

CONSOLIDATED RAIL INFRASTRUCTURE AND SAFETY IMPROVEMENTS (CRISI) TRANSPORTATION DISCRETIONARY GRANT APPLICATION FOR CREATE PROJECT WA11

September 17, 2018

submitted by

Illinois Department
of Transportation

CREATE partners include

Association of American Railroads
Chicago Department of Transportation
Cook County Department of Transportation and Highways
Illinois Department of Transportation
United States Department of Transportation

Project Title	CREATE Program Project WA11 Dolton Interlocking Upgrade Phase III Construction
Applicant	Illinois Department of Transportation for the CREATE partners
Project Track 1,2,3 and/or 4?	3
Will this project contribute to the Restoration or Initiation of Intercity Passenger Rail Service?	No
Was a Federal grant application previously submitted for this project?	No
If applicable, what stage of NEPA is the project in (e.g., EA, Tier 1 NEPA, Tier 2 NEPA, or CE)?	
NEPA stage:	An Environmental Class Action Determination (ECAD) has been prepared and a Categorical Exclusion determination was made for this project on May 7, 2014
Is this a Rural Project? What percentage of the project cost is based in a Rural Area?	No
City(ies), State(s) where the project is located	WA11 is located in Dolton, Riverdale, and Chicago, IL.
Urbanized Area where the project is located	WA11 is fully within the Chicago urbanized area
Population of Urbanized Area	8,018,716
Is the project currently programmed in the: State rail plan, State Freight Plan, TIP, STIP, MPO Long Range Transportation Plan, State Long Range Transportation Plan?. Yes/no (If yes, please specify in which plans the project is currently programmed).	Yes The CREATE Program, including the WA11 Dolton Interlocking Improvement is included as part of the following plans: <ul style="list-style-type: none"> The Illinois State Freight Plan (2017), IDOT Long Range Transportation Plan (2018), CMAP Long Range Transportation Plan Draft (2018), and Cook County 2040 Long Range Transportation Plan (2016) each include support for the CREATE Program, which includes WA11. The Illinois State Rail Plan Update (2017), TIP (2018), and Cook County Freight Plan (2018) each include support for the CREATE Program and its projects, and in particular WA11.



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1.0 Project Narrative:

The Illinois Department of Transportation (IDOT) is pleased to submit this application for a Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program discretionary grant on behalf of the Chicago Region Environmental and Transportation Efficiency (CREATE) Program for improvements to the Dolton Interlocking Improvement Project (WA11). Please see a letter from [Mr. Randall Blankenhorn, IDOT Secretary](#), in support of this application, as well as additional support letters in Appendix B. The following narrative presents the information requested by the CRISI Notice of Funding Opportunity in support of WA11.

1.1 Project Summary:

The CREATE Program is a public-private partnership designed to address systemic issues in the areas of freight movement, freight/passenger rail conflict and highway/rail conflict in the Chicago metropolitan region. CREATE is primarily focused on investments along four rail corridors that will develop additional capacity and improved connections within and through the Chicago metropolitan area rail network. The CREATE WA11 project is designed to improve the speed at which rail freight and intercity trains move through the Chicago region. The project will upgrade and reconfigure the CSX¹/IHB/UP connections at Dolton Interlocking, with the following key features:

- Construction of a third main line with direct access from CSX and Barr Yard to the UP.
- Installation of crossovers between two mainline IHB tracks; upgrade connection between IHB and UP.
- Changes to the signal systems between the CSX, UP and IHB due to the above tracks connection changes.
- Improving conditions at nine at-grade crossings.

The project will increase freight train speeds from 20 mph to 30 mph for multiple routes, including routes accessing three major freight rail yards (CSX Barr Yard, UP Yard Center, and UP Dolton Intermodal Yard), a CSX mainline route, and all mainline connections between IHB, CSX, and UP. The increased speeds will enable this location to handle an increased number of trains, as well as increase the speed at which Amtrak trains can cross the interlocking, reducing potential delay to Amtrak trains. The increased speeds will also reduce gate down time at numerous at-grade crossings which reduces delay to motorists, buses, and businesses operating in the area.

The measurable benefits of the project fall into four key areas:

1. **Improved State of Good Repair—\$76 million² in benefits:** The increased capacity of the Chicago Terminal rail freight network will result in fewer shipments being diverted to truck,

¹ The project occurs on B&OCT rail lines, a wholly owned subsidiary of CSX. This application references “CSX” throughout.

² All benefits and costs presented are in 2017 dollars. When applicable, future costs or benefits are discounted to 2017 dollars.

avoiding negative impacts on roadway pavement conditions or the need for additional maintenance. CREATE partner railroads are committing to maintain the CRISI-funded railroad facilities in a state of good repair at no cost to the partner public agencies.

2. **Reduced Delay on the Rail Network and at Grade Crossings—\$27 million in benefits:** The project will enable the handling of more cargo on existing rail infrastructure and increase train speeds through the Chicago Terminal, reducing delays to users on both the road and rail systems.
3. **Reduced Fuel Usage and Emissions—\$74 million in benefits:** The freight rail improvements will reduce train idling and potential diversion of shipments to truck, thereby reducing emissions and fuel consumption. The project will also reduce emissions from idling trucks and motorists stopped at several at-grade crossings by reducing gate down times.
4. **Increased Safety—\$63 million in benefits:** Reducing potential diversion of shipments to truck will lower the possibility of truck-involved crashes and their consequences. In addition, the reduced at-grade crossing delays and reconfiguration of the at-grade crossing at the intersection of 138th Street and Indiana Avenue will reduce the risk of unsafe behaviors, such as trespassing and driving around crossing gates.

Overall the project will lead to \$240 million in benefits that increase the economic competitiveness of the Chicago Terminal by improving system performance, reducing delays, and reducing negative public sector impacts due to truck-rail diversion. With a total project cost of approximately \$42 million, the **WA11 B/C ratio is 5.6:1**. A detailed [benefit-cost spreadsheet](#) and [narrative](#) is included in Appendix C.

1.2 Project Funding:

The CRISI funding request for WA11 is solely for Phase III construction activities and close out. The requested amount is **\$19,206,398** and represents **50 percent of the cost of Phase III construction** (see Table 1). The remaining 50 percent will be funded by contributions from **IDOT (22 percent)** and the **CREATE partner railroads (28 percent)**. The private funding commitment from the CREATE partners has been successfully negotiated amongst all parties and comes in the form of private capital funding for the proposed improvements.

What is CREATE?

- *Launched in 2003, the CREATE Program includes 70 projects designed to separate freight and passenger trains at six key junctions; eliminate about two dozen at-grade crossings; and increase rail capacity, speed, and reliability in the Chicago area.*
- *The CREATE Program is managed through a public-private partnership among Amtrak, AAR, BNSF Railway Co., Belt Railway Co. of Chicago, Chicago Department of Transportation, Cook County Department of Transportation and Highways, Illinois Department of Transportation, CP, CN, CSX, Indiana Harbor Belt Railroad Co., Metra, Norfolk Southern Railway, and Union Pacific Railroad.*
- *So far, CREATE has completed 29 projects and secured \$1.6 billion dedicated to improving the fluidity of rail traffic through Chicago.*

Table 1 Federal Funding Request

Task #	Task/Name Project Component	Cost	Percentage of Total Phase III Construction Costs	Percentage of Total Project Cost
1	Phase I Preliminary Engineering	\$1,234,131 ¹	—	3%
2	Phase II Final Engineering and ROW Acquisition	\$3,209,686 ¹	—	7%
3	Phase III Construction (Includes project close out)	\$38,412,797	100%	90%
Total Project Cost		\$42,856,613	—	100%
Federal Funds Received from Previous Grant		N/A	N/A	N/A
CRISI Federal Funding Request		\$19,206,398²	50%	45%
Non-Federal Funding Match (Cash)		\$19,206,398 ²	50%	—
Portion of Non-Federal Funding Match from the Private Sector		\$10,603,199	28%	—
Portion of Total Project Costs Spent in a Rural Area		N/A	N/A	N/A
Pending Federal Funding Requests		N/A	N/A	N/A

¹ Indicates funds previously spent or committed.

² CRISI funding request and non-federal funding match each are \$19,206,298.50.

The **50 percent** contribution by IDOT and the CREATE partner railroads of **\$19,206,398** for Phase III Construction is in **addition** to the **\$4,443,817** already committed or spent for Phase I Preliminary Engineering, Phase II Final Engineering, and right-of-way (ROW) acquisition for the project.

In addition to the private capital funding provided as a match to the CRISI funds, the railroads are responsible for the long-term capital maintenance of the Dolton Interlocking to a state of good repair at no cost to public agencies.

CRISI is an opportunity to deliver a significant infrastructure project within the CREATE Program. The Program has a proven history of successfully and expeditiously managing federal grant funds, 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 was 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 experienced at procurement, project management, and collaborating to ensure successful project delivery, and have a strong history of accountability and delivering projects on or under budget. 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. A reliable and reasonable cost estimate for future eligible costs for WA11 were developed during Phase I preliminary engineering. The environmental review was updated in Phase II final engineering.

Appendix B contains funding commitment letters from the project partners.

1.3 Applicant Eligibility:

The applicant meets the eligibility criteria outlined defined under 49 U.S.C. 24407(b)(8). The lead applicant for this grant is the Illinois Department of Transportation (IDOT), a CREATE partner and unit of state government. The DUNS number for IDOT is 1336007540000.

The contact for this application is:

Beth McCluskey

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This application is submitted with full support of the CREATE partners who will be involved in project delivery.

As the lead applicant for this CRISI grant, IDOT will serve as the fiduciary recipient and grant administrator for federal funds on behalf of the CREATE Program. Joining in the application are all the CREATE partners, with financial contributions from IDOT and the

WA11 has broad agency and public support as shown in the state and local approvals and adopted plans listed below.

State Transportation Plans

- *2017 IDOT State Rail Plan update includes WA11 in the long-range plan project list.*
- *IDOT's 2018 Long Range Transportation Plan (LRTP)*

Cook County Transportation Plans

- *2016 Cook County LRTP identified CREATE as a successful "path-breaking effort" and supported funding its completion as a means of improving train traffic and maintaining the region's role as North America's freight capital.*
- *2018 Cook County Freight Plan focuses on the cluster of at-grade crossings in Riverdale and Dolton, IL associated with the WA11 project. These at-grade crossings experience frequent and severe delays, which will be improved by the WA11 project.*

Chicago Metropolitan Agency for Planning

- *GO TO 2040 Comprehensive Regional Plan (2014) calls for the full funding and implementation of the CREATE Program and states that implementation of the CREATE Program should be a top priority to support the efficiency and effectiveness of mobility throughout the region.*
- *FFY 2014-19 Transportation Improvement Program (TIP) includes the entire CREATE Western Avenue corridor (TIP ID 01-05-0011), of which WA11 is a component Project.*

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 Program delivery. Recognizing the national and regional significance of CREATE, 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. For WA11 the sponsor is IDOT and the contracting entity is CSX. All projects have followed FHWA guidelines through Phase I and II to ensure eligibility for federal and IDOT funds. In its role as grant administrator, IDOT will coordinate closely with affected railroad owners, operators, and funding partners.

1.4 Project Eligibility:

The project is eligible under the following categories described under Section C(3) of the Notice of Funding Opportunity:

- WA11 addresses rail traffic congestion. The speed of trains through the Dolton Interlocking—a junction where eight rail lines cross and 125 freight trains and two passenger trains pass through daily—is limited by the existing signal system and track configuration. The Interlocking, located between several railyards, sees a high volume of train traffic every day that must be carefully orchestrated. Delays at the Interlocking add to the existing rail traffic congestion in nearby yards and interchanges and the delays ripple through the rail network to other facilities. Without the project, rail congestion and delays will continue to increase with growing traffic demands. WA11 will increase train speeds by 50 percent through the Dolton Interlocking, thereby increasing capacity, as well as reducing delay and congestion for rail traffic.
- WA11 is a rail line relocation and improvement project. The CSX leads between the CSX track and the IHB, and between the CSX track and the UP, as well as the IHB's Harbor Lead between the IHB and the UP, will be realigned, the curves will be smoothed out, and larger turnouts will be installed so that freight trains may operate at higher speeds.
- WA11 is a capital project to improve short-line and regional railroad infrastructure. The IHB, a Class III switching railroad, controls the interlocking, and the project will construct new crossovers in the IHB mainlines.
- WA11 will install new crossing materials and new signals, which will improve multiple at-grade crossings. WA11 will improve the dangerous 138th Street and Indiana Avenue at-grade crossing by removing the NS track and reducing distance between the gates on 138th Street.

The detailed project description in the following section describes how the project addresses the eligibility requirements.

1.5 Detailed Project Description:

Challenges

The Dolton Interlocking Improvement project (WA11), is an important project in the CREATE Program, and is necessary to address significant and recurring rail system congestion by improving the efficiency and flexibility of rail corridors over CSX³, IHB, and UP railroads in the vicinity of Dolton Junction through signal improvements, increased train speeds, increased capacity, improved reliability, and improved geometric design. WA11 improves the condition, clearances, and capacity of rail mainlines; enhances capacity and service with less conflict between freight and intercity passenger rail; and reduces delays and risks associated with at-grade crossings. An overall map of the CREATE Program showing the location of WA11 within the Chicago region is shown in Figure 1.

Currently, railroads experience constrained operating windows and reduced operating speeds due to track geometry and conflicts with Amtrak passenger service (which has priority over freight) and an increasing numbers of freight trains to meet the demands of an expanding economy. The degradation of efficient freight rail service, given the current rail configuration within the WA11 area, impacts the competitiveness of the railyards and freight-dependent business both within and outside of the immediate area. Slower train speeds with increasing numbers of passenger and freight trains create significant delays to motorists at grade crossings, as well as impact local businesses whose employees are delayed going to work or rely on freight transportation to run their businesses.

The Dolton Junction Interlocking is surrounded by important railyards. Northwest of the project limits is CSX Barr Yard, to the west of the project limits is IHB Blue Island Yard, and to the south of the project limits is the UP Dolton Yard Intermodal Facility (see Figure 2). The layout of the Dolton Junction Interlocking is shown in Figure 3. The current railroad turnouts, curve geometry, and track configuration of the Dolton Junction Interlocking restrict train speeds to 20 mph on the CSX mainline, 20 mph on the UP mainline, 20 mph on the IHB mainline, 10 mph for the CSX lead connecting the CSX mainline with the joint CSX/UP mainline, and 20 mph for the IHB Harbor lead track. These lower train speeds create longer delays at grade crossings and create longer delays for other trains using the Dolton Interlocking.

The joint CSX/UP mainline is located south of the project limits and connects CSX Barr Yard with UP Dolton Yard via the CSX lead. The current track configuration requires the use of the two-track CSX mainline to connect to the CSX lead. The CSX lead is limited to 10 mph due to curve geometry and crossing over two sets of curved diamonds. While the CSX and IHB are able to mostly operate on their own lines, the CSX lead has to cross the IHB mains, as well as the NS track, before reaching the UP mains. This configuration means that when a train is queued to access the CSX lead, which requires crossing both the NS track and the IHB mainlines and feeds into the UP Main No. 2, one or more CSX mainlines is blocked from making through movements that would otherwise only intersect with the UP tracks.

³ The project occurs on B&OCT rail lines, a wholly owned subsidiary to CSX. This application references “CSX” throughout.

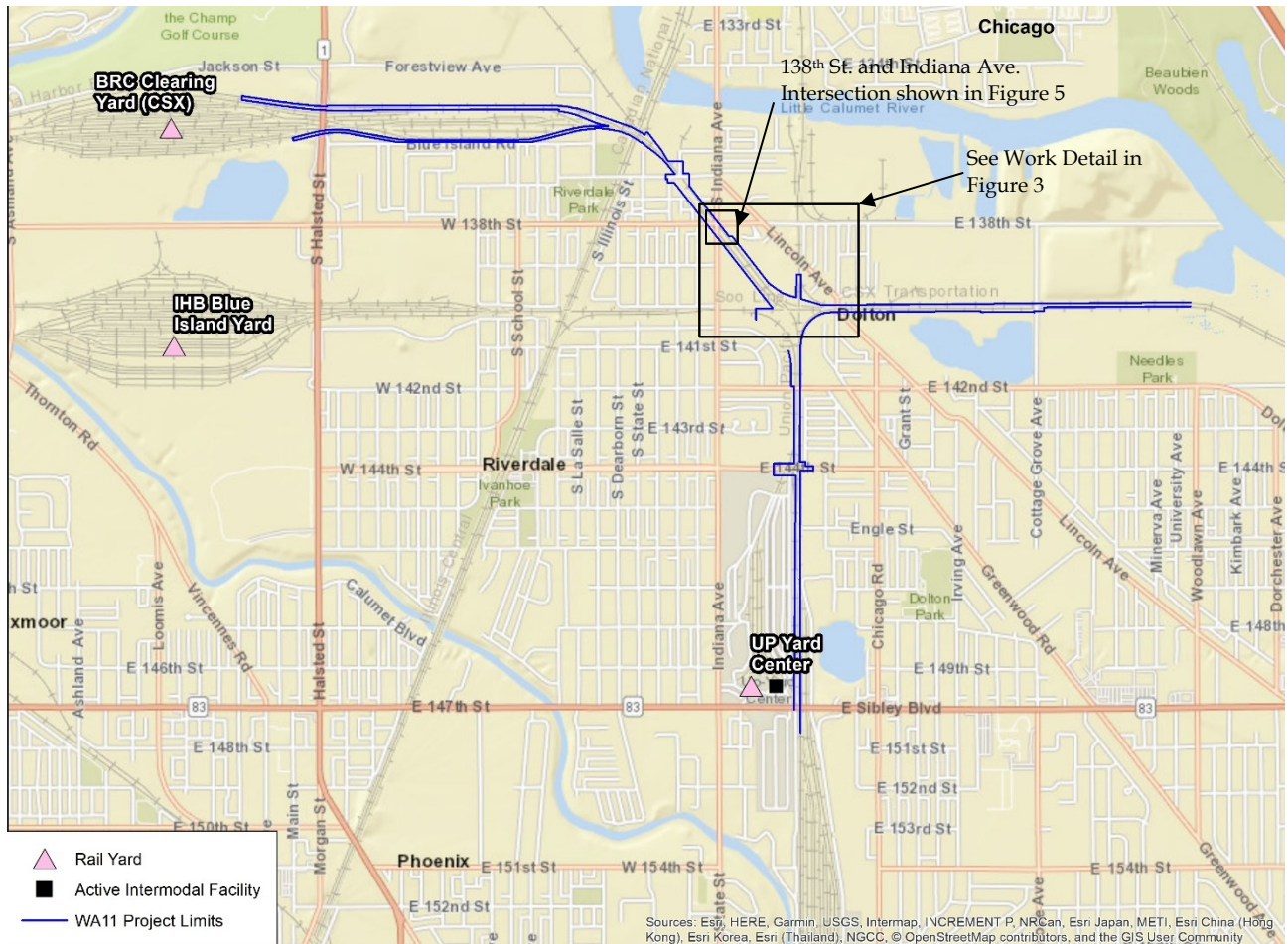
Figure 1 Overall CREATE Program Map



Note: Does not include Viaduct Improvement Program locations, Safety Improvement Program or Common Operational Picture

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Figure 2 Dolton Junction Interlocking Project Location and Rail Yards

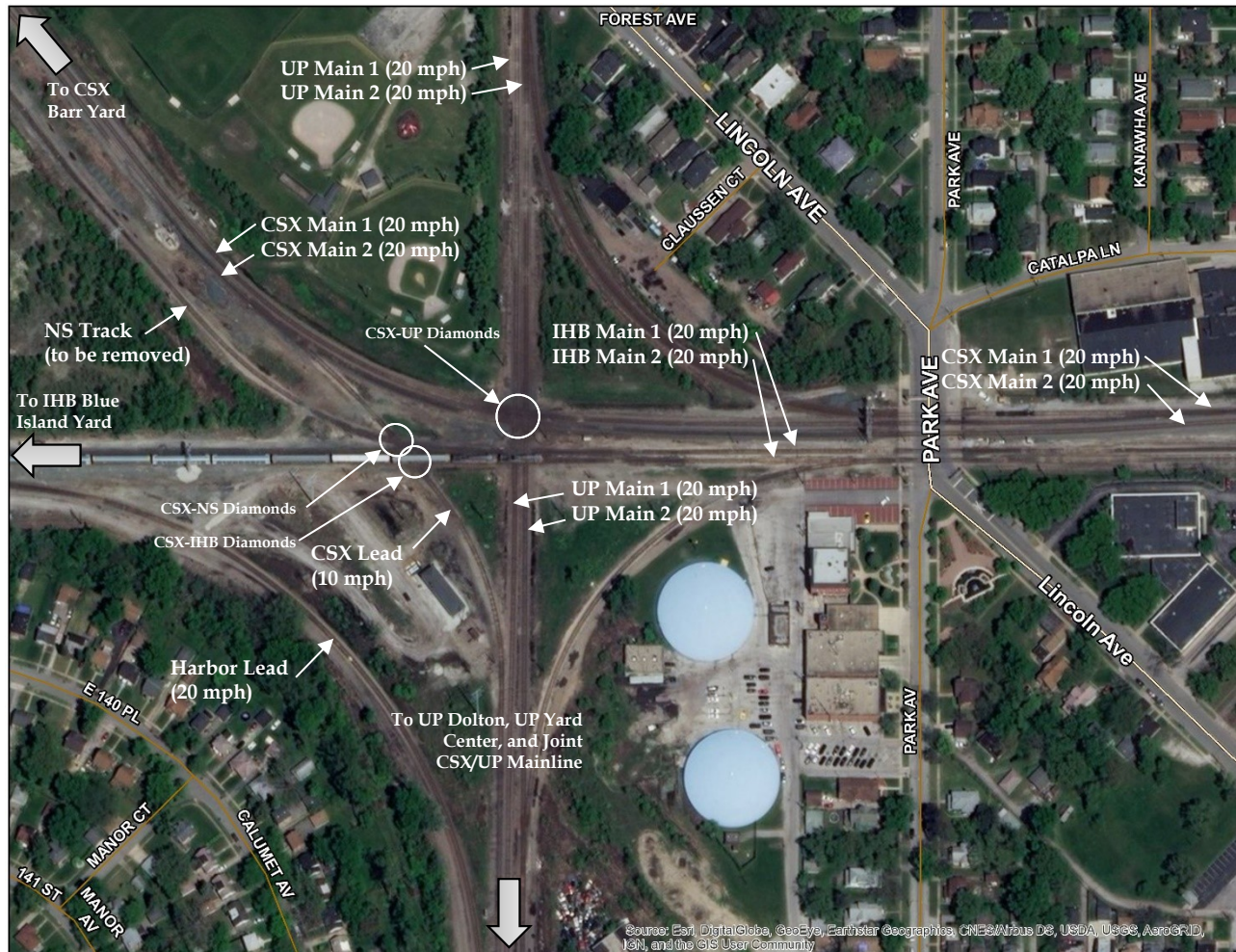


The IHB Blue Island Yard is connected to the UP Dolton Yard by the IHB Harbor Lead and is also negatively impacted by the slow speeds and current rail configuration. The movement between the IHB and the UP on the IHB Harbor lead is limited in speed due to the curve geometry.

Movements on the UP must cross both of the CSX and IHB mains. These movements include Amtrak's Hoosier and Cardinal services which connect Chicago with Indianapolis, Cincinnati, Charleston, Charlottesville, Washington D.C., and New York. The Hoosier and Cardinal trains travel on the UP mains through the interlocking. Delays to Amtrak trains accessing the interlocking can result from freight movements on the UP, CSX, or IHB that are held up by the various rail line crossings and slow speeds through the interlocking.

The Dolton Junction Interlocking is controlled remotely by an IHB dispatcher for all the railroads using the junction. The IHB Dolton Junction Interlocking Tower was recently updated by the railroads to allow for remote electronic operations. As a result, the railroads are able to make electronic requests to the IHB dispatcher for movements through the interlocking, improving the efficiency of the Tower operations.

Figure 3 Dolton Junction Interlocking Close-up of Existing Layout



The 138th Street and Indiana Avenue intersection is diagonally crossed by CSX Mains No. 1 & 2. Also, only 100 feet away along both Indiana Avenue and 138th Street are additional NS track at-grade crossings. The current configuration has an at-grade crossing that is 200 to 300 feet long. This creates a dangerous situation where cars may line up on the tracks and also get stuck between the tracks. Figure 4 shows the location of the 138th Street and Indiana Avenue intersection, and Figure 5 shows the detail of the intersection and at-grade crossings.

Delays at grade crossings negatively impact local businesses and schools. The 400 employees at Ardagh Group, the largest private employer in Dolton located just north of the CSX and IHB rail lines on Cottage Grove Avenue, are often tardy due to crossing delays. Some workers resort to a 7-mile detour via 142nd Street, I-94, 130th Street, and Indiana Avenue to avoid the risk of being delayed at a grade crossing. Local schools such as Harriett Tubman Elementary School and ECHO AFI Academy that are located adjacent to other crossings report that student tardiness and train noise are especially disruptive to the learning process.

The high density of rail crossings in the area also raises safety concerns. Fire departments have difficulty replying to calls on the north sides of the villages of Riverdale and Dolton when long trains block multiple crossings, and both villages lack the funds to build additional fire stations to serve those areas. Further, the long delays at crossings can encourage unsafe practices, such as

pedestrians crossing under or between stopped railcars, or even motorists driving around crossing gates.

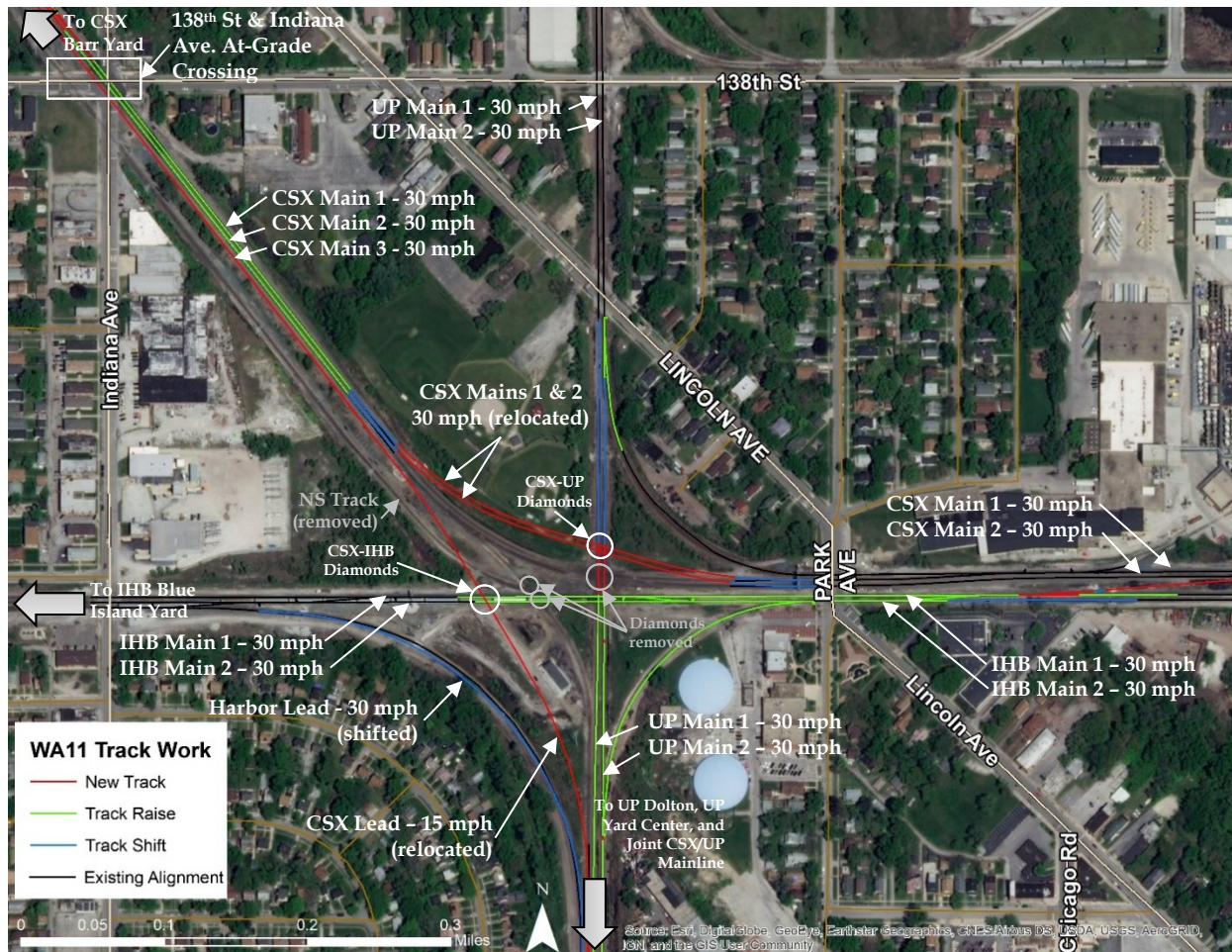
CREATE Project WAI1

As illustrated in Figure 4, the project improves rail operations through proposed track work and signal system improvements. The track work will include construction of a third main track on the CSX railroad between Barr Yard and Dolton Junction; removal of the existing NS track between Dolton Junction and 137th Street; realignment of two main tracks on the CSX railroad through Dolton Junction to reduce curvature and increase operating speed; installation of new crossing diamonds on the CSX and UP; construction of new crossovers on the CSX, IHB, and UP railroads; and reconfiguring the interchange connection between CSX and UP railroads at Dolton Junction. The new third main track on the CSX railroad will be compatible with at-grade crossing improvements at 138th Street that have been ordered by the Illinois Commerce Commission (ICC). The signal system improvements include upgrades, relocation, and/or removal of some of the existing signals and installation of new signals.

The project will increase operating speeds of trains in the project area from 20 mph to 30 mph except for the CSX lead, which will increase in speed from 10 mph to 15 mph. The increased speed, removal of NS track, new CSX Main No. 3, additional and relocated crossovers, and new alignments will improve the efficiency of the rail operations. The project has been coordinated with the villages of Dolton and Riverdale and the City of Chicago. Input from the municipalities was and will continue to be considered in the development of the project. Notably, the current project design incorporates community input regarding maintaining at-grade crossings at 137th Street and 144th Street.

The third CSX main track will extend from the east end of Barr Yard just west of the Canadian National (CN)/Metra overpass, will parallel the two existing CSX mainline tracks, then as the CSX Lead it will cross the IHB at Dolton Junction, and will connect to the joint CSX/UP mainline track south of 142nd Street. The track will cross the IHB on a tangent alignment to allow for the use of standard geometry crossing diamonds. The curvature on this track will allow 15 mph operations.

Four No. 15 crossovers will be constructed on the CSX mainlines at CP Riverdale to replace the existing crossovers and to allow movement between the three mainline tracks. The NS track (south section) at 138th Street will be removed and NS will access CP Riverdale via CSX tracks and the IHB at CP Grove. Signals will be replaced at CP Riverdale to reflect the crossover improvements and the addition of the third main track. Connections to the NS track (north section), CN interchange track, and the industry track on Michigan Avenue will remain. The two existing CSX mainline tracks will be realigned on the approaches to the UP crossing (diamond). Reduced curvature will be used to increase train speeds to 30 mph at the crossing. Tangent alignment at the crossing will allow for the use of standard geometry crossing diamonds. This modification from curved to standard tangent diamonds will result in lower operation and maintenance costs over time.

Figure 4 Close-up of Dolton Junction Interlocking with Portion of Proposed Work

Four No. 15 crossovers will be constructed on the UP at CP North Yard Center south of Dolton Junction to replace existing crossovers. The crossovers will provide improved connections and will allow increased train speeds between the mainline tracks, the CSX third main track, and the IHB lead. A No. 11 crossover will be constructed to provide a new connection from the UP Main No. 1 to the west section of the yard that provides access to the Dolton Yard Intermodal Facility.

Improvements to the IHB will consist of a No. 15 crossover located east of Lincoln Avenue and reduced curvature for the IHB lead which connects the IHB to the UP Dolton Yard Intermodal Facility in the southwest quadrant of Dolton Junction. The 6 degree 45 minute curve will allow for an increase in track speed to 30 mph.

Finally, the signal system and power-operated turnouts within the interlocking will be replaced. The project involves signal upgrades for CP Riverdale, CP North Yard Center, CP Grove, and the Dolton Junction interlocking. No track modifications will be made to the connecting tracks in the northeast and southeast quadrants at Dolton Junction.

Replacement of the IHB Tower was originally scoped to be a part of WA11. However, due to the dire need for improvements to the interlocking controls, the Dolton Junction Interlocking control

system was replaced by IHB in 2017. The new system is remotely controlled system by the IHB, and allows CSX and UP to make electronic requests for access to the interlocking, greatly improving the efficiencies of the interlocking.

The project will benefit railroads by increasing freight capacity and operating windows and reducing track conflicts for intercity Amtrak passenger trains. The project will increase the possible number of train movements between Barr Yard (CP Riverdale) and the joint CSX/UP mainline by allowing parallel train movements on all three tracks. It is also expected to improve service at the IHB Blue Island railyard which is in close proximity to the project area.

The speed of train movements through the project limits will increase because of the increased track capacity and improved track geometry. The faster operating speed will allow trains to clear the existing at-grade crossings in less time, and will decrease the amount of time the train movements occupy the interlocking. It will decrease the amount of delay experienced by trains passing through the Dolton Junction Interlocking, along with decreasing the amount of vehicular delay at the local at-grade crossings.

The project will benefit nine at-grade crossings with new crossing material, upgraded signals, and an increase in maximum rail speeds to 30 mph, allowing through trains to clear the at-grade crossings more quickly. Another three at-grade crossings near the project but outside of the project limits will also benefit from the increased speeds. The 137th Street at-grade crossing will also receive new crossing gates, lights, and bells.

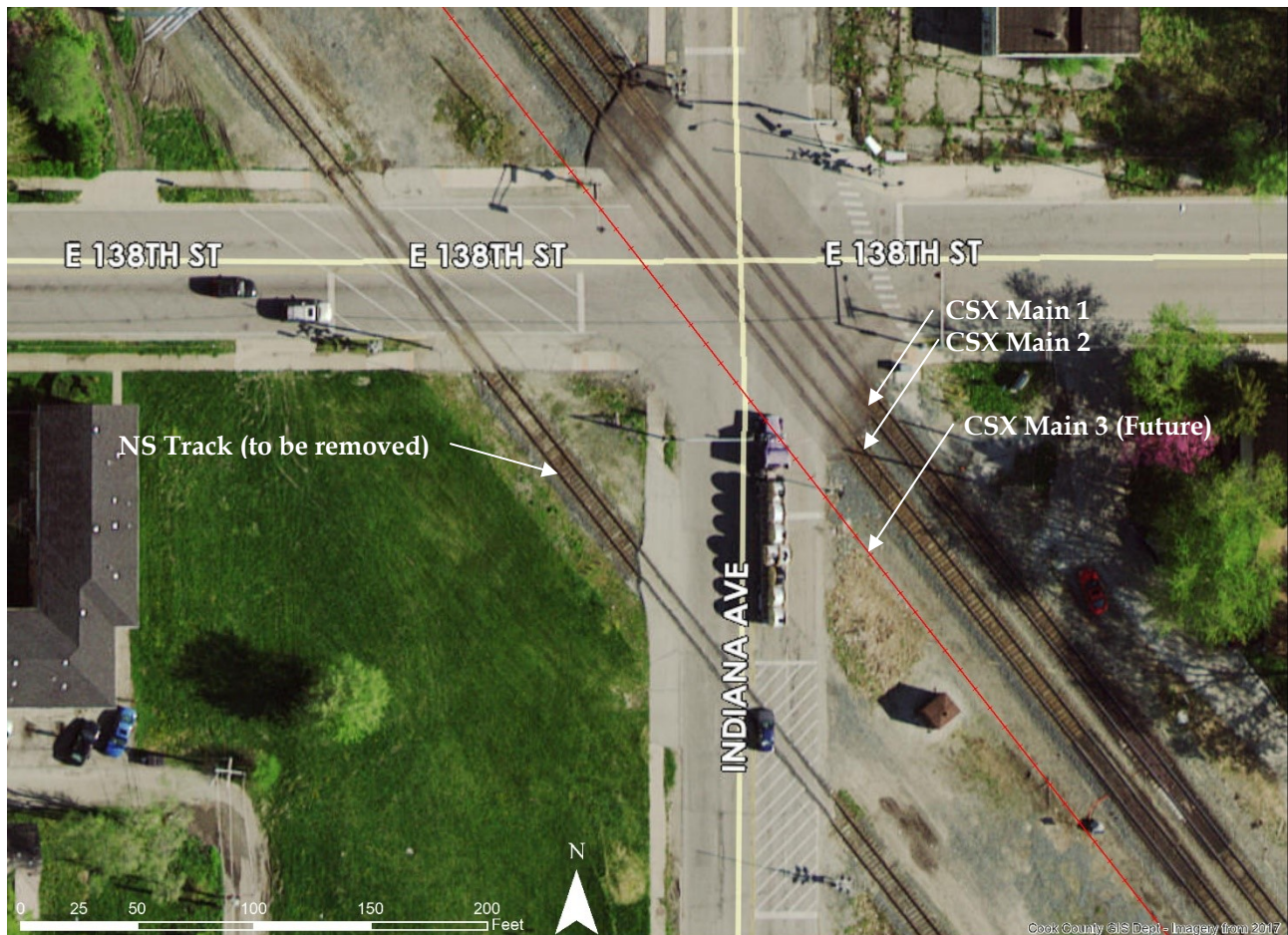
The 138th Street and Indiana Avenue intersection and at-grade crossings will benefit from the removal of the NS track and installation of the new CSX third main parallel to the existing mains. The existing intersection is dangerous and complex with long distances between the crossings and gates. The removal of the NS track and placing the CSX third main track close to the existing mainlines will enhance the safety of the intersection—not only preventing cars from getting stuck between the gates, but also discouraging the illegal strategies that some drivers take to avoid the excessive delays. For example, northbound traffic on Indiana Avenue may go around the gates and turn westbound onto 138th Street, or eastbound traffic on 138th Street may go around the gates to turn southbound on Indiana Avenue. The project will also enhance at-grade crossing safety by upgrading the 138th Street and Indiana intersection (shown in Figure 5) with new roadway approaches, ADA-compliant sidewalks and curb ramps, crossing surfaces, cantilever crossing warning signals and gates, and vehicular traffic signals. These

In support of WA11, Mayor Riley H. Rogers of the Village of Dolton states: “Plans to improve our infrastructure and to improve safety must be comprehensive because our needs are comprehensive. On a daily basis, and for a number of years, I have received calls from residents as well as area business owners looking for solutions to the many railroad-crossing delays. I have long stressed the importance of pedestrian safety at railroad crossings and we have done much to raise awareness. Now, we are ready to take the needed steps to modernize outdated rail infrastructure, and to provide the safety and mobility that our residents desire and deserve, however, additional funding is needed. We ask that you honor IDOT’s funding request so that we may resolve these issues together.”

improvements are compatible with the at-grade crossing improvements at 138th Street that have been ordered by the Illinois Commerce Commission (ICC).

Appendix A contains the Pre-Final Proposed Schematics for WA11.

Figure 5 138th Street and Indiana Avenue Intersection and At-Grade Crossings



Project Impacts and Beneficiaries

The WA11 project provides significant benefits to a variety of users. Due to the national importance of the Chicago Terminal to trade and transportation, this project demonstrates benefits at the national scale, accruing not only to businesses and motorists in the Chicago region, but extending to the broader Midwest and nation as a whole.

Broadly, this project is expected to provide benefits in all of the areas of interest to FRA, including increased system performance (increased rail capacity and reduced delay on the rail and roadway systems); improved modal integration (reduced delay and avoided truck-rail diversion); improved safety, reliability, and trip time for passenger and freight traffic (increased rail capacity, reduced delay and avoided diversion); and ability to meet anticipated demand (increased rail capacity).

The benefit-cost analysis examines three primary sources of benefits for the WA11 project. The specific measurable benefits for this project align with US DOT guidance and include the factors of travel time savings from increased train speeds and reduced system delay, reduced fuel consumption and emissions for train and motor vehicles, increased safety on the roadway system, and avoided pavement damage. There are three main components to this evaluation:

Reduced Delay and Improved Rail Travel Times. WA11 will increase the speed of trains moving through the project limits and decrease the amount of delay experienced by trains passing through the Dolton Junction Interlocking and the Chicago Terminal as a whole. As a result, WA11 will allow more efficient movement of freight and passenger trains, leading to savings in train operating costs, improved travel times, and improved reliability.

Due to data availability, passenger train delay was excluded from the quantified benefits; however, the project is anticipated to bring significant improvements in travel time and reliability to the Amtrak trains operating in the project area. In 2017 and 2018, 240 Cardinal and Hoosier trains experienced 2,800 minutes of delay in the project area. Overall, 17 percent of Amtrak trains operating in this area have been delayed. The average length of the delay was 12 minutes, but some trains experienced delays as long as two hours. Increasing freight train speeds by 50 percent in the project area is expected to significantly reduce train congestion and conflicts, increasing the efficiency of Amtrak service.

Reduced Delay at At-Grade Crossings. WA11 will improve the operational conditions at numerous at-grade crossings (eleven with data to support quantifiable benefits), leading to travel time savings for road users, vehicle operating cost savings through avoided fuel consumption by idling motor vehicles, and improved air quality through reduced emissions.

While not quantified here, WA11 will also provide public safety benefits (e.g., faster and more reliable response to fire or medical emergencies) and wider economic benefits through higher productivity as a result of improved travel time reliability for commuters and better access to markets and jobs in a predominantly minority and low-income area of Cook County, IL.

Increased Rail System Capacity and Avoided Modal Diversion. The demand for goods in the Chicago metropolitan region is forecast to grow rapidly over the next decades. Projections show inbound/outbound rail freight tonnage will grow from 82 million tons in 2015 to 143 million tons in 2045 (see Table 2). The CREATE Program improvements, including WA11, increase the ability of the Chicago Terminal to handle this rail traffic, as well as vast amounts of rail traffic passing through the region. WA11 will allow the rail system to accommodate this growth in traffic, avoiding the need for additional truck traffic and thus reducing wear and tear on the region's roadway system, fuel consumption, and safety hazards from increasing truck traffic.

The benefits quantified as part of the benefit-cost analysis fall into four key areas:

1. **Improved State of Good Repair—\$76 million⁴ in benefits:** The increased capacity of the Chicago Terminal rail freight network will result in fewer shipments being diverted to truck,

⁴ All benefits and costs presented are in 2017 dollars. When applicable, future costs or benefits are discounted to 2017 dollars.

avoiding negative impacts on roadway pavement conditions or the need for additional maintenance.

2. **Reduced Delay on the Rail Network and at Grade Crossings—\$27 million in benefits:** The project will enable the handling of more cargo on existing rail infrastructure and increase train speeds through the Chicago Terminal, reducing delays to users on both the road and rail systems.
3. **Reduced Fuel Usage and Emissions—\$74 million in benefits:** The freight rail improvements will reduce train idling and potential diversion of shipments to truck, thereby reducing emissions and fuel consumption. The project will also reduce emissions from idling trucks and motorists stopped at several at-grade crossings by reducing gate down times.
4. **Increased Safety—\$63 million in benefits:** Reducing potential diversion of shipments to truck will lower the possibility of truck-involved crashes and their consequences. In addition, the reduced at-grade crossing delays and reconfiguration of the at-grade crossing at the intersection of 138th Street and Indiana Avenue will reduce the risk of unsafe behaviors, such as trespassing and driving around crossing gates.

Overall the project will lead to **\$240 million in benefits** that increase the economic competitiveness of the Chicago Terminal by improving system performance, reducing delays, and reducing negative public sector impacts due to truck-rail diversion. With a total project cost of approximately \$42 million, the **WA11 B/C ratio is 5.6:1**. A detailed benefit-cost spreadsheet and narrative is included in Appendix C.

Table 2 Inbound and Outbound Freight Rail Movements in the Chicago Region

Year	Weight (Thousands of tons)	Ton-Miles (Millions)	Value (Millions of USD)
2012	79,251	57,335	\$53,691
2013	80,849	58,466	\$55,833
2014	82,173	59,508	\$54,114
2015	82,104	58,753	\$55,721
2020	92,352	65,087	\$66,342
2025	101,358	71,541	\$76,278
2030	110,278	77,974	\$86,631
2035	119,740	85,123	\$98,458
2040	132,031	94,852	\$114,572
2045	142,824	103,692	\$129,496
CAGR, 2012-2045	1.8%	1.8%	2.7%

Note: The values in this table represent the inbound, outbound, and internal rail movements in the Chicago-Naperville, IL-IN-WI Commodity Flow Survey (CFS) Area provided by the Federal Highway Administration's Freight Analysis Framework version 4.

Performance Measures

Once selected for this grant, the CREATE partners will comply with all standard FRA reporting requirements, as discussed in the Notice of Funding Opportunity Section F(3)(c) and required in 2 CFR 200.301 and 49 U.S.C. 24407(f), including quarterly progress reports, quarterly federal financial reports, and interim and final performance reports, as well as all applicable auditing, monitoring, and close out requirements. Included in the reporting will be performance measures mutually agreed upon by FRA and CREATE for the purpose of tracking the impacts of the

proposed WA11 project in achieving strategic goals and objectives. These may include, but are not limited to, the following: number of trains, average train speed, freight train delay, passenger train delay, and gate down time.

Subsequent Information

(A) At-grade crossing information

The project will benefit several at-grade crossings with new crossing material, upgraded signals, and an increase in maximum rail speeds to 30 mph, allowing through trains to clear the at-grade crossings more quickly. Table 3 lists the at-grade crossing inventory information including the railroad owner, the DOT crossing inventory number, and the roadway.

Table 3 At-Grade Crossings near Project

Street	US DOT Crossing Number	Rail-road	Total Daily Freight Trains	Daily Amtrak Trains	Gate Down Time (minutes)	AADT (2014)	% Trucks
Public at-grade highway/rail at-grade crossings within the project limits							
Perry Ave.	163609N	CSX	37	0	242.8	500	6
137 th St.	163610H	CSX	37	0	242.8	900	6
138 th St./Indiana Ave.	163611P	CSX	37	0	323.8	6850	8
138 th St./Indiana Ave.	522338C	NS	0	0	0	6850	8
Lincoln Ave./Park Ave.	163612W	CSX	37	0	242.8	7450	10
142 nd St.	167450K	UP	56	2	370.5	5700	2
144 th St	167451S	UP	86	2	567.4	3600	5
Cottage Grove Ave. (GS23A)	163613D	CSX	37	0	121.4	2150	19
Cottage Grove Ave. (GS23A)	326886B	IHB	77	0	1010.6	2150	19
Nearby at-grade highway/rail at-grade crossings outside the project limits							
138 th St.	840146L	UP	12	2	81.8	1800	14
Leyden Ave./Lincoln Ave.	840147T	UP	12	2	81.8	7450	10
Indiana Ave at 140 th St.	326894T	IHB	77	0	404.3	4950	4

Source: ICC Grade Crossing Database, updated 2018.

(B) Heavily traveled rail corridor information

Intercity passenger trains travel through the project in the north-south direction along the UP Villa Grove Subdivision. Amtrak operates two trains per day through the project limits at a maximum speed of 20 mph. These trains carry 3 million passengers per year on the Hoosier and Cardinal corridors. The Hoosier corridor operates between Chicago, IL and Indianapolis, IN, and the Cardinal corridor operates between Chicago, IL and New York, NY through Cincinnati, OH and Washington, DC.

Delay data provided by Amtrak illustrates the magnitude of delays caused by the Dolton Junction Interlocking. In 2017 and 2018, 240 Cardinal and Hoosier trains experienced a combined 2,800 minutes of delay, affecting approximately one-sixth of all Amtrak trains passing through the Dolton Junction Interlocking in those years. The average delay for an Amtrak train was 12 minutes, but some trains experienced delays as long as two hours.

(C) PTC information

The project will not assist in the deployment of a PTC system. The CSX (Barr Subdivision) is an in-service PTC route. The UP (Villa Grove Subdivision) PTC is scheduled to be in-service in 2018. The IHB (Mainline) is not PTC enabled at this time.

1.6 Project Location:

The project is located primarily in the villages of Dolton and Riverdale in Cook County, IL. The northeast quarter of the 138th Street/Indiana Avenue intersection and at-grade crossing is within the city limits of Chicago, IL. The Dolton Junction Interlocking is located in a mostly minority and low-income area, and local traffic is greatly affected by delays at the high concentration of at-grade crossings in the area.

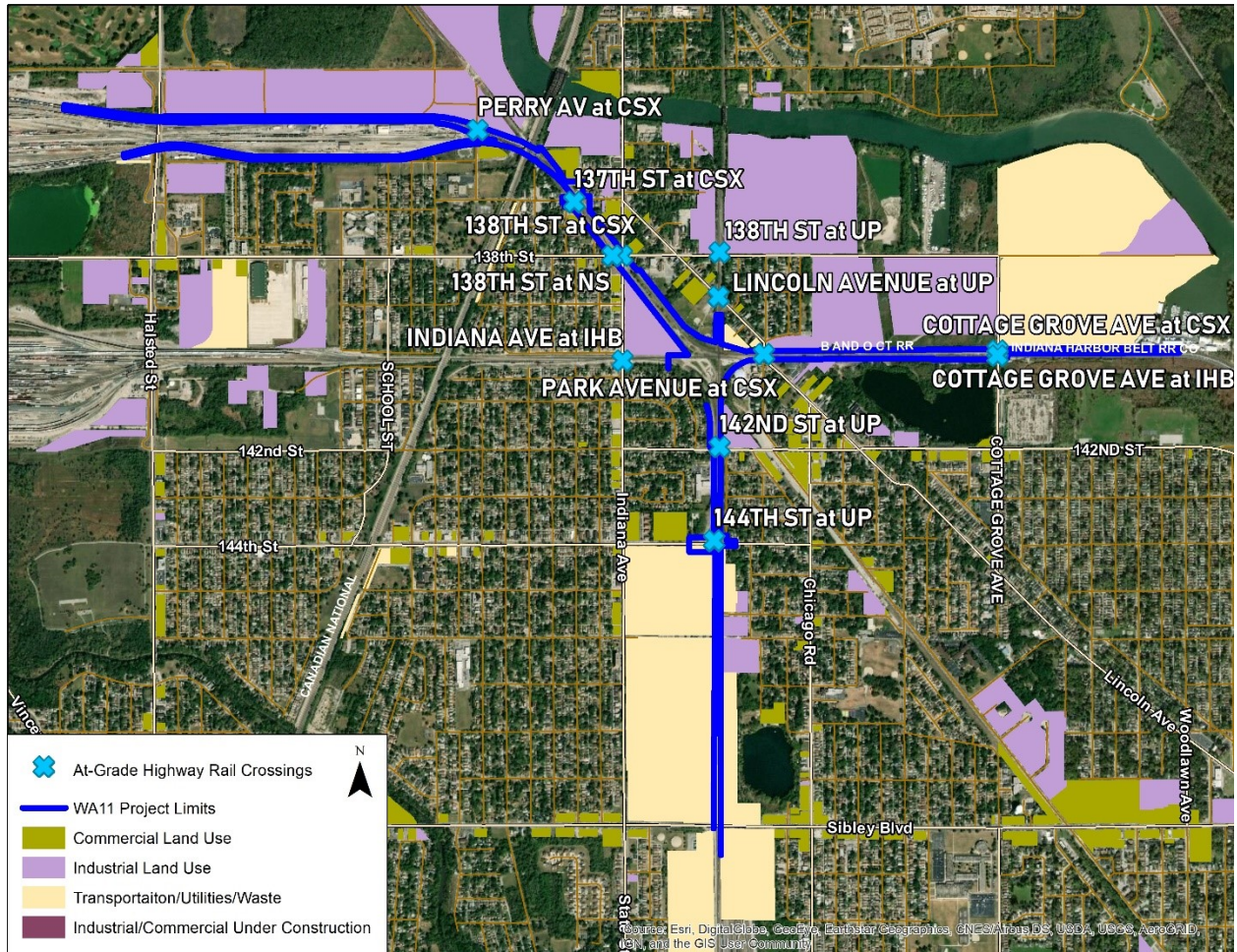
The data from the 2010 U.S. Census shows the demographics in the project area are 95 percent non-white with 26 percent of families below the poverty level. These statistics greatly exceed the average for all of Cook County and the City of Chicago which are 24 to 29 percent non-white with 12 to 17 percent families below poverty level, respectively.⁵

Figure 6 is a map of the project area and affected at-grade crossings. The project affects rail lines owned by CSX (subsidiary to CSX), UP, NS, and IHB. It extends along the CSX between CP Grove (DC 9.3) to CP Riverdale (MP DC 12.7), along the UP between CP Lincoln Avenue (MP 16.4) to CP North Yard Center (MP 18.0), along the NS Bernice Secondary (MP QP-293.4 to QP-294.3), and along the IHB between Dolton Junction (MP 10.6) and CP Grove (MP 9.8).

The hub of the project is defined as the intersection of UP and CSX rail lines, located at 41.6406 latitude, -87.6122 longitude. The project extends to the north (41.6422, -87.6123), northwest (41.6504, -87.6460), west (41.6405, -87.6149), south (41.6215, -87.6123), and east (41.6409, -87.5885). The project is wholly within the Chicago, IL urbanized area (UACE 16264).

⁵ http://createprogram.org/linked_files/2014-05-07_WA11_FINAL_ECAD_3.0-Patrick_d.pdf.

Figure 6 WA11 Project Limits



1.7 Evaluation and Selection Criteria:

Application Review Information

Meeting the Evaluation Criteria

The following describes the benefits and technical merits of the WA11 project, which meet the criteria of the NOFO.

Project Benefits:

The WA11 project will lead to \$240 million in benefits that increase the economic competitiveness of the Chicago Terminal by improving system performance, reducing delays, and reducing negative public-sector impacts due to truck-rail diversion. With a total project cost of approximately \$42 million, the **WA11 B/C ratio is 45.6:1**. A detailed benefit-cost spreadsheet and narrative is included in Appendix C.

Technical Merit:

FRA will evaluate application information for the degree to which:

(A) The tasks and subtasks outlined in the SOW are appropriate to achieve the expected outcomes of the proposed project:

The proposed tasks and subtasks are appropriate and in accordance with best practices for construction projects of similar size and scope, based on the CREATE Program's experience.

The projects managed under the CREATE Program are developed through a rigorous process of design and review to assure that they are designed to the highest engineering standards, and are also compliant with all federal, state and local regulations as well as delivered in a manner that is accountable and responsible. As stated below in (B), the WA11 project's preliminary design has been approved with the final design nearing completion. At this stage in the development process, the remaining tasks are scoped with high confidence.

(B) Applications indicate strong project readiness and meet requirements under the project track(s) designated by the applicant:

The Phase I Preliminary Engineering for WA11, [CREATE Program Project WA11 Phase I Project Report and Design Approval](#), was completed January 25, 2016.

For the Phase I NEPA study, an Environmental Class Action Determination (ECAD) has been prepared and a [Categorical Exclusion determination](#) was made for this project on May 7, 2014. Phase II Final Engineering and ROW Acquisition is 90 percent complete with an expected completion in November 2019.

The private funding commitment from the CREATE partner railroads has been successfully negotiated amongst all parties and comes not only in the form of a commitment of private capital funding for the proposed improvement, but also in the commitment to long-term maintenance and operations of the facility. In addition, IDOT has agreed to provide just under half of the matching funds for the CRISI application. The non-federal funding match for this grant request is not counted as the matching requirement for another federal program. The cash match for this project is committed, stable and dependable.

(C) The technical qualifications and experience of key personnel proposed to lead and perform the technical efforts, and the qualifications of the primary and supporting organizations to fully and successfully execute the proposed project within the proposed timeframe and budget are demonstrated:

The CREATE Program has a proven record 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 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. 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 on behalf of the CREATE

partners recently returned \$16 million to US DOT due to cost savings during construction of the Englewood Flyover (CREATE Project P1) managed by Metra.

The CREATE partners will let all RFPs for design and bids for construction using established federally-approved processes. Some work, including track and signal construction, is force account and performed directly by the railroads per union agreement. The project and all respective components will adhere to FRA, IDOT, CDOT, and railroad standards, along with all other federally-recognized guidelines pertaining to the project, and the CREATE Partnerships and Management Practices.

To mitigate risks, 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. Cost estimates for the project include sufficient contingencies and management reserve percentages per estimate to mitigate project risks for issues such as weather or other delays.

The project includes substantial private sector participation in the financing, construction, and operation of the proposed project. CSX will perform the construction through force account and agreements with UP and IHB. The railroads are contributing over half of the local match to the project, and will maintain the infrastructure in the future.

IDOT, the applicant, has the legal, financial, and technical capacity to carry out the proposed project; and the other parties in the project have satisfactory continuing control over the use of the equipment or facilities and the capability and willingness to maintain the equipment or facilities.

The project is consistent with planning guidance and documents set forth by US DOT, including those required by law or State rail plans developed under Title 49, United State Code, Chapter 227.

[William C. Thompson](#), P.E, Chief Engineer of the AAR in Chicago, will oversee execution of WA11 on behalf of the CREATE Program, working closely with IDOT as the funding agency, and CSX as the contracting/implementing railroad. Mr. Thompson has forty years experience in heavy haul railroad operations, engineering, design, and research.

[Samuel Tuck III](#), P.E., is the Bureau Chief of the CREATE Program & Freight Rail at IDOT. Mr. Tuck is responsible for collaborative management of the project funding and agreements. Mr. Tuck is an accomplished engineer and project manager with over 20 years experience.

[Eric Hendrickson](#), Director of Network Planning CSX Transportation, is responsible for overseeing the WA11 project management. Eric has over 24 years of railroad experience including as a Crew Dispatcher, Train Dispatcher, Chief Dispatcher, Locomotive Manager, Corridor Manager, Trainmaster, Superintendent of Operations, and Director of Network Operations.

[Brett N. Guarino](#), Project Manager II CSX Transportation, serves as the CSX representative to the CREATE Railroad Design Group. Ms. Guarino will oversee construction implementation of WA11 working closely with IDOT as the funding agency, and the CREATE Partnership. Ms.

Guarino has eight years experience in heavy haul railroad design and construction project management.

Meeting FRA Selection Criteria

The NOFO states that the FRA Administrator will select projects applying the following selection criteria, giving preference to projects for which the:

(A) Proposed Federal share of total project costs is 50 percent or less:

This CRISI funding request for Phase III construction of the WA11 project is \$19,206,398 and represents 50 percent of the cost of Phase III construction, for which the remaining 50 percent will be cash contributions divided between IDOT (22 percent of the total project cost) and the CREATE partner railroads (28 percent of the total project cost). The \$19.2 million funding request represents 45 percent federal share of the total project cost (Phase I through Phase III).

(B) Proposed non-Federal share is comprised of more than one source, including private sources, demonstrating broad participation by affected stakeholders:

As stated in (A), 5 percent of the Phase III match comes from IDOT and 55 percent of the match comes from CREATE private partners. In addition, significant match has been provided by CREATE local partners.

(C) Net benefits of the grant funds will be maximized considering the Benefit-Cost Analysis, including anticipated private and public benefits relative to the costs of the proposed project, and factoring in the other considerations in 49 U.S.C. 24407(e):

The WA11 project will lead to \$240 million in benefits that increase the economic competitiveness of the Chicago Terminal by improving system performance, reducing delays, and reducing negative public-sector impacts due to truck-rail diversion. With a total project cost of approximately \$42 million, the **WA11 B/C ratio is 45.6:1**. A detailed benefit-cost spreadsheet and narrative is included in Appendix C.

The NOFO also states that after applying the above preferences, the FRA Administrator will take into account the following key Departmental objectives:

(A) Supporting economic vitality at the national and regional level:

CRISI emphasizes freight projects of national and regional significance. In response, the CREATE partners are submitting a freight rail improvement project for CRISI funding. WA11 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 stakeholders that have provided letters of support that can be found in Appendix B.

(B) Leveraging Federal funding to attract other, non-Federal sources of infrastructure investment:

To date, the CREATE Program has received funding commitments totaling \$1.597 billion:

- Federal funds totaling \$579 million, including INFRA grant, TIGER I and TIGER IV grants, SAFETEA-LU PNRS grant, ARRA High Speed Rail grant, Railroad Relocation grant, and FRA railroad safety grant through the STEP Program.
- State funds totaling \$490 million, including state bond funds, PNRS/TIGER matching funds, and support for grade separations.
- Local government funds totaling \$153 million, including County and City funds for viaduct improvements, grade separations, and land acquisition.
- Railroad funds totaling \$375 million, including private freight, Metra, and Amtrak funds for railroad infrastructure and grade separations.

It is also noteworthy that between 1997 and 2017, the CREATE railroad partners have invested over \$6.1 billion in infrastructure improvements in the Chicago Terminal for projects outside the CREATE Program.

Per the parameters outlined in Section C.2 of the Notice of Funding Opportunity, the CREATE partners have committed to funding the non-Federal match for this grant.

This CRISI funding request is only for Phase III construction of the WA11 project. It is for \$19,206,398 and represents 50 percent of the cost of Phase III construction, for which the remaining 50 percent will be funded by contributions from IDOT (22 percent of the total project cost) and the CREATE partner railroads (28 percent of the total project cost). In total, the \$19.2 million funding request represents 44.8 percent of the total project cost (Phase I through Phase III).

(C) Preparing for future operations and maintenance costs associated with their project's life-cycle, as demonstrated by a credible plan to maintain assets without having to rely on future federal funding.

CRISI prioritizes maintaining federally-funded assets in a state of good repair. In response, the CREATE partner railroads are committing to maintain the CRISI-funded railroad facilities in a state of good repair at no cost to the partner public agencies.

(D) Using innovative approaches to improve safety and expedite project delivery:

CRISI 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. The WA11 project will use CREATE processes and procedures unique to this type of 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](#).

After CREATE was initiated, many new procedures and policies were developed to govern this complex Program, which involves freight and passenger rail investments. During the initial years of CREATE's operations, significant investment was made in developing innovative policies and

procedures that will guide the Program for years to come. This investment assures that the Program is poised to quickly advance projects when funding is available. WA11 is one such project.

(E) Holding grant recipients accountable for their performance and achieving specific, measurable outcomes identified by grant applicants.

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

- **Reaching project delivery milestones in a timely manner:** Key milestones for each element of the project are identified in the project schedule. CRISI 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 performance baselines before construction and report performance measures quarterly for the WA11 project. The CREATE partners commit to measure appropriate performance measures (to be negotiated with FRA) as a condition of CRISI funding. The CREATE Program has demonstrated a track record of achieving similar performance targets on past projects.
- CREATE also has a record in completing projects within the proposed budget with several finishing 5 percent below budget.

1.8 Project Implementation and Management:

Each CREATE project is managed by an individual sponsor. CSX, working closely with IDOT, will be the project manager. The facility owners, namely the CSX, UP, and IHB, will work closely together to manage and deliver all elements of the project. A project management plan is in place for managing the implementation of the proposed project, including the management and mitigation of project risks. The CREATE partners follow the CREATE process as outlined in the [Phase III Manual](#) and corresponding [flow chart as found on CREATE website](#).

The CREATE Program has a demonstrated history of successfully and expeditiously managing grant funds, 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, on behalf of the CREATE partners, recently returned \$16 million to the US DOT due to cost savings during construction of the Englewood Flyover (CREATE Project P1) managed by Metra.

1.9 Planning Readiness for Tracks 2 and 3 (PE/NEPA and FD/Construction Projects)

The Phase I preliminary engineering for the WA11 project, [CREATE Program Project WA11 Phase I Project Report and Design Approval](#), was completed January 25, 2016.

Critical events and prior studies determining need and feasibility of the proposed project include:

- Partners CDOT, IDOT and Railroads develop CREATE concept, August 2003.
- CREATE Final Feasibility Plan, August 2005.
- CREATE Final Feasibility Plan, Amendment 1, November 2009.
- CREATE Final Feasibility Plan, Amendment 1 (Modified), January 2011.
- Cook County joins CREATE Partners, May 2017.

The preliminary project design conforms to all regulatory, safety, security, and other design requirements, including those under the Americans with Disabilities Act (ADA).

Phase II Final Engineering and ROW Acquisition is 90 percent complete with an expected completion date of November 2019. The Phase II final design for the WA11 project track and signal engineering is scheduled to be complete at the end of 2018. The property procurement is scheduled to be complete November 2019, after which Phase II will be complete and ready to proceed with construction phase.

1.10 Environmental Readiness for Track 3 FD/Construction Projects:

For the Phase I NEPA study, an Environmental Class Action Determination (ECAD) has been prepared and a Categorical Exclusion determination has been made for this project on May 7, 2014. Though Phase I is complete, some Phase I items require reevaluation prior to construction. These are:

- Special Waste Assessment / Preliminary Environmental Site Assessment (completion anticipated September 2018).
- Technical Memorandum for the following items (completion anticipated November 2019):
 - Update biological clearance.
 - Update wetland delineations and wetland impact determination.
 - Update air quality analysis.
 - Verification and documentation that other resources remain unchanged from the Phase I ECAD.

Appendix A Design Plans

Existing Schematics and Prefinal Proposed Schematic plans can be found on the [webpage](#).

Appendix B Letters of Support and Funding Commitments

[Letters of support and funding commitments](#)

Letters of Support and Funding Commitments	
Amtrak	Illinois Department of Transportation
Association of American Railroads	Illinois Farm Bureau
Calumet Area Industrial Commission	Illinois International Port District
Chicago Metropolitan Agency for Planning	Illinois Manufacturers' Association
Chicago Department of Transportation	Metropolitan Mayors Caucus
Civic Committee of The Commercial Club of Chicago	Metropolitan Planning Council
Cook County Department of Transportation and Highways	Northwestern Indiana Regional Planning Council
CSX Transportation	South Suburban Mayors & Managers Association
Illinois Coal Association	Village of Crete
Illinois Congressional Delegation	Village of Dolton
Illinois Corn Growers Association	Village of Riverdale

Appendix C Benefit-Cost Analysis

Please see the attached [BCA Narrative](#) and [BCA Workbook](#).