ Million)	Value Added (\$ Million)
<b>Freight Shippers</b>				
Direct	\$1,173.7 M	2,159	\$210.6 M	\$609.3 M
Indirect	\$555.4 M	2,498	\$140.4 M	\$253.5 M
Induced	\$382.0 M	2,433	\$107.2 M	\$210.2 M
<b>TOTAL</b>	<b>\$2,111.1 M</b>	<b>7,091</b>	<b>\$458.1 M</b>	<b>\$1,073.0 M</b>
<b>Passenger Rail Operations</b>				
Direct	\$42.3 M	70	\$7.6 M	\$22.0 M
Indirect	\$20.0 M	90	\$5.1 M	\$9.1 M
Induced	\$13.8 M	88	\$3.9 M	\$7.6 M
<b>TOTAL</b>	<b>\$76.1 M</b>	<b>248</b>	<b>\$16.5 M</b>	<b>\$38.7 M</b>

All Rail Transportation Service				
Direct	\$1,216.0 M	2,229	\$218.2 M	\$631.2 M
Indirect	\$575.4 M	2,588	\$145.4 M	\$262.7 M
Induced	\$395.8 M	2,521	\$111.0 M	\$217.8 M
<b>TOTAL</b>	<b>\$2,187.2 M</b>	<b>7,338</b>	<b>\$474.6 M</b>	<b>\$1,111.7 M</b>

Note: All monetary values are in 2021 dollars.

The findings shown in **Table A-3** indicate that the predominate share of rail transportation service impacts are attributable to the freight rail industry in Kentucky. This is due to comparatively smaller passenger rail service within Kentucky.

### A.3.2. Rail Transportation User Impacts

**Table A-4** presents the impacts of rail transportation users in Kentucky in 2021. Through their economic activities, rail users directly supported over 49,100 jobs, and a total of over 122,600 number of jobs overall. Other industry impacts included:

- \$35.2 billion in output
- \$7.3 billion in employment income
- \$16.2 billion in value added

Similar to the results for rail transportation service, the predominate share of impacts from rail transportation users are attributable to the freight rail industry in Kentucky.

**Table A-4. Economic Impact of Rail Transportation Users, 2021**

Category of Impact	Output (\$ Million)	Employment (Jobs)	Employment Income (\$ Million)	Value Added (\$ Million)
Direct	\$20,264.8 M	49,119	\$3,539.8 M	\$292.5 M
Indirect	\$8,910.4 M	34,958	\$2,018.2 M	\$12,534.1 M
Induced	\$6,048.8 M	38,538	\$1,697.7 M	\$3,330.7 M
<b>TOTAL</b>	<b>\$35,224.0 M</b>	<b>122,615</b>	<b>\$7,255.7 M</b>	<b>\$16,157.3 M</b>

Note: All monetary values are in 2021 dollars.

## A.4. SUMMARY OF IMPACTS

### A.4.1. Total Rail Activity Impacts

**Table A-5** provides a summary of the total rail-related impacts in Kentucky in 2021. Accounting for both rail transportation users and rail transportation services, the rail industry supported almost 130,000 jobs and \$7.7 billion in employment income in Kentucky. Moreover, the rail-related impacts generated \$37.4 billion in output and \$17.3 billion in value-added.

Table A-5. Total Rail Transportation Impacts, 2021

Category of Impact	Output (\$ Million)	Employment (Jobs)	Employment Income (\$ Million)	Value Added (\$ Million)
Direct	\$21,480.8 M	51,349	\$3,758.0 M	\$923.7 M
Indirect	\$9,485.8 M	37,546	\$2,163.7 M	\$12,796.8 M
Induced	\$6,444.6 M	41,059	\$1,808.7 M	\$3,548.5 M
<b>TOTAL</b>	<b>\$37,411.2 M</b>	<b>129,953</b>	<b>\$7,730.3 M</b>	<b>\$17,269.0 M</b>

Note: All monetary values are in 2021 dollars.

#### A.4.2. Impacts as Percentage of Total Economy

To present the economic contribution of the rail industry in Kentucky, the estimated impacts were compared with the corresponding economic statistics for the entire State. The comparison of the data points are presented in **Table A-6**. The results indicate that the rail industry in Kentucky accounted for about 7.3 percent to 9.6 percent of the State's economy, depending on the reference measure.<sup>5</sup>

Table A-6. Kentucky and Rail-Related Economic Measures, 2021

Measure of Economic Activity	Overall State Level	Rail Industry Related Activity	Share of Rail Related Activity
Employment	1,617,040	129,953	8.0%
Employment Income	\$80,502.1 M	\$7,730.3 M	9.6%
Value Added	\$237,928.9 M	\$17,269.0 M	7.3%

Note: All monetary values are in 2021 dollars.



Source: Kentucky Transportation Cabinet

5. Employment and employment income for Kentucky in 2021 were obtained from the U.S. Census Bureau's QuickFacts for Kentucky. Meanwhile, the value added / GDP from Kentucky in 2021 were obtained from the U.S. Bureau of Economic Analysis, Gross Domestic Product: All Industry Total in Kentucky [KYNGSP], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/KYNGSP>, March 1, 2024.



# APPENDIX B PUBLIC SURVEY #1 SUMMARY

## INTRODUCTION

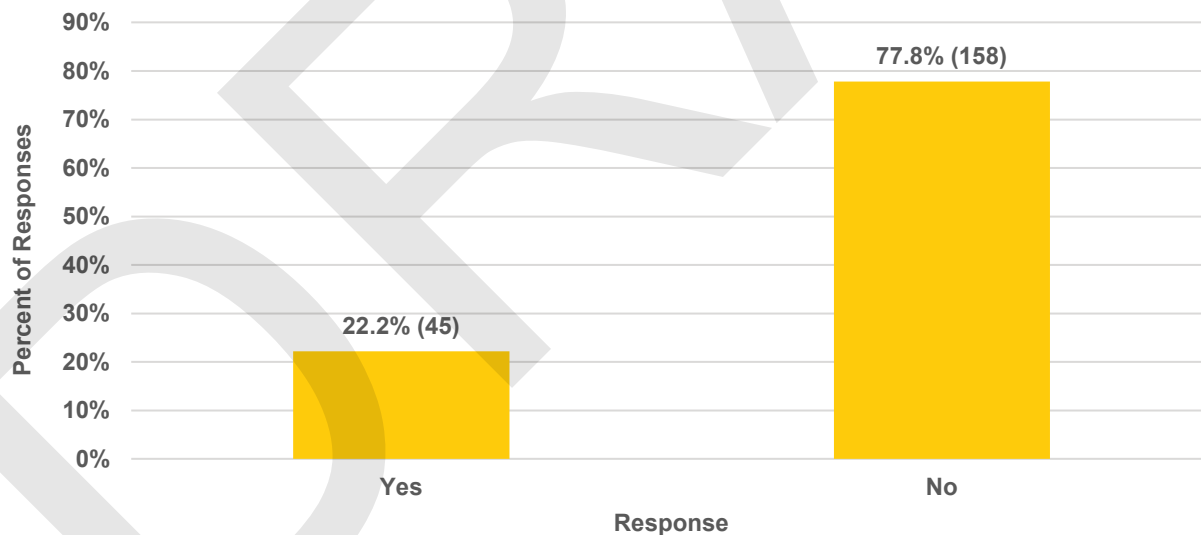
The first public survey was released online in February 2024 and remained open until May 2024. The survey was available in English and Spanish. The survey was used to collect input from rail users on issues and opportunities regarding rail services and facilities in Kentucky. While open, the survey received 2,847 total responses. The following appendix summarizes the first public survey.

## B.1. INDIVIDUAL QUESTION SUMMARY

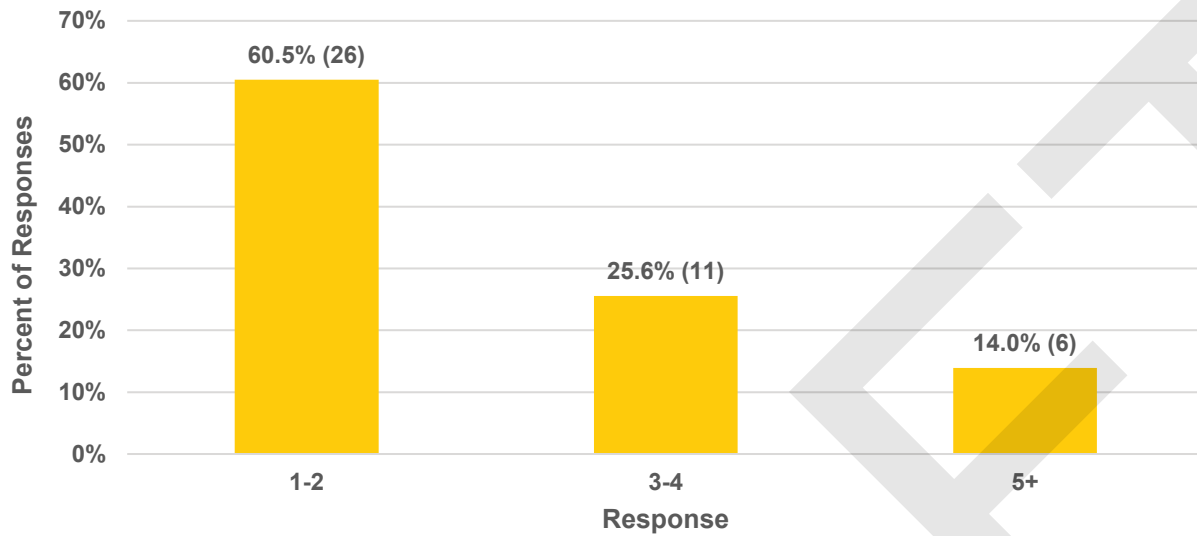
### B.1.1. Western Kentucky, Fulton Service Area

There were 240 people who identified as living in the western Kentucky service area who answered the following questions.

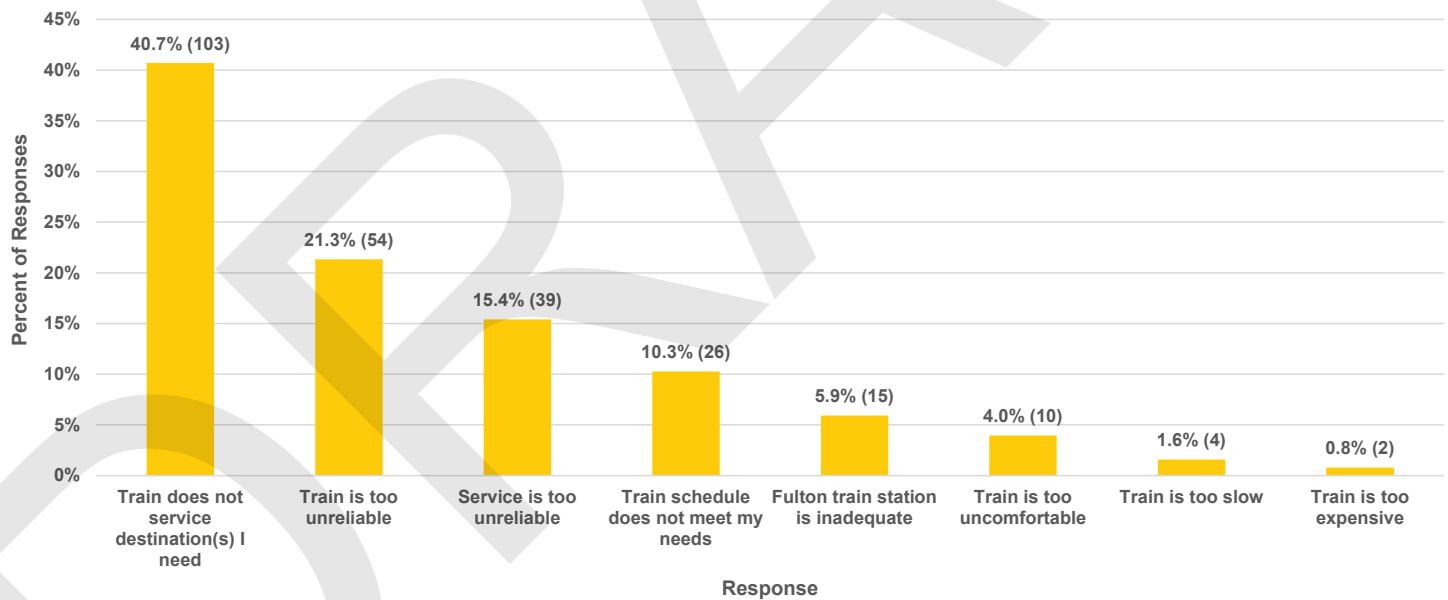
**Survey Question:** Have you previously travelled on the Amtrak City of New Orleans?



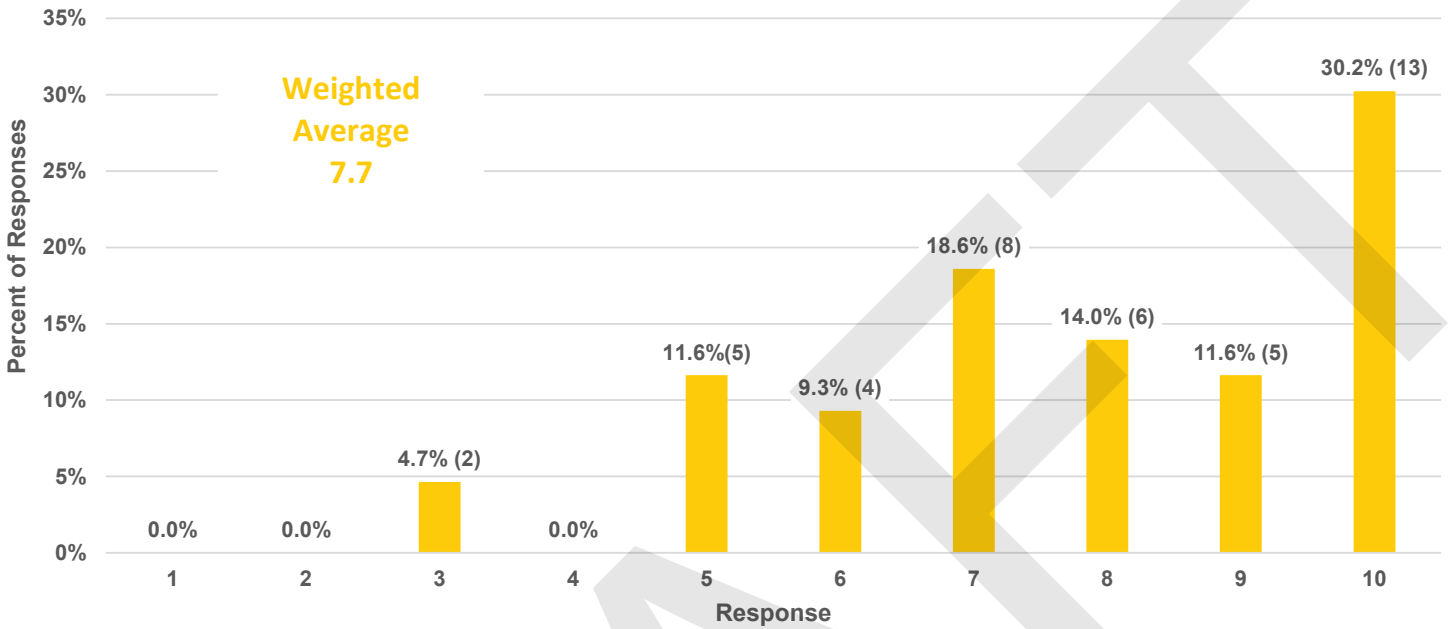
**Survey Question:** If yes, approximately how many times have you ridden the City of New Orleans in the past 5 years?



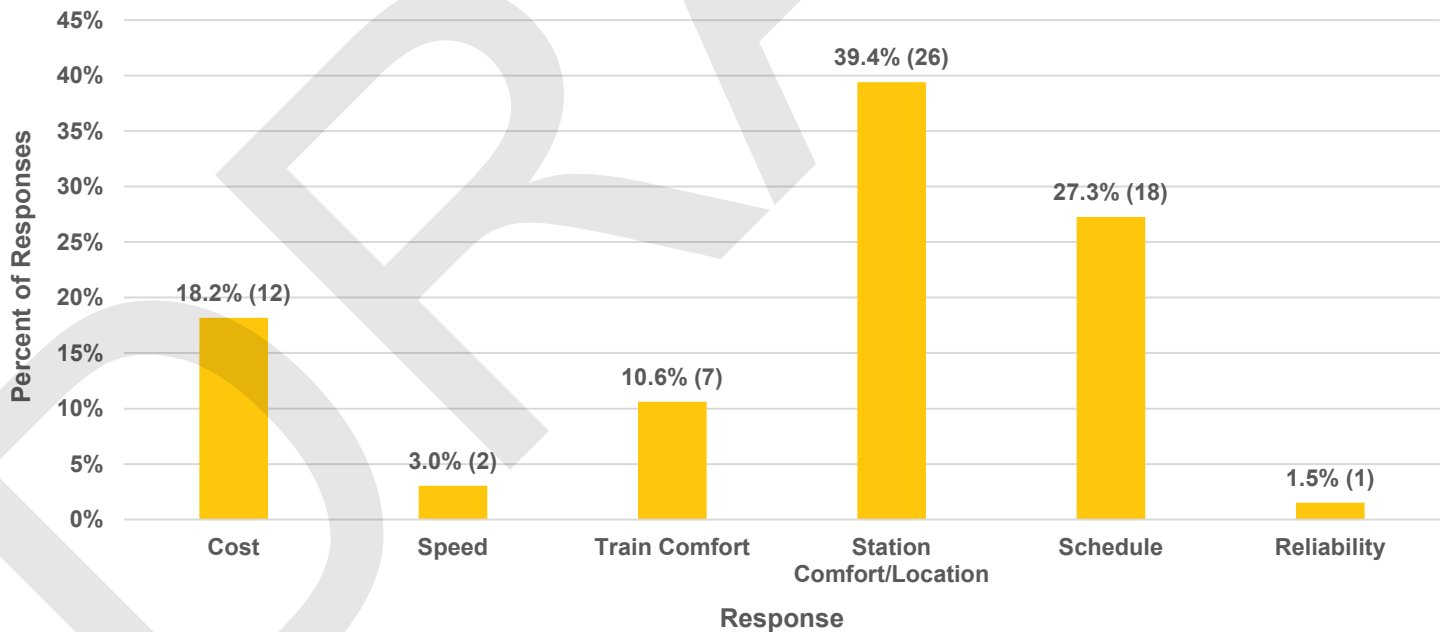
**Survey Question:** If you have not ridden the City of New Orleans, what factor(s) have kept you from using the service? Chose up to two/three.



**Survey Question:** If you have ridden the City of New Orleans, please rate your total travel experience from station to station from 1-10.



**Survey Question:** If you have ridden the City of New Orleans, what single aspect of the service would you most prefer to have improved?



**Survey Question:** Please provide any additional comments on the Amtrak City of New Orleans Service.

In total, 53 additional comments were received. Key points are:

- **Limited Service and Lack of Accessibility:** Respondents feel there are too few train stations and limited routes, making it difficult to travel within the state or connect to major cities.
- **Fulton Station Concerns:** The current Amtrak station in Fulton is inconvenient due to its location, lack of amenities, unsafe environment, and late-night boarding times.
- **Desire for Expansion:** People want more routes connecting major Kentucky cities like Louisville, Lexington, Paducah, and Elizabethtown as well as Cincinnati, OH.
- **Environmental Benefits:** There's support for expanding passenger rail as a sustainable and environmentally friendly alternative to driving.
- **Cost Concerns:** Affordability is important, especially compared to driving and flying.
- **Improved Scheduling:** More convenient departure and arrival times are crucial for wider ridership.
- **Marketing and Awareness:** Many respondents were unaware of existing Amtrak services, highlighting the need for better promotion.
- **Safety and Security:** Security concerns at stations and late-night boarding are deterrents for some potential riders.
- **Senior Travel:** Recently retired individuals see passenger rail as an attractive travel option with more leisure time.
- **Economic Benefits:** Rail is seen as a way to connect respondents to jobs, healthcare, and other opportunities.



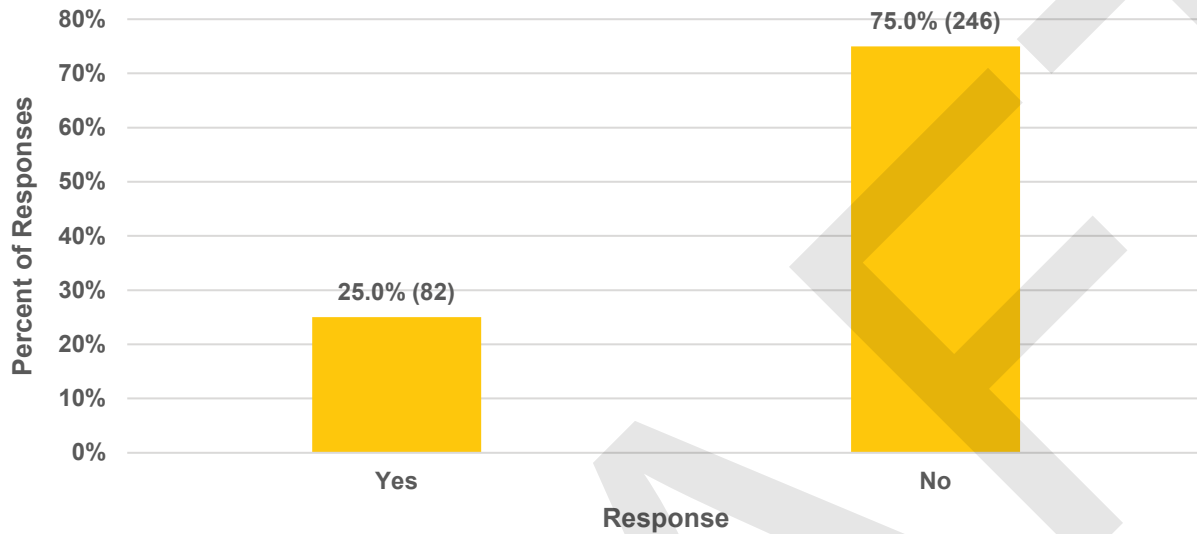
Source: Kentucky Statewide Rail Plan Team



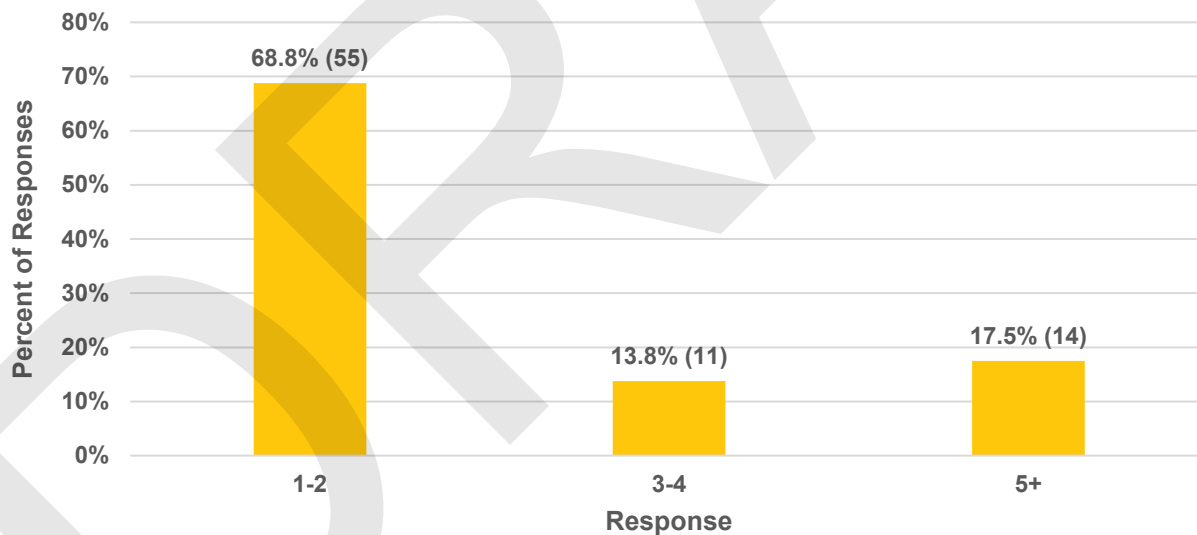
### B.1.2. Northern and Eastern Kentucky, Ashland-Maysville Area

There were 362 people who identified as living in the northern and eastern Kentucky service area who answered the following questions.

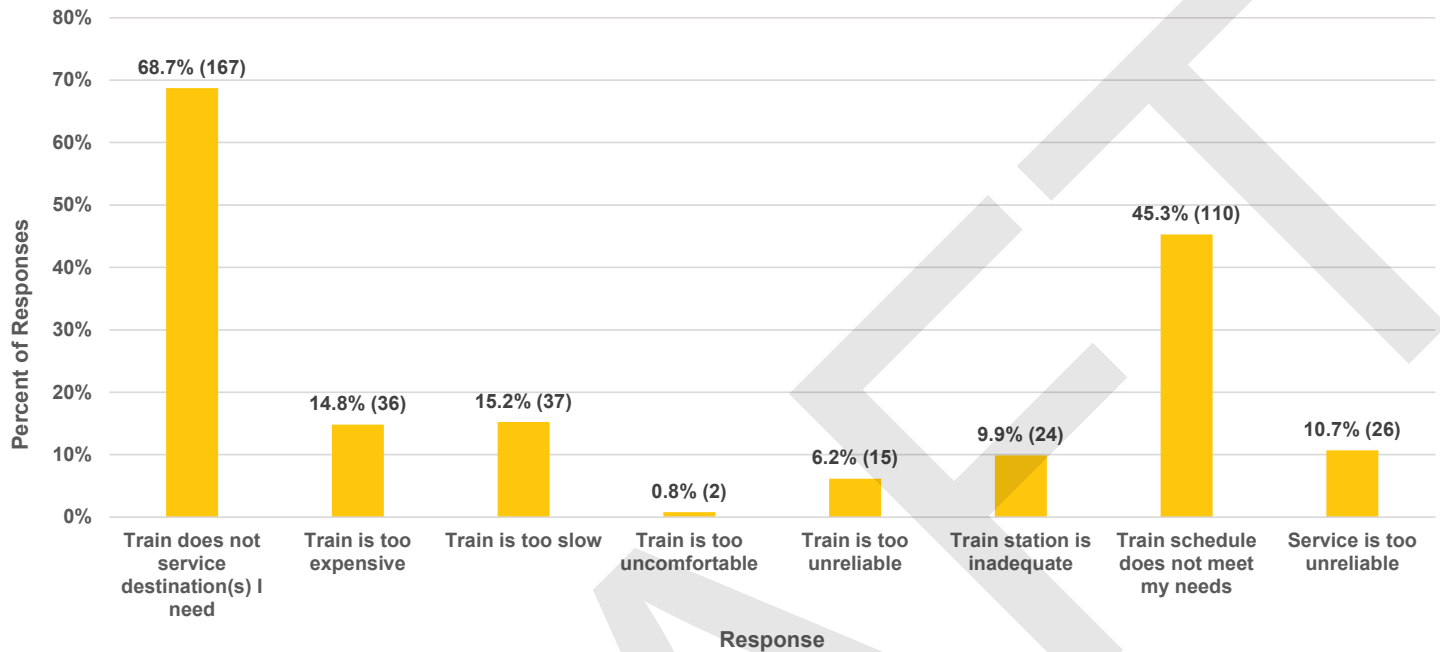
**Survey Question:** Have you previously travelled on the Amtrak Cardinal?



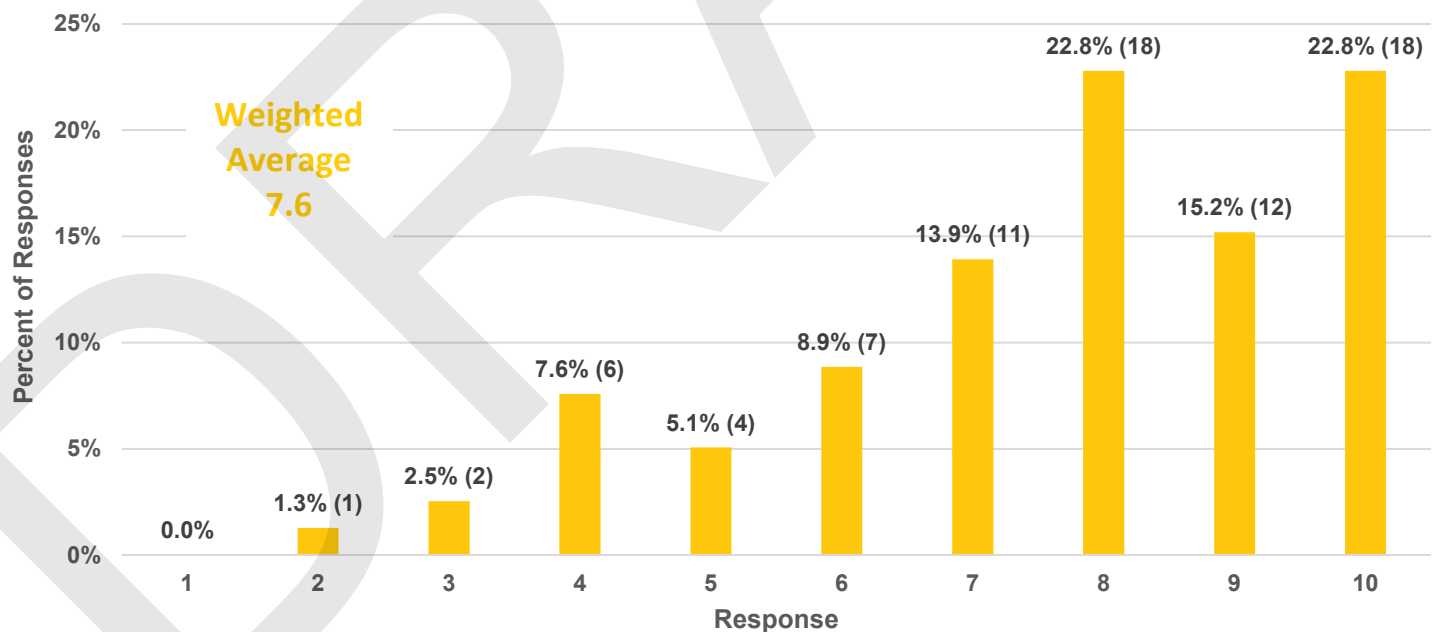
**Survey Question:** If yes, approximately how many times have you ridden the Cardinal in the past 5 years?



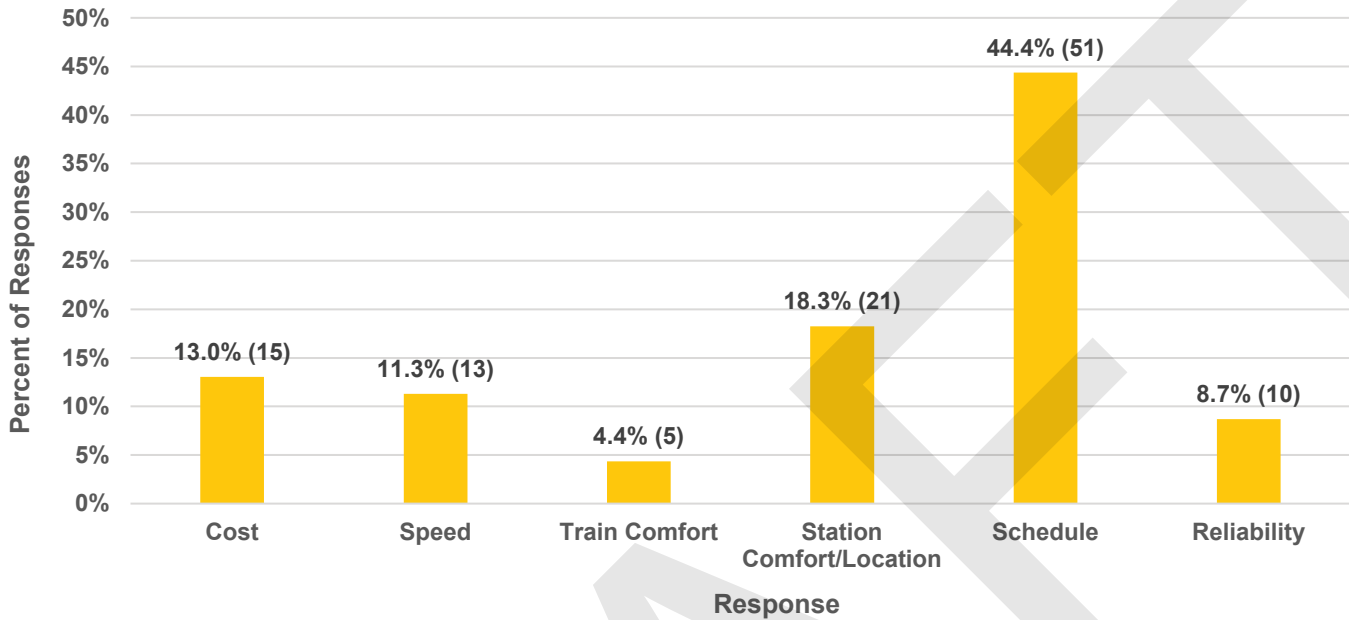
**Survey Question:** If you have not ridden the Cardinal, what factor(s) have kept you from using the service? Choose up to two/three.



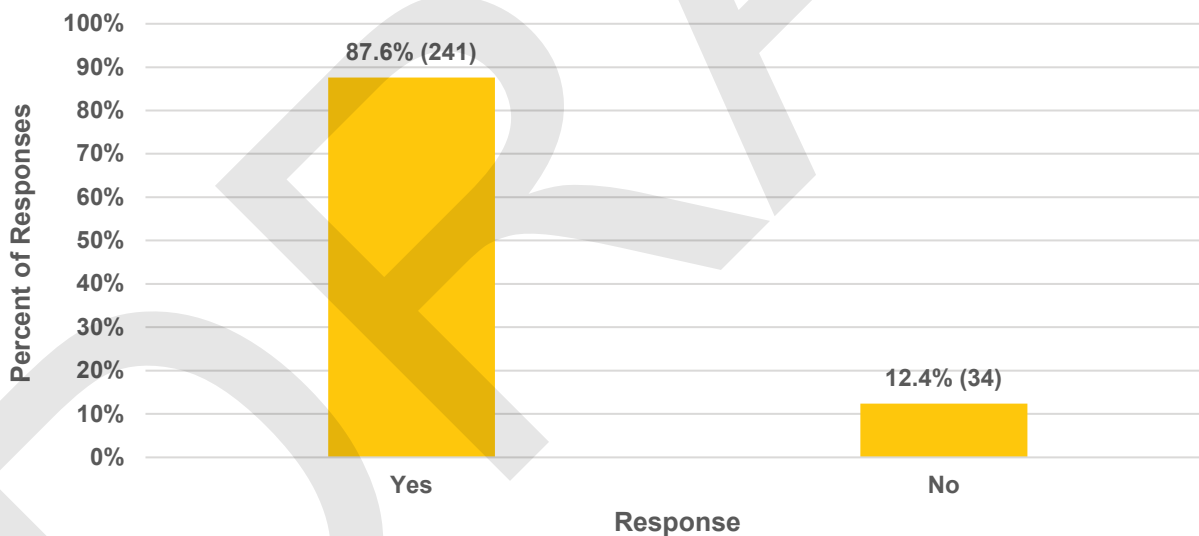
**Survey Question:** If you have ridden the Cardinal, please rate your total travel experience from station to station from 1-10.



**Survey Question:** If you have ridden the Cardinal, what single aspect of the service would you most prefer to have improved?



**Survey Question:** Would the proposed increase in Cardinal service from three times weekly to daily make it more likely that you would use this service?



**Survey Question:** Please provide any additional comments on the Amtrak Cardinal Service.

In total, 110 additional comments were received. Key points are:

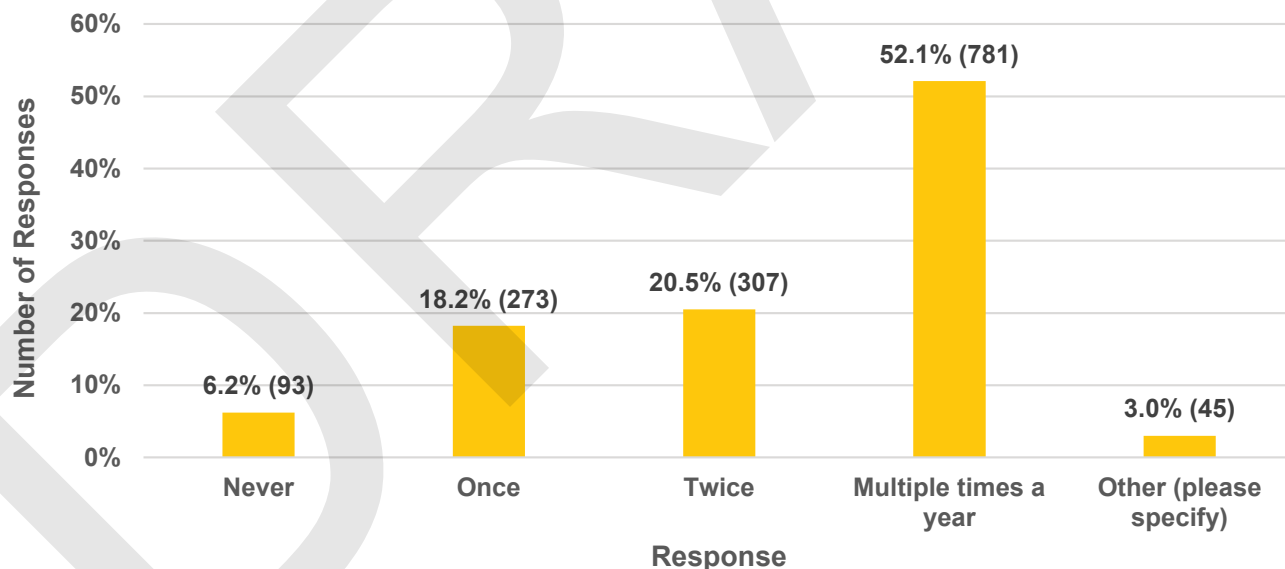
- **Strong Desire for Expanded Service:** Many respondents want better access to passenger rail, especially for travel between major cities like Louisville, Lexington, Cincinnati, and Atlanta.
- **Safety Concerns:** Safety is a major concern, with people expressing concerns about security at stations and the potential for accidents.

- **Affordability:** Cost is a factor, with some comparing it to driving and finding it less affordable.
- **Convenience and Accessibility:** People want more convenient schedules, better access to stations, and easier connections to other modes of transportation.
- **Infrastructure Needs:** Investment in new infrastructure, including stations and improved tracks, is necessary for expansion.
- **Route Priorities:** Specific routes like Louisville-Lexington-Cincinnati and Louisville-Atlanta are frequently mentioned as priorities.
- **Economic Benefits:** Rail service is seen to boost tourism, create jobs, and improve economic development in Kentucky.
- **Environmental Impact:** Many see rail as a more sustainable and environmentally friendly alternative to driving.
- **Public Awareness:** There is a need for better marketing and awareness of existing rail services in Kentucky.
- **Balance Between Passenger and Freight:** There is a debate about the balance between passenger and freight rail, with some advocating for prioritizing passenger services.

### B.1.3. Louisville Service Area

There were 1,543 people who identified as living in the central Kentucky service area who answered the following questions.

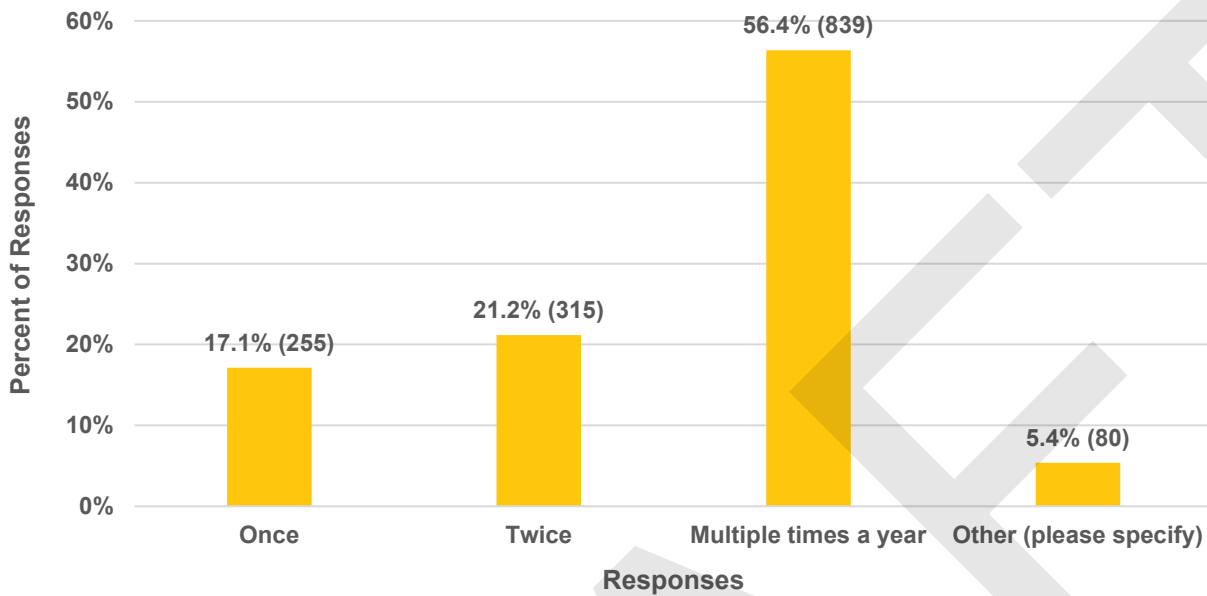
**Survey Question:** How often annually would you be likely to use this service to travel to the Indianapolis area?



Additional comments noted that use would fluctuate based on cost and location of the station.

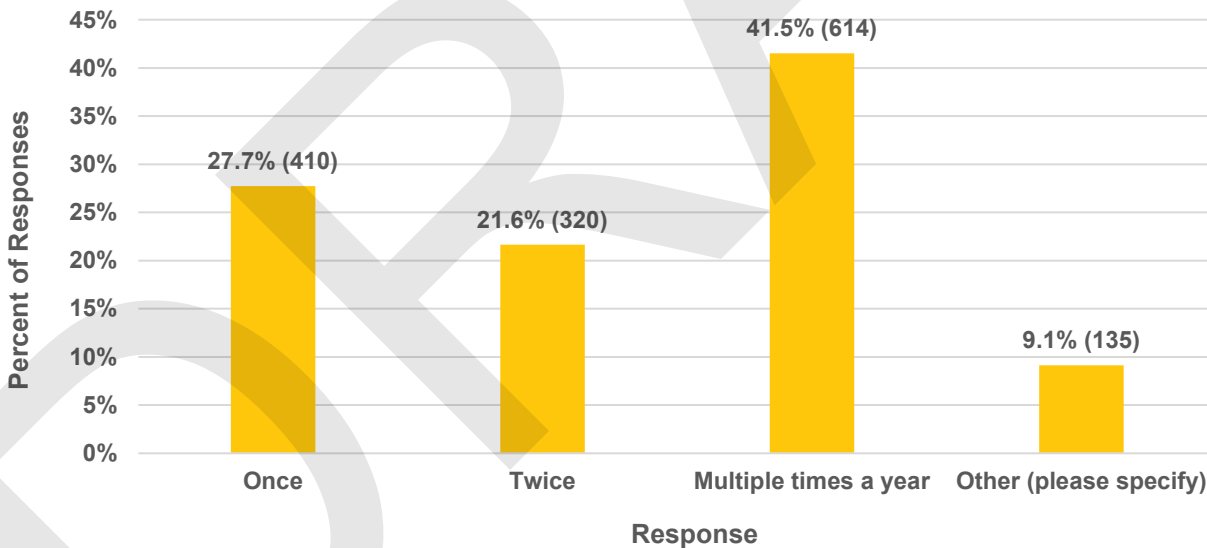


**Survey Question:** How often annually would you be likely to use this service to travel to the Chicago area?



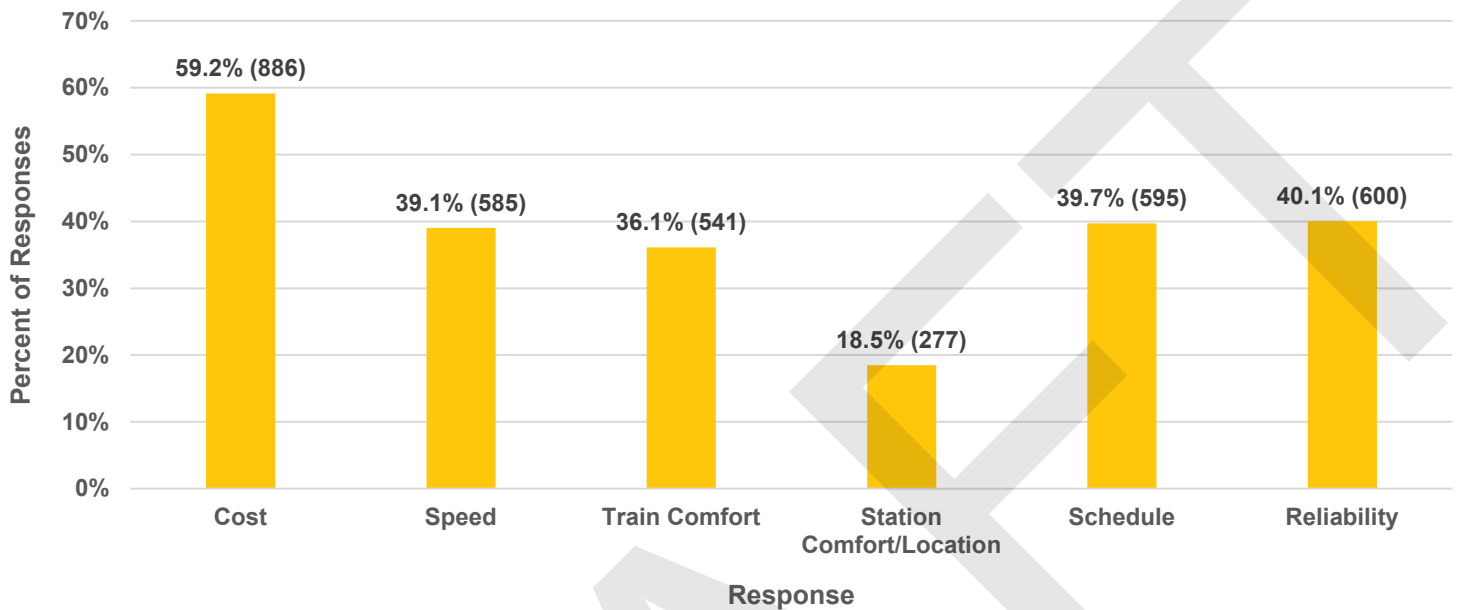
Utilizing the “Other” option, additional comments noted that they would not use the service.

**Survey Question:** How often annually would you be likely to use this service to travel to further Amtrak destinations via connection in Chicago?



Utilizing the “Other” option, additional comments noted that they would not use the service.

**Survey Question:** What aspects of the proposed rail service are most important to you? Choose up to two (2).



**Survey Question:** Please provide any additional comments.

In total, 528 additional comments were received. Key points are:

**Strong Support:**

- Respondents overwhelmingly support expanding passenger rail service in Kentucky.
- Many see it as a more relaxing and scenic alternative to driving or flying.
- Potential benefits include reduced traffic congestion, environmental advantages, and economic growth.
- Popular destinations include Chicago, Indianapolis, Cincinnati, Nashville, and Lexington.
- Features like affordability, reliability, safety, and station convenience are important.
- Some respondents would like to see service within Kentucky, connecting smaller cities.

**Concerns:**

- A few comments expressed skepticism about the project's feasibility or cost-effectiveness.
- Others worried about competition with freight trains or questioned Amtrak's reputation.
- Accessibility for people with disabilities was mentioned as a concern.

**Additional points:**

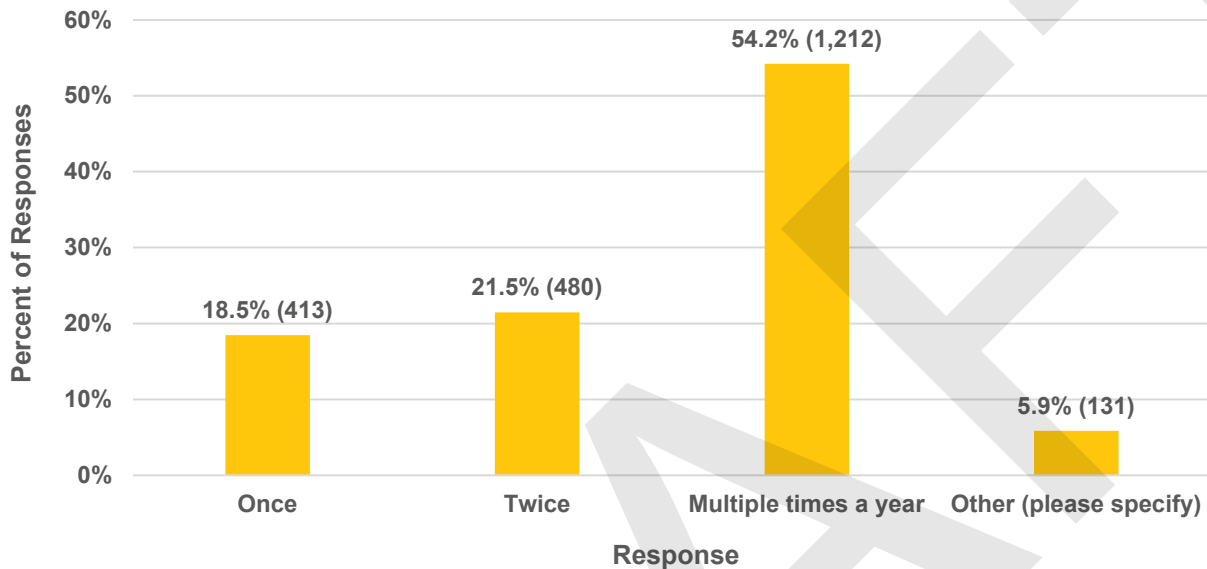
- Some comments highlighted the potential for high-speed rail.
- Several people mentioned a desire for weekend getaways and ease of travel for visiting family.
- Love of trains and the desire for a more sustainable transportation option were expressed.

Overall, the sentiment leans heavily in favor of expanding passenger rail service in Kentucky.

### B.1.4. Potential Amtrack long distance train service in Kentucky

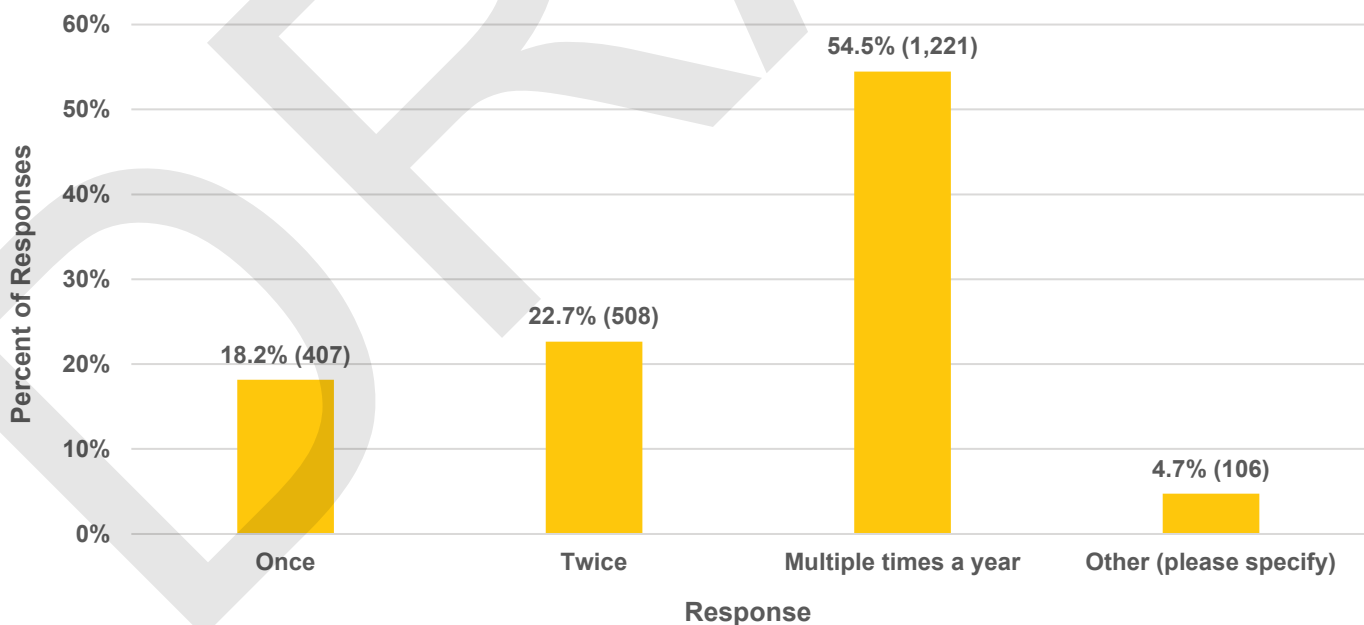
There were 2,307 respondents who provided input for the potential long distance train service in Kentucky.

**Survey Question:** How often annually would you be likely to use this service to travel to access long distance destinations north of Kentucky (Cincinnati, Columbus, Detroit)?



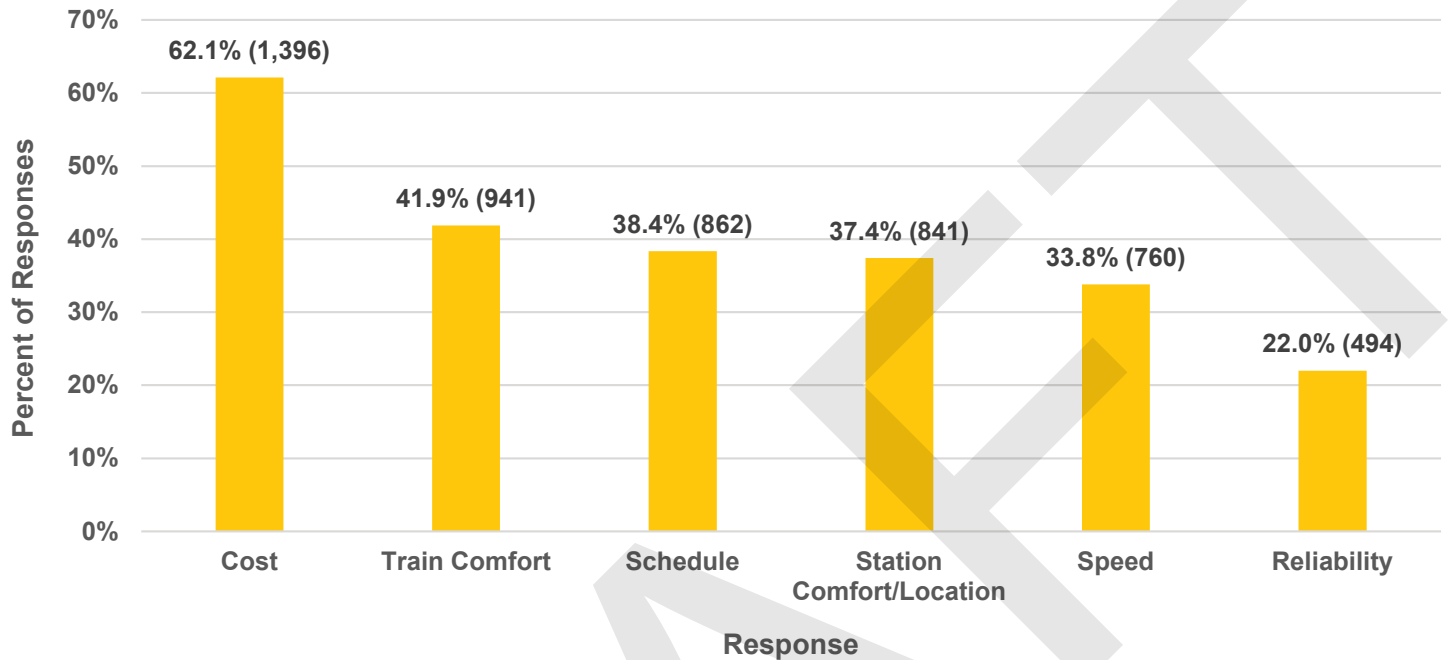
Utilizing the “Other” option, additional comments noted that they would not use the service.

**Survey Question:** How often annually would you be likely to use this service to travel to access long distance destinations south of Kentucky (New Orleans, Miami, Nashville)?



Utilizing the “Other” option, additional comments noted that they would not use the service.

**Survey Question:** What aspects of the proposed rail service are most important to you? Choose up to two (2).



**Survey Question:** Please provide any additional comments.

In total, 549 additional comments were received. The input is overwhelmingly in favor of expanding passenger rail service in Kentucky. Key points are:

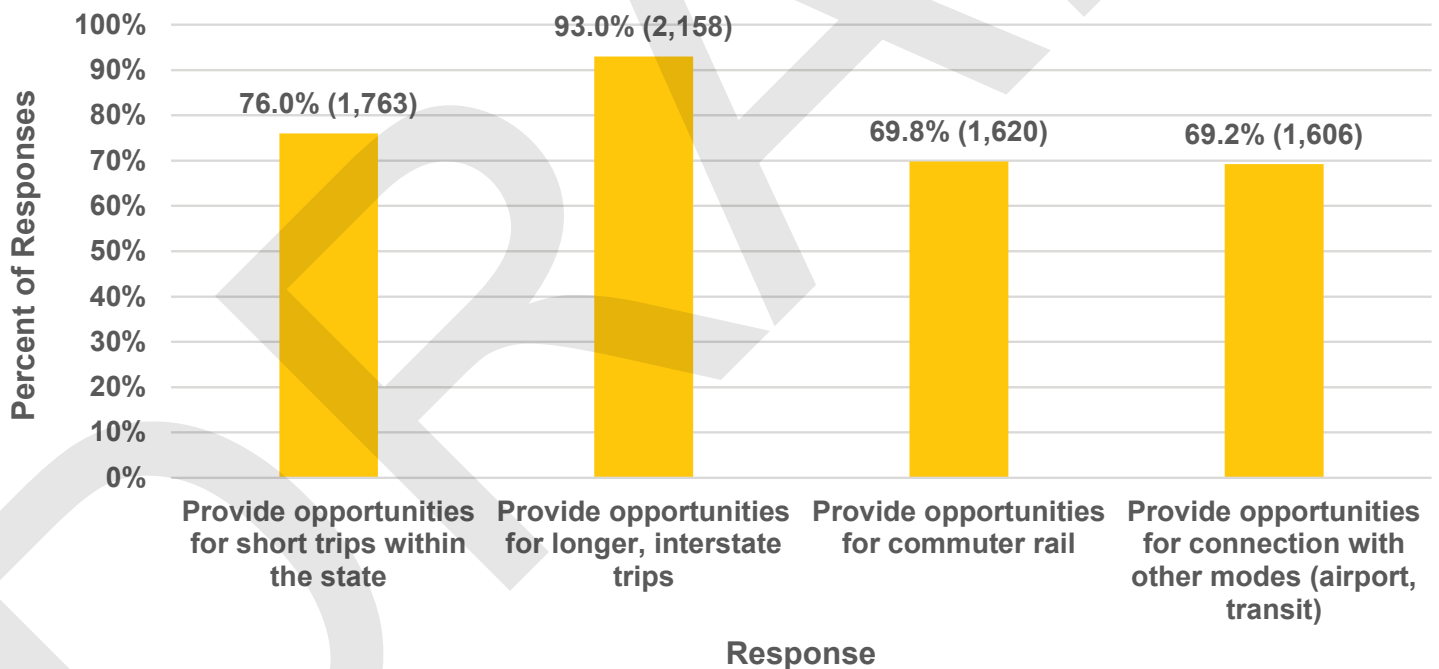
- **Strong Public Support:** There is widespread public support for expanding passenger rail service in Kentucky. People see it as a safer, more relaxing, and more environmentally friendly alternative to driving.
- **Desired Routes:** People are interested in a variety of routes, including:
  - Connecting Louisville and Cincinnati
  - Connecting Louisville and Lexington
  - Connecting Kentucky to Atlanta and Florida
  - Connecting Kentucky to Chicago and Detroit
  - Including smaller towns like Bowling Green and Owensboro
  - East-west routes connecting Kentucky to cities like Philadelphia and Washington, D.C.
- **Important Considerations:**
  - **Cost:** People want affordable fares.
  - **Schedule:** Trains need to run at convenient times, with connections to other forms of transportation in destination cities.



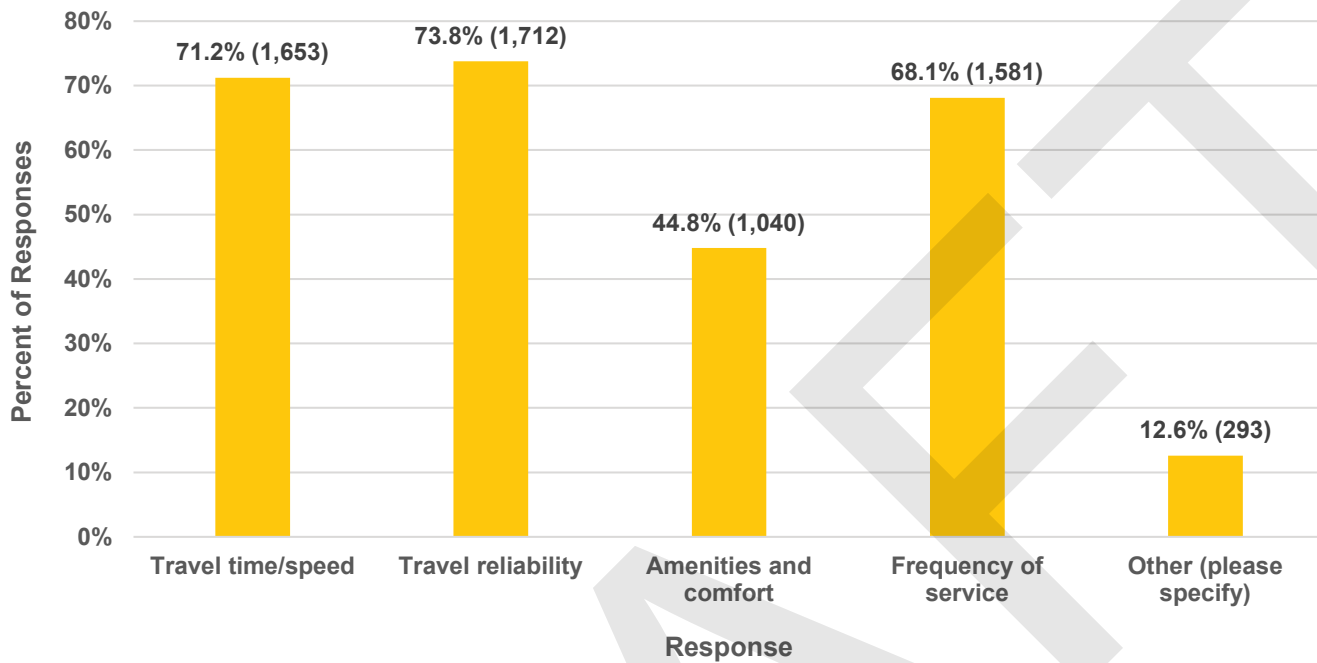
- **Safety:** Stations and trains need to be safe and secure.
- **Comfort:** Trains should be comfortable for long-distance travel.
- **Accessibility:** Stations should be easily accessible by car or public transportation.
- **Lexington:** Many people specifically requested a stop in Lexington.
- **Worker treatment:** People want rail workers to be treated fairly and paid adequately.
- Additional Notes:
  - Some people expressed concerns about the cost of building and maintaining passenger rail service.
  - A few people felt that passenger rail service would not be well-used in Kentucky.
  - There were suggestions for additional features, such as sleeper cars, auto transport, and connections to major airports.

### B.1.5. General Questions

**Survey Question:** What should passenger rail accomplish in Kentucky? Choose all that apply.

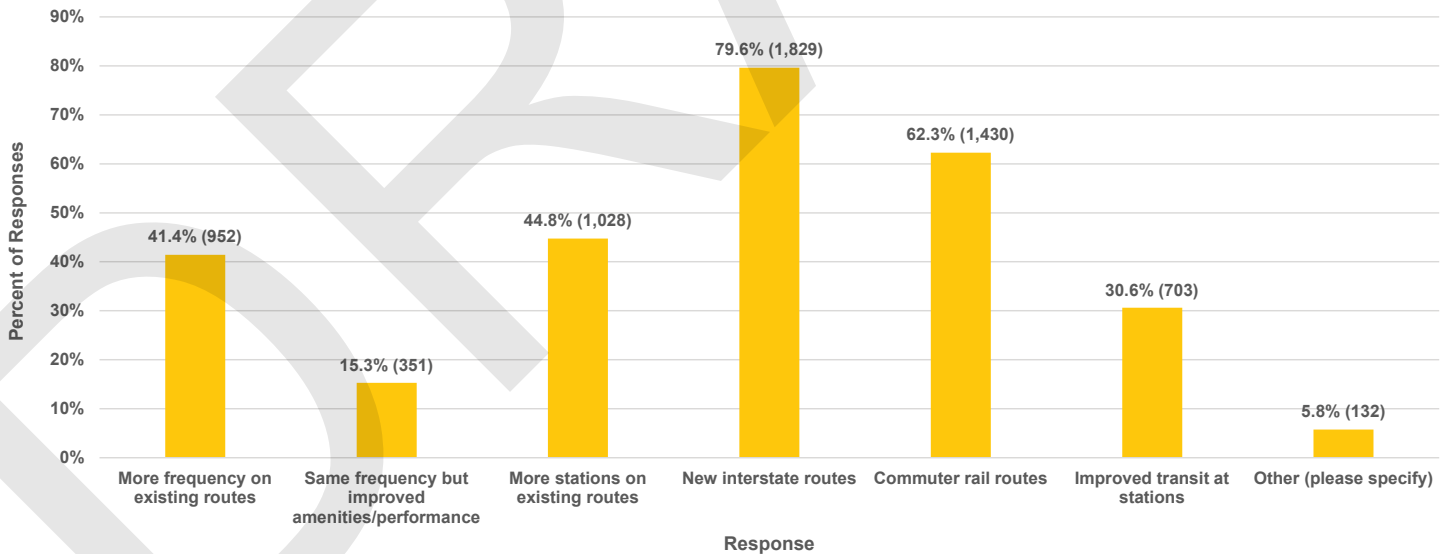


**Survey Question:** What are the most important aspects of passenger rail service for you? Choose all that apply.

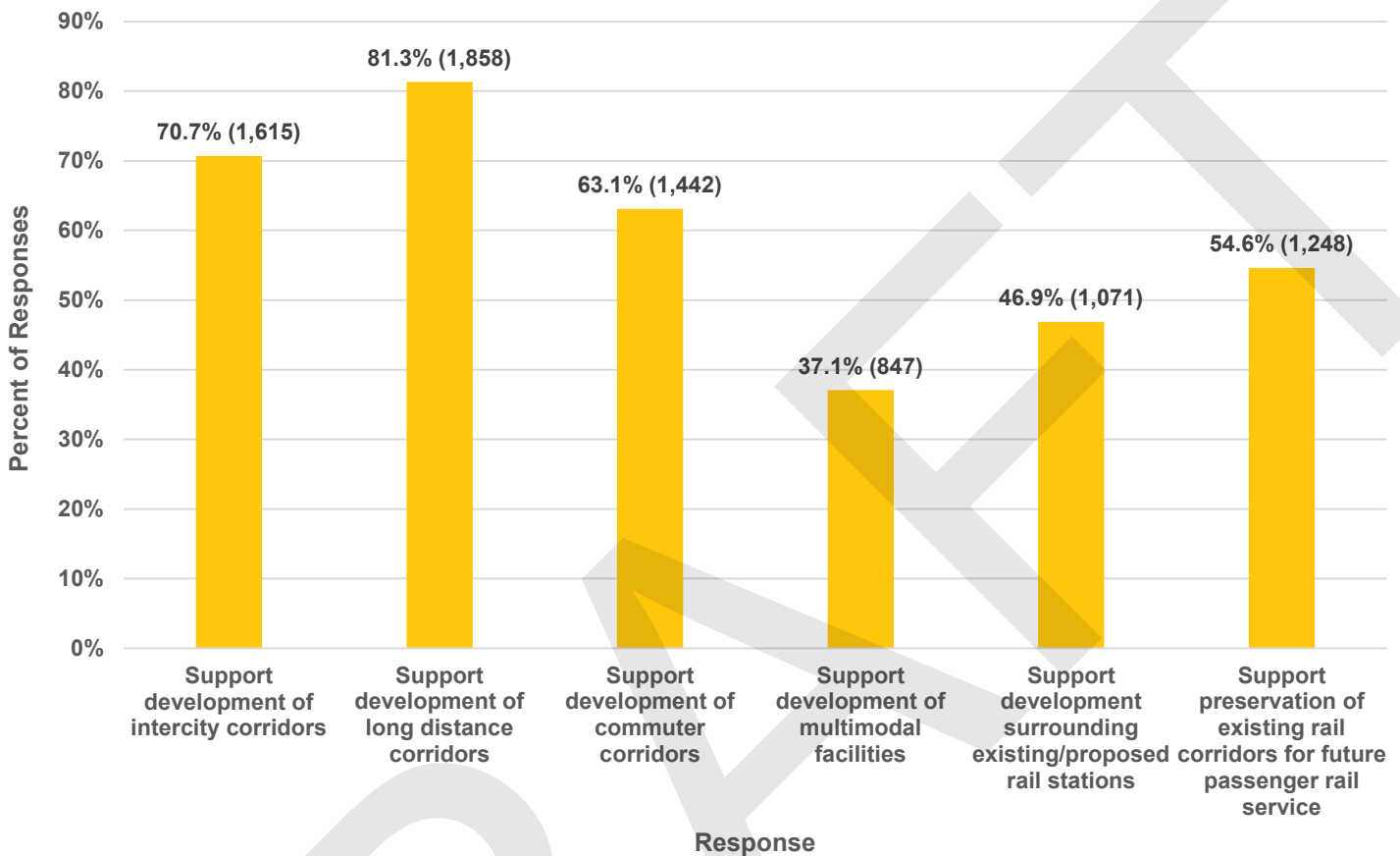


Additional comments noted that cost, accessibility, and safety were also important aspects to consider.

**Survey Question:** How should Kentucky prioritize future passenger rail service destinations? Choose all that apply.

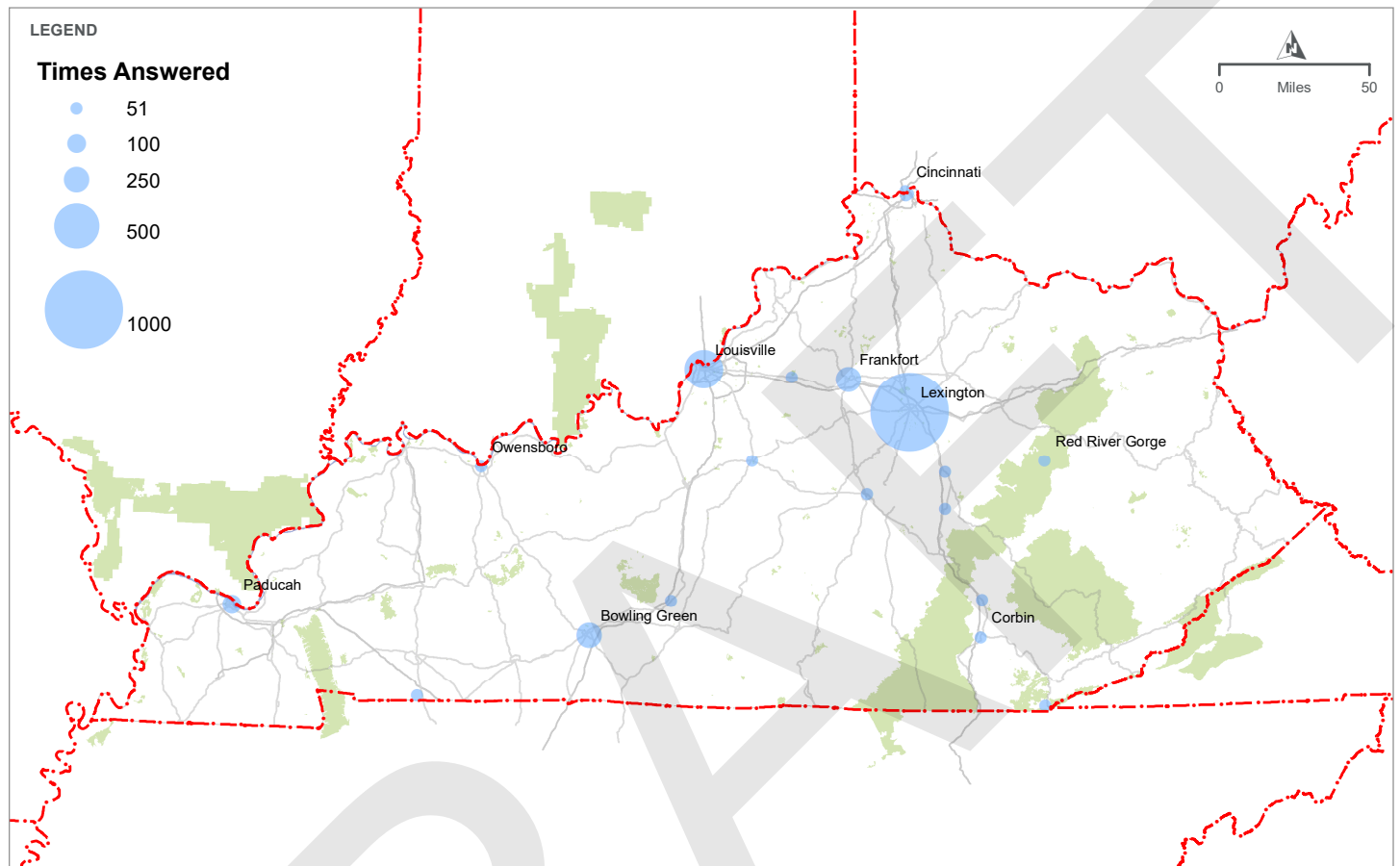


**Survey Question:** How should KYTC prioritize supporting passenger rail in Kentucky? Choose all that apply.



Source: Kentucky Statewide Rail Plan Team

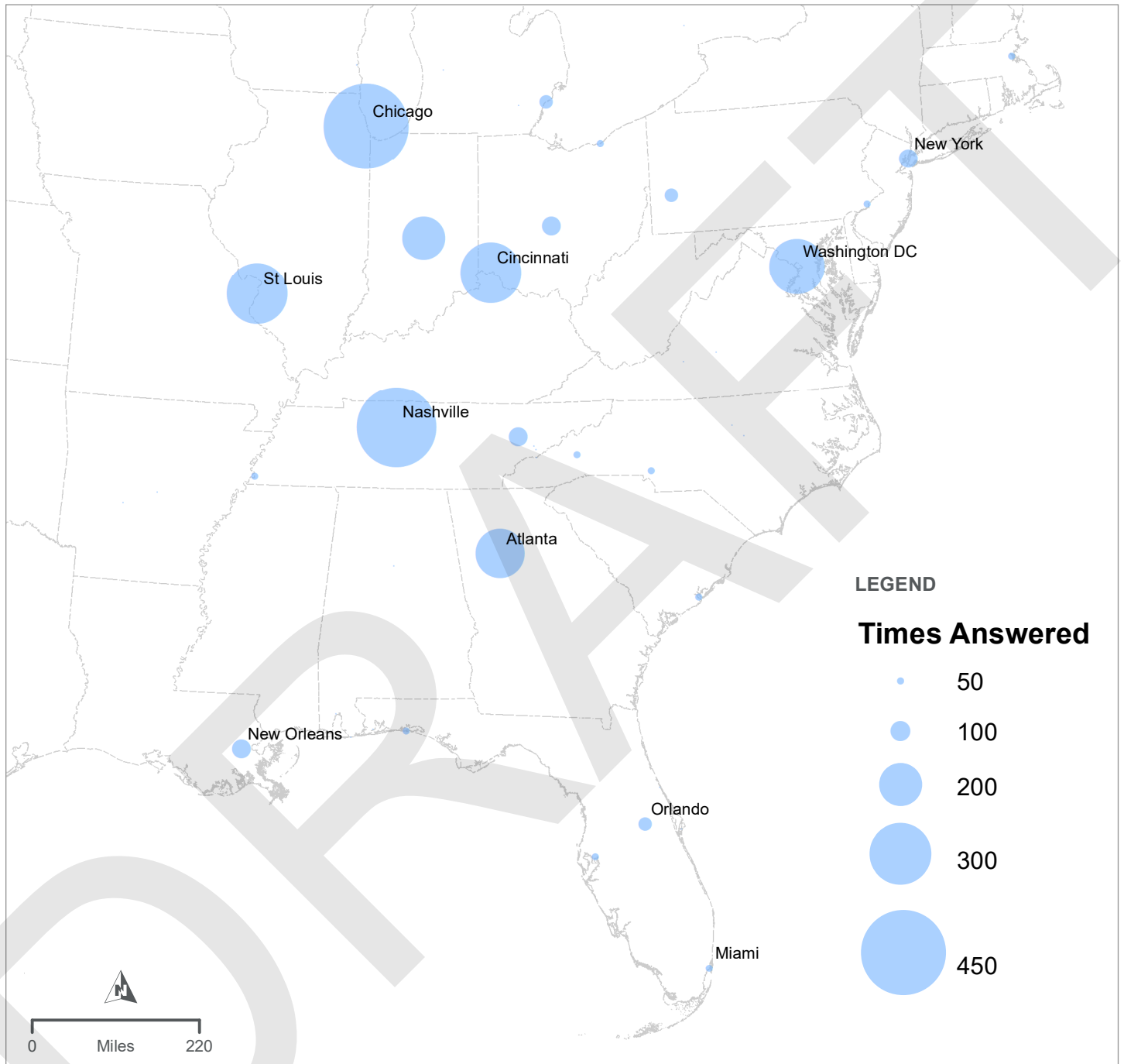
**Survey Question:** What other destinations within Kentucky would you like to be able access via passenger rail?



Source: Kentucky Statewide Rail Plan Team



**Survey Question:** What other destinations outside of Kentucky would you like to be able access via passenger rail?

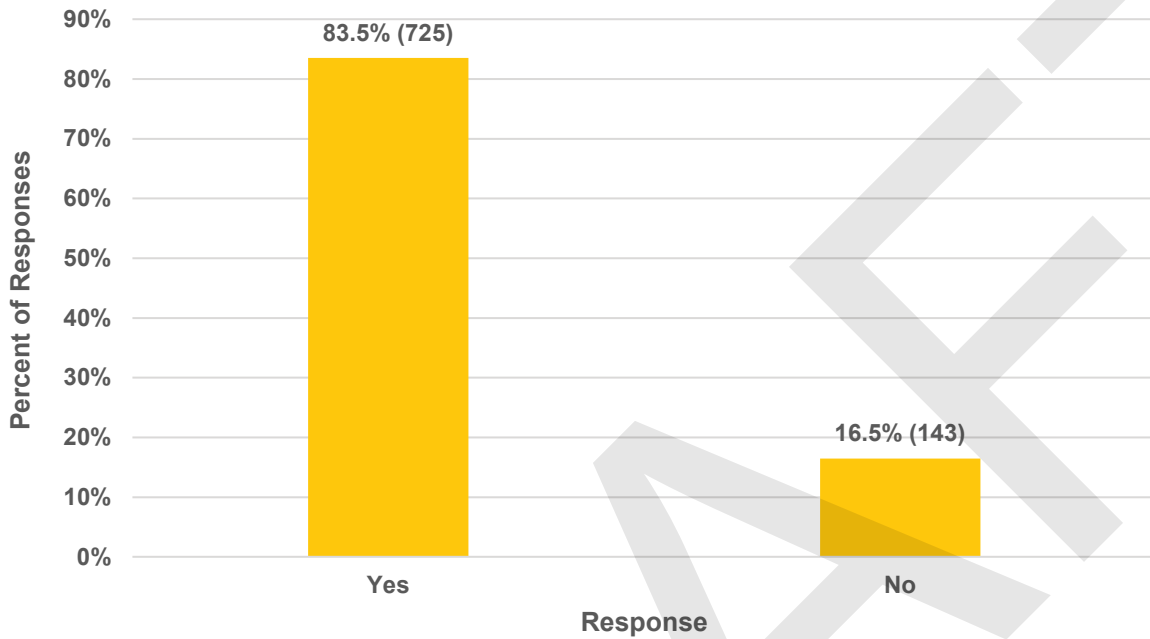


Source: Kentucky Statewide Rail Plan Team

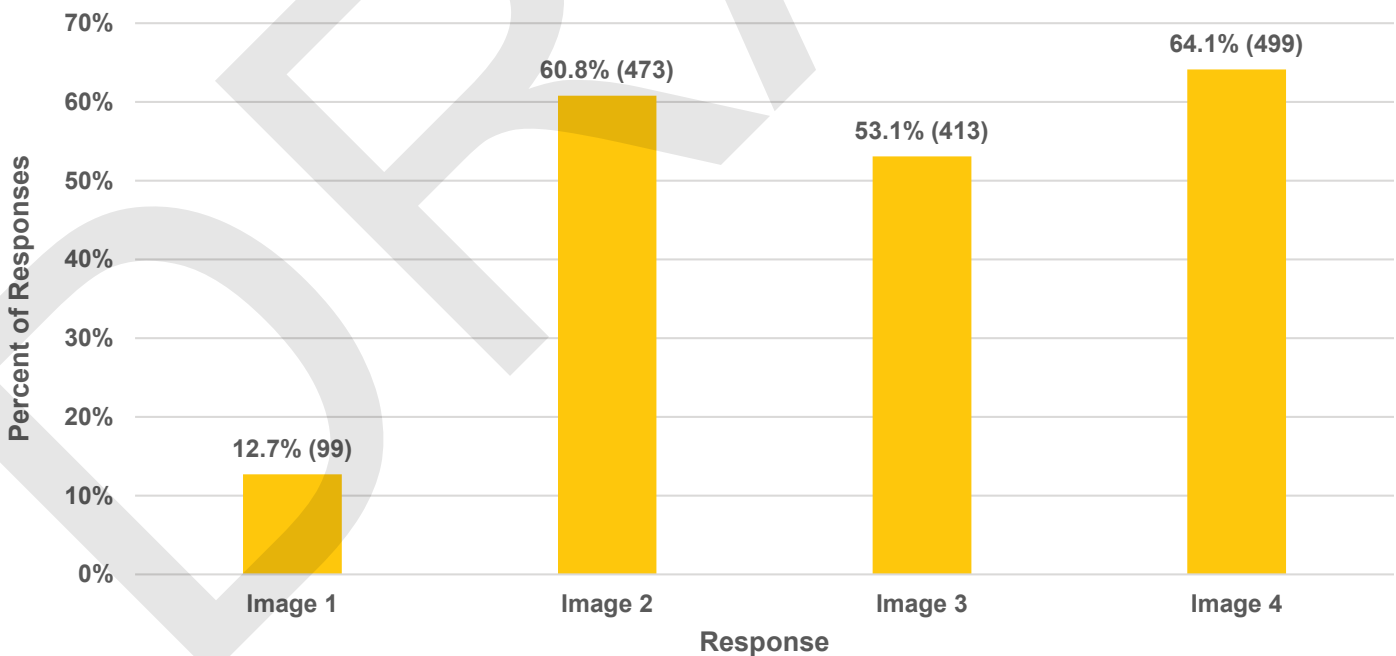
## B.1.6. Freight Rail

There were 905 respondents who provided input freight rail service in Kentucky.

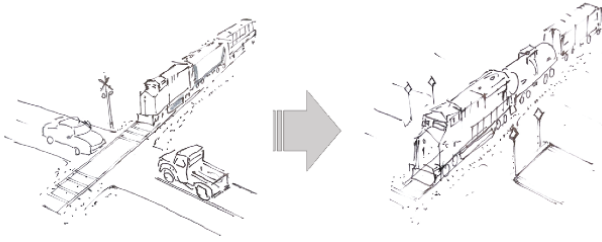
**Survey Question:** Should Kentucky prioritize investment in freight rail service and operations in the state?



**Survey Question:** How should Kentucky prioritize grade crossing improvements? Choose all that apply.

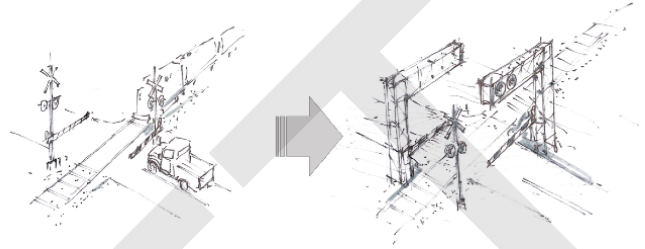


**Removal of existing grade crossings**



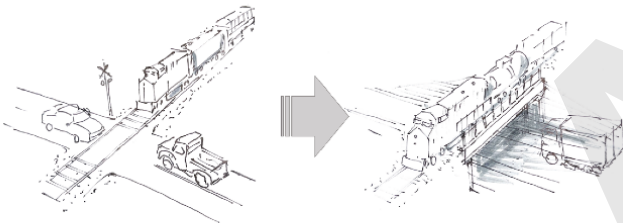
**Image 1**

**Upgrade of existing signalized grade crossings**



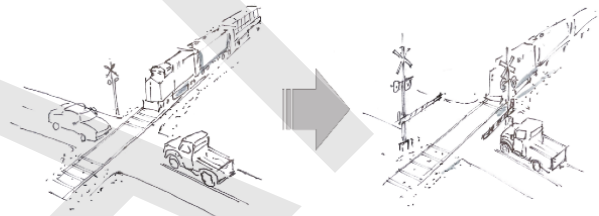
**Image 3**

**Grade separation of existing grade crossings**



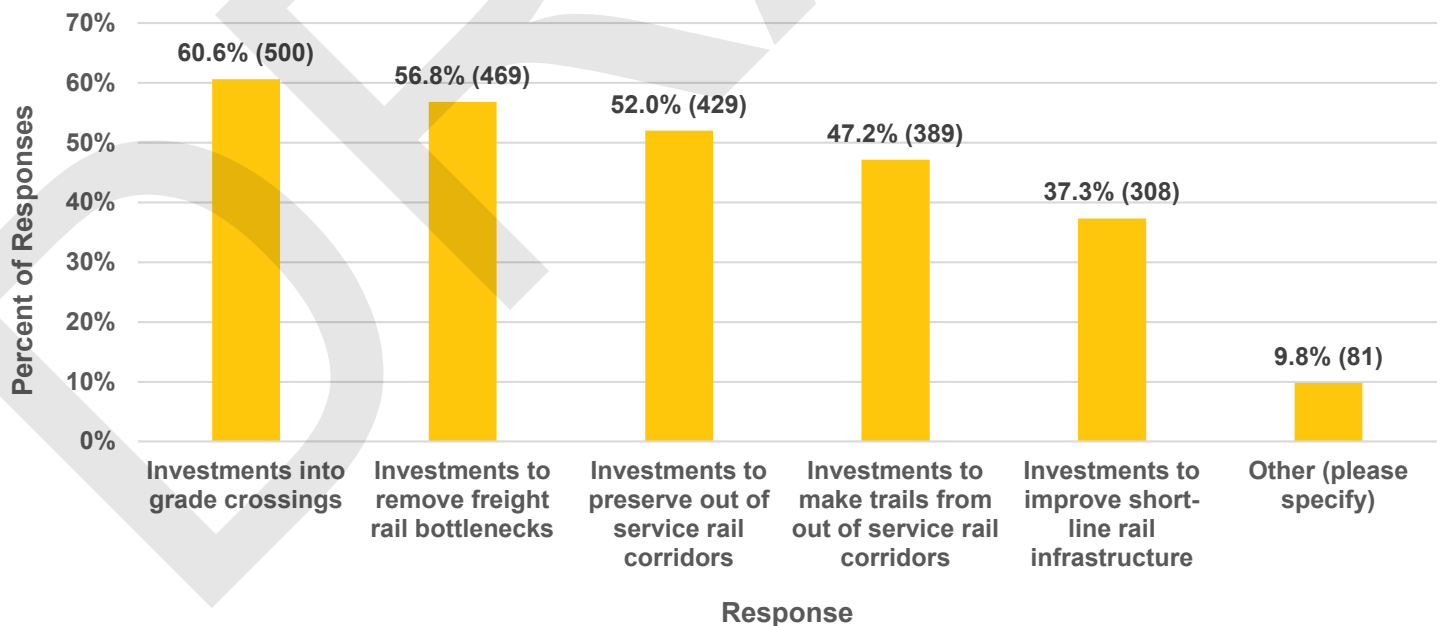
**Image 2**

**Signalization of existing unsignalized grade crossings**



**Image 4**

**Survey Question:** How should Kentucky prioritize investment in freight rail service and operations?  
Choose all that apply.



**Survey Question:** What opportunities do you see for specific grade crossing improvements in Kentucky?

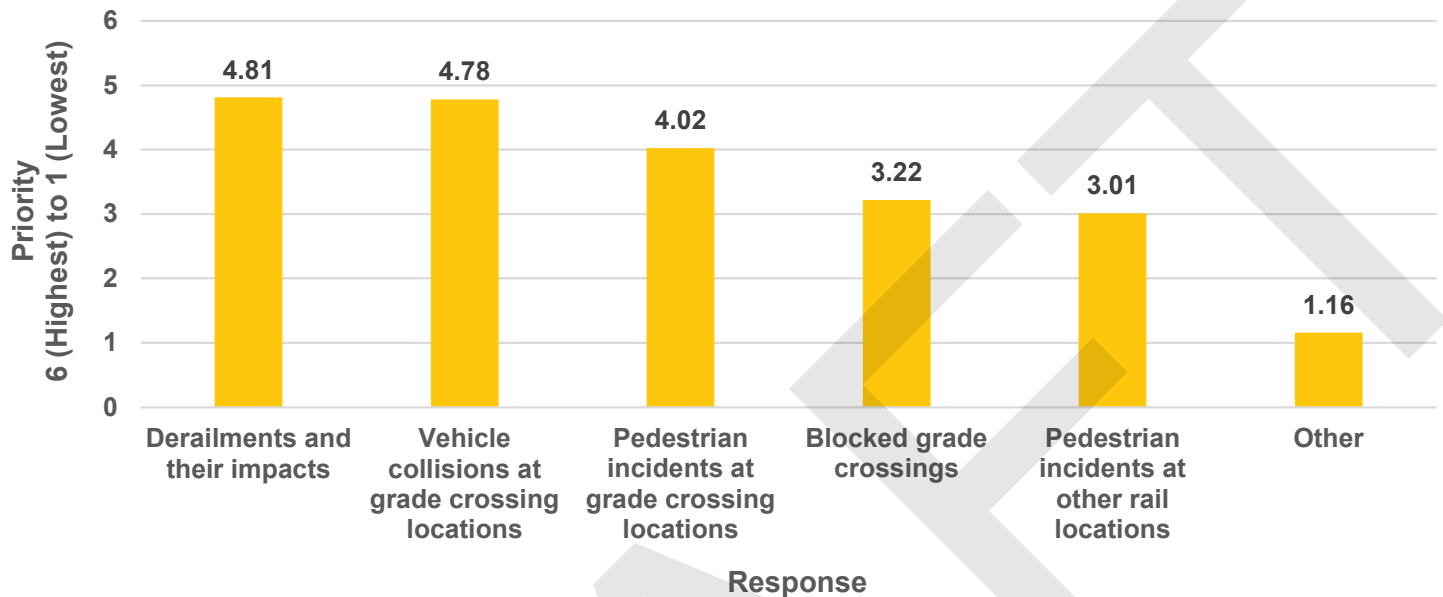
In total, 275 comments were received. Key points are:

- **Safety Concerns:** Many people expressed concerns about the safety of railroad grade crossings, particularly in urban areas.
- **Improvements Needed:** The most common recommendations for improvement were:
  - **Grade separations:** Constructing overpasses or underpasses to eliminate conflicts between road and rail traffic.
  - **Improved signals and warnings:** Installing better lights, bells, and gates at crossings.
  - **Pedestrian safety:** Providing safer pedestrian crossings, including sidewalks and designated crossing areas.
  - **Reduced train delays:** Implementing measures to reduce the time trains block road crossings, such as scheduling changes or improved communication systems.
- **Other Concerns:** Additional concerns raised included:
  - **Dangerous crossings:** People identified specific crossings that they considered particularly dangerous.
  - **Infrastructure maintenance:** The need for better maintenance of existing crossings and infrastructure.
  - **Economic impact:** The potential economic benefits of improving grade crossings, such as increased tourism and reduced traffic congestion.
  - **Safety for pedestrians and cyclists:** Concerns about the safety of pedestrians and cyclists at grade crossings.

Overall, the public is calling for significant improvements to railroad-grade crossings in Kentucky to enhance safety, reduce traffic congestion, and improve the overall transportation infrastructure.



**Survey Question:** What are your highest safety concerns as they relate to the railroad network and the general public? Please prioritize your concerns using the list below.



**Survey Question:** Are there any specific rail service improvement or infrastructure projects that would benefit you? If so, what are they, and how would they help?

In total, 243 comments were received. Key points are:

- Support for Light Rail:
  - There is strong support for implementing light rail service in both Lexington and Louisville.
  - Many see it as a safer, more efficient, and environmentally friendly alternative to driving.
  - Light rail could reduce traffic congestion and improve air quality.
- Safety:
  - Improved safety at railroad crossings, including grade separations and better signals.
  - Reduced risk of accidents and injuries.
- Infrastructure:
  - Investment in upgrading existing rail infrastructure.
  - Construction of new lines and stations.
  - Improved maintenance of tracks and crossings.

- Economic Benefits:
  - Potential for economic growth in the region, especially with improved access to major cities.
  - Job creation in the rail industry and related sectors.
  - Reduced transportation costs for businesses and individuals.
- Accessibility:
  - Improved accessibility for people with disabilities.
  - Easier access to neighborhoods and attractions in both cities.
- Environmental Impact:
  - Reduced carbon emissions and air pollution.
  - More sustainable transportation option.
- Specific Routes:
  - A route connecting Lexington and Louisville.
  - A route connecting Louisville to Cincinnati.
  - Expanding existing rail lines in the region.

Overall, the public is enthusiastic about the potential benefits of light rail service in Lexington and Louisville and is calling for further investment and planning to make it a reality.

**Survey Question:** Are there any specific rail service improvements or infrastructure projects that would benefit you? If so, what are they, and how would they help?

In total, 183 additional comments were received. Key points are:

- **Strong Support for Passenger Rail:** There is widespread public support for investment in passenger rail service, with many seeing it as a safer, more efficient, and environmentally friendly alternative to driving.
- **Prioritize Passenger Rail Over Freight:** Many comments call for prioritizing passenger rail over freight rail, especially for improving travel times and accessibility.
- **Economic Benefits:** Investment in passenger rail is seen as having economic benefits, including job creation, reduced transportation costs, and improved access to major cities.
- **Safety Concerns:** Safety is a major concern, with comments highlighting the need for improved infrastructure, crossing signals, and crew staffing levels.
- **Desired Routes:** Specific routes are frequently mentioned, including connections between Lexington and Louisville, Cincinnati, and other major cities. Some suggest re-using existing abandoned rail lines.
- **Environmental Benefits:** The potential for reduced pollution and a more sustainable transportation system is a key argument for expanding passenger rail service.

- **Learning from Other Countries:** Several comments call for learning from countries with successful passenger rail systems, like Japan, with efficient schedules and high ridership.
- **Frustration with Current Freight Trains:** Long train blockages, noise, and safety concerns regarding freight trains are frequently mentioned.
- **Need for Reliable Service:** Comments emphasize the importance of reliable schedules, competitive travel times compared to driving, and affordability for passenger rail to be successful.
- **Modernize and Improve Overall Rail Infrastructure:** Investment is needed to improve both passenger and freight rail infrastructure, including tracks, crossings, and signaling systems.



Source: Kentucky Statewide Rail Plan Team

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