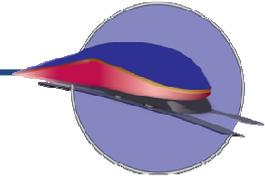


Corridor Program Name: MI-CHI HUB-CHI-DET/PNT Date of Submission: 10/2/09 Version Number: 1

## 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: MI-CHI HUB-CHI-DET/PNT Date of Submission: 10/2/09 Version Number: 1

## A. Point of Contact and Application Information

<b>(1) Application Point of Contact (POC) Name:</b> Al Johnson		<b>POC Title:</b> Supervisor, Office of High Speed Rail & Innovative Project Advancement		
<b>Applicant State Agency or Organization Name:</b> Michigan Department of Transportation				
<b>Street Address:</b> 425 West Ottawa Street P.O. Box 30050	<b>City:</b> Lansing	<b>State:</b> MI	<b>Zip Code:</b> 48909	<b>Telephone Number:</b> 517-335-2549
<b>Email:</b> johnsonal@michigan.gov		<b>Fax:</b> 517-373-7997		

Corridor Program Name: MI-CHI HUB-CHI-DET/PNT Date of Submission: 10/2/09 Version Number: 1

## B. Corridor Program Summary

(1) **Corridor Program Name:** MI-CHI HUB-CHI-DET/PNT

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

**Start Date:** 07/2010

**End Date:** 09/2016

(3) **Total Cost of the Corridor Program:** (Year of Expenditure (YOE) Dollars\*) \$ 993,550,098

**Of the total cost above,, how much would come from the FRA HSIPR Program:** (YOE Dollars\*\*) \$ 986,566,527

**Indicate percentage of total cost to be covered by matching funds:** 0.7 %

**Please indicate the source(s) for matching funds:** State of Illinois and Illinois railroad

\* 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 Chicago Hub (Chicago-Detroit/Pontiac) High Speed Rail Corridor Service Development Plan (CSDP) is part of Midwest Regional Rail Initiative (MWRRI) Phase I Implementation. To date, various financial and development issues have resulted in modifications to the CSDP. Due to environmental impacts between Chicago Union Station and Buffington Harbor, frequencies on this route can not be increased. Therefore, Michigan will be the lead state for the CSDP, which

consists of a comprehensive grouping of projects that will result in significant improvements to existing services. It is anticipated that the MWRRI Chicago Terminal Limits PE/NEPA project (Track 1 application) will identify and provide solutions for the complex issues in the Chicago to Buffington Harbor segment, thus allowing future corridor improvements needed for increased frequency of service.

Significant improvements to the Chicago-Detroit/Pontiac corridor will improve roadway congestion, increase reliability and reduce travel times. These improvements will offer another mode option with comparable total travel times and user costs. The infrastructure improvements will also benefit rail freight carriers and users, since freight trains will also be able to operate at higher speeds and will experience less delay on heavily used segments. Grade crossing improvements and full implementation of positive train control systems are designed to support increased train speeds by safeguarding joint use by passenger and freight trains, enhancing safety at grade crossings, and managing train traffic more effectively. While the train frequency is not increased, these improvements will result in the scheduled running time being almost as fast as that envisioned by the original MWRRS Phase I implementation.

The Chicago-Detroit/Pontiac corridor carries the Amtrak Wolverine service. This corridor traverses Oakland, Wayne, Washtenaw, Jackson, Calhoun, Kalamazoo, Van Buren, Cass, and Berrien Counties. It serves the Michigan cities of Pontiac, Birmingham, Royal Oak, Detroit, Dearborn, Ann Arbor, Jackson, Albion, Battle Creek, Kalamazoo, Dowagiac, Niles and New Buffalo, connecting these cities to the Chicago hub. The freight railroads involved in this route are Canadian National (CN), Conrail Shared Assets Operation (CSAO), Norfolk Southern (NS) and Amtrak. The aerial track chart maps attached as preliminary engineering materials illustrate the corridor.

The Michigan Department of Transportation (MDOT) intends to improve the CN portion of this corridor by providing new welded rail along with ballast and new ties for most of the line from Pontiac to West Detroit Junction. The installation of Centralized Traffic Control (CTC), along with CTC controlled crossovers, connecting the CN's two main tracks, will be completed on this portion of the corridor.

Improving the rail and signalization from Pontiac-Royal Oak and Troy-Birmingham into Detroit will greatly benefit this corridor. The cities of Troy and Birmingham plan to construct a new Amtrak station on the CN where the rails separate the two communities. This will upgrade services, connectivity and safety. The facility will serve both communities through the use of a tunnel and replace the current bus shelter at trackside.

Planned improvements on the CN portion of the corridor (Pontiac to Milwaukee Junction) include rehabilitation and replacement of rail, replenishing track ballast, replacement of rail ties, upgrades to signalization, grade crossing improvements.

West Detroit Connection Track Project (Milwaukee Junction through West Detroit including Delray and CP Yd) involves replacing a bridge over Junction Ave. and connecting Conrail Shared Assets Operations and CN railroads at West Detroit Junction and constructing one mile of new track eastward to the Vinewood Interlocking. Property acquisition, several crossovers, Beaubien Interlocking, Milwaukee Junction, Delray, and CP Yd will also be constructed as part of this project. In addition, the current Automatic Block System (ABS) will be converted to Centralized Traffic Control (CTC) signaling between Milwaukee Junction and West Detroit Junction. This new connection will provide a direct connection to Detroit Station and separate Amtrak from freight movements, eliminate the re-aligning of hand-thrown switches; increase track speeds from 15 mph, to 40 mph, and will reduce travel time a minimum of 15 minutes per train move.

Along the CSAO mainline between West Detroit and Townline, the corridor improvements will include new ties, rail and ballast for most of the line plus universal crossovers which connect both CSAO mains and provide access to the new connecting track to the Detroit Station. The West Detroit and CSAO portion of the corridor project create "independent" access for Amtrak passenger trains to the station.

The City of Dearborn has plans for a new station on the Norfolk Southern Railway Corporation (NS) mainline. The project is ready to go, and will occupy six acres of property with a 23,000 SF facility that will be a consolidation of two existing rail stops. The new station will be adjacent to the Henry Ford Museum which entertains 1.7 million visitors annually, be within walking distance of Dearborn's West Downtown District, and is in close proximity to the University of Michigan – Dearborn and Henry Ford Community College (serving 23,000 combined students). The station will provide intermodal transportation opportunities, as bus and taxis will also use the station.

As corridor train movements continue to the west, trains operate on the NS until they reach Kalamazoo, with the exception of a short piece of CN ownership through the City of Battle Creek. Along the NS ownership, improvements will include the installation of new rail, ties, and ballast; bridge improvements; and equipping all public grade crossings with 4-quadrant gates and related vehicle detection circuitry. MDOT is currently negotiating with NS for the acquisition of this portion of track. If MDOT acquires this portion of the line, it would extend the positive train control system from Kalamazoo to Ann Arbor, allowing for the current FRA approved track speed of 95 mph, and the assumed increase to 110 mph in late 2009, or early 2010. This would give the corridor 186 miles of speeds up to 110 mph.

The Battle Creek Station, located on CN portion of the corridor, is scheduled for interior and exterior renovations to modernize and create a more user friendly facility for the rail, bus and taxi services operating at the station.

On the Amtrak ownership of the corridor, rails will be replaced in areas where the heat treated rail needs to be brought up to specifications with the adjoining rails. The Amtrak ownership will also be enhanced by the installation of four-quadrant gates at each public grade crossing and flashers with half-roadway gates at all private crossings. This grade crossing modernization is in anticipation of FRA's approval for 110 mph train speeds, which requires that all at-grade crossings must be closed or equipped with automatic warning devices.

In Indiana, the Gateway Project will address the single most delay-prone corridor in the country; fourteen Amtrak trains traverse this corridor daily. The Gateway project was submitted as a Track 1 application; if funded, MDOT will coordinate with Indiana

In the Illinois, the Englewood flyover project will significantly improve operations "South-of-the-Lake" (Lake Michigan), reduce train congestion and enhance train reliability. This project will relieve a major chokepoint between Chicago Union Station and points east and south. The project scope includes construction of the flyover and approach bridges, embankment, retaining walls, relocated main tracks and other track projects as well as associated infrastructure improvements to support grade separated tracks. Signal improvements (interlocking) benefiting Amtrak, NS and Metra are also included. The Englewood flyover project was also submitted as a Track 1 application.

Each project outlined in this corridor program has independent utility. Every project contributes significantly to improving passenger rail operations along this corridor and is not dependent on another project for realization of this benefit.

A significant asset on this corridor program is the innovative Incremental Train Control System (ITCS) positive train control project. This project has been in ten years of engineering, testing and construction, and has been a cooperative effort by FRA, MDOT, Amtrak and General Electric. The project runs along the Amtrak ownership and has had an investment of nearly \$40 million. This project has gained FRA approval to operate a positive train control system at 95 mph. in revenue passenger service. Currently, FRA approval is limited to a 55 mile test area, but this technology will expand from Ann Arbor, Michigan to Porter, Indiana under this application. As a result, FRA approval is expected for additional speed increases to 110 mph in 2009.

Both the consolidation of the Dearborn stations into one and the addition of the Troy/Birmingham station are examples of cost effectiveness and the use of private properties to enhance the attractiveness of the corridor services and provide customer and community convenience. The Dearborn facility will be constructed on property of the Ford Motor Company, and the Troy/Birmingham station will be constructed on city owned property on either side of the tracks. In Battle Creek, the station is city owned and maintained and the planned renovations are evidence of the city's commitment to passenger rail. Also on the corridor, in Ann Arbor, a new station is planned near the University of Michigan Hospital, that will relocate, expand station and parking, and offer other amenities to create a "community stop" rather than just a station. In New Buffalo, a new station on the corridor that was built on private property and totally funded by a local developer will give the city more additional daily train service than was scheduled on the Amtrak Pere Marquette route.

Two proposed commuter services in Michigan will take advantage of these corridor improvements. The proposed Ann Arbor to Detroit commuter service is projected to have four roundtrips between Ann Arbor and Detroit and improvements such as signaling, new switches, and the new bridge at West Detroit, will allow the commuter trains to travel at higher speeds, have tighter schedules, and to perform at a higher level of on-time performance. The corridor wide improvements will lay the groundwork for the commuter trains to extend further west and provide other communities with transportation alternatives. The other proposed commuter train will operate north of the corridor between Howell and Ann Arbor. And operate two trains a day. This service will have connections to Ann Arbor and allow the commuter trains access to a

maintenance and repair facilities.

In Illinois, commuter rail services will be improved because completion of the Englewood flyover project will facilitate the transfer of Metra’s SouthWest Service from Chicago Union Station to La Salle Street Station. This transfer will free up much needed gate and track capacity at Union Station, directly benefiting the expansion of Amtrak and High Speed Rail services. It will also facilitate the implementation of Metra’s proposed SouthEast Service, which will extend rail commuter service to an under-served region.

MDOT has submitted the necessary forms for Categorical Exclusions on all of their projects and has also submitted a Service NEPA Environmental Assessment Document. We are awaiting FRA approval on all these submittals. The Illinois Department of Transportation has received a Categorical Exclusion (09/2008) and an environmental decision from FRA (10/01/2008) for the Englewood flyover project.

**(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): safety, grade crossings, train control

**(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	See Section F			Master Agreement in Place
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	See Section F					
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>The equipment purchased by the state of Michigan will be in compliance with the Passenger Rail Investment and Improvement Act of 2008 (PRIIA) ... Section 305 - Next Generation Corridor Train Equipment and Amtrak. Due to the nature of the MI-Chicago Hub-Chicago-Detroit/Pontiac-Corridor, this service would benefit from the advantages of tilt engineering. This engineering would provide a higher degree of passenger comfort and ride quality. The rolling stock developed for this corridor will be standard and of an interoperable configuration/train consist which can freely rotate and operate on all MWRRI corridors.</p> <p>Each car will be designed to meet the requirements set forth by the Amtrak Clearance Diagram for Passenger Equipment. All of the structural requirements set forth by the FRA will be applied to the power cars and coaches. Additionally, the power cars will be equipped with all the necessary train control equipment including positive train control and Automatic Train Control (ATC).</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: Amtrak and Metra</p> <p>Status of Agreement: Final executed agreement on project scope/outcomes</p>						

<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		
MI-CHI HUB-CHI-DET-W.DET CONNECTION TRK	Final Design/C	Reduce passenger/freight conflicts and congestion, improve safety and increase train speeds between West Detroit Junction and Milwaukee Junction	6/2010	64.3	64.3	Track 1a	Yes
MI:CHI HUB:CHI-DET:TRACK STAB & ACQ-NS	Final Design/C	Acquire NS line between Dearborn and Kalamazoo and improve infrastructure to support train speeds of 79 mph between Dearborn and Ann Arbor and 110 between Ann Arbor and Kalamazoo	7/2010	357.8	357.8	Track 1a	Yes
MI:CHI HUB:CHI-DET:TRACK STAB -CN	Final Design/C	Improve infrastructure to support train speeds of 79 mph	1/2012	13.9	13.9	Track 1a	Yes
MI:CHI HUB:CHI-DET:TRACK STAB -CSAO	Final Design/C	Improve infrastructure to support train speeds of 79 mph	7/2010	3.5	3.5	Track 1a	Yes
MI:CHI HUB:CHI-DET:TRACK STAB -AMTRAK	Final Design/C	Improve infrastructure to support train speeds of 79 mph	7/2010	7.5	7.5	Track 1a	Yes
MI-CHI HUB:CHI-DET-TRAIN EQUIPMENT	Acquire New	Purchase additional train sets to support increased service frequency	7/2011	361.0	361.0	N/A	Yes
MI:CHI HUB:CHI-DET:STATIONS-DEARBORN	Final Design/C	Construct Dearborn Intermodal Rail Passenger Facility	1/2010	34.7	34.7	Track 1a	Yes
MI:CHI HUB:CHI-DET:STATIONS-TROY	Final Design/C	Construct Troy/Birmingham Intermodal Transit Facility	1/2010	10.3	10.3	Track 1a	Yes
MI:CHI HUB:CHI-DET:STATIONS-BCREEK	Final Design/C	Renovate the Battle Creek station	1/2010	3.5	3.5	Track 1a	Yes
IL-CREATE P1	Final Design/C	Construct Englewood Flyover	7/2010	136.9	136.9	Track 1a	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
	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.**

Each project in this CSDP has independent utility. Within this coordinated and comprehensive grouping of projects, MDOT has developed a non-interdependent schedule; that is, it is not necessary to complete one project before beginning another. However, coordination of construction activity was a consideration in the schedule development to minimize disruptions to current rail passenger services. Due to the complexity of some of the projects, there are elements within each that will call for sequencing of activities/tasks. A timeline has been developed for each project and many sub-elements/tasks will be scheduled simultaneously. The following sequencing/scheduling of projects will take place under this application:

1. The W DET CONNECTION TRK (Detroit Connecting Track) project is the furthest along in the contracting process and has begun the land acquisition necessary for project implementation. This project will reduce travel times, improve reliability and reduce passenger and freight train conflicts.
2. The second project, the IL-CREATE P1 (Illinois-CREATE) project will construct the Englewood Flyover. This project is vital to reducing passenger and freight train conflicts and congestion south of the lake.
3. Third, the TRACK STAB & ACQ-NS (Track Stabilization and Acquisition-Norfolk Southern) will acquire the NS line between Dearborn and Kalamazoo and make significant infrastructure/bridge and signaling improvements to the infrastructure to support train speeds of 79 mph between Dearborn and Ann Arbor and up to 110 mph between Ann Arbor and Kalamazoo. This segment of track will also be equipped with an Incremental Train Control System (ITCS) which is a Positive Train Control (PTC) system.
4. The fourth project is the TRACK STAB-CSAO (Track Stabilization-Conrail Shared Assets Operations) which will improve infrastructure to support train speeds of 79 mph.
5. The fifth project in the sequence is the TRACK STAB-CN (Track Stabilization-Canadian National) project which will also improve infrastructure to support train speeds of 79 mph and reduce passenger and freight train conflicts.
6. The sixth project in this sequence is TRACK STAB-AMTRAK (Track Stabilization-Amtrak) which will also improve infrastructure to support train speeds of up to 110 mph.

The Indiana Department of Transportation (INDOT) submitted the Indiana Gateway Project as part of a Track 1 submission for funding in this corridor. If that project is funded, MDOT will coordinate these activities with Indiana as a partner in this Track 2 application and as a partner in the MWRRI. This project will improve operational flexibility between Porter and the Illinois/Indiana stateline.

The purchase of additional TRAIN EQUIPMENT will support increased service frequency, reliability, higher speeds, reduced travel times and enhanced passenger comfort. Due to the aggressive schedule necessary for the timely development and procurement of new equipment, this project will occur simultaneously with all other capital projects.

The three station projects [STATIONS-TROY (Troy/Birmingham Intermodal Transit Facility), STATIONS-DEARBORN (Dearborn Intermodal Rail Passenger Facility), and STATIONS-BCREEK- (Battle Creek Train Station)] are independent of all other projects associated with this application. Final design and construction for the station projects will begin at the time of award and continue concurrently with work on other corridor projects. The STATIONS-TROY (Troy/Birmingham Intermodal Transit Facility) project has property available to the city at no cost from the developer until June 2010. If construction does not begin by this date the property will have to be purchased at the fair market price (approximately \$1M).

MDOT's Office of High Speed Rail & Innovative Project Advancement and station communities intend to initiate work on these projects at the time of award and, due to the complexity of each project, work will not be delayed.

## 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"/>		1996
Service/Operating Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		9/2004
Prioritized Capital Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		9/2004
Ridership/Revenue Forecast	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		9/2004
Operating Cost Forecast	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		11/2006
Assessment of Benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		11/2006
<b>Implementation Planning Activities/Documents</b>					
Program Management Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		10/2009
Financial Plan (capital & operating – sources/uses)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		10/2009
Assessment of Risks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

**(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	10/2009	Please access the document at this Web site: <a href="http://www.michigan.gov/mdot/0,1607,7-151-11056-218528--,00.html">http://www.michigan.gov/mdot/0,1607,7-151-11056-218528--,00.html</a>
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		
Finding of No Significant Impact		
Finding of No Significant Impact		

Corridor Program Name: MI-CHI HUB-CHI-DET/PNT Date of Submission: 10/2/09 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.

Significant improvements to existing corridor services consist of a coordinated and comprehensive grouping of projects as part of an overall Service Development Program (SDP) that includes the Chicago Hub (Chicago-Detroit/Pontiac) High Speed Rail Corridor Service Development Plan (CSDP) and will result in intercity passenger rail (IPR) service performance improvements, IPR network development, improved transportation safety, and cross-modal benefits.

In Michigan, projects throughout this corridor will result in increased average speeds, shorter trip times, and improved service quality. One of the CSDP projects will provide all new welded rail along with ballast and ties for two-thirds of the CN line from Pontiac to West Detroit Junction. Additional corridor-wide improvements will promote increased train speeds; increased train volume; increased train capacities; and facilitate the up-grade of

the line to higher levels of performance. A crucial project in this corridor is the construction of the West Detroit Connection Track. This project will result in a major time reduction by eliminating a chokepoint for passenger movements.

The installation of Centralized Traffic Control (CTC) train signalization will allow for the increased train speeds and train capacity. The CTC will help alleviate train congestion, as well as, conflicts between freight and passenger trains, which will reduce delays and improve the consistency of Amtrak trains on-time performance.

IPR network development will be promoted by the station projects in Michigan. The cities of Troy and Birmingham are planning the construction of a new Amtrak station on the CN where the rails separate the two communities. The building is to be 2500 SF, with platforms on both sides of the rails and connected by a pedestrian tunnel. The station will have a glass and steel canopy, modern restrooms, passenger waiting areas, will be intermodal as users can also make connections to buses and taxi services, and will be ADA compliant. Improving the trackage and signalization from Pontiac through Royal Oak and Birmingham and Troy and into Detroit will also help revitalize the entire economically distressed area.

Cross-modal benefits will result from the track improvements in Michigan. Both freight and passenger trains will experience improved fuel efficiency as a result of spending less time idling while awaiting clear track routes. Better on-time performance will bring increased ridership to Amtrak and while doing so, allow freight movements to reach their destinations in a more timely manner. Along with the installation of ITCS from Ann Arbor to Kalamazoo, the Michigan corridor would be complete for the operating of Amtrak services at 110 mph, from Ann Arbor to the Michigan/Indiana state line, a distance of approximately 186 miles. A combination of the rail improvements can result in a profitable situation for freight and passenger trains and can assist all modes of transportation.

Finally, projects in Michigan will result in improved safety for passengers, vehicles and rail employees. The safety and protection of the motoring public will be further enhanced by the installation of modern flashers and half-roadway gates at all private grade crossings, and the installation of 4-quadrant gates and vehicle detection circuitry at nearly 80 % of public grade crossings.

In Illinois, the CREATE Project P1 will improve IPR service performance by eliminating significant delays between Metra Rock Island District trains, Amtrak passenger trains and NS freight trains at Englewood. This will result in improved schedule reliability for current Amtrak and Metra trains as well as future High Speed Rail Trains.

In addition to current Amtrak service, four High Speed Rail Corridors of the "Chicago Hub Network" will pass through this location. This project is known as the Englewood Flyover and it is needed to relieve a major chokepoint between Chicago Union Station and points east and south. Completion of this project is also the keystone to any service expansion to the east. The project scope includes construction of the flyover and approach bridges, embankment, retaining walls, relocated main tracks and other track projects as well as associated infrastructure improvements to support grade separated tracks. Signal improvements (interlocking) benefiting Amtrak, NS and Metra are also included.

The Englewood Flyover project in the Illinois portion of the CSDP will result in improved IPR service in the following respects. It is anticipated that without this project, as train volumes increase on Amtrak, Metra and NS, the potential for delays will increase. Recent experience has shown that deteriorating on-time performance has a negative impact on Amtrak ridership levels. NS currently has a 30 mph restriction on its main tracks through the Englewood Interlocking. With the removal of the Interlocking, through construction of this project, it is

anticipated that operating speeds on Amtrak trains could be increased from 30 to 50 mph.

Improved transportation safety will result from the project element of eliminating the at-grade crossing of the Metra Rock Island District and NS mainlines. This will also benefit Amtrak.

Commuter Rail Services will be improved because completion of this project will facilitate the transfer of Metra's SouthWest Service from Chicago Union Station to La Salle Street Station. This transfer will free up much needed gate and track capacity at Union Station, directly benefiting the expansion of Amtrak and High Speed Rail services. It will also facilitate the implementation of Metra's proposed SouthEast Service, which will extend rail commuter service to an under-served region.

This project will improve Freight Rail Service in that its completion will directly benefit NS intermodal trains operating to and from NS' nearby 47<sup>th</sup> and 63<sup>rd</sup> Street Terminal. More efficient operation of these intermodal trains would directly benefit Amtrak trains operating on the same NS tracks.

Additional transportation benefits are included in the Corridor Service Development Plan, which is attached.

**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	437,700 Corridor	705,000 Corridor	741,000 Corridor	790,000 Corridor
Annual passenger-miles (millions)	93.44 Corridor	126 Corridor	132 Corridor	141 Corridor
Annual IPR seat-miles offered (millions)	172 Corridor	172 Corridor	172 Corridor	172 Corridor
Average number of daily <u>round trip</u> train operations (typical weekday)	3	3	3	3
On-time performance (OTP) <sup>2</sup> – percent of trains on time at endpoint terminals	26.4 MI 36 IL	60 MI 44 IL	75 MI 44 IL	90 MI 44 IL
Average train operating delays: minutes of en-route delays per 10,000 train-miles <sup>3</sup>	---	2250 IL	2250 IL	---
Top passenger train operating speed (mph)	95MI 50 IL	110 MI 50 IL	110 MI 50 IL	110 MI 50 IL
Average scheduled operating speed (mph) (between endpoint terminals)	54 MI 45 IL	58 MI 50 IL	58 MI 50 IL	58 MI 50 IL

<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.

The Chicago Hub (Chicago-Detroit/Pontiac) High Speed Rail Corridor Service Development Plan (CSDP) is estimated to create 1,078 construction jobs. As of the 1<sup>st</sup> full year of operations, it is estimated that 7,248 jobs will be created. As of the 5<sup>th</sup> full year of operations, the estimated number of jobs created is 11,125, and as of the 10<sup>th</sup> full year of operations, the number of jobs estimated to be created is 12,970.

In Michigan, the construction period of the track improvement portions of the CSDP (including ballast and 2/3 tie replacement, rail replacement, grade crossing enhancement and signaling upgrade) is estimated to end by September 2015. New operational jobs will be created following the construction period. In addition, new construction jobs will be created during the construction period of the West Detroit Connection Track; the construction period is estimated to end by June 2013. The construction period of the Station improvement portions of the CSDP is estimated to end by June 2012. As with track improvements and construction, new construction jobs related to station improvements will generally be created first before new operational jobs.

In Illinois, there is a major construction project included in the CSDP (the CREATE Project P1, consisting of construction of a flyover and approach bridges, embankment, retaining walls, relocated main tracks, temporary running tracks, yard track relocations and associated infrastructure improvements to support 3 new grade-separated tracks, and signal improvements.) The estimated duration of the construction period is 18 months.

The CSDP project location in Illinois and most of those locations in Michigan are in Economically Distressed Areas, according to the definition in Section 301 of the Public Works and Economic Development Act of 1965, as amended (42 U.S.C. 3161). The CSDP location in Indiana is not located in an Economically Distressed Area. Thus, the new jobs to be created by implementation of the CSDP will largely be available to jobseekers in Economically Distressed Areas (includes areas with an unemployment rate higher than the national average, currently, 9.7%).

Technological advances included in the CSDP will result in increased efficiencies in several areas. The Equipment project provides for the acquisition of up to 10 new sets of train equipment; these train sets will be consistent with the PRIIA provision for a standardized Next Generation rail corridor equipment pool. Due to the nature of the Chicago Hub (Chicago-Detroit/Pontiac) High Speed Rail Corridor, this service will benefit from the advantages of tilt engineering. Among numerous modern features, the power cars will be equipped with a power plant that will utilize ultra low sulfur diesel fuel. It is envisioned that each power car will have two diesel engines to provide mechanical energy to feed generators that will convert mechanical energy into electrical energy. This electrical energy will be distributed on a DC-link that will support electrical power inverters for propulsion and for providing electrical power to the passenger cars. The propulsion system will be controlled by the operating cab and synchronized between the lead and trailing power cars to provide uniform propulsion and dynamic braking for the train set. Additionally, the power cars will be equipped with all the necessary train control equipment including positive train control and ATC. The power cars will have dedicated, ergonomic friendly cab space with a console equipped to facilitate train operation and communication with operation control centers.

The CSDP also includes projects for signalization upgrades; this technological advance will alleviate congestion.

The CSDP will result in enhanced regional transportation infrastructure and services, resulting in significant economic benefits and new Midwest jobs, while strengthening the region's manufacturing, service and tourism industries, and protecting the environment. It will support existing industries and foster growth of new businesses in the three states and elsewhere across the Midwest by improving access between communities. It will also encourage large businesses to distribute their operations more widely into smaller, highly accessible Midwestern communities that provide a high quality of life for residents. Users of the improved intercity rail corridor will experience reduced travel times and costs, as well as enhanced travel comfort and station amenities.

The CSDP is a crucial component of the larger Midwest Regional Rail Initiative Service Development Plan (SDP). It has been calculated that the benefit to cost ratio of the SDP is 1.8, that is, for every dollar spent on the system, one dollar eighty cents is returned in benefits. These benefits are expected to begin to accrue as soon as the goals the SDP have been attained through program implementation (construction and operation): increased average speeds, shorter trip times, and improved quality of services.

**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
	1,078	7,248	11,125	12,970

**(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.

Emissions and non-productive fuel consumption will be reduced as a result of these corridor improvements, especially in the large urban areas of Detroit and Chicago where significant engine idling occurs due to congestion on facilities during peak hours. For example, Metra operations severely restrict the ability of NS to move freight and passenger traffic on its Chicago Line between the hours of 6am and 9am and 4pm to 6pm each day. By grade separating the conflicting operations, the Englewood project will greatly reduce train delays and thus diesel motor emissions and non-productive fuel consumption. A comparison of emissions between the future year (2015) Build and No Build Alternatives for the Englewood Flyover shows reductions in emissions for HC, CO, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> and SO<sub>2</sub> in tons per year:

	HC	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>
2005 Existing	2.59	6.81	49.7	1.64	1.51	4.07
2015 Build Alt.	2.83	9.13	50.3	1.77	1.63	0.0327
2015 No Build Alt.	3.12	10.1	55.5	1.95	1.79	0.0361

Environmental benefits associated with these corridor improvements include reductions in roadway congestion and the associated energy use and vehicle emissions due to travelers shifting from the highway mode. Currently, passenger rail travel along the Chicago-Detroit/Pontiac Corridor reduces auto trips by 500-600 per day. The resultant savings in fuel is approximately two million gallons per year. With ridership expected to increase by a factor of four with full implementation of the MWRRS, fuel savings would likewise increase to eight million gallons per year.

The Detroit Intermodal Freight Terminal (DIFT) commodity flow modeling provided an estimate of truck travel reductions in 2030 with the improvements related to the DIFT Project. The following savings and reductions are anticipated:

	Wayne Co.	SE MI	MI
Annual Truck VMT Savings (millions of miles)	41	134	732
Annual Diesel Fuel Savings (millions of gallons)	5	15	82
Annual CO2 Reduction (Metric tons)	1600	5400	30,000

Anticipated regional reduction of pollutants due to the DIFT truck-to-rail diversion are:

	CO	HC	NOx	PM10	PM2.5	VOC	DPM	BENZ	BUTA	FORM	ACET	ACRO
Wayne Co.	17.8	16.1	33.8	3	1.7	15.9	1.7	0.17	0.1	1.3	0.48	0.06
SE Mich.	48.7	37.7	128.9	11.8	6.7	37.2	6.7	0.41	0.24	3.05	1.12	0.14

The expected shift from auto and air travel to rail travel will also promote other environmental benefits including more efficient land use associated with transit-oriented development, less noise pollution, minimal alterations to hydrological characteristics as compared to highway construction, minimal visual intrusion on the landscape and minimal disturbances to natural flora and fauna habitats. Noise and emissions will also be reduced as new equipment is put into service along the corridor.

Construction of modern station facilities presents opportunities to utilize newer design features that reduce environmental impacts from storm runoff, wastewater disposal, heating and cooling systems and lighting. The Troy/Birmingham Transit center provides a good example of these types of environmental benefits. First and foremost the creation of the Transit Center and Transit-Oriented Design (TOD) district will foster sustainable lifestyles that are inherently better for the environment. Increased transit usage helps to reduce the rate of growth in auto vehicle trips and reduces the use of petroleum products. Fewer vehicles on the roadways translate into less congestion, lower amounts of vehicle emissions, and overall better air quality than would otherwise occur. Further, TOD principles discourage large surface lots that result in the transformation of land into impervious surfaces. Secondly, the Troy/Birmingham Transit Center will pursue LEED certification of silver or higher. This will be achieved through the use of green building principles, including a green roof, rain gardens, geothermal heating and cooling, and on site storm and waste water management. Efficient green building technologies will be integrated into the site by introducing cutting edge equipment such as solar powered transit shelters for waiting passengers that will employ LED lights and real time updates for arrival and departure times. These technologies will be integrated into the existing local intermodal transportation network that can be utilized for direct transfer to other modes of intercity passenger transport and local transit. Also, the design of the Transit Center will include LED lighting throughout the site and facilities for recharging electric cars.

The design of the Dearborn Station will incorporate similar features to optimize energy efficiency, indoor environmental quality, and storm water management, as well as incorporating recycled and regional materials into the design of the facility. The design of the passenger station has been registered with USGBC with the intent of achieving a LEED Silver certification.

**(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 projects in this Corridor Service Development Plan (CSDP) will enhance rail service efficiency and reliability between Pontiac, Detroit and through to Chicago. The improvements, including rail, ballast and tie replacement, bridge improvements, signaling upgrades, and grade crossing enhancements will result in a rail system that will contribute to more livable communities and enhance the overall quality of life in Michigan and the Mid-west region. By expanding the positive train control system to allow higher speeds along this segment of the corridor, on-time performance and reliability measures will be improved, thus enhancing customer service and generating greater ridership. Operational improvements related to the Englewood Flyover in Chicago will greatly improve livability in that immediate area and improve “livable” development potential associated with rail service. Because many of the stations are located in densely populated walkable urban/downtown environments or central business districts, increasing ridership levels will result in economic benefits for local neighborhoods as people seek services within close proximity to the stations within the corridor.

The construction of the West Detroit Connection Track will greatly enhance rail travel as a viable option for mobility in the SE Michigan area. The increased frequencies, increased reliability and improved connectivity and will allow passenger rail service to become a more attractive option for travelers. This accessibility to Chicago, Ann Arbor, Kalamazoo, etc. without automobile ownership or availability will also create an opportunity for transit-oriented development with the city of Detroit and along the Woodward corridor, in the vicinity of the New Center Station.

The new stations associated with this CSDP will have many positive “livable” benefits for their communities. The Troy/Birmingham transit center will be the focal point of a newly established Transit Oriented Design district. This district will be a defined area with established development guidelines aimed at encouraging mixed-use, high density development, where people can live in a walkable community close to public transportation. The Dearborn Intermodal Rail Passenger Facility will also stimulate transit oriented development in the station area.

New modern train equipment will also be purchased to replace existing equipment used on this corridor. New equipment is the most influential component when it comes to the public’s option of using the intercity passenger rail system. This equipment will enhance ridership on the corridor and improve safety, reliability, and customer comfort. Many modern technological improvements can be provided, such as WiFi service, which will enhance the benefits for users of this mode. New equipment will enhance the overall quality of life in Michigan and the Mid-west region.

Corridor Program Name: MI-CHI HUB-CHI-DET/PNT Date of Submission: 10/2/09 Version Number: 1

## 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.*

MDOT engineers are highly skilled and thoroughly trained in project management, as evidenced by their track record in applying new technology and innovations to address a full array of rail transportation challenges. MDOT was the first state to interconnect traffic and grade crossing signals to prevent motorists from being trapped on a grade crossing. MDOT is currently conducting an FRA-approved test project using raisable barriers to prevent gate running violations. MDOT has partnered with the FRA, Amtrak and General Electric to implement an Incremental Train Control System (ITCS) which resulted in FRA approval in 2005 to operate passenger trains at 95 mph and we anticipate FRA approval in 2009 for train speeds up to 110 mph.

MDOT has initiated and successfully managed a variety of large-scale projects. One example is the early preliminary engineering for the Detroit Intermodal Freight Terminal (DIFT) Project, which will soon move into subsequent implementation phases. The DIFT project will consolidate the routing of the CSX, NS, CN, CSAO, and Amtrak through the city of Detroit to reduce congestion for freight services. Since the mid-1970s the State of Michigan has acquired and managed over 1,000 miles of active rail lines, investing over \$250,000,000 in capital improvements and purchases. The state presently still owns and manages approximately 530 miles of rail property, and takes an active role in design and implementation of significant capital improvement projects. The state has dedicated railroad engineering staff in place to plan and implement right-of-way projects to enhance its rail corridors. The state also has multiple railroad inspectors that are well-trained and highly experienced.

Michigan is also home to one of the original six federally-designated high speed rail corridors as a result of MDOT's long-standing advocacy for integrated interstate high-speed passenger rail services and its commitment to and participation in the MWRRI.

The expertise residing in the Office of High Speed Rail and Innovative Project Advancement has enabled MDOT to complete this entire Corridor Program application with in-house resources.

**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.*

The MDOT Office of High Speed Rail and Innovative Project Advancement consists of a team of experts in rail management, each with their own area of expertise. This office is responsible for promoting and developing the infrastructure needed to support intercity passenger rail, commuter rail and rail rapid transit services. This office works with contractors, provides project oversight, oversees financial aspects of program development and interacts with stakeholders to ensure the success of all rail projects. Staff members in this office are well-versed in all aspects of project management and have experience in working with rail owners and contractors, stakeholders and federal regulatory agencies.

Michigan will contract with the host railroads to construct infrastructure improvements. The workforce will be mainly from the railroads, using force accounts. Some final design may be done by engineering firms under contract. Our engineering staff

would consult directly as needed with the railroad engineering staff to finalize plans and validate materials, quantities and locations. Depending on final lease negotiations, construction work may be contracted and performed directly with existing NS labor in accordance with standard railroad labor practices, or as a conventional bid-letting under standard MDOT procedures that are fully compliant with all relevant federal guidelines. MDOT has multiple pre-qualified railroad contractors who are familiar with relevant state and federal rules governing such work.

MDOT will seek Amtrak support for technical assistance to extend the positive train control system. In addition, Michigan will seek Amtrak support for development of train schedules, projection of ridership and revenues, projection of annual operating funding requirements, station development, negotiation/coordination with host railroads, and engineering design support. Michigan will also seek FRA assistance with new equipment inspections.

Illinois plans to manage construction activities for the CREATE P1 project within the framework of the original CREATE Partners Agreement which calls for Metra to assume direct contracting responsibility for the project. Metra had considerable experience in this area and will follow their existing bid and contracting procedures and policies using existing staff. Metra maintains a list of qualified contractors for this kind of work, including DBEs and expects to select contractors from this list. The design contractor will provide plans to Metra and Metra staff will be responsible for construction supervision using their established procedures. Payments will be funneled from Illinois DOT through Metra.

The Indiana Department of Transportation submitted the Indiana Gateway Project as part of a Track 1 submission for funding in this corridor. If that project is funded, MDOT will coordinate these activities with Indiana as a partner in this Track 2 application and as a partner in the MWRRI.

**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.**

MDOT will contract with the host railroads and draw on their expertise where applicable to construct infrastructure improvements on their ownership. Railroads are in agreement with needed improvements identified in the Michigan portion of the CSDP. MDOT will seek Amtrak support for development of train schedules, projection of ridership and revenues, projection of annual operating funding requirements, station development, negotiation/coordination with host railroads, and engineering design support. MDOT will also seek Amtrak support for technical assistance to extend the Positive Train Control System (PTCS) east of Kalamazoo.

MDOT will also seek FRA assistance with new equipment inspections.

With respect to the NS acquisition project within the CSDP, there is no uncertainty. NS has notified Amtrak that the NS ownership will no longer be maintained at Class 4 standards and will be downgraded to Class 2 which will only allow for passenger speeds from 30 mph to 40 mph maximum for the duration of their ownership. Thus, MDOT control of the line appears mandatory to the success of high speed passenger rail service and for the investments required to preserve existing service.

The following have been considered for the Illinois portion of the CSDP:

Project Uncertainties

- Ability to meet schedule requirements of funding

- Time required for outside agency review
- Availability of materials; timeliness of delivery

Mitigation Strategy

- Establish parallel design tracks accelerating discrete project components with potential to go to early construction, thereby reducing overall design schedule
- Prepare and bid separate construction packages for Force Account work and project components that can be initiated in advance of the main flyover work
- Accelerate design of elements needing outside agency review to 90% as quickly as possible so that review is removed from the critical path
  - Advance communication with material sources to pre-order based on 60% design

**(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.*

Memoranda of Understanding, Agreements-in-Principle, and letters of support have been negotiated/obtained for the entire Michigan part of the Chicago-Detroit/Pontiac Corridor.

CN-A letter of support from CN Railway is part of this application. Agreements are in the process of being negotiated regarding construction, maintenance, and operation.

CSAO- A letter of support from CSAO (Conrail representing NS and CSX) is part of this application. Agreements will be negotiated regarding construction, maintenance, and operation.

NS-An internal team of MDOT executive and attorney general staff are presently negotiating the final lease terms on ownership and control of the NS Rail Lines. Assisting our team is a highly-regarded railroad attorney with over 20 years experience in developing comparable transactions, including multiple transactions with NS. The lease agreement template (attached as part of the MOU) addresses all relevant aspects of the proposed transaction, including current and future cost obligations of the parties, maintenance standards and responsibilities, frequency and schedule of current and future services, facility access, freight rights, planned improvements, dispute resolution, planned interim cost adjustment factors, and relevant contingency language. Upon execution, the lease will provide for a joint coordination committee (to be comprised of personnel from MDOT administrative staff and NS administrative staff) that will oversee performance and compliance with conditions established by the lease. The present status of the ongoing negotiations is positive, with all parties communicating and participating in good faith toward developing a mutually satisfactory agreement in advance of the receipt of any ARRA awards.

Amtrak-An Agreement in Principle between Amtrak and MDOT regarding the Amtrak segment of the corridor is part of this application.

**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.*

An Agreement-in-Principle between Amtrak and MDOT regarding Amtrak being the operator on other host railroads in the corridor is part of this application. An Agreement-in-Principle between Amtrak and MDOT regarding equipment is part of this application.

**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 will be the high speed and intercity passenger rail service provider. This is a continuation of what exists today. Amtrak operates the Wolverine service as part of their National System Network which includes the six trains now used to provide daily intercity passenger rail service in the Chicago-Detroit/Pontiac Corridor. In addition, Michigan will

continue to contract with Amtrak to provide the Blue Water service (Chicago-Port Huron) which includes two additional trains between Battle Creek and Chicago. These trains operate at speeds up to 95 mph between Kalamazoo and Niles (45 miles) and up to 79 mph in the remainder of the 304-mile corridor. This selection will not needlessly increase the cost of the Corridor Program and associated operations as Amtrak is the current provider; consequently, Amtrak is already operating train sets in the corridor and equipping and maintaining those train sets using facilities located in proximity to the corridor.

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

A letter of support from CP Railway is part of this application. While not a host railroad, CP operations impact the rail operations on the eastern end of the corridor.

The governors of eight Midwestern states consisting of Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Wisconsin and the Mayor of Chicago signed a letter of support dated April 10, 2009 and a Memorandum of Understanding dated July 27, 2009. The MOU resolves the intent to work cooperatively in developing the MWRRI High Speed Rail Corridors throughout the Midwest Region. A copy of the letter and MOU are part of this application.

**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.*

MDOT's proposed lease agreement with Norfolk Southern includes relevant cost sharing arrangements for future use and maintenance of the line between Dearborn and Kalamazoo as specifically and proportionally related to planned freight use.

**(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
IDOT and IL railroads	Existing	Committed	IDOT State Funds	7.0	0.7%	IL-CREATE P1 Track 1 application
	New	Committed				
	New	Committed				
	New	Committed				

<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.

**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.*

In Illinois, the Illinois Department of Transportation (IDOT) and the freight railroads have agreed to commit \$7 million to the CREATE Project P1. As a state agency, IDOT has no independent authority to cover any unforeseen cost increases or financial shortfalls, unless funds were authorized and appropriated by the Illinois General Assembly. In addition, Metra will be providing project management services specifically to this project as part of the overall financial contribution to the overall CREATE Program. Since the CSDP project was originally part of the CREATE Program it is subject to the following agreements between the various CREATE stakeholders (including IDOT): Joint Statement of Understandings Regarding the Proposed CREATE Project (2003); First and Second Amendments to the JSU (2004, 2005); Joint Statement Regarding CREATE Governance Structure (2003); and Amendment 1 CREATE Final Feasibility Plan August 2009.

Amtrak has shared operating agreements in place with CN, CSAO, and NS.

MDOT is not committing state funds for the capital investment portion of this project.

As a state agency, MDOT has no independent authority to cover any unforeseen cost increases or financial shortfalls, over and above those funds statutorily allocated to the Comprehensive Transportation Fund for rail services per Public Act 51 of 1951, Section 10.

**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 YOY 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.*

The State of Michigan provides a subsidy to Amtrak for two intercity passenger rail services in Michigan. Michigan has provided a subsidy for the Pere Marquette (Grand Rapids, Michigan to Chicago) for 35 years and for the Blue Water Service (Port Huron, Michigan to Chicago) for 25 years. Each of these services provides a daily round trip to several communities along the route.

The source of this funding is Annual State Appropriations. Michigan will continue to invest state funds in Intercity Passenger Rail as it has since 1974, with over \$50 million in capital and operating investments made since 2002. New equipment will first replace existing equipment, then be expand service frequencies.

MDOT is exploring alternative approaches to funding these potential future costs through innovative partnerships.

The existing Wolverine Service (Chicago to Detroit/Pontiac) is part of Amtrak's National System Service and is funded entirely by Amtrak.

**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			
Surplus/deficit after capital asset renewal charge <sup>5</sup>	N/A This table - See E, 3C text.			
Total Non-FRA sources of funds applicable to the surplus/deficit after capital asset renewal				
Funding Requirements for which Available Funds Are Not Identified				
<p>* 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.</p> <p>Note: Data reported in this section should be consistent with the information provided in the Operating and Financial Performance supporting form for this application.</p>				

<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.*

Audited financial statements of the State of Michigan's Comprehensive Annual Financial Report (SOMCAFR) are prepared by the Michigan Department of Management and Budget and audited by the State Auditor General. Separate Audited Financial Statements of the restricted funds of MDOT AFR can be found at the Michigan Office of the Auditor General website at: <http://audgen.michigan.gov> , and MDOT's website at [www.michigan.gov/MDOT](http://www.michigan.gov/MDOT) . Excerpts from the Financial Statements are included in the attached Financial Plan. Audits of the SOMCAFR and MDOT AFR are performed by both the State of Michigan's Auditor General and MDOT's Office of Commission Audits.

MDOT's ability to absorb unforeseen cost increases, cost overruns or financial shortfalls is limited to those funds made available to its rail programs per statutory distribution of Michigan's Comprehensive Transportation Fund, per PA 51 of 1951. Allocation of funds over and above those already made available to MDOT's rail program is at the discretion of the state legislature.

MDOT is not responsible for any cost overruns or financial shortfalls related to the Illinois Englewood flyover project, nor can MDOT accept financial responsibility for potential disposition requirements of that project.

IDOT has no independent authority to absorb potential cost overruns or financial shortfalls related to any capital projects. IDOT's budget is authorized and appropriated by the Illinois General Assembly subject to gubernatorial approval.

The statutory legal authority to build and oversee rail investment in Michigan is provided by PA 295 of 1976 and PA 51 of 1951. The statutory legal authority for Illinois is found in the Illinois Administrative Code Title 44: Government Contracts. See the separate application form OMB# 2130-0583 completed for the Illinois Englewood flyover for more specific information.

**(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:	39 months
Rolling Stock Acquisition/Refurbishment Duration:	36 months
Service Operations Start date:	07/2013 (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 projects in the CSDP are key components in improving domestic manufacturing, supply and other industries. This area represents key corridors to manufacturing centers in the states of Michigan and Illinois. The new track capacity and uncongested movement will open more options for business ventures in these areas, many of which are economically depressed. The CSDP projects will provide additional options for shipping and suppliers from local Midwest manufacturing producers and suppliers to ship more efficiently via rail freight. Currently the congestion in this corridor is a hindrance to the existing freight traffic, as well as a detriment to future manufacturing growth. The improvements associated with the West Detroit Connection Track project will improve passenger and freight congestion in this area. These improvements, which directly impact intercity passenger rail service, are part of an overall plan (Detroit Intermodal Freight Terminal Project) to rationalize the rail infrastructure in Detroit and increase its efficiency and route flexibility. A more efficient rail supply system will promote expansion of domestic manufacturing and other related industries in this area, which is one of the most economically depressed areas of the country.

**(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.**

This high speed rail corridor program reflects an expanding interest in and renewed enthusiasm for rail transportation in the United States. It also represents expansion of job opportunities at several levels for those just completing their education in diverse disciplines such as engineering, planning, logistics, construction and business or operations management.

For more than a decade the Midwestern states participating in the Midwest Regional Rail Initiative have been working together with rail owners and operators to plan a transformation of the rail system into one that will meet the needs of the 21st century. Their unwavering faith in and commitment to rail transportation has become the foundation for welcoming the new generation of engineers, planners, operators and tradesmen into the field of rail transportation. This new generation will bring energy, enthusiasm and innovative ideas to the rail industry, especially with regard to the use of technology to address transportation challenges. The process of designing and constructing these projects will also dramatically increase the body of knowledge in HSIPR development and congestion mitigation techniques, thus making the development and implementation of future projects more easily attainable.

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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, 6 Right of Way Ownership (Michigan)*

*Type of Railroad: Amtrak*

*Owner: Amtrak*

*Route Miles: 79.34*

*Track Miles: 93.42*

*Status of Agreements to Implement Projects: Preliminary Executed Agreement/MOU*

*Type of Railroad: Class 1 Freight*

*Owner: Norfolk Southern (NS)*

*Route Miles: 134.4*

*Track Miles: 168.57*

*Status of Agreements to Implement Projects: Preliminary Executed Agreement/MOU*

*Type of Railroad: Class 1 Freight*

*Owner: Canadian National (CN)*

*Route Miles: 27.18*

*Track Miles: 53.42*

*Status of Agreements to Implement Projects: Host railroad consulted but support not final*

*Type of Railroad: Class 1 Freight*

*Owner: Conrail Shared Assets Ownership*

*Route Miles: 4.55*

*Track Miles: 9.1*

*Status of Agreements to Implement Projects: Host railroad consulted but support not final*

*Section B, 6 Right of Way Ownership (Illinois)*

*Type of Railroad: Class 1 Freight*

*Owner: Norfolk Southern (NS)*

*Route Miles: 0.31*

*Track Miles: 1.0*

*Status of Agreements: No agreement but host railroad supports project*

*Type of Railroad: Commuter Railroad or Authority*

*Owner: Metra*

*Route Miles: 1.6*

*Track Miles: 3.2*

*Status of Agreements: No agreement but host railroad supports project*

*Section B, 7 Services (Michigan)*

*Type of Service: Freight*

*Name of Operator: Canadian National (CN)*

*Top Speed Within Boundaries - Passenger: N/A*

*Top Speed Within Boundaries - Freight: 60*

*Number of Route Miles Within Boundaries: 27.18*

*Average Number of Daily One-way Train Operations Within Boundaries: 13*

*Type of Service: Freight*

*Name of Operator: Conrail Shared Assets Ownership (CSAO)*

*Top Speed Within Boundaries - Passenger: N/A*

*Top Speed Within Boundaries - Freight: 60*

*Number of Route Miles Within Boundaries: 4.55*

*Average Number of Daily One-way Train Operations Within Boundaries: 5*

*Type of Service: Freight*

*Name of Operator: Norfolk Southern (NS)*

*Top Speed Within Boundaries - Passenger: N/A*

*Top Speed Within Boundaries - Freight: 60*

*Number of Route Miles Within Boundaries: 134.44*

*Average Number of Daily One-way Train Operations Within Boundaries: 8*

*Type of Service: Intercity Passenger*

*Name of Operator: Amtrak*

*Top Speed Within Boundaries - Passenger: 95*

*Top Speed Within Boundaries - Freight: N/A*

*Number of Route Miles Within Boundaries: 245.51*

*Average Number of Daily One-way Train Operations Within Boundaries: 6*

*Type of Service: Freight*

*Name of Operator: CSX*

*Top Speed Within Boundaries - Passenger: N/A*

*Top Speed Within Boundaries - Freight: 60*

*Number of Route Miles Within Boundaries: 0*

*Average Number of Daily One-way Train Operations Within Boundaries: 3*

*Type of Service: Freight*

*Name of Operator: Canadian Pacific (CP)*

*Top Speed Within Boundaries - Passenger: N/A*

*Top Speed Within Boundaries - Freight: 60*

*Number of Route Miles Within Boundaries: 0*

*Average Number of Daily One-way Train Operations Within Boundaries: 21*

*Section B, 7 Services (Illinois)**Type of Service: Freight**Name of Operator: Norfolk Southern (NS)**Top Speed Within Boundaries - Passenger: N/A**Top Speed Within Boundaries - Freight: 45**Number of Route Miles Within Boundaries: 0.31**Average Number of Daily One-way Train Operations Within Boundaries: 26**Notes:**Type of Service: Intercity Passenger**Name of Operator: Amtrak**Top Speed Within Boundaries - Passenger: 50**Top Speed Within Boundaries - Freight:**Number of Route Miles Within Boundaries: 0.31**Average Number of Daily One-way Train Operations Within Boundaries: 14**Type of Service: Commuter**Name of Operator: Metra**Top Speed Within Boundaries - Passenger: 40**Top Speed Within Boundaries - Freight: N/A**Number of Route Miles Within Boundaries: 1.6**Average Number of Daily One-way Train Operations Within Boundaries: 68**Section C, Environmental Clearance**NEPA Categorical Exclusion documentation provided with Track 1 applications are also included with this application as Additional Supporting Documents.*



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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 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 (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 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**.