

Total Impacts	
Employment (Average Annual FTE Employment)	5,861
Earnings (2009 \$)	\$1,347,708,000
Output (2009 \$)	\$4,364,980,000

Beginning in 2010, the Chicago to St. Louis Double-Track Improvements project is expected to generate significant economic benefits for the Chicago to St. Louis corridor area and the region in which the project’s rolling stock will be manufactured. An estimated average of 5,861 jobs will be created annually by the project, including an average of 3,174 direct jobs per year. shows the profile of average full-time equivalent (FTE) employment generated annually by the project’s expenditures. At the peak of spending, in the first quarter of 2012, approximately 7,973 FTE persons are employed as a result of the project, including 4,322 direct jobs. The second-highest year in terms of average annual employment would be 2011 when at total of 7,279 FTA persons would be employed. During 2013, a total of 5,444 FTE persons are estimated to be employed due to this project. In total, the project is projected to create 27,839 person years of employment, including 15,077 direct job person years. In all four quarters of 2010, direct (on-project) jobs are expected to be 2,860, while for each quarter of 2011, the direct jobs have been estimated at 3,947 per quarter. This rises to a peak of 4,322 direct (on project) jobs during each quarter of 2012, and then is 2,935 direct jobs per quarter throughout 2013. For the first three quarters of 2014 (prior to revenue service), the direct (on-project) jobs would be 1,351 per quarter.

As expected, the civil engineering construction (11,562 person years) industry is estimated to receive the largest increase in jobs from the project, almost all of which are direct jobs created. The industries that will see a significant number of jobs created include health care (2,795 person years), manufacturing (1,841 person years), retail trade (1,822 person years), professional services (1,694 person years), administration and waste management (1,204 person years), food services (1,157 person years), finance and insurance (973 person years), and other services (902 person years). It is also important to consider the quality of the jobs that would be created by this project. Our analysis shows that the majority of the jobs generated by this project would receive compensation of above \$40,000/year, which is above the US average.

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

Anticipated number of onsite and other direct jobs created (on a 2080 work-hour per year, full-time equivalent basis).	FD/ Construction Period	First full year of operation	Fifth full year of operation	Tenth full year of operation
	3,174	142	142	142

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

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

- Any projected reductions in key emissions (CO<sub>2</sub>, O<sub>3</sub>, CO, PM<sub>x</sub>, and NO<sub>x</sub>) and their anticipated effects. Provide any available forecasts of emission reductions from a baseline of existing travel demand distribution by mode, for the first, fifth, and tenth years of full operation (*provide supporting documentation if available*).
- Any expected energy and oil savings from traffic diversion from other modes and changes in the sources of energy for transportation. Provide any available information on changes from the baseline of the existing travel demand distribution by mode, for the first, fifth, and tenth years of full operation (*provide supporting documentation if available*).
- Use of green methods and technologies. Address green building design, “Leadership in Environmental and Energy Design” building design standards, green manufacturing methods, energy efficient rail equipment, and/or other environmentally-friendly approaches.

The 2003 Final EIS for the Chicago-St. Louis High-Speed Rail Project indicates that the full implementation of the 110 MPH service will result in the following improvements to the Human Environment:

The Preferred Alternative will result in lower volatile organic compound, carbon monoxide and nitrogen oxide emissions from passenger transportation sources in the corridor than under No-Build conditions.

HSR service as part of the Preferred Alternative will be more energy efficient than Amtrak service under the No-Build Alternative; will improve rail passenger service's relative energy efficiency over air and automobile travel; and will be more competitive with bus travel's energy consumption rate. With HSR, total annual energy consumption for all passenger travel in the corridor will also be lower than with the No-Build Alternative.

Existing ridership in the HSIPR Corridor is significant, with almost one-half of one million passenger trips carried annually. This project will improve on-time performance and reduce train travel times in the corridor, 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 1.3 million;
- Reduce fuel consumption by 83,500 gallons, reducing dependence on oil;
- Reduce volatile organic compound (VOC) emissions by 1,400 pounds;
- Reduce carbon monoxide (CO) emissions by 30,000 pounds;
- Reduce oxides of nitrogen (NOx) emissions by 1,900 pounds;
- Reduce carbon dioxide (CO2) emissions by 800 tons; and,
- Reduce particulate (PM10) emissions by 100 pounds.

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

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

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

The Chicago-St. Louis HSR Corridor bisects the State of Illinois, connecting two of the Midwest's largest cities, Chicago, IL and St. Louis, MO. These cities have a combined population of 3,244,205 (2000) and millions more live within the metropolitan areas of these cities. The corridor also serves other major Illinois metropolitan centers including Joliet, Bloomington-Normal and Springfield, each with significant populations.

Both Chicago and St. Louis have well-established bus and rail transit systems and already provide multi-modal connections to the Amtrak stations that are the endpoints of the corridor. Additionally, many of the other towns and cities served by this corridor also have bus systems that serve their respective Amtrak stations. This well-developed mass transit network will compliment and provide continued feeder service to the HSR system.

The Chicago central business district (CBD) is characterized by very dense, transit-oriented development that is pedestrian-friendly and bicycle-friendly. Stations along Chicago's regional rail network (with connections to the HSR corridor) also provide numerous examples of transit-oriented development that combine residential and retail uses. The 2040 Regional Framework Plan (adopted by the former Northeastern Illinois Planning Commission) recognizes the interdependence of transportation and land use and provides guidance for the development of "compact, mixed-use development and redevelopment; jobs and housing balance; transit-oriented development..." Smaller metropolitan communities along the corridor, such as Joliet, Bloomington-Normal and Springfield, also provide housing, employment and retail in close proximity to the HSR Corridor station areas.



Corridor Program Name: IL-Chicago-St.Louis - Double-Track Date of Submission: 10/02/09 Version Number: 0

## E. Application Success Factors

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

**1A. Applicant qualifications.**

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

Yes - Briefly describe experience (brief project(s) overview, dates)

No- Briefly describe expected plan to build technical and managerial capacity. Provide reference to Project Management Plan.

*Please limit response to 3,000 characters.*

IDOT has successfully managed \$143 million in previous capital improvement and service enhancement projects on the Chicago-St. Louis and other passenger rail corridors in the State of Illinois. A significant commitment by the State to double the support given to Amtrak services on three corridors has achieved substantial results in terms of increased train frequency and ridership over the past two years. IDOT has also managed larger highway-oriented programs.

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

Program Management of large-scale projects, such as the transformation of the Chicago-St. Louis Corridor into a high-capacity, high-speed mixed-use corridor, requires significant and specialized resources, skills and experience. The Illinois Department of Transportation, as well as partner Union Pacific, are highly experienced in the delivery of major transportation programs. Unlike many state DOT's, IDOT also has experience delivering rail programs. However, because of the complexity and wide scope of needs, a Program Management Team (PM Team) will be engaged to augment the public agency, rail carrier and regulatory agency's forces. The Service Development Plan and Project Management Plan provide additional details regarding the proposed organizational approach.

The role of a PM Team is to manage the program implementation including the wide-range of interdependencies between standards, designs and projects that comprise the overall program. The Team coordinates those elements of the program that are common to the management; organization; finance; risk assumption; as well as standards of communication, methods, technology and quality that are required to successfully develop and provide the fixed facilities, rolling stock and transportation services envisioned. The Team provides either direct management or management oversight to accomplish the goals of the program.

The Team is envisioned to be integrated, with staff from IDOT, consultants, and other program partners. For a program of this size, with the broad range of disciplines and stakeholders involved, it is recommended that key personnel from IDOT, Amtrak and UPRR be temporarily assigned to the PM Team, to ensure that input, review and coordination activities are expedited.

Individual projects are defined within the overall program. These individual projects include the rolling stock acquisition, environmental activities and design activities. Design activities can be on a line section basis (such as between Joliet and the UPRR Intermodal Center now under construction) or on a location-specific basis, such as when a special structure or approach is required.

Project Managers within the PM Team will be responsible for day-to-day execution of individual project components of the program, and report to the management of the PM Team. Additionally, the PM Team would be responsible for ensuring that productive relationships are maintained with each of the key stakeholders, including IDOT, the UPRR, Amtrak, Metra, regulatory agencies and local governments and authorities. Media and the public at-large are also a key part of the

relationship and information dissemination responsibilities of the PM Team.

Construction contractors will be employed for work related to grading, stations, equipment, road-crossing, and other work. Railroad construction is likely to be performed by railroad forces in compliance with labor agreements.

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

- YES- If yes, explain and provide a timeline for obtaining the waivers  
 NO

*Please limit response to 1,500 characters.*

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

The primary funding risk in the delivery of the project is the ability of the state to reserve capital funds from the bi-annual budget.

One of the larger schedule risks involves the development of PTC. While mandated by the FRA for installation nationwide by 2015, and some initial installations are under way, no corridor of this length and complexity has yet been fitted with a PTC system that meets regulations. It must be expected that there will be development, implementation, and testing challenges. To a lesser extent, schedule delays could be experienced in equipment procurement, since North American industry capacity for equipment is limited, and no manufacturer currently supplies locomotives capable of consistent 110mph operation.

The major stakeholder in the program is the Union Pacific. UPRR has proven itself highly capable of delivering major programs on a regular basis, but risks could include prioritization of projects, competing internal policies, limitations in manpower, and other factors. IDOT and UPRR have a strong history of successful implementation of projects on the corridor to date.

One area of stakeholder risk involves the City of Springfield, where some stakeholders prefer that rail service be relocated from Third Street (the passenger route) to an alternate route. IDOT has proposed that an environmental study be performed by the City of Springfield and Sangamon County so that rail relocation can become eligible for federal reimbursement. A portion of the funds in this application allocated to mitigation along the Third Street Corridor may not be needed if this environmental study shows that rail traffic should be moved to another corridor. In that event, a portion of the mitigation funds may be used in the other corridor that is chosen in the environmental study.

Another risk involves the need for new right of way, required in certain locations. Appropriate mitigation activities will be undertaken.

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

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

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

IDOT has had a successful relationship with UPRR as primary owner of the corridor for many years during the previous phases of the project. Negotiations with Amtrak and the UPRR have already begun for their next phase. As this Application, Service Development Plan, corridor maps, PE documents and other project work products continue to advance, these will be continue to be shared with the UPRR. Comments and additional information on the documents will be solicited from the UPRR so appropriate upgrades can be made to the base documents. These will ultimately result in negotiations and agreement regarding Ownership Agreements with the various entities involved with the project. A Memorandum of Understanding is already in place.

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

Amtrak will continue to provide service on the Chicago-St. Louis corridor per current agreements. As noted in other responses in this Application, the agency has been highly supportive of the Chicago-St. Louis HSR project since its inception. An Agreement in Principle has already been developed and is attached.

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

Amtrak is the operator of the current service on the corridor, and will continue to be operator of the enhanced services. This selection is based on the benefits of being part of Amtrak's extensive network of passenger services currently operated out of the Chicago rail passenger hub. This provides significant efficiencies in a number of ways. Amtrak has an existing major maintenance base already in place and available for use. A new operator would incur the costs of a new facility or arrangement. Amtrak as an operator can also provide efficiencies in fleet utilization, since a pool of equipment can be available immediately to cover unforeseen problems such as bad-order cars or other circumstances requiring replacement equipment. This pool can also be available to provide additional peak capacity as may be required. Amtrak is also in the unique position of being able to advance the goal of standardization of equipment, while this would be more difficult to achieve with a new operator. Lastly, Amtrak has been the operator of Chicago hub corridor services for Illinois for many years, and has been a willing and supportive partner in numerous service enhancements over that time. These include innovative equipment, schedule interlining initiatives and significant expansion of services/frequencies.

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

A Midwest HSR Corridor Memorandum of Understanding involving the States of Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio and Wisconsin, and the City of Chicago for "The Implementation of High-Speed Rail Passenger Service and Connections Involving Corridors Linking Cities in their Respective States" was signed on July

27, 2009. This establishes the MOU participant's respective roles and responsibilities regarding the implementation of HSR service. Discussions are underway that could lead to extensive coordination of the procurement of the new 110 MPH passenger rail equipment covered by this application, which will provide the opportunity for significant levels of standardization and efficiencies. An Agreement in Principle already has been developed with Amtrak. IDOT and Union Pacific, as well as other railroads, have a long history of successful coordination on this corridor. The States of Illinois and Missouri have a Memorandum of Understanding in place.

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

The Chicago-Joliet portion of the corridor (37 miles) is shared with Metra commuter operators. The increased capacity, especially additional crossovers and other features, will improve Metra reliability and operations.

Benefits to UPRR's freight business will be realized, especially with regard to expected increases in intermodal freight traffic as a result of the opening, then development of, the Joliet Intermodal Center at the north end of the corridor. These benefits will include increased capacity, increased reliability, and improved operating flexibility. UPRR will provide its right-of-way at no additional cost to the project.

**(3) Financial Information**

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

Non FRA Funding Sources	New or Existing Funding Source?	Status of Funding <sup>4</sup>	Type of Funds	Dollar Amount (millions of \$ YOE)	% of Program Cost	Describe uploaded supporting documentation to help FRA verify funding source
UPRR ROW	New	Planned	Matching	\$81	2.5%	MOU with UPRR
Local Contribution towards station costs	New	Planned	Various	\$1.9	0.06%	Selected MOU's with Communities
IDOT	New	Planned	Matching	\$2	0.06%	IDOT Grant for Springfield Env Study
	New	Committed				

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

UPRR is making its ROW available at no additional cost to the project. The planned local share toward station costs represents 2% of the estimated cost of the station facilities and amenities, as included in the "Corridor Program Data" spreadsheet and other supplemental information submitted with this application. IDOT will provide a \$2 million local match to be used to conduct the environmental studies in Springfield for the mitigation of rail traffic on the 3<sup>rd</sup> Street Corridor.

**3C. Corridor Program Sustainability and Operating Financial Plan.**

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

IDOT has demonstrated a significant, sustained commitment to supporting and expanding rail transportation options throughout the state and on key corridors throughout Amtrak's existence. The State's recent doubling of support on three corridors has achieved substantial results in terms of increased train frequency and ridership over the past two years. IDOT also has a sustained history of having supported major capital improvements on passenger rail corridors throughout the state, including implementation of state of the art signaling and grade crossing protection systems, as well as major track improvement projects.

Operation of the new locomotives and cars should contribute to a decrease in the operating cost of an individual train by reducing the maintenance requirements compared to existing rolling stock. Further, as noted elsewhere in this Application, the new locomotives will offer several environmental benefits, including improved fuel economy, compliance with Tier III emissions regulations and lower noise emissions.

IDOT will explore all reasonable opportunities to improve the energy performance of rail stations and new maintenance facilities. Among the possible strategies are minimizing water use, improving construction practices and selecting materials

<sup>4</sup> Reference Notes: The following categories and definitions are applied to funding sources:

**Committed:** Committed sources are programmed capital funds that have all the necessary approvals (e.g. legislative referendum) to be used to fund the proposed phase without any additional action. These capital funds have been formally programmed in the State Rail Plan and/or any related local, regional, or State Capital Investment Program CIP or appropriation. Examples include dedicated or approved tax revenues, State capital grants that have been approved by all required legislative bodies, cash reserves that have been dedicated to the proposed phase, and additional debt capacity that requires no further approvals and has been dedicated by the sponsoring agency to the proposed phase.

**Budgeted:** This category is for funds that have been budgeted and/or programmed for use on the proposed phase but remain uncommitted, i.e., the funds have not yet received statutory approval. Examples include debt financing in an agency-adopted CIP that has yet to be committed in their near future. Funds will be classified as budgeted where available funding cannot be committed until the grant is executed, or due to the local practices outside of the phase sponsor's control (e.g., the phase development schedule extends beyond the State Rail Program period).

**Planned:** This category is for funds that are identified and have a reasonable chance of being committed, but are neither committed nor budgeted. Examples include proposed sources that require a scheduled referendum, requests for State/local capital grants, and proposed debt financing that has not yet been adopted in the agency's CIP.



with outstanding and stable life cycle properties. The stations will be responsive to the town/city in which they are located, and will be built/delivered in a process that responds to the people who will be using these stations. The stations and new maintenance facilities will be considered as whole buildings, with inter-related building systems that deliver optimum performance. Green design principles will be followed to use the most environmentally optimal solution for the buildings and consider how the buildings can improve and enhance the environment in which they are built.

IDOT will require that the stations and new maintenance facilities are designed and built to achieve LEED certification.

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

Funding Requirement (as identified on the Supporting Form)	Baseline Actual-FY 2009 Levels (State operating subsidy for FY 2009 if existing service)	Projected Totals by Year (\$ Millions Year Of Expenditure (YOE)* Dollars - One Decimal)		
		First full year of operation	Fifth full year of operation	Tenth full year of operation
Indicate the Fiscal Year	2009	2014	2018	2023
Surplus/deficit after capital asset renewal charge <sup>5</sup>	(\$11,890)	(\$17,534)	(\$10,977)	(\$3,730)
Total Non-FRA sources of funds applicable to the surplus/deficit after capital asset renewal	\$11,890	\$17,534	\$10,977	\$3,730
Funding Requirements for which Available Funds Are Not Identified	0	0	0	0

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

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

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

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

IDOT has full financial management capability for planning and implementing projects, demonstrated by years of highway projects statewide. Illinois also brings significant demonstrated financial commitment to rail by supporting Amtrak services with funding for the Chicago-St. Louis (and other) Corridor. In fact, the State's recent doubling of support on three corridors has achieved substantial results in terms of increased train frequency and ridership over the past two years. Improvements have been implemented by IDOT including state of the art signaling upgrades, track improvement, etc. IDOT is also the lead agency for the complex and multi-party CREATE freight railroad improvement initiative. Audit results can be made available.

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

Final Design Duration:	8 months
Construction Duration:	19 months
Rolling Stock Acquisition/Refurbishment Duration:	53 months
Service Operations Start date:	09/2014 (mm/yyyy)

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

The project will require the manufacture of a significant amount of rail, crossties, other track materials, structural materials, communication equipment, signal equipment and other project related materials. This project will also require the manufacture and assembly of components and equipment making up the new 110 MPH locomotives and cars. With a significant portion of the funding provided by the federal government, the new locomotives and cars will have to meet "Buy America" and other federal funding requirements, leading to the creation of jobs associated with the assembly and testing of the new rolling stock. These are common elements to all HSR development projects within the United States. As materials are consumed for this and other similar projects throughout the country, a need for additional resources will occur which will provide opportunities for manufacturing firms to increase production rates and to grow.

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

The project will require engineering and management expertise in the areas of railroad, rail equipment, communications and systems design, manufacturing and construction. These are common elements to all HSR development projects within the United States. As engineering and management forces are dedicated to this and other similar projects, a need for additional resources will occur which will provide opportunities for entry and mid-level engineers and managers to advance. New entry level engineers will also be sought from colleges and universities. With engineering companies striving to develop diverse workforces, this will create opportunities for female, minority and other disadvantaged graduates. Plant construction and testing activities will present additional opportunities for newer management personnel to learn and grow, again opening the door for new entry level staff.

## F. Additional Information

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

*Section B, Question 4: Deployment of Positive Train Control (PTC) as part of this project is required to achieve 110 MPH passenger train operation and meet the desired operational safety levels in this mixed-use corridor. Union Pacific's Vital Train Management System (VTMS) is designed to meet the PTC statutory requirements for prevention of train-to-train collisions, train over-speed and resulting derailments, unauthorized train incursions into established work zones and train movement through a switch in the wrong position. Additionally, passenger trains equipped with VTMS will communicate with highway crossing warning systems along the corridor to ensure safe, high-speed operation.*

*The PTC installation as part of the Chicago-St. Louis double-track project will be extended to cover those sections of new track being added in this phase, as well as the many on-line crossovers that will be provided between tracks. A further significant impact in the double-tracking will occur relative to grade crossings, many of which will be single-track installations on completion of the 2004 ROD improvements. Modifications to the underlying Traffic Control signal system, including relocation of some signals, will be required as will integration and testing of the complete set of subsystems and components. Successful implementation of PTC on this corridor will serve to improve reliability, increase speeds and enhance capacity throughout the Midwest.*

*Section B, Question 7: Amtrak passenger trains operate at a maximum speed of 79 mph currently on the Corridor. Four "Lincoln Service" Corridor round-trips are operated each day, along with one "Texas Eagle" round-trip. Gateway Eastern owns 17 miles from East Alton to East St. Louis. The TRRA owns the 1.5 miles from East St. Louis to the connection to the Amtrak St. Louis Station. A maximum speed of 30 MPH is possible. This section of line includes the Municipal Bridge, which is densely-trafficked, with about 200 daily train moves.*

*Section B, Question 8: As demand on the Chicago-St. Louis Corridor increases, or as the corridor service trains are expanded (on completion of the full double-tracking of the line, in example), new rolling stock being used temporarily on other lines may be transferred to the Chicago-St. Louis Corridor. The eight round-trips per day service plan envisioned to be implemented after full double-tracking will require two additional trainsets over the EIS-ROD service plan.*

*IDOT would welcome joint procurement of rolling stock with other State DOTs or other agencies as a means of securing a more favorable price on the rolling stock, so long as the features IDOT considers essential on this new equipment are included in any final, joint procurement specification/Contract.*

*Further information on the new rolling stock includes that the cars will include state of the art communications and information systems, but will be required to be fully compatible with existing Amtrak rolling stock, providing for maximum flexibility in use of the new equipment. The performance specifications require that if the new locomotives and/or cars are used on lower-speed corridors, this operation should occur without any degradation in performance or comfort. All equipment in this procurement is to be FRA-compliant and all trucks and other key operating equipment/features will be tested and certified as suitable for sustained 110 MPH revenue operation prior to commencing the high-speed rail service.*

*IDOT and Amtrak are committed to assuring the integrity of the improved, 110 MPH-capable Chicago-St. Louis Corridor.*

*Section C, Questions 3 and 4: The links to the Final EIS and ROD are provided. Note that these documents are specific to the section of line and the proposed improvement projects that would be included between Dwight and Alton, IL.*

*Section D, Question 1.B: Statistics in table are the average for the 110 MPH Corridor trains. Expected on-time performance for the "Texas Eagle" will also be 90%. Average speed for a 110 MPH Corridor express train is expected to be 76 MPH, 68.9 MPH for a Corridor train making all stops and 53 MPH for the "Texas Eagle." Delay minutes for a 110 MPH Corridor express train are projected to be 123 minutes, 197 minutes for a Corridor train making all stops and 522 minutes for the "Texas Eagle." Expected performance data also reflects an additional seven UPRR Joliet Intermodal trains being operated on this line.*

*Section D, Question 2.A: This indicates the project will help stimulate the local economy.*

*In total, the project can be expected to generate \$4.3 billion in real economic output (in 2009 dollars), with over \$819 million dollars of economic output in 2010. Consistent with job creation, the majority of the economic activity would be generated in 2012.*

*It is estimated that the additional annual operations and maintenance (O&M) spending created by the project will be approximately \$46.7 million (in 2009 dollars). For the purposes of this analysis, it has been assumed that the same service levels would be provided in the 1<sup>st</sup>, 5<sup>th</sup> and 10<sup>th</sup> years after completion of the project. To quantify the annual economic impacts of O&M spending, BEA Regional Input-Output Modeling System (RIMS II) multipliers for McLean County and the State of Illinois were utilized. RIMS II industry code 30 (Rail Transportation) was used. The results of the analysis are:*

*Direct Impacts*

*Employment (Person Years): 142*  
*Earnings (2009 dollars): \$11.0 million*  
*Output (2009 dollars): \$42.5 million*

*Indirect/Induced Impacts*

*Employment (Person Years): 265*  
*Earnings (2009 dollars): \$12.4 million*  
*Output (2009 dollars): \$55.8 million*

*Total Impacts*

*Employment (Person Years): 407*  
*Earnings (2009 dollars): \$23.3 million*  
*Output (2009 dollars): \$98.3 million*

*As expected the transportation and warehousing industry is estimated to receive the largest increase in jobs from the project, almost all of which are direct jobs created (142 person years). Other industries seeing a significant increase in jobs created are expected to include: healthcare (32 person years), retail trade (32 person years), administration and waste management (26 person years), manufacturing (25 person years), professional services (23 person years), food services (20 person years), finance and insurance (20 person years) and real estate (20 person years).*

*It is also important to consider the quality of the jobs created by the O&M spending on this project. The majority of the jobs generated by the project would receive compensation above \$0,000/year, which is above the average US per capita income. This indicates that the project will help to stimulate the regional economy. The greatest number of jobs created is in the \$40-60,000/year range (176 person years). The second highest number is 110 person years, in the \$20-40,000/year range. A total of 90 person years of jobs are expected to be created in the \$60-80,000/year range, with the balance (26 person years) in the below \$20,000/year range.*

*Section E, Question 3.A: The link in the table is to Illinois House Bill 312, Public Act 96-0035 - the*

*Capital Bill Legislation Expenditures.*

*Section E, Question 3.C: The design of the stations and new maintenance facilities will be required to incorporate best practices with regard to energy saving strategies for lighting, heating and cooling and for improvements in water efficiency. Use of materials with good life cycle assessment ratings, incorporation of natural ventilation and daylighting and for enhancement of indoor air quality will also be emphasized in the design documents. Procurement documents will incorporate best practices for reduction of construction waste, as well.*

*With regard to financial sustainability and the sustainability of the Chicago-St. Louis High-Speed Intercity Passenger Rail Corridor, if ARRA funds are awarded for this corridor, IDOT will amend its operating agreement in place at that time with Amtrak to provide operational support for the eight proposed 110 MPH round trips between Chicago and St. Louis. Illinois funds the Intercity Passenger Rail program with State General Revenue Funds. In 2009, the State passed the Illinois Jobs Now Capital Bill, which included \$400 million for High-Speed Rail, \$150 million for Amtrak and \$300 million for the CREATE project. These Series B Bond funds will be used to match successful ARRA applications and also future federal authorizations for both High-Speed/Passenger and Rail Freight programs.*

*IDOT will also require that the high-speed rail line is designed and delivered to respect and enhance the environment through which it runs. This will be accomplished by requiring that waste and recycled materials are used as fill, where practical/possible. It will also require that materials and equipment are manufactured in an environmentally-responsible manner, as well as requiring that the selected vendors have ISO 14001 and 18001 Certifications, as appropriate.*

*Section E, Question 5: Durations shown include overlap between the track reconstruction and new construction work, the signal work and other project activities, such as stations and rolling stock design, construction and testing, which will extend beyond the two-year window (these elements were not included in any Track 1a Application).*



Corridor Program Name: IL-Chicago-St.Louis - Double-Track Date of Submission: 10/02/09 Version Number: 0

## G.Summary of Application Materials

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

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

<b>Supporting Documents</b> <i>(Documents to be generated and provided by the applicant)</i>	<b>Required for Corridor Programs</b>	<b>Required for Projects [See Note Below]</b>	<b>Reference</b>	<b>Comments</b>
<input type="checkbox"/> Map of Corridor Service	✓		Corridor Service Overview Question B.2	
<input type="checkbox"/> Service Development Plan	✓		HSIPR Guidance Section 1.6.2	
<input type="checkbox"/> “Service” NEPA	✓		HSIPR Guidance Section 1.6.2	
<input type="checkbox"/> Project Management Plan	✓		HSIPR Guidance Section 4.3.3.2	
<input type="checkbox"/> “Project” NEPA (Required before obligation of funds)		✓	HSIPR Guidance Section 1.6.2	
<input type="checkbox"/> PE Materials	✓	✓	HSIPR Guidance Section 1.6.2	
<input type="checkbox"/> Stakeholder Agreements	✓	✓	HSIPR Guidance Section 4.3.3.2	
<input type="checkbox"/> Financial Plan	✓	✓	HSIPR Guidance Section 4.3.3.2	
<input type="checkbox"/> Job Creation	✓	✓	HSIPR Guidance Section 1.6.2	
<b>Standard Forms</b> <i>(Can be found on the FRA website and <a href="http://www.forms.gov">www.forms.gov</a>)</i>	<b>Required for Corridor Programs</b>	<b>Required for Projects [See Note Below]</b>	<b>Reference</b>	<b>Comments</b>



<input type="checkbox"/> SF 424: Application for Federal Assistance	✓		HSIPR Guidance Section 4.3.3.3	Form
<input type="checkbox"/> SF 424C: Budget Information-Construction	✓		HSIPR Guidance Section 4.3.3.3	Form
<input type="checkbox"/> SF 424D: Assurances-Construction	✓		HSIPR Guidance Section 4.3.3.3	Form
<input type="checkbox"/> FRA Assurances Document	✓		HSIPR Guidance Section 4.3.3.3	Form
<p><b>Note: Items checked under “Corridor Programs” are required at the time of submission of this Track 2 Corridor Programs application. Items checked under “Projects” are optional at the time of submission of this Track 2 Corridor Programs application, but required prior to FD/Construction grant award.</b></p>				

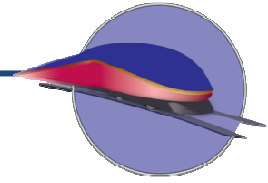
**PRA Public Protection Statement:** Public reporting burden for this information collection is estimated to average 16 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is **2130-0583**.

Corridor Program Name: IN-Chicago Cleveland-HSR Service Date of Submission: 10/1/09 Version Number: 1

## High-Speed Intercity Passenger Rail (HSIPR) Program

### Track 2–Corridor Programs:

## Application Form



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

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

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

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

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

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

#### Instructions for the Track 2 Application Form:

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

corridor name that forms part of the Corridor Program name; and (3) a project descriptor that will concisely identify the project's focus (e.g., HI-Fast Corridor-Wide River Bridge). For projects previously submitted under another application, please use the **same name** previously used on the project application.

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

Corridor Program Name: IN-Chicago Cleveland-HSR Service Date of Submission: 10/1/09 Version Number: 1

## A. Point of Contact and Application Information

<b>(1) Application Point of Contact (POC) Name:</b> Michael Riley		<b>POC Title:</b> Manager - Rail Office		
<b>Applicant State Agency or Organization Name:</b> Indiana Department of Transportation				
<b>Street Address:</b> 100 North Senate Avenue, N955	<b>City:</b> Indianapolis	<b>State:</b> IN	<b>Zip Code:</b> 46204	<b>Telephone Number:</b> 317-232-1491
<b>Email:</b> mdriley@indot.in.gov		<b>Fax:</b> 317-232-1499		

Corridor Program Name: IN-Chicago Cleveland-HSR Service Date of Submission: 10/1/09 Version Number: 1

## B. Corridor Program Summary

(1) **Corridor Program Name:** IN-Chicago Cleveland-HSR Service

(2) **What are the anticipated start and end dates for the Corridor Program?** (mm/yyyy)

**Start Date:** 12/1/09

**End Date:** 12/1/17

(3) **Total Cost of the Corridor Program:** (Year of Expenditure (YOE) Dollars\*) \$ 2,816,658,000

**Of the total cost above,, how much would come from the FRA HSIPR Program:** (YOE Dollars\*\*) \$ 2,816,658,000

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

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

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

\*\* This is the amount for which the Applicant is applying.

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

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

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

The Indiana Chicago-Cleveland Corridor High Speed Rail Service Program will implement high speed passenger rail service at speeds of up to 110 mph in the states of Indiana, Illinois, and Ohio. Eight round trips per day will be provided from Chicago to Toledo via Fort Wayne and nine round trips from Toledo to Cleveland with an end to end corridor express travel time of 4 hours and 22 minutes. A map of the corridor is attached.

Communities served along the 354 mile “southern” route include Chicago, the Gary Regional Airport, Plymouth, Warsaw, Fort Wayne, Defiance, Toledo, Sandusky, Elyria and Cleveland (southern route assumed for purposes of this application). The Chicago-Cleveland Corridor Service Program includes feeder bus service from Plymouth to South Bend, Elkhart and Niles, from Ft. Wayne to Waterloo and Lima, from Defiance to Bryan, from Toledo to Detroit and from Cleveland to Canton and Youngstown.

The implementation of Chicago-Cleveland Corridor service will require a major public investment in rail infrastructure and new operating equipment estimated at \$2.358 billion, 2010\$. The estimated cost associated with track improvements, structures, maintenance facilities, stations and signals (including positive train control technology) for 110 mph operations is estimated to be \$2.065 billion in 2010\$. Eight new train sets required for high speed corridor operations will cost \$292.7 million in 2010\$.

The Indiana Chicago-Cleveland Corridor High Speed Rail Service Program, as summarized above, is based on an extensive body of planning and engineering analyses conducted by the State of Indiana, Amtrak, the Federal Railroad Administration and other Midwest states. The program as described above was recommended by the “Midwest Regional Rail System Plan Executive Report” (September 2004 -- attached) and the associated Midwest Regional Rail Initiative Project Notebook (June 2004) prepared and funded by the nine Midwest states of Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio, Wisconsin and by Amtrak and the Federal Railroad Administration.

The 2004 MWRRS Plan incorporates the results of the Northern Indiana/Northwestern Ohio Routing Study prepared for the Indiana Department of Transportation, the Ohio Rail Development Commission and the National Rail Passenger Corporation (November 2002 -- attached). The Indiana and Ohio Routing Study included a route alternatives analysis of northern and southern route alternatives between Chicago and Cleveland consistent with FRA Rail Corridor Transportation Plan guidance. The Indiana and Ohio Routing Study also includes a benefit/cost analysis for each of these corridor alternatives using an FRA approved methodology.

The “southern route” through Fort Wayne was selected as the recommended alternative and is used as the basis for this program submittal. The southern corridor route segment from Chicago to Tolleston in the “South of the Lake” area used in the Indiana and Ohio Routing study was incorporated from the “Detroit-Chicago High Speed Rail Corridor Study Update -- South-of-the-Lake Corridor” prepared for Indiana, Michigan and Amtrak (December 2004 -- attached). The Northern Indiana/Northwestern Ohio Routing Study was supported by an extensive public comment and outreach effort involving meetings at 7 locations attended by over 1,100 citizens documented in the “Indiana Passenger Rail Initiative Final Report” (March 2002 – attached)

The 2004 MWRRS Plan (September 2004) and associated “Project Notebook (June 2004) has subsequently been updated to include an affirmative peer review of all aspects of the MWRRS Plan including capital cost estimates, operating plan, and ridership, revenue and operating cost forecasts. The update includes: “Proposed Segments of Independent Utility” (March 2008 – attached), including the Chicago-Cleveland Corridor. Also included is a “Midwest Regional Rail Initiative Benefit-Cost & Economic Impact Analysis” (November 2006 – attached).

The “Northern Indiana/Northwestern Ohio Routing Study” and supporting documentation provided by the 2004 MWRRS Plan and the “Detroit-Chicago High Speed Rail Corridor Study Update -- South-of-the-Lake Corridor” provide a substantial portion of the documentation required for a Tier 1 corridor service NEPA document for the Chicago-Cleveland Corridor Program. A purpose and need statement for the Chicago-Cleveland Corridor prepared by INDOT is attached along with one for the Chicago-Detroit Corridor which also includes a portion of the South of the Lake corridor segment.

The operating plan for the Chicago-Cleveland Corridor is based on that developed by the 2004 MWRRS Plan. The service will be operated by Amtrak under contract with the states of Indiana, Illinois and Ohio using a fleet of eight “next generation” train sets featuring lightweight tilt coaches and two high horsepower push-pull locomotives per train set operated as a part of a larger Midwest equipment pool. A service and inspection maintenance facility operated by the equipment vendor will be located in Cleveland with a layover facility in Chicago. This next generation equipment will provide amenities desired by passengers including: bistro car food service, 110 volt power, Wi-Fi, video display panels, roomy seats and ample headroom and bag storage.

The MWRRS service plan for the Chicago-Cleveland Corridor features city center to city center travel times less than auto and in some cases less than air, given access and security clearance times at airports. The express travel time between the Chicago and Cleveland endpoints will be 4 hours and 22 minutes, a two hour reduction from current Amtrak service in the corridor. Local service to all stops will be a very competitive 4 hours and 48 minutes. About half of the trips will be express and half will be local trains to provide maximum access to rail transportation.

Eight to nine round trips per day in the corridor will allow travelers flexibility in travel times and will feature quick turn times to maximize equipment utilization and reduce fixed costs per passenger mile. This is facilitated by maintenance work being conducted at the Cleveland endpoint rather than in Chicago. Investments in new track, signals and equipment will result in 95 percent on-time performance. The combination of a relatively high number of frequencies, competitive travel times, service reliability and equipment amenities will maximize ridership and revenues.

The MWRRI plan forecasts 1.2 million riders annually when the service is fully operational after a 3-year start up period. Proposed ticket prices have been set to maximize revenues rather than ridership. After the required public investment in infrastructure and operating equipment, the Chicago-Cleveland Service is forecast to cover its operating costs with fare box revenues after a three-year ramp-up period where operating subsidies will be required. This assumes other MWRRS corridors will be implemented concurrently with the Chicago-Cleveland Service per the MWRRS Plan schedule.

The Chicago-Cleveland Corridor Service operates on existing corridors owned by at least four freight railroads. Railroads support the project and letters received to date are included in the application. The Corridor Service originates at Chicago's Union Station on NS track and proceeds west of Englewood on a new double track passenger corridor on old NYC right-of-way and then on to the CSX Lakeside Subdivision for a total of 21.4 miles. In addition to significant track, bridge refurbishment and signal work, this segment involves the replacement of the Calumet River Bridge and the Hick Drawbridge. A new double track flyover will be constructed at Buffington Harbor at CP 501 and the route continues approximately 5 miles on CSX to Tolleston.

The route proceeds 123.2 miles on improved CSX single track with 5 mile sidings optimized for freight operations every 25 miles from Tolleston to Wanatah and then on to Mike Junction in Fort Wayne with top speeds of 110 mph. It then continues 6.86 miles on a new road bed on NS right-of-way through Fort Wayne to New Haven at 79 mph. It continues for 56.9 miles on NS and Maumee and Western (M&W) right-of-way to Liberty Center at a top speed of 110 mph. West of Liberty Center, it continues at 79 mph 8.2 miles to Delta along the Indiana & Ohio Railway (I&O).

The route then proceeds on NS right-of-way 25.9 miles from Delta to Toledo on a separate third track with maximum speeds of 110 mph. From Toledo to Berea the route continues for 94.5 miles on a separate third track where possible with maximum speeds of 110 mph in NS right-of-way. From Berea to Cleveland the route continues at 79 mph for 12 miles in NS right-of-way on a separate third passenger track with a fourth track for passing, freight capacity and to accommodate Cleveland transit operations.

The Indiana Chicago-Cleveland Corridor High Speed Rail Service Program will include the following activities and associated schedules and estimated costs:

- 1) The development of a Tier 1 Service NEPA document based on already completed purpose and need statement, alternatives analyses and cost estimates prepared for the corridor (2 to 12 months, \$12.5 million, 2010\$),
- 2) The development of a Tier 2 Project NEPA document and preliminary engineering plans and cost estimates for the corridor (18 months, \$62.5 million, 2010\$),
- 3) Final design plans and specifications, either for bid by the States of Indiana, Illinois and Ohio and local municipalities or by appropriate freight railroads. (18 months, \$149.9 million),
- 4) Construction of track improvements, structures, signals, stations, and maintenance facilities (36-48 months, \$2,206 million, 2010\$),
- 5) Acquisition and testing of new operating equipment (24-36 months, \$292.7 million, 2010\$),
- 5) Initiation of full operations.

Institutionally, this program will be conducted cooperatively by the states of Indiana, Illinois, Ohio, Michigan and Amtrak. The Indiana Department of Transportation is recommending the establishment of a Chicago-Cleveland Corridor Steering Committee made up of representatives from Indiana DOT, Illinois DOT, the Ohio DOT/Ohio Rail Development Commission, and Michigan DOT with Amtrak as an ex-officio member. This Steering Committee will function as a sub-committee on the overall Midwest Regional Rail Initiative Steering Committee. The work associated with the Chicago-Cleveland Corridor High Speed Rail Service Program will be conducted as follows:

- 1) Tier 1 Service NEPA: contracted by Indiana DOT and directed by the Steering Committee,
- 2) Tier 2 Project NEPA and preliminary engineering work: The South of the Lake/ Chicago-Porter Corridor work will be contracted either by Illinois or Indiana DOT and directed by the Steering Committee and integrated into a broader corridor Tier 2 NEPA effort contracted by Indiana DOT also directed by the Steering Committee (see Illinois Track 1b request for Chicago Terminal Area/SOL on behalf of MWRRI states),
- 3) Final design work: final design work for projects and project segments will be managed by each state based each project's

location in that state. Depending on the nature of each project, the actual work can be done under state contract, under contract by the relevant freight railroad using pass-through federal funding administered by the appropriate state or in the case of stations and similar projects under contract by local municipalities using pass-through federal funding administered by the appropriate state.

4) Construction: Depending on the nature of each project same as “3)” above.

5) Acquisition of operating equipment: Each state will purchase operating equipment in proportion to the number of train miles or passenger miles etc. within state borders

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

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Additional Service Frequencies                 | <input checked="" type="checkbox"/> Increased Average Speeds/Shorter Trip Times |
| <input checked="" type="checkbox"/> Improved Service Quality                       | <input type="checkbox"/> New Service on Existing IPR Route                      |
| <input checked="" type="checkbox"/> Improved On-Time performance on Existing Route | <input type="checkbox"/> New Service on New Route                               |
| <input checked="" type="checkbox"/> Reroute Existing Service                       | <input type="checkbox"/> Other (Please Describe):                               |

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

Type of Railroad	Railroad Right-of-Way Owner	Route Miles	Track Miles	Status of agreements to implement projects
Class 1 Freight	Norfolk Southern	181.0	363.4	No Agreement, but Host Railroad Support
Class 1 Freight	CSX	128.4	128.4	No Agreement, but Host Railroad Support
Regional or Shortline	Maumee & Western RR / NS	56.9	56.9	No Agreement, but Host Railroad Support

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

Type of Service	Name of Operator	Top Speed Within Boundaries	Number of Route Miles	Average Number of Daily	Notes
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		Passenger	Freight	Within Boundaries	One-Way Train Operations within Boundaries <sup>1</sup>	
Freight	Norfolk Southern	N/A	70	181.0	90	
Intercity Pass	Amtrak	79	N/A	153.4	4	Note: Chicago-Porter trains = 14
Freight	CSX	N/A	40	128.4	6	

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

The Service Development Plan for the Chicago-Cleveland Corridor Service will require the acquisition of eight, 300-seat, “next generation” high-speed train sets and operated as a part of a MWRRS equipment pool. Tilting coaches and two push-pull diesel-electric locomotives per train set will be specified. The precise performance characteristics of the equipment will be based on schedule travel times and stopping patterns called for in the corridor operating plan. As called for in the MWRRS Plan, the equipment procured for the Chicago-Cleveland Corridor will provide a high level of on-board amenities as a means of satisfying traveler demand and increasing ridership and revenues. Amenities called for will include: a modern decor, 2x2 seating, seat pitch competitive with aircraft first-class seating, overhead baggage storage, “bistro” car food service, WIFI access, 110 volt outlets for computers and cell phones, and video display panels.

The travel times and station stops in the operating plan for the Chicago-Cleveland Corridor will require equipment which can not only operate at 110 mph cruise speeds, but also have high acceleration and deceleration rates. Light weight, tilting Talgo 21 train sets were used generically for the purposes of developing the MWRRS Plan for the Chicago-Cleveland Corridor. Tilting coach equipment has the advantage of offering higher speeds through existing curves without the added capital cost and environmental impact of curve straightening.

The operating characteristics of this type of equipment was further confirmed by the 2000 and 2002 MWRRRI equipment procurement effort by Amtrak, Wisconsin and Illinois where train sets offered by Talgo and Siemens met the performance and travel time standards for the MWRRS Plan. Both offered provided light weight tilting coach sets powered by two light weight 3,000 horsepower locomotives at each end for quick turn-around, push-pull operations.

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

Name of Operating Partner: Amtrak

Status of Agreement: Partner consulted, awaiting support commitment

<sup>1</sup> One round trip equals two one-way train operations.

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

Project Name	Project Type	Project Description	Project Start Date (mm/yyyy)	Estimated Project Cost (Millions of YOE Dollars, One Decimal)		Was this Project included in a prior HSIPR application? Indicate track number(s).	Are more detailed project costs included in the Supporting Forms?
				Total Cost	Amount Applied For		
PE/NEPA	PE/ NEPA	PE/NEPA	12/1/09	\$73.5	\$73.5	No	Yes
Final Design	Final Design	Final Design	8/1/2012	\$147.0	\$147.0	No	Yes
Inspection / Management	Final Design/C	Inspection / Management	3/1/2014	\$171.5	\$171.5	No	Yes
Segment 1	Construction	South of Lake	3/1/2014	\$727.6	\$727.6	No	Yes
Segment 2	Construction	Tollestion to Wanatah	3/1/2014	\$63.0	\$63.0	No	Yes
Segment 3	Construction	Wanatah to Mike Jct.	3/1/2014	\$404.1	\$404.1	No	Yes
Segment 4	Construction	Mike Jct. to New Haven	3/1/2014	\$51.9	\$51.9	No	Yes
Segment 5	Construction	New Haven to Liberty Center	3/1/2014	\$240.3	\$240.3	No	Yes
Segment 6	Construction	Liberty Center to Delta	3/1/2014	\$20.1	\$20.1	No	Yes
Segment 7	Construction	Delta to Toledo	3/1/2014	\$149.8	\$149.8	No	Yes
Segment 8	Construction	Toledo to Berea	3/1/2014	\$338.1	\$338.1	No	Yes
Segment 9	Construction	Berea to Cleveland	3/1/2014	\$162.5	\$162.5	No	Yes
Acquire New Rolling Stock	Acquire New	Train Equipment (8 train sets)	3/1/2015	\$292.7	\$292.7	No	Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes

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

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

The project will build upon efforts that have already been undertaken as part of the MWRI and additional detailed studies that have been performed by INDOT and Amtrak. The project will begin with the completion of environmental documentation, preliminary engineering, final design and then construction. The sequence and timeline is outlined in the Track 2 Corridor Program Data but generally is as follows:

Activity 1 -- Completion of any Service NEPA activities as required by FRA (~8-12 months). This would be for the entire corridor all at one time.

Activity 2 -- Completion of preliminary engineering and Project NEPA activities (~18 months). This would be for the entire corridor all at one time.

Activity 3 -- Completion of final design (~18 months). Designs would be broken into logical segments, they would be designed concurrently, efforts would be performed by multiple states (Indiana, Illinois, and Ohio), and coordinated through the MWRI Steering Committee.

Activity 4 -- Completion of construction (~36-40 months). Construction would be broken into logical segments, it would have multiple sections being constructed simultaneously, efforts would be performed by multiple states (Indiana, Illinois, and Ohio), and coordinated through the MWRI Steering Committee.

Activity 5 -- Acquisition of rolling stock would begin during the construction activities due to the long lead time for build, delivery, and testing. The MWRI assumed a coordinated effort in acquiring train equipment to leverage the system's needs and obtain better system wide pricing. This effort will be coordinated with the MWRI Steering Committee.

Corridor Program Name: IN-Chicago Cleveland-HSR Service Date of Submission: 10/1/09 Version Number: 1

## C. Eligibility Information

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

- State  
 Amtrak

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

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

**(2) Establish completion of all elements of a Service Development Plan.** Note: One Service Development Plan may be referenced in multiple Track 2 Applications for the same corridor service.

**Please provide information on the status of the below Service and Implementation Planning Activities:**

	Select <u>One</u> of the Following:			Provide Dates for all activities:	
	No study exists	Study Initiated	Study Completed	Start Date (mm/yyyy)	Actual or Anticipated Completion Date (mm/yyyy)
<b>Service Planning Activities/Documents</b>					
Purpose & Need/Rationale	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		10/1/09 included in the application
Service/Operating Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		2004 MWRRI
Prioritized Capital Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		2004 MWRRI
Ridership/Revenue Forecast	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		2004 MWRRI
Operating Cost Forecast	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		2004 MWRRI
Assessment of Benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		2004 MWRRI
<b>Implementation Planning Activities/Documents</b>					
Program Management Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Sept 2009 - included in application
Financial Plan (capital & operating – sources/uses)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Sept 2009 - included in application
Assessment of Risks	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Sept 2009 - included in application

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

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

Documentation	Date (mm/yyyy)	Describe How Documentation Can be Verified
Non-tiered NEPA EA	See Section F	See Section F
Tier 1 NEPA EA		
Tier 1 NEPA EA		

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

Documentation	Date (mm/yyyy)	Hyperlink (if available)
Finding of No Significant Impact	See Section F	See Section F
Finding of No Significant Impact		
Finding of No Significant Impact		

Corridor Program Name: IN-Chicago Cleveland-HSR Service Date of Submission: 10/1/09 Version Number: 1

## D. Public Return on Investment

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

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

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

The Indiana Chicago-Cleveland Corridor High Speed Rail Service Development Plan will implement a new high speed passenger rail service at speeds of up to 110 mph in the states of Indiana, Illinois, and Ohio. Eight round trips per day will be provided from Chicago to Toledo via Fort Wayne during the peak travel hours of 6:00 am. to 8:20 pm and nine round trips from Toledo to Cleveland with an end to end corridor express travel time of 4 hours and 22 minutes.

The MWRRI service plan for the Chicago-Cleveland Corridor features city-center to city-center passenger rail travel times less than auto and competitive with air, given access and security clearance times at airports. The express travel time between the Chicago and Cleveland endpoints will be 4 hours and 22 minutes, a significant reduction from current Amtrak service in the corridor. Half of the trips will be express and half will be local trains to provide maximum access to rail transportation. Local service to all stops will be a very competitive 4 hours and 48 minutes.

Communities served along the 354 mile route include Chicago, the Gary Regional Airport, Plymouth, Warsaw, Fort Wayne, Defiance, Toledo, Sandusky, Elyria and Cleveland. The Chicago-Cleveland Corridor Service Program includes feeder bus service from Plymouth to South Bend, Elkhart and Niles, from Ft. Wayne to Waterloo and Lima, from Defiance to Bryan, from Toledo to Detroit and from Cleveland to Canton and Youngstown.

The current travel time by Amtrak is 6 hours and 5 minutes on the Capital Limited and 7 hours and 5 minutes on the Lake Shore Limited – with the high-speed service proposed here offering up to a three hour travel time savings. Current Amtrak long distance trains provide poor service to the Cleveland travel market, with inconvenient arrivals at either 1:55 am or 5:05 am.

The express passenger rail travel time provided by the new Chicago-Cleveland Corridor High Speed Rail Service offers an hour and twenty minute time savings over auto travel, which requires an estimated travel time of 5 hours and 43 minutes, city-center to city-center. Non-stop air travel time is 1 hour and 9 minutes. However when at least an hour for security clearance and with up to an hour for connect time to the airport, parking, ticketing, baggage claim etc, at each end of the trip, the total travel time from city center to city center could be nearly 4 hours.

The Chicago-Cleveland Corridor Currently Amtrak provides 2 daily round trips between Chicago and Cleveland. The goal of the Chicago-Cleveland Corridor High Speed Rail Service Program is to provide hourly train service during peak travel periods to provide maximum arrival and departure flexibility to a wide range of business and pleasure travelers. The Service Development Plan increases the number frequencies from Chicago to Toledo from 2 to 8 round trips per day with an additional 9th round trip between Toledo and Cleveland.

The Chicago-Cleveland High Speed Service through Fort Wayne is forecast to have a ridership of over 1,227,000 riders annually three years after start-up and when the MWRRS is fully operational (2015 MRRRS Plan). This compares to current (2008) passenger rail ridership of 141,000 in the corridor. MWRRS has an over an eight-fold increase largely driven by the lack current service on the Amtrak route. Travelers arriving and departing (2020) range from 393,000 in Cleveland to 254,000 in Toledo to 144,000 in Fort Wayne and 89,000 in Gary.

The transportation benefits of the Chicago-Cleveland Corridor Program are confirmed by other transportation metrics for the service. The average operating speed with stops for current Amtrak Service in the corridor is 50.9 mph. With the introduction of planned track and signal improvements and new high-speed rolling stock capable of 110 mph operations the average operating speed increases to 80.8 mph. The current on-time performance of Amtrak service in the corridor is 45.4 percent. With the introduction of planned track and signal improvements to allow new passenger operations and reduce freight congestion on the corridor and the introduction of new more reliable rolling stock on-time performance is expected to be consistently 95 percent or more.

The financial performance results of the Chicago-Cleveland Corridor Operating Plan provide an on-going argument for the public investment needed to provide these transportation benefits. During the first three years operations, the corridor is forecast to have an operating deficit. In the fourth year it is forecast to turn a small operating profit which increases over time. These results assume the full build out of the entire 3,000 mile MWRRRI System and all of the system synergies that result from the operation of the Chicago-Cleveland Corridor Service as a part of an integrated MWRRRI system.

The introduction of a new competitive regional passenger rail system will induce new intercity travel by virtue of providing new choices and better intermodal connectivity for travelers in the region. It will also attract travelers from other modes – primarily from auto -- but also from air and intercity bus. The modal share of intercity passenger rail in the Chicago-Cleveland Corridor increases over ten times from 0.01 percent to 1.03 percent of total travel (base year 2000 to forecast year

2025). The auto share of intercity travel is forecast to decrease from 98.44 percent to 97.31 percent.

The Chicago-Cleveland Corridor High Speed Passenger Rail Service benefits from an integrated feeder bus service and connectivity to other local transit and intercity public transportation modes. The Chicago-Cleveland Corridor Service Program includes feeder bus service from Plymouth to South Bend, Elkhart and Niles, from Ft. Wayne to Waterloo and Lima, from Defiance to Bryan, from Toledo to Detroit and from Cleveland to Canton and Youngstown. These dedicated feeder buses will be scheduled to meet corridor trains in a manner which will provide “seamless” intermodal connectivity and contribute to approximately 10 percent of total rail ridership across the MWRRS.

Plans for the Chicago-Cleveland Corridor provide for a station at the Gary Indiana Airport with provisions for enhanced air-rail intermodal connectivity. In addition the proposed Southwest Cleveland, Chicago-Cleveland/3C passenger rail stop is at the Greater Cleveland Regional Transit Authority (GCRTA) West 150th St. /Puritas St. Rapid Rail Transit Station which is approximately three miles north of Cleveland Hopkins International Airport. Intermodal access to the airport by passenger rail will be facilitated by a platform transfer to the GCRTA rapid transit line -- the Airport is two stops south.

The capital improvements which will be provided in the corridor for passenger rail will also provide capacity and safety improvements for freight rail operations. All public crossings will be provided with improved grade crossing warning devices – in most cases gates and lights, private crossings will be closed or improvements be made. Flyovers will be provided at a number of high volume rail to rail crossings to increase safety, capacity and operational fluidity. Positive train control will provide efficiency and safety benefits to both freight and passenger operations.

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

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



Corridor Program Metric	Actual – FY 2008 levels	Projected Totals by Year		
		First full year of operation	Fifth full year of operation	Tenth full year of operation
Annual passenger-trips	141,000	1,020,000	1,300,000	1,450,000
Annual passenger-miles (millions)	20.5	148.0	229.6	245.60
Annual IPR seat-miles offered (millions)	304.5	554.0	554.0	554.0
Average number of daily round trip train operations (typical weekday)	2	8	8	8
On-time performance (OTP) <sup>2</sup> — percent of trains on time at endpoint terminals	45.4%	95%	95%	95%
Average train operating delays: minutes of en-route delays per 10,000 train-miles <sup>3</sup>	160	15.8	15.8	15.8
Top passenger train operating speed (mph)	79	110	110	110
Average scheduled operating speed (mph) (between endpoint terminals)	50.9	80.8	80.8	80.8

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

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

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

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

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

As part of the MWRRI economic impact analysis, Indiana will realize significant economic benefits from increased accessibility via passenger rail service and temporary construction and permanent operating jobs. The MWRRI Benefit Cost and Economic Analysis (November 2006) notes that the increased accessibility will increase economic activity, particularly in urban areas and stations. The state of Indiana could see from \$2.3 to \$3.5 billion in user benefits from time savings, congestion relief and emission reductions during the first 40 years of the project. The improved accessibility of high-speed passenger rail can create as much as 4,540 jobs, increase household income by \$86 million and create up to \$350 million in joint economic development potential (page 18). The Chicago-Cleveland corridor benefits from its location between large urban areas and their economic influence on the region. At the Cleveland regional level, which includes the Chicago-Cleveland corridor and a substantial portion of northeastern Indiana, the economic study estimates up to 2,490 jobs created, and increase of household income up to \$45 million and \$183 million in joint development potential at stations.

Economic benefit is realized from linking Indiana communities into the MWRRI system providing increased access for existing manufacturing and service industries and fosters small business growth in these communities. Likewise, large businesses will have access to a larger labor pool in communities offering high quality of life. The connectiveness of rail service in the Chicago-Cleveland corridor provides an attractive and cost effective alternative to auto travel and limited air service to communities in the corridor, which can further encourage business growth in the corridor.

Another significant opportunity for communities with station stops is the joint development potential that encourages economic development at stations and in the immediate vicinity. The MWRRI economic analysis identified the following benefits for stations in the Chicago-Cleveland corridor:

Station	Increase in employment (#of people)	Increase in household income (millions of 2002 \$)	Increase in property value (million of 2002 \$)
Chicago, IL	12,250-18-375	242-363	1,150-1,725
Hammond-			
Whiting	175-265	3.5-5	16-25
Gary, Airport	400-650	8-12	32-48
Michigan City	130-195	2.6-3.9	12-18
Plymouth	230-345	4.5-6.8	21-32
Warsaw	105-160	2.1-3.2	10-15
Ft. Wayne	345-520	6-9	26-38
Toledo, OH	480-720	9-13	35-53
Cleveland, OH	1,005-1510	18-27	74-111

Source: MWRRI. Midwest Regional Rail Initiative Benefit Cost and Economic Analysis, November 2006.

Development potential is further enhanced when other transportation modes are connected to MWRRI stations. For example, feeder bus service proposed in Ft. Wayne, Plymouth, Toledo, OH and Cleveland, OH maximize modal connections and further encourage economic development where convenient travel options are available. Endpoints in Chicago and Cleveland already act as

intermodal stations.

The American Public Transportation Association evaluated the policy issues and fiscal impacts of financing high-speed passenger rail (APTA, 2008). The construction and operating jobs created from implementing high-speed rail translates into increase federal and station income taxes. APTA estimates that by year 10 when the MWRRI is completed, jobs created in Indiana would result in accrued federal income tax of \$135.0 million, and \$58.1 million in state income taxes (2008 dollars). In years 20, 30 and 40 of passenger rail operations, Indiana could see up to \$111.4 million, \$182.3 million and \$276.7 million in state income tax, respectively.

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

Anticipated number of onsite and other direct jobs created (on a 2080 work-hour per year, full-time equivalent basis).	FD/ Construction Period	First full year of operation	Fifth full year of operation	Tenth full year of operation
	3711	4540	4540	4540

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

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

- Any projected reductions in key emissions (CO<sub>2</sub>, O<sub>3</sub>, CO, PM<sub>x</sub>, and NO<sub>x</sub>) and their anticipated effects. Provide any available forecasts of emission reductions from a baseline of existing travel demand distribution by mode, for the first, fifth, and tenth years of full operation (*provide supporting documentation if available*).
- Any expected energy and oil savings from traffic diversion from other modes and changes in the sources of energy for transportation. Provide any available information on changes from the baseline of the existing travel demand distribution by mode, for the first, fifth, and tenth years of full operation (*provide supporting documentation if available*).
- Use of green methods and technologies. Address green building design, “Leadership in Environmental and Energy Design” building design standards, green manufacturing methods, energy efficient rail equipment, and/or other environmentally-friendly approaches.

Passenger rail transportation provides both user and non-user benefits in terms of reduced air and energy emissions because of the efficiency of train travel compared to other modes and diverting passenger miles traveled from less efficient air and autos. The Passenger Rail Working Group for the National Surface Transportation Board Policy and Revenue Commission noted that intercity passenger rail consumes 17 percent less energy per passenger mile than airlines and 21 percent less energy per passenger mile than autos (<http://www.dot.wisconsin.gov/projects/state/docs/prwg-report.pdf>). Furthermore, the average intercity passenger train produces 60 percent fewer CO<sub>2</sub> emissions per passenger-mile than the average auto and half the GHG emissions of an airplane. Other pollutants, such as nitrogen oxides are reduced as well.

In northwestern Indiana, between 1980 and 2000, population decreased one percent, but traffic volumes on major highways in the region increased about 50 percent. The Northwestern Indiana Regional Planning Commission (NIRPC) recognizes that part of this demand is the result of the region’s strategic location at the southern end of Lake Michigan. Many of the nation’s transportation systems converge in the region, making orderly flow of goods and services a priority for transportation planning in the region. According to the NIRPC’s long range transportation plan, three of the seven major east-west transcontinental interstate highways cross through northwest Indiana. Trunk lines of three major eastern railroads pass through the region (Northwestern Indiana

Regional Planning Commission, 2006. Northwestern Indiana Long Range Transportation Plan-Connections 2030). Introducing passenger rail service in the Chicago-Cleveland corridor has significant potential to reduce congestion and related air emissions in this heavily traveled corridor. For example, the Center for Clean Air Policy notes that by 2030, there are corridors within the Vision for High Speed Rail in America that could potentially reduce GHG emissions by more than 8.7 million metric tons annually.

InDOT's Northern Indiana/Northwestern Ohio Routing Study (TEMS, 2002) included a cost-benefit analysis of both user and non-user benefits. The study estimated that the 30-year net present value of other mode user benefits to be over \$49 millions due to reduced airport congestion and over \$94 million in reduced highway congestion. The reduced congestion and efficiency of rail travel provides a resources NPV benefit of over \$26 million in reduced airline energy consumption and \$1.65 million in air emissions reductions.

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

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

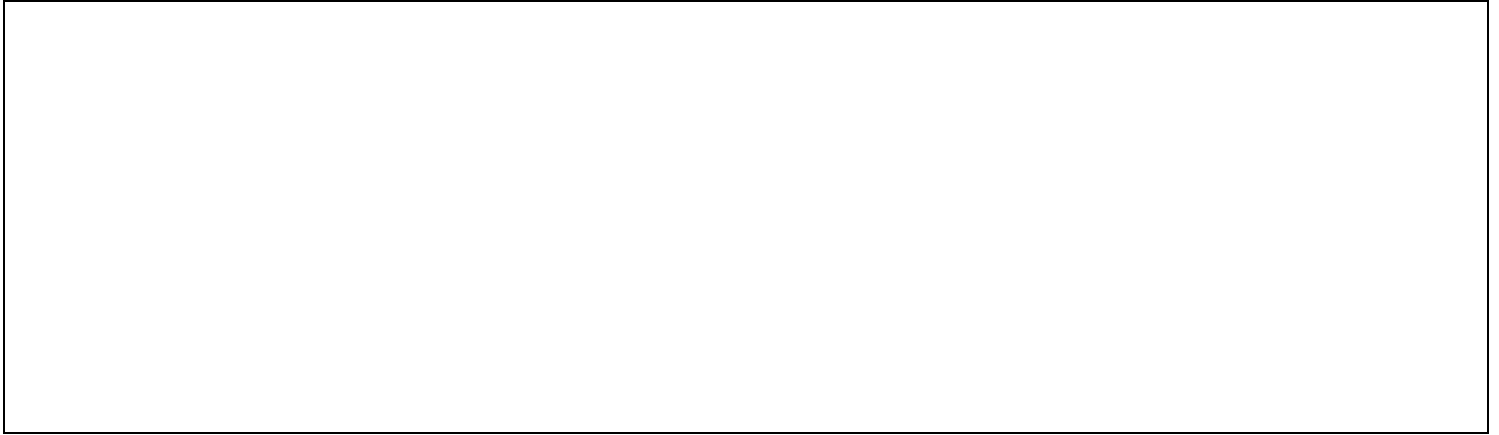
- Integration with existing high density, livable development: Provide specific examples, such as (a) central business districts with walking/biking and (b) public transportation distribution networks with transit-oriented development.
- Development of intermodal stations: Describe such features as direct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

Passenger rail's contribution to livable communities are well documented. Indiana, as well as communities in the Chicago-Cleveland corridor, are recognizing and implementing plans and policies to take advantage of the land use, economic and environmental benefits that passenger rail brings to local communities. The Passenger Rail Working Group of the NSTB in its 2007 report, identified specific benefits including: reduced congestion and greenhouse gas emissions, encouraging denser rail-oriented development that benefit air and water quality, and increased mobility and economic development in smaller communities. Passenger rail stations that are located in communities with transit supportive land use policies and plans take maximum advantage of station area potential. Stations in downtown and dense urban areas encourage redevelopment with mixed used housing, higher densities and multi-modal connections. Suburban stations can focus economic development in a compact manner while further improving access to alternative travel modes.

The state of Indiana is supportive of rail development across the state, most notably in Indianapolis where there have been a number of studies to identify corridors for future rail development, including Forward Momentum: Reporting on the Need for Mass Transit in Central Indiana (Indianapolis Chamber of Commerce, 2009), Mass Transportation in Central Indiana Survey (Indianapolis Chamber of Commerce, 2008), Northeast Corridor Rapid Transit Alternatives Analysis Completion Study (Directions) (Indianapolis MPO, 2008) and Final Report: Central Indiana Commuter Rail Feasibility Study (InDOT, 2008).

The City of Lafayette Indiana has also invested in high speed rail through their collaborative efforts with INDOT to relocate CSX tracks (includes Amtrak service) to eliminate over 42 grade crossings. The project was a long term program costing over \$200 million that was completed in 2001. The City has also passed a current resolution in support of high speed rail in the state of Indiana.

The endpoints of the Chicago-Cleveland corridor are located in well established stations in dense urban environments with multi-modal connections. The Cleveland Comprehensive Plan (Connecting Cleveland, 2020 Citywide Plan, Draft) specifically identifies transit oriented development as a key policy to strengthen the competitiveness of urban communities. The Allen County/Ft. Wayne Comprehensive Land Use and Development Plan (Draft, January 2007) includes Objectives and strategies supporting more efficient land use patterns and specifically identifies the future MWRRRI passenger rail station as an important transit hub that will support multimodal connections.



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## E. Application Success Factors

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

### 1A. Applicant qualifications.

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

Yes - Briefly describe experience (brief project(s) overview, dates)

No- Briefly describe expected plan to build technical and managerial capacity. Provide reference to Project Management Plan.

*Please limit response to 3,000 characters.*

INDOT recognizes that implementing the High Speed Intercity Rail Improvement Program will be significant. INDOT will have to ramp up and draw upon project management experience within the organization to provide the capacity needed to implement the projects being proposed and draw upon outside contractors to supplement some staffing needs. Specifically, for implementation, INDOT will bring forward the complete capabilities of the 5,000 employee Department of Transportation. INDOT's overall staffing resources fit perfectly with the high speed rail needs since the planning and design efforts associated with the Major Moves program are declining as the program shifts more efforts into the construction of the program. The ability for INDOT to deliver a large rail program is demonstrated in the following ways:

INDOT Has Project Delivery Systems in Place --INDOT has extensive experience in delivering transportation infrastructure across the state. There is a delivery methodology and project controls in place to guide the development and implementation of a current \$1 billion program that includes both large and small projects. The Rail Section has used these systems to manage projects, schedules, resources, control costs, and record documentation of the project development process. The Rail Section will continue to use these systems and draw upon other resources within the organization to increase capacity as needed.

INDOT Has the Skills to Deliver a Major New Infrastructure Program -- INDOT's Major Moves Program is implementing new/additional highway infrastructure spending. Major Moves is a 10-year \$12 billion program being implemented between 2006 and 2015. The state will invest nearly \$12 billion on hundreds of new road construction, preservation, resurfacing and other projects. New construction spending will quadruple, from \$213 million in 2006, to \$874 million in 2015. The total construction program is likewise significant with \$708 million in 2006, greater than \$1 billion 2009-2014, and ending at \$1.458 billion in 2015 ([http://www.in.gov/indot/files/Funding\\_Chart\\_2006-2015.pdf](http://www.in.gov/indot/files/Funding_Chart_2006-2015.pdf)).

INDOT Has Delivered a Major Rail Infrastructure Project -- INDOT in conjunction with the City of Lafayette, IN completed a \$200 million rail infrastructure in May 2001. The project was one of the United States' largest railroad/highway grade crossing elimination projects which was completed after many years of planning and construction. A total of 42 grade crossings and a section of street running were eliminated through line relocation in this project involving two NS and one CSXT line through Lafayette. The CSXT line is also used by Amtrak trains between Indianapolis and Chicago.

Governor's Support -- Governor Mitch Daniels along with seven other Midwest governors and Chicago's Mayor Daily signed a letter to U.S. Department of Transportation Secretary Ray LaHood indicated unified support for the MWRRI.

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

INDOT has developed an organization structure to leverage existing staff expertise, reallocate staffing as needed to fulfill increased level of management of the program, and contract with consultants for additional expertise and staffing needs. The organization chart within the Project Management Plan depicts the rail program management and coordination expertise to be located within the central office and the decentralized District's function would be to manage the construction delivery. This dual structure allows expertise to be centralized and thus maximum utilization with the Districts providing local coordination, local knowledge, and maximum ability to control construction outcomes.

The organization structure creates a high level Passenger Rail Program Manager position whose responsibilities would include:

- Overall management and coordination of the intercity passenger rail implementation, budget and schedule.
- Budget management activities include applying for federal funds, applying for state funds, tracking grants, and assist in the development of annual state budget needs.
- Coordination with FRA, USDOT, other federal agencies, Amtrak, internal INDOT expert resources, adjacent states for the corridor development, and stakeholders.
- Guide the development and implementation of standards for service levels, equipment, infrastructure, and stations.
- Lead role in procurement of consultants, design services, railroad services, operating equipment and related maintenance facilities.
- Coordination and communication with MWRRI Steering Committee.

The final responsibility area in the organization structure is the creation of the Passenger Rail Major Project Management section with the focus on specific corridor project development. This section would follow the model previously used for major highway corridors. It would have a dedicated high level INDOT manager position that would be staffed by an existing or reallocated INDOT position and have additional staffing via a consultant(s) program manager. The Major Project Management section responsibilities would include:

- Overall management and coordination for the development of the Chicago-Cleveland corridor and Chicago-Cincinnati corridor.
  - Program and financial management activities include: budget development, cost monitoring, scheduling, contract management, stakeholder information, environmental documentation and design development.
  - Define the project needs and select a consultant program manager for each corridor. Overall consultant management will include creating the environmental document, preliminary design, final design, permitting, bidding documents, contractor selection and construction of projects within each corridor.
- Coordination of INDOT Districts to oversee the contractor construction work, work done by freight railroads, and work done by local communities.

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

- YES- If yes, explain and provide a timeline for obtaining the waivers  
 NO

*Please limit response to 1,500 characters.*

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

The Chicago-Cleveland Corridor Program is a \$2.8 billion program in 2010 dollars. With a program this size, the largest uncertainty is the need to be successful in securing federal funding since states will not be able to self fund the program. The second issue associated with funding will be securing any state funding to advance any needed project studies or potential future program matches. Mitigation strategies will be success in securing funding through this application and other national HSIPR funding sources. The MWRRI Steering Committee has demonstrated close collaboration among the states and will be the mechanism for collaboration in securing state funding needs.

A second program uncertainty is the railroad agreements. Each railroad in the Chicago-Cleveland corridor has been contacted throughout the MWRRI process, contacted during the application process, and they understand the project need and are supportive (letters of support are included in the application).

Finally, it should be noted that the Midwest Regional Rail Initiative Steering Committee performed a quality audit in October

2005 to identify any uncertainties associated with the implementation of the MWRRS. Areas audited included ridership and revenue, operating costs, capital costs, and the financial plan. The audit found that the technical work performed in the four areas was sound. The highest uncertainties were related to external factors that included negotiations with freight railroads on access and capacity needs, federal and state funding availability, institutional development, development of train control technologies, and dispatching coordination issues. Each of these uncertainty areas has been discussed above, within the Project Management Plan, or within the overall program with the development of PTC systems.



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

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

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

The Indiana Department of Transportation has contacted each freight railroad on the Chicago-Cleveland Corridor regarding this application:

- 1) Norfolk Southern Railway
- 2) CSX Transportation (owner of the southern route in Indiana)
- 3) Maumee and Western Railroad
- 4) Indiana and Ohio Railroad
- 5) Chicago, Fort Wayne and Eastern Railroad (leasee of the CSX southern route in Indiana)

Letters in support of this application are attached.

The final infrastructure improvements associated with the level of passenger rail service called for in the Chicago-Cleveland Corridor Program will be confirmed in detailed capacity modeling/operations analysis work. This modeling work will be conducted as a part of the preliminary engineering and project NEPA process to be funded with federal grant funds requested in this application. The results of this modeling process will be used to negotiate and develop a written agreement between each affected railroad and three states of Indiana, Ohio and Illinois. Each state will be expected to provide infrastructure improvement funding obtained from federal grant sources for various portions of the corridor within their boundaries.

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

The operator of the Chicago-Cleveland Corridor service will be Amtrak based on a negotiated operating agreement executed jointly with the states of Indiana, Ohio and Illinois. This agreement would specify the level of service offered, performance standards, penalties for not meeting performance standards, operating costs, and operating cost sharing among the three states based on a combination of such factors as passenger-miles, passenger origins and destinations, and train-miles within each state's borders. The MWRRS plan specifies Amtrak as the “default operator” of the nine-state system subject to this type of negotiated operating agreement.

Operating equipment obtained with federal funding will be owned (or deeded to Amtrak) as appropriate by each state (Indiana, Ohio and Illinois) based on metrics similar to those listed above, and the equipment will be operated by Amtrak in a regional equipment pool.

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

Amtrak has been selected as the operator based on the long-held MWRRS Plan identifying Amtrak as the “default operator” for the System. Amtrak offers advantages in that it has statutory rights of access to US freight railroads, which other operators do not have. These rights of access were further strengthened in the Passenger Rail Investment and Improvement Act (PRIIA) passed by Congress in 2008, which gives the Surface Transportation Board additional authority to adjudicate operating disagreements between Amtrak and host freight railroads for both existing and proposed new services. Under current federal law, Indiana, Ohio and Illinois continue to have the right to pursue other operators if Amtrak does not meet the performance standards identified in the operating agreement. This opportunity to pursue other operators serves to protect the states against needless cost increases. Under PRIIA the Surface Transportation Board has been empowered to review and if necessary establish cost-sharing agreements between Amtrak, states and commuter railroads to further protect the public interest.

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

Multiple stakeholders throughout the state of Indiana have expressed support for the high speed intercity passenger rail program. The following is a summary of the stakeholder and supporting materials are also being submitted.

- 1.) Resolution in support of the intercity passenger rail initiative in Indiana by the Northeastern Indiana Regional Coordinating Council
- 2.) Resolution No. 10-01, a resolution requesting support of the Midwest Regional Rail Initiative, by the City of West Lafayette, Indiana.
- 3.) Resolution No. 2000-22, a resolution requesting support of the Midwest Regional Rail Initiative, by the City of Lafayette, Indiana.
- 4.) Resolution 09-15, a resolution of the northwestern Indiana Regional Planning Commission supporting the Midwest High Speed Rail Plan.
- 5.) Support letter – Northwestern Indiana Regional Planning Commission
- 6.) Support letter – City of Crawfordsville
- 7.) Support letter – signed by Columbus Mayor, Valparaiso Mayor, Greensburg Mayor, Warsaw Mayor, Hobart Mayor, West Lafayette Mayor, Lafayette Mayor, Whiting Mayor, and Michigan City Mayor.
- 8.) Support letter – signed by Associate State Director Community Outreach AARP Indiana, Indiana High Speed Rail Association, The Downtown Fort Wayne Economic Development Improvement District, Indiana Rail Transportation Group, Environmental Law and Policy Center, Governor’s Private Sector Designee Midwest Interstate Passenger Rail Commission, Executive Director Alliance for Health Promotion, Chairman and CEO Steel Dynamics Inc., Hoosier Environmental Council, West Lafayette Go Greener Commission, and Indiana Citizens’ Alliance for Transit.
- 9.) Support letter – signed by Greater Lafayette Commerce, Lafayette-West Lafayette Chamber of Commerce, Crawfordsville/Montgomery County Chamber of Commerce, Lakeshore Chamber of Commerce, Columbus Area Chamber of Commerce, Shelby County Chamber of Commerce, Greensburg/Decatur County Chamber of Commerce, and Beech Grove Chamber of Commerce.
- 10.) Support letter – signed by Mayor of Fort Wayne and three Commissioners of Allen County.
- 11.) Support letter – signed by the President of the Fort Wayne Downtown Improvement District
- 12.) Support letter – signed by the President of the Northeast Indiana Corporate Council
- 13.) Support letter – signed by the President/CEO of the Northeast Indiana Regional Partnership
- 14.) Support letter – signed by the President of the Young Leaders of Northeast Indiana

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

The only commuter rail service operating concurrently with the proposed Chicago-Cleveland Corridor Service is heavy rail transit service operated by the Greater Cleveland Regional Transit Authority (GCRTA) in the vicinity of the proposed Southwest Cleveland Station. The GCRTA has been contacted by the Ohio Department of Transportation. Any operating agreements with GCRTA or other transit or commuter rail authorities will be negotiated and executed after the completion of NEPA documentation, preliminary engineering and capacity analysis work to be conducted with funding requested in this application.

**(3) Financial Information**

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

Non FRA Funding Sources	New or Existing Funding Source?	Status of Funding <sup>4</sup>	Type of Funds	Dollar Amount (millions of \$ YOE)	% of Program Cost	Describe uploaded supporting documentation to help FRA verify funding source
Indiana General Fund Obligation	New	Planned	General Revenue	\$24.0	7.8%	Planned -- not obligated
	New	Committed				
	New	Committed				
	New	Committed				

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

The Indiana Department of Transportation has made a substantial in-kind contribution of staff time associated with overseeing the preparation of this application along with the provision of state funds for consultant assistance. As federal funding is provided for the Chicago-Cleveland Corridor Program, the level of INDOT staff resources required to manage it will substantially increase over time. The new organizational structure proposed in the Program Management Plan provides evidence of the large in-kind commitment of Indiana Department of Transportation staff resources for program and project management that will be associated with any federal grant funding provided to implement the Chicago-Cleveland Corridor Program.

**3C. Corridor Program Sustainability and Operating Financial Plan.**

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

- o The State of Indiana has a long history of successfully managing all phases of a major state multimodal transportation program. The state has powers of taxation, as well as state bonding, subject to balanced budget requirements that will allow it to appropriate the funds needed to cover its share of any operating or capital cost not covered by federal funding associated with the Chicago-Cleveland Corridor Program. Indiana like most states will need to pass specific appropriations legislation to provide funding to cover projected short term operational losses and future state match funds that may be required with federal funding. It is important to remember that the first full year of service will not be until 2018. The current Indiana state biennial budget runs through June 30, 2011. Any operating deficits will thus be addressed in the biennial budget for the years July 1, 2017 through June 30, 2019 – four state budget sessions from now. Given that this Program is just moving into the preliminary engineering and NEPA documentation phase, it is premature and unrealistic for the state legislature to make any commitment for these purposes until more detailed information is available on costs,

<sup>4</sup> **Reference Notes:** The following categories and definitions are applied to funding sources:

**Committed:** Committed sources are programmed capital funds that have all the necessary approvals (e.g. legislative referendum) to be used to fund the proposed phase without any additional action. These capital funds have been formally programmed in the State Rail Plan and/or any related local, regional, or State Capital Investment Program CIP or appropriation. Examples include dedicated or approved tax revenues, State capital grants that have been approved by all required legislative bodies, cash reserves that have been dedicated to the proposed phase, and additional debt capacity that requires no further approvals and has been dedicated by the sponsoring agency to the proposed phase.

**Budgeted:** This category is for funds that have been budgeted and/or programmed for use on the proposed phase but remain uncommitted, i.e., the funds have not yet received statutory approval. Examples include debt financing in an agency-adopted CIP that has yet to be committed in their near future. Funds will be classified as budgeted where available funding cannot be committed until the grant is executed, or due to the local practices outside of the phase sponsor’s control (e.g., the phase development schedule extends beyond the State Rail Program period).

**Planned:** This category is for funds that are identified and have a reasonable chance of being committed, but are neither committed nor budgeted. Examples include proposed sources that require a scheduled referendum, requests for State/local capital grants, and proposed debt financing that has not yet been adopted in the agency’s CIP.

environmental and social impacts.

○

The Financial Plan indicates that Operating losses will occur during the early years of operation. As MWRRI ridership continues to grow, the Chicago to Cleveland corridor will develop a surplus of revenues to expenditures. This surplus will be reinvested in the capital plant of the rail corridor. It is not a common practice for states to otherwise fund a “sinking fund” for future capital investments required for equipment and other capital costs. Most states including Indiana use bonding or in some cases current appropriations to fund capital investments as they are needed. See Question 4 for a list of existing state statutes providing statutory authority to manage and fund the Chicago-Cleveland Corridor Program.

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

Funding Requirement (as identified on the Supporting Form)	Baseline Actual-FY 2009 Levels (State operating subsidy for FY 2009 if existing service)	Projected Totals by Year (\$ Millions Year Of Expenditure (YOE)* Dollars - One Decimal)		
		First full year of operation	Fifth full year of operation	Tenth full year of operation
Indicate the Fiscal Year	2009	2018	2023	2028
Surplus/deficit after capital asset renewal charge <sup>5</sup>	N/A	(\$18.3)	\$0.5	\$5.0
Total Non-FRA sources of funds applicable to the surplus/deficit after capital asset renewal	N/A	\$0	\$0	\$0
Funding Requirements for which Available Funds Are Not Identified	N/A	(\$18.3)	surplus	surplus

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

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

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

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

The State of Indiana, like the states of Illinois and Ohio, has a long history of successfully managing all phases of a major state multimodal transportation program. The state has powers of taxation, as well as state bonding, subject to balanced budget requirements that will allow it to appropriate the funds needed to cover its share of any operating or capital cost not covered by federal funding associated with the Chicago-Cleveland Corridor Program. The following Indiana State Statutes provide the basic statutory authority for the Indiana Department of Transportation to fund, manage and implement the Chicago-Cleveland Corridor Program:

I.C. 8-3-1.5-18--INDOT may spend any sums appropriated for modernization and rebuilding of any rail properties owned by the state or by a private carrier

I.C. 8-3-1.5-17--INDOT may purchase railroad rolling stock, equipment, and machinery for operation and maintenance of any rail properties

I.C. 8-3-1.5-5--department may acquire rail and non-rail property

I.C. 8-3-15-19--INDOT may contract with others to provide, maintain or improve rail service on properties acquired by the state

I.C. 8-3-1.7-2(a)(4)--The Industrial Rail Service Fund may be used to provide money for high speed rail development fund

I.C. 8-3-1.5-14--funds for carrying out purposes of the chapter

I.C. 8-23-25--high speed rail development fund

I.C. 8-23-2-6(a)(16)--money from the state highway fund may not be used to provide operating subsidies to support a public transportation system or a commuter transportation system. (There is no similar limitation on the use of general funds)

Illinois and Ohio have similar statutory authority (see Track 2 applications being submitted by Illinois and Ohio)

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

Final Design Duration:	18 months
Construction Duration:	40 months
Rolling Stock Acquisition/Refurbishment Duration:	27 months
Service Operations Start date:	05/2017 (mm/yyyy)

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

This \$2.36 billion (2010\$) Chicago-Cleveland Corridor Program will involve expenditures of over \$2.06 billion for infrastructure and \$292.7 million for rolling stock both of which will further domestic manufacturing, supply and industrial development. Federal Buy America provisions will apply to all procurement activities. For example, the corridor program will involve the expenditure of \$1.22 billion for track and track structures which will benefit the nation's steel industry and domestic track manufacturers. It will also benefit the producers of concrete ties and bridge structures. Over \$335.8 million will be expended for communications and signaling which will benefit U.S electronic industries and signal component manufacturers. The implementation of positive train control will advance the technological competence of the U.S signal industry. The United States currently has no domestic supplier of high speed coaches and locomotives. The purchase of eight high speed train sets for the Chicago-Cleveland Corridor Program at a cost of \$292.7 million as a part of planned ultimate pool of 63 train sets for the Midwest Regional Rail System will advance the development of the domestic passenger equipment supply industry.

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

The implementation of the \$2.36 billion (2010\$) Chicago-Cleveland Corridor Program will involve the expenditure of over \$284.8 million in professional services for rail design engineers, signal design engineers, planners and operations analysts. The sustained demand for these services offered by the Chicago-Cleveland Corridor Program over a seven-year build-out period will serve to develop the rail professional services industry. Public sector passenger rail capacity building is demonstrated by the state transportation organizational structure proposed in the Chicago-Cleveland Corridor Project Management Plan. This major project and others like it throughout the country will clearly increase the management capacity of state transportation agencies. The implementation of the Chicago-Cleveland Corridor Service will also involve the employment of a significant number of operating employees such as locomotive engineers, conductors, on-board service providers and associated management and support personnel. The MWRRS Plan estimates that over 1,200 additional operating personnel will be required with full build out of the 3,000 mile system.

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## F. Additional Information

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

*Section B, Question 5, Describe the Service Objectives*

*The CHI CLE corridor will have 8 trains per day versus Amtrak's current one per day (i.e. Additional Service Frequencies), trains will be more reliable and have enhanced passenger amenities (i.e. Improved Service Quality), Indiana and Ohio have existing Amtrak service that would have better on time performance with the improvements (i.e. Improved On-Time Performance on Existing Route), there is a southern alternative that was the recommended corridor in MWRRI (i.e. potential to Reroute Existing Service), and MWRRI shows shorter trip times when the plan is implemented (i.e. Increased Average Speeds/Shorter Trip Times).*

*Section B, Question 6 Right-of-Way Ownership (additional railroads that do not fit in the table)*

*Type of Railroad -- Regional or Short Line Freight  
 Railroad Right-of-Way Owner -- Indiana & Ohio Railway  
 Route Miles -- 8.2 miles  
 Track Miles -- 8.2 miles*

*Status of agreements to implement projects -- No agreement but host railroad supports project  
 It should also be noted that a portion of the CSX line from Tolleston to Fort Wayne is operated by the Chicago Fort Wayne and Eastern Railroad.*

*Section B, Question 7, Services (additional railroads that do not fit in the table)*

*Type of Service: Freight  
 Railroad Right of Way Owner: Maumee & Western Railroad  
 Top Speed within Boundaries (Freight): 10mph  
 Top Speed within Boundaries (Passenger): N/A  
 Number of Route Miles Within Boundaries: 56.9  
 Average Number of Daily One-way train Operations within Boundaries: 2  
 Notes:*

*Type of Service: Freight  
 Railroad Right of Way Owner: Indiana & Ohio Railway  
 Top Speed within Boundaries (Freight): 25 mph  
 Top Speed within Boundaries (Passenger): N/A  
 Number of Route Miles Within Boundaries: 8.2  
 Average Number of Daily One-way train Operations within Boundaries: 2  
 Notes:*

*Type of Service: Commuter  
 Railroad Right of Way Owner: Greater Cleveland Regional Transit Authority*

*Top Speed within Boundaries (Freight): N/A*  
*Top Speed within Boundaries (Passenger): 50 mph*  
*Number of Route Miles Within Boundaries: 12.0*  
*Average Number of Daily One-way train Operations within Boundaries: 192*  
*Notes: Data from published schedule and call to Mike Schipper at GCRTS*

*Type of Service: Commuter*  
*Railroad Right of Way Owner: Metra*  
*Top Speed within Boundaries (Freight): N/A*  
*Top Speed within Boundaries (Passenger): 45 mph*  
*Number of Route Miles Within Boundaries: 4*  
*Average Number of Daily One-way train Operations within Boundaries:*  
*Notes: number of trains from published schedule*

*Section B, Question 10 Master Project List -- A recommendation in the Northern Indiana / Northwest Ohio Routing Study was to include \$30 million (\$48.5 million 2010) for infrastructure upgrades to the NICTD. These costs were not included as part of the application since they are associated with commuter rail and thus not eligible.*

*Section C, Question 3 Establish Completion of Service NEPA Documentation and Question 4 Indicate if there is an environmental decision from FRA -- INDOT and the MWRRRI states have advanced elements of the service level NEPA, including an Alternatives Analysis of the Chicago Cleveland Corridor and the South of the Lake Corridor). These analyses are corridor-level reviews of potential corridors for passenger rail service in the corridor, evaluation criteria focused on service and engineering criteria that screened the most feasible corridors that could connect major population centers, reduce travel times, and increase frequency and reliable passenger rail service. Environmental and economic benefits of MWRRRI corridors are documented in a 2006 study prepared for the MWRRRI states. Concurrent with these studies, INDOT conducted a statewide public information program that included reviews information on the Chicago-Cleveland corridor. The next steps will be to incorporate the analyses into a formal NEPA process to complete agency consultation, develop track schematics and complete an environmental review.*

*The following studies support Tier I, Service Level NEPA (these are include as attachment in the applicaton in the Service NEPA attachment):*

- 1.) Midwest Regional Rail Initiative Benefit Cost and Economic Analysis (2006)*
- 2.) Northern Indiana/Northwestern Ohio Routing Study. Prepared by Transportation Management and Economic Systems, Inc. for Indiana Dept. of Transportation, Ohio Dept. of Transportation and National Rail Passenger Corporation. November, 2002.*
- 3.) Detroit-Chicago High Speed Rail Corridor Study Update "South of the Lake". Amtrak Purchase Order S-049-31385. Prepared by HNTB Corporation for Illinois Dept. of Transportation, Indiana Dept. of Transportation and Michigan Dept. of Transportation. December 2004 Update.*
- 4.) The Indiana Passenger Rail Initiative: Taking a Bold Track into a New Century. Prepared by Blalock and Brown for the Indiana Dept. of Transportation. March, 2002.*



*Section D, Question 1 B Operational and Ridership Benefits Metrics, Average train operating delays; minutes of enroute delays per 10,000 train-miles (methodology)*

*Total trips were calculated based on 365 days in the year multiplied by the number of trips provided (4 for Amtrak and 8 for MWRRI). Next delay was calculated by taking the number of trips times the %that are delayed and then a 10 minute delay was conservatively used. Train miles are provided in the Financial Plan which was divided by 10,000. The delay calculation was then divided by the train miles per 10,000.*

*Section D Public Return on Investment, Questions 2-4, Additional Referenece Information:*

*Environmental and Economic Benefits Resources*

*MWRRI economic benefits:*

*<http://www.dot.wisconsin.gov/projects/state/docs/mwrri-economic.pdf>*

*American Public Transportation Association. June 25, 2008.*

*[http://www.apta.com/gap/policyresearch/Documents/apta\\_mwrr\\_final\\_report\\_062508.pdf](http://www.apta.com/gap/policyresearch/Documents/apta_mwrr_final_report_062508.pdf)*

*Vision for the Future, US intercity passenger rail network through 2050*

*<http://www.dot.wisconsin.gov/projects/state/docs/prwg-report.pdf>*

*Financing High-Speed Intercity Passenger Rail with Tax Credit Bonds: Policy Issues and Fiscal Impacts. Prepared by Mercator Advisors, LLC and Vantage Point Associates, Inc.*

*Supporting Planning documents*

*Cleveland 2020 comprehensive plan includes TOD policies – connecting Cleveland, 2020 Citywide Plan*

*<http://planning.city.cleveland.oh.us/cwp/SummaryGoals.php?section=ti>*

*Indiana has increased interest in investing in passenger rail*

*[http://www.hecweb.org/File/Update\\_on\\_Central\\_Indiana\\_Transit\\_--HEC--June\\_2009.pdf](http://www.hecweb.org/File/Update_on_Central_Indiana_Transit_--HEC--June_2009.pdf)*

*Allen county/Ft. Wayne*

*[http://www.planyourcommunity.org/index.php?option=com\\_content&task=view&id=12&Itemid=12](http://www.planyourcommunity.org/index.php?option=com_content&task=view&id=12&Itemid=12)*

*Lafayette supports rail investment*

*[http://www.lafayette.in.gov/egov/docs/1204236542\\_890045.pdf](http://www.lafayette.in.gov/egov/docs/1204236542_890045.pdf)*



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## G.Summary of Application Materials

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

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

<b>Supporting Documents</b> <i>(Documents to be generated and provided by the applicant)</i>	<b>Required for Corridor Programs</b>	<b>Required for Projects [See Note Below]</b>	<b>Reference</b>	<b>Comments</b>
<input checked="" type="checkbox"/> Map of Corridor Service	✓		Corridor Service Overview Question B.2	
<input checked="" type="checkbox"/> Service Development Plan	✓		HSIPR Guidance Section 1.6.2	
<input checked="" type="checkbox"/> “Service” NEPA	✓		HSIPR Guidance Section 1.6.2	
<input checked="" type="checkbox"/> Project Management Plan	✓		HSIPR Guidance Section 4.3.3.2	
<input type="checkbox"/> “Project” NEPA (Required before obligation of funds)		✓	HSIPR Guidance Section 1.6.2	
<input checked="" type="checkbox"/> PE Materials	✓	✓	HSIPR Guidance Section 1.6.2	
<input checked="" type="checkbox"/> Stakeholder Agreements	✓	✓	HSIPR Guidance Section 4.3.3.2	
<input checked="" type="checkbox"/> Financial Plan	✓	✓	HSIPR Guidance Section 4.3.3.2	
<input checked="" type="checkbox"/> Job Creation	✓	✓	HSIPR Guidance Section 1.6.2	
<b>Standard Forms</b> <i>(Can be found on the FRA website and <a href="http://www.forms.gov">www.forms.gov</a>)</i>	<b>Required for Corridor Programs</b>	<b>Required for Projects [See Note Below]</b>	<b>Reference</b>	<b>Comments</b>

<input checked="" type="checkbox"/> SF 424: Application for Federal Assistance	✓		HSIPR Guidance Section 4.3.3.3	Form
<input checked="" type="checkbox"/> SF 424C: Budget Information-Construction	✓		HSIPR Guidance Section 4.3.3.3	Form
<input checked="" type="checkbox"/> SF 424D: Assurances-Construction	✓		HSIPR Guidance Section 4.3.3.3	Form
<input checked="" type="checkbox"/> FRA Assurances Document	✓		HSIPR Guidance Section 4.3.3.3	Form
<p><b>Note: Items checked under “Corridor Programs” are required at the time of submission of this Track 2 Corridor Programs application. Items checked under “Projects” are optional at the time of submission of this Track 2 Corridor Programs application, but required prior to FD/Construction grant award.</b></p>				

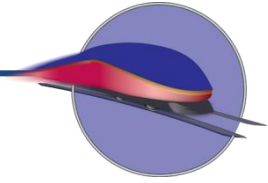
**PRA Public Protection Statement:** Public reporting burden for this information collection is estimated to average 16 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is **2130-0583**.

Corridor Program Name: Netwon, KS to KS/OK State Line Date of Submission: 10/02/09 Version Number: 1

## High-Speed Intercity Passenger Rail (HSIPR) Program

### Track 2–Corridor Programs:

## Application Form



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

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

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

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

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

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

#### Instructions for the Track 2 Application Form:

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

corridor name that forms part of the Corridor Program name; and (3) a project descriptor that will concisely identify the project's focus (e.g., HI-Fast Corridor-Wide River Bridge). For projects previously submitted under another application, please use the **same name** previously used on the project application.

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

Corridor Program Name: Netwon, KS to KS/OK State Line Date of Submission: 10/02/09 Version Number: 1

## A. Point of Contact and Application Information

<b>(1) Application Point of Contact (POC) Name:</b> John W. Maddox, C.P.M.		<b>POC Title:</b> Kansas Department of Transportation, Freight and Rail Unit Program Manager		
<b>Applicant State Agency or Organization Name:</b> Kansas Department of Transportation				
<b>Street Address:</b> Eisenhower State Office Building 700 SW Harrison 2 <sup>nd</sup> Floor Tower	<b>City:</b> Topeka	<b>State:</b> KS	<b>Zip Code:</b> 66603	<b>Telephone Number:</b> 785-296-3328
<b>Email:</b> johnm@ksdot.org		<b>Fax:</b> 786-296-0963		



Corridor Program Name: Netwon, KS to KS/OK State Line Date of Submission: 10/02/09 Version Number: 1

## B. Corridor Program Summary

(1) **Corridor Program Name:** Grade Crossing Improvement Program

(2) **What are the anticipated start and end dates for the Corridor Program?** (mm/yyyy)

**Start Date:** Unknown

**End Date:** Unknown

(3) **Total Cost of the Corridor Program:** (Year of Expenditure (YOE) Dollars\*) \$ 10,000,000

**Of the total cost above,, how much would come from the FRA HSIPR Program:** (YOE Dollars\*\*) \$ 10,000,000

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

**Please indicate the source(s) for matching funds:** NA

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

\*\* This is the amount for which the Applicant is applying.

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

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

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

This project would entail upgrading at-grade crossings on the BNSF Railway tracks between Newton, KS and the Kansas/Oklahoma Border (approximately 4 miles south of Arkansas City, KS) in preparation for the potential northward expansion of the Heartland Flyer service that currently runs between Oklahoma City and Fort Worth. Improvements would include circuitry upgrades to accomoade 79 mph passenger service, signalization as needed, and upgrading crossing surfaces as needed. A Cooridor Program has

not been established. KDOT applied for a Track 3 grant to develop a Service Development Plan for the corridor.

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

- Additional Service Frequencies
- Improved Service Quality
- Improved On-Time performance on Existing Route
- Reroute Existing Service
- Increased Average Speeds/Shorter Trip Times
- New Service on Existing IPR Route
- New Service on New Route
- Other (Please Describe): Grade crossing improvements to accommodate 79 mph rail passenger service

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

Type of Railroad	Railroad Right-of-Way Owner	Route Miles	Track Miles	Status of agreements to implement projects
Class 1 Freight	BNSF Railway	82.66	82.66	Host Railroad Not Yet Consulted
Class 1 Freight				Master Agreement in Place
Class 1 Freight				Master Agreement in Place

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

Type of Service	Name of Operator	Top Speed Within Boundaries	Number of Route Miles	Average Number of Daily	Notes
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		Passenger	Freight	Within Boundaries	One-Way Train Operations within Boundaries <sup>1</sup>	
Freight	BNSF Railway	NA	55 mph	82.66	18	
Freight						
Freight						
<p><b>(8) Rolling Stock Type.</b> Describe the fleet of locomotives, cars, self-powered cars, and/or trainsets that would be intended to provide the service upon completion of the Corridor Program. <i>Please limit response to 2,000 characters.</i></p> <p>Not known at this time</p>						
<p><b>(9) Intercity Passenger Rail Operator.</b> If applicable, provide the status of agreements with partners that will operate the benefiting high-speed rail/intercity passenger rail service(s) (e.g., Amtrak). If more than one operating partner is envisioned, please describe in Section F.</p> <p>Name of Operating Partner: None at this time</p> <p>Status of Agreement: Partner not yet consulted</p>						

<sup>1</sup> One round trip equals two one-way train operations.

