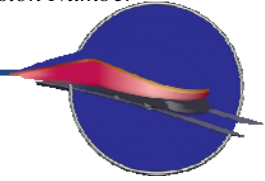


High-Speed Intercity Passenger Rail (HSIPR) Program

Application Form



Track 1a–Final Design (FD)/Construction & Track 4–FY 2009 Appropriations Projects

Welcome to the Track 1a Final Design (FD)/Construction and Track 4 Application for the Federal Railroad Administration’s High-Speed Intercity Passenger Rail (HSIPR) Program. Applicants for Track 1a FD/Construction and/or Track 4 are required to submit this Application Form and Supporting Materials (forms and documents) as outlined in Section G of this application and in the HSIPR Guidance.

We appreciate your interest in the program and look forward to reviewing your application. If you have questions about the HSIPR program or this application, please contact us at HSIPR@dot.gov.

Instructions:

- Please complete the HSIPR Application electronically. See Section G for a complete list of the required application materials.
- Please name the project according to the following format and include the project name in the [header](#) on ALL application materials. The distinct Track 1a and/or Track 4 project name should be less than 40 characters and follow the following format: State abbreviation-route or corridor name-project title (e.g., HI-Fast Corridor-Track Work IV).
- For each question, enter the appropriate information in the designated gray box. If a question is not applicable to your FD/Construction Project, please indicate “N/A.”
- Narrative questions should be answered concisely within the limitations indicated.
- Applicants must upload this completed application and all other application materials to www.GrantSolutions.gov by August 24, 2009 at 11:59pm EDT.
- Fiscal Year (FY) refers to the Federal Government’s fiscal year (Oct. 1- Sept. 30).
- Please direct questions to: HSIPR@dot.gov

A. Point of Contact and Applicant Information

(1) Application Point of Contact (POC) Name: Rodney P. Massman		POC Title: Administrator of Railroads		
Street Address: 2217 St. Mary's Blvd.	City: Jefferson City	State: MO	Zip Code: 65109	Telephone Number: 573-751-7476
Fax: 573-526-4709		Email: rodney.massman@modot.mo.gov		
(2) Name of lead State or organization applying (only States may apply for Track 4): Missouri				
(3) Name(s) of additional States and/or organizations applying in this group (if applicable): N/A				

(4) Is this project for which you are applying for HSIPR funding related or linked to additional applications for HSIPR funding that may be submitted in this or subsequent rounds of funding? Yes No Maybe
If “yes” or “maybe,” provide the following information:

Program/Project Name	Lead Applicant	Track	Total HSIPR Funding Proposed (if known)	Status of Application
*MO-KC to STL Corridor-Missouri Rail Crossing Safety Improvements	Missouri	Track 1a - FD/Construction	\$3.2 M	Applied
MO-KC to STL Corridor-Webster Universal Crossover	Missouri	Track 1a - FD/Construction	\$4.4 M	Applied
MO-KC to STL Corridor-Bonnots Mill Universal Crossover	Missouri	Track 1b - PE/NEPA	\$5.6 M total, \$764,000 PE-NEPA	Applied
MO-KC to STL Corridor-Knob Noster Passing Siding Extension	Missouri	Track 1b - PE/NEPA	\$8.5 M total, \$836,800 PE-NEPA	Applied
MO-KC to STL Corridor-Hermann Universal Crossover	Missouri	Track 1b - PE/NEPA	\$5.2 M total, \$712,500 PE-NEPA	Applied
MO-KC to STL Corridor-3 rd Mainline Track in Jeff City Yard	Missouri	Track 1b - PE/NEPA	\$9.7 M total, \$930,000 PE-NEPA	Applied
MO-KC to STL Corridor-Kingsville Passing Siding	Missouri	Track 1b - PE/NEPA	\$11.5 M total, \$958,800 PE-NEPA	Applied
MO-KC to STL Corridor-Strasburg Grade Separation	Missouri	Track 1b - PE/NEPA	\$15 M total, \$1,700,000 PE-NEPA	Applied
MO-KC to STL Corridor-Double Track Lee’s Summit to Pleasant Hill	Missouri	Track 1b - PE/NEPA	\$56.6 M total, \$1,418,800 PE-NEPA	Applied
MO-KC to STL Corridor-Real-Time Passenger Information Displays	Missouri	Track 1b - PE/NEPA	\$3 M total, \$750,000 PE-NEPA	Applied
MO-KC to STL Corridor-New Locomotive Equipment	Wisconsin -MO	Track 2	\$50 M total, undetermined PE-NEPA	Will Apply

* This project would immediately precede the asterisk (*) highlighted project in priority order.

B. Project Overview

<p>(1) FD/Construction Project Name: MO-KC to STL Corridor-2nd Rail Bridge Over Osage River</p>
<p>(2) Indicate the Track under which you are applying: Track 1a - FD/Construction <i>Please note if you are applying for Track 1a–FD/Construction and Track 4 <u>concurrently</u>, you must submit two separate versions of this application into www.GrantSolutions.gov (one for Track 1a –FD/Construction and one for Track 4–FY 2009 Appropriations Projects).</i></p>
<p>(3) Indicate the activity(ies) for which you are applying (<i>check both if applicable</i>):</p> <p style="text-align: center;"> <input type="checkbox"/> Final Design <input checked="" type="checkbox"/> Construction </p>
<p>(4) What are the anticipated start and end dates for the FD/Construction Project? (<i>mm/yyyy</i>)</p> <p style="text-align: center;">Start Date: *Depending on obligation, but no later than 02/01/10 End Date: 02/01/12</p>
<p>(5) Total Cost of the FD/Construction Project (year of expenditure (YOE) Dollars*): \$ 28,300,000.00</p> <p>Please provide proposed inflation assumptions and methodology, if applicable in the space below. <i>Please limit response to 1,000 characters.</i></p> <p>Since the project will be constructed within two years of obligation, there are no inflation assumptions. However, this project has a 10-percent contingency included in order to account for any fluctuations in unit costs.</p> <p>Of the total cost of the FD/Construction Project, how much would come from the FRA HSIPR Program: (YOE Dollars**) \$ 22,640,000.00</p> <p>Indicate percentage of total cost to be covered by <u>matching funds</u> 20 % <i>Applications submitted under Track 4 require at least a 50 percent non-Federal match to be eligible for HSIPR funding.</i></p> <p><small>* Year-of-Expenditure (YOE) dollars are inflated from the base year. ** This is the amount for which the applicant is applying.</small></p>
<p>(6) Project Overview Narrative. <i>Please limit response to 5,000 characters.</i></p> <p>Provide an overview of the main features and characteristics of the FD/Construction Project, including:</p> <ul style="list-style-type: none"> • The location of the project including name of rail line(s), State(s), and relevant jurisdiction(s) (include map if available in supporting documentation). • Identification of service(s) that would benefit from the project, the stations that would be served, and the State(s) where the service operates. • How the project was identified through a planning process and how the project is consistent with an overall plan for developing High-Speed Rail/Intercity Passenger Rail service. • How the project will fulfill a specific purpose and need in a cost-effective manner. • The project’s independent utility. • The specific improvements contemplated. • 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 project. <p>This shovel-ready project is located on the Union Pacific Railroad in Missouri along the <i>Missouri River Runner</i> route, which is the Amtrak-state supported service. 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 the shovel-ready project. There will be no donated land from the railroad in order to construct the project.</p> <p>This project will improve on-time performance along the entire Union Pacific corridor in Missouri between St. Louis and</p>

- Structures (bridges, tunnels, etc.)
- Track Rehabilitation
- New or restored sidings/passing tracks
- Major Interlockings
- Station(s)
- Communication, Signaling and Control

- Rolling Stock Refurbishments
- Rolling Stock Acquisition
- Support Facilities (Yards, Shops, Admin. Buildings)
- Grade Crossing Improvements
- Electric Traction
- Other (Please Describe):

(10) Right-of-Way-Ownership. Provide information for all railroad right-of-way owners in the FD/Construction Project 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	283	424	Preliminary Executed Agreement
Amtrak				Master Agreement in Place
Amtrak				Master Agreement in Place

(11) Services. Provide information for all existing rail services within project 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 Project Boundaries		Number of Route-Miles Within Project Boundaries	Average Number of Daily One-Way Train Operations ² within Project Boundaries	Notes
		Passenger	Freight			
Freight	Union Pacific	60	55	.5	38	before economic downturn
Intercity Passenger	Amtrak	60	55	.5	4	current
Freight						

(12) 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 project. *Please limit response to 1,000 characters.*

Amtrak currently provides two train sets. One includes a locomotive, two coach cars and one food (lounge) car with a first-class section for one round trip per day between St. Louis and Kansas City. The second set includes an additional coach car for one round trip per day. Together this provides for a total of four train trips per day. The contract is renegotiated yearly, and the overall number of available seats -- which is 195 on the average train -- is not expected to decline. This provides a total capacity for 780 passengers per day. Missouri is also applying on Track 2 as part of the state of Wisconsin's application for two new sets of train equipment for use on this corridor.

(13) Intercity Passenger Rail Operator. Provide the status of agreements with partners that will operate the benefiting high-speed rail/intercity passenger rail service(s) upon completion of the planned investment (e.g., Amtrak).
 Name of Operating Partner: Amtrak
 Status of Agreement: Final executed agreement on project scope/outcomes

² One daily round-trip train operation should be counted as two daily one-way train operations.

(14) Benefits to Other Types of Rail Service(s). Are benefits to non-intercity-passenger rail services (e.g., commuter, freight) foreseen?

Yes No

If “Yes”, provide further details in Section E, Question 2.

C. Eligibility Information

(1) Select applicant type, as defined in Appendix 1.1 of the HSIPR Guidance (only States may apply for Track 4):

- 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 Preliminary Engineering. In the space(s) below, please list the documents that establish completion of Preliminary Engineering for the project covered by this application. See HSIPR Guidance Appendix 2.2. If more than four references need to be listed, please place the additional information in Question F.

Document Name	Completion Date (mm/yyyy)
Final design, only amendment is for use of new steel instead of recycled	4-1-09

(3) Establish Completion of 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.

Documentation	Date (mm/yyyy)	Describe How Documentation Can be Verified
<input type="checkbox"/> Categorical Exclusion Documentation		
<input checked="" type="checkbox"/> Final Environmental Assessment	12-13-07, **currently minor permits are being updated	attached
<input type="checkbox"/> Final Environmental Impact Statement		

(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)
<input type="checkbox"/> Categorical Exclusion Determination	N/A	N/A
<input type="checkbox"/> Finding of No Significant Impact		
<input type="checkbox"/> Record of Decision		

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 project 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):

- **IPR network development:** Describe improvements to intermodal connections and access to stations as well as actual and potential expansions to the IPR network that may result from the project (including opportunities for interoperability with other services).
- **IPR service performance improvements** (also provide specific metrics in table 1B below): Please describe service performance improvements directly related to the project, as well as a comparison with the existing service (without project). 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, expressed in passenger-minutes), and other relevant performance improvements.
- **IPR service results** (also provide specific metrics in table 1B below): Describe relevant outcomes of the service improvement such as increases in ridership, passenger-miles, and other results in comparison with the existing service (without project).
- **Suggested supplementary information** (only when applicable):
 - Transportation Safety: Describe overall safety improvements that are anticipated to result from the FD/Construction Project, including railroad and highway-rail grade crossing safety benefits, and benefits resulting from the shifting of travel from other modes to safer IPR service.
 - Cross-modal benefits from the FD/Construction Project, 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 – Aviation and highway congestion reduction/alleviation, and/or other capacity or safety benefits. Describe any planned investments in other modes of transportation that may be avoided or delayed due to the improvement to IPR service that will result from the project.

There are many transportation benefits associated with this project. The *Missouri River Runner* Amtrak service 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, most importantly, the Metrolink light rail system, which connects to the airport and many other areas of 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 is joined to several hotels and attractions through a downtown skyway.

The service improvements are outlined in the attached document highlighting a recent University of Missouri study of Amtrak delays and their causes. The findings show a dramatic decrease in Amtrak delays as a result of this project. 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 on the line 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 5 round trips a day.

See the attached findings from the University of Missouri on specific improvements to on-time performance expected as a result of this project. The study demonstrates that all projects would result in a 47 percent decrease in Amtrak delays, and this bridge project specifically would result in a 17.9 percent decrease in Amtrak delays. The new bridge project will effectively reduce the overall travel time for passengers and increase ridership. Additional safety benefits will be realized due to fewer blocked crossings. The increased rail capacity will further open options for both Amtrak and freight trains.

1B. Operational and Ridership Benefits Metrics: In the table(s) below, provide information on the anticipated transportation benefits and ridership changes projected to result from the project. Please do not include benefits and changes that would occur even if the project is not implemented (for example, as a result of population or economic growth factors).

Project/Program Metric	Actual— FY 2008 levels	Projected Totals by Year (Actual Levels Plus Project-Caused Changes Only)		“X” If N/A or Unsure
		First Full Year After Project Completion	Fifth Full Year After Project Completion	
Annual passenger-trips	151,691	155,000	170,000	<input type="checkbox"/>
Annual passenger-miles (millions)	28,327,133	35,000,000	40,000,000	<input type="checkbox"/>
Annual IPR seat-miles offered (millions)	80,156,920	80,156,920	120,000,000*depen dent on legislative appropriation	<input type="checkbox"/>
Average number of daily round train trip operations (typical weekday)	2	2	3*dependent on legislative appropriation	<input type="checkbox"/>
On-time performance (OTP) ³ – percent of trains on time at endpoint terminals	18%	80%	85%	<input type="checkbox"/>
Average train operating delays: minutes of en- route delays per 10,000 train-miles ⁴	3,227.871	3,000.00	2,800.00	<input type="checkbox"/>
Top operating speed (mph)	79 mph	79	90	<input type="checkbox"/>
Average scheduled operating speed (mph) (between endpoint terminals)	49.94 mph	55	58	<input type="checkbox"/>

(2) 2A. Economic Recovery Benefits. This section is required for Track 1a, and optional for Track 4. Please limit response to 4,000 characters. For more information, see Section 5.1.1.2 of the HSIPR Guidance.

Describe the contribution the FD/Construction Project is intended to make towards economic recovery and

³ As calculated and reported by Amtrak according to its existing procedures and definitions. An example can be found at page E-7 of the May 2009 Monthly Performance Report at <http://www.amtrak.com/pdf/0905monthly.pdf>. ‘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.

⁴ As calculated by Amtrak according to its existing procedures and definitions. Useful background 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>

reinvestment, including information on the following:

- How the project 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 project will affect job creation (consider the construction period vs. operating period)
- How the project will create or preserve jobs or new or expanded business opportunities for populations in Economically Distressed Areas (consider the construction period vs. operating period)
- How the project will result in increases in efficiency by promoting technological advances.
- How the project represents an investment that will generate long-term economic benefits (including the timeline for achieving economic benefits and describe how the project was identified as a solution to a wider economic challenge)
- If applicable, how the project will help to avoid reductions in State-provided essential services.

The *High-Speed Intercity Rail Plan's* goal 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 six projects along the corridor will complete phase two with a combined investment of \$101 million. Total investment for the Missouri plan is estimated at \$151.3 million.

The Osage River Bridge project will add a second rail bridge over the Osage River. This will eliminate train delays caused by a single-track bottleneck on the bridge. Project construction is located in the economically distressed area of central Missouri. Total project investment which includes the 1-b project of the Bonnots Mill crossover is \$33.8 million and is estimated to create 179 jobs in the construction phase and one job in the operations phase on average annually.

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 FD/Construction Project. Please consider construction, maintenance, and operations jobs.

****See attachment from Missouri Economic Research and Information Center

	FD/ Construction Period	First full Year of Operations	Fifth full Year of Operations
Anticipated number of <u>annual</u> onsite and other direct jobs created (on a 2080 work-hour per year, full-time equivalent basis)	178	1	1

(3) Environmental Benefits. Please limit response to 4,000 characters.

How will the FD/Construction project improve environmental quality, energy efficiency, and reduction in the Nation's dependence on oil? Address project-caused changes in the following:

- Any projected reductions in key emissions (CO₂, O₃, CO, PM_x, and NO_x) and their anticipated effects. Provide any available forecasts of emission reductions from a baseline of existing service for the first and fifth 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 service for the first and fifth 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.

The main project goal is to dramatically decrease overall wait times for trains traveling on the UP line over the Osage River. By reducing the wait times to use the river crossing, 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 NO_x, 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 area. Although the Osage River Bridge project is located in an attainment area for all three of these criteria pollutants, localized impact to all aspects of the environment including wildlife, nearby citizens, vegetation and crops will be reduced.

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 is 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 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 completion of the project. CO emissions would decrease by 38 tons per year, and PM emissions would decrease by 8 tons per year.

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 voluntarily committing to meet greenhouse gas emission reduction targets. Please reference the additional analysis report on environmental impacts specific to this project, which is attached.

(4) Livable Communities Project 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 FD/Construction Project 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 obviously a need for the service.

The Gateway Transportation Center in downtown St. Louis combines access from Amtrak to the local transit systems (light rail and bus), taxis and intercity buses. 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.

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. Project Success Factors

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

1A. Applicant qualifications. *Please limit response to 2,000 characters.*

Management experience: Does the applicant have experience in managing rail investment projects and managing projects 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.

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 is on going and will be complete 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. These areas include but are not limited to 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 as well in order to solve problems and expedite solutions.

The project is similar to the Shell Spur project, and another of the other Track 1b projects -- the Knob Noster siding extension, which was designed using part of the monies from the same Shell Spur grant. The third mainline construction is expected to be similar to the Shell Spur siding. MoDOT has been extensively involved in all areas of the shell siding project including design, pre-bid process and daily updates with the contractor.

1B. Describe the organizational approach for the different project stages included in this application (final design, construction), including the roles of staff, contractors and project stakeholders in implementing the project. For construction activities, provide relevant information on work forces, including railroad contractors and grantee contractors. *Please limit response to 2,000 characters.*

The previous Shell Spur project will serve as a good overall example of the organizational approach that will be used for this proposed project. Union Pacific Railroad, which will be the owner and maintainer of this project, is responsible for the project's design and estimate. This Osage River bridge project is identified in one of the University of Missouri studies as a bottleneck for Amtrak along the route. A recent University of Missouri study shows that if Missouri's plan to complete 11 projects (including the four shovel-ready projects being proposed) is achieved Amtrak delays along the corridor would decrease by 47 percent.

The oversight process for this proposed project would substantially follow the Shell Spur process, which includes these key steps: 1) an initial estimate and design by UP, recognized in an MOU with MoDOT, 2) an environmental assessment initially done by UP and then by MoDOT, 3) property acquisition, if necessary, in compliance with MoDOT standards, 4) final plans' approval and final agreement entered into by UP and MoDOT, 5) UP releases a request for proposals to all eligible bidders and receives at least three bids, 6) UP asks for MoDOT's concurrence in awarding the bid, 7) MoDOT and UP hold a joint conference with the winning bidder to discuss expectations and reporting requirements, 8) UP enters into its own contract with the bidder to begin construction, 9) MoDOT issues administrative order to begin the project, and the bidder begins construction and maintains weekly contact with both UP and MoDOT regarding progress and handling any issues that might occur, 10) UP and MoDOT agree on billing cycle and process payments, and finally, 11) MoDOT approves final project and audits payments.

1C. Does the FD/Construction Project 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 project uncertainties and mitigation strategies (consider funding risk, schedule and budget 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 per the the cost-sharing percentages with Union Pacific and MoDOT's funds (if any) that will be committed through the MOU. Union Pacific has agreed that the proposed project can be completed within a two-year construction timeframe, thus barring extreme unforeseen '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 of the route, thus there is not substantial risk of cities discontinuing support of their station stops.

If MoDOT is successful with this application, it will appreciate an expedited completion of the grant agreement so the project can be quickly started. MoDOT will require minimal technical assistance. 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 Narratives. 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 project design and scope, project benefits, project implementation, use of project property, project maintenance, scheduling, dispatching and operating slots, project ownership and disposition, statutory conditions and other essential topics. Summarize the status and substance of any ongoing or completed agreements. *Please limit response to 2,000 characters.*

See the attached MOU's with both UP and amtrak. See also the 1996 agreement between MoDOT and UP agreeing to not only preserve the existing 2 operating slots but also the option to add an additional 3 slots .

A final multifaceted agreement will also be signed between Union Pacific and MoDOT for this proposed project following the grant award, which will be similar to the Shell Spur agreement, also attached.

The agreement details all aspects of the project, including design, scope, benefits, maintenance, ownership and expectations on behalf of all parties. Work on this final agreement will begin immediately when a grant is awarded.

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

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

2C. Selection of Operator – This question applies to Track 1a only. 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 project or of the operations that it enables or improves. *Please limit response to 1,000 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 2,000 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, but most often, it is simply a gesture recognizing the needed improvements. The third Track 1-a application for crossing improvements will follow this model with agreements signed with each of the local road authorities on each individual project.

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

An MOU for this proposed project has been signed with Union Pacific, 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 format that will be used for this bridge project 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.

(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 ⁵	Type of Funds	Dollar Amount (YOE Dollars)	% of Project Cost	Describe Uploaded Supporting Documentation to Help FRA Verify Funding Source
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⁵ 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 project/program 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 project/program, and additional debt capacity that requires no further approvals and has been dedicated by the sponsoring agency to the proposed project/program.

Budgeted: This category is for funds that have been budgeted and/or programmed for use on the proposed project 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 project sponsor's control (e.g., the project 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.

Union Pacific Railroad	New	Committed	Cost-share	\$5,660,000	20	MOU attached
	New	Committed				
	New	Committed				

3B. Capital Investment Financial Agreements: Describe any cost sharing contribution the applicant intends to make towards the FD/Construction Project, 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 2,000 characters.*

The MOU signed with UP details the railroad’s 20 percent commitment. 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 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 is an inspector of rail infrastructure through the FRA’s state rail safety participation program, which currently includes two federally certified track inspectors. The MoDOT staff will inspect the project before it is accepted and completed as part of this rail infrastructure program.

3C. Operating Financial Plan: Does the applicant expect that the State operating subsidy requirements for the benefiting intercity passenger rail service will significantly increase, **as a result of the project**, during the first five years after project completion?

Yes No

If “Yes,” please complete the table below (in YOE dollars) and answer the following questions. *Please limit response to 2,000 characters.*

- (a) How did you project future State operating subsidies for the benefiting service(s); and
- (b) What are the source, nature, and likelihood of the funding that will enable the State to finance the projected increases in annual operating subsidies due to the project?

N/A

Subsidy	Actual— FY 2009 levels (YOE Dollars)	Projected Totals by Year (Actual Levels Plus Project Caused Changes Only) (YOE Dollars)											
		First Full Year After Project Completion	Fifth Full Year After Project Completion										
State operating subsidy (total for all benefiting services)	N/A	N/A	N/A										
<p>(4) Financial Management Capacity and Capability – Provide audit results and describe applicant capability to absorb potential cost overruns, financial shortfalls, 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. <i>Please limit response to 2,000 characters.</i></p> <p>The legal corporate body overseeing MoDOT is the Mo. Highways and Transportation Commission. 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.</p> <p>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 Mo. 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 Mo.</p> <p>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.</p>													
<p>(5) Timeliness of Project Completion – Provide the following information on the dates and duration of key activities, if applicable. <i>For more information, see Section 5.1.3.1 of the HSIPR Guidance, Timeliness of Project Completion.</i></p> <table border="1"> <tr> <td>Final Design Duration:</td> <td>Recycled steel design is complete, New Steel design is currently being amended into design months</td> </tr> <tr> <td>Construction Duration:</td> <td>24 months</td> </tr> <tr> <td>Rolling Stock Acquisition Duration:</td> <td>N/A months</td> </tr> <tr> <td>Rolling Stock Testing Duration:</td> <td>N/A months</td> </tr> <tr> <td>Service Operations Start date:</td> <td>N/A (mm/yyyy)</td> </tr> </table>				Final Design Duration:	Recycled steel design is complete, New Steel design is currently being amended into design months	Construction Duration:	24 months	Rolling Stock Acquisition Duration:	N/A months	Rolling Stock Testing Duration:	N/A months	Service Operations Start date:	N/A (mm/yyyy)
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Rolling Stock Testing Duration:	N/A months												
Service Operations Start date:	N/A (mm/yyyy)												
<p>(6) If applicable, describe how the project will promote domestic manufacturing, supply and other industries, including United States-based equipment manufacturing and supply industries. <i>Please limit response to 1,500 characters.</i></p> <p>The construction of a second railroad bridge over the Osage River will require a significantly large amount of manufactured goods and supplies. The bridge is to be constructed of newly manufactured steel girders and beams. The project also requires a wide variety of other materials including track and track-related materials (such as switches, ties, plates, spikes), electronic signal devices, culverts, aggregate, silt fence, chain link fence, asphalt, lime fertilizer, seed and mulch.</p> <p>The total material cost is expected to exceed \$23 million. As with the current FRA- sponsored project to build the new Shell Spur siding near California, MO, all purchased products will comply with the "Buy America" provisions, and local suppliers typically</p>													

will be used for the commonly available items. Thus, this project will stimulate domestic supply and manufacturing industries.

(7) If applicable, describe how the project will help develop US professional railroad engineering, operating, planning and management capacity needed for sustainable HSR/IPR development in the United States, including promotion of a diverse workforce. 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.*

When completed, the new Osage Bridge will remove the last single track section of rail for the Amtrak route in the 120-mile section between Jefferson City, which is Missouri's state capital, and St. Louis. The transition from an initial recycled steel plan to an all new steel plan will complement the existing bridge and will be used by Amtrak and freight trains for the next generation.

G. Summary of Supporting Materials

Application Form	Required	Optional	Reference	Description	Format
<input checked="" type="checkbox"/> This Application Form	✓		HSIPR Guidance Section 4.3.3.3	This document to be submitted through <i>GrantSolutions</i> .	Form
Supporting Forms	Required	Optional	Reference	Description	Format
<input checked="" type="checkbox"/> General Info.	✓		HSIPR Guidance Section 4.3.5	This document to be submitted through <i>GrantSolutions</i> .	Form
<input checked="" type="checkbox"/> Detailed Capital Cost Budget	✓		HSIPR Guidance Section 4.3.5	This document to be submitted through <i>GrantSolutions</i> .	Form
<input checked="" type="checkbox"/> Annual Capital Cost Budget	✓		HSIPR Guidance Section 4.3.5	This document to be submitted through <i>GrantSolutions</i> .	Form
<input checked="" type="checkbox"/> Project Schedule	✓		HSIPR Guidance Section 4.3.5	This document to be submitted through <i>GrantSolutions</i> .	Form
Supporting Documents	Required	Optional	Reference	Description	Format
<input checked="" type="checkbox"/> Map of the Planned Investment		✓	Application Question B.6	Map of the Planned Investment location. Please upload into <i>GrantSolutions</i> .	None
Standard Forms	Required	Optional	Reference	Description	Format
<input checked="" type="checkbox"/> SF 424: Application for Federal Assistance	✓		HSIPR Guidance Section 4.3.3.3	Please submit through <i>GrantSolutions</i>	Form

<input checked="" type="checkbox"/> SF 424C: Budget Information-Construction	✓		HSIPR Guidance Section 4.3.3.3	Please submit through <i>GrantSolutions</i>	Form
<input checked="" type="checkbox"/> SF 424D: Assurance Construction	✓		HSIPR Guidance Section 4.3.3.3	Please submit through <i>GrantSolutions</i>	Form
<input checked="" type="checkbox"/> FRA Assurances Document	✓		HSIPR Guidance Section 4.3.3.3	May be obtained from FRA’s website at http://www.fra.dot.gov/downloads/admin/assurancesandcertifications.pdf . The document should be signed by an authorized certifying official for the applicant. Submit through <i>GrantSolutions</i> .	Form

PRA Public Protection Statement: Public reporting burden for this information collection is estimated to average 32 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is **2130-0583**.