

TIGER II Grant Application for CREATE Package of Projects



Submitted by:

Illinois Department of Transportation

CREATE Partners include:

Association of American Railroads

Chicago Department of Transportation

Illinois Department of Transportation

United States Department of Transportation



C R E A T E

KEEPING THE GO IN CHICAGO



August 23, 2010

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1.0 Executive Summary

Thank you for the opportunity to submit this application on behalf of the CREATE Partners for TIGER II Grant funds to support a package of three projects (“the Package”) from the CREATE Program. Exemptions are not being sought for small projects under \$10 million as we are requesting the package be considered as a single project. The sections which follow respond to the requirements of the Final Notice dated June 1, 2010: Section 2.0 provides Program and Project descriptions, and the Chicago region’s role in passenger travel and freight trade; Section 3.0 describes CREATE accomplishments; Section 4.0 presents the expected benefits of the three CREATE Projects that are included in the Package for which funding is being requested, and Section 5.0 presents the projects’ readiness and NEPA status..

The Package strongly contributes to each of the Primary and Secondary Selection Criteria outlined in the Final Notice dated June 1, 2010:

- **Long-Term Outcomes:**
 - **State of Good Repair** – All railroad improvements will be maintained by railroads at their expense. Annual truck VMT reduced by 3.3 million due to shipment diversion to rail. This will result in a reduction in existing highway maintenance costs of \$232,544 per year.
 - **Economic Competitiveness** – Reduced train hours in the Chicago region of 4,126/year, leading to reduced shipment delays and resulting in logistics cost savings of \$61.7 million/year, boosting national and regional competitiveness.
 - **Livability** – Reduced rail transit delay of 6,638 passenger hours per year for savings of \$163,428 per year, and reduced motorist delay of 47,644 hours annually for savings of \$1.3 million per year.
 - **Sustainability** – Reduced diesel consumption of 552,386 gallons per year due to increased locomotive operating efficiency and diversion of freight from truck to rail. Emissions from locomotives and vehicles reduced substantially, resulting in a combined cost savings of \$453,545 per year.
 - **Safety** – Reduction in worker injuries as a result of switch automation.
 - **Job Creation and Economic Stimulus:** This Package can be expected to provide direct and indirect employment of 1,158 employment years.
- **Benefit-Cost Analysis:** The benefit-cost ratio for the Package of projects is between 5.40:1 (seven percent discount rate) and 8.32:1 (three percent discount rate) – see Table 4.1.
- **Project Readiness and NEPA Status**
 - **Project Schedule** – Feasible and sufficiently detailed project schedules can be found at [Project Information](#).
 - **Environmental Approvals** – Categorical Exclusions have been received from FHWA for the three projects in the Package.
 - **Legislative Approvals** – No specific legislative approvals are required to progress the Package. Letters of support have been received from Summit, Illinois and Bedford Park, Illinois as well as from Mayor Daley of Chicago and Governor Quinn of Illinois.
 - **State and Local Planning** – All projects in the Package are in the region’s TIP. CREATE is a “central element” of the strategic regional freight system in the RTP, [2030 RTP for NE IL](#).
 - **Technical Feasibility** – Preliminary design has been completed for all projects in the Package.

- **Financial Feasibility** – With funding from TIGER II grant funds, and State of Illinois “Illinois Jobs Now” funds from stable revenue sources, these projects would be fully funded. All projects have contingency reserves built into cost estimates.
- **Secondary Selection Criteria:**
 - **Innovation** – This Package of projects **continues the innovative tradition of CREATE**. It lays the groundwork for Positive Train Control on several routes. It will be supported by the innovative Common Operational Picture technology, now under development.
 - **Partnership and Management Practices** – **A strong coalition of private and public railroads and four government agencies** has been working on CREATE since 2003. CREATE Partnerships and Management Practices are detailed in Section 4.6.3 and linked web materials.

In addition, the Package of projects fully meets the priority criteria shown below:

- Requested TIGER funding of \$85.2 million fills out a **total financing package of \$106.5 million**.
- Funds **will be obligated by September 30, 2012** as per the June 1, 2010 NOFA.
- The Package **significantly impacts desirable long-term national/regional benefits** (see below.)
- The Package **quickly creates/preserves jobs in economically distressed areas**, with all projects in the Package located in economically distressed areas.
- The Package continues the use of **innovative strategies** on CREATE, see Section 4.6.2.
- The Package will benefit from strong, **established public-private collaboration** – See Section 4.6.3. Many other public, nonprofit, and private organizations support CREATE.
- The Package **significantly improves long-term efficiency in the movement of people and goods**, and makes the region more attractive for existing and potential employers. See Sections 4.2 and 4.3.
- The application includes a **commitment of financial support** from the State of Illinois (see Table 2.1).
- The application is **supported by the Chicago Metropolitan Agency for Planning and Respiratory Health Association** whose missions include many nontransportation issues. See Table 4.2.
- The Package will result in **more livable communities throughout the region** – see Section 4.3.
- Construction has begun on projects funded by the TIGER I discretionary grant.

The required wage rate certification letter can be found at [Wage Rate Certification Letter](#).

2.0 Program and Project Description

■ 2.1 CREATE Program Overview

The Chicago Region Environmental and Transportation Efficiency Program (CREATE) is a public-private partnership, including the U.S. DOT, Illinois Department of Transportation (IDOT), Chicago Department of Transportation (CDOT), Metra, Amtrak, and the Association of American Railroads (AAR) representing: BNSF Railway (BNSF), Canadian National (CN), Canadian Pacific (CP), CSX, Norfolk Southern (NS), Union Pacific (UP), and switching railroads Belt Railway Company of Chicago (BRC) and Indiana Harbor Belt Railroad (IHB). CREATE encompasses improvements along four rail corridors: 1) East-West Corridor (NS/BRC); 2) Western Avenue Corridor (BNSF/UP/CSX/NS); 3) Beltway Corridor (CSX/IHB); and 4) Passenger Express Corridors (Metra SWS/Heritage). The CREATE Program is aimed at addressing existing and future congestion issues on the rail system, which bring adverse effects to the national economy and the transportation system. CREATE’s mission is to complete all the

necessary improvements included in the 71 projects that comprise the CREATE Program to achieve national and regional benefits. A description of the evolution of the CREATE Program is available at [Program Evolution](#) and the CREATE operational goals are at [CREATE Operational Goals](#). Overall, CREATE Program goals are to:

- Improve safety and operations at proposed grade-separation locations;
- Eliminate or reduce many points of direct conflict between rail corridors and the roadway network;
- Eliminate points of conflict between rail corridors, especially points of passenger/freight conflict;
- Reduce fuel consumption by and emissions from locomotives and waiting autos and trucks;
- Reduce traffic congestion on the region's highways;
- Modernize and increase the capacity of rail facilities to more efficiently handle today's rail traffic and meet future demands;
- Connect the rail corridors more effectively to foster the efficient flow of goods and people within and through the region, as well as to and from other parts of the U.S., including international traffic through the major ports;
- Reroute freight and intercity passenger operations from the St. Charles Air Line rail route; and
- Improve the efficiency and reliability of the corridors to better serve national security.

The 71 Projects in the CREATE Program include:

- Grade separation of six railroad crossings (rail-rail flyovers);
- Grade separation of 25 highway-rail crossings;
- Extensive upgrades of tracks, switches, and signal systems via 37 rail projects;
- Viaduct Improvement Program;
- Grade crossing safety enhancements; and
- Rail operations visibility improvements (Common Operational Picture) – see Section 4.6.2.

The CREATE Program is designed to address systemic issues in the areas of freight movement, freight/passenger rail conflict and highway/rail conflict. Through focused investment along four rail corridors, the Program will construct additional capacity and improve connections within and through the Chicago metropolitan area rail network. Along the passenger corridor, the complete CREATE Program will separate passenger and freight operations at six congested rail/rail at-grade crossings where slower moving freight yard operations conflict with passenger train operations. Construction of 25 grade separations at locations of significant rail/highway conflict will reduce traffic congestion and eliminate the possibility of crashes. The CREATE Program Final Feasibility Plan is available at [Final Feasibility Plan](#).

■ 2.2 CREATE Projects Targeted for TIGER II Funds

Three component CREATE projects have been identified for TIGER II discretionary grant consideration as shown in Figure 2.1 and in Table 2.1, **CREATE Grant Funds and Sources/Uses**. The projects in the CREATE Package proposed for TIGER II discretionary funding have all received environmental clearance. These are the CREATE projects that are next in regional priority and for which construction can be initiated most quickly. Table 2.1 shows the sources of funding in place for each project and associated percentages. For all of these projects Federal funding would be obligated by September 2012. All three of the projects were previously submitted in IDOT's TIGER I application. Projects are listed in priority order. Table 2.2 provides the scope and benefits of each project proposed for TIGER funding. Drawings and maps showing project locations, as well as environmental documentation are located at [Project Information](#). A summary of environmental review is located at [Environmental Review Summary](#).

Table 2.1 CREATE Grant Funds and Sources/Uses

Project								TIGER II Grant Request (millions)		
CREATE Package of Projects								\$85.2		
Component Projects in the Package:										
Project Number	Project Type	City	County	State	Congressional District(s)	Urban/ Rural	Total Project Cost (\$ millions)	Grant Funding Requested (\$ millions)	IDOT CREATE Capital Funds (\$ millions)	Share of TIGER/ Match funds
WA3-segment	Rail	Chicago	Cook	IL	Gutierrez (IL-4) and Davis (IL-7)	Urban	6.9	5.5	1.4	80%/20%
WA2-segment	Rail	Chicago	Cook	IL	Gutierrez (IL-4), and Davis (IL-7)	Urban	25.0	20.0	5.0	80%/20%
B9/EW1	Rail	Summit, Bedford Park, Chicago	Cook	IL	Lipinski (IL-3)	Urban	74.6	59.7	14.9	80%/20%

Source: CREATE.

Note: Detailed budgets for each project are located in the project web links within the Project Reports at [Project Information](#).

Note: For B9/EW1, the Total Project Cost includes both final design and construction.

Note: The share of non-Federal funds does not include the \$8.6 million of private railroad funds already expended to advance the design and construction of these projects to this point

Note: All "IDOT Funds" are available and committed to these projects as the funding package is filled out..

Table 2.2 CREATE Projects Scope and Benefits for TIGER II Funding

Project WA3	
Project Description	Project Benefits
The portion of the project for which TIGER II funding is requested is the 2.5 mile segment of NS tracks between 16th Street and Archer Ave. Within this segment the project will • Install connection tracks from CSX to NS, between the two NS tracks, to the BNSF lead track, including replacement/installation of 6 power operated switches. • Install TCS signaled connections with renewed rail to increase speeds and allow a smoother transition between the railroads at 22nd Street. The complete project WA3 will: • Replace/install 29 power operated switches and bi-directional Traffic Control System (TCS) along 6 miles of Norfolk Southern main tracks; • Construct a 2-mile controlled siding track; • Extend by 1 mile the switching lead track to the Ashland Avenue Yard; • Install connection tracks from CSX to NS, between the two NS tracks, to the BNSF lead track; and • Install signaled connections with renewed rail to increase speeds and allow a smoother transition between the railroads at 22nd Street.	This TIGER II application is for the final segment of the WA3 project. Other fully funded segments currently under construction will be complete by mid 2011. Upon completion of this final segment, speeds will increase and smoother transitions will be enabled between the railroads at 22nd street. Project WA3 allows BNSF, CSX, NS and UP trains to use multiple signaled routes through the project area. Trains presently average 5 mph through this area. Signals and power switches will increase speed to 25 mph through all routes. The replacement of hand-thrown switches also significantly reduces delays. A train experiences 15 to 30 minutes of delay for every switch the conductor is required to hand operate. Trains experience delays not only to operating their own switches but also waiting for other trains to navigate the project limits with manual switches. Currently, on the segment seeking TIGER II funding, trains spend up to one hour to traverse the limits of this project. With the completion of this project trains are expected to pass through this segment in as little as 6 minutes. Currently 25 freight trains pass through the WA 3 segment daily. Daily 24, trains cross this corridor including 8 CN trains, 6 Metra Heritage Corridor trains and 10 Amtrak trains to and from St. Louis, and can experience freight conflict. On the St. Louis corridor, Amtrak passengers experience 1,563 passenger hours of delay annually that would be mitigated by this project. On the Metra Heritage Corridor passengers experience 556 annual passenger hours of delay that would be mitigated by this project.

Table 2.2 CREATE Projects Scope and Benefits for TIGER II Funding (continued)

Project WA2	
Project Description	Project Benefits
The portion of the project for which TIGER II funding is requested is the 2.5 mile segment between 16th Street and Archer Ave. Improvements are: • A new bi-directional computerized Traffic Control System (TCS) on the CSX rail line along the CREATE Western Avenue Corridor; • Reconstruction of bridges at 35th Street and 36th Street to accommodate the proposed increase in speed; and • Within this segment 10 hand thrown switches will be upgraded to power switches. The complete Project WA2 improvements are: • A new bi-directional computerized Traffic Control System (TCS) on a 7-mile segment of the CSX rail line along the CREATE Western Avenue Corridor; • 28 hand-thrown switches will be upgraded to power switches; • At the CSX 59th Street Yard signals and switches will be upgraded to improve flexibility in mainline operations; • One of the CSX mainlines will be upgraded between 51st Street and 71st Street from the existing 10 mph maximum speed to allow 25 mph operations; • A new eastward connection to the Belt Railway from a CSX main line; and • Reconstruction of bridges at 35th Street and 36th Street to accommodate the proposed increase in speed.	The segment for which TIGER II funding is sought will complete 6 out of 7 miles of the entire WA2 project. Three and a half miles of WA2 is fully funded and currently under construction. New computerized signaling will alleviate a number of issues on the segment of the WA2 corridor proposed for funding via TIGER II. The corridor currently has limited operational flexibility due to an inefficient signal and switching system and high train volumes making many different types of movements. These conditions result in low operating speeds, limited operational flexibility, congestion, and delay. Currently, most trains spend at least 45 minutes traversing the limits of this segment. With the completion of this project trains are expected to pass through this segment in as little as 6 minutes. Currently, 35 freight trains daily pass through this corridor. An additional 24 trains cross the corridor and face potential conflict and delays, including 16 passenger trains -- 10 Amtrak trains on the Chicago-to-St. Louis line and 6 Metra Heritage Corridor trains. Metra Heritage Corridor riders experience 556 passenger hours of delay annually at this location, which would be partially mitigated by this project. Amtrak riders experience 1,563 passenger hours of delay at this location, which would be partially mitigated by this project. Operations are significantly hindered by multiple hand-thrown switches, which require trains to stop to allow the conductors to exit the train, manually align the switch, and walk back to the train to resume movement. Dispatchers tend to dispatch trains through the corridor based on switch alignment, which reduces the speed, capacity and fluidity of the corridor. Trains experience 15 to 30 minutes of delay for every switch the conductor is required to hand operate. Trains experience delays not only due to operating their own switches but also waiting for other trains to navigate the project limits with manual switches. The signal system upgrades will provide greater visibility to the train dispatcher, enabling him or her to know exact locations of trains. This enhances the dispatcher's ability to route more trains through the territory, expanding overall capacity. Operations into and out of the four intermodal yards, each of which handles five or more intermodal trains per day, will be improved. Together with CREATE Project WA1, this signalization project at the connection between CSX and UP will enable quicker interchanges of trains between CSX and UP.

Table 2.2 CREATE Projects Scope and Benefits for TIGER II Funding (continued)

Project B9/EW1	
Project Description	Project Benefits
Project B9 will connect the CREATE Beltway and East-West Corridors. Improvements are: • New double track connection and crossovers between the BRC and IHB/CSX line at Archer and 63rd in Summit, IL. • The project will upgrade mainline crossovers to accommodate higher speeds, from 10 mph to 25 mph. A <i>crossover</i> is a pair of switches that connects two parallel rail tracks, allowing a train on one track to cross over to the other. • Additional crossovers will be added to the control point at 71st Street to allow access into and out of a signal-controlled siding track. • Project B9 proposes Argo Yard improvements necessary to create yard capacity lost as a result of installing the new main line crossovers. Yard work will include realignment of switching lead tracks, installation of three new yard tracks, and creating new industry lead track to avoid switching within the control point. Project EW1 will • Construct two new 7-mile main tracks around the south side of Clearing Yard, in Bedford Park and Chicago from Harlem Avenue to Southwest Highway. • Install crossovers and turnouts at the CP West Subdivision and CP East End. • Construct three new control points that include the installation of a series of crossovers. • Construct yard improvements to offset the loss of yard capacity due to the new main lines. Yard work includes realignment of switching lead tracks, run-through tracks, tracks leading to the hump used to classify cars, and construction of additional departure yard tracks.	Project B9's new double-track connection will allow speeds of 25 mph and provide increased flexibility for dispatchers. Installation of additional yard tracks in Argo Yard will reduce the amount of time switching cars destined for local industry occupy the main tracks. Project B9 is located near Argo Corn Products, the largest industrial facility in the region, which handles up to 200 cars per day from three carriers (IHB, BRC, and CN). Once complete, Project B9 will allow access to the new main tracks around Clearing Yard (Project EW1) on the new East-West Corridor. Increased freight speeds and improved fluidity on the IHB will allow trains to clear Canal Interlocking more quickly, reducing the potential for freight conflict with Amtrak and Metra and improving travel time, speed, and reliability. Daily, 76 freight trains pass through this location. Metra operates 6 daily trains and Amtrak operates 10 daily trains on the Heritage Corridor which crosses the Indiana Harbor Belt Railway just north of the project limits. Project EW1 will increase speed and efficiency of through trains traversing Clearing Yard. The new main tracks will enable trains to travel on the new route along the south side of the yard at 25 mph. Yard capacity improvements to an interlocking at the east end of Clearing Yard will allow for multiple simultaneous train movements. The new corridor provides critical redundancy in the regional rail network by providing a new east-west route through the region. The additional capacity of this new east-west corridor will more evenly distribute train traffic throughout the regional rail network, which will increase the throughput of the Chicago rail network. In the event of service disruptions along the existing corridors, this route will allow train flows to be maintained.

The proposed projects will move two CREATE Corridors closer to completion, yielding substantial near-term benefits

2.2.1 Beltway Corridor

- One Beltway rail project is proposed for funding in this application
- Three Beltway rail projects already are operationally complete (B6, B8 and B3);
- One project is funded and under construction (B12)
- Three projects received TIGER I funding (B2, B4/B5, and B15). Projects B2 and B4/B5 are under construction.
- With receipt of TIGER II funds, only three Beltway rail projects would remain to be completed (B1, B13, B16).

2.2.2 Western Avenue Corridor

- A portion of the WA3 project is currently under construction and the funded portion is expected to be completed by mid 2011. We are seeking TIGER II funding to complete the project.
- A portion of the WA2 project is currently under construction and the funded portion is expected to be completed by the end of 2010. We are seeking TIGER II funding to complete the next segment of this project, which has independent utility. One remaining segment will be completed in conjunction with another CREATE project.
- One rail project has been completed (WA5).
- One rail project has funding allocated and is near construction (WA 10)
- One rail project is in final design (WA4).
- With receipt of TIGER II funds, only three rail projects will remain to be completed (WA1, WA 7 and WA11).

■ 2.3 CREATE Project Parties

CREATE is a groundbreaking public-private partnership involving 13 public and private agencies that have been working together for more than seven years to advance a complex set of multimodal infrastructure projects in the Chicago region. This application is submitted by Illinois DOT on behalf of the CREATE Partners, listed below. More information is available on each partner by clicking on the links.

[USDOT](#)
[Illinois DOT](#)
[Chicago DOT](#)
[Amtrak](#)
[Belt Railway of Chicago](#)
[BNSF Railway](#)
[Canadian National](#)

[Canadian Pacific](#)
[CSX Transportation](#)
[Indiana Harbor Belt](#)
[Metra](#)
[Norfolk Southern](#)
[Union Pacific](#)

Each of the partners has played a significant role in the advancement of CREATE, with most investing funds in CREATE projects within and outside of the formal CREATE process. As part of this application, state sources will contribute \$21.3 million, providing a non-Federal match of 20 percent.

■ 2.4 Transportation Challenges Addressed by CREATE

Each day, nearly 1,300 trains – 800 passenger and 500 freight – are handled in the Chicago region, with a staggering 40,000 railcars per day. One quarter of the nation's rail traffic travels through the Chicago region¹ where six of the seven Class I railroads converge. Nowhere else in North America does such a quantity of rail traffic converge in a single region, creating a level of passenger and freight congestion that impacts the movement of people and goods nationally.

2.4.1 Intercity Passenger Rail Operations

Chicago is the National Railroad Passenger Corporation's (Amtrak) primary intercity rail hub outside the Northeast Corridor. Intercity passenger volumes

through Chicago have grown considerably in recent years, as have weekday train volumes, which increased from roughly 48 in 2003 to a current level of 56. All of Amtrak's long-distance and regional services serving the Midwest terminate at downtown Chicago's Union Station. In Illinois, Amtrak service operates almost entirely on freight-owned track and has been increasingly affected by conflict with freight operations resulting from growing rail traffic.

Demand for Amtrak service has been growing dramatically. Nationally, ridership in Federal Fiscal Year

2008 was 27.2 million, the second largest volume of passengers using Amtrak since the beginning of operations in 1971. In 2007, the frequency of Amtrak trains operated under a contract with the Illinois Department of Transportation was doubled on three routes to downstate Illinois. The result was explosive growth in ridership on the affected routes, which exceeded 1.1 million riders in FY 2009. Combined, ridership on the three corridors was up 2 percent in FY2009, with ridership on the Chicago to St. Louis corridor up 6 percent compared to FY 2008. Expanding demand for passenger service places additional burdens on Chicago's rail network, particularly as a vastly improved Midwest rail regional network focusing around a Chicago-based hub moves towards reality.

The Chicago Hub shown in Figure 2.2 is one of 10 high-speed rail corridors designated by the Federal Railroad Administration. Using grants from the American Recovery and Reinvestment Act (ARRA), improvements to this corridor will be made that allow passenger rail service from Chicago to St. Louis to operate at speeds of up to 110 mph. All of the CREATE projects in this application are on freight tracks that cross the Chicago to St. Louis passenger route and will provide benefits to intercity passenger trains that frequently face delays due to freight conflict.

Figure 2.2 Midwest High Speed Rail Hub



Source: USDOT.

¹ Association of American Railroads 2006 Rail Waybill Sample, based on traffic analysis by ALK Associates.

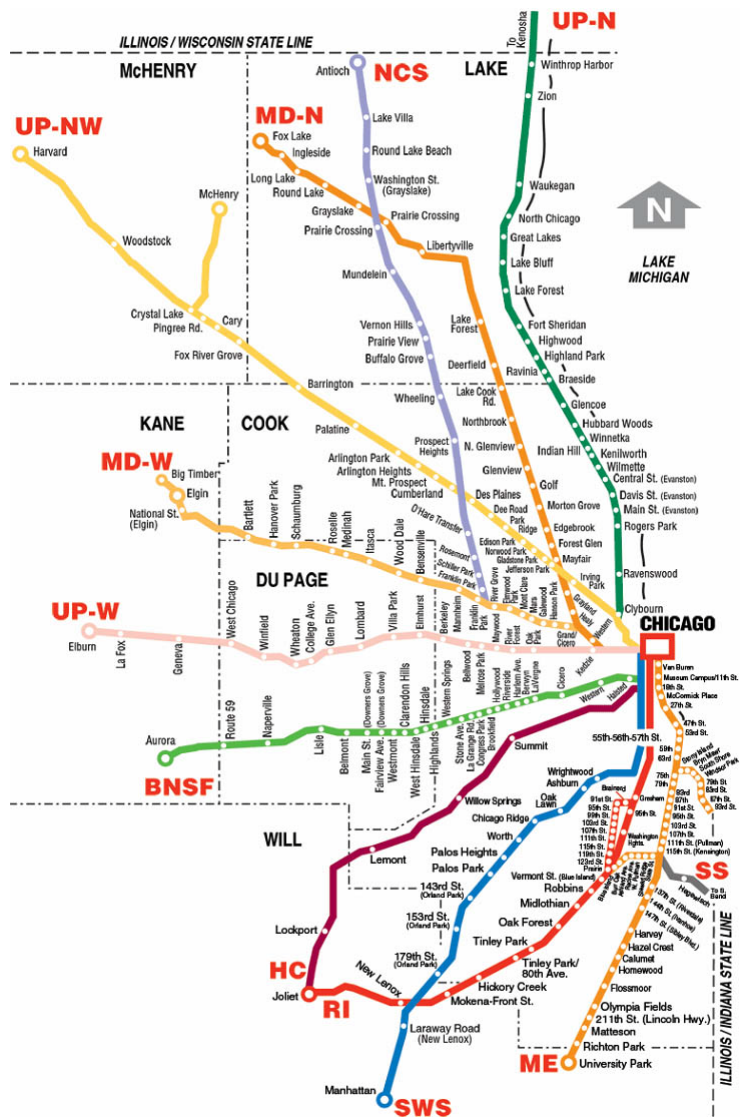
2.4.2 Commuter Rail

Regional services, operated by Metra and the Northern Indiana Commuter Transportation District (NICTD), are exceeded in ridership only by the Long Island Railroad in North America. In 2009, Metra operated 702 weekday trains on a network of 488 route miles with 240 stations and a daily volume of 312,700 unlinked passenger trips throughout the Chicago metropolitan region.

Demand has been rising steadily in recent years, with 2008 volume reaching a record for Metra's 25 year history of 87 million annual passengers. In 2009 ridership was down 5.2 percent to 82.3 million, which is attributed to the recent economic downturn. Since 1983, Metra's first year of operation, ridership has increased 46 percent, averaging 1.7 percent growth annually.

Paralleling the overall growth in ridership has been an increase in trains operated. In the seven years since CREATE was announced in 2003, daily Metra trains have increased from approximately 650 scheduled trains to more than 700. These trains operate over 11 radial lines into the City of Chicago, as shown in Figure 2.3. Nine Metra lines – all except the Rock Island (RI) and Metra Electric (ME) – operate on tracks owned or managed by freight railroads and must coordinate operations with freight carriers. Metra's radial lines cross freight rail lines at grade in several locations, including the heavily traveled Indiana Harbor Belt Railroad (IHB) and the Belt Railway of Chicago (BRC), which is a frequent cause for delays to both passenger and freight trains. The demand for commuter rail service combined with increasing freight volumes and congestion make operating timely and reliable commuter and freight rail service over largely the same rail network increasingly challenging.

Figure 2.3 Metra Commuter Rail Network



2.4.3 Freight Rail Congestion

Figure 2.4 demonstrates Chicago's critical location at the nexus of the North American railroad network. Six of the seven largest rail carriers access the region: the eastern railroads, Norfolk Southern (NS) and CSX; the western railroads, BNSF Railway (BNSF) and Union Pacific (UP); and the two Canadian railroads, Canadian Pacific (CPR) and Canadian National (CN).

The seeds for Chicago's position as the preeminent freight rail hub in North America were sown over 150 years ago when railroads from the east and the west constructed lines to tap the city's strategic location at the foot of Lake Michigan. However, the rail lines built more than a century ago were not configured for the volumes and types of freight being carried currently, and Chicago has become the largest U.S. rail freight chokepoint. A train that may take as little as 48 hours to travel the 2,200 miles from Los Angeles to Chicago, spends an average of 30 hours traversing the Chicago region. Average speeds of freight trains operating in the region typically range from 5 to 12 miles per hour, depending on the route.²

Figure 2.4 CREATE Partners Rail Network



This congestion affects all types of rail traffic, from merchandise trains handling individual carloads containing many different kinds of goods, to unit trains carrying 100 or more carloads of coal, grain, and other bulk products, to trains carrying containers and trailers full of manufactured goods. Commonly known as intermodal traffic, goods moving in containers and on trailers allow ready movement by truck, railway, or container ship. The availability of inexpensive and quality intermodal service has greatly facilitated the massive growth in imports and exports over the past 20 years, with rail serving as the link between ports and inland markets, where final delivery/pick-up is performed by truck. In recent years, intermodal rail traffic has experienced the greatest growth of all types of rail traffic, a trend that is expected to continue even with slackening demand in international traffic. At present, nearly half of all U.S. rail intermodal traffic flows through the Chicago region.³ Delays in rail freight traffic threaten the economic vitality of businesses that rely on these and other important types of rail shipments throughout the region and nation.

Robust growth in traffic is expected to continue through 2035. Freight trade with the Chicago region is forecast to increase 23 percent between 2002 and 2015 and 89 percent between 2002 and 2035, according to U.S. DOT⁴. As the 2010 economic recovery strengthens⁵, traffic volumes will continue to rise,

² CREATE rail simulation model run in 2002.

³ Association of American Railroads 2006 Rail Waybill Sample, based on traffic analysis by ALK Associates.

⁴ Freight Analysis Framework 2

and with it, the system will be further stressed, impacting the cost of shipping goods throughout much of the nation. With Chicago being the primary interchange between the east and the west, the rail lines traversing the region will bear more than their share of future growth as shown at: [Rail Volume Forecast](#).

3.0 CREATE Accomplishments

Since its announcement in 2003, CREATE has made considerable progress in securing initial funding and progressing the Program. A timeline of program milestones is available at [CREATE Timeline](#).

■ 3.1 A Project of National and Regional Significance

CREATE received the last of its SAFETEA-LU funding in May 2009, and obligated all Projects of National and Regional Significance funding received by the end of 2009.

To date, CREATE has received the following funds totaling \$1.01 billion:

- \$100 million – ARRA TIGER I;
- \$300 million – Illinois Capital Bill, CREATE Program
- \$100 million – Illinois Capital Bill, Two individual grade separation projects
- \$1.9 million - Federal Rail Line Relocation Funds ;
- \$90.6 million – Federal Projects of National and Regional Significance;
- \$116 million - Railroad partners;
- \$10 million - IL DOT;
- \$4.2 million - Chicago DOT; and
- \$286.5 million – STP and other sources.

Funding awarded but not yet received totals \$133 million:

- \$133 million – ARRA High Speed Rail.

With this funding, 10 projects have been completed, 6 are under construction, 8 have been advanced to the design phase, and 17 projects are undergoing environmental review. A key CREATE strategy has been to build a pipeline of projects that have completed environmental review and preliminary design so they are ready to advance to the final design and construction phases.

In July 2009, Illinois Governor Patrick Quinn approved the “Illinois Jobs Now” program, including funds to provide \$320 million in state funds for CREATE. This program also authorized over \$100 million in funding for two individual CREATE grade crossing projects (GS15a and GS25). These funds will be released over the course of the multiyear program to fund CREATE projects. This grant application includes \$21.3 million from the Illinois Jobs Now program as the non-Federal match for TIGER II funding.

Each project for which TIGER II funding is requested has independent utility and will provide immediate benefits to the nation and the region by itself. CREATE seeks TIGER II funds to keep the program moving forward until the next Transportation Authorization is passed by Congress, since SAFETEA-LU expired on September 30, 2009 and it is unclear when a new bill will be passed. As a multimodal project involving freight and passenger rail, in addition to highway improvements, this project is not easily funded

⁵ For the first 29 weeks of 2010, carload traffic by the major North American railroads is up 10.2 percent and intermodal traffic is up 13.9 percent compared to the same period in 2009.

via existing programs managed by the modal agencies. If CREATE does not receive TIGER II funds, the program will be hampered in its ability to advance projects and costs will increase.

4.0 CREATE Alignment with Selection Criteria

The CREATE Program was developed to benefit numerous constituencies in the Chicago region and the nation. The CREATE projects will benefit a broad range of transportation system users, including:

- U.S. businesses that ship or receive products or materials via rail:
 - Consumer goods;
 - Energy;
 - Chemicals;
 - Minerals;
 - Aggregates;
 - Motor vehicles;
 - Grain and agricultural products; and
 - Forest products.
- Seaports nationwide that move container or bulk traffic by rail to, from, or through the Chicago region (26 percent of Los Angeles/Long Beach intermodal units, 21 percent of Oakland intermodal units, 47 percent of Portland intermodal units and 54 percent of Seattle/Tacoma intermodal units go to, from, or through Chicago);
- U.S. consumers;
- Amtrak riders traveling to, from, or through Chicago;
- Metra rail commuters in the greater Chicago region;
- Motorists and motor carriers in the Chicago region;
- Rail carriers operating in the Chicago region and their employees and facilities nationwide;
- Future freight rail and intermodal customers worldwide; and
- Local residents impacted by noise and air pollution from current numbers of idling trains.

A comprehensive Benefit-Cost Analysis (BCA), compliant with all requirements in the June 1, 2010 announcement, was performed for the Package of CREATE projects included in this application. This BCA includes:

- Logistics cost savings and truck ton-mile reductions from the University of Illinois Regional Economics Applications Laboratory (REAL);
- Highway travel time reductions from the Illinois Commerce Commission;
- Freight rail transit time reductions from the RTC simulation model of the Chicago region's rail network; and
- Other benefits and costs from sources, including the National Highway Traffic Safety Administration (NHTSA), U.S. Environmental Protection Agency (USEPA), and the Association of American Railroads (AAR).

The BCA shows that the Package of CREATE Projects applied for here has a benefit cost ratio between 5.40:1 (seven percent discount rate) and 8.32:1 (three percent discount rate). Further details on the benefits can be found below in Tables 4.1 and 4.2. Separate spreadsheets detailing the benefit-cost calculations are being submitted with this application. These spreadsheets can be accessed at [BCA Summary](#) and a narrative description of the process is available at [BCA Narrative](#).

Table 4.1 Primary Selection Criteria Benefit-Cost Summary

Category	Package				WA3		WA2			B9/EW1		
	Annual Value (Millions of Dollars)	20-Year NPV (Millions of Dollars – 7% Discount Rate)	20-Year NPV (Millions of Dollars – 3% Discount Rate)	Annual Value (Millions of Dollars)	20-Year NPV (Millions of Dollars – 7% Discount Rate)	20-Year NPV (Millions of Dollars – 3% Discount Rate)	Annual Value (Millions of Dollars)	20-Year NPV (Millions of Dollars – 7% Discount Rate)	20-Year NPV (Millions of Dollars – 3% Discount Rate)	Annual Value (Millions of Dollars)	20-Year NPV (Millions of Dollars – 7% Discount Rate)	20-Year NPV (Millions of Dollars – 3% Discount Rate)
BENEFITS												
State of Good Repair												
Reduced maintenance costs from truck VMT avoided	.23	2.27	3.49	.015	.15	.23	.054	.53	.82	.16	1.59	2.44
Economic Competitiveness												
Logistics Cost Savings	61.67	601.23	966.17	4.00	38.95	62.60	14.48	141.13	226.80	43.19	421.14	676.77
Livability												
Transit (Metra Commuter Rail and Amtrak Intercity Rail) and Motorist Travel Time Savings	1.34	12.68	20.05	.28	2.64	4.18	.87	8.28	13.10	.18	1.75	2.76
Sustainability												
Benefit from Reduced fuel consumption and emissions	.45	4.45	7.11	.02	.23	.37	.09	.87	1.39	.26	2.58	4.12
COSTS*												
Construction Costs (total)	106.50			6.90			25.00			74.60		
Maintenance Costs	.96	8.48	13.38	.24	2.09	3.29	.18	1.61	2.53	.62	5.50	8.67
BENEFIT/COST RATIO												
Benefit/Cost Ratio based on 20 year NPV at seven percent discount rate		5.40			4.68			5.68		5.33		
Benefit/Cost Ratio based on 20-year NPV at three percent discount rate			8.32			6.63			8.82			8.24

Notes: *Maintenance costs for the rail projects will be borne entirely by the private railroad owners. The value of jobs created has not been included in the benefit-cost calculations.

Table 4.2 Secondary Criteria Benefits Summary

Category	Summary
Innovation	Common Operational Picture for railroad operations; projects set the stage for construction of positive train control (PTC); CREATE development of multiple customized new policies.
Partnership	
Jurisdictional/Stakeholder Collaboration	CREATE is a partnership involving 13 private and public stakeholder organizations.
Amount of private debt and equity	\$21.3 million contributed by the State of Illinois.
Collaboration among neighboring or regional jurisdictions	Letters of support for the TIGER II application include the Village of Summit, Village of Bedford Park, City of Chicago, and State of Illinois.
Disciplinary Integration	Community-based organizations with broad livability goals support CREATE, including the Chicago Metropolitan Agency for Planning and Respiratory Health Association.

■ 4.1 State of Good Repair Benefits

The CREATE package of projects fully satisfies the stated criteria for state of good repair.

4.1.1 Upgrade of Projects Critical to Future Economic Stability

As described in Section 2.4, the Chicago rail hub is central to the nation's economic competitiveness and growth. CREATE seeks to rehabilitate and upgrade the existing rail network to preserve and optimize the current system. The projects proposed would repair antiquated rail infrastructure, bringing it up to the standards required for modern day operations. For example, significant trackage that currently employs hand-thrown switches is proposed for upgrade to powered switches. Signal upgrades and the addition of increased track capacity through new connections and additional mainline track will increase freight operating speeds and reduce conflict with passenger operations on the existing network. These improvements will build on the significant investment already made in constructing and maintaining these lines and enhance operations through this system.

4.1.2 Asset Management, Maintenance and Operations

Commitment to CREATE has been demonstrated by the significant investment already made by the CREATE Partners, including \$116 million from the private railroads. A long-term commitment by the partner railroads to maintain and operate the CREATE infrastructure is defined via partnership agreements. Further, before receiving construction funds for any rail infrastructure project, the lead railroad for a CREATE project must sign a funding agreement, including the following language:

When construction of this project is completed, and so long as state and Federal law shall so require, the COMPANY shall maintain at its expense or, by agreement with others, provide for maintenance of the facilities installed with this improvement.

As each CREATE Rail Project is completed, it will become an integral part of the Chicago rail network and will be maintained as part of each railroad's system. Maintenance costs of the freight rail infrastructure developed under the CREATE Program will be borne entirely by the private freight railroads. As an example of the commitment to this maintenance, between 1998 and 2009, a total of \$3.0 billion in capital maintenance investments was expended by the partner freight railroads, Amtrak and Metra to upgrade the greater Chicago rail network. These combined expenditures, averaging \$250 million per year, are in addition to the railroads' contributions to CREATE. The railroads agree to maintain the CREATE Projects at the same level of utility as at construction completion.

4.1.3 Freight Diversion from Truck to Rail

Modeling results show that CREATE implementation would result in a mode shift from truck to rail within the region as well as nationally. With an investment in CREATE as compared to a no-build scenario, the total costs of commodity flows originating from Census Region 8, in which Chicago is located, would be reduced by 0.33 percent. Highway flows from the East Coast would be decreased as a result of CREATE improvement in the Region 8 area and shifted to rail. According to the University of Illinois Regional Economics Applications Laboratory (REAL), 3.3 million truck VMT nationally would be taken off the road annually as a result of the Package of CREATE projects in this application, resulting in a reduction in the cost of highway maintenance of \$232,000 per year.

4.2 Economic Competitiveness Benefits

The University of Illinois REAL calculated that the annual value of logistics cost savings would total \$61.67 million for the Package of projects in this grant application. The cost savings were prorated based on the projects' cost as a proportion of the estimated \$3.05 billion total cost of the CREATE Program.

According to the Berkeley RTC simulation conducted by the CREATE partner railroads, construction of all 71 projects in the complete CREATE Program would significantly increase average speeds and reduce delays along the CREATE Corridors. Table 4.3 shows the number of each type of train in the simulation, average speeds, wait hours, delay hours and elapsed time with and without construction of the complete CREATE Program, during a 96-hour time period. As shown, CREATE forecasts a reduction in elapsed hours of 1,292 train hours over four days, or 323 train hours saved per day. The simulation model redistributed trains through the network, with more trains on the Beltway and East-West Corridors and fewer trains on the Western Avenue Corridor. For more detail on the modeling process, please see the Chicago Rail Improvement Study documentation at [CREATE Rail Improvement Study](#).

A video of the rail simulation is available at: [CREATE Simulation Video](#).

Table 4.3 Full CREATE Program Operational Benefits

Train Type	Average Speeds		Dwell/Wait Hours		Delay Hours		Elapsed Hours	
	Without CREATE	With CREATE	Without CREATE	With CREATE	Without CREATE	With CREATE	Without CREATE	With CREATE
Totals/Averages	11.46	15.57	1,148	755	911	333	4,576	3,284

Benefits to shippers would result from a reduction in the cost of transportation as a proportion of goods production. This affects the cost of goods for consumers and the ability of businesses to make a profit. When it takes rail cars 30 hours to cross Chicago, the cost is borne by businesses, shippers, and consumers. Improvements to Chicago rail operations will help to keep the cost of logistics in check, particularly as related to rail shipments. Keeping U.S. transportation costs reasonable is critical to maintaining U.S. economic competitiveness.

University of Illinois' Regional Economics Application Laboratory integrated the cost savings resulting from reduced freight rail delay forecast via the CREATE rail simulation model into a multiregional U.S. economic model. The model was developed to study two regions, the Midwest (Illinois, Wisconsin, Indiana, Ohio, and Michigan), and the remainder of the U.S. The model identifies 13 business sectors and the economic impact on each from the efficiency improvements to freight rail in the CREATE Program. Total logistics cost benefits resulting from CREATE are assumed to be allocated equally with 50 percent going to increased goods and services and 50 percent to wages and salaries, and are

estimated for this Package of CREATE Projects at \$61.7 million per year as shown in Table 4.4. A detailed description of the modeling approach is available at [University of Illinois Methodology](#).

Table 4.4 Annual Logistics Cost Savings (millions of dollars)

Midwest						
Total	Illinois	Indiana	Michigan	Ohio	Wisconsin	Rest of U.S.
61.68	3.49	1.80	2.58	3.28	1.44	49.06

Source: Regional Economics Applications Laboratory, University of Illinois.

4.2.1 Nonwage Materials

Of the \$106.5 million to construct the Package of 3 projects for which funding is requested, 47 percent of the total cost is for construction materials. Of those materials, approximately 98 percent are sourced domestically while the remainder is purchased abroad because no U.S. suppliers exist. Therefore, the value of materials produced in the United States that will be purchased for construction of these CREATE projects is \$ 50 million, which will generate significant U.S. nonwage economic activity. These benefits are not included in the benefit-cost analysis. One-hundred percent of materials are in compliance with the Buy America requirements.

4.2.2 CREATE Contribution to Economically Disadvantaged Populations

According to the definition of Economically Distressed Areas in section 301 of the Public Works and Economic Development Act of 1965, all the projects in this application are located in jurisdictions defined as economically distressed. The City of Chicago, the location of projects WA2 and WA3, is economically distressed based on unemployment of 1.5 percent above the national average between June 2008 and May 2010. Summit, in which a material portion of project B9/EW1 is located, is distressed based on per capita income of less than 80 percent of the national average.

The railroad industry is a major employer with freight railroads employing 12,482 people in Illinois. Railroad wages are highly competitive, averaging \$100,200 annually including benefits. For most railroad jobs only a high-school diploma is required to apply, and the railroads provide extensive on-the-job training. In the greater Chicago area, 47 percent of the CREATE freight railroad partners' employees are persons of color. CREATE has conducted extensive outreach on employment and procurement opportunities, including participating in 15 job fairs and several supplier fairs in the region, as described at: [Employment and Procurement Outreach](#). Bid solicitations are posted on the CREATE web site and automatically sent to contractors who have expressed an interest.

■ 4.3 Livability Benefits

The project provides benefits that support the livability principles developed by DOT, HUD and EPA as part of the Partnership for Sustainable Communities, in particular by: providing more transportation choices, enhancing economic competitiveness, and coordinating policies and leveraging investments.

4.3.1 Transit Travel Time Savings

CREATE provides significant benefits to intercity and commuter passenger rail users. Benefits to passenger rail users will be realized due to reductions in delay to Amtrak and Metra trains, resulting in travel time savings for riders. All projects in this application will directly reduce Metra and Amtrak delay resulting from freight train interference. The projects listed in Table 4.5 are estimated to reduce Amtrak freight-related delay by 5,043 passenger hours per year, and reduce Metra delay by 1,595 passenger hours per year.

Table 4.5 Passenger Rail Routes Benefited by CREATE Package of Projects

CREATE Project	Metra Route Benefited	Metra Trains Per Day Affected	Amtrak Route Benefited	Amtrak Trains Per Day Affected
WA3	Heritage	6	Chicago -St. Louis (Potential High-Speed Rail Corridor)	10
WA2	Heritage	6	Chicago - St. Louis (Potential High-Speed Rail Corridor)	10
B9/EW1	Heritage	6	Chicago – St. Louis (Potential High-Speed Rail Corridor)	10

4.3.2 Motorist Delay Reduction

The reduction in delay at grade crossings was estimated for the entire Beltway Corridor based on the results from the CREATE simulation model. The model results showed that with CREATE the number of trains was assumed to increase six percent and train speeds were assumed to increase 15 percent. The results calculated for the entire corridor were prorated based on the value of the B9 project as a proportion of the total cost of projects along each corridor. At the 30 grade crossings along the Beltway Corridor, the CREATE Package of Projects included in this application will result in a daily reduction in motorist delay of 14 hours. Along the Western Avenue Corridor 117 daily motorist hours of delay will be alleviated. The total annual benefit from these projects combined will be a reduction of 47,644 motorist hours of delay.

4.4 Sustainability Benefits

The environmental benefits of CREATE investments make a strong contribution to the sustainability of the region. Rail is a highly energy efficient mode of freight transport, offering significant environmental benefits from the standpoint of fuel consumption and greenhouse gas emissions, as well as other impacts, including land-use. According to the Federal Railroad Administration, railroads are 1.9 to 5.5 times more fuel-efficient than trucks, depending on the commodity carried and length of the haul. Greenhouse gas emissions are directly related to fuel consumption. That means moving freight by rail instead of truck reduces greenhouse gas emissions by 75 percent, on average. Improvements made to the nation's rail infrastructure – such as those proposed by CREATE – have the potential to further improve the efficiency of rail operations in the U.S. and to reduce the environmental impact of freight transport.

4.4.1 Reduction in Oil Consumption and Emissions

CREATE will reduce the amount of time trains spend idling due to rail congestion and result in diversion of freight from trucks to rail, resulting in a savings of, 552,386 gallons of diesel fuel per year. This translates into 61,376 barrels of crude oil saved per year.⁶

As discussed earlier, by increasing the speed of trains via CREATE improvements, the amount of time motor vehicles spend waiting at grade crossings will be reduced. CREATE also will reduce the amount

⁶ Based on nine gallons of diesel being generated by each barrel of crude oil, Energy Information Administration.

of time locomotives spend idling waiting to proceed. Combined, the value of emissions reductions and reduced diesel consumption will result in annual savings of \$2.1 million.

■ 4.5 Safety

The CREATE Program will benefit not only the traveling public but also will enhance railroad employee safety. Three CREATE projects proposed for TIGER II funding include upgrading a total of 16 switches from hand-thrown to power operated, which will reduce the potential of employee injury as described at [Rail Employee Safety Benefits](#). CREATE provides important national security benefits by preserving the functionality of the rail network for potential national defense needs as described at [National Security Benefits](#).

■ 4.6 Job Creation and Economic Stimulus

During the construction of the Package of Projects, a total of 1,158 direct and indirect job years are estimated to be created. The distribution of jobs created by quarter is shown at [CREATE Construction Jobs](#). Job estimates were developed based on one job year (including direct, indirect and induced jobs) being created for each \$92,000 of investment. Figure 4.1 shows the distribution of jobs based on the project schedules.

Figure 4.1 Employment Generation

Project	2010		2011				2012				2013				Total Jobs During Period of Construction	Total Job Years
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
WA3					C	C	C	C	C							
WA3 Jobs					60	60	60	60	60						60	75
WA2		C	C	C	C	C	C	C	C	C	C					
WA2 Jobs		109	109	109	109	109	109	109	109	109	109				109	272
B9/EW1	D	C	C	C	C	C	C	C	C	C						
B9/EW1 Jobs	50	355	355	355	355	355	355	355	355	355					355	811
Average Q Jobs Created	50	464	464	464	524	524	524	524	524	464						

DESIGN
CONSTRUCTION

■ 4.7 Secondary Criteria Benefits

Secondary criteria benefits are summarized in Table 4.2.

4.7.1 Innovation

CREATE incorporates innovative technology advancing the state of the practice in rail operations for improved efficiency and safety, which is described below.

Positive Train Control

The CREATE projects that install signals along corridors that currently are unsignalized, or that upgrade an existing signal system, represent major steps toward future installation of Positive Train Control (PTC) in the Chicago area. PTC is a technology that automatically enforces speed limits and permissions to operate over a section of track, thereby reducing the risk of collisions and other incidents that can lead to injuries and property damage. PTC is designed to keep a train within authorized limits on a track and under its maximum speed limit. To accomplish this, sophisticated technology and braking algorithms will automatically bring PTC-equipped passenger and heavy freight trains to a safe stop. This will help prevent train-to-train collisions, overspeed derailments and casualties or injuries to the public and railway workers. Passed October 1, 2008, The Rail Safety Improvement Act of 2008 requires all Class I railroads and passenger railroads to implement a PTC system by December 31, 2015 on all main line track where intercity passenger railroads and commuter railroads operate, as well as on lines carrying toxic-by-inhalation hazardous materials.

Common Operational Picture

Common Operational Picture (COP) is the development of an open interface for integrating information from dispatch systems of all major railroads in the region – tracks, signals, switches, train occupancies, train IDs, etc. – into a single display. While not one of the projects in this application, COP is included in the Visibility Projects category in the overall CREATE program, and will benefit the operation of the full Chicago Terminal system. The output of this work will be that all of the Chicago railroads participating in the CREATE Program will have a fully integrated overview display system that encompasses the entire Chicago area.

The first phase of the project Common Operational Picture – Monitoring Multiple Railroad Operations with an Integrated Track Display and Common Data Protocol – is underway in Chicago. It involves development of a prototype multi-railroad dispatch monitoring system for monitoring train movements for four railroads (BNSF, CSX, IHB and UP). Such a system has maximum effectiveness and value when *all* of the railroads are included; Phase II will add the remaining six rail companies: Amtrak, BRC, CN, CP, Metra, and NS and extend the display region to include the entire Chicago area. In addition, it will transform the network infrastructure of Phase I, which will demonstrate the technological feasibility of Common Operational Picture, into one capable of supporting long-term commercial use. The benefits of COP are:

- Reduced operating costs by providing more efficient operations;
- Improved safety by reducing human and technology failures;
- Enhanced passenger revenue generating capability by attracting more riders through reducing trip times, upgrading customer service quality, increasing reliability, and improving on-time performance; and
- Enhanced public and environmental benefits of passenger and freight rail.

In addition, CREATE has developed numerous innovative management practices described below.

4.7.2 Partnerships and Management Practices

To ensure the effective management of the CREATE Program, a number of management practices and policies have been put in place governing the roles and responsibilities of IDOT, CDOT, FHWA, and the railroad partners. These ensure the program makes steady progress forward and that proper quality controls are in place. For example, Federal funding for CREATE so far has come from the Projects of National and Regional Significance Program, managed by the Federal Highway Administration. However, with the extensive number of projects involving rail infrastructure, policies to govern the types of projects presented by CREATE were not in place given the historic highway focus of FHWA. Therefore, in the early years of the program, a number of policies needed to be developed specific to the CREATE Program. Now that this work has been done, the Program is organized to advance projects quickly and efficiently. A significant policy developed for CREATE is the Systematic, Project Expediting, Environmental Decision-Making (SPEED) Strategy. The SPEED Strategy:

- Addresses the CREATE Program in total;
- Supports systematic decision-making through an expeditious method of moving low-risk component projects forward; and
- Assesses potential environmental impacts in a proportional, graduated way.

A detailed description of the SPEED strategy is available at [SPEED Strategy](#).

A detailed process has been developed to guide all partners in adhering to policies and procedures for designing CREATE projects. The purpose of preparing Phase I reports for the CREATE projects is to fully document the coordinated efforts of the Illinois Department of Transportation and other involved parties in developing the environmental documents and preliminary (30 percent) design. The Phase I manual also helps ensure financial feasibility of projects by defining contingency reserves for projects depending on their stage of development. This document is accessible at [Phase I Manual](#). The Phase II Manual provides guidance on topics, including contracting for professional services and DBE utilization plan development. The Phase II manual is available at: [Phase II Manual](#). A flow chart detailing CREATE processes for Phase II and Phase II is available at [Phase II/III Flow Chart](#).

The CREATE Noise and Vibration Model was developed for CREATE using FTA procedures (see [FTA Noise and Vibration Procedures](#)). Portions of the model also are available at [Noise and Vibration Model](#). Detailed descriptions of CREATE staff positions, committees, and additional policies are presented at [CREATE Partnerships and Management Practices](#).

4.7.3 National and Regional Support

CREATE is a project of national and regional significance with support from a wide range of stakeholders throughout the country and region, including passenger rail advocates, national businesses and civic and municipal organizations. CREATE's application has been supported throughout the nation, from the Port of Seattle/Tacoma to national companies such as Corn Products International. Copies of letters of support for this TIGER II application are available at [TIGER II Letters of Support](#) and more than 35 general CREATE letters of support are accessible at: [CREATE Letters of Support](#).

5.0 Project Readiness and NEPA Status

■ 5.1 Schedule

All projects in this application will obligate TIGER II funds by September 2012. Completion of construction on projects is anticipated by the first quarter of 2013. Detailed construction schedules for all of the projects can be found at [Project Information](#).

■ 5.2 Environmental Approvals

All three projects in this application have secured Categorical Exclusions. Environmental documentation for each project is located at [Project Information](#).

■ 5.3 Legislative Approvals/Broad Project Support

No legislative approvals are required to progress these CREATE projects. CREATE has secured letters of support including the Village of Bedford Park, Village of Summit, City of Chicago, and State of Illinois.

■ 5.4 State and Local Planning

All projects in this Package are in the regional Transportation Improvement Program (TIP). The TIP is available at: [CMAP TIP](#). CREATE is a “central element of the strategic regional freight system” in the RTP.

■ 5.5 Technical Feasibility

All projects in this application have proceeded through preliminary engineering. Geometrics and schematics for each project are available at [Project Information](#).

■ 5.6 Financial Feasibility

The CREATE Program has demonstrated its ability to manage grant funding through its obligation of all PNRs funds and initiation of project construction using TIGER I funds (released by USDOT on July 22 and construction initiated the week of August 2, 2010). All projects have contingency reserves built into construction cost estimates.

■ 5.7 Federal Wage Rate Certification

IDOT has provided the required wage rate certification letter at [Wage Rate Certification Letter](#).

■ 5.8 Material Changes from Pre-application

There have been no material changes from the pre-application form.

6.0 Contact Information

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Final note: No material changes need to be made to the Pre-Application form for this Package of Projects.