



KIPDA
Kentuckiana Regional Planning
& Development Agency

Louisville - Indianapolis



Corridor Identification
Program Grant Application

March 27, 2023

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I. COVER PAGE

Corridor Title	Louisville – Indianapolis Passenger Rail Corridor
Applicant	Kentuckiana Regional Planning & Development Agency (KIPDA)
Applicant Contact	Andy Rush – Director of Transportation Kentuckiana Regional Planning & Development Agency 11520 Commonwealth Drive Louisville, Kentucky 40299 502-266-6144
Was a Federal Grant Application Previously Submitted for this Corridor? Yes/No	No
Other sources of Funding for the Corridor? Yes/No	No
City(-ies), State(s) Where the Corridor is Located	Indianapolis, Indiana; Columbus, Indiana; Clarksville, Indiana; Louisville, Kentucky
Congressional District(s) Where the Corridor is Located	Indiana Districts 09, 07 Kentucky District 03
Is the Corridor currently programmed or identified in: State Rail Plan, or regional or interregional intercity passenger rail systems planning study? Yes/No	Yes, in FRA Midwest Regional Rail Plan (pages 11,54); 2015 Kentucky State Rail Plan (page 3-2), 2029 Tennessee Statewide Rail Plan (page 92); 2021 Indiana State Rail Plan (page 155).
Is the applicant working with other entities in support of the Corridor? Yes/No	Amtrak, City of Indianapolis, City of Columbus, Indiana, Indiana Department of Transportation (INDOT), Indianapolis Metropolitan Planning Organization, Kentucky Transportation Cabinet (KYTC), Louisville Metro Government, Town of Clarksville, Transit Authority of River City (TARC).

II. CORRIDOR SUMMARY

The 313-mile Louisville – Indianapolis – Chicago *Kentucky Cardinal* corridor is home to over 13 million people and connects many rural communities to three of the Top 50 urbanized areas in the country and 15 institutions of higher learning with a combined student population of 130,000 students. The Kentuckiana Regional Planning and Development Agency (KIPDA), in conjunction with Louisville Metro Government, the Town of Clarksville, and other partners, is proposing reinstating passenger rail service in the Louisville – Indianapolis – Chicago corridor. Specifically, KIPDA is proposing reinstating service between Louisville and Indianapolis, and in coordination with the Indiana Department of Transportation (INDOT) striving to add new service frequencies between Indianapolis and Chicago. A reinstatement of service between these cities would provide an alternative to driving on congested I-65 from Louisville through Indianapolis to Chicago. Reducing the number of automobiles in this corridor would improve environmental conditions in the region by reducing greenhouse gas (GHG) emissions. Added rail passenger service in this corridor would provide increased connectivity between workplace epicenters in Louisville, Indianapolis, and Chicago, while improving accessibility for residents in disadvantaged communities along the corridor.

III. CORRIDOR FUNDING

Table I Funding for the Louisville Corridor

Project Element	Funding Source		Total
Corridor Study			\$500,000
	Louisville		
	KYTC		
	Other	Regional/Local/Private	
	Federal		
	Federal	FRA CID Program	\$500,000
	Federal		
Total Corridor Funding to Date			\$0

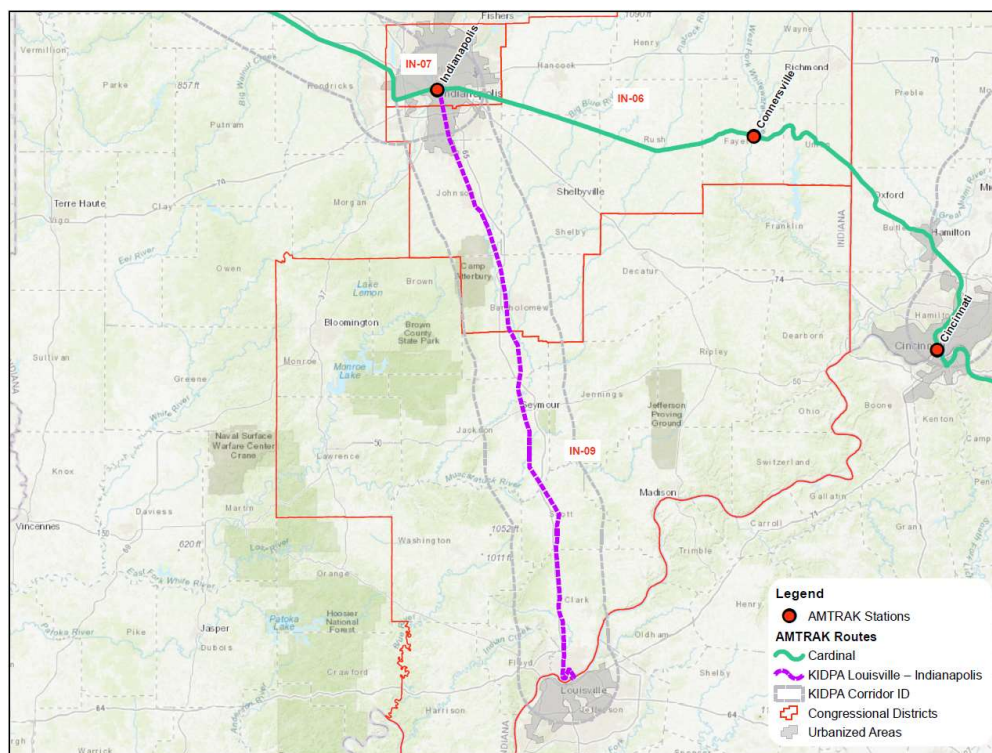
IV. APPLICANT ELIGIBILITY

The applicant for this program is the Kentuckiana Regional Planning and Development Agency (KIPDA). KIPDA serves as the Metropolitan Planning Organization (MPO) for the Louisville/Jefferson County KY-IN urbanized area and is also responsible for the Regional Transportation Council (RTC). The MPO consists of Jefferson, Bullitt, and Oldham counties in Kentucky and Clark and Floyd counties in Indiana. The RTC consists of Shelby, Spencer, Henry, and Trimble Counties in Kentucky. Thus, KIPDA meets applicant eligibility criteria described in the Notice of Solicitation and Funding Opportunity (NOFO) for the Corridor Identification and Development Program (87 FR 77920 [December 20, 2022]) as a Regional Planning Agency as noted in C(1)(f).

V. DETAILED CORRIDOR DESCRIPTION

KIPDA is submitting a separate Corridor ID Program application for the Louisville – Indianapolis segment of the Louisville – Indianapolis – Chicago corridor. As background to this application, it is noted that INDOT is applying for the Indianapolis – Chicago segment.

Figure 1 Louisville – Indianapolis Route



Basic Characteristics and Key Travel Markets.

Louisville and Indianapolis were once connected by the Interstate Public Service Co., later put under control of the Indiana Railroad, as an electric interurban service. Additionally, the cities were connected by the former Pennsylvania Railroad, which operated several passenger trains daily on the 107-mile route between the two cities. Travel time by train in the 1950s was 2 hours 25 minutes (2:25). The Pennsylvania Railroad became the Penn Central after its merger with the New York Central. Amtrak once served Louisville with two different trains. Between May 1971 and August 1974 Amtrak's *Floridian* ran from Chicago to Florida via Indianapolis and Louisville over the former Pennsylvania Railroad/Penn Central tracks. Due to deteriorating track conditions on this segment of the route in Indiana, the train was rerouted to the west just north of Nashville, Tennessee. In April 1975 the train was routed back east over the former Chicago – Indianapolis and Louisville Railroad (*The Monon*), again serving Louisville, but bypassing Indianapolis to the west. The *Floridian* served Louisville until its discontinuance in October 1979 due to declining passenger volumes, but there was no service between Louisville and Indianapolis during this time.

Twenty years later in December 1999, Amtrak started running the *Kentucky Cardinal* as a rebranding and extension of the *Hoosier State*, which was an Indiana state-supported corridor train that ran four days a



week between Chicago and Indianapolis filling in the gaps in the three-times a week *Cardinal* long-distance train schedule. The *Kentucky Cardinal* ran along former Pennsylvania Railroad/Penn Central trackage that had been used by the *Floridian*. Today the former Pennsylvania Railroad/Penn Central trackage is owned by the Louisville and Indiana Railroad (LIRC).

LIRC is a Class III railroad that operates freight service between Indianapolis and Louisville, with a major yard and maintenance shop in Jeffersonville, Indiana. It is owned by Anacostia Rail Holdings. It serves the cities of Franklin, Sellersburg, Seymour and Columbus, Indiana, and serves Camp Atterbury. Camp Atterbury (CAIN), located near Edinburg, Indiana, is that state's largest military site. The

Atterbury Rail Deployment Facility at CAIN can load/unload a brigade combat team in 72 hours and handle 120 railcars per day. The facility possesses services and equipment to facilitate rapid deployment activities. Accordingly, this rail alignment is part of the U.S. Department of Defense (DoD) Strategic Rail Corridor Network (STRACNET). LIRC made improvements to the corridor funded in part by CSXT, which has trackage rights over the line. LIRC replaced the 1930's era 130# jointed rail with 136# continuous welded rail (CWR), new ties, added two new 10,000 ft. sidings, and replaced a critical bridge. The 2018 completion of this project allowed LIRC to increase from Class II to Class III track standards raising freight train speed limits from 25 mph to 49 mph and improved its railcar capacity from 263,000 lbs. gross weight on rail to an industry standard of 286,000 lbs. The improvements allow passenger train speeds up to 60 mph. The tracks will need to be upgraded to Class IV to permit passenger train speeds up to 79 mph, which will provide competitive travel times between Louisville and Indianapolis.

The passenger rail route from Indianapolis to Chicago will follow the route of the three-times per week *Cardinal* long-distance train and is the subject of a separate Corridor ID grant application being submitted by INDOT. Chicago is home to over 8.9 million people and is the 3rd largest metropolitan region in the United States while continuing to be the country's rail transportation hub. Each day thousands of Amtrak passengers arrive or change trains at Union Station, much as railway travelers did 150 years ago. Prior to the pandemic, over 3.3 million passengers arrived or departed Chicago Union Station annually. Chicago continues to be one of the world's largest and most diversified economies contributing to the strong GDP. The total economic output of Chicago in gross metropolitan product total \$770.7 billion in 2020, making it the third largest in the United States behind New York and Los Angeles, while also exceeding independent countries such as Switzerland. Chicago is additionally the second largest banking center in the United States.

The Indianapolis metropolitan area is the 33rd most populous metropolitan statistical area in the United States with over 2.1 million residents according to the 2020 US Census. Indianapolis anchors the 29th largest economic region in the U.S., based primarily on the industries of transportation/logistics, utilities, professional and business services, education and health services, government; conventions and hospitality; and manufacturing. The city is home to three Fortune 500 companies, two major league sports clubs (Colts and Pacers), five university campuses, and several museums, including the world's largest children's museum. The largest employer in Indianapolis is Indiana University Medical Center with over 10,000 employees. However, the city is perhaps best known for annually hosting the world's largest single-day sporting event, the Indianapolis 500. The Indy 500 draws 325,000 spectators for the one-day event.

The Louisville metropolitan area has a population of 1.25 million according to the 2020 US Census and is one of the most centrally located mid-sized cities in the continental United States. Bridging the country's Midwest and Southern regions, the geographic location benefits the city as it allows for an efficient presence of economic activity between itself and other cities within 400 miles- including Chicago, Indianapolis, Cincinnati, St. Louis, Atlanta, Pittsburgh, and Nashville among others. Corporations including Humana, Inc., Yum! Brands, Inc., Brown-Forman Corp., Papa John's International, Texas Roadhouse Inc., and Churchill Downs Inc. make up the top publicly traded companies in the metropolitan area, having a combined revenue of \$79.6B in 2020 and combined local employment of 17,600. Louisville's largest private-sector employers overall include UPS, Ford Motor Co., and Norton Healthcare; employing over 25,000; 13,000; 13,800 people respectively. Fort Knox is located just south of Louisville and houses over 12,000 troops and dependent family members.

Louisville attracts hundreds of thousands of tourists yearly. The Kentucky Derby Festival is comprised of 70 city-wide events, including *Thunder over Louisville*, one of the largest fireworks shows in North America. The festival generates hundreds of millions of dollars for the local economy yearly while the Kentucky Derby itself generates upwards of \$400 million. Bourbon distilleries along the Kentucky Bourbon Trail attract hundreds of thousands of visitors yearly, many of which are in Louisville. Distilleries such as Buffalo Trace in Frankfort, Kentucky, just 55 miles from downtown Louisville, attract annually over 340,000 visitors alone.

Ridership: The Service Development Plan for which this grant application is being submitted, will assess the ridership potential for the route segment between Louisville and Indianapolis. Travel between the two cities on parallel I-65 and local highways is very strong. There are over 1.9 million annual trips between the two cities.¹ There are 15 institutions of higher learning reachable by passenger rail service between Louisville and Chicago- including University of Illinois Chicago, DePaul University, Columbia College Chicago, Loyola University, University of Chicago, Northwestern University in Chicago; Marian University, University of Indianapolis, and Butler University in Indianapolis; Purdue University in Lafayette; Indiana University Southeast in New Albany; University of Louisville, Bellarmine University, Sullivan University, Simmons College, and Spalding University in Louisville. Combined student population is over 130,000. University students are frequent users of passenger rail service for travel to and from campuses.

The Chicago O'Hare (ORD) Airport has significantly more daily long-distance or international flights than Louisville's Muhammad Ali International Airport (SDF) and Indianapolis (IND), causing many flights from smaller airports such as SDF to get directed to ORD for layovers. Passenger rail along the Louisville – Chicago corridor could allow for a reduction in air traffic congestion from increased usage of rail to major air hubs.

Readiness: KIPDA, Louisville Metro, the Town of Clarksville, and their partners are eager to commence service development planning in this corridor. KIPDA has the staff resources and ability to obtain consultant support to supplement staff capability and the desire to improve passenger rail service between Louisville, Indianapolis, and Chicago.

Description of Eligible or Ongoing Activities: As Step 1 of this Corridor ID program, a joint KIPDA/Louisville Metro/Town of Clarksville partnership supported by the Kentucky Transportation Cabinet (KYTC) has been proposed to develop the scope, schedule, and cost estimate for the development of a Service Development Plan (SDP) for the Louisville – Indianapolis corridor working with the FRA. As

¹ FHWA NextGen trip tables.

part of Step 1, KIPDA and its partners will also conduct outreach to stakeholder railroads and communities to determine level of support and resources that can be committed for Step 2 of the Corridor ID program.

Intended Operator: It is expected that Amtrak would operate the new passenger rail service as a regional corridor service. However, final determination of an operator will be made in the Service Development Planning process.

Legal, Technical and Financial Capability of Applicants.

KIPDA and its supporting partners have the legal, financial, and technical capability to engage in the planning and development of improved passenger rail services in the Louisville – Indianapolis – Chicago Corridor.

Legal: KIPDA hires outside legal counsel on an as needed basis.

Technical: KIPDA is very experienced in managing Project Planning activities for major capital projects and will be increasing their technical and organizational capacity for Project Planning activities related to the Corridor ID program. KIPDA has been involved with and has provided federal grant dollars towards local initiatives that could potentially complement additional endeavors, such as passenger rail. Some of these include recent projects known as *Reimagine 9th Street* and *Broadway All the Way*, in addition to providing federal grant dollars from programs including Transportation Investment Generating Economic Recovery (TIGER), Rebuilding American Infrastructure with Sustainability and Equity (RAISE), Safe Streets for All (SS4A), and Strengthening Mobility and Revolutionizing Transportation (SMART); many of which are focused on improving multi-modal facilities and increasing compliance with Vision Zero initiatives.

Financial: Given this Corridor’s early development stage, funding for Corridor project development, implementation and operations has not yet been determined. KIPDA and its partners could support efforts with the Corridor ID program through allocations of local, state, and other federal funds.

Challenges Addressed by This Corridor.

The Louisville – Indianapolis – Chicago *Kentucky Cardinal* trains were handicapped by inconvenient departure and arrival times, as it ran on the same schedule as the Indianapolis-Chicago leg of the Amtrak long-distance *Cardinal*. It was also plagued by slow travel times, especially on the segment from Indianapolis south to Louisville on the former Pennsylvania Railroad/Penn Central trackage. This segment is now owned and operated by LIRC, which had purchased the line from Conrail in 1994. This Class III railroad had a speed limit of 25 miles per hour over most of the route due to its Class II jointed rail. This made travel on the southern leg of the *Kentucky Cardinal* slower than automobile traffic on the parallel Interstate 65.

Condition of Trackage – The LIRC handles less than 5 million gross tons per year on a single-track line with several 10,000 foot passing sidings. The line is not signaled and operates under a warrant control system. The LIRC tracks were improved in 2018 and are maintained at a Class III level. Capacity constraints and the friction of mixed freight/passenger rail traffic on a single track, un-signalized line would result in poor performance of both freight and passenger trains. Slow passenger train speeds relative to auto travel on parallel I-65 would make the trip lengthier, inconvenient, and potentially unreliable making passenger rail less competitive for intercity trips when compared to highway travel choices, leading to system inefficiencies and increased congestion on I-65.

The funding provided by the Corridor ID program will permit the project sponsors to prepare a Service Development Plan examining ways and means to restore passenger service on this important segment of the corridor. Establishing higher track classification to allow passenger train speeds up to 79 mph and adding Positive Train Control (PTC) signaling, additional passing sidings or double track as warranted would support frequent and convenient passenger train service between Louisville, Indianapolis, and Chicago. These infrastructure and capacity improvements will benefit both the freight railroad and passengers through improvements to safety, fluidity, service reliability and on-time performance. There are many other factors that will be investigated as part of the service development planning effort.

Expected Users and Beneficiaries of the Corridor.

Improved passenger rail service in the Louisville – Chicago Corridor has the potential to provide convenient service to the over 13 million people living in the corridor. The users of improved passenger rail services will be the key beneficiaries:

- Historically disadvantaged and rural communities benefit from greater connectivity to metropolitan areas by improved access to employment centers, educational institutions, and healthcare.
- Residents throughout the corridor will benefit from improved air quality through reductions in harmful air pollutants, as well as a decrease in carbon emissions.
- Businesses and employers benefit from drawing on a wider pool of prospective labor who can more easily access their businesses, and workers benefit from greater access to jobs.
- Travelers will benefit from having a more comfortable and safer travel choice for the trips between Louisville and Indianapolis; as well as tourist attractions and sites of historic significance could benefit from passenger rail as it could offer greater access between cities and promote an increase in economic development from non-local dollars.
- The military STRACNET trackage between Louisville and Indianapolis would be improved to support passenger train movements in case of mobilization.
- The host freight railroad will also benefit from track and capacity improvements in the corridor needed to support passenger rail service through improved track conditions, higher speeds, fluidity, more reliable schedule adherence and on-time performance for freight deliveries.

Potential to Scale the Corridor.

As part of this application, KIPDA, Louisville Metro, the Town of Clarksville, and their partners could evaluate the feasibility of extending additional service south to Nashville.

VI. CORRIDOR LOCATION

The 313-mile Louisville – Indianapolis – Chicago corridor is home to over 13 million people and connects many rural communities to three of the Top 50 urbanized areas in the country and 15 institutions of higher learning. The corridor traverses through three states and crosses through six Congressional districts: Kentucky District 03; Indiana Districts 07 and 09; and Illinois Districts 01, 02, and 03.

Within each state, the passenger rail service travels through many rural counties connecting to urbanized areas. The segment of the route between Indianapolis and Louisville is 107-miles long with approximately 105 miles in Indiana. The line crosses the Ohio River and terminates in Downtown at the Louisville Union Station, now owned by the Transit Authority of River City (TARC). The urbanized areas are depicted by a shaded gray color on the corridor as shown in Figure 3 below. The urbanized

population of this corridor is over 3.3 million people. The 107-mile segment of the corridor between Indianapolis and Louisville passes through rural Indiana with 85.3 miles outside of the urbanized area boundaries. The balance of the land area is rural, which in Indiana is mostly farms. The rural population in this corridor adds people living within 50-miles of the Amtrak stations. Stations in urbanized areas also serve rural communities. The geospatial coordinates for the current and proposed Amtrak stations in the corridor are:

- Indianapolis, IN (39.76288395184841, -86.16122078849256)
- Columbus, IN (39.25451702631652, -85.93843140199792)
- Clarksville, IN (38.276119299960996, -85.75651022813872)
- Louisville, KY (38.24646957282435, -85.76877204434884)

Figure 2 Louisville - Indianapolis - Chicago Corridor



VII. EVALUATION AND SELECTION CRITERIA

Corridor Benefits

Projected ridership, revenues, capital investment, and operating funding requirements.

The Service Development Plan, for which this grant application is seeking funding, will assess projected ridership, capital investment needs and operating fund requirements.

Environmental, congestion mitigation, and other public benefits.

Rail offers a multitude of benefits, including environmental, congestion mitigation, safety, and the improvement of transportation equity across socioeconomic and demographic groups. When compared to automobile and air travel, passenger rail produces lower GHG emissions, which means that shifting trips from road and air to rail in markets where it makes sense can reduce overall transportation emissions. Still, rail's reliance on diesel fuel leaves a large challenge in reducing GHG emissions from the rail industry.

Congestion reduction - Because rail provides an alternative to driving, some travelers may be persuaded to take the train reducing the number of cars on roadways concurrently reducing levels of traffic congestion. This provides both the environmental benefits associated with fewer emissions-producing vehicles on roadways, and economic benefits such as an overall reduction in vehicle miles traveled (VMT).² Reduction of VMT and highway congestion benefits remaining highway users by reducing the marginal cost of congestion born by those vehicles, providing an economic benefit to those drivers through less gas used and less time spent idling in traffic. Resources such as the Peak-Period Congestion on the National Highway System map provided by the Federal Highway Administration (FHWA) can be used as a reference as to what is expected for congestion levels on interstates like I-65 in 2045 if today's transportation conditions remain unaltered.

Health and Safety - As travelers divert from automobile to passenger rail, additional benefits may arise as passenger rail has a significantly lower fatality rate per 100 million passenger miles than automobiles (0.005 vs 0.046). In addition to lessening the environmental and economic impacts of automobile use, passenger rail also offers health and recreational benefits. Passenger rail can contribute to healthier communities by having stations in more mixed-use environments that promote walking and transit, which may also incentivize greater economic development conditions with an infill of land use in the community. Non-users of passenger rail could benefit from an implementation of signalization of the corridor and upgrades made to grade crossings. Improving passenger rail service in the Louisville – Indianapolis segment of the Corridor has the potential to transform the social and economic fabric of the small communities in the region. However, at this early stage of planning and in the absence of concept plans, it is difficult to reasonably quantify all the public benefits that will arise from service improvements in this corridor.

Projected trip times and their competitiveness with other transportation modes.

The Service Development Plan, for which this grant application is seeking funding, will assess projected trip times and competitiveness with other travel options in the corridor. The intent of these efforts is to make rail travel frequent and fast enough to realistically compete with personal auto travel time.

Anticipated positive economic and employment impacts.

From a broader economic growth perspective, more efficient and reliable connectivity across the corridor could help attract and retain business and enhance economic development opportunities. The economic impact of improved passenger rail service would be determined during project development as part of the environmental assessment.

Benefit to rural communities.

In addition to the wider economic benefits that can boost the productivity of the region, rural communities can retain their rural and agricultural character. In the census tracts within a 50-mile distance of the rail stations in the Louisville – Indianapolis corridor, approximately 20 percent of the corridor population is rural. Approximately 59 percent of the route travels through rural countryside as compared to urbanized areas.

² The FHWA Cost Allocation Study 2000 Addendum estimates the marginal congestion costs per VMT to be \$0.01 for every auto mile diverted to rail on both urban and rural highways.

Service to historically unserved or underserved and low-income communities.

Many of the communities within the UZAs and rural areas served by the long-distance trains in this corridor are significant low-income or disadvantaged. Many of the communities have large minority populations and are vulnerable to health and other hazards.

Every community must prepare for and respond to hazardous events, whether a natural disaster like a tornado, severe winter storm or disease outbreak, or a human-made event such as a harmful chemical spill. Several factors, including poverty, lack of access to transportation, and crowded housing may weaken a community’s ability to prevent human suffering and financial loss in a disaster. These factors are known as social vulnerability. The Center for Disease Control and Agency for Toxic Substances and Disease Registry developed a social vulnerability index (SVI) that ranks census tracts on 15 social factors, including poverty, lack of vehicle access, and crowded housing. Possible SVI scores range from 0 (lowest vulnerability) to 1 (highest vulnerability). For the Louisville area, a score of 0.616 indicates a moderate level of vulnerability while Indianapolis has a higher level. Passenger rail service is generally immune to the winter storms that frequent the Midwest states, although Amtrak has preemptively canceled trains this past winter. Table 2 below highlights the urbanized area population demographics and characteristics.

Table 2 Urbanized Area Demographics

Louisville – Indianapolis – Chicago Corridor Urbanized Area Population and Characteristics					
Urbanized Area	Population	Percent Minority	Percent Income below \$50,000	Percent living below poverty line	CDC Social Vulnerability Index
Chicago	9,618,502	46%	34%	10.6%	0.6755
Indianapolis	2,129,479	31.5%	39%	10.6%	.08291
Louisville	1,284,826	27.9%	41%	12.1%	.06146
Total	13,032,807				

Source: US Census Bureau; Center for Disease Control (CDC) and Agency for Toxic Substances and Disease Registry SVI Index at <https://svi.cdc.gov/map.html> accessed February 21, 2023.

Connectivity with existing or planned transportation services of other modes.

The availability of intercity passenger rail in Louisville will permit better connectivity for better access to a broader range of travel destinations and economic opportunities. Automobile, ridesharing services, public transit, and active transportation methods would be options for accessing the passenger rail stations. TARC currently occupies Louisville’s Union Station, where AMTRAK once operated, as it serves as their main administrative headquarters and is a hub for numerous routes along busy corridors including BRT access. At the northern end of the line, Indianapolis is making major investments in its transit system through the construction of three BRT lines and a frequent grid; the primary hub is a few blocks from Union Station. Columbus, IN also has access to their local bus service, ColumBUS. Additionally, rail and bus services are housed together at Indianapolis Union Station. There are connections to Greyhound, Miller Trailways, Barons Bus, and Amtrak under one roof.

Connection between at least 2 of the 50 most populated metropolitan areas.

The Louisville – Indianapolis – Chicago Corridor connects three of the 50 most populated metropolitan areas in the country. Chicago, Indianapolis, and Louisville metropolitan areas rank 3rd, 33rd, and 45th largest in the country respectively according to the 2020 U.S. Census.

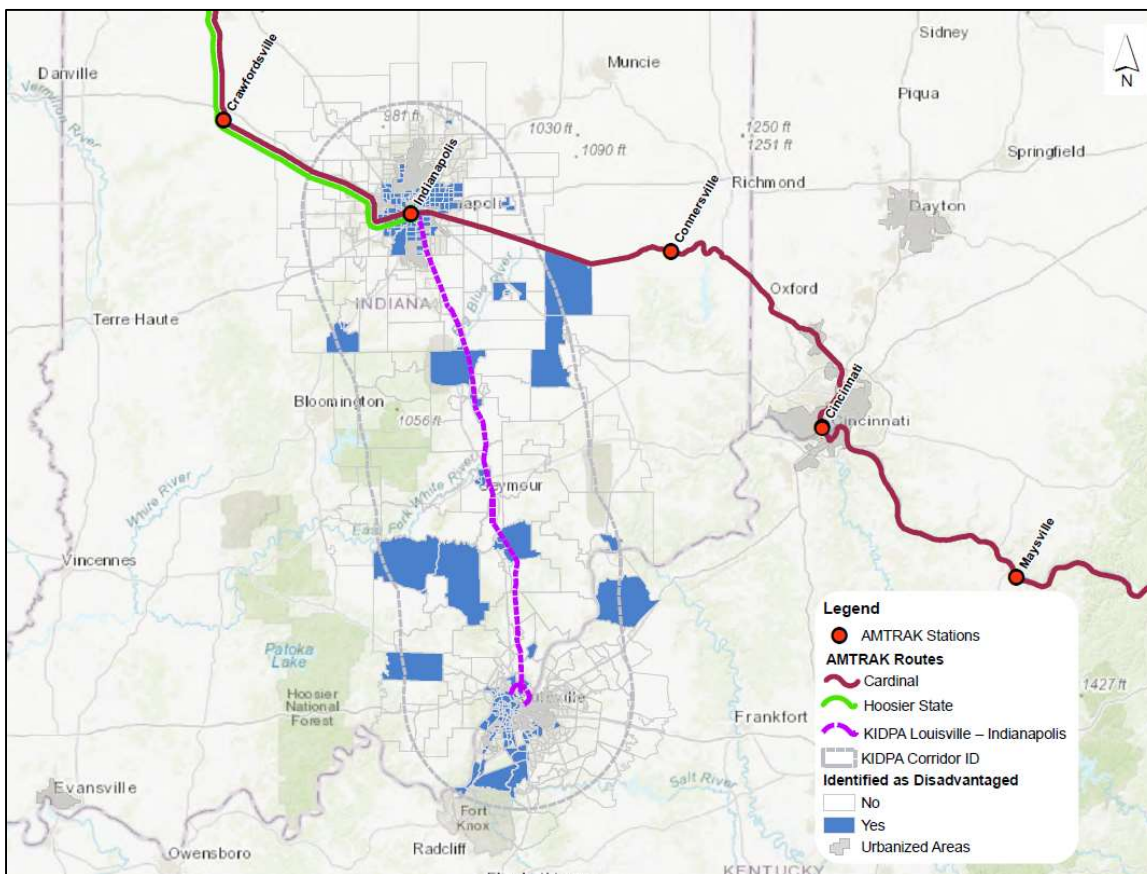
Enhancement to regional equity and geographic diversity of passenger rail service.

The rail passenger corridor would encourage regional equity by investing in infrastructure that improves or expands transportation options to rural, minority and disadvantaged communities by restoring passenger rail service and by adding convenient arrival/departure times.

In upholding Federal (Justice40) equity standards for investments in transportation projects, KIPDA will work to deliver project benefits targeted to disadvantaged and overburdened communities. Service development planning will assess strategies to address rail affordability as well as accessibility for vulnerable populations such as low-income households, people with limited English proficiency, elderly, disabled veterans, and others. Improvements to this corridor will benefit minority and disadvantaged populations that are vulnerable to health and other hazards. The rail passenger corridor would encourage social equity by investing in infrastructure that improves or expands transportation options to minority and disadvantaged communities by providing these communities with better access to the opportunities that lie outside their boundaries with more affordable and convenient travel choices.

Figure 3 illustrates the location of census tracts fulfilling the indices measuring disadvantaged and overburdened communities.

Figure 3: Justice 40 Disadvantaged Communities



Integration into the national passenger rail transportation system.

The Louisville – Indianapolis segment of the Corridor was part of the Amtrak national rail passenger network. Since being disconnected in 2003, people living in Louisville must drive to Indianapolis to catch the *Cardinal* long-distance train to Chicago. Most choose to drive the entire distance or not make

the trip altogether to avoid the stress of driving congested interstate highways saturated with heavy truck traffic. Reinstating service between Louisville and Indianapolis with better track conditions, more frequent service, convenient arrival/departure times and speedier more reliable service would reconnect people in this corridor to the national passenger rail network and provide people with a viable option to driving.

Technical Merit

Readiness to commence activities under the Program and complete Step 1 and Step 2.

KIPDA and its partners are ready to commence the activities of the Corridor ID Program and begin preparing a scope, schedule, and cost estimate for the development of an SDP.

Technical qualifications and experience of key personnel the applicant proposes to use.

KIPDA, Louisville Metro, Town of Clarksville, and KYTC staff bring a deep bench of qualified experts with experience in delivering complex federally-funded projects to manage and complete Step 1 and Step 2 planning activities for the Louisville – Chicago Corridor SDP. KIPDA will supplement its staff by contracting with a competent and technically qualified consultant to carry out the technical analyses necessary for preparing a service development plan in accordance with FRA guidance.

Andy Rush, Director of Transportation, KIPDA Andy is a licensed Professional Engineer in Kentucky and has over 16 years of experience at KIPDA, where he manages a staff of 20 transportation professionals. Prior to his work at KIPDA, Andy worked for Norfolk Southern Corporation. Andy has a bachelor's degree in Civil Engineering and a Master's in Business Administration, both from the University of Kentucky.

Michael King, Director of Advanced Planning, Louisville Metro Government Through his work with Metro Government, Michael works to carry out strategic, long- and short-term planning initiatives focused on neighborhoods, multi-modal corridors, brownfields, sustainability, and public art. He specializes in collaborating closely with the community as well as cross-departmentally in planning for future growth and development of Louisville. Since receiving his Master of Urban Planning Degree from the University of Louisville, Michael has worked for over 16 years in various capacities in Louisville Metro Government. His multi-faceted skillset has allowed him to integrate a holistic planning approach into numerous projects throughout the city.

Kevin Baity, Town Manager, Town of Clarksville During the periods 2000-2003 and 2006-2015, Kevin served on the Illinois Rail Coalition, a group of elected and appointed officials and transportation professionals working directly with the Illinois Dept of Transportation and Amtrak on matters related to expanding passenger rail service along the Chicago to St. Louis and Chicago to Carbondale (IL) routes. During the 2000-2003 period, He was the Community Development Director by the City of Centralia, IL and in charge of the construction of a new passenger station. During the 2006-2015 period, he was the Assist. City Manager for Economic Development and eventually the City Manager by the City of Carbondale, IL. and partnered with Southern Illinois University to lobby for a third daily train (the Saluki) between Chicago and Carbondale to better serve the needs of the citizens (and students). (Note: During his time in Centralia, was also active in lobbying for the Saluki train, which was added in 2006).

The applicant's commitment to the Implementation and operation of the Corridor.

KIPDA is committed to preparing a service development plan that explores ways and means to restore service in the *Kentucky Cardinal* corridor by improving railroad infrastructure to include upgrades to

track, signaling and providing more corridor capacity to support increased service frequencies and improved freight rail fluidity and capacity.

Whether the route was identified as part of a regional or interregional planning study.

The Midwest Regional Rail Study identified a corridor between Louisville and Chicago routed through Indianapolis, Indiana over segments of the legacy Pennsylvania/Penn Central or Monon Railroads. These optional routes can be studied as part of the service development planning process.

The committed or anticipated non-Federal funding for operating and capital costs.

KIPDA anticipates developing funding and financing strategies, including private-sector involvement, as part of planning activities under the Corridor ID and Fed-State Partnership Programs.

Whether the Corridor is included in a State’s approved State Rail Plan.

The Kentucky State Rail Plan, Tennessee State Rail Plan and Indiana State Rail Plan all discuss extending passenger rail service from Chicago through to Atlanta via Indianapolis and Louisville.

Whether a passenger rail operator has expressed support for the Corridor.

Amtrak has expressed support. (See attached Letter of Support). In addition, service improvements being sought in this corridor are included in the Amtrak *Connects US* program. The vision includes:

- Four round trips between Chicago – Indianapolis – Cincinnati
- Four round trips between Chicago – Indianapolis – Louisville

These new corridors deliver travel market benefits with better than-car trip-times due to 110 mph speeds for eight round trips between Chicago and Indianapolis as well as benefits to the Cincinnati and Louisville extensions.

Selection Criteria

The level of positive environmental impact for passenger rail reflects its ability to minimize energy consumption, reduce air pollution and mobile emissions of greenhouse gases and harmful pollutants, reduce accidents, minimize highway congestion, and limit greenfield impacts by making optimal use of existing right-of-way. This development strategy will produce a much smaller carbon and physical footprint than either highway or airport development, in which forests, farmland, or wetlands are often impacted for highway, parking and airport facilities. Wetland and water resource impacts are minimized by reuse of existing rail routes.

Safety and Health

Improved passenger rail services in the Louisville – Chicago Corridor advances safety by:

- Providing a safe, low fatality mode of transportation
- Diverting automobile travel to rail, reducing vehicle-miles travelled and potential for fatalities
- Reducing pollutants along the corridor, lessening the health effects associated with auto and air travel, which disproportionately affects overburdened communities.

Safe System: Improved passenger rail service is expected to improve the safety of moving goods and people by creating fast, safe, reliable connections for over 13 million people. More than 46,000 people die in car crashes each year, according to Annual United States Road Crash Statistics (ASIRT). The U.S. traffic fatality rate is 12.4 deaths per 100,000 inhabitants. Amtrak experienced six passenger fatalities in 2021. The elimination of grade-crossings where warranted results in fewer collisions between highway users and trains.

Public Health: Traffic-related air pollutants disproportionately affect vulnerable communities, putting them at greater risk. Improved passenger rail service will contribute to improved air quality through the reduced mobile emissions from auto users and air travel. Improved air quality reduces the hazards posed by airborne pollutants associated with certain breathing disorders. Passenger trains minimize a traveler’s discomfort by providing more spacious seating, freedom of movement, and opportunity to engage in a variety of productive activities or just simply relax. The extra time and freedom of rail travel allows passengers to catch up on work, read a book, play games, or simply enjoy the scenery as it rolls past the American countryside. This more leisurely way to travel reduces stress levels and improves mental and heart health.

Infrastructure Investment and Job Creation

Improving and expanding passenger rail service will result in long-term job creation by supporting good-paying construction and manufacturing jobs directly related to Corridor investments. This region is union strong with laws that encourage free and fair choice to join a union. High schools and community colleges in the region provide pre-apprenticeship programs leading to apprenticeships in the skilled trades. Local governments use local hiring provisions or other targeted preferential hiring requirements in their construction procurement documents, which provides opportunities for local families to achieve economic security through employment supporting the rail industry. Amtrak operates 15 maintenance facilities nation-wide, with their largest facility being in Beech Grove, Indiana; just south of Indianapolis. Increasing passenger rail service through Indianapolis could bring a higher demand for jobs in locomotive repair and could additionally employ individuals who reside along the Louisville – Indianapolis corridor.

To compete in a global economy and maintain its current competitive advantages, Indiana and Kentucky communities must remain highly connected to the global economy and elevate itself in the hierarchy of global communities by improving its transportation linkages to major international gateways like Chicago. Intercity passenger rail service linking communities in the corridor with Chicago will have a positive impact on influencing economic development and migration patterns, creating a more sustainable future and with less environmental impact than continued dependence on the highway and air system alone. The service development plan will examine how Louisville can improve its economic competitiveness in this new global economy.

Equity - Social equity is defined as the fair, just and equitable distribution of public services and implementation of public policy; and the commitment to promote fairness, justice, and equity in the formation of public policy. This includes transportation. On January 27, 2021, President Biden signed Executive Order (EO) 14008, “Tackling the Climate Crisis at Home and Abroad” which created a government wide “Justice40 Initiative” that aims to deliver 40 percent of the overall benefits of relevant federal investments to disadvantaged communities. Equitable distribution of benefits and equitable access to the national passenger rail system will guide service development planning. Louisville has integrated equity in its agency planning, budgeting, and operations, sharing similarities with the Justice40 Initiative (such as focusing on multifactor analysis to identify overburdened communities, establishing methodologies to track investment equity, and emphasizing community engagement). In upholding Federal (Justice40) equity standards for investments in transportation projects, Louisville and its partners will work to deliver project benefits targeted to disadvantaged and overburdened communities. Service development planning will assess strategies to address rail affordability as well as accessibility for vulnerable populations such as low-income households, people with limited English proficiency, elderly, disabled veterans, and others. Improvements to this corridor will benefit minority and disadvantaged populations that are considered to be vulnerable to health and other hazards. Restored passenger rail service with increased frequencies and more reliable OTP provide affordable access to employment and educational opportunities and to health care providers. KIPDA has as its goal to procure goods and services to the maximum extent

that is feasible from both minority and woman owned/managed businesses as part of KIPDA's Disadvantaged Business Enterprise policy.

Support Resilient Supply Chains & Economic Opportunity - Freight transportation industries of various modes could experience forms of resiliency as implementation of passenger rail comes into fruition. Building capacity to support increased passenger train frequency also adds capacity to freight rail systems, allowing more intermodal trains to operate. The American Trucking Association (ATA) reported a driver shortage of 78,000 in 2022 and is anticipating an increase if conditions remain unchanged. Diverting long-distance truck trips to freight rail could help alleviate some of the driver shortages by decreasing the average length-of-haul on highways and keeping truckers more localized, as well as this could attract more drivers by increasing the time at home and decreasing the time spent on the road.

Climate and Sustainability

In terms of energy use, rail is one of the most fuel-efficient modes for both freight and passenger travel. Travel by intercity passenger rail uses less energy per passenger mile and achieves a higher efficiency in passenger miles per gallon than travel by air, private automobile, or intercity bus. Goals and objectives outlined in Indianapolis's resilience and sustainability plan, *Thrive Indianapolis*, potentially could be met with the possible outcomes intercity passenger rail may bring.

Transformation

Restoring passenger rail service presents an opportunity for transformative change in rural Southern Indiana and Kentucky. Improving rail infrastructure by improving the track structure, installing PTC signaling and expanding capacity contributes to a more resilient, flexible transportation network that can accommodate and respond to changing conditions. Investing in passenger rail brings opportunities for technology to be scaled up and allow for a greater capacity than what automobile and air travel offers today, as rail line capacity is only limited by train length and frequency. By restoring passenger rail service between Louisville and Chicago, people will have more options than the highly congested I-65 and improving this segment of track is an investment in the STRACNET rail system needed for moving troops and equipment during times of mobilization for the purposes of national defense.

VIII. USDOT STRATEGIC GOALS

This corridor aligns with USDOT strategic goals by creating tremendous opportunity for improved equity, sustainability, safety, economic strength, and positive climate impacts. The Louisville – Indianapolis Chicago *Kentucky Cardinal* Corridor will advance good-paying, quality jobs and workforce development programs rooted in diversity, equity, and inclusion. During a time of unprecedented transportation funding provided through the Bipartisan Infrastructure Law, this Corridor presents Amtrak, Kentucky, Indiana, Illinois, and the FRA with a unique opportunity to advance the ambitious agenda set out by the Biden Administration to make transformative investments that will modernize transportation infrastructure. Project planning undertaken by KIPDA, Louisville Metro, town of Clarksville, and partners under the Corridor ID program will be guided by project principles that align with the USDOT Strategic Plan.



Safety:

- The corridor will enhance railroad operating safety including at grade crossings
- The corridor will foster a safer transportation system for the movement of goods and people



Economic Strength and Global Competitiveness:

Infrastructure Investment and Job Creation

- Enables region to attract semi-remote workers
- Increases the candidate pool for opportunities in the region
- Increases the radius of potential jobs in a post-pandemic environment

Support Resilient Supply Chains & Economic Opportunity

- Improves rail connections between Louisville, Indianapolis and Chicago
- Strengthens a developing relationship with public and private entities including universities and the health care sector



Equity and Barriers to Opportunity:

- Provides access to nationally recognized healthcare facilities
- Mitigates risks associated with limited access and opportunity in the community



Climate Change and Sustainability:

- Reduces overall emissions by providing an opportunity for transportation mode shift
- Extends the longevity of the regional roadway network



Transformation:

- The corridor connects educational, research, and public health institutions
- The corridor connects Louisville to the national passenger rail system

IX. DESIGNATED RAIL CORRIDOR

The Louisville – Indianapolis Chicago *Kentucky Cardinal* corridor is not a designated high-speed rail corridor. But the Midwest Regional Rail Study identified a designated corridor between Indianapolis and Louisville as an extension of the Midwest Corridor regional rail system. The FRA designated high-speed rail corridor identified in the NOFO include a Midwest corridor linking Chicago, IL with Detroit, MI, St. Louis, MO, and Milwaukee, WI with

an extension to Indianapolis, IN and Cincinnati, OH.

an extension from Indianapolis, IN to Louisville, KY.

an extension from Chicago, IL to Toledo, OH and Cleveland, OH; and

an extension between Cleveland, OH, Columbus, OH, Dayton, OH, and Cincinnati, OH.