High-Speed Intercity Passenger Rail (HSIPR) Program

Track 2–Corridor Programs: Application Form

Welcome to the Application Form for Track 2–Corridor Programs of the Federal Railroad Administration's High-Speed Intercity Passenger Rail (HSIPR) Program.

This form will provide information on a cohesive set of projects—representing a phase, geographic segment, or other logical grouping—that furthers a particular corridor service.

Definition: For purposes of this application, a "Corridor Program" is "a group of projects that collectively advance the entirety, or a 'phase' or 'geographic section,' of a corridor service development plan." *(Guidance, 74 Fed, Reg. 29904, footnote 4).* **A Corridor Program must have independent utility and measurable public benefits.**

In addition to this application form and required supporting materials, applicants are required to submit a Corridor Service Overview.

An applicant may choose to represent its vision for the entire, fully-developed corridor service in one application or in multiple applications, provided that the set of improvements contained in each application submitted has independent utility and measurable public benefits. The same Service Development Plan may be submitted for multiple Track 2 Applications. Each Track 2 application will be evaluated independently with respect to related applications. Furthermore, FRA will make its evaluations and selections for Track 2 funding based on an entire application rather than on its component projects considered individually.

We appreciate your interest in the HSIPR Program and look forward to reviewing your entire application. If you have questions about the HSIPR program or the Application Form and Supporting Materials for Track 2, please contact us at HSIPR@dot.gov.

Instructions for the Track 2 Application Form:

- Please complete the HSIPR Application electronically. See Section G of this document for a complete list of the required application materials.
- In the space provided at the top of each section, please indicate the Corridor Program name, date of submission (mm/dd/yyyy), and an application version number assigned by the applicant. The Corridor Program name must be identical to the name listed in the Corridor Service Overview Master List of Related Applications. Consisting of less than 40 characters, the Corridor Program name must consist of the following elements, each separated by a hyphen: (1) the State abbreviation of the State submitting this application; (2) the route or corridor name that is the subject of the related Corridor Service Overview; and (3) a descriptor that will concisely identify the Corridor Program's focus (e.g., HI-Fast Corridor-Main Stem).
- Section B, Question 10 requires a distinct name for each project under this Corridor Program. Please the following the naming convention: (1) the State abbreviation; (2) the route or corridor name that forms part of the Corridor Program name; and (3) a project descriptor that

will concisely identify the project's focus (e.g., HI-Fast Corridor-Wide River Bridge). For projects previously submitted under another application, please use the **same name** previously used on the project application.

- For each question, enter the appropriate information in the designated gray box. If a question is not applicable to your Track 2 Corridor Program, please indicate "N/A."
- Narrative questions should be answered within the limitations indicated.
- Applicants must up load this completed and all other application materials to www.GrantSolutions.gov by October 2, 2009 at 11:59 pm EDT.
- Fiscal Year (FY) refers to the Federal Government's fiscal year (Oct. 1- Sept. 30).

A. Point of Contact and Application Information

(1) Application Point of Contact (POC) Name: **Rodney P. Massman**		**POC Title:** **Administrator of Railroads**		
Applicant State Agency or Organization Name: **Missouri Department of Transportation**				
Street Address: **2217 St. Mary's Blvd.**	**City:** **Jefferson City**	**State:** **MO**	**Zip Code:** **65109**	**Telephone Number:** **573-751-7476**
Email: rodney.massman@modot.mo.gov		**Fax: 573-526-4709**		

B. Corridor Program Summary

(1) Corridor Program Name: MO-KC to STL Corridor-New Locomotive and Passenger Equipment

(2) What are the anticipated start and end dates for the Corridor Program? *(mm/yyyy)*
Start Date: 01/01/11 **End Date:** equipment will be used indefintely

(3) Total Cost of the Corridor Program: (Year of Expenditure (YOE) Dollars*) $ $50,000,000.00

Of the total cost above,, how much would come from the FRA HSIPR Program: (YOE Dollars**) $ $50 M total,

Indicate percentage of total cost to be covered by matching funds: 0 %

Please indicate the source(s) for matching funds: N/A

***** Year-of-Expenditure (YOE) dollars are inflated from the base year. Applicants should include their proposed inflation assumptions (and methodology, if applicable) in the supporting documentation.
** This is the amount for which the Applicant is applying.

(4) Corridor Program Narrative. *Please limit response to 12,000 characters.*

Describe the main features and characteristics of the Corridor Program, including a description of:

- The location(s) of the Corridor Program's component projects including name of rail line(s), State(s), and relevant jurisdiction(s) (include a map in supporting documentation).
- How this Corridor Program fits into the service development plan including long-range system expansions and full realization of service benefits.
- Substantive activities of the Corridor Program (e.g., specific improvements intended).
- Service(s) that would benefit from the Corridor Program, the stations that would be served, and the State(s) where the service operates.
- Anticipated service design of the corridor or route with specific attention to any important changes that the Corridor Program would bring to the fleet plan, schedules, classes of service, fare policies, service quality standards, train and station amenities, etc.
- How the Corridor Program was identified through a planning process and how the Corridor Program is consistent with an overall plan for developing High-Speed Rail/Intercity Passenger Rail service, such as State rail plans or plans of local/regional MPOs.
- How the Corridor Program will fulfill a specific purpose and need in a cost-effective manner.
- The Corridor Program's independent utility.
- Any use of new or innovative technologies.
- Any use of railroad assets or rights-of-way, and potential use of public lands and property.
- Other rail services, such as commuter rail and freight rail that will make use of, or otherwise be affected by, the Corridor Program.
- Any PE/NEPA activities to be undertaken as part of the Corridor Program, including but not limited to: design studies and resulting program documents, the approach to agency and public involvement, permitting actions, and other key activities and objectives of this PE/NEPA work.

This request is for equipment to support the current Amtrak route located on the Union Pacific railroad in Missouri along the *Missouri RiverRunner* route. This route's state-supported Amtrak service has existed for more than 30 years. There are 10 Amtrak stations along the route that include St. Louis, Kirkwood, Washington, Hermann, Jefferson City, Sedalia, Warrensburg, Lee's Summit, Independence

and Kansas City. There is no commuter rail service on this line. The only freight use is by Union Pacific freight trains, which will also benefit from faster passenger trains that would no longer compete with slower freight trains for the same track.

This project will improve accessibility, passenger comfort and reliability of on-time performance through better equipment along the entire Union Pacific corridor in Missouri between St. Louis and Kansas City. It will enhance the future provision of 110-mph service since equipment that is reliable and comfortable is key to improving passenger service. This application, along with the additional MoDOT infrastructure projects requested in Tracks 1a and 1b, will improve the efficiency and effectiveness of the service. However, the actual passenger comfort will be most enhanced by this application, which would affect the coach cars and café service cars.

This project was planned in conformance to the Midwest Regional Rail Initiative (MWRRI), and Missouri's passenger rail improvement plan has been a part of the MWRRI scope and improvements since 1996. The MWRRI began in 1996 under the auspices of the Mississippi Valley Conference – a regional division of the American Association of State Highway and Transportation Officials. Sponsors of the MWRRI include the states of Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio and Wisconsin, Amtrak and the Federal Railroad Administration. A steering committee comprised of representatives from Amtrak and the nine states was developed to provide organizational structure. The steering committee supplied oversight and direction to the consultant team, which started research into the viability of an enhanced Midwest rail system. Based on favorable results from these early 1990's corridor-specific studies, a vision emerged for developing an integrated Chicago Hub regional rail system. An integrated system would allow MWRRI to benefit from reduced costs through economies of scale and better equipment use, and from an increase in its interconnecting passenger revenues.

- In 1998, the MWRRI consortium, in cooperation with the consultant team, released a draft *1998 Plan* report outlining estimated costs and detailing the potential benefits of the rail network. This analysis evaluated alternative speed options: 79 mph, 100 mph and 125 mph. The planning process involved 12 tasks grouped in six stages. Intensive market research and stated preference surveys resulted in development of an initial demand forecast for the feasibility study. This study determined that a 110-mph system was the best fit to the Midwest region's needs and that this intermediate speed option would provide an affordable, and operationally and economically viable system.
- In 1999, the *2000 Plan* efforts began. This phase focused on 110-mph operations, resulting in considerable refinement to the operating and cost assumptions. An institutional workshop was held to develop alternatives for system financing and governance. A detailed financial plan, ramp-up plan, branch-line analysis and express-parcel market assessment were also developed. An equipment vendors' workshop was held to refine vehicle life-cycle costs with Talgo, Bombardier and Adtranz participating. The *2000 Plan* report presented, at a feasibility level, a complete assessment of MWRRI market potential, delineated expected system operating and capital costs, outlined a strategy for funding capital needs, suggested a financing plan and provided a cost-benefit analysis.
- From 2002-2004, the current *2004 Plan* recognizes that the MWRRI will share infrastructure with freight railroads, and therefore, this portion of the planning process was undertaken largely to address freight railroads' concerns. During this phase, substantial line capacity simulation work was performed, route-specific track maintenance costs were developed, the infrastructure capital plan was refined, and a detailed feeder-bus and express-parcel operations plans were developed.

The ideal and typical day analyses produced as part of the *2000 Plan* represent the most current work available; however, due to funding constraints, the analyses have not been updated to reflect the latest *2004 Plan* assumptions. Some assumptions may have changed since those sections were originally completed, but any such older material is clearly marked with a notation that it represents work previously performed for, and approved by, the MWRRI Steering Committee.

At the conclusion of each planning phase, the financing plan, operating ratios and benefit/cost analysis were updated to reflect the most current assumptions. In a few situations, previous financial results were retained in the report, so the reader can see how some of the planning assumptions have evolved over time. However, whenever this occurs, previous results are identified with respect to which planning report (i.e., 1998, 2000) they apply. The most up-to date results are associated only with current planning in the *2004 Plan.*

The proposed Midwest Regional Rail System Service (MWRRS) attributes (including Missouri) include new rolling stock operating at significantly faster speeds than existing equipment and offering more on-board amenities designed to meet the needs of business and leisure travelers. Train stations will be renovated to provide comfortable, attractive waiting areas with customer-friendly information services. Larger stations should feature food service, retail space and connections to local transportation. There will be a feeder-bus network to facilitate access to the stations, and its schedules and fares will be coordinated with the passenger rail schedules to provide essentially seamless travel throughout Missouri and the Midwest region.
The principal service attributes of the MWRRS are:

- Use of modern equipment (this application will further this important goal);
- Improved travel times and frequencies;
- Competitive fares that maximize revenue yields;

- ❑ Improved accessibility and reliability; and
- ❑ On-board and station amenities.

On-board food service provides the main source of ancillary revenues, but a same-day priority parcel service is an optional, ancillary business that may also be provided in conjunction with passenger rail service. To be conservative, MWRRS operating ratios and the financial plan were developed without inclusion of parcel service. However, a set of operating ratios with express parcel service has also been developed for estimating purposes.

Missouri's application for train equipment conforms to the MWRRI most importantly in the four following areas.

1. Use of Modern Equipment

It is proposed that Missouri, and the MWRRS, as a whole will use modern, cost-effective technology for achieving the desired speed of 110-mph. Principal advantages of modern train technology include low operating costs, high-performance levels and efficient handling characteristics. Along with anticipated economies of scale, modern technology reduces operating costs when compared to existing Amtrak practice. In the earlier *2000 Plan*, European costs were measured at 40 percent of Amtrak's costs. However, in the current 2004 study, train-operating costs have been significantly increased to a level that is approximately 80 percent of Amtrak's costs today. This is regarded as a conservative assumption for a modern, 63-train system (when the entire MWRRI is included). Costs assumed in this study are specific to a large operation with economies of scale and may not apply to a smaller system. The modern train provides a wide range of comfort and convenience geared to 21st century travel.

2. Improved Travel Times and Frequencies

Travel time and frequency of service are the two key factors travelers consider when selecting a mode of travel. Missouri and the MWRRS will offer an attractive mix of travel times and train schedules to accommodate business as well as leisure travelers. Improved travel times and increased frequency of service will serve to foster connectivity throughout the region and strengthen the overall attractiveness and performance of the MWRRS. The market assessment undertaken in the MWRRI's 2004 plan represents an analysis of the full social and business market potential for the MWRRS. The study of the passenger rail market opportunities includes an analysis of consumer preferences, market segments, competitive travel modes and the longer-term socioeconomic trends in income, employment and population that affect overall travel levels, and consumer choices and mode selection behavior. An assessment of expected demand and revenue projections is critical to assuring the operational feasibility of a $7.7 billion passenger rail capital infrastructure project. To develop a full understanding of the market for passenger rail service in Missouri and the Midwest region, an extensive analysis was made of all travel in the Midwest region.

3. Market Opportunities

Missouri will benefit immensely from being connected to the entire MWRRS. With a population of just over 9 million, Chicago is the largest metropolitan area served by the MWRRS. Nearly 30 percent of intercity trips made by air, rail and bus in the region begin or end in Chicago. Missouri's major regional centers connected by the MWRRS include St. Louis (2.6 million) and Kansas City (1.8 million). The MWRRS encompasses a rail network of more than 3,000 route miles and serves a population of nearly 60 million. About 80 percent of the region's population lives within an hour drive of either an MWRRS rail or bus station. The passenger rail market analysis confirms there is a substantial market for intercity travel between all the cities on the MWRRS network. In many markets, the MWRRS provides a faster and more cost-effective alternative to auto and bus travel. Furthermore, the MWRRS provides a more cost-effective means of travel than air in many of the smaller, urban areas on or near an MWRRS corridor. Increased connectivity between regional centers and smaller urban areas is critical to the region's continued economic growth. In many cases, small, urban areas are today dependent on auto connections and lack competitive public modes of travel

4. MWRRI Institutional Arrangements

Missouri will continue its active involvement in the MWRRS governance and continuous improvements process. At this stage in the MWRRI planning process, establishing a formal managing entity through a Joint Powers Agreement (JPA) for MWRRS implementation and operation activities has not occurred; however, the recent agreement signed and the establishment of a steering committee between the governors of the eight states involved will provide increased focus, visibility and support for the MWRRI. It is assumed in the future that the MWRRI JPA could provide coordinated oversight and management responsibility for MWRRS planning and, funding, and financial and service-related elements. Additionally, it could serve as the entity to formally and collectively set MWRRI policies and priorities, and also provide ongoing implementation and operations-related oversight. As a group, Missouri and the Midwest states are far more along in these institutional arrangements than any other similarly situated area in the country, and the various agreements and arrangements that have already been made will provide a firm foundation for continued future corridor development programs.

(5) Describe the service objective(s) for this Corridor Program *(check all that apply):*

- ☐ Additional Service Frequencies
- ☒ Improved Service Quality
- ☐ Improved On-Time performance on Existing Route
- ☐ Reroute Existing Service
- ☐ Increased Average Speeds/Shorter Trip Times
- ☐ New Service on Existing IPR Route
- ☐ New Service on New Route
- ☒ Other *(Please Describe):* Improved and more accessible equipment

(6) Right-of-Way-Ownership. Provide information for all railroad right-of-way owners in the Corridor Program area. Where railroads currently share ownership, identify the primary owner. *If more than three owners, please detail in Section F of this application.*

Type of Railroad	Railroad Right-of-Way Owner	Route Miles	Track Miles	Status of agreements to implement projects
Class 1 Freight	Union Pacific Railroad	283	424	Preliminary Executed Agreement/MOU
Class 1 Freight				Master Agreement in Place
Class 1 Freight				Master Agreement in Place

(7) Services. Provide information for all existing rail services within Corridor Program boundaries (freight, commuter, and intercity passenger). *If more than three services, please detail in Section F of this application.*

Type of Service	Name of Operator	Top Speed Within Boundaries		Number of Route Miles Within Boundaries	Average Number of Daily One-Way Train Operations within Boundaries[1]	Notes
		Passenger	Freight			
Freight	Union Pacific Railroad	*varies but top speed is 79	*varies but top speed is 70	283	38	Before economic downturn
Intercity Pass	Amtrak	*varies but top speed is 79	*varies but top speed is 70	283	4	current
Freight						

(8) Rolling Stock Type. Describe the fleet of locomotives, cars, self-powered cars, and/or trainsets that would be intended to provide the service upon completion of the Corridor Program. *Please limit response to 2,000 characters.*

Locomotives and cars will conform to MWRRI specifications:

The stock will be assembled as a train-set – the composite of about 85-ft. long corrosion-resistant shelled coaches and locomotives on each end providing propulsion and supplemental braking. Cars will be semi-permanently coupled in blocks based on a method that maintains them uniformly and cycles the train-set for maintenance as a complete unit.

The power cars will be able to be separated for maintenance using standard uncoupling techniques. They require more intense and frequent maintenance than the block of cars.

Cars will include -

- Air brakes (pneumatic control & distribution)

[1] One round trip equals two one-way train operations.

- Heat, ventilation, air conditioning
- Doors, door controls
- Lights (ambient & emergency)
- Car body features (seats, floor covering, wall &ceiling panels, partitions, windows, luggage bins, low-level platform access)
- Electrical power distribution (incl. high-voltage & low-voltage power supply / distribution)
- Trucks (wheels, suspension & monitoring systems, brake equipment mounting, bearings)
- Coupling system
- Train line data & communication networks
- Public address & communications systems
- Lavatory rooms & associated systems

Food service cars will be designed and equipped to meet Amtrak requirements.

Power cars will use ultra-low sulfur diesel fuel. Each car will have 2 diesel engines providing mechanical energy that converts to electrical energy distributed on a DC-link supporting electrical power and inverters for propulsion. The operating cab will control the propulsion system and synchronize between the lead and trailing power cars for uniform propulsion and dynamic braking.

The power cars will provide compressed air pneumatic power for air brakes. All FRA structural requirements will be applied to power cars and coaches that have train control equipment and ATC. The power cars will have dedicated, ergonometric friendly cab space with a console equipped to facilitate train operation/communication with operation controls.

(9) Intercity Passenger Rail Operator. If applicable, provide the status of agreements with partners that will operate the benefiting high-speed rail/intercity passenger rail service(s) (e.g., Amtrak). If more than one operating partner is envisioned, please describe in Section F.

Name of Operating Partner: Amtrak

Status of Agreement: Preliminary executed agreement/MOU

(10) Master Project List. Please list all projects included in this Track 2 Corridor Program application in the table below. If available, include more detailed project costs for each project as a supporting form (see Section G below).

Project Name	Project Type	Project Description	Project Start Date (*mm/yyyy*)	Estimated Project Cost (Millions of YOE Dollars, One Decimal)		Was this Project included in a prior HSIPR application? Indicate track number(s).	Are more detailed project costs included in the Supporting Forms?
				Total Cost	Amount Applied For		
MO-KC to St. Louis Corridor-New Locomotive and Passenger Equipment	Acquire New	New locomotives, café/business class cars, and passenger cars	01/01/11	$50M	$50M	Yes,Preapplication	Yes
N/A	PE/ NEPA						Yes
"	PE/ NEPA						Yes
"	PE/ NEPA						Yes
"	PE/ NEPA						Yes
"	PE/ NEPA						Yes
"	PE/ NEPA						Yes
"	PE/ NEPA						Yes
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"	PE/ NEPA						Yes

Note: In addition to **program** level supporting documentation, all applicable **project** level supporting documentation is required prior to award. If project level documentation is available now, you may submit it; however, if it is not provided in this application, this project may be considered as a part of a possible Letter of Intent but will not be considered for FD/Construction grant award until this documentation has been submitted.

In narrative form, please describe the sequencing of the projects listed in Question 10. Which activities must be pursued sequentially, which can be done at any time, and which can be done simultaneously? *Please limit response to 4,000 characters.*

There is only one project in Question 10, but there are other Track 1-a and Track 1-b applications that have been applied for by MoDOT. Since the project applied for in this application is substantially different from all other applications in that it is equipment and not infrastructure, this project and application can proceed simultaneously along with any of the other projects.

C. Eligibility Information

(1) Select applicant type, as defined in Appendix 1.1 of the HSIPR Guidance:

☒ State
☐ Amtrak

If one of the following, please append appropriate documentation as described in Section 4.3.1 of the HSIPR Guidance:

☐ Group of States
☐ Interstate Compact
☐ Public Agency established by one or more States
☐ Amtrak in cooperation with a State or States

(2) Establish completion of all elements of a Service Development Plan. Note: One Service Development Plan may be referenced in multiple Track 2 Applications for the same corridor service.
Please provide information on the status of the below Service and Implementation Planning Activities:

	Select One of the Following:			**Provide Dates for all activities:**	
	No study exists	Study Initiated	Study Completed	Start Date (mm/yyyy)	Actual or Anticipated Completion Date (mm/yyyy)
Service Planning Activities/Documents					
Purpose & Need/Rationale	☐	☒	☐	1-1-04	9-30-09
Service/Operating Plan	☐	☒	☐	1-1-04	9-30-09
Prioritized Capital Plan	☐	☒	☐	1-1-04	9-30-09
Ridership/Revenue Forecast	☐	☒	☐	1-1-04	9-30-09
Operating Cost Forecast	☐	☒	☐	1-1-04	9-30-09
Assessment of Benefits	☐	☒	☐	1-1-04	9-30-09
Implementation Planning Activities/Documents					
Program Management Plan	☐	☒	☐	1-1-04	10-1-10
Financial Plan (capital & operating – sources/uses)	☐	☒	☐	1-1-04	10-1-10
Assessment of Risks	☐	☒	☐	1-1-04	10-1-10

(3) Establish Completion of Service NEPA Documentation (the date document was issued and how documentation can be verified by FRA). The following are approved methods of NEPA verification (in order of FRA preference): 1) References to large EISs and EAs that FRA has previously issued, 2) Web link if NEPA document is posted to a website (including www.fra.gov), 3) Electronic copy of non-FRA documents attached with supporting documentation, or 4) a hard copy of non-FRA documents (large documents should not be scanned but should be submitted to FRA via an express delivery service). See HSIPR Guidance Section 1.6 and Appendix 3.2.9.

Note to applicants: Prior to obligation of funds for FD/Construction activities under Track 2, all project specific documents will be required (e.g. Project NEPA, Financial Plan, and Project Management Plan).

Documentation	**Date** *(mm/yyyy)*	**Describe How Documentation Can be Verified**
Non-tiered NEPA EA (Categorical exclusion)	1-1-04	attached
Tier 1 NEPA EA		
Tier 1 NEPA EA		

(4) Indicate if there is an environmental decision from FRA (date document was issued and web hyperlink if available)

Documentation	**Date** *(mm/yyyy)*	**Hyperlink** *(if available)*
Finding of No Significant Impact--No Decision	N/A	N/A
Finding of No Significant Impact		
Finding of No Significant Impact		

D.Public Return on Investment

(1) 1A. Transportation Benefits. *See HSIPR Guidance Section 5.1.1.1. Please limit response to 8,000 characters.*

How is the Corridor Program anticipated to improve Intercity Passenger Rail (IPR) service? Describe the overall transportation benefits, including information on the following *(please provide a level of detail appropriate to the type of investment):*

- Introduction of new IPR service: Will the Corridor Program lead directly to the introduction of a new IPR service that is not comparable to the existing service (if any) on the corridor in question? Describe the new service and what would make it a significant step forward in intercity transportation.
- IPR network development: Describe projected, planned, and potential improvements and/or expansions of the IPR network that may result from the Corridor Program, including but not limited to: better intermodal connections and access to stations; opportunities for interoperability with other services; standardization of operations, equipment, and signaling; and the use of innovative technologies.
- IPR service performance improvements *(also provide specific metrics in table 1B below)*: Please describe service performance improvements directly related to the Corridor Program, as well as a comparison with any existing comparable service. Describe relevant reliability improvements (e.g., increases in on-time performance, reduction in operating delays), reduced schedule trip times, increases in frequencies, aggregate travel time savings (resulting from reductions to both schedule time and delays, e.g., expressed in passenger-minutes), and other relevant performance improvements.
- Suggested supplementary information (*only when applicable*):
  - Transportation Safety: Describe overall safety improvements that are anticipated to result from the Corridor Program, including railroad and highway-rail grade crossing safety benefits, and benefits resulting from the shifting of travel from other modes to IPR service.
  - Cross-modal benefits from the Corridor Program, including benefits to:
    - ✓ Commuter Rail Services – Service improvements and results (applying the same approach as for IPR above).
    - ✓ Freight Rail Services – Service performance improvements (e.g., increases in reliability and capacity), results (e.g. increases in ton-miles or car-miles of the benefiting freight services), and/or other congestion, capacity or safety benefits.
    - ✓ Congestion Reduction/Alleviation in Other Modes; Delay or Avoidance of Planned Investments – Describe any expected aviation and highway congestion reduction/alleviation, and/or other capacity or safety benefits. Also, describe any planned investments in other modes of transportation (and their estimated costs if available) that may be avoided or delayed due to the improvement to IPR service that will result from the Corridor Program.

There are many transportation benefits associated with this project that will improve equipment and services along the route. Equipment that is usable and attractive is of paramount importance to the route's future success and should generate excitement and new riders. The improved reliability of newer equipment means fewer breakdowns and mechanical problems, which help attract and maintain increased ridership. The current service historically has had older equipment and poor on-time performance. The on-time performance has greatly improved recently, so if the equipment could also be improved, the synergy between the two could combine to create ridership gains never before realized on this route.

The *Missouri River Runner* Amtrak service, which would be the primary beneficiary of the new equipment, has four trains per day that connect to large metropolitan areas. In St. Louis, there are connections to five Amtrak trains to Chicago, one to San Antonio and one Amtrak bus connector to Carbondale, Illinois. These connections are based in the recently expanded St. Louis Gateway Center, which makes it possible to house all services in one building. Also at the center is several intercity bus services, city bus service and MetroLink light rail system, which connects to the airport and many other areas of the St. Louis metro region.

In Kansas City, the *Missouri River Runner* service connects to one train to Chicago and one train to Los Angeles. Plans are

to also provide for the Heartland Flyer service to connect to Wichita, Oklahoma City and Dallas. These connections are all based in the Union Station complex, which joins hotels and attractions through a skyway.

The service improvements would complement the Track 1a and 1b projects which outline the many proposed infrastructure projects, most of which are in the attached document highlighting a recent University of Missouri study of Amtrak delays and their causes.There are currently no cross-state bus routes that provide the service along the same Amtrak corridor, thus the service would have a monopoly and be in the best position to take advantage of the market (see attached document for bus detail) All future growth projections are in conformance with future MWRRI projections. It is expected that when the MWRRI connections become more widely known, passenger numbers will further increase.

When the combination of both new equipment and further connections are widely disseminated, the growth of the service could be exponential. Passenger numbers are currently increasing on the *Missouri River Runner* route. These numbers increased 10 percent from fiscal year 2008 to fiscal year 2009 and are expected to significantly increase with a reliable on-time performance -- something that has been sought for many years. There is no commuter rail service on the line. There is also potential for growth in passenger service as both MWRRI and a 1996 MOU between MoDOT and UP (see attached) show that at least three further slots have been preserved for this line, which could bring the *Missouri River Runner* service to five daily round trips.

1B. Operational and Ridership Benefits Metrics: In the table(s) below, provide information on the anticipated levels of transportation benefits and ridership that are projected to occur in the corridor service or route, following completion of the proposed Corridor Program.

Note: The "Actual—FY 2008 levels" only apply to rail services that currently exist. If no comparable rail service exists, leave column blank.

Corridor Program Metric	Actual – FY 2008 levels	Projected Totals by Year		
		First full year of operation	Fifth full year of operation	Tenth full year of operation
Annual passenger-trips	151,691	155,000	170,000	220,000
Annual passenger-miles (millions)	28,327,133	35,000,000	40,000,000	50,000,000
Annual IPR seat-miles offered (millions)	80,156,920	80,156,920	120,000,000* dependent on legislative appropriation	*150,000,000 dependent on legislative appropriation
Average number of daily round trip train operations (typical weekday)	2	2	3*dependent on legislative appropriation	*3-4 dependent on legislative appropriation
On-time performance (OTP)[2]– percent of trains on time at endpoint terminals	18%	80%	85%	90%
Average train operating delays: minutes of en-route delays per 10,000 train-miles[3]	3,227.871	3,000.00	2,800.00	2,600.00

[2] 'On-time' is defined as within the distance-based thresholds originally issued by the Interstate Commerce Commission, which are: 0 to 250 miles and all Acela trains—10 minutes; 251 to 350 miles—15 minutes; 351 to 450 miles—20 minutes; 451 to 550 miles—25 minutes; and 551 or more miles—30 minutes.

[3] As calculated by Amtrak according to its existing procedures and definitions. Useful background (but not the exact measure cited on a route-by-route basis) can be found at pages E-1 through E-6 of Amtrak's May 2009 Monthly Performance Report at http://www.amtrak.com/pdf/0905monthly.pdf

Top passenger train operating speed (mph)	79	79	90	90
Average scheduled operating speed (mph) (between endpoint terminals)	49.94	55	58	60

(2) A. Economic Recovery Benefits: *Please limit response to 6,000 characters. For more information, see Section 5.1.1.2of the HSIPR Guidance.*

Describe the contribution the Corridor Program is intended to make towards economic recovery and reinvestment, including information on the following:

- How the Corridor Program will result in the creation and preservation of jobs, including number of onsite and other direct jobs (on a 2,080 work-hour per year, full-time equivalent basis), and timeline for achieving the anticipated job creation.
- How the different phases of the Corridor Program will affect job creation (consider the construction period and operating period).
- How the Corridor Program will create or preserve jobs or new or expanded business opportunities for populations in Economically Distressed Areas (consider the construction period and operating period).
- How the Corridor Program will result in increases in efficiency by promoting technological advances.
- How the Corridor Program represents an investment that will generate long-term economic benefits (including the timeline for achieving economic benefits and describe how the Corridor Program was identified as a solution to a wider economic challenge).
- If applicable, how the Corridor Program will help to avoid reductions in State-provided essential services.

The *High-Speed Intercity Rail Plan's* overall goal for Missouri's St. Louis-to-Kansas City Amtrak route is to reduce delay time for both passenger and freight trains by adding additional rail sidings and enhancing existing rail infrastructure. The project would span the distance between Kansas City and St. Louis. The first phase involves three shovel-ready projects with a combined investment of approximately $34 million. An additional eight projects along the corridor will complete Track 1 projects with a combined investment of $101 million. Total investment for the Missouri plan is estimated at just over $200 million, with $151.3 million in infrastructure and $50 million in new passenger rail equipment.

The creation and manufacturing of new passenger rail equipment will provide new opportunities for manufacturers, factories, workers and designers in several Midwestern states. Project construction will most likely be located in the economically distressed area of the Midwest, and possibly in Missouri. Total project investment, which includes design, development, construction and delivery, is $50 million and is estimated to create on average annually 734 jobs in the construction phase (130 direct jobs/604 indirect jobs) and one job in the operations phase. These jobs will pay an average wage of $52,368; this level of wages indicates the jobs created will be mostly of high quality. The investment will increase employment in areas such as manufacturing, health care and social assistance, professional and technical services, accommodation and food services. The region will benefit from a short-term impact of increased personal income growth and productivity.

For the manufacturing period, every dollar invested returns (benefit-cost ratio):
0.87: 1.00 in new personal income totaling $34.959 million
1.67: 1.00 in new value-added (GRP) totaling $83.399 million
3.24: 1.00 in new economic activity (output) totaling $162.130 million

Please see the attached analysis for the additional program-specific report of economic benefits provided by the Missouri Department of Economic Development's Missouri Economic Research and Information Center.

2B. Job Creation. Provide the following information about job creation through the life of the Corridor Program. Please consider construction, maintenance and operations jobs.

Anticipated number of onsite and other direct jobs created (on a 2080 work-hour per year, full-time equivalent basis).	FD/ Construction Period	First full year of operation	Fifth full year of operation	Tenth full year of operation
	130	1	1	1

(3) Environmental Benefits. *Please limit response to 6,000 characters.*

How will the Corridor Program improve environmental quality, energy efficiency, and reduce in the Nation's dependence on oil? Address the following:

- Any projected reductions in key emissions (CO2, O^3, CO, PMx, and NOx) and their anticipated effects. Provide any available forecasts of emission reductions from a baseline of existing travel demand distribution by mode, for the first, fifth, and tenth years of full operation *(provide supporting documentation if available).*
- Any expected energy and oil savings from traffic diversion from other modes and changes in the sources of energy for transportation. Provide any available information on changes from the baseline of the existing travel demand distribution by mode, for the first, fifth, and tenth years of full operation (*provide supporting documentation if available*).
- Use of green methods and technologies. Address green building design, "Leadership in Environmental and Energy Design" building design standards, green manufacturing methods, energy efficient rail equipment, and/or other environmentally-friendly approaches.

A key project goal is to replace outdated energy-consuming equipment with new more fuel-efficient equipment. This will complement the existing infrastructure improvements by dramatically decreasing the overall wait times for trains traveling on the UP line. By reducing the wait times at various points along the route, the amount of fuel wasted by unnecessary engine idling will also dramatically decrease. Based on the reduction in idling, emission reductions for the criteria pollutants of NOx, CO and PM were calculated. As a diesel engine also emits CO2, reducing idling will also cut CO2 emissions. However, at this time, the U.S. Environmental Protection Agency has not released a guidance document on how to calculate CO2 emissions and reductions for diesel train engines.

Reducing the emissions of NOx, CO and PM will also result in environmental benefits to the surrounding areas all along the route. Although the new equipment will still have an impact, it will be much more fuel-efficient and energy-friendly. It will reduce the negative impacts to all aspects of the environment including wildlife, nearby citizens, vegetation and crops.

Diesel exhaust is high in various types of PM, some of which are classified as hazardous air pollutants (considered to be hazardous to human health). The health impacts of fine particulates are well documented and include decreased lung function, aggravation of asthma, irregular heartbeat and premature mortality in those who suffer from cardiac and lung disease. NOx is a major constituent of diesel emissions and one of the two pollutants that combine to form ozone, another criteria pollutant that has a well-documented negative impact on the environment, specifically vegetative and human health.

Emission reduction calculations were performed for NOx, CO and PM to assess the environmental benefits of (as one example) the Osage River Bridge project. Using a modeled delay reduction for both Amtrak and Union Pacific trains, average fuel use per engine at idle and USEPA emission factors relating pollutant mass emissions to each gallon of fuel consumed, emission reductions were estimated. Emissions of NOx are estimated to decrease 217 tons per year after the project's completion. CO emissions would decrease by 38 tons per year, and PM emissions would decrease by 8 tons per year. Although this analysis was performed using current equipment, each of these expected achievements would be expected to increase using new rather than the existing old equipment due to newer and better diesel technology.

Rail travel consumes less energy per passenger mile than car or air travel. By diverting 10 percent of the freight moved on highways to rail, the nation could save as much as one billion gallons of fuel annually. Amtrak is committed to a 6 percent reduction in carbon dioxide emissions by voluntary committing to meet greenhouse gas emission reduction targets. Newer and better equipment will help the state and Amtrak achieve its milestones toward this goal.

(4) Livable Communities Corridor Program Benefits Narrative. (*For more information, see Section 5.1.1.3 of the HSIPR Guidance, Livable Communities)***.** *Please limit response to 3,000 characters.*

How will the Corridor Program foster Livable Communities? Address the following:

- Integration with existing high density, livable development: Provide specific examples, such as (a) central business districts with walking/biking and (b) public transportation distribution networks with transit-oriented development.
- Development of intermodal stations: Describe such features as direct transfers to other modes (both intercity passenger transport and local transit).

One of the project's goals is to improve dependability and speed of Amtrak service between St. Louis and Kansas City. This service connects 10 diverse communities including Missouri's two largest major metropolitan areas, the state capital and several popular historic towns. Improving the service will synergistically support the existing transportation systems providing intermodal access to an abundance of work- and tourist-related locations within these 10 communities. There is no intercity bus service provided on the same routes as the Amtrak route (see attached map), so there is a need for the service.

The newly opened (2008) Gateway Transportation Center in downtown St. Louis combines access from Amtrak's Chicago and other national trains to the local transit systems (light rail and bus), taxis and intercity buses. It is also close to many other downtown attractions and sights.

In Hermann, Sedalia and Jefferson City, passengers can access the Katy Trail State Park, which is Missouri's most popular hiking/biking facility and the nation's longest rails-to-trails conversion. Amtrak and Missouri partnered to provide specific accommodation for bicycles on trains in response to passengers desiring to take bikes along for trail rides. Also in Sedalia, the OATS transit system shares the building with the Amtrak station.

In Warrensburg, home of the University of Central Missouri, the local bus system includes the Amtrak station along with 14 other regular stops. In Kansas City, the Amtrak station is located at Union Station, which is a local bus transfer facility offering access to the metropolitan area and access to downtown through a metropolitan skyway.

In addition to these locations with interconnectability to other transportation facilities, six of the Amtrak stations provide direct access to historic downtown business areas with stores, restaurants, wineries and lodging within walking distance. The expected improvements to Amtrak service will foster positive enhancement to livable communities.

E. Application Success Factors

(1) Project Management Approach and Applicant Qualifications Narrative. *Please provide separate responses to each of the following. Additional information on program management is provided in Section 5.1.2.1 of the HSIPR Guidance, Project Management.*

1A. Applicant qualifications.
Management experience: Does the applicant have experience in managing rail investments and Corridor Programs of a similar size and scope to the one proposed in this application?

☒ Yes - Briefly describe experience (brief project(s) overview, dates)
☐ No- Briefly describe expected plan to build technical and managerial capacity. Provide reference to Project Management Plan.
Please limit response to 3,000 characters.

The applicant previously secured a grant from the Federal Railroad Administration, Intercity Passenger Rail Program, Grant No. 6048 of $3,292,684, to construct a new siding at Shell Spur on the same Union Pacific-Amtrak corridor of this project. The award was made Sept. 30, 2008, and construction began May 29, 2009. Work will be completed by Dec. 31, 2009. The award was matched to a $5 million state appropriation.

An MOU and a later multifaceted agreement were signed in 2009 with the Union Pacific Railroad to facilitate the project. A grant agreement was also signed with the FRA. Both application and the current grant oversight are efforts on behalf of many areas of expertise in the Missouri Department of Transportation. Some of these areas include environmental, design, controller's office, transportation planning, governmental relations and multimodal operations. The key stakeholder/project driver in MoDOT is the railroad section. Each of these units also interfaces with Union Pacific and the actual contractor to solve problems and expedite solutions.

While this equipment project is not similar to the Shell Spur project, the rationale and the end result are the same -- to improve rail service and make it a more positive experience for all rail passengers. MoDOT has been extensively involved in all areas of the Shell Siding project including design, pre-bid process and daily updates with the contractor. It is expected that this project will be handled in concert with other states and with Amtrak, and will require extensive participation to arrive at a fully executed contract for the design and purchase of new equipment. The applicant has also applied for 11 Track 1-a and 1-b grants as well, so it is clear that all applications would be handled with the same degree of expertise and due diligence.

1B. Describe the organizational approach for the different Corridor Program stages included in this application (e.g., final design, construction), including the roles of staff, contractors and stakeholders in implementing the Corridor Program. For construction activities, provide relevant information on work forces, including railroad contractors and grantee contractors. *Please limit response to 3,000 characters.*

The previously cited Shell Spur project serves as a good overall example of the organizational approach that will be used for this proposed project. It is presumed that Amtrak will be the project's lessor and maintainer, unless otherwise determined. Therefore, extensive Amtrak participation is expected for the design and estimate, in addition to that of several other Midwestern states that would participate in similar applications.

A recent University of Missouri study shows that if Missouri's plan to complete 11 projects (including the three shovel-ready projects being proposed in Track 1a) is achieved, Amtrak delays along the corridor would decrease by 47 percent. This could exponentially increase the need for and the use of current Amtrak equipment, which leads to the serious need for new and better equipment.

This project's oversight process will follow the equipment design and procurement process, which includes these key steps: 1) an initial estimate and design for equipment supported by Amtrak, recognized in an MOU with MoDOT,that conforms to and is fully supported by the MWRRI and other MWRRI states, 2) an environmental assessment if necessary, 3) ADA compatibility at stations review, if necessary, in compliance with federal and MoDOT standards, 4) final plans' approval and final agreement entered into by Amtrak , MoDOT and potentially other Midwestern states, 5) MODOT or a single Midwestern state acting on behalf of all Midwestern states releases a request for proposals to all eligible bidders and receives at least three bids, 6) MoDOT asks for

Amtrak's or other Midwestern states' concurrence in awarding the bid -- or vice versa depending on the arrangement, 7) MoDOT and Amtrak hold a joint conference with the winning bidder to discuss expectations and reporting requirements, 8) MoDOT and/or other Midwestern states enter into its own contract with the bidder to begin construction, 9) Bidder begins construction and maintains weekly contact with both Amtrak, Midwestern states and MoDOT regarding progress and handling any issues that might occur, 10) Bidder and MoDOT agree on billing cycle and process payments, and finally, 11) MoDOT approves final project in concurrence with Amtrak and other Midwestern states, accepts equipment and arranages financial, maintenance, and upkeep arrangement with Amtrak and audits payments.

1C. Does any part of the Corridor Program require approval by FRA of a waiver petition from a Federal railroad safety regulation? (Reference to or discussion of potential waiver petitions will not affect FRA's handling or disposition of such waiver petitions).

☐ YES- If yes, explain and provide a timeline for obtaining the waivers
☒ NO
Please limit response to 1,500 characters.

N/A

1D. Provide a preliminary self-assessment of Corridor Program uncertainties and mitigation strategies (consider funding risk, schedule risk and stakeholder risk). Describe any areas in which the applicant could use technical assistance, best practices, advice or support from others, including FRA. *Please limit response to 2,000 characters.*

There is no known funding risk if the application is approved and new equipment is procured as Amtrak will continue to run and maintain the equipment and if possible do so through a shared agreement in conjunction with most or all of the other Midwestern states. Union Pacific has agreed that the new equipment procurement is of no consequence to them and shows no roadblocks to this acquisition. New equipment would also help alleviate the problems of Amtrak trains breaking down on UP tracks and holding back UP freight trains.

Amtrak's preliminary MOU in reference to equipment procurement is attached, and it has no objection to new equipment since it supports Amtrak's goals of being represented by new, modern, efficient equipment. Amtrak has demonstrated its interest and support by signing the preliminary MOU This means, barring extreme unforseen 'acts of God,' such as earthquakes, tornadoes, floods or fires, there are no schedule risks.

Amtrak has shown no propensity to discontinue service on the line as long as the state of Missouri financially supports the service, which has been in place for more than 30 years. There is no stakeholder risk. Many communities along the route have invested substantial amounts of money in their train stations, so there is a vested interest in ensuring the route's success. Thus, there is no substantial risk of cities discontinuing support of their station stops.

If MoDOT and other Midwestern states are successful with their applications, an expedited completion of the grant agreement will be appreciated. If the grant agreement could be similar to those of other Midwestern states, the project can be quickly started and the equipment easily interchanged with that of other surrounding states. MoDOT will require technical assistance but only in conjunction with ensuring conformance with amtrak and MWRRI standards. Any assistance would be similar to the FRA assistance requested during the successful implementation efforts regarding the application for an intercity passenger rail grant in 2008.

(2) Stakeholder Agreements Narrative. *Additional information on Stakeholder Agreements is provided in Section 5.1.2.2 of the HSIPR Guidance.*

Under each of the following categories, describe the applicant's progress in developing requisite agreements with key stakeholders. In addition to describing the current status of any such agreements, address the applicant's experience in framing and implementing similar agreements, as well as the specific topics pertaining to each category.

2A. Ownership Agreements – Describe how agreements will be finalized with railroad infrastructure owners listed in the "Right-of-Way Ownership" and "Service Description" tables in Section B. If appropriate, "owner(s)" may also include operator(s) under trackage rights or lease agreements. Describe how the parties will agree on Corridor Program design and scope, benefits, implementation, use of Corridor Program property, maintenance, scheduling, dispatching and operating slots, Corridor Program ownership and disposition, statutory conditions and other essential topics. Summarize the status and substance of any ongoing or completed agreements. *Please limit response to 3,000 characters.*

Amtrak will operate the service as described in paragraph 2(B). The most likely scenario will be equipment procured with Amtrak's and MWRRI's concurrance and in coordination with the other Midwestern states, so it is fully interchangeable with other Midwestern routes. An agreement is being developed with Amtrak in order to apply for this Track 2 application, and it is expected that several other agreements will be required in order to finalize the details of the equipment's ownership, leaseholding and maintenance.

Union Pacific has agreed to maintain three extra slots on its line in addition to the two existing slots. Amtrak has signed an agreement with MoDOT on the infrastructure applications, and it is not expected to be an issue obtaining the necessary agreements in order to procure and maintain the new equipment. Current stations will continue and Amtrak already has facilities that it will keep and maintain in St. Louis and Kansas City.

2B. Operating Agreements – Describe the status and contents of agreements with the intended operator(s) listed in "Services" table in the Application Overview section above. Address Corridor Program benefits, operation and financial conditions, statutory conditions, and other relevant topics. *Please limit response to 3,000 characters.*

Amtrak has approved this proposed project and recongizes it as a benefit to the Amtrak operation. Each year, MoDOT renegotiaties an annual contract with Amtrak. A copy of this contract is attached. The most recent contract was modified to specifically include language highlinging the parties' agreement to cooperate and share information on any projects involving federal grants for infrastructure.

2C. Selection of Operator – If the proposed operator railroad was not selected competitively, please provide a justification for its selection, including why the selected operator is most qualified, taking into account cost and other quantitative and qualitative factors, and why the selection of the proposed operator will not needlessly increase the cost of the Corridor Program or of the operations that it enables or improves. *Please limit response to 3,000 characters.*

Amtrak was established in 1971 and has operated the St. Louis-to-Kansas City passenger train service since then. In 1979, this line became a state-supported passenger rail service when Amtrak proposed the elimination of the link connecting Missouri's two largest metropolitan areas and the state's capital.

During the first two decades of operation, the state support needed by Amtrak to keep the line in operation steadily increased. The state legislature requested MoDOT seek a competitive bid in a quest to find an operator requiring less financial support. In both 2004 and 2005, a formal request for bids to operate the St. Louis-to-Kansas City service was extensively advertised; however, no bids were received in response to either request. Considering the current statutory advantages Amtrak enjoys, it is unlikely any other operator could compete for this service.

The conclusion made from this effort is Amtrak is the most economical provider of the passenger service.

2D. Other Stakeholder Agreements – Provide relevant information on other stakeholder agreements including State and local governments. *Please limit response to 3,000 characters.*

Current state agreements include MoDOT's participation and funding in the Midwest Regional Rail Initiative (MWRRI), the States for Passenger Rail Coalition (SPRC) and the Midwest Interstate Passenger Rail Commission (MIPRC). The state also participates in the FRA's State Participation Program for Rail Safety Inspectors pursuant to 49 USC 20105.

Each year, MoDOT contracts with local governments to spend limited funds available for station improvements selected by the local entities. MoDOT also contracts with local road authorities, including cities along the route, when crossing upgrades or improvements are made. In some cases, this is done to share costs, such as for upgrading to LED lighting, however most often, it is simply a gesture recognizing the needed improvements.

Missouri is also a member of the Midwest states' multi-state steering group on high-speed rail. This group will be an active participant and will formulate a regional plan that will address issues that conforms to the July 27, 2009, MOU signed by the governors of eight Midwestern states that highlights joint support of a regional rail system.

2E. Agreements with operators of other types of rail service - Are benefits to non-intercity passenger rail services (e.g., commuter, freight) foreseen? Describe any cost sharing agreements with operators of non-intercity passenger rail service (e.g., commuter, freight). *Please limit response to 3,000 characters.*

An MOU for this proposed project has been signed with Amtrak, and a full multifaceted agreement will be signed following the grant award for the project. A copy of the Shell Spur final agreement is attached. This is the same general format that will be used for this equipment agreement. The agreement details all aspects of the project, including design, scope, benefits, maintenance, ownership and expectations on behalf of both parties. Work on this final agreement will begin immediately when a grant is awarded. It is difficult to quantify direct benefits to the tracks' owner, Union Pacific Railroad, but it is clear that newer, more efficient equipment will solve problems of equipment breaking down or having to be maintained on the tracks of the freight railroad and delaying its trains.

(3) Financial Information

3A. Capital Funding Sources. Please provide the following information about your funding sources (if applicable).

Non FRA Funding Sources	New or Existing Funding Source?	Status of Funding[4]	Type of Funds	Dollar Amount (millions of $ YOE)	% of Program Cost	Describe uploaded supporting documentation to help FRA verify funding source
N/A	New	Committed	N/A	N/A	N/A	N/A
	New	Committed				
	New	Committed				
	New	Committed				

[4] Reference Notes: The following categories and definitions are applied to funding sources:
Committed: Committed sources are programmed capital funds that have all the necessary approvals (e.g. legislative referendum) to be used to fund the proposed phase without any additional action. These capital funds have been formally programmed in the State Rail Plan and/or any related local, regional, or State Capital Investment Program CIP or appropriation. Examples include dedicated or approved tax revenues, State capital grants that have been approved by all required legislative bodies, cash reserves that have been dedicated to the proposed phase, and additional debt capacity that requires no further approvals and has been dedicated by the sponsoring agency to the proposed phase.
Budgeted: This category is for funds that have been budgeted and/or programmed for use on the proposed phase but remain uncommitted, i.e., the funds have not yet received statutory approval. Examples include debt financing in an agency-adopted CIP that has yet to be committed in their near future. Funds will be classified as budgeted where available funding cannot be committed until the grant is executed, or due to the local practices outside of the phase sponsor's control (e.g., the phase development schedule extends beyond the State Rail Program period).
Planned: This category is for funds that are identified and have a reasonable chance of being committed, but are neither committed nor budgeted. Examples include proposed sources that require a scheduled referendum, requests for State/local capital grants, and proposed debt financing that has not yet been adopted in the agency's CIP.

3B. Capital Investment Financial Agreements. Describe any cost sharing contribution the applicant intends to make towards the Corridor Program, including its source, level of commitment, and agreement to cover cost increases or financial shortfalls. Describe the status and nature of any agreements between funding stakeholders that would provide for the applicant's proposed match, including the responsibilities and guarantees undertaken by the parties. Provide a brief description of any in-kind matches that are expected. *Please limit response to 3,000 characters.*

The MOU signed with Amtrak shows the operator's interest in and capacity to support future equipment should the application be successful. It also stipulates that the future equipment will be run and operated in accordance with MWRRI procedures in all MWRRI states. The MOU signed with UP details the railroad's 20 percent commitment to the Track 1a and 1b infrastructure applications. The MOU also addresses other projects MoDOT is applying for in order to provide a comprehensive view of the corridor. All of the projects join together to improve and complete the rail service by offering a rational, reliable mode of travel.

MoDOT is not making a direct contribution to the equipment project; however, it will oversee the project, and manage all issues and problems much the same way it is currently overseeing the Shell Spur project. MoDOT will be an active participant in Amtrak's next generation equipment committee, which this acquisition will follow. The MoDOT and Amtrak staffs will inspect the equipment before it is accepted and completed as part of current and future MOU's with Amtrak.

3C. Corridor Program Sustainability and Operating Financial Plan.

Please report on the Applicant's projections of future financial requirements to sustain the service by completing the table below (in YOE dollars) and answering the following question. Describe the source, nature, share, and likelihood of each identified funding source that will enable the State to satisfy its projected financial support requirements to sustain the operation of the service addressed in this Corridor Program. *Please limit response to 2,000 characters.*

Missouri offers two round-trip daily trains between St. Louis and Kansas City with stops in Kirkwood, Washington, Hermann, Jefferson City, Sedalia, Warrensburg, Lee's Summit and Independence. The Missouri Legislature provides financial support to the Missouri Department of Transportation for Amtrak to provide intercity passenger rail service. Funding covers the cost of operations, fuel and host railroad fees.

The current funding for the Missouri passenger rail service comes from two sources, the state's General Revenue fund and the Federal Budget Stabilization Fund. General Revenue funding makes up 39 percent of the total yearly Amtrak costs, and the Federal Budget Stabilization Fund comprises 61 percent.

General Revenue funds are allocated from the state legislature. Federal Budget Stabilization Funds are allocated to the state treasury due to the American Recovery and Reinvestment Act of 2009 to assist states in budget stabilization.

In the past, funding for this corridor came from the General Revenue and State Transportation Funds. The State Transportation Fund is designated for highway and transportation purposes other than road and highway construction and maintenance. The Missouri state legislature, on an annual basis, determines future funding for the state-supported corridor.

Note: Please enter supporting projections in the Track 2 Application Supporting Forms, and submit related funding agreements or other documents with the Supporting Materials described in Part G of this Track 2 Application. The numbers entered in this table must agree with analogous numbers in the Supporting Forms.

Funding Requirement (as identified on the Supporting Form)		**Projected Totals by Year ($ Millions Year Of Expenditure (YOE)* Dollars - One Decimal)**		
	Baseline Actual-FY 2009 Levels (State operating subsidy for FY 2009 if existing service)	**First full year of operation**	**Fifth full year of operation**	**Tenth full year of operation**
Indicate the Fiscal Year	2009	2013	2018	2023
Surplus/deficit after capital asset renewal charge[5]	8.0M	Est.*11.8M	Est.*14.3M	Est.*16.2M
Total Non-FRA sources of funds applicable to the surplus/deficit after capital asset renewal	8.0M	Est.*11.8M	Est.*14.3M	Est.*16.2M
Funding Requirements for which Available Funds Are Not Identified	0	0	0	0

* Year-of-Expenditure (YOE) dollars are inflated from the base year. Applicants should include their proposed inflation assumptions (and methodology, if applicable) in the supporting documentation.

Note: Data reported in this section should be consistent with the information provided in the Operating and Financial Performance supporting form for this application.

[5] The "capital asset renewal charge" is an annualized provision for **future** asset replacement, refurbishment, and expansion. It is the annualized equivalent to the "continuing investments" defined in the FRA's Commercial Feasibility Study of high-speed ground transportation (*High-Speed Ground Transportation for America*, September 1997, available at http://www.fra.dot.gov/us/content/515 (see pages 5-6 and 5-7).

(4) Financial Management Capacity and Capability – Provide audit results and/or other evidence to describe applicant capability to absorb potential cost overruns, financial shortfalls identified in 3C, or financial responsibility for potential disposition requirements (include as supporting documentation as needed). Provide statutory references/ legal authority to build and oversee a rail capital investment. *Please limit response to 3,000 characters.*

The legal corporate body overseeing MoDOT is the Mo. Highways and Transportation Commission (MHTC). The state constitution, Article 4 §29, gives it authority over railroad programs/facilities as provided by law and authority to plan, locate, relocate, establish, acquire, construct, maintain, control and as provided by law to operate, develop and fund public transportation facilities as part of any state rail transportation system or program.

Mo. statutes, §226.008 RSMo, give MHTC authority to administer and enforce all railroad laws in chapters 389 and 622 previously enforced by the Division of Motor Carrier and Railroad Safety. Also, §622.090 outlines MHTC's powers and duties, which extend to all railroads, to all transportation of persons or property thereon and to the person owning, leasing, operating or controlling the same; and to the portion of the lines of any other railroad within Missouri and to the person or entity owning, leasing, or operating the same, so far as concerns the construction, maintenance, equipment, terminal facilities and local transportation facilities/transportation of persons or property; and to all railroad corporations operating or doing business in Missouri.

Under §622.140, MHTC may contract with or act as an agent for the US or any agency thereof, or any railroad, that are proper, expedient, fair and equitable and in the interest of the state and its citizens, and to that end the now MHTC may receive and disburse any contributions, grants or other financial assistance as a result of or pursuant to such agreements or contracts. Lastly, §622.250 gives MHTC authority to generally supervise common carriers and to examine and keep informed as to the safety, adequacy and security afforded by them and their compliance with all provisions of law, orders and MHTC decisions. MHTC may inspect tracks and facilities of any rail carrier, including of locomotives or trains.

(5) Timeliness of Corridor Program Completion – Provide the following information on the dates and duration of key activities, if applicable. For more information, see Section 5.1.3.1 of the HSIPR Guidance, Timeliness of Corridor Program Completion.

Final Design Duration:	N/A months
Construction Duration:	N/A months
Rolling Stock Acquisition/Refurbishment Duration:	24 months
Service Operations Start date:	01/01/13 *(mm/yyyy)*

(6) If applicable, describe how the project will promote domestic manufacturing, supply and other industries, including United States-based equipment manufacturing and supply industries. *Please limit response to 1,500 characters.*

The construction of new passenger rail equipment will require a significantly large amount of manufactured goods and supplies. The equipment is to be constructed of newly manufactured steel and related items. The project also requires a wide variety of other materials including passenger-related materials, electronic signal devices, engines, windows, radio equipment and much more.

The total material cost is expected to exceed $49 million. As with the current FRA-sponsored project to build the new Shell Spur siding near California, Missouri, all purchased products will comply with the "Buy America" provisions, and local suppliers typically will be used for the commonly available items. Thus, this project will stimulate domestic supply and manufacturing industries in the Midwest and other states cross the country.

(7) If applicable, describe how the Corridor Program will help develop United States professional railroad engineering, operating, planning and management capacity needed for sustainable IPR development in the United States. *Please limit response to 1,500 characters.*

This project is one part of the plan to incrementally improve the St. Louis-to-Kansas City rail passenger infrastructure. The implementation and operation of the improved rail passenger system will exert a positive, long-term impact on the professional railroad industry. During the project implementation phase, professional railroad engineers, planners and managers will be employed to assure the improvements are properly designed and constructed. When completed, the improved infrastructure will become a part of the Midwest regional system of high-speed intercity passenger rail service. This regional system will create a greater capacity and need for efficient railroad operations and technological improvements for the next generation, thus supporting a sustainable high-speed intercity rail passenger service.

Missouri Department of Transportation and the Union Pacific Railroad foster a culture of diversity within their respective workforces, and both agencies are strong supporters of the USDOT Disadvantaged Business Enterprise (DBE) Program. MoDOT has an exceptional track record of DBE compliance with regard to the award of contracts for transportation improvement projects. In light of this long-standing, clear commitment to workforce diversity, the administration of these FRA ARRA funds will undoubtedly promote a diverse workforce as the project progresses from final design to operation of the improved rail passenger infrastructure.

F. Additional Information

(1) Please provide any additional information, comments, or clarifications and indicate the section and question number that you are addressing (e.g., Section E, Question 1B). *This section is optional.*

This project will bring sorely needed new equipment to the *Missouri River Runner* route and will thereby exponentially increase passenger numbers and comfort. One of the most important factors in the route's success is how passengers perceive their surroundings. The new equipment that is clean and reliable presents an up-to-date image of train service in the 21st century and will provide a huge boost to passenger numbers in the future.

G.Summary of Application Materials

Note: In addition to the requirements listed below, applicants must comply with all requirements set forth in the HSIPR Guidance and all applicable Federal laws and regulations, including the American Recovery and Reinvestment Act of 2009 (ARRA) and the Passenger Rail Investment and Improvement Act of 2008 (PRIIA).

Application Forms	Required for Corridor Programs	Required for Projects [See Note Below]	Reference	Comments
☒ This Application Form	✓		HSIPR Guidance Section 4.3.3.3	
☒ Corridor Service Overview (Same Corridor Service Overview may be used for multiple applications)	✓		HSIPR Guidance Section 4.3.3.3	
Supporting Forms (*Forms are provided by FRA on Grant Solutions and the FRA website*)	**Required for Corridor Programs**	**Required for Projects [See Note Below]**	**Reference**	**Comments**
☒ General Info	✓	✓	HSIPR Guidance Section 4.3.5	FRA Excel Form
☒ Detailed Capital Cost Budget	✓	✓	HSIPR Guidance Section 4.3.5	FRA Excel Form
☒ Annual Capital Cost Budget	✓	✓	HSIPR Guidance Section 4.3.5	FRA Excel Form
☒ Operating and Financial Performance and Any Related Financial Forms	✓		HSIPR Guidance Section 5.3.5	FRA Excel Form
☒ Program or Project Schedule	✓	✓	HSIPR Guidance Section 4.3.5	FRA Excel Form

Supporting Documents *(Documents to be generated and provided by the applicant)*	**Required for Corridor Programs**	**Required for Projects [See Note Below]**	**Reference**	**Comments**
☒ Map of Corridor Service	✓		Corridor Service Overview Question B.2	
☒ Service Development Plan	✓		HSIPR Guidance Section 1.6.2	
☒ "Service" NEPA	✓		HSIPR Guidance Section 1.6.2	
☒ Project Management Plan	✓		HSIPR Guidance Section 4.3.3.2	
☒ "Project" NEPA (Required before obligation of funds)		✓	HSIPR Guidance Section 1.6.2	
☒ PE Materials	✓	✓	HSIPR Guidance Section 1.6.2	
☒ Stakeholder Agreements	✓	✓	HSIPR Guidance Section 4.3.3.2	
☒ Financial Plan	✓	✓	HSIPR Guidance Section 4.3.3.2	
☒ Job Creation	✓	✓	HSIPR Guidance Section 1.6.2	

Standard Forms *(Can be found on the FRA website and www.forms.gov)*	**Required for Corridor Programs**	**Required for Projects [See Note Below]**	**Reference**	**Comments**
☒ SF 424: Application for Federal Assistance	✓		HSIPR Guidance Section 4.3.3.3	Form
☒ SF 424C: Budget Information-Construction	✓		HSIPR Guidance Section 4.3.3.3	Form
☒ SF 424D: Assurances-Construction	✓		HSIPR Guidance Section 4.3.3.3	Form
☒ FRA Assurances Document	✓		HSIPR Guidance Section 4.3.3.3	Form
Note: Items checked under "Corridor Programs" are required at the time of submission of this Track 2 Corridor Programs application. Items checked under "Projects" are optional at the time of submission of this Track 2 Corridor Programs application, but required prior to FD/Construction grant award.				

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