TIGER V Grant Application
for CREATE Grade Separation Project: 25th Avenue and Union Pacific, Bellwood and Melrose Park, IL

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

June 3, 2013

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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 V Grant funds to support a Grade Separation project from the Chicago Region Environmental and Transportation Efficiency (CREATE) Program. The project has independent utility and any funding CREATE receives will be used to maximum benefit. A densely populated region of 9.5 million residents, greater Chicago experiences high levels of roadway traffic and functions as North America's busiest rail hub. The region handles 1,300 trains daily: 500 freight and 800 passenger. The tremendous train volumes, which contribute to the economic health of the nation and region, result in significant local community impacts. While healthy levels of freight rail activity serve businesses and consumers across the country and around the world, the local impacts include many hours of vehicles waiting at rail grade crossings. The Grade Separation Project of 25th Avenue and the Union Pacific West Line in Bellwood and Melrose Park, Illinois, has among the worst motorist delays in Northeastern Illinois. These delays have negatively impacted the community's livability and economic development potential for decades.

While funds were committed to the project in the 2012 State of Illinois Capital Bill (Illinois Jobs Now!), bonds must be sold to generate the revenue. Significant uncertainly exists as to when funding may actually become available for this project. Given its priority by the Illinois Department of Transportation (IDOT) and by the CREATE Program, IDOT presents this TIGER V application seeking funding to ensure this critical project can be advanced rapidly and with a more predictable and secure timeframe. Based on IDOT's previous experience with the timing of securing funds for projects in Illinois Jobs Now!, it is estimated that funding would be available no sooner than November 2014, approximately one year later than would be anticipated if the project were to receive a TIGER V grant award. Therefore the incremental (or "marginal") benefits of the project are calculated based on acceleration of project construction by one year. Within this application both the total benefits of the project under a TIGER V grant and the incremental benefits of project acceleration due to TIGER V funding are described. For reference, the benefit-cost analysis spreadsheet includes calculations for the total project benefits under TIGER V, the total project benefits under Illinois Jobs Now!, and the incremental benefits of the accelerated project.

Section 2.0 provides a description of the CREATE Program, description of the Project for which funding is requested, information on the Project Parties, Grant Funds and Sources/Uses, and a discussion of the Chicago region's role in passenger travel and freight trade; Section 3.0 describes CREATE accomplishments including the successful use of previously awarded TIGER I and TIGER IV funds; Section 4.0 presents the expected benefits of the highway-rail grade crossing separation project for which funding is being requested; and Section 5.0 presents the project's readiness and NEPA status. The project strongly contributes to each of the Primary and Secondary Selection Criteria outlined in the Final Notice of Funding Availability, dated April 26, 2013, including the following performance measures.

- Long-Term Outcomes:
  - State of Good Repair – The new facility will improve the functioning of the roadway due to removal of the at-grade crossing and reduced maintenance costs of the new facility amounting to an incremental benefit of $25,552 (three percent discount rate) or $852 million over 30 years at a three percent discount rate.
  - Economic Competitiveness – Reduction in delay to motorists and trucks due to separation of the roadway and rail line, will provide $ 478,443 in incremental benefits at a three percent discount rate and $24 million in benefits over 30 years at a three percent

discount rate. The reduction in delay at this location will enable community development activities to occur including an anticipated 268,900 square feet of commercial and industrial development.

- Livability –The reduction in more than 70,000 annual hours of motorist delay and more than 5,000 annual hours of truck delay will increase livability of the region.
- Sustainability – The reduction in vehicle idling at the crossing will not provide an incremental benefit in reduced vehicle emissions but will result in a total sustainability benefit of $492,672 at a three percent discount rate over 30 years.
- Safety – Estimated incremental safety benefits are $553,059 at a three percent discount rate and avoidance of crashes over 30 years will result in benefits of $18 million at a three percent discount rate over 30 years.
- Project Readiness: This project will meet all local, state and federal requirements by June 2014. Completion of contract plans is anticipated by November 2013.

- Benefit-Cost Analysis: The incremental benefit-cost ratio for the project presented herein is 1.06:1 at a three percent discount rate, which is used as directed by the "2013 Benefit Cost Analysis Guidance for TIGER Grant Applicants" because alternative use of the funds dedicated to the project would be used for other public expenditures on the CREATE program. With funding from TIGER V, total benefits and costs over thirty years result in a benefit cost ratio of 1.04:1 at a three percent discount rate (Table 4.1). The full benefit-cost analysis spreadsheet is available at Benefit Cost Spreadsheet and the descriptive narrative of the benefit cost methodology is available at Benefit Cost Narrative.
- Project Readiness and NEPA Status
  - Project Schedule – A feasible and sufficiently detailed schedule for the project can be found at Schedule.
  - Environmental Approvals – A Categorical Exclusion was received from FHWA on October 5, 2012. The full Project Report containing environmental information is available at Project Report.
  - Legislative Approvals – No specific legislative approvals are required to advance the project. Letters of support have been received from the Village of Bellwood, Illinois Village of Melrose Park, Illinois, the State of Illinois, and Cook County (the county where the project is located.
  - State and Local Planning – This project is in the region's Transportation Improvement Program. CREATE is a central element of the strategic regional freight system in the RTP which can be found at Go To 2040 Plan.
  - Technical Feasibility – Preliminary engineering has been completed for the project. Final engineering is underway and contract plans are expected to be complete by November 2013.
  - Financial Feasibility – With funding from TIGER V grant funds, the Illinois Commerce Commission, and the freight railroads this project would be fully funded and could be constructed more quickly than if using Illinois Jobs Now! funds, for which the timing of availability is uncertain. The project has contingency reserves built into the cost estimate.
- Secondary Selection Criteria:
  - Innovation – This projects continues the innovative tradition of the CREATE Program, which has been successfully operating for ten years.

– Partnership and Management Practices – A strong coalition of private railroads and four government agencies has been working on CREATE since inception. CREATE Partnerships and Management Practices are detailed in Section 4.7.2 and the linked web materials.

In addition, the grade separation project fully meets the priority criteria shown below:

- Requested TIGER V funding of $17.5 million would advance the project construction by at minimum one year give the uncertain timing of obtaining the funds anticipated from the Illinois Jobs Now! Capital program.
- Funds will be obligated by June 30, 2014 as per the April 26, 2013, NOFA.
- The project significantly impacts desirable long-term regional benefits (see below).
- The project quickly creates/preserves jobs in economically distressed areas, with the project located in an economically distressed area and job creation beginning by the second quarter of 2014. See Sections 4.2.2 and 4.6
- The project continues the use of innovative strategies for CREATE. see Section 4.7.1.
- The project will benefit from strong, established public-private collaboration. See Section 4.7.2. Many other public, nonprofit, and private organizations support CREATE. See Section 4.7.3.
- The project significantly improves long-term efficiency in the movement of people and goods, making the region more attractive for employers. See Sections 4.2 and 4.3.
- The application is supported by the Chicago Metropolitan Agency for Planning, whose mission includes many non-transportation issues. See Table 4.2.
- The project will result in more livable communities through direct benefits to Bellwood and Melrose Park, Illinois and improved mobility along the corridor – see Section 4.3.
- Construction is anticipated to be complete for all five projects funded by the TIGER I discretionary grant by November 2013. Construction will be completed for the two projects funded by TIGER IV by May 2014.

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 70 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 CREATE operational goals can be found at Program Goals. CREATE 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;
- Reduce traffic congestion on the region's highways;
- 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;
- 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 70 Projects in the CREATE Program include:

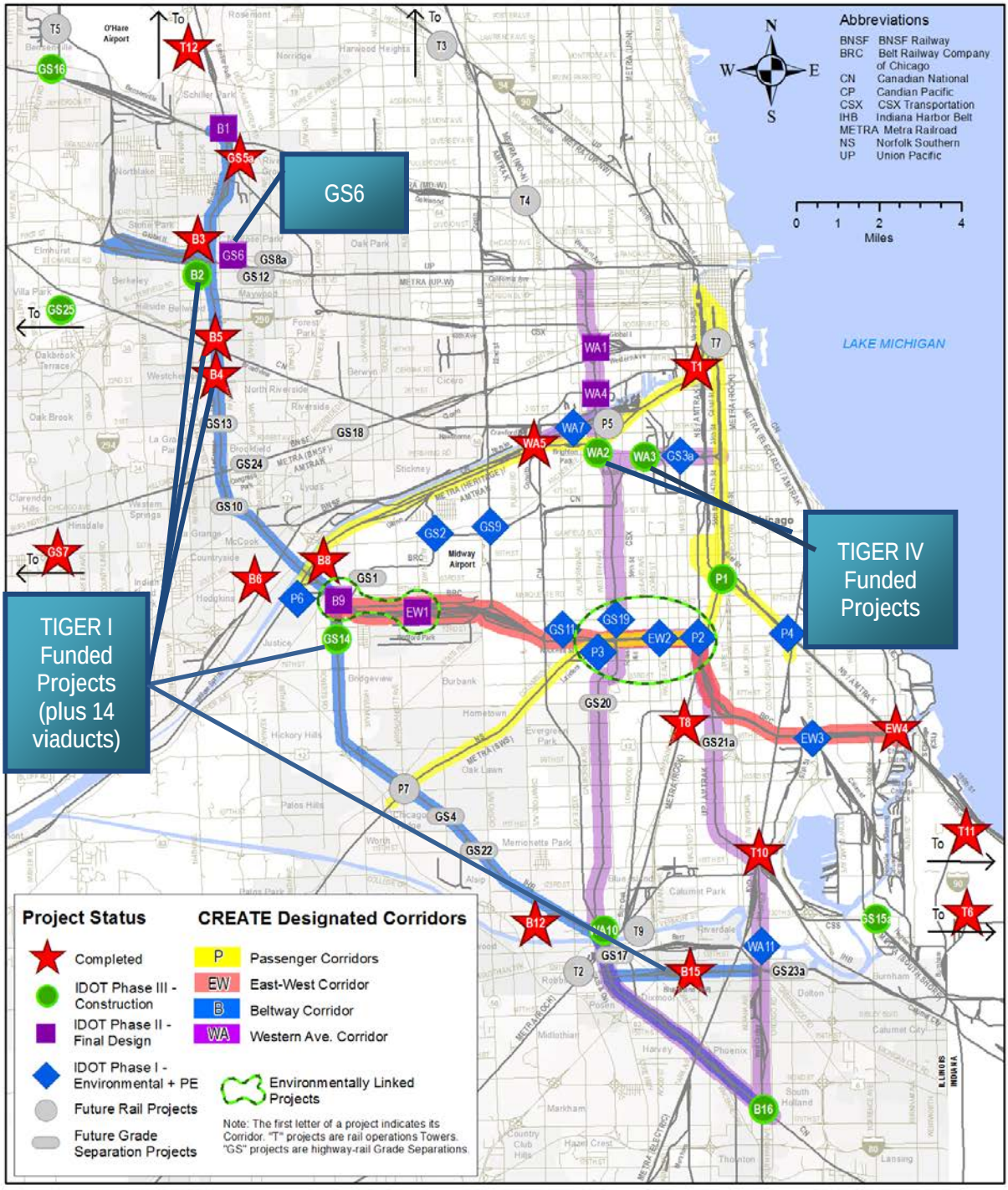
- Grade separation of 25 highway-rail crossings;
- Grade separation of six railroad crossings (rail-rail flyovers);
- Extensive upgrades of tracks, switches, and signal systems via 36 rail projects;
- Viaduct Improvement Program;
- Grade crossing safety enhancements; and
- Rail operations visibility improvements (Common Operational Picture).

The CREATE Program is designed to address systemic issues in the areas of highway/rail conflict, freight movement, and freight/passenger rail conflict. Construction of 25 grade separations at locations of significant rail/highway conflict will reduce traffic congestion and eliminate the possibility of crossing related crashes. Through focused investment along four rail corridors, the Program will result in additional capacity and improved connections within and through the Chicago metropolitan area rail network. 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. The CREATE Program Final Feasibility Plan is available at Final Feasibility Study.

2.2 CREATE GS6 Project Description

The 25th Avenue and Union Pacific grade crossing separation (CREATE Project GS6) in Bellwood and Melrose Park, Illinois (shown in Figure 2.2) is the top priority grade crossing separation project in the CREATE Program and the CREATE project for which construction can be initiated most quickly. Section 2.2.4 describes the sources of funding in place for the project and the percentage non-Federal funding that has been committed. For this project Federal funding would be obligated by June 30, 2014, assuming grant award by August 3, 2013. The project location with respect to other CREATE Program projects is shown in Figure 2.1.

Figure 2.1 CREATE Project Construction Status, GS6 Project Location, and Location of Previous TIGER-Funded Projects



Note: Viaduct projects in the City of Chicago are not displayed.

2.2.1 Purpose and Need for CREATE Project GS6

The purpose of the proposed project is to construct a grade separation of 25th Avenue and the Union Pacific (UP) Railroad in Bellwood and Melrose Park, Illinois. This project was initiated to relieve traffic congestion along 25th Avenue resulting from the at-grade crossing with the UP Railroad and to improve safety in the project area. A grade separation of 25th Avenue and the railroad would improve the safety of the crossing; eliminate long wait times for vehicles at the crossing, improve the efficiency of traffic operations along 25th Avenue, reduce the potential of delays to Metra commuter rail, stimulate economic development in the area, provide improved emergency response times, eliminate crashes between trains and vehicles, and reduce crashes between vehicles on 25th Avenue.

25th Avenue is a major north-south corridor for the entire west metropolitan Chicago area. 25th Avenue is a four-lane arterial in western Cook County extending from Lawrence Avenue in Schiller Park to Ogden Avenue (US 34) in Brookfield and crosses the UP Railroad between St. Charles Road and Lake Street in Bellwood, Illinois. Average daily traffic on this segment of 25th Avenue is 19,000 vehicles, comprised of 95 percent passenger vehicles and 5 percent trucks.

High passenger and freight train volumes, coupled with staging of trains out of the Proviso Yard lead to long closures of 25th Avenue. The crossing gates are activated for more than seven[1] hours per day, with many closure incidences up to 20 minutes or longer, as yard trains move slowly and occasionally stop altogether. This results in long delays, traffic back-ups, congestion, and vehicular crashes along 25th Avenue. Presently, the daily freight rail traffic count is comprised of approximately 60 freight trains, plus additional train movement across 25th Avenue as trains are staged to enter or depart the Proviso Yard, UP's largest facility in the Chicago region. Proviso Yard handles 2,800 railcars per day, contains the Global II intermodal terminal and classifies carload traffic. The Proviso Freight Yard begins 790 feet to the west of the crossing. In addition, 59 scheduled Metra Union Pacific West (UPW) passenger trains pass through this location. Figures 2.3 through 2.5 show typical conditions at GS6 when a train activates the gate.

A review of 2006 to 2008 crash data indicated that a total of vehicle 69 crashes recorded within the project limits that appear to be related to the at grade crossing. There were no injury crashes involving vehicles and trains during this timeframe. Frequent closures of the railroad crossing contribute to rear end and sideswipe crashes as vehicles either stop/slow down to make turns, make way for turning vehicles or maneuver around stopped vehicles. There are no left-turn lanes at the two intersections closest to the at grade crossing.

[1] Extrapolated from field observations at GS6 on May 7 and 9, 2013.

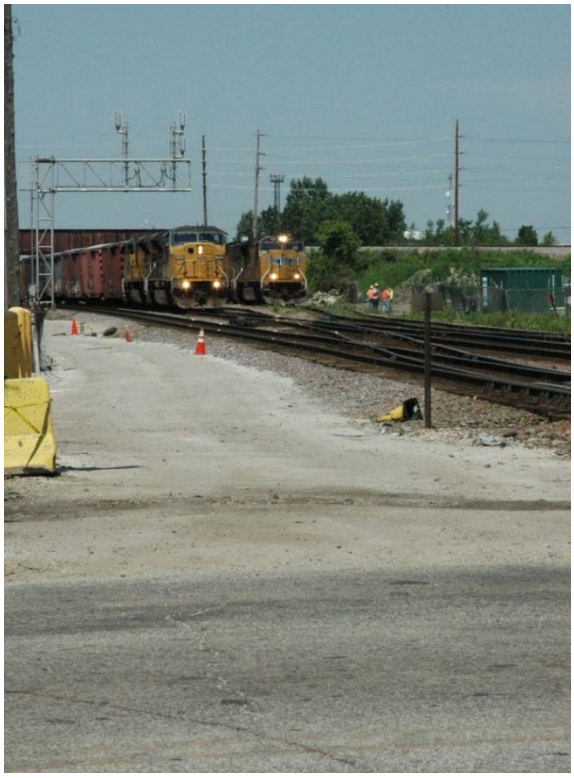
Figure 2.2 Location of GS6 Project and Union Pacific Proviso Railyard

Source: Google Maps

Figure 2.3 Approaching GS6 Crossing on 25th Avenue

Source: CREATE Program, 2011

Figure 2.4 UP Trains Approach GS6 Crossing



Source: CREATE Program, 2011

Figure 2.5 Vehicles Backed Up at GS6 Crossing

Source: CREATE Program, 2011

2.2.2 Scope of Work

The GS6 scope of work proposes to elevate the roadway over the UP tracks using a bridge. Details on specific elements are provided below.

Typical Sections – Between St. Charles Road and Grant Avenue, the project proposes two 11-foot through lanes in each direction and an 11-foot median/left turn lane; between Grant Street and Lake Street there will be two 11-foot through lanes in each direction.

Intersections – The intersection of 25th Avenue and Grant Avenue is being improved to include an 11-foot wide left turn lane for north and south bound traffic. The storage length for this left turn lane will be 125 feet. The intersection of 25th Avenue and Main Street is eliminated as a result of this improvement. An existing driveway on the west side approximately 500 feet south of Lake Street will be improved. An 11-foot wide northbound left turn lane on 25th Avenue will be added and the driveway will be widened to allow for separate left and right turn lanes for exiting vehicles. The storage length for the northbound left turn lane on 25th Avenue at the commercial driveway would be 185 feet.

Sidewalks - A new sidewalk, 5 to 7 feet in width, will be constructed on the west side of 25th Avenue south of Grant Avenue. On the east side of 25th Avenue, south of Grant Avenue, due to right of way constraints, a 4 to 7 foot side walk will be constructed. North of Grant Avenue, a 5 to 10 foot wide sidewalk will be constructed on the west side. North of Grant Avenue, on the east side, a 4 to 6 foot wide sidewalk will be constructed north of the proposed bridge. No sidewalk will be constructed on the bridge on the east side. A design exception has been approved for locations where standard sidewalk widths cannot be provided.

Vertical Alignment – The preferred improvement is to construct a roadway bridge over the railroad. As a result, the profile of 25th Avenue will be raised to provide a clearance of 24 feet over the railroad tracks. Figure 2.6 shows a rendering of the proposed project.

Figure 2.6 GS6 Project Rendering

Value Engineering Study

A value engineering study was conducted to ensure the project was designed for maximum functionality at minimum cost. The Value Engineering Final Report documents the aspects of the project design investigated and the Approval Form notes the final elements carried forward.

Environmental documentation of the project's receipt of a Categorical Exclusion is provided in the Project Report. The detailed project schedule is provided at Schedule. To accommodate the new overpass, plans call for the acquisition of 1.73 acres of adjacent property, which will result in the displacement of three business properties and one residential property. The Village has good relationships with the entities, has communicated with the property owners about the upcoming land acquisition, and all parties are supportive. The fair market value of the properties will be determined and the impacted properties will be compensated as part of the acquisition process in accordance with the state and/or federal laws. The engineering team has a high level of confidence in the project schedule given it was recently fully re-evaluated as part of the value engineering study.

2.2.3 GS6 Relationship to Previous TIGER-funded Projects

Figure 2.6 shows the location of GS6 as related to other CREATE Program projects, as well as its relationship those projects funded with previous TIGER grants. The CREATE GS6 project is directly related to and will build on the B2 project, funded under TIGER I. The B2 project, now nearly finished, adds a third mainline for 3.5 miles on the UP West corridor and a new connection between the Indiana Harbor Belt and UP that has enabled trains to travel 70 mph through the GS6 project area. Given the increased capacity provided adjacent to the Proviso railyard and through the Bellwood Metra station area, the area will be able handle more rail traffic. Additionally, there will be an increase from two to three mainline tracks as well as one existing yard track once B2 is finished in August 2013. This brings the total number of tracks through the crossing to four, allowing more trains to operate simultaneously in the project area. Gate-down time at the 25th Avenue and UP crossing is likely to increase. More information on the status of projects funded via TIGER I and TIGER IV grants is provided in Section 3.2.

2.2.4 Grant Funding Sources and Uses

Table 2.1 shows the total construction costs, non-federal funds and the TIGER V grant request. The original funding plan for CREATE Project GS6 was for the State's portion of the cost of the project to be funded with appropriations from the Transportation Series B Bond Fund as a part of the Governor's Illinois Jobs Now program (IJN!). However, due to IJN! Funding uncertainty and the project's construction readiness, the CREATE partners are seeking TIGER V funding to accelerate project completion.

Unlike prior capital programs funded with bonds, where the General Assembly would fully authorize the issuance of bonds to provided liquidating cash and grant limited amounts of appropriation every year thereafter, IJN! was enacted with the full amount of the program appropriated, but only partial authorization. The initial authorization of $600.4 million (against appropriations of $2.85 billion) was enacted in July 2009. This was followed by subsequent authorization increases enacted in March 2011 and July 2012.

All of the IJN! Appropriations have been programmed, including GS6, but that is only part of the process of being able to pay for the project. At the present time, authorization is insufficient to provide the liquidating cash for all of the programmed projects. As of the middle of May 2013, there is no legislation

pending before the General Assembly that would provide any of the remaining $300.1 million in authorization that is still needed to fully support the appropriations.

It is expected that there will be no authorization increase during the spring 2013 General Assembly session. The next opportunity for the General Assembly to address this issue would be in the fall 2013 Veto Session. However, at the present time it is not expected that IJN! Funding will be addressed in the Veto Session. The General Assembly may or may not address the authorization issue during the spring 2014 session.

In summary, there is no certainty as to when the General Assembly will address the authorization issue: hence, until they do there is no liquidating cash for the CREATE GS6 project. In another sense, the CREATE GS6 project is "programmed" but it is not technically funded until there is a General Assembly authorization and the entirety of the appropriation has been released by the Governor's Office. Thus, it is very unlikely that funding would become available before November 2014. Therefore, the incremental benefit cost analysis is performed using the assumption that TIGER V funding will advance the project schedule by at minimum one calendar year.

Table 2.2 provides details on the jurisdictions in which the project is located.

Table 2.1 CREATE GS6 Grant Funds Sources and Uses

Project Construction Cost	Illinois Commerce Commission Funds	Freight Railroad Funds*	Non-Federal Funds	Percent Non-Federal Funds	Grant Request	Percent Grant Request
$31.1M	$12M	$1.6M	$13.6	44%	$17.5M	56%

*Estimate. Freight railroads pay five percent of structure cost that spans over railroad right-of-way.

Table 2.2 GS6 Project Location Information

City	County	State	Congressional District	Urban / Rural
Bellwood and Melrose Park, IL	Cook	IL	Davis (IL – 7)	Urban

2.3 CREATE Project Parties

CREATE is a groundbreaking public-private partnership involving 13 public and private agencies that have been working together for ten 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 both within and outside of the formal CREATE process.

A separate entity was established specifically for the development of the GS6 project: the West Cook Railroad Relocation and Development Authority (WCRRDA). The WCRRDA is a separate unit of government created by the Illinois State legislature. The Authority has a seven member board and includes two representatives each from Maywood, Bellwood and Melrose Park. The Office of the Chairman rotates annually. The Authority's primary purpose is to undertake development of the GS6 grade separation project. The resolution establishing the WCRRDA is available at WCRRDA Charter.

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 moving through the region. One quarter of the nation's freight rail traffic travels through the Chicago region[2] where six of the seven Class I railroads converge. The northeastern Illinois region is greatly impacted by this level of freight and passenger rail traffic at its 1,468 public highway-rail grade crossings. Nowhere else in North America does such a quantity of rail traffic converge in a single region, creating a level of motorist, passenger and freight rail congestion that impacts the movement of people and goods both regionally and nationally.

2.4.1 Rail – Highway Conflict

Rail - highway conflict is an ongoing challenge in greater Chicago. Of the 70 projects in the CREATE Program, 25 address at-grade rail /highway crossings. Given the importance of the Chicago region as a rail hub and the anticipated growth in freight and passenger rail traffic, these projects are critical to maintain community quality of life given current rail volumes and the expectation of future increases. As noted in the May 22, 2013 issue of The Atlantic Cities blog on "the Forgotten Urban Transportation Problem We Should be Fixing", conflicts between freight and urban quality of life are even more pronounced in places like Chicago. The article notes the challenges of the " hub dilemma — the additional layer of commercial traffic that accrues at international nodes like …Chicago".

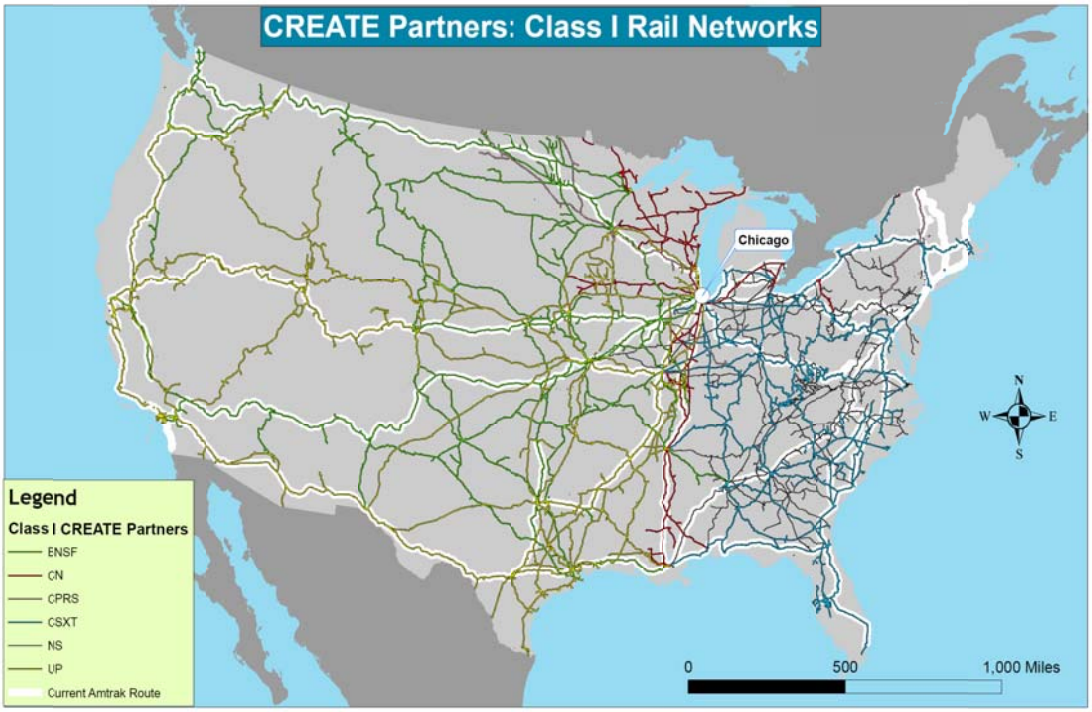
A number of major railyards are located throughout the Chicago region to process railcars, transfer cars and trains between eastern and western railroads, and build trains for transport to points east and west of Chicago. The Union Pacific Proviso railyard just west of the CREATE Project GS6 is one of the most significant yards in operation, operating 24 hours per day, seven days per week. Not only are the current levels of rail traffic conflict at this location extremely problematic, but the potential for increased train volumes and more delays is also of great concern to the affected communities.

The project location where the Union Pacific West line crosses 25th Avenue in Bellwood is a primary example of the extent of traffic disruption and limits to economic development that result from this conflict and that the GS6 project seeks to resolve. Unpredictable travel times along corridors are deterrents to real estate developers and potential community investors. The delay at the GS6 location has been a barrier to economic development for both Bellwood and Melrose Park for decades.

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

Figure 2.7 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). Robust growth in rail traffic is expected to continue through 2040. Freight rail trade with the Chicago region is forecast to increase 48 percent by weight and 304 percent by value between 2007 and 2040, according to U.S. DOT[3]. 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 the economic recovery strengthens, traffic volumes will continue to rise, and with it, the system will be further stressed, with delays at at-grade crossings only increasing.

Figure 2.7 CREATE Partners Freight Rail Network



2.4.2 Commuter Rail

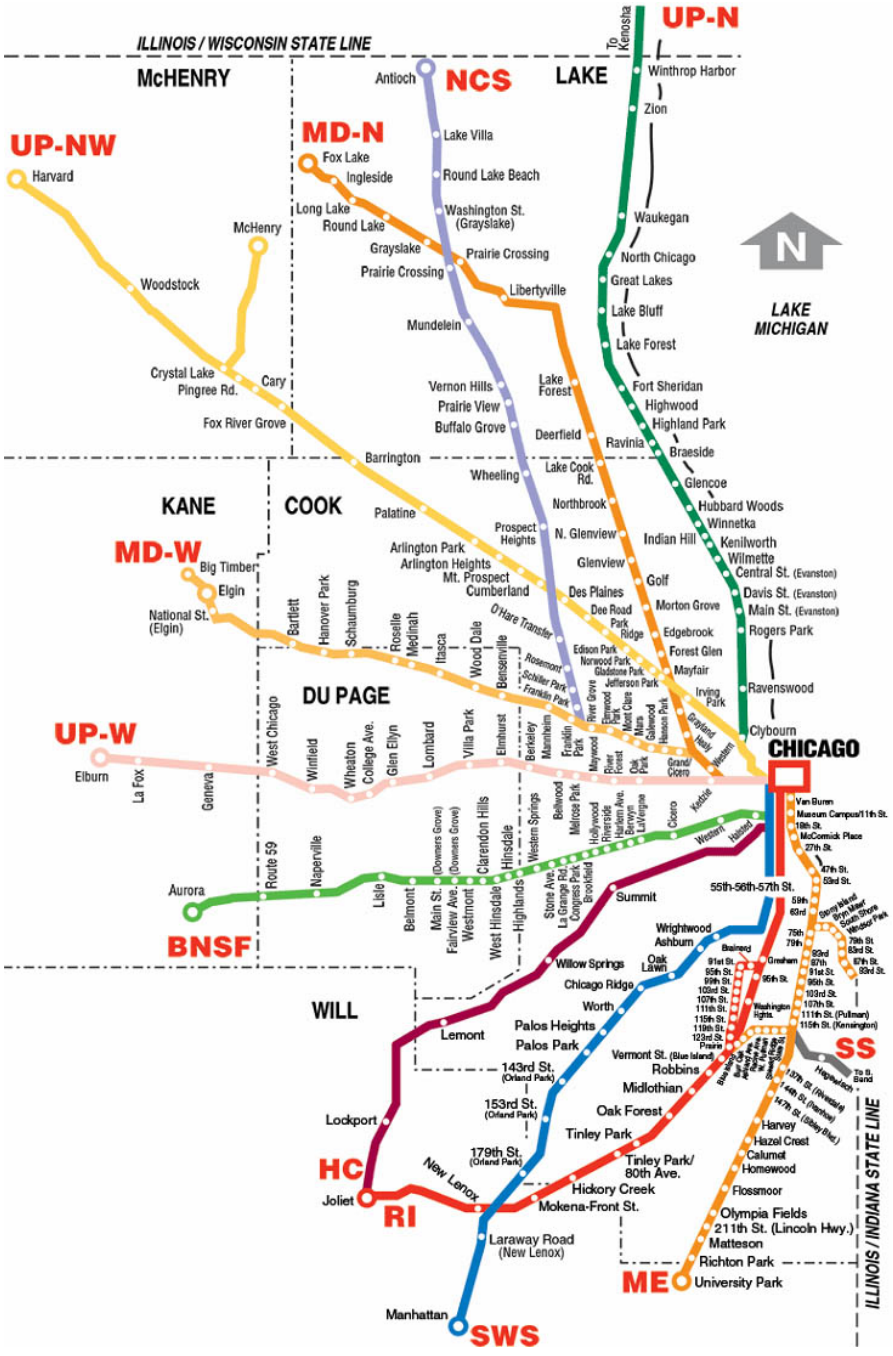
Regional services, operated by Metra and the Northern Indiana Commuter Transportation District (NICTD), are exceeded in ridership only by the Long Island Railroad in North America. In 2010, Metra operated 702 weekday trains on a network of 488 route miles with over 240 stations and a daily volume of 301,200 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. There were 81.3 million passenger trips reported in 2012. Since 1983, Metra's first year of operation, ridership has increased 44 percent, averaging 1.5 percent growth annually.

[3] Freight Analysis Framework 3.

Paralleling the overall growth in ridership has been an increase in trains operated. In the eight 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 2.8. The GS6 project is on the UP-W line, which carried 8.1 million passenger trips from July 2011 to June 2012.

Figure 2.8 Metra Commuter Rail Network



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 Timeline.

3.1 A Project of National and Regional Significance

CREATE has received funding from Federal, state and local sources. To date, the following funds have been received or committed totaling $1.2 billion:

- $100 million SAFETEA-LU PNRS
- $100 million TIGER I
- $10.4 million TIGER IV
- $126 million ARRA High Speed Rail
- $1.9 million Federal Rail Line Relocation
- $410 million Illinois DOT (Illinois Jobs Now!, PNRS/TIGER match & grade separations)
- $12 million Illinois Commerce Commission (to be used for GS6)
- $10.1 million Chicago DOT
- $234 million Railroad partners
- $236 million Pre - CREATE Funds (various sources)

With this funding, 17 projects have been completed, 12 are under construction, six have been advanced to the design phase, and 13 projects are undergoing environmental review. A map documenting the status of construction is located at Project Status Map and Chart. 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. The GS6 project has completed environmental review and will complete contract plans by November 2013.

The Illinois Commerce Commission has programmed $12 million for construction of the project as shown in its Programming Letter. The freight railroads have committed an estimated $1.6 million to this project per the requirement to contribute five percent of rail-highway grade separation construction costs and are supportive of this project as evidenced by letters of support from Union Pacific and the Association of American Railroads.

As noted in section 2.2.4, receipt of TIGER V funds would accelerate construction of Project GS6 by at least one year given recent challenges in securing funds authorized under Illinois Jobs Now!

3.2 Effective Use of TIGER Grant Funds

The CREATE Program was very appreciative to receive a TIGER I grant of $100 million to fund five projects and a TIGER IV grant of $10.44 million for two projects. The status of all TIGER-funded projects is listed in Table 3.1 below. All the projects funded with the TIGER I grant will be complete by October 2013. The TIGER IV funded projects are anticipated to be completed by May 2014.

For each of the TIGER funded projects, the CREATE program tracks a series of performance measures to evaluate the results of the projects. The performance measures vary depending on the project type. For example, for the rail signalization upgrades along the Indiana Harbor Belt (Projects B4 and B5) the performance measures are: Average daily total train delays (total trains affected); Average daily train

delays (minutes of elapsed time); and Average freight train speed in mph. Two of the projects are still under construction and will be completed later this year (B2 and GS14) and three were completed in the past year (B4/B5, B15, Viaduct Improvement Program). Therefore limited data on results is available thus far. The most relevant project for comparison to GS6 is GS14, a grade crossing separation of CSX and 71st Street in Bridgeview, Illinois, which will be completed by the fall of 2013. For the Chicago DOT viaduct improvement program, before and after photographs document the substantial improvements resulting from the 11 projects funded by TIGER.

Table 3.1 provides the status of projects having received TIGER I or TIGER IV funding.

Table 3.1 Status of CREATE Projects Receiving Previous TIGER Funding

Project	Description	Status	Date Completed/*To Be Completed*
TIGER I-Funded Projects			
B2	Add 3.5 miles off third mainline on UP-Geneva subdivision; upgrade 3 control points; upgrade Bellwood and Berkeley Metra Stations	90% Complete; anticipated complete date of early third Q 2013	*Early 3rd Quarter 2013*
B4/B5	Installed a new bi-directional computerized Traffic Control System (TCS) along a seven-mile segment of the Indiana Harbor Belt (IHB). This project upgraded over a dozen hand-thrown switches to power switches.	Complete	August 9, 2012
B15	A new bi-directional computerized Traffic Control System (TCS) was installed on a three-mile segment of Indiana Harbor Belt (IHB) mainline track along the north side of Blue Island Yard.	Complete	October 15, 2012
GS14	Construction of a grade separation underpass at the existing CSX railroad tracks in Bridgeview, IL	The project is currently 50% complete and on a revised schedule to be complete by October 8, 2013. See Note for details	*October 8, 2013*
Viaduct Program 1 (14 Viaducts)	Roadway, pedestrian and drainage improvements at 14 locations under rail viaducts	Complete	February 8, 2013
TIGER IV Funded Projects			
WA2 Segment B	Install new bi-directional computerized Traffic Control System (TCS) on the CSX rail line; upgrade 10 hand thrown switches to power switches	Under construction	*April 29, 2014*
WA3 Segment C	Install connection tracks from NS to CSX including replacement, installation of six power operated switches. Install a new bi-directional computerized Traffic Control System (TCS)	Under construction	*May 1, 2014*

NOTE: The GS14 project consists of the construction of a grade separation underpass at the existing CSX Railroad tracks, consisting of retaining walls, 71st Street will be reconstructed and depressed under the new bridge with a portion of Ferdinand Avenue requiring reconstruction, utility relocation, storm sewers, detention pond expansion, curb and gutter, sidewalks, lighting and landscaping, from east of 78th Avenue to Beloit Avenue, in the Village of Bridgeview. The contract required extensive utility relocation which resulted in delay impacts to the project. The primary delays were for the adjustment of fiber optic cable located within CSX right of way and ComEd relocation. The fiber optic cable could not be located until CSX allowed access to their property after the construction agreement was signed. It was discovered that the fiber optic line was in conflict with the 84 inch pipe jacking operation. This required relocation prior to installation of the 84 inch pipe but could not be relocated until the bridge piles were driven due to the tight nature of the ROW and structure. ComEd delays were a result of the relocation to the new right of way, but their lines were in conflict with installation of the 84 inch jacking pit. This required a temporary ComEd to allow the 84 inch pipe to be jacked. During the duration of these delays, the IEPA changed the requirements for the Clean Construction Debris Disposal. The increased parameters changed the excavation from normal earth excavation toe non-special waste. The results were increased costs and additional disposal time. The project is currently 50% complete and on a revised schedule to be complete by October 8, 2013.

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:

- 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 vehicles;
- Metra rail commuters in the greater Chicago region;
- 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; and
- Amtrak riders traveling to, from, or through Chicago.

A comprehensive Benefit-Cost Analysis (BCA), compliant with all requirements in the April 26, 2013 announcement, was performed for the CREATE GS6 Grade Crossing project included in this application. This BCA includes:

- A reduction in delay to motorists and trucks due to elimination of the at grade highway-rail crossing;
- A reduction in annual highway and rail maintenance costs due to removal of the grade crossing and addition of the overpass;
- Environmental and congestion savings based on removal of the at-grade crossing; and
- Safety benefits resulting from removal of the at-grade crossing and the additional of turn lanes at intersections near the crossing, decreasing potential conflict between rail and highway/pedestrian road users and vehicle conflicts from congestion due to delays at the railroad crossing.

The BCA shows that the GS6 CREATE Project has a benefit cost ratio of 1.04:1 (three percent discount rate) and 0.61:1 (seven percent discount rate) for the project as a whole (funded through TIGER V). The incremental benefit cost ratio of the project is 1.06:1. This represents the difference in benefit from receiving a TIGER V grant to fund the project versus funding the project with Illinois Jobs Now! funds. 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 Benefit Cost Spreadsheet and a narrative description of the process is available at Benefit Cost Narrative.

Table 4.1 Primary Selection Criteria Benefit-Cost Summary

	GS6 Project (with TIGER V funds)		GS6 Project Incremental Benefits and Costs (TIGER V vs. IJN! Funds)	
Category	30-Year NPV in Thousands of $, 3% Discount Rate	30-Year NPV in Thousands of $, 7% Discount Rate	30-Year NPV in Thousands of $, 3% Discount Rate	30-Year NPV in Thousands of $, 7% Discount Rate
BENEFITS				
State of Good Repair				
Reduced arterial street and railroad maintenance costs, minus overpass maintenance costs	852	457	25.6	32.0
Economic Competitiveness				
Truck and passenger vehicle travel time savings and associated reduction in fuel costs	24,253	12,590	478	758
Sustainability				
Environmental benefit from reduced fuel consumption and emissions	493	433	-8.7*	-7.1*
Safety				
Reduced fatal and injury crashes due to grade separation	18,435	9,882	553	692
TOTAL BENEFITS	44,033	23,361	1,048	1,474
COSTS				
Total Phase I and II Costs	9,675	Same	Same	Same
Total Phase III Construction Costs	31,100	Same	Same	Same
360 Day Traffic Detour Costs	5,101	Same	Same	Same
Incremental Cost Difference	-	-	*991*	*2,038*
BENEFIT/COST RATIO				
Benefit/Cost Ratio based on 30 year NPV at three percent discount rate	1.04:1	-	1.06:1	-
Benefit/Cost Ratio based on 30-year NPV at seven percent discount rate	-	0.61:1	-	0.72:1

Notes: Maintenance costs for the rail tracks will be borne entirely by the private railroad owner. The value of jobs created has not been included in the benefit-cost calculations. *Although the incremental sustainability benefits of GS6 are negative, the project will have positive total sustainability benefits in both TIGER V or IJN! funding scenarios.

4.1 State of Good Repair Benefits

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

The project will improve the condition of the transportation facilities by building a new bridge to separate rail and highway traffic. If left unimproved, the asset will threaten future transportation network efficiency, accessibility and mobility of people and goods, and economic growth due to significant delays at the grade crossing. The roadway will be maintained by the Village of Bellwood. A reduction in annualized maintenance costs of $21,000 will be realized by the Village due to the grade separation project. The signals at the railroad crossing are maintained by the Union Pacific Railroad. Elimination of the crossing will reduce annualized maintenance costs by $70,000. In total, the state of good repair benefits total to $850,000 over thirty years at a three percent discount rate. The incremental state of good repair benefits are $25,000 at a three percent discount rate.

4.2 Economic Competitiveness Benefits

The GS6 grade crossing separation experiences among the highest levels of delay in the region among the 1,468 at-grade crossings in the region. The gate-down time as measured through fieldwork and analysis conducted in May 2013 showed the daily gate-down time was more than seven hours per day, resulting in significant delays to traffic on 25th Avenue.

25th Avenue is a major north-south corridor for the entire west metropolitan Chicago area. 25th Avenue is a four-lane arterial in western Cook County extending from Lawrence Avenue in Schiller Park to Ogden Avenue (US 34) in Brookfield. It connects to the I-290 Expressway and provides accessibility to O'Hare International Airport, Midway Airport, manufacturing, and freight related facilities. Additionally, certain development opportunities exist in the project area that would stabilize and enhance the tax base of the surrounding communities, maintain and revitalize existing commerce and industry, create opportunities for intermodal transportation efficiencies, and promote comprehensive planning within and between communities within the corridor.

Currently, there are two mainline through tracks and one yard track that exit the Proviso Freight Yard. The three tracks are oriented in an east-west direction intersecting 25th Avenue in the Village of Bellwood, Illinois. A fourth mainline track is currently under construction and is expected to be completed in August 2013. Immediately to the west of the crossing the Railroad operates the Union Pacific Proviso carload yard and Global II intermodal terminal. There are approximately ten (10) to fifteen (15) trains daily which exit the yard eastbound and block vehicular traffic in 25th Avenue at the grade crossing. During this movement, it is not uncommon for yard trains to block the crossing for 15 to 30 minutes with occasional blockages ranging up to 60 minutes. Rail traffic on the two mainline through tracks consists of approximately 60 UP Railroad freight trains and 59 Metra Union Pacific West commuter trains daily. Crossing times on the mainline tracks vary from one minute for Metra trains up to 7-10 minutes for slow moving freight trains.

The current average daily vehicle traffic of 19,000 vehicles and the train traffic volume of over 120 trains per day combine to create long delays at the existing 25th Avenue highway-rail grade crossing on a regular basis. The delay on 25th Avenue has contributed to increased congestion on neighboring arterial streets. The costs of these delays are borne by local businesses, residents, and commuters, and have contributed to a lack of economic development on the corridor. Local industry and potential developers have cited the 25th Avenue grade crossing as a reason to avoid locating in or traveling through this area For example, CBRE notes in its letter of support that the most frequent complaint it hears in the area is congestion along 25th Avenue. By 2040 traffic volumes are projected to increase to 20,000 vehicles per

day; this increase along with anticipated higher train volumes will add further delays to motor vehicle traffic travelling on 25th Avenue.

With the proposed grade crossing separation, 25th Avenue would experience an annual reduction of over 70,000 hours of passenger vehicle and 5,000 hours of truck delay in the first year after project completion, translating to an annual value of time savings of over $1 million and a fuel savings of $100,000. With the grade separation the travel time through the 25th Avenue corridor from the I-290 Expressway to North Avenue will decrease by 13 percent, allowing for traffic to flow more easily through the region and to the Bellwood / Melrose Park area. Currently, many motorists seeking to avoid potential delays from the at-grade crossing on 25th Avenue travel a more circuitous route, using the parallel congested corridors of Mannheim Road and 1st Avenue. The reduction in travel time on 25th Avenue will help relieve congestion on these routes, adding to the travel time savings. In total, the grade separation would generate benefits valued at $24 million from travel time savings at a three percent discount rate be accrued over 30 years. The incremental economic competitiveness benefits total over $478,000 at a three percent discount rate.

Commercial development in Bellwood and Melrose Park consists primarily of light industrial and manufacturing businesses that require mobility to move materials and products in and out of their facilities. For example, the Cozzi O'Brien Recycling is a metal recycling manufacturer that buys, processes and sells recyclable metals, plastic and newspaper. As noted in its letter of support, the firm has made a multi-million dollar investment in real estate and equipment based on its understanding that the overpass will be constructed. If the project is not completed, the company would face "continued transportation and access issues that weigh heavily on the company costs and present enormous safety concerns."

As a result of the anticipated GS6 project, significant real estate and development activity has occurred in the Bellwood and Melrose Park communities as shown in Figure 4.1 and Table 4.2. This includes development of grocery stores, a restaurant and retail and manufacturing businesses, which would generate 357 new jobs in the community.

Figure 4.1 Anticipated Commercial and Industrial Development Generated by GS6 Project

4.2.1 Improvements to Freight Rail Operations

UP assembles trains at the Proviso freight railyard to depart east over the highway crossing at 25th Avenue on the northernmost track. The process often involves locating partial trains (cuts of cars) onto the three adjacent tracks. Rail operators attach a locomotive onto a cut of cars, back it up and then shove it onto the second track to attach the second of three groups of railcars. The rail operator then pushes the cars onto the second track to assemble to assemble the second third of the cars and then onto third track to build one full train. Each time a cut of cars is pulled out and shoved back the crossing is blocked. Separating the highway from the tracks will speed up building of these trains and reduce potential operating hazards associated with level crossings.

4.2.2 CREATE Contribution to Economically Disadvantaged Populations

According to 42 U.S.C. 3161, Economically Distressed Areas (EDAs) are areas where the unemployment rate is one percent or more above the national average or the per capita income is 80 percent or less than the national average. Both Bellwood and Melrose Park are located in Economically Distressed Areas as shown in the Economically Distressed Counties Map.

CREATE has conducted extensive outreach on employment and procurement opportunities, including participating in multiple job fairs and several procurement fairs in the region and reaching out to disadvantaged business enterprises (DBEs), as described at Employment and Procurement Outreach. Bid solicitations are posted on the CREATE web site and automatically sent via email to contractors who have expressed an interest.

4.3 Livability Benefits

The project provides benefits that support the six 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. The Bellwood Community has been undergoing a number of planning and initiatives recently that represent major advances.

In October 2010, the Chicago Metropolitan Agency for Planning (CMAP) was awarded a Sustainable Communities Regional Planning grant by the U.S. Department of Housing and Urban Development (HUD) to assist with the implementation of GO TO 2040, the regional comprehensive plan. With funding from this grant, CMAP has launched the Local Technical Assistance (LTA) program, which involves providing assistance to communities across the Chicago metropolitan region to undertake planning projects that advance the principles of GO TO 2040. With this support, the Village of Bellwood began work on its first Comprehensive Plan in September 2012. The Plan will address many areas affecting future development and prioritization of resources for Village including redevelopment of underutilized and vacant land, increasing connectivity for all modes of transportation, park and recreation opportunities, economic and ecological sustainability, and enhancing opportunities for retail and industrial to be successful. The Comprehensive Plan will unify the Village's Sub-area Plans into a cohesive whole with a long-term vision for development. The Plan will serve to implement the relevant goals and recommendations of other plans and studies prepared for the Village including the *St. Charles Road Redevelopment Plan*, *Mannheim Corridor Plan, Addison Creek Redevelopment Plan, CMAP's Homes for a Changing Region,* and *CMAP's GO TO 2040 Comprehensive Regional Plan*.

A chapter of the plan will target redevelopment areas. Some redevelopment areas are more ready than others, but all share the goal to bring life into areas that have suffered from disinvestment. One of the goals on page 14 of *Homes for a Changing Region* is to:

Aggressively pursue opportunities for Transit-Oriented Development (TOD) near existing mass transit stations and to look for opportunities to redevelop vacant or underutilized land in or near TOD sites. A notable first step is that the communities will use the HUD Challenge Grant funding to create a revolving loan fund to encourage private investment in redevelopment areas within walking distance of transit stations.

The plan seeks to address this goal. The map from the draft Comprehensive Plan under development identifies several key redevelopment areas, with two adjacent to the location of the proposed grade separation (#1 and #2), and is shown in Figure 4.2. Other targeted areas along 25th Avenue will be more viable targets for development once the grade separation is constructed.

The Village of Bellwood is a participant in the West Cook County Housing Collaborative (WCCHC), a joint effort among the municipalities of Bellwood, Berwyn, Forest Park, Maywood and Oak Park. In November 2011, the U.S. Department of Housing and Urban Development (HUD) awarded WCCHC a nearly $3 million award as part of the Sustainable Communities Program to increase affordable housing for families near transit centers in West Suburban Cook County.

WCCHC has focused its efforts on creating affordable housing opportunities near public transit. WCCHC is using the HUD Sustainable Communities Challenge grant funds to create a Transit Oriented Housing Loan Fund Strategy (the Fund) which will guide the creation and implementation of a single-purpose fund to support the predevelopment and acquisition of transit oriented projects near major transit centers. The Village of Bellwood project to be supported by the Fund is a new affordable housing project that will be located in close proximity to the new overpass. The GS6 project has been deemed consistent with federal livability grants per this letter.

Figure 4.2 Draft Bellwood Comprehensive Plan Development Areas

DRAFT 5-30-13

Comprehensive Plan VILLAGE OF BELLWOOD, ILLINOIS

Key Redevelopment Areas

1. A new Transit Oriented Mixed-Use Development within walking distance of two Metra Stations
2. Redevelopment of St. Charles and 25th Avenue, with new retail and residential opportunities
3. A new Mixed-Use neighborhood with the Village Hall, Stevenson Park and Addison Creek as anchors. Commercial Uses along 25th Avenue and Washington Boulevard, and a variety of housing types near the Roosevelt Middle School and remainder of the redevelopment area.
4. Redevelopment of St. Charles and Mannheim Road, with new retail and residential opportunities
5. New Industrial and Job Producing Uses along 25th Street, from Interstate 290 to Madison Street

As part of the Comprehensive Planning effort, five major Redevelopment Areas have been identified. These areas provide the opportunity to meet community goals to bring in new mixed-use development, retail and residences to the Village, especially within walking distance of the two Metra Stations. New development can also take advantage of the proposed 25th Avenue Bridge across the railroad tracks to make 25th Street a stronger retail address.

Site of 25th Avenue Grade Separation Project

Mixed-Use and Transit Oriented Examples

4.3.1 Community Livability

Due to the safety profile of this grade crossing location, the 120 daily trains traversing the 25th Avenue crossing must blow their whistles when approaching grade crossing, resulting in significant noise for area businesses and residents. With a full grade separation, trains would no longer need to use their whistles as a safety warning and the noise impacts would be greatly reduced.

4.3.2 Transit Reliability

This project will reduce the potential of interference with transit operations by vehicles crossing the tracks at grade. Daily, 59 Metra UP-West trains with daily ridership of 29,400 cross the project location. While trains are generally not delayed by vehicles crossing the tracks, the potential of a crash between the heavily traveled 25th Avenue and Metra trains will be eliminated by this project.

4.3.3 Motorist Delay Reduction

By avoiding nearly 3 million hours of vehicle delay, the GS6 project will provide roadway congestion benefits valued at $42 million over 30 years.

4.4 Sustainability Benefits

The environmental benefits of CREATE investments make a strong contribution to the sustainability of the region by relieving congestion and reducing fuel consumption and emissions through reductions in motorist delay.

4.4.1 Reduction in Oil Consumption and Emissions

Congestion due to the significant delay at the 25th Avenue grade crossing leads to negative environmental and economic consequences. Vehicles currently consume over 27,000 gallons of fuel annually while idling due to delays at the 25th Avenue at grade crossing. Elimination of the 25th Avenue at grade crossing will reduce the emissions from these vehicles and contribute to fuel savings worth a total of $492,000 at a three percent discount rate over 30 years. Although there are no incremental sustainability benefits, the total sustainability benefits for both the TIGER V and IJN! funding scenarios are positive.

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. A freight train moves a ton of freight an average of 484 miles on a single gallon of fuel. According to a recent independent study produced for the Federal Railroad Administration, railroads on average are four times more fuel-efficient than trucks. 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 that benefit 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. Increased efficiency of train building operations within the Proviso Yard due to the grade separation is one piece of the larger CREATE program contributing to these benefits.

4.5 Safety

According to Federal Railroad Administration statistics, the 25th Avenue grade crossing has experienced a fatality/injury rate from train-vehicle crashes three to four times higher than that of similar crossings in northeast Illinois in the past thirty years. The multiple tracks and high levels of freight and passenger train activity result in a crossing with significant safety concerns. Given its safety profile, this location has been designated as one of only two locations on the UP-West line that is exempt from the whistle ban requiring trains to blow their whistles.

In addition to having long delays due to train crossings, the GS6 location has multiple tracks and types of train traffic, which can result in multiple trains moving through the crossing simultaneously and trains moving through the crossing at varying speeds. Trains moving in and out of the Proviso freight yard operate at slow speeds through the crossing. Freight and Metra passenger trains on the mainline track operate at up to 70 mph. If motorists or pedestrians see a freight train moving in or out of the yard at a slow speed they may think they can beat the train. However, there are currently two mainline tracks and one yard track, and a third mainline track will go into service in late summer 2013 as part of the B2 project. Therefore, a 70 mph Metra or through-freight train may travel through the project location at the same time as a yard train, and a motorist or pedestrian would not be able to cross in time to beat that train. Additionally, because of the significant delays at the crossing and the slow speeds of some trains, motorists and pedestrians sometimes try to travel through the crossing after the gates have been activated, leading to increased potential for vehicle/train and pedestrian/train incidents.

The GS6 project will prevent a projected two fatalities, six serious injury crashes, and additional other crashes over 30 years by elimination of the at grade crossing. An additional 69 crashes will be avoided through congestion reduction and addition of left turn lanes in the immediate vicinity of the crossing, for a combined economic benefit of $18.4 million over thirty years at a three percent discount rate. The incremental safety benefits total over $553,000 at a three percent discount rate.

4.6 Job Creation and Economic Stimulus

During the construction of the project, a total of 342 direct and indirect job years are estimated to be created. Job estimates were developed based on the assumption that $1 million in investment results in 11 direct, indirect and induced highway job years. Table 4.3 shows the distribution of jobs based on the project schedule.

Table 4.3 Job Creation by Quarter

	Cost (Million $)	Jobs Created	2014	2015					
		Total	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Construction	31.1	342	37	222	222	222	222	222	28

Note: Assumes 11 jobs created/sustained for every $1 million invested in highway projects, based on Illinois DOT data.

Secondary Criteria Benefits

Secondary criteria benefits are summarized in Table 4.4.

Table 4.4 Secondary Criteria Benefits Summary

Category	Summary
Innovation	CREATE is an innovative public-private partnership in successful operation for 10 years
Partnership	
Jurisdictional/Stakeholder Collaboration	CREATE is a partnership involving 13 private and public stakeholder organizations. Local partners include the Village of Bellwood, Village of Melrose Park, Cook County, West Cook County Railroad Relocation Authority.
Amount of non-federal debt and equity	$1.6 million contributed by the railroad partners, $12 million contributed by the Illinois Commerce Commission
Collaboration among neighboring or regional jurisdictions	Letters of support for the TIGER V application include the Village of Bellwood, Village of Melrose Park, and Cook County.
Disciplinary Integration	The project received a certificate of consistency with Sustainable Communities Planning and Implementation and a letter of support from the Chicago Metropolitan Agency for Planning. Bellwood is a partner in the West Cook County Housing Collaborative.

4.7.1 Innovation

CREATE is a successful public-private partnership that has been in operation for ten years and 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 first came 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 III is available at Phase II/III Flowchart. The Phase III Manual is also available.

The CREATE Noise and Vibration Model was developed for CREATE using FTA procedures. Portions of the model are available at Noise and Vibration Assessment Methodology. Detailed descriptions of CREATE staff positions, committees, and additional policies are presented at CREATE Partnerships and Management.

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 local communities, businesses, and civic and municipal organizations. Copies of letters of support for this TIGER V application are available at the links below. Letters were received from:

AGD Investments, LLC

Association for American Railroads

CBRE Industrial Services

Chicago Metropolitan Agency for Planning

Cook County Board of Commissioners

Cozzi O'Brien Recycling

Illinois Chamber of Commerce

Illinois Commerce Commission

State of Illinois

Sitex Group, LLC

Union Pacific Railroad

Village of Bellwood

Village of Melrose Park

5.0 Project Readiness and NEPA Status

5.1 Schedule

The GS6 grade crossing separation will obligate TIGER V funds by June 30, 2013 A detailed construction schedule for the project can be found at Schedule. To ensure the optimum project design in terms of cost and performance, Illinois DOT conducted a value engineering study to make any possible improvements to schedule, costs, land acquisition or construction impacts. A number of these recommendations were adopted or are undergoing consideration as shown in the Value Engineering Report and Recommendations Approval Form. Given the detailed evaluation of the design and schedule by an independent engineering firm, the Illinois DOT is confident that the final design and construction schedule will be met.

5.2 Environmental Approvals

The GS6 project has received a Categorical Exclusion. Environmental documentation is available at Project Report.

5.3 Legislative Approvals/Broad Project Support

No legislative approvals are required to progress the CREATE GS6 project. CREATE has secured letters of support including the Village of Bellwood, Village of Melrose Park, and Cook County.

5.4 State and Local Planning

The GS6 project is 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

This project has completed preliminary engineering and contract plans will be complete by November, 2013. Geometrics and schematics for the project are available in the Project Report.

5.6 Financial Feasibility

The CREATE Program has demonstrated its ability to manage grant funding through its obligation of all PNRS funds and construction of TIGER I and TIGER IV projects. The project has contingency reserves of 25 percent built into construction cost estimates. Letters noting financial commitment and support are located at ICC Letter and AAR Letter. A table detailing the cost breakdown of the project construction, percentage of total cost by item, and funding shares is located at Construction Cost Estimates and Percentages.

5.7 Risks and Mitigation Strategies

To ensure that the project is well designed and to reduce the chance of issues during construction, the project went through a value engineering process and adopted a number of recommendations to improve project performance and reduce costs. The land acquisition process is anticipated to proceed smoothly as the Village of Bellwood has communicated with the landowners and all are supportive or the project.

5.8 Federal Wage Rate Certification

IDOT has provided the required Wage Rate Certification Letter.

6.0 Contact Information

John Oimoen
Deputy Director, Railroads
Illinois Department of Transportation
JRTC – STE 6-600

100 West Randolph
Chicago, IL 60601
(312) 793-4222
John.Oimoen@Illinois.gov