

2017-2018 INFRA GRANT

Project Name: 75 th Street Corridor Improvement Project and A Connections (B9)	argo	
Was an INFRA application for this project submitted previously? • If yes, what was the name of the project in the previous application?	Yes (75 th Street Corridor Improvement Project and Argo Connections)	
Previously Incurred Project Cost	\$14,120,180	
Future Eligible Project Cost	\$473,748,840	
Total Project Cost	\$487,869,020	
INFRA Request	\$160,000,000	
Total Federal Funding (including INFRA)	\$164,800,000	
Are matching funds restricted to a specific project component?	Yes (\$0.2 million in CMAQ matching funds dedicated to GS19)	
Is the project or a portion of the project currently located on National Highway Freight Network?	Yes	
Is the project or a portion of the project located on the National Highway System?	Yes	
• Does the project add capacity to the Interstate system?	No	
• Is the project in a national scenic area?	No	
Do the project components include a railway-highway grade crossing or grade separation project?	Yes (163446G, P2, P3)	
Do the project components include an intermodal or freight rail project, or freight project within the boundaries of a public or private freight rail, water (including ports), or intermodal facility?	Yes	
If answered yes to either of the two component questions above, how much of requested INFRA funds will be spent on each of these projects components?	14.7% for freight rail (remaining 85.3% for grade separations)	
State(s) in which project is located	Illinois	
Small or large project	Large	
Urbanized Area in which project is located, if applicable	Chicago	
Population of Urbanized Area	8,608,208	
Is the project currently programmed in the: TIP, STIP, MPO Long Range Transportation Plan, State Long Range Transportation Plan, State Freight Plan?	Yes (all)	
If selected, would you be interested in participating in a new environmental review and permitting approval?	No (environmental approvals received)	

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EXECUTIVE SUMMARY

An effective rail network through Chicago is vital to keeping the nation's economy moving. It is the collective and shared responsibility of the partners in the Chicago Region Environmental and Transportation Efficiency (CREATE) Program to maintain and improve the freight gateway to our nation, as well as the world. The 75th Street Corridor Improvement Project and Argo Connections (CREATE Project B9) is the *preeminent multimodal opportunity to Rebuild America*, ensuring preservation and resiliency of one of our nation's most important transportation assets.

The Illinois Department of Transportation (IDOT), in cooperation with co-applicants the Chicago Department of Transportation (CDOT), the Cook County Department of Transportation and Highways (CCDOTH), and the Chicago Metropolitan Agency for Planning (CMAP), is pleased to submit this application for an Infrastructure For Rebuilding America (INFRA) discretionary grant on behalf of the CREATE Program for improvements to the Chicago Terminal (Terminal). The Terminal is a complex rail hub where six Class I railroads converge. Currently, this hub handles *one-fourth of the nation's freight rail traffic and half of all intermodal trains* on their journey to market. This application seeks Federal support to *leverage significant local public and private funding commitments to fix the most complex and congested segment of railroad in North America*. CREATE's 75th Street Corridor Improvement Project (75th Street CIP) and Argo Connections (B9) comprise a network of inter-related infrastructure improvements that will reduce travel time and expand railroad capacity through the Terminal, resulting in a doubling of corridor capacity and operational benefits that extend beyond the region to a national scale.

As a result of reduced congestion and additional capacity to accommodate anticipated growth in freight traffic through the Terminal, the monetized benefits of the 75th Street CIP/B9 Project-including travel time, shipping costs, safety, and emissions- will greatly exceed its costs. *The composite benefit-cost ratio for all Project components is 7:1 or better, with a Net Present Value of \$3.8 billion* (as discussed in Section V.1.1). In addition, the Project performs strongly on all four Merit Criteria priorities of the INFRA program:

- Support for National and Regional Vitality: As discussed in Section V.1, the infrastructure improvements in the Project will significantly improve and accommodate increased national freight and passenger rail activity in the Chicago region, while also improving access and mobility, safety and air quality. Significant national and regional economic benefits will be further realized as capacity and reliability are improved through the Terminal.
- Leveraging of Federal Funding: As detailed in Section IV and discussed in Section V.2, the total Project budget is \$473.7 million. Federal funding will comprise 35 percent of the budget, leveraging significant private and other

STRONG NATIONAL BENEFITS

The NPV of the 75th Street CIP/B9 Project will return the requested Federal investment by more than 20 to 1

STRONG REGIONAL SUPPORT

Departments of Transportation from throughout the Midwest have indicated their support for moving the 75th Street CIP/B9 Project forward with INFRA funding (see <u>letters of support</u>)

STRONG LOCAL CAPACITY

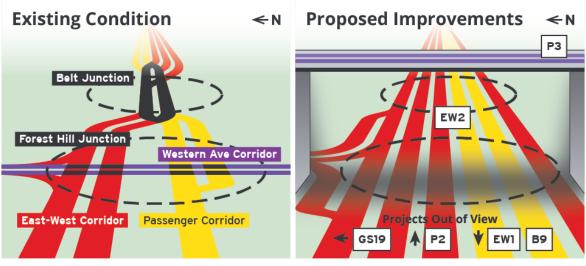
The CREATE Partners have successfully completed all past projects on time, with 90 percent at or under budget

CREATE

- *non-Federal investments equal to 65 percent of the budget*. Several Class I railroads and Amtrak have committed \$111.4 million in private funding. An additional \$202.4 million has been committed by other non-Federal sources, including \$20 million from Metra.
- **Potential for Innovation:** As discussed in Section V.3, the Project will continue the successful track record of the CREATE Program, *utilizing the innovative processes and procedures established to support this unique multimodal initiative*. From a design standpoint, innovative *technology solutions* are a key component of each element, incorporating emerging technologies *to improve performance*, *safety and security*.
- Performance and Accountability: As discussed in Section V.4, accountability measures
 developed and in use by the CREATE partners will ensure consistent Project performance.
 CREATE partners commit to meeting element-specific design and construction milestones
 as a condition of receiving INFRA funds for each element, subject to INFRA funds
 availability.

Due to unique features of our nation's geography, the railroad network converges in Chicago. 75th Street is the primary east-west route through the Terminal and the only one with the physical potential to add significant capacity. The 75th Street CIP comprises a network of four closely related individual projects: Forest Hill Flyover (CREATE Project P3), 71st Street Grade Separation (GS19), Belt Junction and 80th Street Junction replacement (EW2), and Metra Rock Island Connection (P2). This grant request will fully fund Projects P3 and GS19 for final design, utility relocation and construction. Projects P2 and EW2 will be fully funded for final design and utility relocation to set the stage for their future construction. This grant request will also add the capacity at Argo (B9) needed to feed additional traffic to the East-West Corridor. Figure E.1 depicts the existing conflicts and future streamlined configuration of the Project elements.

Figure E.1: Schematic Perspective of Proposed Project





Watch the Video

Click on this image for a short video (less than one minute) on how this project will improve train movements in the 75th Street corridor.



The Project comprises the next critical path elements in completing the overall CREATE Program. \$160 million in INFRA funding, only 34 percent of the budget, will close the funding gap and allow the Project to quickly proceed to construction, ensuring that the nation's transportation and logistics network can efficiently and cost-effectively move products to market.

The CREATE Program is a *first-of-its-kind multimodal public-private partnership to improve rail and roadway transportation* within the Chicago region through the completion of a network of 70 inter-related infrastructure projects. Initiated in 2003, CREATE represents a unique partnership between IDOT, CDOT, Cook County, and the railroads including freight carriers BNSF Railway (BNSF), CN Railway (CN), CP Railway (CP), CSX Transportation (CSX), Norfolk Southern (NS), Union Pacific (UP), Belt Railway of Chicago (BRC), and Indiana Harbor Belt Railroad (IHB), as well as the passenger railroads Amtrak and Metra.

This partnership is distinguished as one with significant direct funding support from multiple private sources over time. As of today, 29 CREATE projects have been completed, five are under construction, four are in final design, and another 13 are in the preliminary design and environmental review process. In addition to a combined private freight railroad funding commitment of over \$106 million for the 75th Street CIP/B9 Project, the railroads have further committed to spend up to \$60 million through 2050 on maintenance of the new facilities.

APPLICANT AND PROJECT ELIGIBILITY

The lead applicant for this grant is the <u>Illinois Department of Transportation (IDOT)</u>, a CREATE partner and unit of state government. The DUNS number for IDOT is 1336007540000.

Each element of the Project is eligible per Section C.3.a. of the Notice of Funding Opportunity as they are either freight rail grade separation projects or freight rail network improvement projects that will significantly improve freight movement on the National Highway Freight Network.

The contact for this application is:

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This application is submitted with full support of the CREATE partners and with <u>CDOT</u>, <u>CCDOTH</u>, and the <u>Chicago Metropolitan Agency for Planning</u> (CMAP, the Federally-designated metropolitan planning organization serving the Urbanized Area) as co-applicants who will be involved in Project delivery.



I. PROJECT DESCRIPTION

CREATE encompasses railway and roadway improvements, including grade separation projects, along four rail corridors onto which rail traffic within the Terminal is focused: 1) East-West Corridor; 2) Western Avenue Corridor; 3) Beltway Corridor; and 4) Passenger Corridor. *The network of Projects included in this request is collectively located at the confluence of all four Corridors*. As illustrated in Figure I.1, the 75th Street Corridor Improvement Project (75th Street CIP) will fix the most complex and congested part of the Chicago Terminal (Terminal) and is the next critical path element in completing the overall CREATE Program. The Argo Connections element will complete construction of the Beltway Corridor and link it to the East-West Corridor with a new double track connection and crossovers between the BRC and IHB/CSX railroads. The 75th Street Corridor alone handles almost two million freight cars annually; upon completion of the 75th Street CIP, the Corridor will be able to accommodate more than four million freight cars annually.

I.1 Project Size and Elements

More than two million railcars bound for points across the country pass through the 75th Street Corridor annually. These movements are slowed by current conflict points and capacity limitations, in particular at the Belt Junction chokepoint where all rail traffic must share two tracks, causing regular delays that ripple across the US rail system. The 75th Street CIP was developed to reduce these conflicts between Amtrak, Metra, BRC, BNSF, CN, CP, CSX, IHB, NS, and UP trains. The Project will double capacity by reconfiguring the BRC mainline tracks, laying new track, and creating flyover tracks at three key locations. Associated signals, crossovers, and bridge work are included. All mainline track and signals in the corridor will be Positive Train Control (PTC) equipped and compatible (see Section V.3).

The 75th Street CIP comprises a network of four closely related individual projects designed to eliminate these impediments to traffic flow: Forest Hill Flyover (CREATE Project P3), 71st Street Grade Separation (GS19), Belt Junction and 80th Street Junction replacement (EW2), and Metra Rock Island Connection (P2). This grant request will fully fund Projects P3 and GS19 for final design, utility relocation and construction; they must be completed prior to Projects EW2 and P2 for operational reasons. A fifth project, Argo Connections (B9) has already substantially completed final design and will be fully funded for construction with this grant request, providing improved access to the critical East-West Corridor. *More than \$14 million has already been invested by the CREATE partners to advance these projects through environmental review and design*.

Each Project is described in more detail below and illustrated in Figure I.1.

• Design and Construction of Forest Hill Flyover (P3): Project P3 consists of a new CSX north-south rail flyover structure to eliminate conflicts between north-south and east-west train movements at Forest Hill Junction. Phase I environmental and preliminary engineering are complete, and CSX will lead the next phases. P3 must be completed before EW2 track realignments can proceed below.

¹ The Chicago Terminal is generally defined as the railroad network inside the CN Matteson and Leithton subdivisions (former Elgin Joliet & Eastern Railway, or "J") beltline running around Chicago between Gary, Indiana and Waukegan, Illinois.



- **Design and Construction of 71**st **Street Grade Separation (GS19):** Project GS19 consists of a road-rail grade separation of 71st Street and the Western Avenue Corridor. Because of their physical proximity, GS19 must be built in conjunction with P3. Phase I environmental and preliminary engineering are complete, and CSX will lead the next phases in close coordination with CDOT.
- Design of Belt Junction and 80th Street Junction Replacements (EW2): Project EW2 will reconfigure the east-west tracks at Forest Hill Junction (EW2a), add tracks to remove the bottleneck at Belt Junction (EW2b), realign track and signal systems between Belt Junction and the Dan Ryan (Interstate 94) Expressway (EW2c), reconstruct 80th Street Junction (EW2d), relocate UP to a currently unused NS alignment, and add PTC along this stretch of tracks. EW2 also includes a new Metra mainline track, and improvements to several existing viaducts over city streets. Phase I environmental and preliminary engineering are complete, and BRC and NS will lead the next phase. Although final design of this Project will be done together with P3 and P2, it cannot be completed until P3 is complete, and significant portions of the construction of EW2 must proceed prior to P2.
- **Design of Metra Rock Island Connection (P2):** Project P2 will build a flyover structure to connect the Metra SouthWest Service (SWS) mainline tracks to the Rock Island Line (P2a), eliminating conflicts between Metra and BRC trains at Belt Junction and allowing Metra SWS trains to terminate at LaSalle Street Station (P2b). Phase I environmental and preliminary engineering are complete, and Metra will lead the next phases.
- Construction of Argo Connections (B9): Project B9 will link the CREATE Beltway and East-West Corridors with a new double track connection and crossovers between the BRC and IHB/CSX railroads near Archer Avenue and 63rd Street, and provide an improved connection to Clearing Yard one of the largest and busiest railyards in the nation (B9a). The Project will upgrade mainline crossovers to accommodate higher speeds (from 10 to 25 mph) (B9b), restore yard capacity lost to track construction (B9c), and add nearly three miles of new mainline track. B9 will complete trackwork for the overall Beltway Corridor. Phase II final design is substantially complete, and CSX will begin construction as soon as INFRA funding is secured.

This funding request includes three Project elements for construction and two for design, expediting the overall CREATE Program most efficiently. The 75th Street CIP/B9 Project is phased for logical implementation, with north-south mobility improvements to be built first, and east-west track reconfiguration and expansion to follow.

When this network of five inter-related projects is completed, *the most significant national and regional freight rail bottleneck will be eliminated*, and passenger rail operations will also be improved. More detailed information on all five of the Project elements can be found at the links below:

Scopes of Work Budgets

Schedules Project Information



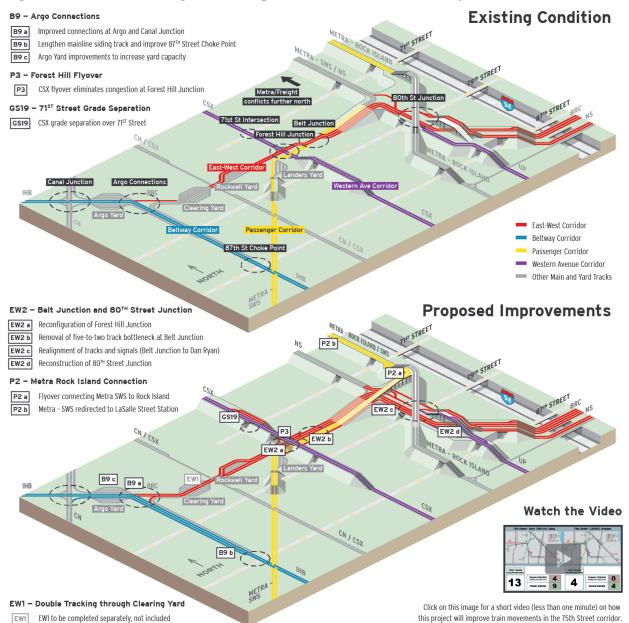


Figure I.1: Schematic Diagram of Proposed 75th Street CIP/B9 Project (high resolution version)

I.2 Project History and Context

The CREATE Program is a *unique multimodal public-private funding partnership to improve rail and roadway transportation* within the Chicago region. CREATE represents a unique partnership between IDOT, CDOT, Cook County, the rail freight carriers BNSF, CN, CP, CSX, NS, UP, BRC, and IHB, and passenger railroads Amtrak and Metra. To ensure project readiness at funding availability, a key CREATE strategy has been to establish a pipeline of projects that have completed preliminary engineering and environmental review, ready to advance to final design and construction. Since the inception of the CREATE Program in 2003, 29 of 70 total CREATE projects have been completed, five are under construction, four are in final design phase,



and another 13 are in the preliminary design and environmental review process. Figure I.2 provides an overview of the regional scope of CREATE, identifying projects already completed as they relate geographically to the 75th Street CIP/B9 Project. Completion of the 75th Street CIP/B9 Project will allow the operational advantages of completed projects to be fully realized, as a key central connection is improved.

The CREATE Program represents an unprecedented level of cooperation between the private and public sectors to address critically needed infrastructure investments. Achievements in the history of the CREATE initiative include the following:

- \$1.4 billion has been committed to CREATE Program improvements to date.
- Over time, the Federal share in support of CREATE has generally decreased on large Federal grants. Prior to 2011, three Federal grants were awarded (PNRS, FRA and TIGER I) that each represented an 80 percent or higher Federal share. Subsequent large grants awarded in 2012 (TIGER IV) and in 2016 (FRA STEP) represented a 60 percent and 62.5 percent Federal share, respectively. At 35 percent, this Project would result in the lowest requested Federal share to date for a CREATE grant of significant scale.
- CREATE partners have been tracking project performance under previous Federal funding agreements, including train speed, travel time, and the number of rail cars through the Corridor. Completed improvements have reduced the average travel time of a rail car through the Terminal by an estimated 35 percent. INFRA funding will double capacity at Forest Hill Junction, further increasing train speeds and travel time reliability.
- CREATE partners have been good stewards of available funding, with 90 percent of completed projects accomplished at or under budget.

This application marks a shift in shared investment between public and private partners. A 2015 effort to apply for funding for this Project was not successful due to insufficient private sector support at that time. The State of Illinois insisted that the 75th Street CIP be the primary CREATE priority for the future of both the Program and the partnership. As part of this application, a new partner, Cook County, committed \$75 million over five years toward the project. At the same time, IDOT led negotiations that increased the level of railroad investment committed and the number of contributing parties, resulting in today's robust and diverse financial support.

This INFRA funding request is submitted on behalf of all of the CREATE Program partners. More information is available about each CREATE Program partner via the links provided.

<u>USDOT*</u> <u>BNSF Railway</u>

CCDOTHCN RailwayIDOTCP Railway

<u>CDOT</u> <u>CSX Transportation</u>

Amtrak Indiana Harbor Belt Railroad

MetraNorfolk SouthernBelt Railway of ChicagoUnion Pacific

Note: *nonvoting member

C R E A T E

CREATE PROJECTS PROJECT COORDINATES **Completed Project** 41.769886°N 87.8085647°W Project Included in Application 41.757589°N P3/ Related Project Not Included 87.6807827°W **GS19** in Application 41.757837°N EW2 87.6611277°W ----- Railroad 41.759077°N P2 87.6401637°W Miles 0 NORTH Lake Michigan Chicago Western Ave Corridor Summit B9 Bedford Park Bridgeview GS19 P2 EW2 РЗ Illinois Department of Transportation

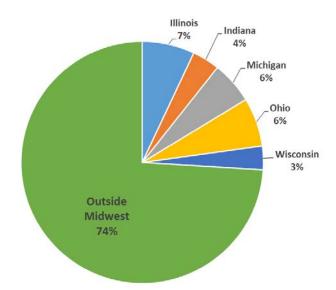
Figure I.2: 75th Street CIP/B9 Project in a Regional Context (high resolution version)



1.3 **National and Regional Significance**

The Terminal as a whole comprises an estimated 3.865 track-miles of rail – more track mileage than 40 other states combined. However, most of these rail lines are more than a century old and are not configured for the volumes, patterns, and types of traffic being carried currently. The density of the rail network in Chicago provides unparalleled opportunities to make connections among the railroads, as well as to trucking and other modes.

Six of the Class I freight railroads converge in Chicago, and one-fourth of the nation's freight rail traffic and half of all intermodal trains originate, terminate, or pass through metropolitan Chicago on their journey to market. Approximately 37,500 rail cars are handled in the Chicago region daily, with approximately one-third continuing through to other states. These volumes are expected to nearly double by 2050. The 75th Street Corridor alone handles almost two million freight cars annually. Upon completion of the 75th Street CIP, the Corridor will be able to accommodate more than four million freight cars annually, greatly improving the overall capacity of the Terminal.



"About three-quarters of [the CREATE Program] impacts would occur outside the Midwest, reflecting the significant degree of interconnectivity that exists in the production systems in the US economy."

Economic Impact of Improvements in Transportation Congestion in the Chicago Region on the Midwest and US Economies, University of Illinois, 2010

As the nation's rail hub, congestion in the Terminal negatively affects national supply chain and passenger rail movements. The CREATE Program's corridors, including the 75th Street Corridor at the heart of the Terminal, handle rail freight valued at more than \$1.4 trillion annually. Without the CREATE Program's planned improvements, national and regional economic activity will be disrupted adversely, similar to the effects recently felt across North America when winter storms in 2011 and 2014 affected the Terminal. Implementation of the overall CREATE Program will result in national economic benefits estimated at approximately \$31.5 billion over a 30-year period related to reduced travel times for rail passengers and freight, reduced motorist and cargo delays, improved rail and highway safety, air quality improvements, and construction relatedbenefits.²

The following Figure I.3 provides a graphic depiction of the critical annual freight flows that rely upon the Terminal. Improving the capacity and operational flexibility of the Terminal is essential to keeping the national freight economy moving efficiently, providing improved mobility for critical national commodities under normal conditions, and increasing rail network resilience to adapt to natural disasters or other unusual circumstances.

² http://www.createprogram.org/





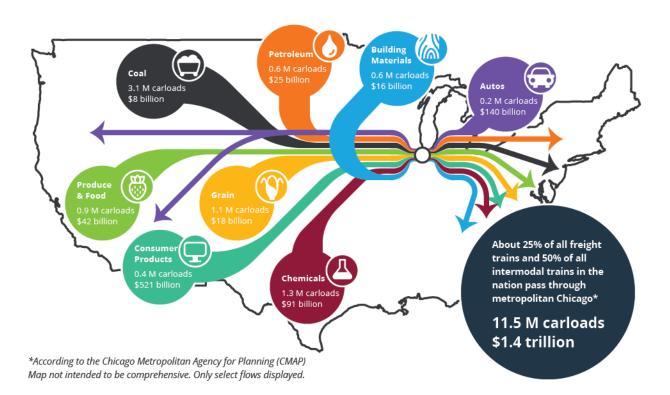


Figure I.3: CREATE Program in a National Context

The five freight and two passenger railroads within the 75th Street CIP/B9 Project area for this INFRA grant application are especially important components of the region's freight and passenger rail network. The growing demand for both freight and passenger rail service, coupled with the limitations of the existing infrastructure, drive the need for this funding request. An INFRA grant will leverage significant private and local funding resources to ensure timely, logical, full delivery benefits of the Program. The Project will contribute directly to fulfilling the national and regional goals of USDOT.

I.4 Transportation Challenges Addressed

Rail-Rail Crossings and Rail Delays: Several major rail lines come together at *three rail-rail crossings in the corridor, which are key bottlenecks that will be eliminated* by the Project. The necessary train movements through these junctions must currently cross paths, often allowing only a single train to pass at any given time. The crossings thus become chokepoints causing delays that have negative consequences throughout the entire region and country.

The Project will *eliminate all major at-grade rail conflicts at Forest Hill Junction, Belt Junction, and 80th Street Junction.* At Belt Junction alone, 30 Metra and 98 freight trains per day cross each other's paths. Modeling for the BCA analysis indicates that completion of the Project will *reduce freight delay throughout the Terminal by nearly 20%.* Resulting additional capacity of the East-West Corridor will more evenly distribute trains throughout the regional freight rail network and reduce the burden on other Terminal corridors (Beltway and Western Avenue). In addition, the East-West corridor *will provide critical redundancy in the regional rail network by providing a*



new mainline route. In the event of maintenance work or service disruptions along the existing corridors, this route will allow freight train flows to be maintained.

By eliminating rail conflict points and providing additional through tracks, the Project will allow the corridor to carry significantly more freight trains per day through the Project area. The 75th Street CIP Project will *double freight car capacity upon completion*.

At-Grade Crossing Delays/Safety: Project GS19 will eliminate one of the major highway-rail grade crossings in the Project area. The 71st Street crossing of the CSX tracks north of Forest Hill Junction currently carries an average annual daily traffic (AADT) volume of over 11,000 vehicles and has the crossing gates down for over two hours of each day, resulting in *more than 10,000 hours of driver delay per year*. The grade-separated crossing will eliminate this vehicle delay, while also eliminating the possibility of automobile-train crashes and improving local emergency vehicle access. GS19 will improve east-west traffic flow along the key 71st Street arterial more broadly in conjunction with the previously completed GS14 (71st Street in Bridgeview) and the future GS11 (Columbus and Maplewood Avenues in Chicago).

Negative Environmental Impacts: In addition to operational impacts of inadequate rail capacity, inefficient routing, and the resulting delays, congestion within the region's rail network and the 75th Street Corridor in particular results in a range of adverse impacts for adjacent communities. These impacts include noise, safety concerns, and reduced air quality. Additional information regarding these impacts can be reviewed here.

II. PROJECT LOCATION

Chicago is the *rail transportation hub of the nation* and the *third largest metropolitan area* in the U.S. It is critical to not only ensure that goods can traverse the Terminal safely, efficiently, and reliably on their way across the nation, but also to mitigate the negative impacts of freight rail on local communities. The entire 75th Street CIP is located in the City of Chicago, Illinois. Project B9 extends into the neighboring municipalities of Bedford Park, Bridgeview, and Summit, Illinois. All elements of the 75th Street CIP/B9 Project are located in Cook County.

II.1 Urbanized Area Context

Figure I.2 depicts the locations of the Project elements at a regional level and in the context of the entire CREATE Program, indicating key connections to existing transportation infrastructure. All Project elements are within the Chicago IL-IN Urbanized Area. The 75th Street CIP Project falls within an area generally bounded by 69th Street on the north, 100th Street on the south, Central Park Avenue on the west, and the Dan Ryan Expressway (I-94) on the east. The B9 Project is generally bounded by 63rd Street on the north, 71st Street on the south, Archer Road on the west, and Sayre Avenue on the east.

II.2 Project Maps and Geospatial Data

To supplement the Project descriptions provided in Section I.1, geospatial reference data is provided for each Project element on Figure I.2. More detailed maps depicting the general extents and context of each Project element can be found <u>here</u>.

C R E A T E

III. PROJECT PARTIES

This application is noteworthy for its *unprecedented level of private sector cooperation and financial commitment*. The CREATE partners have welcomed Cook County as a full partner, as now reflected in this INFRA application, bolstering further the level of non-Federal participation. The lead applicant for this INFRA grant funding request is <u>IDOT</u>, serving as the fiduciary recipient and grant administrator for Federal funds for the CREATE Program. Joining in the application are <u>CDOT</u> and <u>CCDOTH</u> as financially contributing partners, and the Association of American Railroads (AAR). AAR represents their member freight railroads, as well as Metra and Amtrak, all of whom are financially contributing partners involved in Project delivery. Recognizing the national and regional significance of CREATE, <u>CMAP</u>, the region's metropolitan planning organization, joins this application as a co-applicant. FHWA is the CREATE Program's lead Federal oversight agency.

Each CREATE project is managed by an individual sponsor, which leads procurement, engineering and construction activities. All projects have followed FHWA guidelines through Phase I and II to ensure eligibility for Federal funds. In its role as grant administrator, IDOT will coordinate closely with affected railroad owners, operators, and funding partners including:

- <u>CSX</u> lead entity for construction of B9, and design and construction of P3; co-lead for design and construction of GS19;
- BRC, NS and UP lead entities for design of EW2;
- Metra lead agency for design of P2; and
- <u>CDOT</u> co-lead agency for design and construction of GS19, and for P3/GS19 environmental commitments not directly within Project construction limits.

IV. GRANT FUNDS, SOURCES AND USES OF PROJECT FUNDS

INFRA prioritizes innovative project delivery and the leveraging of Federal dollars with non-Federal contributions, including private investment, which aligns with the CREATE program's public-private partnership approach and method for delivering projects. For these reasons, the CREATE partners' INFRA grant request includes a majority non-Federal share with significant private investment. A significant portion of Project support consists of *funding commitments from private Class I railroads and Amtrak (23.6 percent)* in addition to a commitment by the railroads to maintain the INFRA funded infrastructure investments for their full lifecycle.

INFRA also prioritizes construction over planning. In response, the CREATE partners are proposing a construction-focused project, starting with Project B9, which generates significant delay savings benefits and is ready to begin construction almost immediately. To prepare B9 for construction, the CREATE partners are using \$761,200 in Federal funds previously obligated for right-of-way acquisition with a \$190,300 local match coming from IDOT.

IV.1 Future Eligible Costs

INFRA's objectives include holding recipients accountable for performance. The CREATE partners are experienced at procurement, project management, and collaboration to ensure successful project delivery, and have a strong history of accountability and delivering projects on or under budget. A reliable and reasonable cost estimate for future eligible costs for the 75th Street CIP was developed during Phase I preliminary engineering and environmental review. For B9,

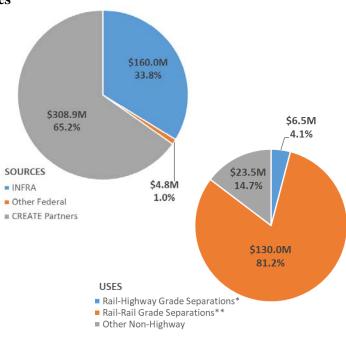


CSX has substantially completed the Phase II design in house and has prepared a cost estimate for Phase III construction in accordance with the CREATE partner approval process.

In accordance with FHWA's Major Project requirements, a <u>Cost Estimate Review (CER)</u> was held for the 75th Street CIP in June 2014 (see Section VI.4 for more information on the CER). The CER concluded that the cost estimates were reasonable. The CER-based cost estimate was updated for this funding request to reflect changes in the Project schedule since 2014 and to include B9 and is and is reflected in the detailed project <u>budgets</u>. Table IV-1 shows planned sources and eligible future uses of funds by project phase. In addition to these future eligible costs, the *CREATE partners have previously invested more than \$14 million in these projects to advance them through environmental review and design.*

Table IV.1: Project Funding Sources and Uses

Sources	Total	%
INFRA		
INFRA Grant	\$160,000,000	33.8%
Other Federal		
CDOT STP	\$4,000,000	0.8%
CDOT CMAQ	\$800,000	0.2%
Non-Federal (CREATE Partne		
State		
IDOT	\$101,374,420	21.4%
Regional / Local		
Metra	\$20,000,000	4.2%
Cook County	\$75,000,000	15.8%
City of Chicago	\$1,200,000	0.3%
Private		
Amtrak	\$5,000,000	1.1%
Class I Railroads	\$106,374,420	22.5%
TOTAL	\$473,748,840	100.0%



Uses	INFRA	Other Federal	Non-Federal (CREATE Partners)	Total	INFRA %	Total %
P2 **						
Phase II Design	\$1,721,109	\$4,000,000	\$23,095,294	\$28,816,403	1.1%	6.1%
EW2						
Phase II Design	\$11,244,211	\$0	\$20,221,929	\$31,466,140	7.0%	6.6%
P3 **						
Phase II Design	\$12,192,205	\$0	\$21,926,831	\$34,119,037	7.6%	7.2%
GS19 *						
Phase II Design	\$116,350	\$800,000	\$409,247	\$1,325,597	0.1%	0.3%
P3 **						
Phase III Const.	\$116,048,094	\$0	\$208,704,402	\$324,752,495	72.5%	68.5%
GS19 *						
Phase III Const.	\$6,428,388	\$0	\$12,561,008	\$18,989,396	4.0%	4.0%
В9						
Phase III Const.	\$12,249,643	\$0	\$22,030,129	\$34,279,772	7.7%	7.2%
TOTAL	\$160,000,000	\$4,800,000	\$308,948,840	\$473,748,840	100.0%	100.0%

^{*} Rail-Highway Grade Separations

^{**} Rail-Rail Grade Separations



Contingency Reserves

INFRA calls for innovative strategies to solve challenges. The CREATE partners have applied this to project cost contingencies. Cost estimates for the Project include sufficient contingencies and management reserve percentages per estimate to mitigate project risks for issues such as weather or utility delays in accordance with the CREATE partners' <u>Estimates and Contingency Plan</u>.

While the possibility of Federal, state or private (railroad) funds being unavailable for Project expenditures is remote, periodic interruptions in state or Federal reimbursements have been successfully overcome through unique and effective cash management practices. The CREATE partners recognize the need for contingency funding in the event of normal funding interruptions and have a variety of contingency solutions available depending upon the duration of the unavailability of funds, ranging from short term cash management techniques to longer term access to credit and capital markets.

IV.2 Federal Funding Status and INFRA Request

INFRA aims to expand the total resources available for infrastructure investments by minimizing the Federal project share. The total Federal share is 35 percent, including INFRA funds as well as CDOT STP and CMAQ funds. The *INFRA request alone equals 34 percent of the future eligible project costs and is about half of the allowable 60 percent maximum*. The INFRA funds requested total \$160 million, with 14.7 percent (\$23.52 million) of this to be invested in freight intermodal project components that are subject to the \$500 million INFRA maximum for freight projects, and the remaining 85.3 percent in grade separations (see Table IV.1). In addition to the Federal funds for future eligible costs included in Table IV.1, an additional \$761,200 in Federal funds have been obligated for right-of-way acquisition for Project B9 with the local match coming from IDOT. Even when accounting for the previously obligated Federal funds, *the Project's Federal share complies with INFRA funding constraints*. Should the Project not receive the requested amount of INFRA funds, the Project would be delayed for the foreseeable future until additional funding can be identified.

IV.3 Non-Federal Funding Commitment

INFRA prioritizes helping those who help themselves by leveraging INFRA funding with non-Federal sources. INFRA's priorities have resulted in a *significant 65 percent non-Federal funding match* provided by State, local and private sources including IDOT, CCDOTH, CDOT, Metra, Amtrak, and the participating private railroads for the Project, as indicated in a commitment letter from the CREATE partners. As detailed in Table IV.1, the local funds include \$96.2 million from Metra, Cook County and the City of Chicago. The state of Illinois dedicated \$101.4 million in state funding for the Project. In addition, the non-Federal match includes an unprecedented *commitment of more than \$111 million in private funds* from the Class I railroads and Amtrak. This private funding commitment has been successfully negotiated amongst all parties and comes not only in the form of instantaneously available private capital funding for the proposed improvement, but also in the commitment to long-term maintenance and operations. The non-Federal funding match for this grant request is not counted as the matching requirement for another Federal program.

Funding Stability

Since its inception in 2003, the CREATE partners have made considerable progress in securing funding and implementing the Program through collaboration and shared prioritization of resources. The partnership framework and management processes are detailed in Partnerships and

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Management Practices. Each partner plays a significant role in the advancement of CREATE, while investing funds in projects beyond the formal CREATE process. Over time, the partners have shifted from the traditional 80 percent federal and 20 percent local share to the proposed \$160 million INFRA request for a total Federal share of 35 percent. While funding challenges and constraints exist, the partners have found creative and responsible ways to advance the Program. This funding request includes diverse regional support from IDOT, CDOT, Metra, CCDOTH, Amtrak, and the affected railroads who have committed providing matching funds for the INFRA grant.

The only restriction on the funds committed by the Project partners is: CDOT's CMAQ funds of \$0.8 million are committed to GS19. CMAQ funding is not constrained by time or project schedule.

Ongoing Maintenance

INFRA prioritizes maintaining federally-funded assets in a state of good repair and public-private partnerships. In response, the railroads are committing to maintain the INFRA-funded railroad facilities in a state of good repair at no cost to the partner public agencies. *This private investment amounts to up to \$60 million through 2050* for maintenance of facilities designed or constructed with INFRA funds.

Financial Condition of the Project Sponsor

IDOT is an agency of the executive branch of Illinois state government. The agency's core mission is to provide safe and cost-effective transportation options throughout the state, which serves as the transportation hub of North America. In the 2016 fiscal year, IDOT's operating budget was nearly \$2.8 billion during which time the agency improved 878 miles of pavement and 138 bridges, and completed 202 safety improvements and 745 highway projects. IDOT also awarded and managed a total of \$3 billion in highway contracts and obligations, including construction, engineering and land acquisition. IDOT's proposed Multiyear Plan for 2016-2022 included more than \$11 billion in projects, with more than \$2 billion in project spending in fiscal year 2017. IDOT's Rail Freight Program provided \$1.75 million in financial assistance in 2016, leveraging \$22 million in private investments. As an agency of the state government, IDOT is able to access capital markets by selling general obligation debt backed by the full faith and credit of the state government. INFRA gives the state of Illinois the chance to supplement their existing transportation system's focus on the future movement of goods through the Chicago Terminal, the multistate region and beyond.

Ability to Effectively Manage Grants

INFRA is an opportunity to deliver our most complex infrastructure Project within CREATE and advance the Program to the next critical phase of improving the carrying capacity of the Terminal. As previously noted, each CREATE project is managed by an individual sponsor. The facility owners, namely the BRC, CDOT, CSX, IDOT, Metra, NS and UP, will work closely together to manage and deliver all elements of the Project. The CREATE Program has a demonstrated history of successfully and expeditiously managing grant funding, particularly through its obligation of Projects of National and Regional Significance (PNRS) and Transportation Investments Generating Economic Recovery (TIGER) funds. For example, TIGER I funds were released by USDOT on July 22, 2010 and construction initiated the week of August 2, 2010. For TIGER IV, funds were obligated October 2, 2012 and construction was initiated June 12, 2013.



The CREATE partners are well prepared and experienced at delivering projects. At the present time, 29 of CREATE's 70 projects have been completed, five are under construction, and four are in the final design phase. Of the completed projects, 90 percent were at or under budget. For example, IDOT recently returned \$16 million to the USDOT due to cost savings during construction of the Englewood Flyover (P1) managed by Metra.

V. MERIT CRITERIA

The merit criteria outlined for INFRA align perfectly with the 75th Street CIP/B9 Project proposal. The criteria are each discussed below, including a detailed discussion of the results of the Benefit-Cost Analysis under Criterion 1 (see Section V.1.1). Additional mobility, safety, community and environmental outcomes summarized in Section V.5 are qualitative in nature, and serve as a supplement to the discussion of quantified benefits in the Benefit-Cost Analysis.

V.1 Criterion 1: Support for National and Regional Economic Vitality

INFRA emphasizes freight projects of national and regional significance. In response, the CREATE partners are submitting the most significant freight rail improvement project in the nation for INFRA funding. *No other project will have comparable effects on the national supply chain as the 75th Street CIP/B9 Project*, as discussed in Section I.3. It will improve reliability and reduce delay by eliminating bottlenecks and expanding capacity. The resulting travel time savings reduce business operating costs and expand market access, providing long-term economic benefit for shippers and receivers alike. This benefit will be particularly valuable for industries that rely heavily on access to cost-effective rail shipments, such as agriculture, energy, and manufacturing. These industries have strong multiplier effects and represent a key competitive advantage for the U.S. in the global economy. The significance of the Project as a source of economic vitality is evidenced by the broad and diverse coalition of state DOTs, business groups, and public agencies from across the country that have provided letters of support.

V.1.1 Benefit-Cost Analysis

As a result of reduced congestion and additional capacity to accommodate anticipated growth in freight traffic through the Terminal, the monetized benefits of the 75th Street CIP/B9 Project-including travel time, shipping costs, safety, and emissions- will greatly exceed its costs. *The composite benefit-cost (B/C) ratio for all Project components is 7:1 or better, with a Net Present Value (NPV) of \$3.8 billion.* The NPV of the construction projects will *return the requested Federal investment by more than 20 to 1*.

Although only some of the benefits of the Project have been monetized in the Benefit-Cost Analysis (BCA), *each component of the Project delivers both strong B/C ratios and NPV*. Complete documentation of BCA inputs, methodology and results can be found in the separate Benefit-Cost Analysis Technical Memorandum and Benefit-Cost Analysis Model, including a summary overview of the BCA methodology attached as an Appendix to the Technical Memorandum.

A BCA was prepared for the entire group of Project elements when fully complete. In addition, BCAs were prepared for the elements or groups of elements which may be constructed separately or in advance of the full Project, to demonstrate that *each element with independent utility has benefits in excess of costs*.



Benefits have been organized according to the segments of traffic affected: trains accommodated under existing rail capacity, additional trains that will be accommodated by expanded rail capacity, and motorists using the 71st Street grade separation. Table V.1 summarizes the benefits that accrue to each segment of traffic.

Table V.1 Benefit Cost Analysis Results, 7% Discount Rate (2016\$ millions)

	В9	P3/GS19	B9 + P3/GS19	B9 + P3/GS19 + P2/EW2
Benefits to Existing Capacity				
Freight Train Delay Reduction	\$13.1	\$38.5	\$51.3	\$66.2
Passenger Train Delay Reduction	\$226.4	\$439.3	\$486.4	\$384.6
Emissions Reductions	\$0.9	\$1.0	\$1.2	\$1.4
Benefits to Expanded Capacity				
Logistics Cost Savings	\$920.7	\$1,791.2	\$2,612.5	\$3,385.5
Emissions Reductions	\$109.2	\$212.4	\$309.8	\$401.5
Injury and Fatal Crashes Avoided	\$24.7	\$48.0	\$70.0	\$90.7
Pavement Maintenance Cost Savings	\$27.4	\$53.2	\$77.6	\$100.6
71st Street Grade Separation				
71 st Street Motorist Delay Savings	\$0.0	\$3.1	\$3.1	\$3.1
Total Benefits	\$1,322.3	\$2,586.7	\$3,611.9	\$4,433.5
less Maintenance Costs	-\$3.5	-\$0.4	-\$3.8	-\$17.2
plus Residual Value	\$1.5	\$14.0	\$15.5	\$36.9
TOTAL NET BENEFITS	\$1,320.4	\$2,600.3	\$3,623.6	\$4,453.2
Total Capital Costs	\$28.9	\$216.1	\$245.0	\$577.9
BENEFIT-COST RATIO	45.67	12.03	14.79	7.71
NET PRESENT VALUE	\$1,291.5	\$2,384.2	\$3,378.6	\$3,875.6

V.2 Criterion 2: Leveraging of Federal Funding

INFRA, as the financial prospect to aid in funding the 75th Street CIP/B9 Project, has challenged every CREATE partners' contribution level and, coupled with the addition of Cook County as a full partner, has made the proposed degree of leverage possible.

To date, the CREATE Program has received funding commitments totaling \$1.441 billion:

- **Federal funds totaling \$435 million**, including TIGER I and TIGER IV Grants, SAFETEA-LU PNRS Grant, ARRA High Speed Rail Grant, Railroad Relocation Grant, and FRA Railroad safety grant for the Safe Transportation of Energy Products by Rail Program;
- State funds totaling \$480 million, including state bond funds, PNRS/TIGER matching funds, and support for highway-rail grade separations;
- Local Government funds totaling \$136 million, including County and City funds for viaduct improvements, grade separations, and land acquisition; and
- Railroad funds totaling \$390 million, including private freight, Metra, and Amtrak funds for railroad infrastructure and grade separations.

It is also worthy of note that since 2004, the CREATE railroad partners have invested over \$4 billion in Terminal infrastructure improvements *outside* the CREATE Program.

The significant 65 percent non-Federal funding match from IDOT, CCDOTH, CDOT, Metra, Amtrak, and the participating private railroads for the Project (see Table IV.1) is committed, stable and dependable per the parameters outlined in Section C.2 of the Notice of Funding Opportunity.



The partners further commit to maintaining Project assets in a state of good repair after construction at no cost to the public sector.

V.3 Criterion 3: Potential for Innovation

INFRA calls for innovation, which aligns with the preferred CREATE approach of developing future-focused infrastructure solutions to the multimodal challenges of the legacy railroad network of the Terminal. This package of Projects will use *CREATE processes and procedures unique to this type of multimodal investment* in the areas of engineering, design, and procurement. The Project will require a significant amount of coordination to ensure that rail network capacity and access is not hindered for extended periods of time, and will set an example of balancing the needs of multiple stakeholders and users, as detailed in the CREATE Program Partnerships and Management Practices guidelines. For example, the CREATE rail partners utilize a secure interface for integrating information from all major railroad dispatch systems into a single display, called the Common Operational Picture (COP), improving the efficiency of overall rail operations.

Environmental Review and Permitting: While environmental approvals have already been secured for the Project, it is worth noting that all NEPA documents that are prepared for the CREATE Program are part of a tiered NEPA review process that considers the unique nature of the Program. It is one element of a systematic CREATE decision-making policy referred to as the Systematic, Project Expediting, Environmental Decision-Making (SPEED) Strategy. A detailed description of the USDOT-approved SPEED Strategy is available here. This innovative strategy allows for the right-sizing of NEPA environmental review based on the specifics of each project.

Experimental Project Delivery: The CREATE Program seeks to achieve the advantages of an expedited process through a multi-contract strategy, *separating components of the Program into discrete work scopes that align with the ideal sequencing of work, minimize rail network disruption and advance the overall Program efficiently. The Project schedules described in Section VI.2 take advantage of these opportunities. Within the individual elements of the Project, it is anticipated that Accelerated Bridge Construction (ABC) and other available construction techniques to complete projects while maintaining network availability will be utilized.*

Safety and Technology: INFRA prioritizes both safety and innovation. In response, the CREATE partners will *place increased emphasis on emerging transportation technologies* for such components as trespass prevention and remote monitoring of flyover structures to be considered during final design. Additionally, increased use of other Homeland Security options will be a priority for implementation to protect of our most critical infrastructure. The Project will meet all current railroad standards, including all Positive Train Control (PTC) signal and communication system requirements. The design of the Project also includes other innovative technologies such as remote bridge monitoring, and automated delay and incident detection/monitoring/reporting capabilities.

V.4 Criterion 4: Performance and Accountability

INFRA prioritizes performance and accountability. In response, the CREATE partners commit to the following specific, measurable outcomes as a condition of INFRA funding:

• Reaching Project delivery milestones in a timely manner: Key milestones for each element of the Project are identified in the schedules discussed in Section VI.2. If INFRA



funding is available by March 1, 2018, the CREATE partners commit to meeting the element-specific design and construction end dates as a condition of INFRA funding. INFRA funding support will allow the Project to be delivered efficiently, advancing the overall CREATE Program sequence as planned.

• Achieving transportation performance outcomes: As has occurred on TIGER-funded projects, the CREATE partners will establish baselines before construction and report performance quarterly for each INFRA-funded construction Project element. The CREATE partners commit to measure train delay and capacity through the Argo Connections (B9) and Forest Hill Junction (P2), and to demonstrate delay reduction and capacity improvement as a condition of INFRA funding. The CREATE Program has demonstrated a track record of achieving similar performance targets on past projects.

V.5 Other Outcomes

V.5.1 Mobility Outcomes

The Project will improve national and regional freight and passenger rail mobility, and local mobility for all modes of travel. In addition to a monetized benefit related to reductions in pavement damage (Section V.1.1), the following additional positive outcomes are anticipated:

- **Rail:** Reliability and travel time will improve for over 200 freight trains representing seven railroads, over 30 Metra commuter trains, and over 10 Amtrak trains that traverse the Project area every day.
- **Highway:** The reliability of general traffic, truck traffic, and public transit will improve due to improved viaduct clearance and roadway pavement conditions at 36 viaduct locations, impacting a significant number of travelers daily. More than 10,000 hours of motorist delay each year will be eliminated at 71st Street due to completion of GS19.

V.5.2 Safety Outcomes

The Project will reduce rail-to-rail conflicts in six locations and eliminate one highway-rail grade crossing. In addition to a monetized benefit from reductions in injury and fatal highway crashes (see Section V.1.1), the following additional positive outcomes are anticipated:

- Reduced potential for crashes between trains due to reduced conflict points, and the *elimination of potential for crashes at rail-highway and rail-rail grade separations*.
- Enhanced safety in the transport of certain potentially hazardous commodity types.
- Reduced potential for rail derailments due to improved track configurations.
- Improved reliability in emergency vehicle response times in local neighborhoods.

V.5.3 Community and Environmental Outcomes

The extent of community engagement and resulting mitigation strategies identified within the 75th Street CIP Project area were unique in the context of a freight rail improvement. The Project sets an example of effective engagement and identification of local benefits, as documented in the <u>Final Environmental Impact Statement (FEIS) and Record of Decision (ROD)</u>. In addition to a monetized benefit related to improved regional air quality due to the projected reduction in emissions (Section V.1.1), the following additional positive outcomes are anticipated:

• **Fuel Reduction:** Corridor improvements are anticipated to save nearly 190,000 gallons of gas and over 3.6 million gallons of diesel fuel annually, enhancing national energy security.

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- **Air Quality and Noise:** Reduced train idling in the Project area will result in localized air quality improvement and a reduction in noise pollution in affected neighborhoods.
- **Stormwater Management:** Viaduct improvements will incorporate stormwater drainage improvements that will likely reduce basement flooding that impacts area homes.
- Community Mobility and Access: The Project will improve 36 viaducts and construct one new viaduct, improving accessibility to local schools, libraries, parks and other neighborhood amenities.
- **Public Safety:** Viaduct improvements will improve community policing efforts and reduce emergency services response times.
- **Job Creation:** The job creation commitment as documented in the Record of Decision for the 75th Street CIP will be honored during implementation.

VI. PROJECT READINESS

This section provides the detailed Project schedule that serves as the basis of the funding plan, discusses technical feasibility, and *describes the "critical path" relationship of the proposed work to the overall CREATE initiative*. Summary documentation of secured approvals and the status of state and local planning support is included, along with Project risks and mitigation strategies.

VI.1 Technical Feasibility

All CREATE projects are documented in the <u>Feasibility Plan</u> as amended in 2011, which supports the tiered environmental process for the overall Program, serves as the foundation for CREATE projects, and details their general and conceptual information, including project descriptions, problems being addressed, impacts on train speed and volume, benefits, and conceptual cost estimates. See Section IV.1 for information on the cost estimate and contingency. *Phase I Design is complete for all elements of the 75th Street CIP/B9 Project, establishing their technical feasibility*.

There are some restrictions on the extent and locations of work that can occur simultaneously in order to achieve minimal disruption of railroad operations during the construction period. Based on these considerations, a construction phasing plan was developed to design and construct Projects P3 and GS19 simultaneously. Although final design of EW2 will occur together with P3 and P2, EW2 cannot be completed until P3 is complete, and portions of the construction of EW2 must proceed in conjunction with P2. Project B9 can proceed independent of the 75th Street CIP.

The CREATE partners will let all RFPs for design and bids for construction using the established FHWA approved process. The Project and all respective components will adhere to FHWA, IDOT, CDOT and railroad standards, along with all other Federally recognized guidelines pertaining to the Project, and the CREATE <u>Partnerships and Management Practices</u>. Track and signal construction will generally be completed by the railroads.

VI.2 Project Schedule

Because of the varied nature of the work, and to foster participation by both large and small contractors, including local disadvantaged businesses, it is likely that each of the major phases will consist of several separate contracts. This strategy also offers the benefit of expediting overall progress. In addition, railroad track and signal construction will typically be completed by the owning railroads (except BRC) using their internal personnel and equipment.



The current schedules for the Projects are summarized in Table VI-1 below. Detailed schedules for the Projects are provided here, including estimated timeframes for property acquisition where required and illustrating initiation of construction phase activities within the requisite 18 months of obligation (assumed to be in July 2018). B9 property acquisition is expected to be complete in December 2017; construction phase efforts can begin upon obligation of INFRA funds with the procurement of track, civil and signal construction. Design work for P2, EW2, P3 and GS19 will commence in May 2018, and construction on P3 and GS19 is slated to begin in June 2019.

Table VI-1: Project Schedules

Project	Phase II Design	Phase III Construction
В9	Substantially complete	April 2018 to April 2020
P2	May 2018 to April 2020	November 2021 to November 2023 (Phase III is not in funding request)
EW2	May 2018 to April 2020	April 2021 to April 2023 (Phase III is not in funding request)
P3 & GS19	May 2018 to August 2020 (phased)	June 2019 to June 2023

In addition to exceeding the construction timelines required by INFRA funding for B9, P3, and GS19, the CREATE partners are prepared to initiate design of P2 and EW2 earlier than the obligation deadline for requested INFRA funds, subject to funding availability. Full funding will allow CREATE partners to start development of funding strategies for full construction of EW2 and P2, to move forward immediately once design is underway.

VI.3 Required Approvals

VI.3.1 Environmental Permits and Reviews

FHWA determined that a tiered environmental review process would be required for the CREATE Program prior to analyzing project-specific proposals. As a result, the <u>Feasibility Plan</u> was prepared in lieu of a Tier 1 Environmental Impact Statement. The <u>FEIS and ROD</u>, issued concurrently for the 75th Street CIP in September 2014, determined impacts to environmentally sensitive areas, right-of-way (ROW), existing infrastructure, drainage, and design exceptions/variances/deviations required to achieve the Project scopes. FHWA reviewed a written reevaluation of the 75th Street CIP (dated October 23, 2017), and determined that the approved 75th Street CIP FEIS and ROD remain valid for the requested FHWA action and that a supplemental EIS is not required (see the <u>FHWA determination</u> dated October 24, 2017).

The B9 Project received a Categorical Exclusion, which was documented in the July 2010 Environmental Class of Action Determination (ECAD) and updated in January 2013 and June 2014, and which was approved by FHWA. Sign-offs from various agencies on the Biological, Wetland, Cultural, and Preliminary Environmental Site Assessment are included in Appendix A of the ECAD and as updated in the June 2014 and October 2017 Technical Memorandums.

CREATE projects are vetted through CREATE partners, including IDOT and CDOT and other stakeholder and permitting agencies. Copies of letters to/from cooperating and participating agencies are documented in the <u>FEIS</u> in Appendix C, including, among others, correspondence with the U.S. Army Corps of Engineers, the U.S. Fish & Wildlife Service, the U.S. Environmental Protection Agency, the U.S. Department of the Interior, and the Federal Railroad Administration



(FRA). Agency review comments on the 75th Street CIP, including those provided by the FRA, are documented and summarized in Appendix J.

The CREATE partners will adhere to the environmental commitments made during the environmental review process. All required permits will be obtained by the lead railroad prior to initiation of construction activity, as identified in the Plans Specifications and Estimates (PSE) during Phase II. Permits will be required from the City of Chicago, Chicago Park District, and Illinois Department of Natural Resources. Permits for compliance with Section 404, Section 401, and the National Pollutant Discharge Elimination System (NPDES) will also be required. Permits for the 75th Street CIP are discussed in Chapter 3 of the FEIS, as are environmental commitments. For B9, permits and environmental commitments are included in the ECAD, and updated in the Technical Memorandums.

Public involvement efforts and public comments for the 75th Street CIP are documented in the <u>FEIS</u>, and were addressed through the environmental commitments. The Stakeholder Involvement Plan is contained in Appendix C while public comments are documented in Appendix J. Public Involvement efforts for B9 are documented in Exhibit I of the <u>January 2013 Technical Memorandum</u>.

VI.3.2 State and Local Planning Approvals and Federal Transportation Planning Requirements

Broad agency and public support is demonstrated by the state and local approvals and adopted plans described below.

State Transportation Plans

The IDOT <u>State Rail Plan</u> adopted in 2012 supports the CREATE Program and is a component of the State's <u>Freight Mobility Plan</u>, including the 75th Street CIP and B9. Likewise, IDOT's 2012 <u>Long Range Transportation Plan (LRTP)</u> supported the CREATE Program and Projects. The 2017 update to the State LRTP is underway, and continues to express support for the CREATE Program.

Cook County Transportation Plan

The <u>2016 Cook County LRTP</u> identified CREATE as a successful "pathbreaking effort" and supported its continued fiscal backing as a means of improving train traffic and maintaining the region's role as North America's freight capital.

Metropolitan Planning Organization

The CREATE Program is consistent with the freight element of the Chicago Metropolitan Agency for Planning (CMAP) GO TO 2040 Comprehensive Regional Plan. CMAP is the Chicago region's Metropolitan Planning Organization (MPO), responsible for reviewing and approving projects that use Federal transportation funds.

GO TO 2040 calls for the full funding and implementation of the CREATE Program in order to support the plan's goal of creating a more efficient freight network, one of its 12 high-priority recommendation areas. The plan states that implementation of the CREATE Program should be a top priority to support the efficiency and effectiveness of mobility throughout the region.

The FFY 2014-19 <u>Transportation Improvement Program</u> (TIP) is metropolitan Chicago's near-term agenda of surface transportation projects, listing all Federally funded projects and regionally significant, non-Federally funded projects programmed for implementation. Projects not listed in the TIP may not expend Federal transportation funds. The 2014-2019 TIP includes the "CREATE



East-West Corridor from Argo Interlocking to CP509," which encompasses the entire Project area, to address freight movement, and identifies the IDOT Division of Public and Intermodal Transportation (DPIT) (now referred to as the Office of Intermodal Project Implementation, or OIPI) as the lead agency.

VI.3.3 Letters of Support

This grant application is supported by transportation agencies, industry and trade associations, and units of government from across the nation. <u>Letters of support</u> have been provided by the following:

Elected Officials

State of Illinois, Governor Bruce Rauner Illinois Congressional Delegation Cook County, President Toni Preckwinkle City of Chicago, Mayor Rahm Emanuel Northeast Illinois Regional Board Chairs

CREATE Partners

Illinois Dept of Transportation
Amtrak
Metra
Association of American Railroads (AAR)
Chicago Metropolitan Agency for Planning (CMAP)

Transportation Agencies & Associations

Iowa Dept. of Transportation
Kansas Department of Transportation
Kentucky Department of Transportation
Michigan Dept. of Transportation
Minnesota Dept. of Transportation
Ohio Dept. of Transportation
Wisconsin Dept. of Transportation
Coalition of Gateways and Trade Corridors
Illinois International Port District
Illinois Road Transportation Builders Assn. (IRTBA)

Industry / Utility / Trade Associations

Civic Committee, Commercial Club of Chicago Illinois Chamber of Commerce Indiana Chamber of Commerce Ohio Chamber of Commerce Illinois Coal Association Illinois Corn Growers Association Illinois Farm Bureau Illinois Manufacturers' Association Illinois Petroleum Council

American Council of Engineering Companies- IL (ACEC) Hispanic American Construction Industry Assn. (HACIA) SMART - Transportation Division (UTU)

BP America

Constellation Brands

Exelon Ingredion

United Parcel Service (UPS)

We Energies and Wisconsin Public Service Wisconsin Electric Power (WEC Energy Group)

Planning / Policy Organizations Alliance for Regional Development

Calumet Area Industrial Commission
Environmental Law and Policy Center
Metropolitan Planning Council
Midwest Interstate Passenger Rail Commission
Mid-Ohio Regional Planning Commission
Northwestern Indiana Regional Planning Commission
Southwest Michigan Planning Commission



VI.4 Assessment of Project Risks and Mitigation Strategies

The CREATE partners manage project risks in accordance with the Estimates and Contingency Plan. This document outlines: 1) processes for use of management reserve funds for changes to scope; 2) procedures for the use of contingency funds associated with addressing design errors, requests by other agencies, unidentified utilities, added property costs, unanticipated conditions or commitments, and force majeure; and 3) the process for approving change orders and their payment method. In addition, the CER conducted in 2014 for the 75th Street CIP included a risk-based review of the Project cost estimate to confirm the reasonableness of the cost estimate and Project schedule (the final report is located here). According to the CER, the most significant threats that could delay the schedule, and their associated mitigation strategies, include the following:

- Right of way acquisition delays: The current schedule includes two years for completion of final design and right-of-way acquisition for Projects P2 and EW2, which could be considered aggressive. During the CER process there was discussion of IDOT requesting legislative approval for "quick take" authority to mitigate this potential schedule threat.
- Railroad operations delaying construction: Mitigation of this threat will require close coordination between the railroads and the contractor related to peak time needs and potential conflicts.
- Bridge material delivery delays: The advanced scheduling and coordination of any long lead-time materials will mitigate this potential delay.
- Bridge construction delays: This threat can be mitigated through close coordination, and scheduling of bridge construction well in advance to minimize local maintenance of traffic.
- Utility relocation delays: Communication and coordination with the utility companies will mitigate much of this delay, although the threat of encountering unknown utilities could still have an impact.
- Weather impacts: The construction schedule assumes four months per year of slowed or inactive construction due to the impact of inclement weather. The schedule could be improved should the region experience mild winters and/or the contractor is able to schedule specific construction activities during winter months.

The most significant of the documented cost risks that could impact the Project cost included the following: superstructure cost increases; substructure cost increases; and potential change orders during construction. The results of the CER demonstrate that the contingency amount in the pre-CER cost estimate is sufficient to cover the financial and schedule risks identified during the CER. As final design proceeds, costs may increase as information is acquired and requirements are established. An allowance for cost increases is already included in the contingency amount in the CER cost estimate, but any cost increases will be mitigated in the design process. There are also opportunities during the construction stage to aggressively manage scope changes, which could further reduce costs.

The potential for unknown environmental risks is mitigated by the fact that the Projects have obtained the requisite environmental approvals. Further, the CREATE Program has a history of delivering projects on time, with 90 percent of completed projects at or under budget. To monitor, manage, and drive cost and schedule performance, CREATE utilizes a program management consultant (PMC). The partnership framework and management processes for CREATE detailed

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in the <u>Partnerships and Management Practices</u> guide the management and mitigation activities used by the PMC and the CREATE partners.

VII. LARGE / SMALL PROJECT REQUIREMENTS

The 75th Street CIP/B9 Project meets the project size requirement to qualify as a *large project* for purposes of this grant application. The minimum project size requirement for the State of Illinois is \$100 million, per Section C.3.c.i of the Notice of Funding Opportunity. As a result, it must meet the following requirements:

- 1. Does the Project generate national or regional economic, mobility, and/or safety benefits? **Yes**, as described in Section V: Merit Criteria
- 2. Is the Project cost-effective? Yes, as described in Section V.1.1: Benefit-Cost Analysis
- 3. Does the Project contribute to one or more Goals listed under 23 USC 150?
 - 1. Safety? Yes, as described in Section V.5.2: Safety Outcomes
 - 2. Infrastructure condition? Yes, as described in Section I.1: Project Elements
 - 3. Congestion reduction? Yes, as described in Section I.4: Transportation Challenges Addressed
 - 4. System reliability? **Yes**, as described in Section I.4: Transportation Challenges Addressed
 - 5. Freight movement and economic vitality? **Yes**, as described in Section V.1: Support for National and Regional Economic Vitality
 - 6. Environmental sustainability? **Yes**, as described in Section V.5.3: Community and Environmental Outcomes
 - 7. Reduced project delivery delays? Yes, as described in Section V.4: Performance and Accountability
- 4. Is the Project based on the results of preliminary engineering? **Yes**, all Project elements have progressed through preliminary engineering and received environmental approval as noted in Section VI.1: Technical Feasibility. In addition, FHWA has reviewed the 75th Street CIP through its CER process, as described in Section VI.4: Assessment of Project Risks and Mitigation Strategies
- 5. With respect to non-Federal financial commitments, does the Project have one or more stable and dependable funding or financing sources to construct, maintain, and operate the Project? **Yes**, as discussed in Section IV.3: Non-Federal Funding Commitment
- 6. Are contingency amounts available to cover unanticipated cost increases? **Yes**, as discussed in Section IV.1: Future Eligible Costs
- 7. Is it the case that the Project cannot be easily and efficiently completed without other Federal funding or financial assistance available to the Project sponsor? Yes, the Project cannot proceed without the INFRA grant requested; however, if an INFRA grant is received, no additional Federal funding will be requested for the Project elements included in this request; in the absence of INFRA funding the schedule for CREATE Program completion will be extended.
- 8. Is the Project reasonably expected to begin construction not later than 18 months after the date of obligation of funds for the Project? **Yes**, as discussed in Section VI.2: Project Schedule

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