Narrative Application Form – Individual FD/Construction Part I

High-Speed Intercity Passenger Rail (HSIPR) Program

Applicants interested in applying for funding under the March 2011 Notice of Funding Availability (NOFA) are required to submit the narrative application forms, parts I and II, and other required documents according to the checklist contained in Section 4.2 of the NOFA and the Application Package Instructions available on FRA's website. All supporting documentation submitted for this FD/Construction project should be listed and described in Section G of this form. Questions about the HSIPR program or this application should be directed to the Federal Railroad Administration (FRA) at HSIPR@dot.gov.

Applicants must enter the required information in the gray narrative fields, check boxes, or drop-down menus of this form. Submit this completed form, along with all supporting documentation, electronically by uploading them to www.GrantSolutions.gov by 8:00 p.m. EDT on April 4, 2011.

A. Point of Contact and Applicant Information

Applicant should ensure that the information provided in this section matches the information provided on the SF-424 forms.

<table>
<tr><td colspan="2">(1) Name the submitting agency:
Missouri Department of Transportation</td><td colspan="3">Provide the submitting agency Authorized Representative name and title: Rodney Massman, Administrator of Railroads</td></tr>
<tr><td>Address 1: P.O. Box 270</td><td>City:
Jefferson City</td><td>State:
MO</td><td>Zip Code:
65102</td><td>Authorized Representative telephone:
(573) 751-7476

Authorized Representative email:
Rodney.massman@modot.mo.gov</td></tr>
<tr><td colspan="2">Provide the submitting agency Point of Contact (POC) name and title (if different from Authorized Representative):

Rodney Massman, Administrator of Railroads</td><td colspan="3">Submitting agency POC telephone: (573)751-7476

Submitting agency POC email:
Rodney.massman@modot.mo.gov</td></tr>
<tr><td colspan="5">(2) List out the name(s) of additional State(s) applying (if applicable):
N/A</td></tr>
</table>

B. Eligibility Information

Complete the following section to demonstrate satisfaction of an application's eligibility requirements.

(1) Select the appropriate box from the list below to identify applicant type. Eligible applicants are listed in Section 3.1 of the NOFA.

- ☒ State
- ☐ Group of States
- ☐ Amtrak
- ☐ Amtrak in cooperation with one or more States

If selecting one of the applicant types below, additional documentation is required to establish applicant eligibility. Please select the appropriate box and submit supporting documentation to demonstrate applicant eligibility, as described in Section 3.2 of the NOFA, to GrantSolutions.gov and list the supporting documentation under "Additional Information" in Section G.2 of this application.

- ☐ Interstate Compact
- ☐ Public Agency established by one or more States

(2) Indicate the planning processes used to identify the proposed FD/Construction project. As defined in Section 3.5.1 of the NOFA, the process should analyze the investment needs and service objectives of the service that the individual project is intended to benefit. Refer to the FD/Construction Application Package Instructions for more information. The appropriate planning document must be submitted with the application package and listed in Section G.2 of this application.

- ☐ State Rail Plan
- ☐ Service Development Plan (SDP)
- ☐ Service Improvement Plan (SIP)
- ☒ Statewide Transportation Improvement Plan (STIP)
- ☐ Other, please list this document in Section G.2 with "Other Appropriate Planning Document" as the title
- ☐ This project is not included in a relevant and documented planning process

(3) Verify the completion of Preliminary Engineering requirements. List the documents that establish completion of Preliminary Engineering for the project covered by this application. Refer to the NOFA and FD/Construction Application Package Instructions for more information. Any document not available online should be submitted with the application package and listed in Section G.2 of this application. If more rows are required, please provide the same information for additional PE requirements in a separate supporting document and list it in Section G.2 of this application.

Documentation	**Date of Issue** (*mm/yyyy*)	**Describe How Documentation Can Be Verified** (choose one)	
		Submitted in GrantSolutions	**Web Link** (if available)
NEPA Document (Categorical Exclusion Worksheet)	03/2011	☒	
Project Location Plan Sheet	03/2011	☒	
Estimate	03/2011	☒	
Project Location Sketch	03/2011	☒	

(4) Verify the completion of NEPA documentation. Indicate the date the document was issued and how the document can be verified by FRA. A NEPA decision document (Record of Decision, Finding of No Significant Impact, or FRA Categorical Exclusion concurrence) is not required for an application but must have been issued by FRA prior to award of a construction grant. Applications that are accompanied by a final NEPA determination will be looked upon favorably during the application review and selection process. Verified documents can be submitted as a supporting document or referenced through an active public URL. Any document not available online should be submitted with the application package and listed in Section G.2 of this application. Refer to the NOFA and FD/Construction Application Package Instructions for more information.

Documentation	**Date of Issue** (*mm/yyyy*)	**Describe How Documentation Can Be Verified** (choose one)	
		Submitted in GrantSolutions	**Web Link** (if available)
NEPA Documentation			
☒ Categorical Exclusion Documentation (worksheet) It is MODOT's expectation that a CE will be required on this project.	See attached	☐	
☐ Environmental Assessment	/	☐	
☐ Final Environmental Impact Statement	/	☐	
Project NEPA Determination			
☐ Categorical Exclusion	/	☐	
☐ Finding of No Significant Impact	/	☐	
☐ Record of Decision	/	☐	

(5) Select and describe the operational independence of the proposed FD/Construction project.[1] Refer to Sections 3.4.4 and 3.5.2 of the NOFA for more information about operational independence and applications related to previously-selected projects.

☐ This project is operationally independent.

☒ This project is operationally independent when considered in conjunction with previously selected or awarded HSIPR project(s) (identify previously selected or awarded projects below). This project was part of the same study in 2007 that recommended sidings at California and at Knob Noster. The California siding has been constructed.

☐ This project is not operationally independent.

Briefly clarify the response:

n/a

[1] A project is considered to have operational independence if, upon implementation, it will have tangible and measurable benefits, either independently of other investments or cumulatively with projects selected to receive awards under previous HSIPR program solicitations.

C. FD/Construction Project Summary

Identify the title, location, and other information of the proposed project by completing this section.

(1) Provide a clear, concise, and descriptive project name. Use identifiers such as State abbreviations, major cities, infrastructure, and tasks of the individual project (e.g., "DC-Capital City to Dry Lake Track Improvements"). Please limit the response to 100 characters.

MO-KC to STL Corridor – Kingsville Passing Siding

(2) If the applicant submitted an application for this project, or a project within the scope, that was not selected, indicate the solicitation under which that application was submitted. Check all that apply.

- ☒ ARRA – Track 1
- ☐ ARRA – Track 2
- ☐ FY 2009 – Track 4
- ☐ FY 2009 Residual
- ☐ FY 2010 Service Development Program
- ☐ FY 2010 Individual Project – PE/NEPA
- ☒ FY 2010 Individual Project – FD/Construction
- ☐ N/A

(3) Indicate the activity(ies) proposed in this application. Check all that apply.

☒ Final Design ☒ Construction

(4) Indicate the anticipated duration, in months, for the proposed FD/Construction project. Consider that American Recovery and Reinvestment Act funding must be obligated by September 30, 2017.

Number of Months: 21

(5) Specify the anticipated HSIPR funding level for the proposed FD/Construction project. This information must match the SF-424 documents, and dollar figures must be rounded to the nearest whole dollar. All applicants are encouraged to contribute non-Federal matching funds. FRA will consider matching funds in evaluating the merit of the application. See Section 3.3 of the NOFA for further information regarding cost sharing.

HSIPR Federal Funding Request	Non-Federal Match Amount	Total Project Cost	Non-Federal Match Percentage of Total
$11,618,300.00	$0.00	$11,618,300.00	0 %

(6) Indicate the source, amount, and percentage of non-Federal matching funds for the proposed FD/Construction project. The sum of the figures below should equal the amount provided in Section C.5. Click on the gray boxes to select the appropriate response from the lists provided in type of source, status of funding, and type of funds. Dollar figures must be rounded to the nearest whole dollar. Also, list the percentage of the total project cost represented by each non-Federal funding source. Provide supporting documentation that will allow FRA to verify each funding source, any documentation not available online should be submitted with the application package and listed in Section G.2 of this application.

Non-Federal Match Funding Sources	Type of Source	Status of Funding [2]	Type of Funds	Dollar Amount	% of Total Project Cost	Describe Any Supporting Documentation to Help FRA Verify Funding Source
Sum of Non-Federal Funding Sources				$0	0%	

(7) Indicate whether the proposed activities in this application are also included as a component project or phase in a Service Development Program application submitted concurrently.

☐ Yes, all of the activities in this application have also been submitted as a component project or phase of a Service Development Program application.

☐ Yes, some of the activities within this application have also been submitted as a component project or phase of a Service Development Program application.

☒ No, this application and its proposed activities have not been submitted as a component project or phase of a Service Development Program application.

(8) Indicate the name of the corridor where the project is located and identify the start and end points as well as major integral cities along the route.

Kansas City to St. Louis Union Pacific Corridor (begin at Milepost 6.9 on KC Terminal, continues over UP for 283 miles and ends at Milepost 0.0 at St. Louis Terminal). Major cities are Kansas City, Sedalia, Jefferson City, Kirkwood and St. Louis). This is a federally designated high-speed rail corridor.

(9) Describe the project location, using municipal names, mileposts, control points, or other identifiable features such as longitude and latitude coordinates. If available, please provide a project GIS shapefile (.shp) as supporting documentation. This document must be listed in Section G.2 of this application.

This 9,200- foot siding extension will be in Johnson County in western Missouri in the city of Kingsville on the Union Pacific Railroad's Sedalia subdivision from milepost 235.5 to milepost 237.5, to result in a 9000-foot clear siding. Requires closing public road and building 4,500-foot connector road.

(10) Provide an abstract outlining the proposed FD/Construction project. Briefly summarize the project narrative provided in the Statement of Work in 4-6 sentences. Capture the major milestones, outcomes, and anticipated benefits that will result from the completion of the individual project.

This project will construct a third siding in the Kingsville area and will complement two other sidings scheduled to be built on this same subdivision near California and at Knob Noster. The Kingsville siding is the third of the three sidings identified by a University of Missouri study that shows the lack of infrastructure in the area, which is used mostly by directional freight trains.

[2] 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., statutory authority) to be used to fund the proposed project 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 or appropriation guidance. 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, and additional debt capacity that requires no further approvals and has been dedicated by the sponsoring agency to the proposed project.

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 capital investment program that has yet to be committed in the near future. Funds will be classified as budgeted when available funding cannot be committed until the grant is executed or due to the local practices outside of the project sponsors' 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 capital investment program.

The study illustrates the need for sidings, so Amtrak would not be delayed. The siding project completes the UP corridor with spacings of usable sidings at approximately every 15 miles along the Sedalia subdivision. The total impact on Amtrak trains will be a huge reduction in delay times since the problem of passing freight trains will be largely resolved in the area.

(11) Indicate the type of expected capital investments included in the proposed FD/Construction project. Check all that apply.

- ☒ Communication, signaling, and control
- ☐ Electric traction
- ☐ Grade crossing improvements
- ☒ Major interlocking
- ☐ Positive Train Control
- ☐ Rolling stock acquisition
- ☐ Rolling stock refurbishments
- ☐ Station(s)
- ☐ Structures (bridges, tunnels, etc.)
- ☐ Support facilities (yards, shops, administrative buildings)
- ☒ Track rehabilitation and construction
- ☐ Other (please describe)

(12) Indicate the anticipated service outcomes of the proposed FD/Construction project. Check all that apply.

- ☐ Additional service frequencies
- ☒ Service quality improvements
- ☒ Increased average speeds/shorter trip times
- ☒ Improved operational reliability on existing route
- ☒ Improved on-time performance on existing route
- ☐ Other (please describe)

Briefly clarify the response(s) if needed:
n/a

(13) Provide the following information about job creation through the life of the proposed FD/Construction project. Please consider construction, maintenance, and operations jobs.

Anticipated number of annual onsite and other direct jobs created (on a 2080 work-hour per year, full-time equivalent basis).	FD/ Construction Period	First full Year of Operations	Fifth full Year of Operations
	70	**1**	**1**
Indicate the anticipated fiscal year.	N/A	2013	2018

(14) Quantify the applicable service outcomes of the proposed FD/Construction project. Provide the current conditions and anticipated service outcomes. Future state information is required only for the service outcomes identified in Section C.11.

	Frequencies[3]	Scheduled Trip Time (round-trips, in minutes)	Average Speed (mph)	Top Speed (mph)	Reliability – Provide Either On-Time Performance Percentage or Delay Minutes
Current	4	540	49	79	80%
Future	4	540	55	79	80%

(15) Indicate if any FD or Construction activities that are part of this proposed project are underway or completed. Check all that apply.

- ☐ Final Design activities are complete.
- ☒ Final Design activities are in progress.
- ☐ No Final Design activities are in progress or completed.
- ☐ Construction activities are complete.
- ☐ Construction activities are in progress.
- ☒ No Construction activities are in progress or completed.

Describe any activities that are underway or completed in the table below. If more space is necessary, please provide the same information for additional activities underway or completed in a supporting document and list in Section G.2 of this application.

[3] Frequency is measured in daily round-trip train operations. One daily round-trip operation should be counted as one frequency.

Activity	**Description**	**Completed?** (If yes, check box)	**Start Date** (*mm/yyyy*)	**Actual or Anticipated Completion Date** (*mm/yyyy*)
PE/NEPA compliance	Preliminary evaluation of environmental impacts.	☐	*06/2011*	*07/2012*
Schematical Sketch Plan Sheet	Identifies the proposed location of the passing siding.	☒	03/2011	03/2011
Estimate	Gives split out of costs for project.	☒	03/2011	03/2011

D. Infrastructure Owner(s) and Operator(s)

Address the section below with information regarding railroad infrastructure owners and operators of the proposed FD/Construction Project. Applicants that own and/or control the infrastructure to be improved by the project or have a service outcomes agreement in place with the infrastructure owning railroad for the proposed project, or an executed agreement that could be amended with the infrastructure owning railroad for a project(s) located on the same corridor as the proposed project, will be looked upon favorably during the application review and selection process.

(1) Provide information regarding Right-of-Way Owner(s). Where railroads currently share ownership, identify the primary owner. Click on the gray boxes to select the appropriate response from the lists of railroad type, right-of-way owner and status of agreement. If the Right-of-Way Owner is not included on the prepopulated list, select "Other" and type the name in the adjacent text box within that field. Should the application have more than five owners, please provide the same information for additional owners in a separate supporting document and list it in Section G.2 of this application.

Type of Railroad	Right-of-Way Owner	Route-Miles	Track-Miles	Status of Agreement to Implement
Class 1 Freight	Union Pacific Railroad	283	424	Service Outcomes Agreement

(2) Name the Intercity Passenger Rail Operator and provide the status of agreement. If applicable, provide the status of the agreement with the partner that will operate the planned passenger rail service (e.g., Amtrak). Click on the gray box to select the appropriate response from the status of agreement list. Should the proposed service have more than three operators, please provide the same information for additional operators in a separate supporting document and list it in Section G.2 of this application.

Name of Rail Service Operator	Status of Agreement
Amtrak	Final executed agreement on project scope/outcomes

(3) Provide information about the existing rail services within the project boundaries (e.g., freight, commuter, and intercity passenger). Click on the gray boxes to select the appropriate response from the list of types of service. If the Name of Operator is not included in the prepopulated list, select "Other" and type the name in the adjacent text box within that field.

Click on the prepopulated fields to select the appropriate response from the list of types of service.

Type of Service	Name of Operator	Top Existing Speeds Within Project Boundaries (mph)		Number of Route-Miles Within Project Boundaries (miles)	Average Number of Daily One-Way Train Operations[4] within Project Boundaries
		Passenger	Freight		
Freight	Union Pacific Railroad	70	55	1	22
Intercity Passenger	Amtrak	70	55	1	4

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

(4) Estimate the share of benefits that will be realized by non-intercity passenger rail services and select the approximate cost share to be paid by the beneficiary.[5] Click on the gray boxes to select the appropriate response from the lists of type of beneficiary, expected share of benefits, and approximate cost share. If more than three types of non-intercity passenger rail are beneficiaries, please provide additional information in a separate supporting document, and list it in Section G.2 of this application.

Type of Non-Intercity Passenger Rail	Expected Share of Benefits	Approximate Cost Share
Freight	Less than 50%	0-24%

[5] Benefits include service improvements such as increased speed or on-time performance, improved reliability, and other service quality improvements.

E. Additional Response to Evaluation Criteria

Respond to each of the following evaluation criteria in the gray text boxes provided to demonstrate how the proposed FD/Construction project will achieve these benefits.

(1) Project Readiness

Describe the feasibility of the proposed FD/Construction project to proceed promptly to award, including addressing:

- The applicant's progress, at the time of application, in reaching compliance with NEPA for the proposed project. Although a NEPA decision document (Record of Decision, Finding of No Significant Impact, Categorical Exclusion determination) is not required at the time of application, applications for Individual FD/Construction Projects that are accompanied by a final NEPA determination will be looked upon favorably during the application review and selection process;
- The applicant's progress, at the time of application, in reaching final service outcomes agreements (where necessary) with key project partners. Applicants that own and/or control the infrastructure to be improved by the project or have a service outcomes agreement in place with the infrastructure owning railroad for the proposed project, or an executed agreement that could be amended with the infrastructure owning railroad for a project(s) located on the same corridor as the proposed project, will be looked upon favorably during the application review and selection process; and
- The quality and completeness of the project's Statement of Work, including whether the Statement of Work provides a sufficient level of detail regarding scope, schedule, and budget to immediately advance the project to award.

The railroad has provided the project's construction cost estimate and schematic diagram for the approximate project location (see attachment). MoDOT has completed a preliminary evaluation of the project site and determined that this project would most likely require a categorical exclusion. Union Pacific Railroad has completed NEPA requirements satisfactorily on several other projects, including the Shell Spur siding for which construction is complete.

Pursuant to MoDOT's stewardship goals and tangible result of being environmentally responsible, MoDOT Design's environmental staff, in coordination with Union Pacific Railroad, will review the project to determine the appropriate environmental classification/level of NEPA documentation. This project will have minimal social, economic or environmental impacts; however, due to potential impacts and the proximity of the project to a couple creeks, a Section 404 Clean Water Act individual permit will more than likely be required. The project will likely require a Categorical Exclusion. Please refer to the following website for MoDOT's Engineering Policy Guide identifying the detailed steps for the PE/NEPA process http://epg.modot.mo.gov/index.php?title=127.14_National_Environmental_Policy_Act_(NEPA)_Classification_and_Documents. An application for PE/NEPA work is being simultaneously filed with this construction application.

PE/NEPA for all projects will be completed relatively quickly upon grant award, and the Kingsville project is no exception.

UP has worked collaboratively with MoDOT to advance the current projects and negotiations of the Service Outcomes Agreement (SOA) in 2011, despite numerous difficulties on a national scale involving the obligations that Host railroads have in relation to rail passenger services that they host. MoDOT and UP both signed the SOA and final negotiations are pending with FRA and Amtrak. Now that this milestone has been accomplished, we're confident we can aggressively pursue the PE/NEPA projects and proceed to construction expeditiously.

The SOA will be amended to include any additional projects awarded for this application opportunity.

(2a) Transportation Benefits

Describe the transportation benefits that will result from the proposed FD/Construction project and how they will be achieved in a cost-effective manner, including addressing:

- Supporting the development of intercity high-speed rail service;
- Generating improvements to existing high-speed and intercity passenger rail service, as reflected by estimated increases in ridership (as measured in passenger-miles), increases in operational reliability (as measured in reductions in delays), reductions in trip times, additional service frequencies to meet anticipated or existing demand, and other related factors;
- Generating cross-modal benefits, including anticipated favorable impacts on air or highway traffic congestion, capacity, or safety, and cost avoidance or deferral of planned investments in aviation and highway systems;
- Creating an integrated high-speed and intercity passenger rail network, including integration with existing intercity passenger rail services, allowance for and support of future network expansion, and promotion of technical interoperability and standardization (including standardizing operations, equipment, and signaling);
- Encouragement of intermodal connectivity and integration through provision of direct, efficient transfers among intercity transportation and local transit networks at train stations, including connections at airports, bus terminals, subway stations, ferry ports, and other modes of transportation;
- Enhancing intercity travel options;
- Ensuring a state of good repair of key intercity passenger rail assets;
- Promoting standardized rolling stock, signaling, communications, and power equipment;
- Improved freight or commuter rail operations, in relation to proportional cost-sharing (including donated property) by those other benefiting rail users;
- Equitable financial participation in the project's financing, including, but not limited to, consideration of donated property interests or services; financial contributions by freight and commuter rail carriers commensurate with the benefit expected to their operations; and financial commitments from host railroads, non-Federal governmental entities, nongovernmental entities, and others;
- Encouragement of the implementation of positive train control (PTC) technologies (with the understanding that 49 U.S.C. 20147 requires all Class I railroads and entities that provide regularly scheduled intercity or commuter rail passenger services to fully institute interoperable PTC systems by December 31, 2015); and
- Incorporating private investment in the financing of capital projects or service operations.

There are many transportation benefits associated with extending a siding at Kingsville in Johnson County, Missouri, on the Union Pacific Sedalia subdivision at milepost 209.24 as the corridor is already a designated high-speed rail corridor (see attached U.S. map). 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 connecting 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 by nearly the same percentage in 2010 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.

See the attached findings from the University of Missouri capacity study on specific improvements to on-time performance expected as a result of this project. This area was identified in the University of Missouri's 2006 capacity study as one of the large bottlenecks on the current Amtrak route. This area between Lee's Summit and Warrensburg was one of the highest along the route at about 19 percent of total delays. This project would be similar in benefits to the other two sidings being developed for this section of the line near California and Knob Noster.

As with the other sidings, this siding will provide an additional place to pass trains easily and allow freight trains to take the siding instead of Amtrak. The overall benefits of greater on-time performance and reliability will be further served by this siding, which results in a higher quality of service.

Safety is also an important consideration. This area was chosen for its lack of many crossings and its rural setting in that the two tracks would least impact the local community. The benefits to the freight line from this and the other two sidings will have an immediate impact in terms of being able to sort trains in and out of Kansas City. Another benefit includes being able to better sort both east- and west-bound Amtrak trains as they go through this mostly single-track area.

Positive train control (PTC) refers to technology that will eventually be used on this line that is capable of preventing train-to-train collisions, over speed derailments and casualties or injuries to roadway workers. It is a process by which the train can detect speed reductions, and the train will automatically slow down or come to a complete stop if the engineer does not respond in a timely manner. The proposed upgrades listed in this grant application will allow for the upgrades of signalized circuitry on these projects and a smoother transition from the standardized signal systems to the new circuitry that is compatible with PTC equipment. Therefore, such upgrades will encourage the railroads to take a more immediate role in implementing PTC on the corridor, permitting freight and passenger trains to interact within a safer environment, especially in congested areas such as St. Louis.

(1b) Other Public Benefits

Demonstrate the potential of the proposed project to achieve other public benefits in a cost-effective manner:

- Environmental quality and energy efficiency and reduction in dependence on foreign oil, including use of renewable energy sources, energy savings from traffic diversions from other modes, employment of green building and manufacturing methods, reductions in key emissions types, and the purchase and use of environmentally sensitive, fuel-efficient, and cost-effective passenger rail equipment;
- Promoting interconnected livable communities, including complementing local or state efforts to concentrate higher-density, mixed-use, development in areas proximate to multi-modal transportation options (including intercity passenger rail stations);
- Improving historic transportation facilities; and
- Creating jobs and stimulating the economy. Although this solicitation is not funded by the American Recovery and Reinvestment Act of 2009 (Public Law 111-5), these goals remain a top priority of this Administration. Therefore, Individual Project applications will be evaluated on the extent to which the project is expected to quickly create and preserve jobs and stimulate rapid increases in economic activity, particularly jobs and activity that benefit economically distressed areas, as defined by section 301 of the Public Works and Economic Development Act of 1965, as amended (42 U.S.C. 3161) ("Economically Distressed Areas").

Allowing MoDOT to finalize the PE/NEPA study for the Kingsville siding extension and begin construction in the near future will confirm that freight and passenger rail travel improves the environment, provides energy-efficient transportation, increases passenger/freight rail fluidity and reduces oil dependency. It will also analyze and continue the work already completed to minimize the stream impacts from the rail line on a nearby stream. The project positively affects rail travel by strengthening the Missouri corridor, increasing on-time performance and providing

growth opportunities for additional freight and passenger trains, while offering many environmental benefits to the state.

- Each ton-mile of freight moved by rail reduces greenhouse gas emissions by 2/3, compared to truck transportation.
- Freight trains are almost four times more fuel-efficient than trucks and have less impact on greenhouse gas emissions.
- Rail travel generates less carbon dioxide and consumes less energy per passenger mile than cars or planes.

Amtrak has committed to a 6 percent reduction in carbon dioxide emissions by volunteering to meet reduction targets. 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. 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 board 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 interconnect ability 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.

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 involved three corridor improvement projects with a combined investment of $36 million. Additional projects in this round of applications complete phase two with a combined investment of $36 million. The total investment estimated for the Missouri plan as of today is estimated at $247 million, with more investments to come. (See attached MODOT/UP/Amtrak proposed funding improvements and graph as of August 2010.)

The Kingsville passing siding project would break up a 25-mile segment with no passing siding and would increase passenger/freight rail fluidity and maintenance flexibility. Project construction is located in the economically distressed area of western central Missouri. The total project investment is $11.5 million.

The following information from the Missouri Department of Economic Development's Missouri Economic Research and Information Center address the economic recovery and reinvestment benefits.

Statewide Impact of Kingsville Passing Siding Project

During the next three years, every dollar of project investment returns (benefit-cost ratio):

0.02 : 1.00 in new net general revenues totaling $0.232 million,
0.36 : 1.00 in new personal income totaling $4.118 million,
0.44 : 1.00 in new value-added (GSP) totaling $5.084 million, and
0.76 : 1.00 in new economic activity (output) totaling $8.699 million.

On average each year, the project creates:

42 new jobs annually (31 direct/ 11 indirect) paying an average wage of $24,609 per job,
$ 0.08 million in new net general revenues annually,
$ 1.37 million in new personal income annually,
$ 1.70 million in new value-added to the economy annually, and
$ 2.90 million annually in new economic activity.

(See attached MERIC report.)

(2) Project Delivery Approach

Consider the following factors to determine the risk associated with the proposed project's delivery within budget, on time, and as designed:

- The adequacy of any completed engineering work to assess and manage/mitigate the proposed project's engineering and constructability risks;
- The sufficiency of system safety and security planning; and
- The project's progress, at the time of application, towards compliance with environmental review requirements under NEPA and related statutes.

There is no known funding risk if approved per the cost-sharing terms with Union Pacific and the MOU. The project can be completed in a two-year construction timeframe, so barring extreme unforseen 'acts of God,' such as earthquakes, tornadoes, floods or fires, there are no schedule risks. Amtrak has shown no propensity to discontinue service as long as there is state financial support, which has been in place for more than 30 years. Many communities have invested substantial funds in their train stations and have a vested interest in ensuring the route's success, so there is no substantial risk of cities discontinuing support of their station stops. An outline System Safety Program Plan in conjunction with the Union Pacific (consistent with the requirements outlined in Section 4.2.6 of the CFR Vol. 75, No. 126 and 49 CFR 659) has been generated and is submitted in support of this application (see attachment). Ongoing PE-NEPA activities (granted for this project in a previous round of funding) continue and move toward the project's next stages for that of construction.

(3) Sustainability of Benefits

Address the likelihood of realizing the proposed project's benefits:

- The quality of financial planning documentation that demonstrates the financial viability of the HSIPR service that will benefit from the project;
- The availability of any required operating financial support, preferably from dedicated funding sources for the benefiting intercity passenger rail service(s);
- The quality and adequacy of project identification and planning;
- The reasonableness of estimates for user and non-user benefits for the project;
- The comprehensiveness and sufficiency, at the time of application, of agreements with key partners (including the railroad operating the intercity passenger rail service and infrastructure-owning railroads) that will be involved in the operation of the benefiting intercity passenger rail service, including the commitment of any affected host-rail carrier to ensure the realization of the anticipated benefits, preferably through a commitment by the affected host-rail carrier(s) to an enforceable on-time performance of passenger trains of 80 percent or greater;
- The favorability of the comparison between the level of anticipated benefits and the amount of Federal funding requested; and
- The applicant's contribution of a cost share greater than the required minimum of 20 percent.

The HSIPR project that will benefit from this planning is the *Missouri River Runner* Amtrak service that has been in existence for 31 years and continues to thrive. Recent increases in on-time performance and in passenger increases in numbers have made it a route with apromising future. Although it is funded by the state's general revenue and even though Missouri has had an extremely tight budget the last few years, there is no reason to expect that the service will not continue, especially as other projects to improve on-time service come on line and further support its funding.

The list of projects identified for this application were essentially the same as are being used with some exceptions from the 2007 University of Missouri study. All of these projects present a comprehensive and complete overview of the entire line and the needs along the line. This project is in a small area that was specifically identified in the 2007 study as the area between Lee's Summit and Warrensburg.

According to the study, the area needing improvements, which when totalled together equal 19.1 percent of all total delays on the line (by far the largest amount of delays), addresses the spirit and intent of the project well within the study's guidelines. The study has received great attention and continues to do so. As the projects are funded, it creates even greater support and continuing emphasis on funding all projects in the study.

Estimates for users vary, but in light of the fact that this is an area with no other sidings for many miles in either direction, this will create an excellent service method for trains to use in order to quickly reach the stations at Sedalia and Lee's Summit. It is estimated that a substantial portion of the freight trains now using the mainline will be diverted to the siding at the times the Amtrak trains are in the area.

MODOT maintains this project will not only improve Amtrak on-time performance but also remove freight trains from the mainline and move them onto the siding, thereby making the solution for all parties better and more comprehensive. Not only is the UP committed to at least an 85 percent on-time performance when this and several other projects are completed in the immediate area of western Missouri per the MODOT-UP MOU of 2009, it is also committed immediately to an 80 percent on-time performance when the three shovel-ready projects previously applied for and granted in 2010 are complete. The SOA also will be amended when this project comes on line.

These amounts are commensurate with the overall benefits in that the Amtrak benefits will be immediately apparent when in place. The freight benefits will, over a number of years and along with future projects for Missouri KC to St. Louis service for passenger trains, show how the additional capacity provided helps remove freight trains from former bottlenecks and puts them on a track to success with fewer problems in arriving at stations on-time. In the future, as the frequencies in freight train travel and the Missouri passenger rail service increase, the types of access and infrastructure improvements sought, such as the existing project, will be the type of projects with the most delivery at the least cost.

F. Statement of Work

The Statement of Work (SOW) is a required document. This must be submitted using the Narrative Application Form Part II. Statement of Work available on FRA's website to provide the required information. The quality and completeness of this document will be measured as a Project Readiness evaluation criterion, as outlined in Section 5.2.1 of the NOFA. Please provide the SOW as a separate document and list it in Section G.2 of this application.

The SOW is a description of the work that will be completed under the grant agreement and must address the background, scope, and schedule, and include a high-level budget of the proposed project.

(1) The SOW is required for a complete application package.

(2) The SOW should contain sufficient detail so that both FRA and the applicant can:

a. Understand the expected outcomes of the work to be performed by the applicant, and

b. Track applicant progress toward completing key project tasks and deliverables during the period of performance.

(3) The SOW should clearly describe project objectives, but allow for a reasonable amount of flexibility regarding how the objectives will be accomplished. It is important to describe the overall approach to and expectations for project/activity completion.

(4) If the SOW describes work for phases and/or groups of component projects, the larger program should be explained in the background section of the SOW. The remainder of the SOW should be limited to describing the activities that directly contribute to the combined FRA and applicant effort which is funded under the grant agreement.

G. Optional Supporting Information

Provide a response to the following questions, as necessary, for the proposed FD/Construction project.

(1) Please provide any additional information, comments, or clarifications, and indicate the section and question number that being addressed (e.g., Section E.2). Completing this question is optional.

The Kingsville siding is the third of the three sidings identified by a University of Missouri study that shows the lack of infrastructure in the area, which is used mostly by directional freight trains. The study illustrates the need for sidings, so Amtrak would not be delayed. The siding project completes the UP corridor with spacings of usable sidings at approximately every 15 miles along the Sedalia subdivision. The total impact on Amtrak trains will be a huge reduction in delay times since the problem of passing freight trains will be largely resolved in the area.

(2) Please provide a document title, filename, and description for all optional supporting documents. Ensure that these documents are uploaded to GrantSolutions.gov with the narrative application form and use a logical naming convention.

Document Title	Filename	Description and Purpose
Categorical Exclusion Worksheet	Kingsville Categorical Worksheet.doc	Describes environmental concerns.
Kingsville Estimate	Kingsville Estimate.pdf	Provides split out of costs for project.
Kingsville Schematic Sheet	Kingsville Plan Sheet.pdf	Identifies the design location of the project.
2011 Amtrak Support Letter	2011_Amtrak_Support_Ltr.pdf	Provides support from Amtrak for project.
2011 UP Support Letter	2011_UP_Support_Ltr.pdf	Provides support from Union Pacific for project.
2011 Project Map	2011_HSIPR_Project_Map.pdf	Identifies Location of projects for 2011 application.
Introductory letter from MoDOT Director	1lntro LETTER signed by KKeith.pdf	Cover letter for the HSIPR projects signed by MoDOT Interim Director
Overview of 2011 Projects	2Project Overview.pdf	Overview of Projects
HSIPR Projects Division of Costs	3HSIPR RAIL PROJECTS DIVISION OF COSTS Mar29 2011.docx	HSIPR Projects Division of Costs
Project Map and Partner Signature Map	4 2J011_HSIPR_Project_Map.pdf	Detailed project map and same map with signatures of support
Project Map and Partner Signature Map	SProject Map and Partner Signature Map.pdf	Detailed project map and same map with signatures of support
MOU between 4 states for joint application	6 State Equipment MOU.pdf	Demonstrates support of project by all parties.
Support Letter from UP for 2011 Applications	7 2011_UP_Support_Ltr.pdf	Provides support of projects for application
MoDOT/UP/Amtrak SOA	8Preliminary Executed SOA with	Identifies Service Outcomes for completion

	UP.pdf	of projects
Multi State Governors MOU	9MuIti - StateGovernorsM0USigned.pdf	Demonstrates commitment to High Speed Rail
Map of High Speed Rail	10US Federally Designated High Speed Rail Corridor Map.pdf	Identifies High Speed Rail Corridors
Letters of Reduced	11Complete Letters of Support-reduced.pdf	Letters of Support
Rail Capacity Analysis I & II	12Rail Capacity Analysis ReportsI and II.pdf	Rail Capacity Analysis Reports I and II
2009, 2010 and 2011 Economic Studies	13Economic Studies by MERIC.pdf	HSIPR Statewide and Lonterm Impacts Study prepared by MERIC
Mo Passenger Rail Schedule	14MO Passenger Rail Schedule.pdf	Missouri Passenger Rail Schedule
Mo Intercity Bus Stops	15Intercity Bus Stops.pdf	Missouri Intercity Bus Stops
Statewide Transportation Improvement Plan	16MHTC Auth on Corridor Improvement Projects STIP 2011-2015.pdf	Projects identified in Statewide Transportation Improvement Plan
Amtrak Operating Agreement	17Amtrak Operating Agreement.pdf	Amtrak Operating Agreement
Amtrak-MoDOT MOU	18Amtrak-MoDOT MOU.pdf	Amtrak-MoDOT MOU
Kansas City Terminal Memorandum of Understanding	19Kansas_City_Terminal_MOU.pdf	Commitment to application by MoDOT and KCT
Terminal Railroad Association of St. Louis Memorandum of Understanding	20STLTerminal-MoDOT MOU.pdf	Commitment to application by MoDOT and TRRA
Terminal Railroad Association of St. Louis Memorandum of Understanding	21TRRA MOU N. Market and Merchants.pdf	Commitment to application by MoDOT and TRRA
UP Memorandum of Understanding	22UP-MODOT MOU signed copy.pdf	Commitment to application by MoDOT and UP
UP Track Layout	23UP Track Layout.pdf	UP Track Layout

1996 Agreement	24-1996 agreement between MODOT and UP to preserve 3 more slots.pdf	1996 Agreement between MoDOT and UP to preserve 3 more slots
Amtrak Support Letter for Merchants and N Market	25 Amtrak Support for Merchants and N. Market	Amtrak Support Letter
Shell Spur Agreement	26Shell SpurAgreement.pdf	Shell Spur Agreement

Narrative Application Form Individual FD/Construction Part II Statement of Work

High-Speed Intercity Passenger Rail (HSIPR) Program

Statement of Work

The quality and completeness of this document will be measured as a Project Readiness evaluation criterion, as outlined in Section 5.2.1 of the NOFA. The applicant must provide a sufficient level of detail regarding scope, schedule, and budget that demonstrates the project is ready to immediately advance to award. Tables have been provided as illustrative examples for capturing data however, applicants can delete or adjust the tables as necessary. This form must be listed in Section G.2 of the Narrative Application Form Part I.

(1) Background. Briefly describe the events that led to the development of this FD/Construction project and the issue the project will address. Also describe the transparent, inclusive planning process used to analyze the investment needs and service objectives of the full corridor on which the individual FD/Construction project is located.

The area in which the siding will be constructed was identified as one of the large bottlenecks on the current Amtrak route in a 2007 study by the University of Missouri and as a section of track that needed an additional siding. This area between Lee's Summit and Warrensburg was one of the highest along the route at about 19 percent of total delays. This project would be similar in benefits to the other two sidings being developed for this section of the line near California and Knob Noster.

As with the other sidings, this siding will provide an additional place to pass trains easily and allow freight trains to take the siding instead of Amtrak. The overall benefits of greater on-time performance and reliability will be further served by this siding, which results in a higher quality of service.

Safety is also an important consideration. This area was chosen for its lack of many crossings and its rural setting in that the two tracks would least impact the local community. The benefits to the freight line from this and the other two sidings will have an immediate impact in terms of being able to sort trains in and out of Kansas City. Another benefit includes being able to better sort both east- and west-bound Amtrak trains as they go through this mostly single-track area.

This project will improve on-time performance along the entire Union Pacific corridor in Missouri between St. Louis and Kansas City and will also enhance the future provision of 90- to 110-mph service.

(2) Scope of Activities. Clearly describe the scope of the proposed FD/Construction project and identify the general objective and key deliverables.

(2a) General Objective. Provide a general description of the work to be accomplished through this grant, including project work effort, project location, and other parties involved. Describe the end-state of the project, how it will address the need identified in Background (above), and the outcomes that will be achieved as a result of the project

This project will construct a third siding in the Kingsville area. This siding will complement the two other sidings scheduled to be built on this same subdivision near California and at Knob Noster. The Kingsville siding is the third of the three sidings identified by a University of Missouri study that shows the lack of infrastructure in the area, which is used mostly by directional freight trains. The study illustrates the need for sidings, so Amtrak would not be delayed. The siding project completes the UP corridor with spacings of usable sidings at approximately every 15 miles along the Sedalia subdivision. The total impact on Amtrak trains will be a huge reduction in delay times since the problem of passing freight trains will be largely resolved in the area.

The area in which the siding will be constructed was identified as a bottleneck in a 2007 study by the University of Missouri and as a section of track that needed an additional siding. This results in Amtrak passenger trains being delayed on both sides of the corridor causing significant bottlenecks while trains wait for this stretch of the track to clear. The siding track will also improve the efficiency of the railroad by allowing for train meets and sorting of cars for freight trains as well as an area for storing trains during maintenance incidents

(2b) Description of Work. Provide a detailed description of the work to be accomplished through this grant by task (e.g., FD and Construction) including a description of the geographical and physical boundaries of the project. Address the work in a logical sequence that would lead to the anticipated outcomes and the end state of the activities.

The railroad has provided the project's construction cost estimate and schematic diagram for the approximate project location (see attachment). MoDOT has completed a preliminary evaluation of the project site and determined that this project would most likely require a categorical exclusion. Union Pacific Railroad has completed NEPA requirements satisfactorily on several other projects, including the Shell Spur siding, for which construction is complete.

Pursuant to MoDOT's stewardship goals and tangible result of being environmentally responsible, MoDOT Design's environmental staff, in coordination with Union Pacific Railroad, will review the project to determine the appropriate environmental classification/level of NEPA documentation. This project will have minimal social, economic or environmental impacts; however, due to potential impacts and the proximity of the project to a couple creeks, a Section 404 Clean Water Act individual permit will more than likely be required. The project will likely require a Categorical Exclusion. Please refer to the following website for MoDOT's Engineering Policy Guide identifying the detailed steps for the PE/NEPA process http://epg.modot.mo.gov/index.php?title=127.14_National_Environmental_Policy_Act_(NEPA)_Classification_and_Documents. PE/NEPA for all projects will be completed relatively quickly upon grant award, and the Kingsville project is no exception.

In addition, the SOA was signed by MoDOT and UP in March 2011 and continued negotiations are pending with Amtrak and FRA. Any projects received in the current application process will be amended to include these projects. The expectation is that this required environmental work would be completed quickly in time for the project to move forward to construction as soon as possible.

(2c) Deliverables. Describe the work products of the project to be completed to FD, or constructed in accordance with the FD that were provided to FRA during the application process or will be completed as a part of this grant. In the table provided, list the deliverables, both interim and final, that are the outcomes of the project tasks.

	Deliverable	Task
1	Track Drawing Plan Sheets, PE-NEPA and estimate	Engineering
2	Stakeholder Construction Agreement, Tri-Party Service Outcomes Agreement, Grant Agreement with FRA	Agreements for obligation of funds

(3) Project Schedule. In the table below, estimate the approximate duration for completing each task in months. For total project duration, reference Section C.4 in the Narrative Application Form Part I.

	Task	Duration		
		Start Month	to	End Month
1	FD/ Engineering	June 2011	**to**	August 2011
2	Construction	September 2011	**to**	February 2012
	Total project duration	*21 months*		

(4) Project Cost Estimate/Budget. Provide a high-level cost summary of FD/Construction work in this section, using the FD/Construction Application Package Instructions, the HSIPR Individual Project Budget and Schedule form, and the Narrative Application Form Part I as references. The figures in this section of the Statement of Work should match exactly with the funding amounts requested in the SF-424 form, the HSIPR Individual Project Budget and Schedule form, and Section C of the Narrative Application Form Part I. If there is any discrepancy between the Federal funding amounts requested in this section, the SF-424 form, the HSIPR Individual Project Budget and Schedule form, or Section C of the Narrative Application Form Part I, the lesser amount will be considered as the Federal funding request. Round to the nearest whole dollar when estimating costs.

The total estimated cost of the proposed FD/Construction project is provided below, for which the FRA grant will contribute no more than the Federal funding request amount indicated. Any additional expense required beyond that provided in this grant to complete the proposed FD/Construction project shall be borne by the Grantee.

FD/Construction Project Overall Cost Summary		
#	Task	Cost in FY11 Dollars
1	Engineering	$958,000
2	Construction	$ 10,660,300
	Total FD/Construction project cost	$11,618,300
Federal/Non-Federal Funding		

		Cost in FY11 Dollars	Percentage of Total Activities Cost
	Federal funding request	$11,618,300	100 %
	Non-Federal match amount	$0	0 %
	Total FD/Construction project cost	$11,618,300	100 %