OMB No. 2130-0583

Date of Submission: 8-24-09 Version Number

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 <u>HSIPR@dot.gov</u>.

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 <u>header</u> 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: <u>HSIPR@dot.gov</u>

A. Point of Contact and Applicant Information

Rodney P. Massman Street Address:	State:	Administrator of Railroads State: Zip Code:				
2217 St. Mary's Blvd.	City: Jefferson City	МО	65109	Telephone Number: 573-751-747		
Fax: 573-526-4709	Fax: 573-526-4709			Email: rodney.massman@modot.mo.gov		
(2) Name of lead State or organ	nization applying (only States	s may apply for Track	4): Missouri			

(4) Is this project for which you a HSIPR funding that may be s If "yes" or "maybe," provide	ubmitted in this	or subsequent rounds of fundi		ications for No 🗌 Mayb
Program/Project Name	Lead Applicant	Track	Total HSIPR Funding Proposed (if known)	Status of Application
MO-KC to STL Corridor-2 nd Rail Bridge over Osage River	Missouri	Track 1a - FD/Construction	\$28.3 M	Applied
*MO-KC to STL Corridor- Missouri Rail Crossing Safety Improvements	Missouri	Track 1a - FD/Construction	\$3.2 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 Frack 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	Missouri Wisconsin -MO	Track 2	NEPA \$50 M total, undetermined PE- NEPA	Will Apply

* This project would immediately <u>follow</u> the asterisk (*) highlighted project in priority order.

B. Project Overview

(1) FD/Construction Project Name: MO-KC to STL Corridor-Webster Universal Crossover
(2) Indicate the Track under which you are applying: Track 1a - FD/Construction 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).
(3) Indicate the activity(ies) for which you are applying (check both if applicable): Final Design Construction
(4) What are the anticipated start and end dates for the FD/Construction Project? (<i>mm/yyyy</i>) Start Date: depending on programming*, but latest is 02/01/10 End Date: 02/01/12
(5) Total Cost of the FD/Construction Project (year of expenditure (YOE) Dollars*): \$ 4,400,000.00
Please provide proposed inflation assumptions and methodology, if applicable in the space below. <i>Please limit response to 1,000 characters.</i>
No assumptions for inflation are added; however, each project has a 10-percent contingency included in order to account for any fluctuations in unit costs.
Of the total cost of the FD/Construction Project, how much would come from the FRA HSIPR Program: (YOE Dollars**) \$ 3,520,000.00
Indicate percentage of total cost to be covered by <u>matching funds</u> 20 % Applications submitted under Track 4 require at least a 50 percent non-Federal match to be eligible for HSIPR funding. * Year-of-Expenditure (YOE) dollars are inflated from the base year. ** This is the amount for which the applicant is applying.
(6) Project Overview Narrative. Please limit response to 5,000 characters.
 Provide an overview of the main features and characteristics of the FD/Construction Project, including: 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 complete com
 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.
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.
This project is located at UP milepost 12.5 on the Jefferson City subdivision, which is near the Kirkwood Amtrak Station and in
Dago 2

the middle of a single 14-mile stretch that, although it is double track, has no crossovers. This would allow easier functionality of getting the Amtrak train to the station and also reduce wait time in getting the train into the station. It would allow a freight train to pass the Amtrak train as it waits at the Kirkwood station. It will also help sort all trains in and out of the busy St. Louis area. It will invaluable in the case of any incidents on either track by allowing trains to cross from one track to another.

The current situation requires train traffic to halt if it cannot get to the nearest crossover. A crossover is a much more reasonable and cost-effective way of adding functionality than simply adding a third track, which could have been planned for this section but would have been much more expensive. This project was also identified in the 2007 University of Missouri study identifying bottlenecks along the route.

The specific location is in St. Louis County, Missouri, on the UP Jefferson City subdivision at MP 12.5 The description of work is to construct a universal crossover currently split by Sappington Road (MP 12.2) by constructing a universal crossover at Kirkwood Junction. The overall purpose of this project is to promote corridor fluidity and efficiency by making it easy for both Amtrak and freight trains to switch tracks at this congested location.

(7) Status of Activities: Are any FD or Construction activities that are part of this planned investment underway or completed?

Yes (Final Design) Yes (Construction) No

If "Yes," please describe the activities that are underway or completed in the table below.¹ If more than three activities, please detail in Section F of this application.

Activity	Description	Completed? (If yes, check box)	Actual Initiation Date (mm/yyyy)	Actual or Anticipated Completion Date (mm/yyyy)				
Final Design	Complete	\boxtimes	1-5-08	2-28-09				
☐Additional ⊠Improved ⊠Improved	project service objectives (<i>check all that apply</i>): Service Frequencies Service Quality On-Time Performance on Existing Route	y): Increased Average Speeds/Shorter Trip Times Other (<i>Please Describe</i>):						
 (9) Types of capital investments contemplated (check all that apply): 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): 								
area. When	(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. <i>If more than three owners, please detail in Section F of this application.</i>							

¹ Please note: (a) requests for reimbursement of costs incurred prior to enactment of the relevant appropriations will not be considered and (b) supporting documentation for activities may also be required as noted in Appendix 2 of the HSIPR Guidance.

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Type of Railroad		-Way Owne	•	Route Miles	Tra	ck Miles		s of Agreements to plement Projects
Class 1 Frei	gh Union Pa	acific		283		424	Prelim	inary Executed Agreem
Amtrak							Maste	er Agreement in Place
Amtrak							Maste	er Agreement in Place
	(11) Services. Provide information for all existing rail services within project boundaries (freight, commuter, and in passenger). If more than three services, please detail in Section F of this application. Top Speed Within Average Project Number of Boundaries Number of					nmuter, and intercity		
Type of Service	Name of Operator	Passenger	Freight	Route-M Within Pr Boundar	iles oject	Opera Opera within 1 Bound	tions ² Project	Notes
Freight	Union Pacific	50	40	.1		3	8	Avg. before economic downturn
Intercity Pa	Amtrak	50	40	.1		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
 - Status of Agreement. Final executed agreement on project scope/outcomes
- (14) Benefits to Other Types of Rail Service(s). Are benefits to non-intercity-passenger rail services (e.g., commuter, freight) foreseen?
 Xes No
 If "Yes", provide further details in Section E, Question 2.

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

C. Eligibility Information

 (1) Select applicant type, as defined in Apper 	ndix 1.1 of the HSII	PR Guidance (onl	y States may apply for Track 4):
If one of the following, please append app Guidance: Group of States Interstate Compact Public Agency established by one or mon Amtrak in cooperation with a State or Sta	re States	ation as described	d in Section 4.3.1 of the HSIPR
(2) Establish Completion of Preliminary Engl completion of Preliminary Engineering for th more than four references need to be listed, p	ne project covered by	this application.	See HSIPR Guidance Appendix 2.2. If
Document Name			Completion Date (mm/yyyy)
Final Design	2-28-09		
(3) Establish Completion of NEPA Documen verified by FRA). The following are appro References to large EISs and EAs that FRA (including www.fra.gov), 3) Electronic cop copy of non-FRA documents (large docume delivery service). See HSIPR Guidance Sec	oved methods of NE has previously issue y of non-FRA docur ents should not be sc	PA verification (in ed, 2) Web link if I nents attached with anned but should b	order of FRA preference): 1) NEPA document is posted to a website h supporting documentation, or 4) a hard
Documentation	Date (mm/yyyy)	Describe Ho	w Documentation Can be Verified
Categorical Exclusion Documentation	8-15-09		Attached
Final Environmental Assessment			
Final Environmental Impact Statement			
(4) Indicate if there is an environmental deci	sion from FRA (dat	e document was	issued and web hyperlink if available).
Documentation	Date (<i>mm/yyyy</i>)		Hyperlink (if available)
Categorical Exclusion Determination	N/A		N/A
Finding of No Significant Impact			
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, <u>including</u> information on the following (*please provide a level of detail appropriate to the type of investment*):

- <u>IPR network development</u>: 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.
- <u>IPR service results</u> (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.
 - o 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 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 significanly 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 the MWRRI and a 1996 MOU between MoDOT and the UP (see attached) show that at least three further slots have been preserved for this line, which could bring the *Missouri River Runner* to five round trips per 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 19.3 percent decrease in Amtrak delays. This 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 <u>projected to result from the project</u>. 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).

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

(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 <u>http://www.amtrak.com/pdf/0905monthly.pdf</u>. '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 <u>http://www.amtrak.com/pdf/0905monthly.pdf</u>

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 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 Webster universal crossing project will increase the ability to sort freight and passenger trains in and out of the St. Louis area. Project construction is located in the economically distressed area of St. Louis. Total project investment is \$4.4 million and is estimated to create 22 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 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

Anticipated number of annual onsite and	FD/ Construction	First full Year	Fifth full Year
	Period	of Operations	of Operations
other direct jobs created (on a 2080 work- hour per year, full-time equivalent basis)	22	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, PMx, and NOx) 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. By reducing the wait times for trains traveling in and out of the St. Louis metro area, the amount of wasted fuel by necessary engine idling will also 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 area. Kirkwood is

located in St. Louis County, which is part of the St. Louis ozone and annual PM nonattainment areas. Any actions that reduce the emissions of PM and NOx will help improve air quality in a region already deemed by the EPA to have unhealthy levels of pollutants by the EPA. NOx is a major constituent of diesel emissions and is one of the two pollutants that combine to form ozone. Ozone is another criteria pollutant that has a well-documented negative impact on the environment, specifically vegetive and human health.

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. In addition to reducing the impact of the facility's emissions on the overall region's air quality, localized impact on all aspects of the environment including wildlife, nearby citizens and vegetation will be reduced.

Emission reduction calculations were performed for NOx, CO and PM to assess the environmental benefits of the Kirkwood universal crossover project. Using a modeled delay reduction for both AMTRAK and Union Pacific trains, average fuel use per engine at idle, and EPA emission factors relating pollutant mass emissions to each gallon of fuel consumed, emission reductions were estimated. Emissions of NOx are estimated to decrease 0.05 tons per year after completion of the siding project. CO emissions will decrease by 0.08 tons per year, and PM emissions will decrease by 0.002 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 voluntary 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 on the same parameters as the Amtrak service (see attached map), so there obviously is 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 the 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 example of the organizational approach that will be used for this project. Union Pacific Railroad, the project owner and maintainer, is responsible for the design and estimate. This Webster crossover 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 project's oversight process will follow these key steps: 1) initial estimate and design by UP, recognized in an MOU with MoDOT, 2) environmental assessment done by UP and then by MoDOT, 3) property acquisition, if necessary, in compliance with MoDOT standards, 4) f inal plans' approval and final agreement entered into by UP and MoDOT, 5) UP releases request for proposals to all eligible bidders and receives at least three bids, 6) UP asks for MoDOT's concurrence in awarding bid, 7) MoDOT and UP hold joint conference with winning bidder to discuss expectations and reporting requirements, 8) UP enters into its own contract with bidder to begin construction, 9) MoDOT issues administrative order to begin project, and bidder begins construction and maintains weekly contact with both UP and MoDOT regarding progress and other issues, 10) UP and MoDOT agree on billing cycle and process payments, and 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

 \boxtimes 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 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 unforseen 'acts of God,' such as earthquakes, tornados, 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 applications, 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 additonal 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 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 – 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, but most often, it is simply a gesture recgonzing the needed improvements.

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 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 Funding⁵	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 <u>Reference Notes:</u> The following categories and definitions are applied to funding sources:

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.

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).

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Union Pacific	New	Committed	Cost-share funds	\$880,000.00	20%	See attached MOU
	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
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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

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		version ivan	JUCI	
		(Actual L	otals by Year Levels <u>Plus</u> I Changes Only)	
	Actual— FY 2009 levels (YOE Dollars)	(YOE Dollars)		
Subsidy		First Full Year After Project Completion	Fifth Full Year After Project Completion	
te operating subsidy (total for all benefiting vices)	N/A	N/A	N/A	

(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. *Please limit response to 2,000 characters*.

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.

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.

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 Project Completion – Provide the following information on the dates and durat	ion of key activities, if
applicable. For more information, see Section 5.1.3.1 of the HSIPR Guidance, Timeliness of P	roject Completion.

Final Design Duration:	completed 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)

(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 the universal crossover in Webster will require the purchase of a wide variety of supplies and manufactured goods including track and track-related materials (such as switches, ties, plates, spikes), electronic signal devices, aggregate, silt fence, seed and mulch.

The total material cost is expected to exceed \$2.4 million. As with the current FRA- sponsored project to build a siding near California, MO, 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.

(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.

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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.*

The Webster crossover is noted as a needed improvement in a University of Missouri study because it is a rail system bottleneck. Construction of this crossover will bring much-needed relief to the area in terms of train movement and availability.

G. Summary of Supporting Materials

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Application Form	Required	Optional	Reference	Description	Format
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
🛛 General Info.	~		HSIPR Guidance Section 4.3.5	This document to be submitted through <i>GrantSolutions</i> .	Form
Detailed Capital Cost Budget	~		HSIPR Guidance Section 4.3.5	This document to be submitted through <i>GrantSolutions</i> .	Form
Annual Capital Cost Budget	~		HSIPR Guidance Section 4.3.5	This document to be submitted through <i>GrantSolutions</i> .	Form
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
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
SF 424: Application for Federal Assistance	v		HSIPR Guidance Section 4.3.3.3	Please submit through GrantSolutions	Form

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SF 424C: Budget Information- Construction	~	HSIPR Guidance Section 4.3.3.3	Please submit through GrantSolutions	Form
SF 424D: Assurance Construction	~	HSIPR Guidance Section 4.3.3.3	Please submit through GrantSolutions	Form
FRA Assurances Document	*	HSIPR Guidance Section 4.3.3.3	May be obtained from FRA's website at http://www.fra.dot.gov/downloads/admi n/assurancesandcertifications.pdf. The document should be signed by an authorized certifying official for the applicant. Submit through <i>GrantSolutions</i> .	Form

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