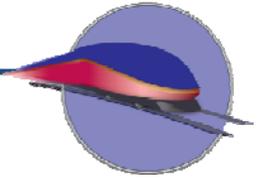


Individual FD/Construction Project Application Form

High-Speed Intercity Passenger Rail (HSIPR) Program



Applicants interested in applying for funding of Final Design (FD)/Construction Projects under the FY10 Individual Project solicitation are required to submit this application form and other required documents as outlined in Section H of this application. List and describe any supporting documentation submitted in Section G. Applicants should reference the FY10 Individual Projects Notice of Funding Availability (NOFA) for more specific information about application requirements. If you have questions about the HSIPR Program or this application, please contact the Federal Railroad Administration (FRA) at HSIPR@dot.gov.

Applicants must use this form by entering the required information in the gray narrative fields, check boxes, or drop-down menus. Submit this completed form, along with any supporting documentation, electronically by uploading them to GrantSolutions.gov by 5:00 p.m. EDT on August 6, 2010.

A. Point of Contact and Applicant Information

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

(1) Name the submitting agency: Michigan Department of Transportation		Provide the submitting agency Authorized Representative name and title: Kirk T. Steudle, Director		
Street Address: 425 West Ottawa Street P.O. Box 30050	City: Lansing	State: MI	Zip Code: 48909	Authorized Representative telephone: 517-373-2114 Authorized Representative email: steudlek@michigan.gov
Provide the submitting agency Point of Contact (POC) name and title (if different from Authorized Representative): Al Johnson		Submitting agency POC telephone: 517-335-2549 Submitting agency POC email: johnsonal@michigan.gov		
(2) List the name(s) of additional state(s) applying (if applicable):				

B. Eligibility Information

Complete the following section to demonstrate satisfaction of applicant eligibility requirements.

(1) Select the appropriate box from the list below to identify applicant type. Applicant type is defined in Section 3.1 of the NOFA.

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

If selecting one of the types below, additional documentation is required. Please select the appropriate box to establish applicant eligibility as described in Section 3.2 of the NOFA and list the supporting document in Section G.2 of this application.

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

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

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

(3) Establish completion of Preliminary Engineering requirements. List the documents that establish completion of Preliminary Engineering for the project covered by this application. See Section 4.2.5 and Appendix 2.3 of the NOFA. If more than five references, please provide the same information in a supporting document and list in Section G.2 of this application. Any supporting documents submitted should be listed in Section G.2 of this application.

Documentation	Date (mm/yyyy)	Describe How Documentation Can Be Verified (choose one)	
		Submitted in GrantSolutions	Web Link (if available)
Aerial Drawings with Track Charts showing improvements	08/2010	<input checked="" type="checkbox"/>	
	mm/yyyy	<input type="checkbox"/>	
	mm/yyyy	<input type="checkbox"/>	
	mm/yyyy	<input type="checkbox"/>	
	mm/yyyy	<input type="checkbox"/>	

(4) Establish completion of NEPA documentation. Indicate the date the document was issued and how the document can be verified by FRA. A NEPA decision document (Record of Decision or Finding of No Significant Impact) is not required for an application but must have been issued by FRA prior to award of a construction grant. Verified documents can be submitted as a supporting document or referenced through a public active URL. Any supporting documents should be listed in Section G.2 of this application. See Section 4.2.5 and Appendix 2.2 of the NOFA.

Documentation	Date (mm/yyyy)	Describe How Documentation Can Be Verified (choose one)	
		Submitted in GrantSolutions	Web Link (if available)
NEPA Documentation			
<input checked="" type="checkbox"/> Categorical Exclusion Documentation (worksheet)	08/2010	<input checked="" type="checkbox"/>	
<input type="checkbox"/> Final Environmental Assessment	mm/yyyy	<input type="checkbox"/>	
<input type="checkbox"/> Final Environmental Impact Statement	mm/yyyy	<input type="checkbox"/>	
Project NEPA Determination			
<input checked="" type="checkbox"/> Categorical Exclusion	08/2010	<input type="checkbox"/>	
<input type="checkbox"/> Finding of No Significant Impact	mm/yyyy	<input type="checkbox"/>	
<input type="checkbox"/> Record of Decision	mm/yyyy	<input type="checkbox"/>	

C. FD/Construction Project Summary

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

(1) Provide a clear, concise, and descriptive project name. Use identifiers such as state abbreviations, major cities, infrastructure, and tasks of the individual project (e.g., “DC-Capital City to Dry Lake Track Improvements”).

MI-CHICAGO HUB-CN ENHANCEMENTS MILWAUKEE JUNCTION TO PONTIAC

(2) Indicate the anticipated funding level for the FD/Construction project below. This information must match the SF-424 forms, and dollar figures must be rounded to the nearest whole dollar. When the non-Federal match percentage is calculated, it must meet or exceed 20 percent of the total project cost.

Federal Funding Request	Non-Federal Match Amount	Total FD/Construction Project Cost	Non-Federal Match Percentage of Total Project Cost
\$ 10,925,858	\$ 2,731,465	\$ 13,657,323	20 %

(3) Indicate the activity(ies) for which you are applying. Check all that apply.

Final Design Construction

(4) Indicate the anticipated duration, in months, for the FD/Construction project (e.g., 36).

Number of Months: 24

(5) List the name of the corridor where the project is located.

Chicago Hub (Chicago-Detroit/Pontiac) High Speed Rail Corridor

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

The project limits begin in Detroit (Wayne County) at Milwaukee Junction (MP 1.16) and continue in a northwesterly direction to the train station (MP 22.40) in the city of Pontiac (Oakland County).

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

Rehabilitate and maintain in a state of good repair (rail, ties, ballast) the CN #2 main to accommodate for train speeds of up to 79 mph. The CN has indicated their plans to single track this portion of their railroad. MDOT seeks to retain the CN #2 main and utilize it for intercity passenger service and limited freight volumes. This will result in immediate reductions in travel time on the CN #2 main due to increased train speeds by eliminating slow orders and reducing freight interference. In addition, this incremental project investment may provide opportunities to increase service frequencies in the future. A single track railroad in this vicinity would be very detrimental to MDOT's intercity passenger and any future commuter trains. Construction, service, operation and maintenance agreements between CN/Amtrak/MDOT) will be negotiated as part of the final design process.

(8) Indicate the source, amount, and percentage of non-Federal matching funds for the FD/Construction project. The sum of the figures below should equal the amount provided in Section C.2. Click on the prepopulated fields to select the appropriate responses from the lists provided in type of source, status of funding, and type of funds. Dollar figures must be rounded to the nearest whole dollar. Identify supporting documentation that will allow FRA to verify the funding source and list it in Section G.2 of this application.

Non-Federal Funding Sources	New or Existing Source?	Status of Funding ¹	Type of Funds	Dollar Amount	% of Total Project Cost	Describe Any Supporting Documentation to Help FRA Verify Funding Source
State of Michigan	New	Committed	Cash	\$ 2,731,465	20 %	See Attached Financial Plan
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
	New	Committed	Cash	\$	%	
Sum of Non-Federal Funding Sources				\$ 2,731,465.00	20 %	N/A

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

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

¹ 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., statutory authority) to be used to fund the proposed project without any additional action. These capital funds have been formally programmed in the State Rail Plan and/or any related local, regional, or state capital investment program or appropriation guidance. Examples include dedicated or approved tax revenues, state capital grants that have been approved by all required legislative bodies, cash reserves that have been dedicated to the proposed project, and additional debt capacity that requires no further approvals and has been dedicated by the sponsoring agency to the proposed project.

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

Planned: This category is for funds that are identified and have a reasonable chance of being committed, but are neither committed nor budgeted (e.g., proposed sources that require a scheduled referendum, requests for state/local capital grants, and proposed debt financing that has not yet been adopted in the agency's capital investment program).



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

- | | |
|--|--|
| <input type="checkbox"/> Final Design activities are complete. | <input type="checkbox"/> Construction activities are complete. |
| <input type="checkbox"/> Final Design activities are in progress. | <input type="checkbox"/> Construction activities are in progress. |
| <input checked="" type="checkbox"/> No Final Design activities are in progress or completed. | <input checked="" type="checkbox"/> No Construction activities are in progress or completed. |

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

Activity	Description	Completed? (If yes, check box)	Start Date (mm/yyyy)	Actual or Anticipated Completion Date (mm/yyyy)
Preliminary Engineering	Enhancements are described and improvements shown on both aerial maps and track charts.	<input checked="" type="checkbox"/>	08/2010	mm/yyyy
Identification of work by CN	Detailed plan of work required and agreed upon.	<input type="checkbox"/>	mm/yyyy	12/2012
Construction Agreement	Detailed plan of work.	<input type="checkbox"/>	mm/yyyy	12/2012
Maintenance Agreement	Detailed plan of responsibility	<input type="checkbox"/>	mm/yyyy	12/2012
Operation Agreement	Detailed plans for track usage	<input type="checkbox"/>	mm/yyyy	12/2012
Review and sign-off of Final design	Project ready details	<input type="checkbox"/>	mm/yyyy	12/2012
		<input type="checkbox"/>	mm/yyyy	mm/yyyy
		<input type="checkbox"/>	mm/yyyy	mm/yyyy
		<input type="checkbox"/>	mm/yyyy	mm/yyyy
		<input type="checkbox"/>	mm/yyyy	mm/yyyy

D. Project Success Factors Overview

Answer the following questions about the individual project that is the subject of this FD/Construction application.

(1) Indicate the expected service outcomes of the FD/Construction project. Check all that apply.

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

Briefly clarify your response(s) if needed:

The removal of this track would have a negative effect on all inter-city passenger trains, by leaving passenger and freight movements susceptible to delays on the single track with no and would adversely affect any future increases in service (inter-city or commuter). This would also effect current and future station operations in this corridor segment.

(2) Quantify the applicable service outcomes of the FD/Construction project. Provide the current conditions and anticipated service outcomes. Future state information is necessary only for relevant service benefits.

	Frequencies ²	Scheduled Trip Time (in minutes)	Average Speed (mph)	Top Speed (mph)	Reliability – Provide Either On-Time Performance Percentage or Delay Minutes
Current	6	334	55	70	N/A
Future	6	334	55	79	-4

(3) Select and describe the operational independence of the FD/Construction project.³

- This project is operationally independent. This project is not operationally independent.

Briefly clarify your response:

CANADIAN NATIONAL SEGMENT
MILWAUKEE JUNCTION - TO - PONTIAC STATION
DELAY ANALYSIS & IMPROVEMENTS

Amtrak reported that their trains averaged 7.1 minutes of delay in the time period from July 1, 2009 – June 30, 2010.

72.2% of their delays were attributed to the following five categories;

Routing	17.3%
Communications & signals	14.6%
Slow Orders (Perm & Temp.)	15.5%
Freight train interference	11.8%
Held	13.0%

As part of the rehabilitation of the CN segment, there is funding included for track infrastructure improvements, including rail, ties, ballast, regulating, etc, to retain the main track in a state of good repair with a 79 mph maximum train speed.

Upon the completion of the track rehab work, it is assumed that the routing, slow orders (temporary), freight train interference and the held delays will be eliminated. This assumption is based on the fact that the track condition will be restored and that Amtrak will be the

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

³ A project is considered to have operational independence if, upon being implemented, it will provide tangible and measurable benefits, even if no additional investments in the same service are made.

primary user of this track. The flexibility gained for the freight and passenger movements should enhance operations for Amtrak through this segment, and possibly reduce the communication and signal issues/delays.

Therefore, it is assumed that of the 7.1 minutes in average delays, the aforementioned improvements will reduce the average delay by a minimum of 4 (4.03) minutes. It is further expected that these improvements will also have an effect on the remaining 42.4% of the delay time as the on-time performance percentages increase due to the integration of passenger and freight movements and the implementation of the track improvements. Further time savings are expected from the increase in passenger train speeds to 79 mph when such increases are implemented.

(4) Provide Right-of-Way ownership information in the FD/Construction project area. Where railroads currently share ownership, identify the primary owner. If Amtrak is the Type of Railroad, the Right-of-Way Owner field does not need to be completed. Click on the prepopulated fields to select the appropriate response from the lists of railroad types and status of agreements. If more than five owners please provide the same information in a separate supporting document, and list it in Section G.2 of this application.

Type of Railroad	Right-of-Way Owner	Route-Miles	Track-Miles	Status of Agreements to Implement
Class 1 Freight	CN	22	22	Master Agreement in Place
Amtrak				Master Agreement in Place
Amtrak				Master Agreement in Place
Amtrak				Master Agreement in Place
Amtrak				Master Agreement in Place

(5) Name the Intercity Passenger Rail Operator and provide the status of agreement. If applicable, provide the status of the agreement with the partner that will operate the planned passenger rail service (e.g., Amtrak). Click on the prepopulated field to select the appropriate response from the status of agreement list.

Name of Rail Service Operator	Status of Agreement
Amtrak	No operating partner involved

(6) Identify the types of services affected by the FD/Construction project and provide information about the existing rail services within the project boundaries (e.g., freight, commuter, and intercity passenger). Click on the prepopulated fields to select the appropriate response from the list of types of service.

Type of Service	Name of Operator	Top Existing Speeds Within Project Boundaries		Number of Route-Miles Within Project Boundaries	Average Number of Daily One-Way Train Operations ⁴ Within Project Boundaries	Notes
		Passenger	Freight			
Freight	CN	0	55	22	5-7	As provided by CN on 7/29/10
Intercity Pa	Amtrak	79	0	22	6	Per Amtrak Schedule
Freight						
Freight						
Freight						
Freight						

(7) Estimate the share of benefits that will be realized by nonintercity passenger rail services (e.g., commuter, freight) and select the approximate cost share to be paid by the beneficiary.⁵ Click on the prepopulated fields to select the appropriate response from the lists of type of beneficiary, anticipated share of benefits, and approximate cost share. If more than five types of nonintercity passenger rail are beneficiaries, please provide additional information in a separate supporting document, and list it in Section G.2 of this application.

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

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

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



E. Additional Response to Evaluation Criteria

Provide a separate response to each of the following categories of potential benefits to identify the ways in which the proposed FD/Construction project will achieve these benefits.

(1a) Transportation Benefits

Describe the ways in which the proposed FD/Construction project will address the potential of successfully executing these transportation benefits in a cost-effective manner:

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

Supporting the Development of High-Speed:

Retaining this section of mainline track is critical to the improvement, maintenance and future of the intercity passenger service in the state of Michigan. Should the No. 2 Main be abandoned or removed it would seriously increase the congestion that MDOT's projects are proposing to reduce or eliminate. Any improvements in on-time performance and/or reductions in travel times will be null and likely increased if this track is not retained. A single track railroad is open to delays when an incident occurs on the single track with no way of detouring other trains or equipment.

Generating Improvements:

The intercity improvements proposed by MDOT are predicated on creating a "passenger friendly" route for intercity trains utilizing this track by improving the fluidity and providing options for passenger and freight operations on this main. The retention of this Main #2, will allow for less conflict in dispatching both modes and will improve on-time performance for passenger trains and ease of freight movements.

Generating Cross-Modal Benefits:

The continuation of the use of this track and relieving congestion will improve on-time performance for Amtrak, which should in turn, attract increased ridership, which will have an end result of reducing passenger train costs, train congestion and reduce highway and air travel snags by reducing the number of vehicles on nearby highway systems and less need to rely on air travel. The success of reliable train travel can have the broad effect of eliminating the need to widen roads or expand airline facilities. Having a good competitive environment for travel dollars is a money saving and win-win situation for all modes of travel.

Creating an integrated high-speed and intercity network:

MDOT plans to retain this mainline as a valuable asset, making it an integral part of their rail transportation system. This segment will be included in all future plans to bring high-speed service into Michigan. This track will need to be equipped with a positive train control system (PTC) and made interoperable with whatever PTC system is chosen by Amtrak/CN. The installation of PTC by 2015 will increase the reliability and capacity, as well as, significantly improve the safety of the employees, passengers and the communities in which the trains travel. Since 1995, MDOT has participated with eight other Midwest states (Indiana, Illinois, Iowa, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin) and Amtrak on the Midwest Regional Rail Initiative (MWRRI) to develop an enhanced passenger rail system in the Midwest. This work has led to a comprehensive Service Development Plan which provides a long term vision for increased speeds and service frequencies on the Chicago-Detroit/Pontiac High Speed Rail Corridor. In addition, Michigan will lead a multi state effort (Indiana, Illinois and Michigan) to complete a Corridor Investment Plan which will include updating the existing MWRRI Service Development Plan for the Chicago-Detroit/Pontiac Corridor and completing a corridor wide environmental document. All of the work proposed in this Project is consistent with the development of the MWRRS. Also, all of the improvements proposed in this SDP are consistent with MDOT's Commission Policy under Resolution 2004-1 adopted February 26, 2004. This Resolution 2004-1 and MWRRI Service Development Plan has been uploaded as supporting documentation.

Encouragement of intermodal connectivity:

This issue is clearly evident on this line, where two of the existing three stations are undertaking new projects. The temporary station at Pontiac will be replaced with a modern structure, scheduled to open in the summer of 2011. This station will also house operations for intercity bus and taxi service. In 2012, the cities of Birmingham and Troy will open a new multi-modal facility that will serve both cities and be served by their local transit systems. Both stations will have many passenger amenities and be fully ADA compliant. These projects show the commitment of the communities along this line, with MDOT, CN, and Amtrak, providing and promoting intercity passenger rail service.

Enhance intercity travel options:

All the aforementioned projects show the backing of multiple parties and interests in providing their citizens and would be travelers with access to all kinds of public transit.

Ensuring a state of good repair of key intercity assets:

Exactly the purpose of this application. To maintain current transit service levels and improve all rail and transit options for the public. The rail rehab portion of the contract will ensure reliable rail service and the station work creates a safe, secure, and friendly place for all patrons.

Standardized rolling stock:

Amtrak currently adapts their rolling stock to existing conditions and passenger needs. While this item is not an issue, the state of good repair, interoperability, and a reliable service will be key assets if a new electrified system or an upgrade in equipment is provided.

Improved freight or commuter rail operation:

The added flexibility for moving freight and passenger traffic will benefit freight operations by maintaining a reliable on-time service with minimal passenger train interference. When track repair or an unforeseen incident occurs, it will be much easier to work through the situation when Amtrak trains are running on scheduled times. This project will allow the dispatcher to set up "windows" for repairs or run trains around other trains, while also reducing slow orders due to track conditions. When commuter rail service is initiated, the infrastructure, trackage, and routes will make it easy to accommodate additional traffic. MDOT will then be in position to balance the financial responsibilities of all

services involved.

Equitable financial participation:

In the initial stages of this proposal/application, the financial participation will be limited to MDOT's 20% of matching funds and MDOT's reimbursement for the incremental maintenance costs subject to construction, operating/service outcomes, and maintenance agreements. Although not financial, the CN's agreement to not abandon this line should be considered as a "partnership" contribution, as they have no obligation to retain it. When Amtrak requests an increase in trains or when commuter rail service is introduced, a financial agreement will be necessary to apportion participation.

Encouragement of implementation of PTC:

All rail users on this line will fully comply with the PTC, FRA rules of 49 USC 20147.

Incorporating private investment: MDOT is confident that with the success of intercity passenger rail, that economic growth will flourish along this section of the corridor, which in turn will bring investments by outside sources to partner with intercity and/or commuter rail, promote rail travel and create destination sites.

(1b) Other Public Benefits

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

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

The current service promotes energy efficiency and reduces the dependence on foreign oil, by the fact that Amtrak operates diesel locomotives rather than gasoline automobile engines or aviation fuels. In fact, locomotive energy efficiency has improved since 1990, according to the July 2010 issue of "The Economist" magazine, ton-miles per gallon (American) have increased from 332, to 457, a gain of 38%. Beyond freight movement and passenger mobility, intercity rail service provides important environmental benefits to the citizens of Michigan. Freight rail is three times more fuel efficient than the truck mode on a per ton-mile basis. The U. S. Environmental Protection Agency (EPA) estimates that a typical freight train emits three times less pollution than a truck per ton-mile. Transportation by rail saves approximately \$266 million annually in pavement damage to Michigan roadways (Michigan Railroads Association, presentation by Bob Chaprnka, August 11, 2008).

The users of intercity passenger rail represent a significant number of vehicles not using gas for transit, further reducing wear and tear on our highways, and easing congestion in all other transportation modes. However, regarding transportation in the future, the potential is immense for creating a more earth friendly transit system. This can be measured in the short term by offering more frequencies and a reliable commuter system that will further reduce gas consumption and highway congestion by taking people off the road and on to the rails for their short, everyday trips to work, etc. Many people traveling in a single unit (train consist) produce much less harmful emissions than having each person operate a single vehicle to reach their destinations. The environmental benefits of passenger rail have been studied and documented. Intercity passenger rail consumes 17% less energy per passenger mile than airlines and 21% less energy per passenger mile than automobiles (Oak Ridge National Laboratory, Transportation Energy Data

Book, Edition 26, 2007). Intercity passenger rail produces 60% fewer CO2 greenhouse gas emissions per passenger mile than the average auto and about 50% the greenhouse gas emissions per passenger mile than airplanes. Intercity passenger rail also generates fewer emissions per passenger mile of other pollutants such as nitrous oxide (NOX), volatile organic compounds (VOC's) and carbon monoxide (CO) ("Vision for the Future - U.S. Intercity Passenger Rail Network Through 2050", prepared for the National Surface Transportation Policy and Revenue Study Commission, December 2007).

The future of intercity passenger rail is wide open, and certainly capable of attaining the same level of fuel efficiency and on-time rail travel as European countries, by converting to electric energy sources and modern, sleek equipment with all the technically advanced amenities.

The future can be as bright as government policy decides to provide funding and regulation. What intercity passenger rail does already possess is the right of way in which to establish/install whatever system the future brings.

Livable/walkable communities will spring up, based around transit system facilities, where people can walk to the stations and then travel to work, shopping, dining, sporting events and the arts. Economic impact analysis prepared for the Midwest Regional Rail Initiative (MWRRI) Plan, recommends 110 mph high speed rail service in the Chicago - Detroit/Pontiac corridor and enhanced service in other Michigan corridors. This analysis estimates that improved passenger rail service in Michigan will result in 6,970 new permanent jobs, \$680 million in increased property values around Michigan stations and a \$138 million increase in annual household income statewide (Economic Impacts of the Midwest Regional Rail System, Transportation Economics and Management Systems, Inc. and HNTB, November 2006). This application/proposal is key to retaining the tracks to develop these communities, high speed rail lines, and transit networks.

This proposal will stimulate the local economy and such rail projects could spur almost limitless growth in job creation. According to the U.S. DOT, \$92,000 in direct government spending creates one job/year. This project would result in 119 jobs/years, not including additional positions that may result in local businesses. This project will also stimulate the local economies with the purchase of materials and equipment. The work also results in purchases of fuel, food, clothing, living accommodations, tax on purchases, and the chance that persons associated with the project will return again to visit, shop, or seek permanent residency. Beginning with the first ballast laid or the first pot of molten steel used in fabricating building materials to the finish of the system that includes operations, security, finance, training, administration and literally thousands of steady careers related to transit result. Creating a world class transit system can not only spur the economy, but also assist in sustaining it for the foreseeable future. But, the future has to begin with projects that retain and improve what currently exists.

(2) Project Delivery Approach

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

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

This application, due to its purpose, shall require a bare minimum of engineering work and should not have any construction risks at all. Being that this is a rehabilitation project on an existing railroad track, all the engineering work was done during the original installation. The only constructability risk possible would be a condition found during the rehab (drainage, tie rot, etc.). There are no slow orders or speed restrictions in place that would give any evidence of a pre-existing problem. This project does have the possibility of operating at maximum speeds (up to 79 mph) for longer distances following the replacement of ties, ballast and welded rail versus the existing jointed rail within the project limits. This project will be done under a force account contract after the quantities and quality of materials, cost of labor and benefits, schedule, and estimates have been reviewed and approved by MDOT and CN staff.

This rehab project contains no issues with system safety or security planning. All the work will be completed under

FRA and CN guidelines.

Refer to the attached categorical exclusion for all NEPA clearance issues.

(3) Sustainability of Benefits

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

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

Due to the importance of this project to maintain and improve the current service, MDOT has committed to a 20% match for this application. MDOT is confident in the railroad's ability to produce accurate estimates, quality materials and Class I workmanship to meet the budget and schedules predetermined through an agreement between MDOT and the CN. MDOT realizes the criticality of this trackage to current and future levels of service and does not want to jeopardize the availability of this route for intercity passenger trains. While CN plans to rationalize their trackage between Milwaukee Junction and Pontiac and operate a single main track railroad, MDOT has CN's agreement (Letter of Support attached) to retain this track for intercity passenger service in advance of the track rehabilitation and maintenance and operations agreements.

F. Statement of Work

Provide a detailed response for how the FD/Construction project will be carried out in the text fields and tables provided. The tables in this section are unlocked; applicants can add rows, as necessary, for additional tasks. If you reference a supporting document, it must be listed in Section G.2.

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

The CN owned portion of the corridor has always been an important link in the overall corridor plan and the CN's partnership is considered vital to any and all developments. While MDOT realizes that the CN's plan to rationalize trackage is a pure business decision on their part, MDOT also knows the serious impacts the loss of this track would cause to the corridors future. The CN ownership is the area where the most freight and passenger train interface occurs, and any loss of capacity would diminish the projects current operations and hinder additional train movements. The CN's plan to abandon this mainline track is the event and the foundation of this application's purpose.

Other projects proposed on the corridor may seek to save or reduce travel time by easing congestion, this projects basically focuses on seperating freight and passenger trains. While this project may not appear to improve travel times in this phase, what it will do, is avoid creating delays that will occur when the current number of freight trains and Amtrak trains are forced to share a single main line track for a twenty-two (22) mile stretch without sidings for passing or setting out rail equipment. The removal of this second main track leaves both railroads suceptible to having a minor derailment or an equipment failure snarling train movements for hours due to not having a second main or other tracks to access for routine train travel or to get repair equipment into place. MDOT's desire is to retain this second main and the advantages that a double main allows. We do not want to see this track pulled up and at sometime in the future when a second main is demanded by additional frequencies, face the prospect of rebuilding a second track from the ground up. Clearly, the pertenent objective is to retain, maintain this track in a state of good repair, and utilize this track to improve intercity passenger services.

The rational of this project, regarding the full corridor, is to retain this valuable stretch of the corridor so other improvements to the corridor are not negated by creating a bottleneck for intercity trains trying to reach their final destination at Pontiac.

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

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

The project in general is to retain and maintain the trackage from MP 1.16 to MP 22.40 in a state of good repair for use by Amtrak intercity passenger trains, with cooperation of the CN, Amtrak and MDOT. The end result will be the opportunity to utilize this second main and maximize operations for freight and passenger traffic versus the abandonment and removal of the trackage under CN's plan to rationalize this to a single track (mainline) railroad. The desired outcome is to retain this trackage and have a MDOT/CN/Amtrak agreement in place for operation, dispatching and maintenance.

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

1. Replace 1/3 of the existing ties, or the number required to achieve 79 mph speeds. 2. Replace ballast where needed to achieve 79 mph speeds. 3. Replace worn or defective rail where needed to achieve 79 mph speeds. 4. Install continuous welded rail to any section that is required to achieve 79 mph speeds. 5. Regulate and gauge as needed. All the work will be subject to review by the CN and MDOT staff.

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

	Deliverable	Task
1	Ties, rail, ballast, spikes, tie plates,	Install within 24 months.
2		
3		
4		

(3) Project Schedule. In the table below, estimate the approximate duration for completing each task in months (e.g., 36). For total project duration, reference Section C.4.

	Task	Task Duration
1	Complete maintenance agreement, final design, construction	24
2	Bring track to state of good repair (will be done simultaneously)	0
	Total project duration	24

(4) Project Cost Estimate/Budget. Provide a high-level cost summary of FD/Construction work in this section, using Appendix 3 of the NOFA and the HSIPR Individual Project Budget and Schedule form as references. The figures in this section of the Statement of Work should match exactly with the funding amounts requested in the SF-424 form, the HSIPR Individual Project Budget and Schedule form, and in Section C of this application. If there is any discrepancy between the Federal funding amounts requested in this section, the SF-424 form, the HSIPR Individual Project Budget and Schedule form, or Section C of this application, the lesser amount will be considered as the Federal funding request. Round to the nearest whole dollar when estimating costs.

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

FD/Construction Project Overall Cost Summary			
#	Task	Cost in FY11 Dollars	
1	Track rehab (rail, ballast, ties, etc.)	\$ 10,078,380	
2	Professional services	\$ 2,116,460	
3	Contingency	\$ 1,219,484	
	Total FD/Construction project cost	\$13,414,324	
Federal/Non-Federal Funding			
		Cost in FY11 Dollars	Percentage of Total Activities Cost
	Federal funding request	\$ 10,731,460	80 %
	Non-Federal match amount	\$ 2,682,864	20 %
	Total FD/Construction project cost	\$ 13,414,324	100 %

G. Optional Supporting Information

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

- (1) Please provide any additional information, comments, or clarifications, and indicate the section and question number that you are addressing (e.g., Section E, Question 3).** Completing this question is optional.

Section F (2b) State of good repair is meant to elevate the condition of the track (Main #2) to its maximum speed and optimum level of service that is agreed upon by the CN, MDOT and Amtrak. As part of the project, changes in track elevation, grades, rail pounds, curves, or characteristics that are not currently present, may come under review and/or be altered or improved.

- (2) Please provide a document title, filename, and description for all optional supporting documents.** Ensure that these documents are uploaded to GrantSolutions.gov using a logical naming convention or that an active link is provided with your application.

Document Title	Filename	Description and Purpose
Financial Plan	FP Milwaukee Junction.pdf	MDOT's financial commitment information
Amtrak AIP	AMTRAK1.doc	.pdfAmtrak commitment to utilize the retained #2 main and cooperate with MDOT and CN
Milwaukee Junction to Pontiac Project Management Plan	MLKPONT210PMP.pdf	Referenced support document
System Safety Program Standard	SSPS.pdf	Referenced support document
MWRRS Service Development Plan	MWRRS_Service_Development_Plan.pdf	Referenced support document
Project Aerial Maps	CN_Aerial_Map.pdf	Details location of project
Commission Policy	Commission Policy Resolution 2004-11.pdf	Referenced support document
Support Letters	CN_Support_Letters.pdf	Referenced support documents
Request For Categorical Exclusion	Final 08_05_10 CN Categorical Exclusion.pdf	Request For Categorical Exclusion
Risk Management Plan	CN_Enhancements_RMP.pdf	Risk Management Plan
Amtrak Agreement in Principle	Amtrak_AIP.pdf	Amtrak Agreement in Principle
Draft Service Outcome Agreement	Draft_Service_Agreement.pdf	Draft Service Outcome Agreement between MDOT, Host RR and Amtrak



H. Checklist of Application Materials

Use this section to determine the thoroughness of your FD/Construction application prior to submission.

Documents	Format
1. Application Form	
<input checked="" type="checkbox"/> HSIPR Individual Project Application Form – FD/Construction	Form
2. Budget and Schedule Form	
<input checked="" type="checkbox"/> HSIPR Individual Project Budget and Schedule Form	Form
3. OMB Standard Forms	
<input checked="" type="checkbox"/> SF 424: Application for Federal Assistance	Form
<input type="checkbox"/> SF 424A: Budget Information-Non Construction	Form *
<input type="checkbox"/> SF 424B: Assurances-Non Construction	Form *
<input checked="" type="checkbox"/> SF 424C: Budget Information-Construction	Form **
<input checked="" type="checkbox"/> SF 424D: Assurances-Construction	Form **
4. FRA Assurances Document	
<input checked="" type="checkbox"/> FRA Assurances Document (See Section 4.2.4 of the NOFA)	Form
5. Project Development Supporting Documentation	
<input checked="" type="checkbox"/> Project Planning Documentation (See Section 4.2.5 of the NOFA)	No Specified Format
<input checked="" type="checkbox"/> Preliminary Engineering (PE) Documentation (See Section 4.2.5 of the NOFA)	No Specified Format
<input checked="" type="checkbox"/> NEPA Documentation (See Section 4.2.5 of the NOFA)	No Specified Format
6. Project Delivery Supporting Documentation	
<input checked="" type="checkbox"/> Project Management Documentation (See Section 4.2.6 of the NOFA)	No Specified Format
<input checked="" type="checkbox"/> Financial Planning Documentation (See Section 4.2.6 of the NOFA)	No Specified Format
<input checked="" type="checkbox"/> System Safety Plan (See Section 4.2.6 of the NOFA)	No Specified Format
<input checked="" type="checkbox"/> Railroad and Project Sponsor Agreements (See Section 4.2.6 of the NOFA)	No Specified Format
7. Optional Supporting Documentation	
<input checked="" type="checkbox"/> Other Relevant and Available Documentation (See Section 4.2.7 of the NOFA)	n/a

* These documents are required for FD/Construction projects that include investments that are not construction activities.

** These documents are not required for FD/Construction applications that only include investments that are not construction activities.

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