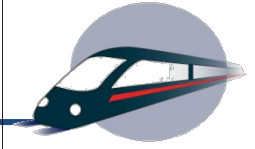


Narrative Application Form – Individual PE/NEPA

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 these PE/NEPA activities 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.

(1) Name the submitting agency: Missouri Department of Transportation		Provide the submitting agency Authorized Representative name and title: Rodney Massman, Administrator of Railroads		
Address 1: PO Box 270	City: Jefferson City	State: MO	Zip Code: 65102	Authorized Representative telephone: (573) 751-7476 Authorized Representative email: Rodney.massman@modot.mo.gov
Provide the submitting agency Point of Contact (POC) name and title (if different from Authorized Representative): Rodney Massman, Administrator of Railroads		Submitting agency POC telephone: (573) 751-7476 Submitting agency POC email: Rodney.massman@modot.mo.gov		
(2) List out the name(s) of additional State(s) applying (if applicable): N/A				

B. Eligibility Information

Complete the following section to demonstrate satisfaction of 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 underlying project.¹ As defined in Section 3.5.1 of the NOFA, the process should analyze the investment needs and service objectives that the underlying project is intended to benefit. Refer to the PE/NEPA 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
- The underlying project is not included in a relevant and documented planning process

(3) Select and describe the operational independence of the underlying project.² 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 program project(s) (identify previously selected or awarded projects below).
- This project is not operationally independent.

Briefly clarify the response:

¹ PE/NEPA activities include the specific tasks necessary to complete PE/NEPA documentation and other tasks applied for in this application that relate to this phase of the underlying project’s development. The underlying project is the larger area and/or infrastructure that will become the Final Design (FD)/Construction project following completion of the PE/NEPA activities.

² A project is considered to have operational independence if, upon being implemented, it will provide tangible and measurable benefits, either independently of other investments or cumulatively with projects selected to receive awards under previous HSIPR program solicitations.

C. PE/NEPA Activities Summary

Identify the title, location, and other information of the proposed PE/NEPA work 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 underlying project (e.g., “DC-Capital City to Dry Lake Track Improvements”). Please limit the response to 100 characters.

MO-KC to STL Corridor-New High Speed Dedicated corridor between KC and STL PE/NEPA

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

Preliminary Engineering Project NEPA³ (including preliminary property acquisition)

(3) 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.

- | | |
|--|---|
| <input type="checkbox"/> ARRA – Track 1 | <input type="checkbox"/> FY 2010 Service Development Program |
| <input type="checkbox"/> ARRA – Track 2 | <input type="checkbox"/> FY 2010 Individual Project – PE/NEPA |
| <input type="checkbox"/> FY 2009 – Track 4 | <input type="checkbox"/> FY 2010 Individual Project – FD/Construction |
| <input type="checkbox"/> FY 2009 Residual | <input checked="" type="checkbox"/> N/A |

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

Number of Months: 60

(5) Specify the anticipated HSIPR funding level for the proposed PE/NEPA activities. 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
\$600,000,000	<u>0</u>	\$600,000,000	<u>0 %</u>

³ Project NEPA documentation is required for the specific design alternative identified through Preliminary Engineering and related activities. Project NEPA documentation may also be referred to as site-specific NEPA or Tier II NEPA documentation.

(6) Indicate the source, amount, and percentage of matching funds for the proposed PE/NEPA activities. 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 ⁴	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				<u>\$ 0</u>	<u>0 %</u>	

(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 underlying project is located and identify the start and end points as well as major integral cities along the route.

The corridor associated with this project is a new line located between Kansas City, Missouri and St. Louis, Missouri. The termini are located at the western junction with the UP in Kansas City Terminal in the western part of Missouri and the eastern junction of St Louis Terminal with the UP in the eastern part of Missouri. This application is requesting funds for *Phase Three: NEPA Analysis* and this will determine the exact location of the route and the affected integral cities outside of the urban cores noted as the termini. Major cities and their associated counties located in the termini locations are: St Louis City (no associated county) and Kansas City, Jackson County. Other counties in Missouri that could be affected include: Lafayette, Johnson, Saline, Pettis, Howard, Cooper, Moniteau, Cole, Boone, Callaway, Mexico, Osage, Audrain, Montgomery, Gasconade, Warren, Franklin, Lincoln, and St. Charles.

The Terminal Railroad Association of St. Louis (reporting mark TRRA) is a terminal railroad owned by the Class I railroads which

⁴ 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.



run into St. Louis, Missouri which handles traffic through its metropolitan area. Current owners include BNSF Railway, Canadian National Railway, CSX Transportation, Norfolk Southern Railway and Union Pacific Railroad. The terminal also connects with the Kansas City Southern Railway.

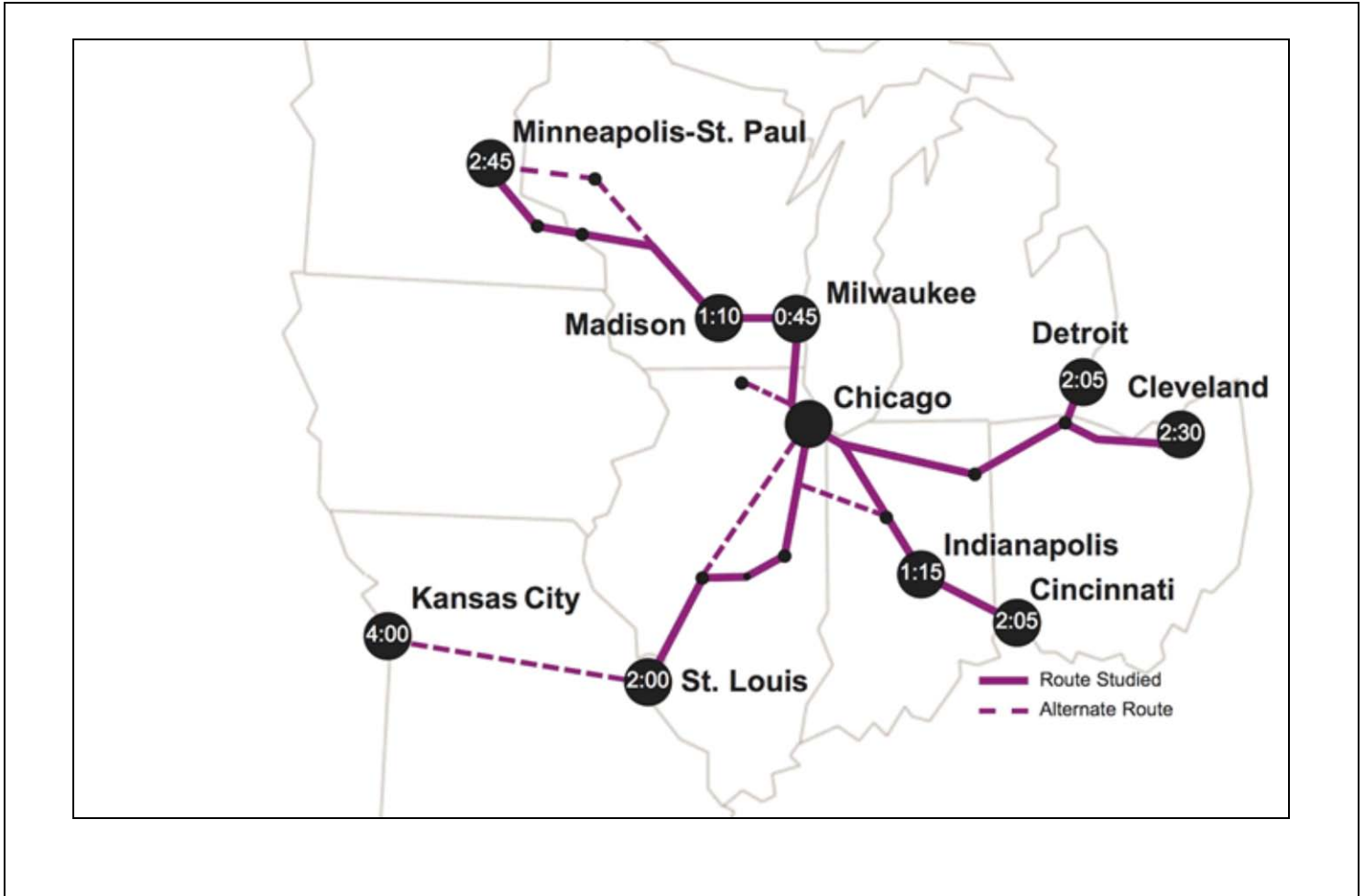
On the western part of Missouri, the rail line will connect with the Kansas City Terminal Railway, a Class III railroad terminal that serves as a joint operation of the trunk railroads that serve the Kansas City metropolitan area, the country's second largest rail hub. It serves the Class I railroads BNSF, Kansas City Southern, Norfolk Southern Railway and Union Pacific as well as Class II carrier Iowa, Chicago and Eastern Railroad and Class III Missouri and Northern Arkansas Railroad plus Amtrak.

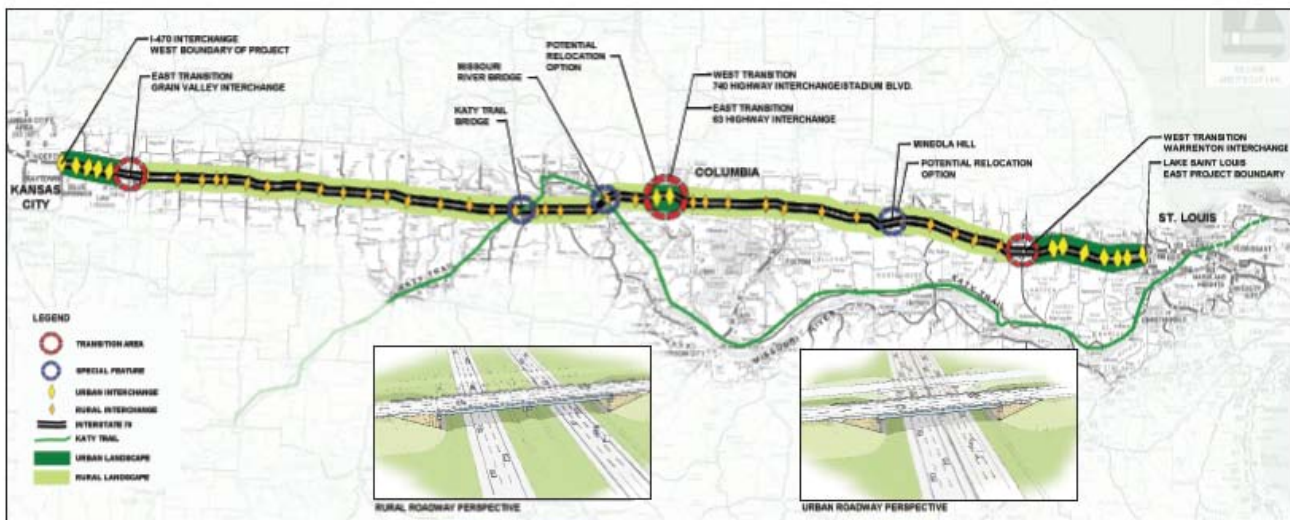
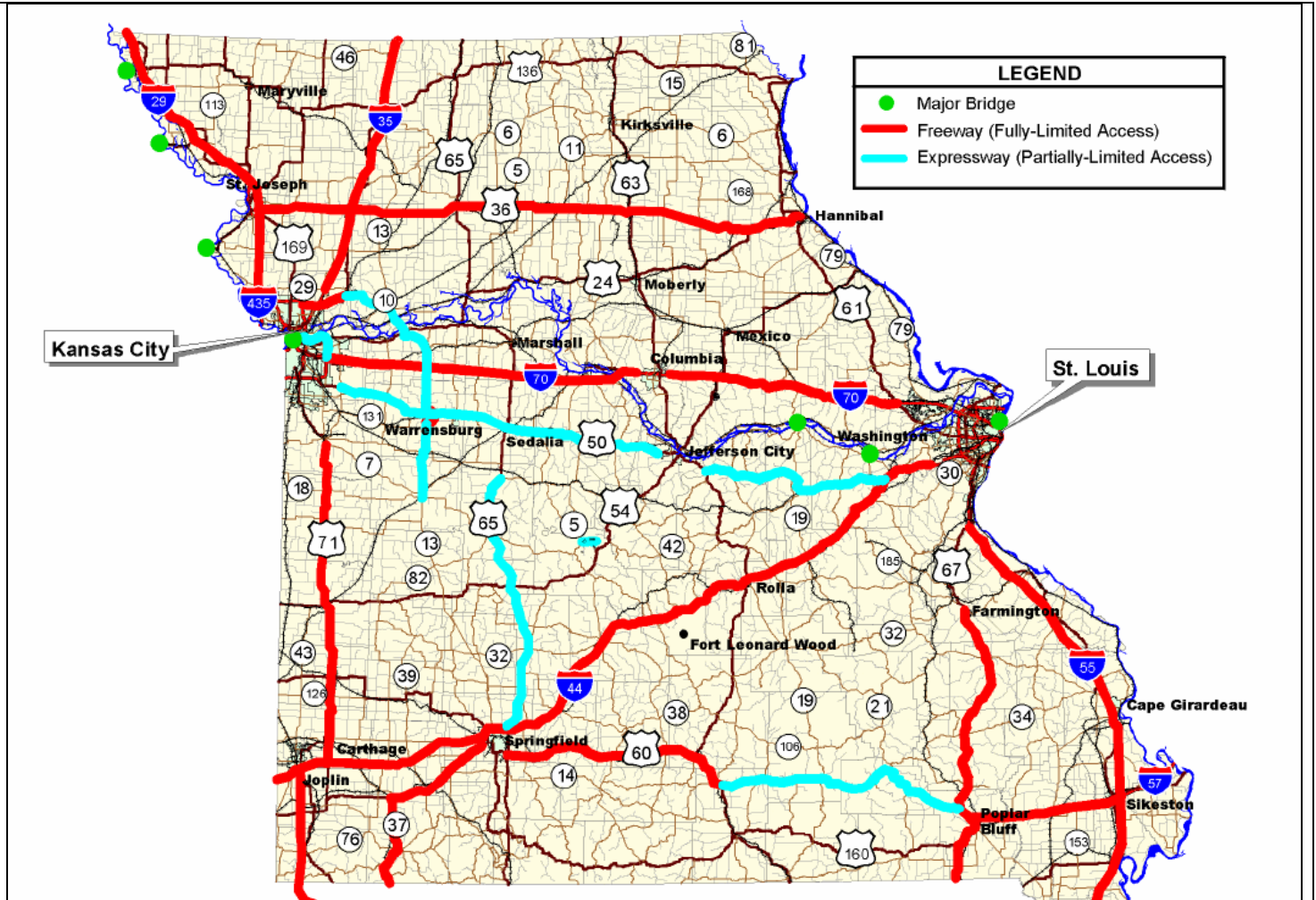
(9) Describe the underlying project location, using municipal names, mileposts, control points, or other identifiable features such as longitude and latitude coordinates. If available, please provide a project GIS shapefile (.shp) as supporting documentation. This **document must be listed in Section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

Missouri's new high speed dedicated corridor lies between Kansas City, Missouri and St. Louis, Missouri and has a designation as a capable of 110 MPH line. This application is requesting funds for *Phase Three: NEPA Analysis and Preliminary Engineering and a portion of Phase Four: Procurement of Right of Way.* After the third phase is complete, the State will be able to determine the exact location of the route and the affected integral cities outside of the urban cores noted as the termini. Major cities and their associated counties located in the termini locations are: St Louis City (no associated county) and Kansas City, Jackson County.

The maps below indicate potential locations of the high speed line that would traverse the state. Additional maps are available as appendices and a GIS Shapefile is also attached.







(10) Provide an abstract outlining the proposed PE/NEPA activities. 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 underlying project.

Project Narrative:

Missouri's new high speed dedicated corridor between Kansas City, Missouri and St. Louis, Missouri has a designation as a capable of 110 MPH high speed rail (HSR) corridor and is a link in a critical network of the Administration's "High-Speed Rail in America" initiative. From the time the Federal Railroad Administration (FRA) approved the extension of the Chicago Hub corridor across Missouri and its inclusion as a key component in the Midwest Regional Rail System, there has been a flurry of planning activity to prepare the corridor concept for the *Phase Three: Preliminary Engineering (PE)* and satisfaction of the *National Environmental and Protection Act (NEPA)* requirements. Currently, the basic planning and development phases are complete and *Phase Three* is needed to address the most appropriate and feasible route for the corridor. *Phase Three* will end with a decision on the most appropriate route through the state. *Phase Four: Procurement of Right of Way (ROW)* along the appropriately selected corridor is also included in this application. Anticipated costs for a significant portion of ROW are \$500 million US Dollars

Milestones:

Major milestones for *Phase Three: Preliminary Engineering and NEPA Analysis* and *Phase Four: Procurement of Right of Way* are noted below. **The time is calculated from the obligation date for funds associated with this application.**

- Develop A Service Agreement for the HSR corridor
- Execution of project agreements – 2 months
- Development of basic design – 4 months
- Preliminary plans approval – 5 months
- Preliminary plans distribution – 6 months
- Publication of Notice of Availability (NOA) associated with draft Environmental Impact Statement (EIS) – 10 months
- Circulation of draft EIS
- Public hearings with stakeholders and concerned public within 30 days of draft availability – 11 months
- Publication of NOA associated with final EIS
- Circulation of Final EIS -18 months

As previously noted, passenger service already operates on a similar cross state corridor, route selection has been made and a Service Development Plan is in the process for the corridor. This Environmental Impact Statement (EIS) will consider the impact development required for the 110 MPH service for a new route on the corridor and aid in the selection of an exact location for construction of a new rail corridor to provide 110–125 MPH service. *Phase Five* will include the Detailed Engineering Plans associated with the chosen location.

- Issuance of the Record of Decision (ROD) – 24 months
- Right of Way (ROW) plan development – 24 months
- ROW plan review- 24 months
- ROW cost estimates – 28 months
- Acquisition authority – 30 months
- Notice of Intent to acquire – 44 to 72 months
- Utility coordination – 40 months

- ROW procurement – 71 months
- ROW clearance certification – 72 months

As previously noted, passenger service already operates on a similar cross state corridor, route selection has been made and a Service Development Plan has been prepared for the corridor. This Environmental Impact Statement (EIS) will consider the impact development required for the 110 MPH service for a new route on the corridor and aid in the selection of an exact location for construction of a new rail corridor to provide 110 MPH service. *Phase Five* will include the Detailed Engineering Plans associated with the chosen location.

Outcomes

Currently, the basic planning and development phases are complete. *Phase Three*, as noted in this application, is needed to address the most appropriate and feasible route for the corridor in order to complete the ROW procurement, detailed design and construction phases. Anticipated costs for a significant portion of ROW are estimated at \$500 million US Dollars, detailed design and construction are estimated at \$8 billion US Dollars.

Service objectives associated with the new corridor include:

- 1) Meeting current and future regional travel needs through significant improvement to the level and quality of passenger rail service.
- 2) Enhancing the reliability of both passenger and freight rail services along the mid west Chicago Hub Network Corridor.
- 3) Decreasing the trip time from Kansas City to Chicago; including all intermediary stops and connecting trips.
- 5) Reducing the quantity of trucks that travel on Interstate 70 in Missouri.
- 6) Reducing the number of passenger vehicles that travel on Interstate 70 in Missouri.
- 7) Increasing the options available for passenger and freight travel across the State of Missouri.
- 8) Providing the potential for further service frequency increases and High Speed Rail service.

Benefits

The benefits associated with the underlying project, the construction and operation of a dedicated high speed corridor traversing the State of Missouri, is the ability for the line to serve as a catalyst to promote economic expansion (including new manufacturing jobs), create new modal choices for passengers, both work and recreational travelers, provide alternatives for freight distribution, decrease travel times for the existing cross state corridor as traffic is removed and placed on the new high speed corridor, reduce national dependence on oil and foster livable urban and rural communities. The corridor will also serve as Missouri's contribution to the National high speed rail network and the Chicago Hub Network corridor. Finally, the existing network includes auto, bus, air, and rail travel, but currently 99% of the trips made annually in this corridor are via auto and air. Improving intercity passenger rail will divert more users to rail, improving utilization and providing benefits to the human environment.

Secondary Impact

This corridor is also expected to open up the opportunity of Missourians to work in either of the two termini locations, St. Louis or Kansas City, a mid state location such as Jefferson City or Columbia and a Chicago Hub locale. The commute to any of the points will

become an option for many Missourian and Illinoisans. This has significant ongoing development opportunities for communities as well as impact for the core urban areas. With a dedicated commuter line for travel to employment in a reasonable time, we can anticipate that ridership will increase as Missourians choose the high speed rail network for their daily travel needs. Travel to Chicago for intermittent work and recreation is also plausible as service becomes faster and more reliable.

Employment Benefits

Investment during the Preliminary Engineering and NEPA analysis is estimated to support 104 direct jobs and the procurement of ROW is expected to support 39 direct, full time employees over the course of 42 months. The construction phase is estimated to support over 208,674 direct, indirect and induced jobs. The construction industry has seen unemployment reach almost 25% during the past few years. Further, considerable operational employment is anticipated as the new route must be serviced for maintenance and new train sets that need additional full time engineers. The impact is estimated at 110 jobs beginning in FY 2015. The new corridor, both in construction and operation phases, will be an incredible boost to Missouri’s economy. The progression of the implementation phase, including PE\ NEPA and ROW procurement are the final steps that Missouri needs before realizing the employment benefits associated with construction of the corridor.

(11) Indicate the type of expected capital investments included in the underlying project. ⁵ Check all that apply.

- | | |
|---|---|
| <input checked="" type="checkbox"/> Communication, signaling, and control | <input checked="" type="checkbox"/> Rolling stock refurbishments |
| <input checked="" type="checkbox"/> Electric traction | <input checked="" type="checkbox"/> Station(s) |
| <input checked="" type="checkbox"/> Grade crossing improvements | <input checked="" type="checkbox"/> Structures (bridges, tunnels, etc.) |
| <input checked="" type="checkbox"/> Major interlocking | <input checked="" type="checkbox"/> Support facilities (yards, shops, administrative buildings) |
| <input checked="" type="checkbox"/> Positive Train Control | <input checked="" type="checkbox"/> Track rehabilitation and construction |
| <input checked="" type="checkbox"/> Rolling stock acquisition | <input checked="" type="checkbox"/> Other (please describe) Entirely new dedicated alignment. |

(12) Indicate the anticipated service outcomes of the underlying project. Check all that apply.

- | | |
|---|---|
| <input checked="" type="checkbox"/> Additional service frequencies | <input checked="" type="checkbox"/> Improved operational reliability on existing route |
| <input checked="" type="checkbox"/> Service quality improvements | <input checked="" type="checkbox"/> Improved on-time performance on existing route |
| <input checked="" type="checkbox"/> Increased average speeds/shorter trip times | <input checked="" type="checkbox"/> Other (please describe) Entirely new dedicated alignment. |

Briefly clarify the response(s), if needed:

(13) Provide the following information about job creation through the life of the PE/NEPA development activities.

Anticipated number of <u>annual</u> onsite and other direct jobs created (on a 2080 work-hour per year, full-time equivalent basis)	PE/NEPA Period
	<u>NEPA 52 direct jobs</u>
	<u>PE 52 direct jobs</u>
	<u>ROW Procurement 39 direct jobs</u>

⁵ The underlying project is the larger area and/or infrastructure that will become the FD/Construction project following completion of the PE/NEPA activities.



(14) Quantify the applicable service outcomes of the underlying project. Provide the current conditions and anticipated service outcomes. Future state information is required only for the service outcomes identified in Section C.12.

The new, modern tracks for cross state travel are intended to merge with both the St. Louis and Kansas City Terminals which offer multimodal passenger and freight connections and further connect with the new double track on the Illinois side of St. Louis and complete the route from western Missouri to Chicago. The corridor development will provide for independent utility by improving reliability and trip time for passenger and freight services and high-speed services, as well as added capacity. The project supports the state's Statewide Transportation Improvement Plan (STIP) by providing easily accessible modal choices.

Service outcomes associated with the new corridor include:

- 1) Meeting current and future regional travel needs through significant improvement to the level and quality of passenger rail service.
- 2) Enhancing the reliability of both passenger and freight rail services along the mid west Chicago Hub Network Corridor.
- 3) Decreasing the trip time from Kansas City to Chicago; including all intermediary stops and connecting trips.
- 4) Reducing the quantity of trucks that travel on Interstate 70 in Missouri.
- 5) Reducing the number of passenger vehicles that travel on Interstate 70 in Missouri.
- 6) Increasing the options available for passenger and freight travel across the State of Missouri.
- 7) Providing the potential for further service frequency increases and High Speed Rail service.

	Frequencies⁶	Scheduled Trip Time (round-trips, in minutes)	Average Speed (mph)	Top Speed (mph)	Reliability – Provide Either On-Time Performance Percentage or Delay Minutes
Current	na	na	na	na	na
Future	TBD by PE-NEPA evaluation	TBD by PE-NEPA evaluation	110	125	100%

⁶ Frequency is measured in daily round-trip train operations. One daily round-trip operation should be counted as one frequency.

(15) Indicate if any PE or NEPA activities that are part of this application are underway or completed. Check all that apply.

- Preliminary Engineering activities are complete. NEPA activities are complete.
 Preliminary Engineering activities are in progress. NEPA activities are in progress.
 No Preliminary Engineering activities are in progress or completed. No NEPA 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.

Activity	Description	Completed? (If yes, check box)	Start Date (mm/yyyy)	Actual or Anticipated Completion Date (mm/yyyy)
Missouri Toll Feasibility Study		X	2002	2003
Service Plan associated with MWRR		X	2008	2009
Procure train equipment	Three new train sets to be purchased by the State of Missouri and potentially ran on the HSR dedicated corridor.		2011	2012
Missouri State Rail Plan	Plan was initiated and approved in 2009-2010	X	2009	2010
Dedicated I-70 Truck Lane Study	Study considers alternatives for High Speed Rail for existing I-70 Corridor	<input type="checkbox"/>	??	??

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

Address the section below with information regarding railroad infrastructure owners and operators of the underlying project for the proposed PE/NEPA development activities. 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
NA				

(2) Name the Intercity Passenger Rail Operator and provide the status of the 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
To Be Determined	

(3) Identify the types of services affected by the underlying project and provide information about the existing rail services within the underlying 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.

Type of Service	Name of Operator	Top Existing Speeds Within Underlying Project Boundaries (mph)		Number of Route-Miles Within Underlying Project Boundaries (miles)	Average Number of Daily One-Way Train Operations ⁷ Within Underlying Project Boundaries
		Passenger	Freight		
Freight	To Be Determined	TBD	TBD	TBD	TBD – Preliminary considerations to permit freight carriers during off-peak hours.
Intercity Passenger Rail	To Be Determined	<u>110</u>	<u>125</u>	TBD	

- TBD (To Be Determined)

⁷ 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 service and select the approximate cost share to be paid by the beneficiary.⁸ 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 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%
Passenger	Greater than 75%	0%

⁸ 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 PE/NEPA activities and underlying project will achieve these benefits.⁹

(1) Project Readiness

Describe the feasibility of the proposed PE/NEPA project to proceed promptly to award, including addressing:

- 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 an executed service outcomes 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 (included in the HSIPR Narrative Application Form), including whether the Statement of Work provides a sufficient level of detail regarding scope, schedule, and budget to immediately advance the project to award.

Describe the feasibility of the proposed PE/NEPA project to proceed promptly to award, including addressing:

- 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 an executed service outcomes 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 (included in the HSIPR Narrative Application Form), including whether the Statement of Work provides a sufficient level of detail regarding scope, schedule, and budget to immediately advance the project to award.

Planning for this rail corridor has been underway for more than 10 years. Along with national and regional efforts, as described in the background section, several detailed studies of this corridor have been completed. The following items are associated with the planning portions; *Phase 1* and *Phase 2* of this project:

- 1) A Service Agreement for the HSR corridor has been developed.
- 2) Illinois has moved forward with their portion of the project: a double track from St. Louis to Chicago.
- 3) Purchase of three train sets by the State of Missouri.
- 4) I-70 Corridor Study (see appendix)
- 5) Truck Only Lane Corridor Study (see appendix)
- 6) Missouri State Rail Plan (see appendix)

The following items are associated with the *Phase Three: Preliminary Engineering/ NEPA* and *Phase Four: Right of Way* procurement for portions of the project:

Key NEPA milestones, measured from project start date, include:

⁹ PE/NEPA activities include the specific tasks necessary to complete PE/NEPA documentation and other tasks applied for in this application that relate to this phase of the underlying project. The underlying project is the larger area and/or infrastructure that will become the FD/Construction project following completion of the PE/NEPA activities.

- o issue Notice of Intent (2 months)
- o scoping meetings (3 months)
- o Notice of Availability (NOA) published and Draft EIS circulated (15 months)
- o public hearing(s) within 30 days of draft availability (16 months)
- o comment period and comments incorporated in Final EIS (21 months)
- o NOA published and Final EIS circulated (23 months)
- o Preliminary Plans (23 months)
- o comment period and issuance of Record of Decision (24 months)
- o Right-of-way Plans (48 months)
- o Right of way purchased (72 months)

(2a) Transportation Benefits

Describe the transportation benefits that will result from the underlying project of the proposed PE/NEPA activities and how they will be achieved in a cost-effective manner, including addressing:

- Generating improvements to existing high-speed and intercity passenger rail service, as reflected by estimated increases in ridership, increases in operational reliability, reductions in trip times, additional service frequencies to meet anticipated or existing demand, and other related factors;
- Creating an integrated high-speed and intercity passenger rail network;
- Encouragement of intermodal connectivity and integration, including a focus on convenient connection to local transit and street networks, as well as coordination with local land use and station area development; (connect with bi state Metro transit and transit network in Kansas City)
- 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 from benefiting entities in the project's financing;
- 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.

The transportation benefits associated with the dedicated high speed corridor include the expected service outcomes, participation of Missouri as a key link in the National and Regional high speed network and promoting ample investment opportunities for the service on the corridor and projected freight and passenger increases.

Service objectives associated with the new corridor include:

- 1) Meeting current and future regional travel needs through significant improvement to the level and quality of passenger rail

service.

2) Enhancing the reliability of both passenger and freight rail services along the mid west Chicago Hub Network Corridor. This is accomplished by providing 200 miles of additional capacity to reduce congestion and bottlenecks associated with the existing Union Pacific cross state corridor, providing a modernized track to accommodate faster moving traffic

3) Decreasing the trip time from Kansas City to Chicago; including all intermediary stops and connecting trips. (Figure 1 below)
The ability to divert patrons from existing modes depends not on line-haul times but on comparative total travel times, which also include access to, egress from, and time spent in stations. The composition of those total travel times varies dramatically among modes, as shown in the figure below for the Chicago—Detroit market. The total travel time savings would be a component of the completed EIS for the corridor project and is expected to be a considerable savings for patrons.

4) Reducing the quantity of trucks that travel on Interstate 70 in Missouri. (See Figure 2 below)

5) Reducing the number of passenger vehicles that travel on Interstate 70 in Missouri.

6) Increasing the options available for passenger and freight travel across the State of Missouri.

7) Providing the potential for further service frequency increases and High Speed Rail service.

8) 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.

Network and Investment Benefits:

The benefits associated with the underlying project, the construction and operation of a dedicated high speed corridor traversing the State of Missouri, is the ability for the line to serve as a catalyst to promote economic expansion (including new manufacturing jobs), The corridor will also serve as Missouri’s contribution to the National high speed rail network and the Chicago Hub Network corridor.

Secondary Transportation – Related Impact

This corridor is also expected to open up the opportunity of Missourians to work in either of the two termini locations, St. Louis or Kansas City, a mid state location such as Jefferson City or Columbia and a Chicago Hub local. The commute to any of the points will become an option for many Missourian and Illinoisans. This has significant ongoing development opportunities for communities as well as impact for the core urban areas. With a dedicated commuter line for travel to employment in a reasonable time, we can anticipate that ridership will increase as Missourians choose the high speed rail network for their daily travel needs. Travel to Chicago for intermittent work and recreation is also plausible as service becomes faster and more reliable.

Figure 1- Travel times by mode

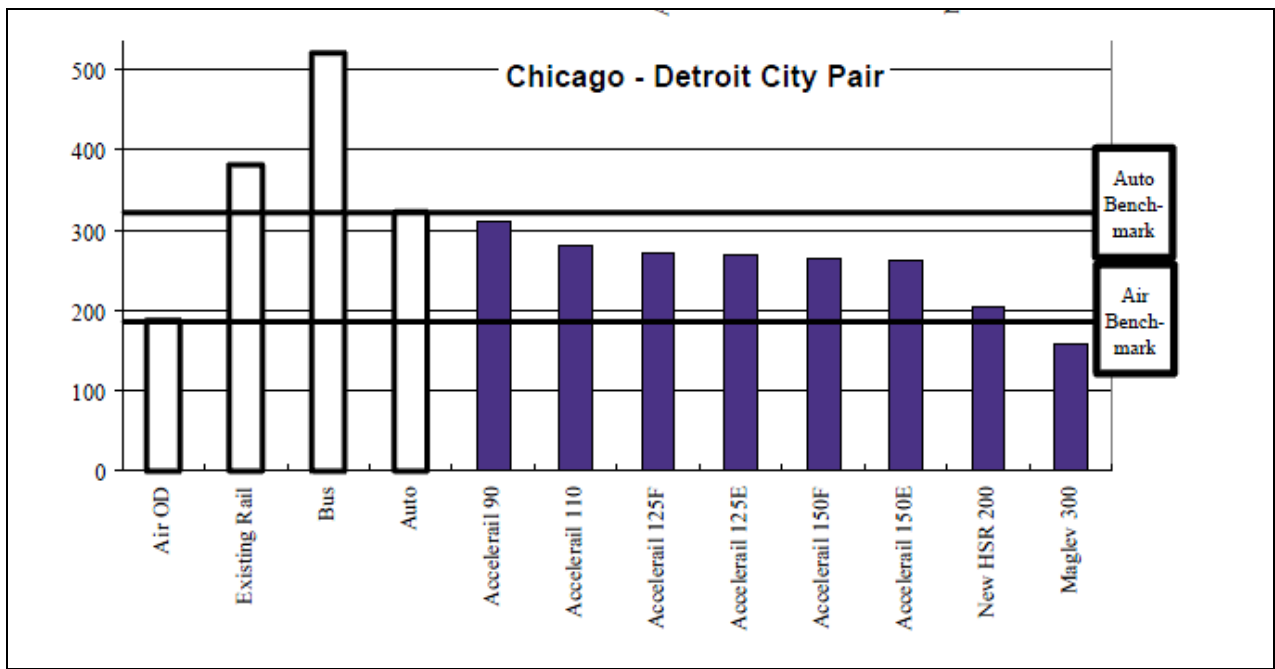
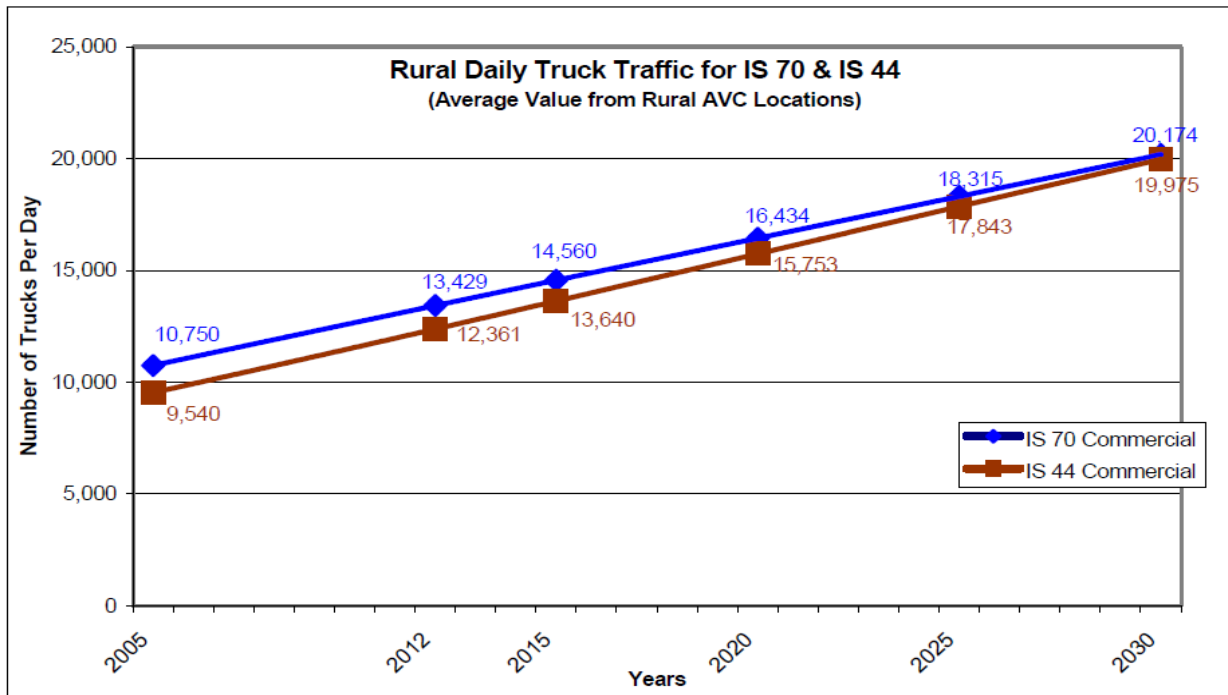


Figure 2: Daily truck traffic



(2b) Other Public Benefits

Describe the other public benefits that will result from the underlying project and how they will be achieved in a cost-effective manner, including addressing:

- The extent to which the project is expected to create and preserve jobs and stimulate increases in economic activity;
- Promoting environmental quality, energy efficiency, and reduction in dependence on oil, including the 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; and
- Promoting coordination between the planning and investment in transportation, housing, economic development, and other infrastructure decisions along the corridor, as identified in the six livability principles developed by DOT with the Department of Housing and Urban Development and the Environmental Protection Agency as part of the Partnership for Sustainable Communities, which are listed fully at <http://www.dot.gov/affairs/2009/dot8009.htm>.

activity, including the extent to which the activity may be expected to:

- Lead to benefits for intercity passenger rail including travel time reductions, increased frequencies, and enhanced service quality
- Address safety issues
- Address intercity passenger rail reliability issues
- Be integrated and complementary to the relevant comprehensive planning process (23 U.S.C. 135)
- Support livable communities
- Promote environmental quality and/or energy efficiency
- Provide other public benefits in a cost-effective manner

Economic Benefits

Along with transportation related benefits, this corridor is expected to open up the opportunity of Missourians to work in either St. Louis or Kansas City and a mid state location such as Jefferson City or Columbia and commute to any of the three points. This has development opportunities for communities as well as impact for the core urban areas. With a dedicated commuter line for travel to employment in a reasonable time, we can anticipate that ridership will increase as Missourians choose the high speed rail network for their daily travel needs. Travel to Chicago for work related options is also plausible as service becomes faster and more reliable.

Livability

Although there are existing means of travel between the two areas, the level of service the high speed corridor will provide is expected to increase the possibility of commuter traffic and even shift communities along the corridor. The livability factors of these communities would increase as additional modal choice is provided to the communities of western, eastern and central Missouri as well as all other affected communities along the Chicago hub network.

National Security

The benefit of high speed rail travel, especially in lieu of highways is the decreased reliance on foreign oil. A portion of the trips taken on I-70 would be taken off highways and placed on the new rail corridor.

Environmental Benefits

The existing network includes auto, bus, air, and rail travel, but currently 99% of the trips made annually in this corridor are via auto and air. Improving intercity passenger rail will divert more users to rail, improving utilization and providing benefits to the human environment. Existing ridership in the St. Louis to Kansas City Corridor is significant, with almost **one-quarter of a million** passenger trips carried annually. New corridor will improve on-time performance and reduce train travel times, making train travel more attractive. For illustrative purposes, even if the project itself only increased annual ridership by one (1) percent (assuming 100% mode shift from automobile to train travel; a shift from airplane to train travel would likely yield even higher results), the resulting annual environmental benefits for the first and fifth years could be similar to the following:

- Reduce vehicle miles of travel by 650,000;
- Reduce fuel consumption by 41,750 gallons, reducing dependence on oil;
- Reduce volatile organic compound (VOC) emissions by 700 pounds;
- Reduce carbon monoxide (CO) emissions by 15,000 pounds;
- Reduce oxides of nitrogen (NOx) emissions by 950 pounds;
- Reduce carbon dioxide (CO2) emissions by 400 tons; and
- Reduce particulate (PM10) emissions by 50 pounds.

Employment Benefits:

Do the size of the investment for a dedicated high speed rail corridor and the benefits associated with the new corridor; the employment impact for the state would be sizable as gains would come in both the short and long term. Investment during the Preliminary Engineering and NEPA analysis is estimated to support 104 direct jobs and the procurement of ROW is expected to support 4 direct, full time employees over the course of forty eight months. The construction phase is estimated to support over 208,674 direct, indirect and induced jobs. The construction industry has seen unemployment reach over 24% and the loss of 649,800 non residential construction jobs in a single year. Further, considerable operational employment is anticipated as the new route must be serviced and new train sets that need additional full time engineers. The impact is estimated at 110 jobs beginning in FY 2015. The new corridor, both in construction and operation phases, will be an incredible boost to Missouri's economy. The progression of the implementation phase, including PE\ NEPA and ROW procurement are the final steps that Missouri needs before realizing the employment benefits associated with construction of the corridor.

(3) Project Delivery Approach

Describe the risk associated with the delivery of the PE/NEPA development activities within budget, on time, and as designed, including addressing:

- The timeliness of project completion and the realization of the project's benefits;
- The applicant's financial, legal, and technical capacity to implement the project;
- The applicant's experience in administering similar grants and projects;
- The soundness and thoroughness of the cost methodologies, assumptions, and estimates;
- The thoroughness and quality of the project management documentation; and
- The timing and amount of the project's future noncommitted investments.

As a result of its responsibility for state highways, MoDOT has significant experience with NEPA and planning projects. Among the major capital improvement projects MoDOT has successfully managed are the St. Louis I-64 reconstruction (PE-\$33,395,000, NEPA-\$4,732,000), which received the 2010 America's Best Transportation Award for Best Transportation Project in the Country; Safe and Sound Bridge design/build project (PE-\$18,426,000); new Mississippi River Bridge (PE-\$18,386,000); KCIcon I-29 Missouri River Bridge construction (PE-\$16,326,000, NEPA-\$2,900,000); Jackson County I-70 (NEPA-\$1,220,000); Benton County Route 65 (NEPA-\$852,000); Cole County Route 50 (NEPA-\$800,000); and Boone County, Route 740 (NEPA-\$540,000).

MoDOT also successfully managed the cross-state I-70 Tier I EIS, Tier II NEPA documents for seven sections of independent utility, and Supplemental EIS for dedicated truck lanes (NEPA-\$22,382,000) and the I-44 Purpose and Need Study (NEPA-\$1,365,000).

MoDOT has long-standing agreements in place with Amtrak, Union Pacific, and other railroads. MoDOT maintains a Multimodal Operations Division, including a Railroad Section with an Administrator of Railroads (Rodney Massman), who has many years of significant rail passenger experience, a Railroad Projects Manager, a Railroad Operations Manager, and various support staff as well as a Freight Development Section. MoDOT's extensive resources overall are also available. MoDOT maintains ongoing contracts with experienced rail planning and engineering consultants to provide additional and specialty support on a task order basis and for individual projects.

MoDOT has considerable experience with multi-modal projects including railroads (stimulus-funded improvements for Bonnots Mill, Herman Crossover, Kirk Crossover, Grand Third Main Line, and Multiple Crossing Improvements), port projects (New Madrid–stimulus-funded construction of 2,000 feet of rail and SEMO Port–existing track raised to avoid flooding and new track added), and airports (review NEPA documents for FAA including EAs for Lebanon Floyd W Jones Airport, Clinton Memorial Airport, Warrensburg Max B Swisher Skyhaven Airport, and Monett Municipal Airport).

MoDOT has full financial management capability for planning and implementing projects, demonstrated by years of planning and NEPA work for highway projects statewide. Missouri also brings significant demonstrated financial commitment to rail by being successful in obtaining appropriations from the Missouri legislature for the past 31 years to support Amtrak services with funding for the existing corridor.

In terms of risk assessment, uncertainties in the project have been considered. Grantee risk is low given the state's experience, ability, and capacity to perform NEPA projects. Funding risk is low considering the state legislature's demonstrated commitment to rail service in the existing Kansas City to St. Louis corridor. Schedule risk for completing the NEPA work is moderate since the project is based on identifying an entirely new cross-state corridor for HSR development, with a high potential for significant impacts to resources, and the possibility of public controversy. Stakeholder risk is typical for projects of this nature. MoDOT already has well-established relationships and agreements with key entities including Amtrak, Union Pacific, and other railroads with ownership and operations in the corridor including the Terminal Railroad Association of St. Louis and the Kansas City Railway Company. MoDOT has experience mitigating issues that arise during NEPA processes, as demonstrated by the successful completion of the projects listed above.

MoDOT does not anticipate requiring significant technical assistance from FRA given the state's background with projects of this nature. It is intended and anticipated that the project will proceed with close coordination with FRA to ensure compliance with requirements.

(4) Sustainability of Benefits

Identify the likelihood of realizing the benefits of the underlying project for the proposed PE/NEPA development activities, including addressing:

- The applicant's financial contribution to the project;
- The quality of a financial planning documentation that analyzes 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;
- The quality and adequacy of project identification and planning; and
- The reasonableness of estimates for user and non-user benefits for the project.

The HSIPR project that will benefit from this planning is the new passenger and rail service that will attain speeds of up to 125mph. Missouri has had passenger rail that is state supported for 31 years and continues to thrive. Recent increases in on-time performance and in passenger increases in numbers have made the current route a route with a great 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 passenger rail service will not continue, especially as other projects to improve on-time service come on line and further support its funding.

As more rail projects are funded, it creates even greater support and continuing emphasis on funding all projects in the area of passenger rail.

Estimates for users vary, but in light of the fact that this endeavor makes the future service more highly desirable. It is estimated that a substantial portion of the freight trains now using the mainline will be diverted to the new line.

These amounts are commensurate with the overall benefits in that the passenger rail 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 PE/NEPA activities.

<p>(1) Please provide any additional information, comments, or clarifications and indicate the section and question number that being addressed (e.g., Section E.3). Completing this question is optional.</p>		
<p>(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.</p>		
Document Title	Filename	Description and Purpose
MOU for Midwest Rail Group	http://recovery.illinois.gov/documents/Applications/Tra ck3-Chi-Stl.pdf (pages 29-33)	Shows cooperation of state rail programs
Toll Feasibility Study	http://www.modot.mo.gov/newsandinfo/documents/Legislative Toll Report 8-8-02.pdf	Displays background of environmental impacts
Tiger 2 Application	http://www.modot.org/arra/tiger/09-09-15-I-70TIGER-V2.pdf	Provides background information on cross state corridor
Final First Tier EIS	http://www.improvei70.org/header.htm	Demonstrates environmental impacts on similar project
Record of Decision (First Tier)	http://www.improvei70.org/downloads/ROD.pdf	First step of environmental analysis
Section 1: Final Environmental Assessment and Finding of No Significant Impact	http://www.improvei70.org/environmental_1.htm	Last step of environmental analyses
Section 2: Final Environmental Assessment and Finding of No Significant Impact	http://www.improvei70.org/environmental_2.htm	See above
Section 3: Final Environmental Assessment and Finding of No Significant Impact	http://www.improvei70.org/environmental_3.htm	See above
Section 4: Final Environmental Impact Statement and Record of Decision	http://www.improvei70.org/environmental_4.htm	See above
Section 5: Categorical Exclusion	http://www.improvei70.org/environmental_5.htm	See above
Section 6: Final Environmental Assessment and Finding of No Significant Impact	http://www.improvei70.org/environmental_6.htm	See above
Section 7: Final Environmental Impact Statement and Record of Decision	http://www.improvei70.org/environmental_7.htm	See above

Final Supplemental SEIS	http://www.improvei70.org/pdf/I-70%20Final%20SEIS%20for%20Web%20Site/Final%20SEIS%20Table%20of%20Contents.pdf	See above
I-70 Supplemental EIS Record of Decision	http://www.improvei70.org/pdf/FinalI70SEIS.pdf	See above
I-70 Dedicated Truck Lanes Feasibility Study Tech Appendix 8: Multimodal Analysis and Opportunities (Missouri-Illinois-Indiana-Ohio)	http://www.i70dtl.org/images/TA_8_One_Page_Summary_FINAL.pdf	Shows rail impacts on statewide study.
FRA RR Development document, Chapter 7	http://www.fra.dot.gov/downloads/RRDev/cfs0997ch7.pdf	Projections of rail performance
Commercial Feasibility Study for High Speed Ground Transportation (HSGT) 1997	http://www.fra.dot.gov/rpd/passenger/515.shtml	Displays economic impacts of rail on statewide transportation network
Midwest Regional Rail System Report (2004)	http://www.dot.state.wi.us/projects/state/docs/railmidwest.pdf	Shows implications of MidWest wide regional rail system.
Terminal Railroad Association of St. Louis	http://terminalrailroad.com/faq.php	Shows passenger rail implications on a terminal railroad.
Chicago to St. Louis Alternative Corridor Study	http://www.midwesthsr.org/sites/default/files/pdf/MHSRA_Chicago_StLouis_HSR_Corridor_Study.pdf	Demonstrates similar study in neighboring state.
Construction Unemployment- BLS data	http://www.bls.gov/news.release/empsit.t13.htm See attached appendix	Identifies economic impacts on employment in a similar area.
Missouri I70 Buffer Zone	See attached appendix	Displays effects on corridor.
Introductory letter from MoDOT Director	1Intro 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	6 State Equipment MOU.pdf	Demonstrates support of project

application		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 UP.pdf	Identifies Service Outcomes for completion of projects
Multi State Governors MOU	9Multi - StateGovernorsMOUSigned.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