

PROJECT EW2A

FY 2023/2024 CRISI Application

Project Narrative

PROJECT TITLE

CREATE Project EW2A

APPLICANT NAME

Illinois Department of Transportation

AMOUNT OF CRISI PROGRAM FUNDING REQUESTED UNDER THIS NOFO

\$ 291,179,049

AMOUNT OF PROPOSED NON-FEDERAL MATCH

\$171,773,853

OTHER SOURCES OF FEDERAL FUNDING, IF APPLICABLE

\$ 22,345,514 in federal formula funding (\$11,172,757 from Metra Commuter Rail through either 5307 or 5337 programs, \$11,172,757 from Amtrak through FRA formula funds)

SOURCE(S) OF PROPOSED NON-FEDERAL MATCH

Illinois Department of Transportation, Cook County – Department of Transportation & Highways, Chicago Department of Transportation, Private Railroads (NS, CSX, UP, BRC, CN)

TOTAL PROJECT COST

\$485,298,416

WAS A FEDERAL GRANT APPLICATION PREVIOUSLY SUBMITTED FOR THIS PROJECT?

Yes, the MPDG Program (INFRA and Mega), for both FY23/24 and FY25/26

IS THE PROJECT LOCATED IN A RURAL AREA?

No

CITY(-IES), STATE(S) WHERE THE PROJECT IS LOCATED

Chicago, IL

CONGRESSIONAL DISTRICT(S) WHERE THE PROJECT IS LOCATED

Illinois Congressional Districts 1 & 7

APPLICATION TRACK(S) PROPOSED TO BE FUNDED BY THIS NOFO?

Track 3 – Final Design/Construction

CURRENT LIFECYCLE STAGE AND ANTICIPATED COMPLETION OF CURRENT LIFECYCLE STAGE?

Track 2 – Project Development. Track 2 stage has been completed. Track 3 stage will begin when funding is secured.

IS THE PROJECT LOCATED ON REAL PROPERTY OWNED BY SOMEONE OTHER THAN THE APPLICANT?

Yes.

HOST RAILROAD/INFRASTRUCTURE OWNER(S) OF PROJECT ASSETS

BRC, CSX, NS, Metra

OTHER IMPACTED RAILROAD(S)

UP, CN, Amtrak, BNSF, CPKC

TENANT RAILROAD(S), IF APPLICABLE

UP, CN, Amtrak, BNSF, CPKC

IF APPLICABLE, IS A 49 U.S.C. 22905-COMPLIANT RAILROAD AGREEMENT EXECUTED OR PENDING?

Yes.

IS THE PROJECT CURRENTLY PROGRAMMED IN ANY MEDIUM OR LONG-RANGE PLANNING DOCUMENT: FOR EXAMPLE, STATE RAIL PLAN, OR INTERREGIONAL INTERCITY PASSENGER RAIL SYSTEMS PLANNING STUDY, STATE FREIGHT PLAN, TIP, STIP, MPO LONG RANGE TRANSPORTATION PLAN, STATE LONG RANGE TRANSPORTATION PLAN, ETC.?

Yes. CREATE Project EW2A is included in the MPO (CMAP) TIP and Long Range Transportation Plan, and the Illinois STIP. The CREATE Program as a whole is included in the Illinois State Rail Plan, the State Freight Plan and the Long Range Transportation Plan.

IS THE PROJECT LOCATED ON A POTENTIAL CORRIDOR SELECTED FOR THE CORRIDOR IDENTIFICATION AND DEVELOPMENT PROGRAM?

Yes. The project is on Amtrak's Daily Cardinal Service (Existing Route).

IS THIS A PROJECT ELIGIBLE UNDER 49 U.S.C. 22907(C)(2) THAT SUPPORTS THE DEVELOPMENT OF NEW INTERCITY PASSENGER RAIL SERVICE ROUTES INCLUDING ALIGNMENTS FOR EXISTING ROUTES?

Yes. EW2A improves infrastructure on Amtrak's Cardinal line, and is prerequisite for opening up capacity at Chicago Union Station to support new intercity passenger rail service routes

IS THIS A PROJECT ELIGIBLE UNDER 49 U.S.C. 22907(C)(11) THAT SUPPORTS THE DEVELOPMENT AND IMPLEMENTATION OF MEASURES TO PREVENT TRESPASSING AND REDUCE ASSOCIATED INJURIES AND FATALITIES?

No. However, by reducing delay, EW2A indirectly discourages trespassing related to theft and pilferage of idling freight trains.

IF YES TO THE PREVIOUS QUESTION, IS THIS PROJECT LOCATED IN A COUNTY WITH THE MOST PEDESTRIAN TRESPASSER CASUALTIES AS IDENTIFIED IN THE FEDERAL RAILROAD ADMINISTRATION'S NATIONAL STRATEGY TO PREVENT TRESPASSING ON RAILROAD PROPERTY?

Yes, Cook County, IL. Ranked #2 among all "U.S. Counties with the Most Railroad Trespasser Casualties, Not Including Suicides (November 2013 to October 2017)"

IS THE APPLICATION SEEKING CONSIDERATION FOR FUNDING UNDER THE MAGLEV GRANTS PROGRAM?

No

PROJECT NARRATIVE

TABLE OF CONTENTS

I. Cover Page	i
II. Project Summary	1
III. Project Funding	2
3.1. Non-Matching Leverage	3
3.2. Active Grant Requests to Other Federal Funding Programs	3
IV. Applicant Eligibility	3
V. Project Eligibility	4
VI. Detailed Project Description	5
6.1. Transportation Challenges	5
6.2. Project Outcomes	7
6.3. Project Users & Beneficiaries	7
6.4. Project Components & Elements	9
6.5. Performance Measures	11
6.6. Grade Crossing Information	11
6.7. Heavily Trafficked Rail Corridors	11
6.8. Positive Train Control (PTC)	12
6.9. Workforce Development & Training	12
6.10. Trespassing Injury & Fatality Reduction & Prevention	12
6.11. Emissions Reduction Information	12
6.12. Community Emergency Plans	13
6.13. Maglev Grants	13
VII. Project Location	13
VIII. Evaluation and Selection Criteria	13
8.1. Project Readiness	13
8.2. Technical Merit	15
8.3. Project Benefits	18
8.4. Selection Criteria	20
IX. Project Implementation and Management	23
9.1. Project Oversight and Contracting	23
9.2. Implementing the Project Management Plan	24
9.3. Assessment of Project Risks and Mitigation Strategies	24
9.4. Project Progress Reporting	24

9.5. Small Business Participation.....25

X. Other Information25

10.1. Environmental Compliance Documentation.....25

10.2. Final Agreements, per 49 U.S.C. 22905(c)(1).....25

10.3. Letters of Support.....25

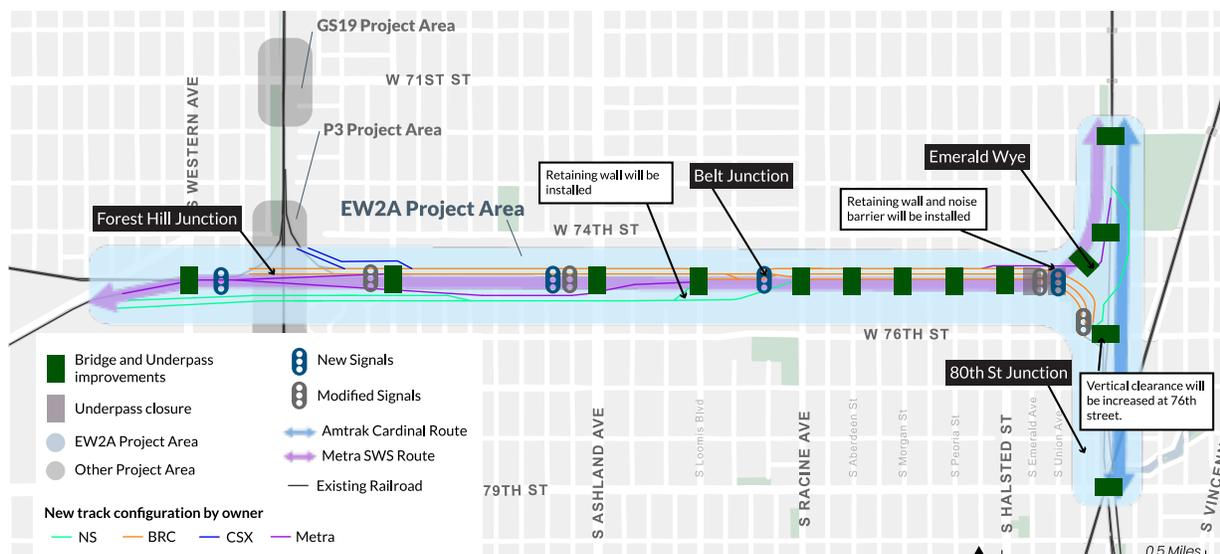
10.4. Exhibits25

PROJECT NARRATIVE

II. Project Summary

The CREATE Program’s Project EW2A (“EW2A” or “the Project,” shown in **Figure 1**) implements the next key phase of the [75th Street Corridor Improvement Project](#) (75th St CIP), by delivering improvements that benefit travel time, safety, and state of good repair along a 3-mile elevated rail corridor on Chicago’s South Side. Serving the Belt Railroad of Chicago (BRC), CN, CSX, Norfolk Southern (NS), Union Pacific (UP), CPKC, and BNSF railroads, the corridor handles 90 freight trains daily, as well as 30 Metra commuter trains daily through Belt Junction,¹ and 3 Amtrak Cardinal trains weekly² through the Emerald Wye. EW2A reconfigures track segments and signals at Belt Junction; adds a third track to the NS line; replaces and restores 14 aging grade-separated structures; and implements mobility improvements on streets throughout the corridor. EW2A will eliminate over 73,000 hours of combined delay for freight and passenger trains in the Chicago Terminal (the Terminal) between 2033-2052 ([BCA](#), p.12), will reduce crashes and auto-related injuries at the Project area’s viaducts³ by 30% ([BCA](#), p.20), and will restore railroad structures that are over 100 years old and at risk of closure. As 90% of the population in the corridor reside in census tracts designated as either Historically Disadvantaged Communities (HDC), Areas of Persistent Poverty (APP), or both (detailed in [Exhibit 1G](#)), EW2A’s improvements advance USDOT’s Justice40 Initiative. An [informational video](#) visualizing train movements and EW2A’s improvements is provided here.

Figure 1. Project Overview Map ([Exhibit 1A](#))



¹ [CREATE Program – 75th St Corridor Improvement Project Brochure](#)

² [Amtrak Guide: Cardinal Train](#)

³ “Viaducts” are a series of structures carrying one element of infrastructure over another to eliminate conflicts. With EW2A, viaducts carry the rail lines above city streets. A single viaduct may include multiple bridges and structures, enabling passage of the road and sidewalks below. The City of Chicago issued its first general ordinance requiring elimination of at-grade rail crossings in 1893, to maintain safety, mobility, and connectivity in the city as the rail network expanded. This forward-thinking policy necessitated construction of the viaducts that EW2A will improve.

III. Project Funding

The total FY 2023-24 CRISI grant request is **\$291,179,049**, 60% of the total Project cost (\$485,298,416). An additional 2.3% of federal match will be provided by Metra, using Federal Transit Administration (FTA) formula funding (through either the 5307 or 5337 programs), along with 2.3% of federal match provided by Amtrak, using Federal Railroad Administration (FRA) annual grant funding. In total federal match accounts for 64.6% of all future eligible project costs. The estimated budget was developed in April 2023, through USDOT’s Construction Schedule and Risk Analysis process, and then updated by the CREATE partners in April 2024 for EW2A, which established updated cost information and contingencies. Should EW2A not receive the requested CRISI funding and additional Federal match as identified in **Table 1**, the Project would be delayed indefinitely, until funding can be secured. As indicated in [Exhibit 2B. Project Schedule](#), EW2A has begun final design work, reflecting the degree of completion that these costs are based on. Additional detail on this can be found in [Exhibit 2C. Detailed Project Estimate](#), [Exhibit 2F. 75th Street CIP Annual Financial Plan](#), and [Exhibit 2G. Construction Schedule & Risk Assessment Summary Report](#). **Table 1** shows the sum of future eligible Federal and Non-Federal costs by Project cost category (derived from the [Annual Financial Plan](#)) in both dollars and percentages of the total project cost. Based on the current project phase, as well as IDOT’s experience implementing other CREATE projects, EW2A established an overall 15% contingency and 5% Project Management Reserve (PMR) until final design is complete. Additional detail on this is provided in [Exhibit 2E. Estimate Contingency Plan](#).

Table 1. Project Sources Summary

Funding Source	Total Funding for 75 th Street CIP – EW2A	Funding %
<i>Federal funds requested in this application:</i>		
CRISI FY 23/24	\$ 291,179,049	60.0%
<i>Other Federal:</i>		
Amtrak	\$ 11,172,757	2.3%
Metra	\$ 11,172,757	2.3%
<i>Non-Federal:</i>		
State		
IDOT	\$ 58,929,003	12.1%
Regional / Local		
Cook County (DoTH)	\$ 29,049,169	6.0%
City of Chicago (CDOT)	\$ 5,586,379	1.2%
Private		
Class I Railroads	\$ 78,209,302	16.1%
Total:	\$ 485,298,416	100%

* Project costs are escalated to Year of Expenditure (YOE) dollars. The YOE is 2030.

For non-federal match, the Illinois Department of Transportation (IDOT) is providing \$58.9 million in match, using state bond sources. The Cook County Department of Transportation & Highways (DoTH) is supplying \$29 million in match, using County motor fuel tax revenues. The

City of Chicago’s \$5.6 million in match is funded through municipal capital improvement funds, and a consortium of participating railroads shall supply \$78.2 million in match.

*Table 2. Sources and Uses Table - Project Budget by Major Construction Activity Category**

No.	Cost Categories	CRISI	%	Other Fed. Funds	%	Non-Federal	%	Total
1.0	Removals / Demolition	\$1,008,809	60%	\$0	0%	\$672,540	40%	\$1,681,349
2.0	Civil - Earthwork	\$12,289,132	60%	\$0	0%	\$8,192,754	40%	\$20,481,886
3.0	Track work	\$36,408,844	60%	\$5,586,378	9%	\$18,686,186	31%	\$60,681,408
4.0	Signals & Systems	\$34,024,387	60%	\$0	0%	\$22,682,924	40%	\$56,707,311
5.0	Structures	\$121,240,536	60%	\$16,759,136	8%	\$64,067,888	32%	\$202,067,560
6.0	Viaducts	\$9,262,704	60%	\$0	0%	\$6,175,136	40%	\$15,437,840
7.0	Environmental Mitigation	\$8,620,734	60%	\$0	0%	\$5,747,156	40%	\$14,367,890
8.0	Miscellaneous & Temporary Facilities	\$23,019,194	60%	\$0	0%	\$15,346,130	40%	\$38,365,324
9.0	Utility	\$4,585,497	60%	\$0	0%	\$3,056,998	40%	\$7,642,495
10.0	ROW	\$0	0%	\$0	0%	\$0	0%	\$0
11.0	Professional Services	\$40,719,212	60%	\$0	0%	\$27,146,141	40%	\$67,865,353
	Unallocated Contingency	\$0	0%	\$0	0%	\$0	0%	\$0
	Total	\$291,179,049	60%	\$22,345,514	5%	\$171,773,853	35%	\$485,298,416

* Project costs are escalated to Year of Expenditure (YOE) dollars. The YOE is 2030.

3.1. Non-Matching Leverage

The City of Chicago has planned additional community mobility improvements, beyond those described in the Statement of Work (Section 4.3. Project Scope, Task 4), such as additional roadway and sidewalk upgrades. This work will total \$4 million in cost and will serve as non-matching leverage to this FY23/24 CRISI grant request.

3.2. Active Grant Requests to Other Federal Funding Programs

In addition to this FY23/24 CRISI request, IDOT submitted this same EW2A scope and grant request to the FY25/26 MPDG Program in May 2024, through the INFRA and Mega programs. At the discretion of US DOT, IDOT and CREATE would accept funding from any combination of these programs, enabling flexibility and the opportunity to maximize federal support. [Exhibit 2D](#) details various options for allocating separate awards from each program.

IV. Applicant Eligibility

The applicant meets the eligibility criteria identified in 49 U.S.C. 24407(b)(8). IDOT is the lead applicant, a CREATE partner and unit of state government enabled by statute [20 ILCS 2705](#),

which holds IDOT accountable and responsible for carrying out programs and policies that have been authorized and funded by the Illinois General Assembly. The IDOT's DUNS number is 1336007540000. The contact for this application is:

Jason Osborn

Director, Office of Intermodal Project Implementation | Illinois Dept. of Transportation
312-793-2116 (o) | Jason.Osborn@illinois.gov

As lead applicant, IDOT will serve its traditional role as the fiduciary recipient and grant administrator for CRISI funding. Each CREATE project is also managed by an individual sponsor, who oversees procurement, engineering, and construction activities. For EW2A, the sponsor is IDOT and the contracting entity is NS. EW2A will continue to follow FHWA guidelines through the final design and construction. As grant administrator, IDOT will coordinate closely with affected railroad owners, operators, funding partners, and Project area communities. The CREATE Program Management Office of the Association of American Railroads (AAR) will also assist with project delivery and oversight, representing the interests of CREATE's member freight railroads. FHWA is CREATE's lead federal oversight agency.

V. Project Eligibility

EW2A is eligible for CRISI under the following categories of the FY25/26 NOFO (Sec. C(3)):

- **A capital project identified by the Secretary as being necessary to address congestion or safety challenges affecting rail service.** EW2A will establish non-conflicting, parallel train paths at junction interlockings. The restoration or replacement of 14 grade-separated structures (all over 100 years old) will ensure continued safe operations along railways and improved road safety beneath the viaducts. Roadway safety at the viaducts will also be improved through planned community mobility enhancements.
- **A capital project identified by the Secretary as being necessary to reduce congestion and facilitate ridership growth in intercity passenger rail transportation along heavily traveled rail corridors.** Amtrak's Cardinal service, included in the FRA's Corridor ID program and connecting Chicago to Washington, DC, before traveling to New York via the Northeast Corridor, traverses through the Project area. Since it shares tracks with 90 freight trains daily, Cardinal service is constrained and often subject to delay. Completion of this project will allow for more efficient movement of freight in the short term, and the eventual construction of the P2 Flyover, which will enable Amtrak to add up to 30 daily trains out of Chicago Union Station (CUS) via the rerouting of Metra's Southwest Service (SWS).
- **A rail line relocation or improvement project.** The Project realigns .5 miles of existing track and constructs of 3.4 miles of new track through the corridor, reducing rail-on-rail conflicts through 2 major junctions.
- **A capital project to improve shortline or regional railroad infrastructure.** EW2A benefits the Belt Railway of Chicago (BRC), a Class III short line railroad that owns a portion of the tracks that move through the Project area.
- **Workforce development and training activities, coordinated to the extent practicable with the existing local training programs supported by the Department of Transportation, the Department of Labor, and the Department of Education.** EW2A's budget prioritizes inclusion of disadvantaged business enterprises (DBE) in design and

construction work. EW2A's contracted work includes outreach to support local hiring in the surrounding communities, in partnership with City Colleges, local organizations, and elected officials. Additionally, CREATE provides funding for construction industry qualifications training, and for on-the-job training in 75th St CIP construction projects, involving entry-level graduates from IDOT's Highway Construction Careers Training Program (HCCTP).

VI. Detailed Project Description

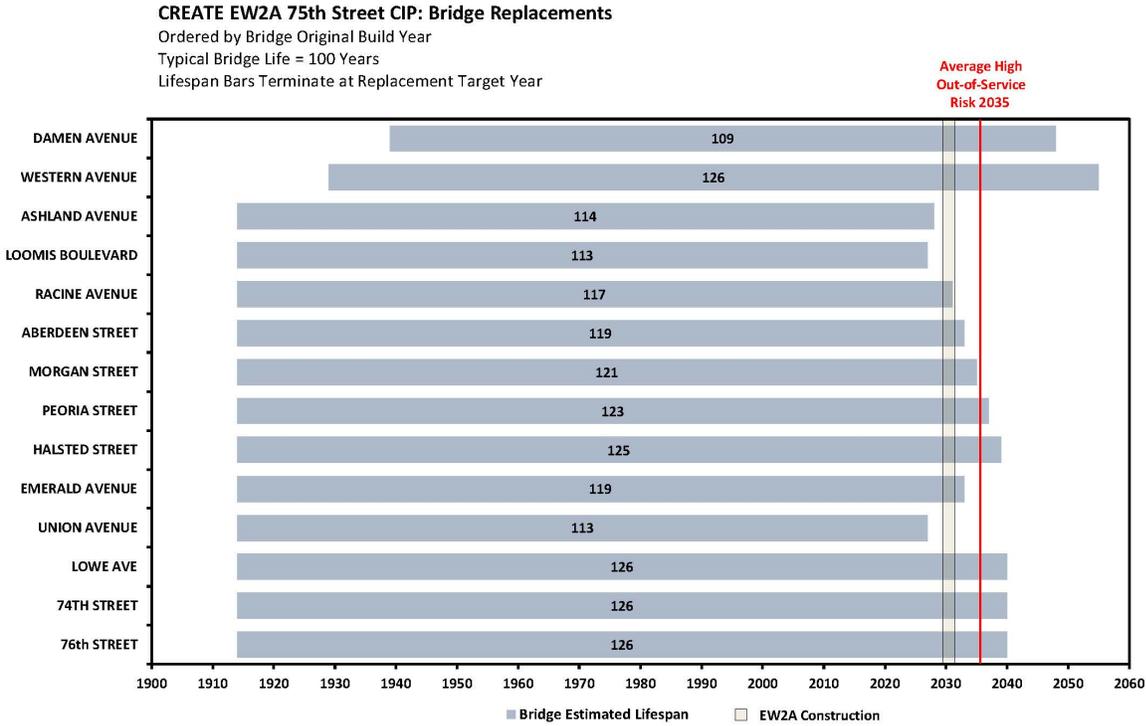
EW2A will reconfigure track segments and signals at Belt Junction; add a third track to the NS line; replace and restore 14 aging grade separation bridges; and implement mobility improvements on surface streets along a 3-mile elevated rail corridor on Chicago's South Side. Project EW2A runs through Belt Junction, along W 75th Street, bordering NS Landers Yard to the west (at S Maplewood Ave), and splitting at the Emerald Wye to the east (east of S Union Ave). The Project's northeast limits terminate at W 72nd St, and its southeast limits terminate at W 79th St, near 80th St Junction. BRC, CN, CSX, NS, UP, CPKC and BNSF railroads all operate on this corridor, producing 90 freight trains daily, in addition to 30 Metra SWS trains daily, and 3 Amtrak Cardinal trains weekly. EW2A has independent utility as a standalone project and serves as the next key stage in the greater 75th St CIP, building upon Projects P3 and GS19 (which are under construction), and laying the groundwork for future segments of EW2, which will remove additional rail-rail conflicts at Belt Junction. EW2A also lays the groundwork for Project P2, which will construct a flyover bridge that connects Metra's SWS line to its Rock Island District (RID) line, enabling SWS trains to terminate at La Salle Station, and opening up capacity at CUS for an expansion of Amtrak service. EW2A's improvements, expanded upon in the Statement of Work, are intended to address the transportation challenges detailed below.

6.1. Transportation Challenges

6.1.1. Aging Infrastructure and Threats to Safety

Shown in **Figure 2**, all structures along the corridor are over 100 years old, and to remain functional, require substantial ongoing maintenance. These structures were designed in the early 20th century, when average railcar weights were less than 100 tons and the average train hauled less than 50 railcars. Today, the average train is over 70 cars long and railcars can weigh as much as 143 tons. If rehabilitation or full replacement of these structures is not undertaken in the near term, it is estimated that by 2032, there is a 10% risk that at least one track will need to be taken out of service (detailed in the [BCA](#), p.5). A disabled or damaged structure would yield threats to roadway safety at the viaducts; suspension of the Metra SWS line; increased travel times and delays throughout the Terminal; increased chokepoints in the national supply chain; and a decline in railcar and intermodal tonnage moving through Chicago, negatively impacting the regional economy. Through its community mobility scope, EW2A also improves roadway safety of the streets passing under the grade-separated rail structures. In the Project's [EIS](#), the City of Chicago identified numerous critical upgrades to the lighting, pavement, pedestrian accessibility, and drainage on these roadways, to bring them to a state of good repair and to reduce accidents and crime. Through these improvements (shown in [Exhibit 4. Environmental Commitments](#)), EW2A enhances connectivity between neighborhoods for all roadway users.

Figure 2. EW2A Bridge Age Diagram (Exhibit 1H)

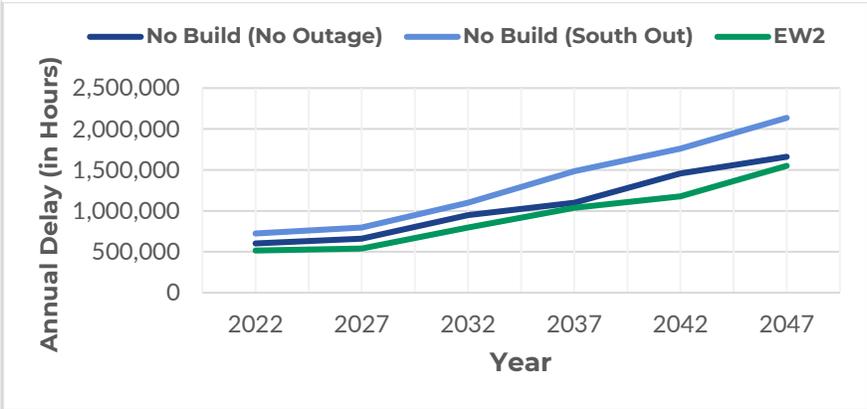


Source: Belt Railroad of Chicago, Metra, Norfolk Southern

6.1.2. Eliminating Rail Conflicts & Delays

Existing track alignments within the Project area produce three rail-rail crossings for the seven rail operators that share the corridor, creating conflicts and bottlenecks that will be eliminated by the Project. Train movements through these junctions currently cross paths, allowing only one train to pass at any given time. By agreement between the passenger and freight railroads in the Terminal, the Chicago Protocol specifies that passenger trains always run first if there is a conflict with a freight train, making these crossings chokepoints that negatively impact freight rail movements throughout the region and the country.⁴ As Belt Junction is a nationally unique convergence point for western and eastern Class I railroads and passenger service, delays resulting from these conflicts cascade beyond the corridor, increasing gate-down time at at-grade

Figure 3. Terminal – Annual Growth in Delay by Alternative



Source: Exhibit 3F. RTC Model Outputs- Delay Hours (Source: CTCO)

⁴ Chicago Train Operations Protocol Guidelines (May 21, 2023)

crossings within the Terminal and beyond. EW2A addresses this by reconfiguring track segments and adding new track, to create non-conflicting, parallel train paths at junction interlockings, enabling more trains to pass through the corridor simultaneously. The [BCA](#) forecasts that these improvements will prevent 2,739 hours of added freight train delay annually in the Terminal (p.12), enabling the Terminal to better handle the 1.3 million annual train miles forecasted to be added from 2022-2047 ([Exhibit 3B. RTC Outputs – Train Miles](#)). By creating a new mainline route, EW2A also provides redundancy within the network, in the event of maintenance work or service disruptions in the Project area or on other corridors in the Terminal. This capacity increase is necessary for actualizing the travel time and throughput benefits of the planned P2 project, which will allow Metra to direct 30 SWS trains to LaSalle St station, freeing up around 30 slots at CUS for Amtrak and Metra service expansions.

6.2. Project Outcomes

As reflected in the Project’s Statement of Work and summarized in **Table 2**, EW2A will result in significant improvements to the tracks, structures, signals, and viaducts along this corridor. The direct benefits associated with these outcomes are detailed in **Section 8.3** (p.18).

Table 2. EW2A Project Outcomes Summary

	Scope Item	Outcome
Track Work	New track	17,700 linear ft (8,900 temporary, 8,800 final)
	Shifted track	45,000 linear ft (16,400 temporary, 28,600 final)
	Track removed	50,500 linear ft
Structures Work	Restoration or replacement	14 structures
	Closure	2 structures
Signals Work	New signals	4 locations
	Shifted or modified signals	9 locations
Viaduct Work	Repaving	13,300 square yds
	Sidewalk improvements	7,900 square yds
	ADA improvements	33 ramps installed
	Lighting improvements	200 fixtures replaced

6.3. Project Users & Beneficiaries

6.3.1. Project Users

The direct users of EW2A are the seven freight railroad partners, Metra, and Amtrak. The Project’s track and signal work will improve fluidity through Belt Junction, and its structural work will enhance the state of good repair, resiliency and safety of the corridor’s bridges and viaducts. Between the Class I (NS, CSX, UP, CN, CPKC, BNSF) and short line (BRC) operators, 90 freight trains traverse the corridor daily. Metra also runs 30 SWS trains per day through the corridor, connecting CUS with south suburban Cook and Will counties (carrying 844,567 riders in 2023).⁵ Amtrak’s Cardinal also operates on the corridor, which carried 82,705 riders in 2023.⁶ Freight and Metra trains currently use the same tracks at Belt Junction, and per the guidelines of the Chicago Protocol,⁷ passenger train movements are prioritized at the corridor’s interlockings

⁵ [Regional Transportation Authority Mapping and Statistics](#)

⁶ [Amtrak Route Ridership \(FY 23 vs. FY22\)](#)

⁷ Chicago Train Operations Protocol Guidelines (May 21, 2023)

and joint operating locations, which curtail freight trains at least twice daily on the corridor, during peak morning and afternoon commuting periods (totaling six hours daily) and during non-peak periods. This increases freight travel times and delay through the corridor and narrows the window of time where freight movements can occur, negatively impacting freight flows through Belt Junction, particularly to and from the adjacent NS Landers Intermodal Yard (which reported 346,127 annual lifts in 2022).⁸ By allowing Metra's 30 trains to run separate, parallel movements from NS trains that exit and enter Landers, dwell times will be reduced for all operators on the corridor, particularly in instances where a train breaks down, by realigning track, introducing new track segments, and adding a wye, thus supporting future growth on the corridor.

EW2A also includes upgrades to streets that pass under its grade-separated structures, benefitting various transportation modes, supporting equitable mobility, and aligning with climate mitigation and resiliency goals. These improvements will benefit motorists traveling through the viaducts (which handle a combined AADT of 139,000),⁹ and bus transit riders on the eight CTA routes that operate through the corridor (8,9, X9, 44,48,49, X49, 75), serving an estimated combined weekday ridership of 53,647.¹⁰ These improvements also benefit bicyclists and pedestrians (including those with physical disabilities), as three City bike routes cross the corridor (on Damen Ave, Loomis St, and Halsted St), and as sidewalks exist on all roads that cross the viaducts. These improvements to safety and mobility ultimately benefit a population of 40,110 residents and 14,529 households within EW2A's census tracts ([Exhibit 3A. Census Tract Tables](#)).

6.3.2. Local & Regional Beneficiaries

Between 2033-2052, EW2A's improvements will result in 69,969 hours of avoided delay for freight trains in the Terminal, valued at a cost savings of over \$2.8 million ([BCA](#), p.12). These savings benefits will support freight movement for other intermodal yards and logistics centers across the Chicago region, near O'Hare Airport (ORD), Lake Calumet, and Will County (see [Exhibit 1F](#)). Ultimately, the implementation of EW2A, the 75th St CIP, and the overall CREATE Program is critical for sustaining and growing Chicago's freight economy, as increased travel times in the Terminal would reduce the competitiveness of the regional market. Chicago's rail system handles 47% of the nation's intermodal rail containers, 28% of all rail cars, and \$641 billion of goods transported on rail annually, as it continues to be one of the most efficient pathways for freight movement nationally.¹¹ As identified by the Chicago Metropolitan Agency for Planning (CMAP), the region's freight cluster accounts for 190,000 jobs (2016) and over \$14 billion in personal income for the residents of northeastern Illinois, with freight railroads directly employing nearly 12,000 people and indirectly supporting an additional 26,000 jobs regionally (2014).¹² The CREATE Program has strengthened regional freight activity and employment, yielding \$31.5 million in generated economic benefits and creating an estimated 44,000 job years from its projects to date.¹³ Implementing EW2A will enable the region to continue to capture these economic benefits. With the total annual train miles in the Terminal expected to increase by 1.3 million from 2022-2047,¹⁴ there is a pressing need to upgrade the region's infrastructure to

⁸ [Chicago Intermodal Facility Lift Counts and Regional TEU Estimate \(through 2022\)](#)

⁹ [Chicago Data Portal – Average Daily Traffic Counts](#)

¹⁰ [Regional Transportation Authority Mapping and Statistics – Ridership Data \(August 2023\)](#)

¹¹ Annual Carloads and Value, 2017 STB Confidential Waybill Sample

¹² [Regional Freight Strategic Direction](#) (Chicago Metropolitan Agency for Planning, 2018): p. 31

¹³ CREATE Economic Benefits Study (Cambridge Systematics, 2015)

¹⁴ [Exhibit 3B - Railroad Train Controller Model Outputs – Train Miles \(2022-2052\)](#)

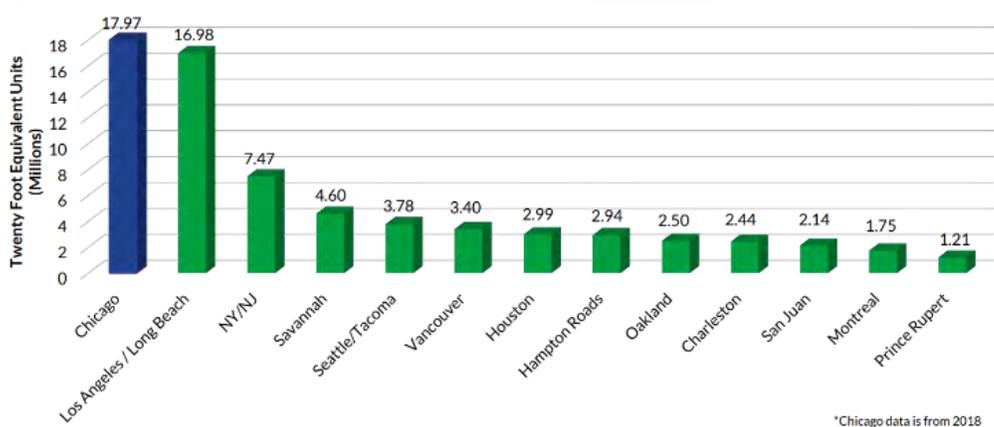
meet the projected demand, and as detailed in the [BCA](#), threats like a partial closure along the corridor could result in a loss of \$373 million in economic value annually (p.23), resulting from a diversion of east-west freight rail traffic through other Midwestern regions.

6.3.3. National Beneficiaries

EW2A will also benefit national intercity passenger rail service. EW2A’s improvements to travel time, delay, and safety must also be implemented before constructing the P2 flyover (which will allow Metra to direct 30 SWS trains to LaSalle St station, freeing up around 30 slots at CUS), making the Project foundational for expanding Amtrak service at CUS, and ultimately, in the Midwest. CUS serves as a key node in Amtrak’s national network, as well as its primary hub for Midwestern regional service. Currently, Amtrak operates 17 intercity lines out of CUS, serving more than 3 million customers annually, making CUS the fourth busiest Amtrak station nationwide.¹⁵ Detailed in [AmtrakConnectsUs](#), Amtrak is targeting significant Midwest service growth, including frequency increases, route expansions, and improved speeds of 110-125 mph (p.46). Completing EW2A is necessary step toward enabling CUS to handle this growth.

EW2A also benefits industries that depend on and participate in the national distribution of manufactured goods and natural resources, as Chicago continues to handle 67% of all east-west gateway traffic in the US, and 85% of all east-west intermodal traffic, and remains the top North American container port (handling 17.9 million Twenty Foot Equivalent Units annually).¹⁶ The Project enhances the efficiency of these container movements through the Terminal, and maintains the cost-effectiveness of rail car shipments for critical sectors like agriculture, energy, and manufacturing, ultimately benefitting other state and regional economies across the country that depend on those sectors.

Figure 4. Top North American Container Ports, 2019 ([Exhibit 1N](#))



Source: CMAP Intermodal Facility Lift Counts Regional TEU Estimate (2019), American Association of Port Authorities, 2020
*Chicago data is from 2018

6.4. Project Components & Elements

EW2A is a component of CREATE Project EW2 and the greater 75th St CIP. EW2A’s scope was developed to have independent utility as a standalone project, but also to enable future projects that depend on its construction. EW2A’s scope includes:

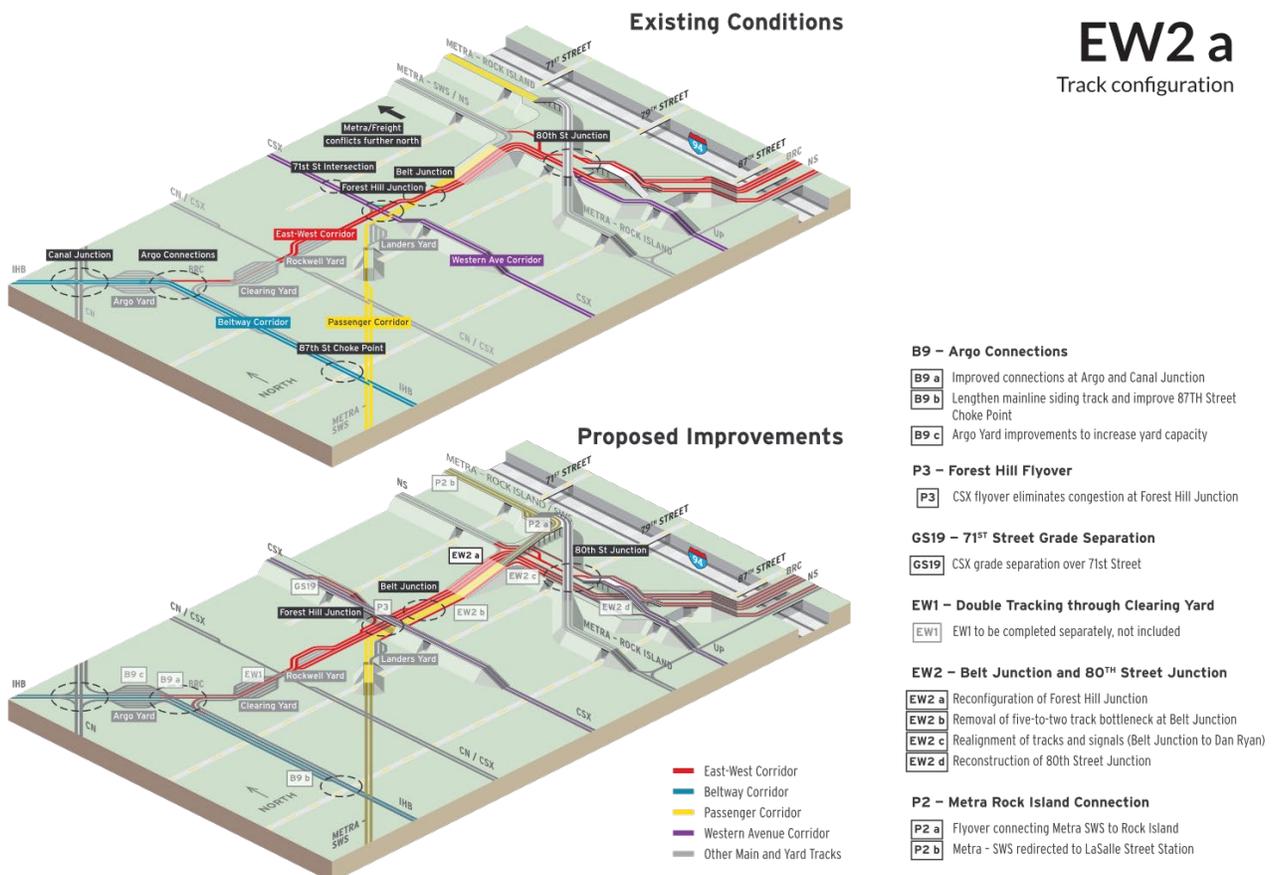
¹⁵ [Chicago Union Station: About](#)

¹⁶ [CREATE Program Overview Presentation \(p. 4 & 6\)](#)

- **Track Work:** Realigning 8.5 miles of existing track and constructing 3.4 miles of new track, including a new NS third mainline from S Racine Street to Landers Yard, which will reduce rail-on-rail conflicts at Belt Junction.
- **Structures Work:** Replacing and restoring 14 aging grade-separated structures, designed with a loading capacity meeting the AREMA Cooper E-80 standard, extending their useful life by 50-100 years. Individual bays, decks, beams, columns, and abutments will be replaced, with some structures widened to accommodate new and reconfigured track. Retaining walls will be installed at two locations, as well as one noise barrier.
- **Signals Work:** Signals will be repositioned, retrofitted, or added in the vicinity of S Damen Ave, Belt Junction, and W 74th St. New signals will be added at four locations along the corridor and existing and modified signals will be shifted to nine new locations.
- **Community Mobility Improvements:** Various street improvements at 14 separate viaducts will be made along the corridor, including ADA ramps, LED lighting fixtures, sidewalk/pedestrian enhancements, pavement replacement, sewer upgrades, bridge deck waterproofing, bridge façade restoration and street tree replacement.

Figure 5 illustrates how EW2A (as a component of the 75th St CIP) improves fluidity through Belt Junction and the corridor. EW2A’s Statement of Work (SOW) details these improvements and their work plan for implementation. The SOW is supported by [Exhibit 2A. Detailed Project Scope](#), which provides approximate locations and quantities for the Project’s components, and by [Exhibit 2C. Project Estimate](#), which provides costs per component.

Figure 5. Isometric Map ([Exhibit 1B](#))



6.5. Performance Measures

To assess progress in achieving strategic goals and objectives of the CRISI program, CREATE has identified the following performance measures for the EW2A project:

Table 3. Proposed Project Performance Measures

Rail Measures	Units Measured	Temporal	Administration Priority	2 nd Admin. Priority	Description
Train Counts	Trains	Quarterly	Workforce Development, Job Quality, and Wealth Creation	Climate and Sustainability	Total number of trains operating between mile posts BRC 13.2 [Western], NS 516.38 [72nd St.] and BRC 15.8 [79 th St]
Reduced freight and passenger train delay (combined)	Combined hours of reduced freight and passenger train delay	Annual	Workforce Development, Job Quality, and Wealth Creation	Equity & Justice40	Total reduced hours of freight and passenger train delay in in the Terminal, resulting from the Project
Maintenance Costs Savings	Average Maintenance Expenditures per Structure	Annual	Workforce Development, Job Quality, and Wealth Creation	Safety	The difference between the average “pre-build” and “post build” maintenance costs per structure
Equity in Contracting	Total contract dollars awarded to DBE’s	Annually	Workforce Development, Job Quality, and Wealth Creation	Equity & Justice40	Estimated dollar value awarded to DBE’s, versus the total project cost

6.6. Grade Crossing Information

No at-grade railroad-roadway crossings exist within EW2A’s project limits. All roadway crossings in the Project area were grade-separated over 100 years ago (as mandated by the City). The necessary rehabilitation and replacement of these structures will ensure that the surrounding communities continue to experience the safety and connectivity benefits from grade separation. However, delays on the corridor can cascade to impact roadway crossings in other parts of the Terminal. Detailed in the [BCA](#) (p.19), EW2A’s improvements will prevent delay related to gate-down time at crossings in the Terminal by a total of 47,829 vehicle hours annually.

6.7. Heavily Trafficked Rail Corridors

EW2A is a crucial step in the completion of the 75th St CIP, a corridor that stands as a nationally unique convergence point for western and eastern Class I railroads (NS, CSX, CN, UP, CPKC, BNSF), short line railroads (BRC), regional commuter rail (Metra), and Amtrak intercity passenger service. In total, 90 freight trains and 30 Metra commuter trains run through the corridor daily, along with 3 Amtrak trains weekly. Located east of NS Landers Intermodal Yard, the corridor is heavily used by a large volume of freight trains engaging in container switching activities, which heavily impact the efficiency of freight flows regionally and nationally. Regarding passenger operations, the Metra SWS line carried 844,567 riders through the corridor in 2023,¹⁷ in addition to Amtrak’s Cardinal service, which carried 82,705 total riders in 2023, a portion of which were carried through the 75th CIP.¹⁸ Freight and passenger rail frequently come

¹⁷ [Metra Commuter Rail – 2022 SouthWest Service Ridership Data](#)

¹⁸ [Amtrak Route Ridership \(FY 22 v. FY21\)](#)

into conflict along the corridor, especially during peak morning and afternoon commuting periods (totaling six hours daily) and during non-peak periods. Completion of the Project will allow parallel movements of passenger and freight rail, increasing throughput of both.

6.8. Positive Train Control (PTC)

Project EW2A will not deploy new PTC systems but will update the corridor's existing PTC systems already installed, as needed. EW2A's signal work will improve broader interoperability with the PTC systems that have been installed throughout the Terminal, by replacing current signals with modernized signals.

6.9. Workforce Development & Training

Elaborated on in **Section 8.4.5 (Alignment with Administration Priorities, p. 21)**, workforce development and training opportunities on EW2A will be advanced through CREATE's existing DBE and mentor-protégé program, and through the Program's numerous workforce development partnerships. CREATE maintains significant programmatic partnerships with various Chicago region community colleges and training centers, to provide equitable opportunities for entry into the railroad industry. These include IDOT's Highway Construction Careers Training Program and the CSX Railway Career Pathways Program. CREATE partners have also funded STEAM education programming in 75th St CIP communities since 2019. These investments align with US DOT's goal of wealth building in disadvantaged communities. As with all CREATE projects, all work performed will be carried out by 100% union labor, including skilled and semi-skilled laborers, equipment operators and specialty craftspeople, representing the Laborers, Steel Workers, Electrical Workers, Heavy Equipment Operators, Brotherhood of Railroad Signalman, Brotherhood of Maintenance of Way Employees unions, and other groups. All contractor employees will be covered by Davis-Bacon Act (23 USC 113) payment of prevailing wage rates. Lastly, union partnerships are instrumental for engaging under-represented groups in CREATE's contracted work, particularly at the Program's [Get on Board \(GOB\)](#) events, which connect minority and DBE contractors with rail-industry prime contractors specializing in engineering, design and construction. GOB events educate contractors on how to become a certified DBE and/or a certified railroad contractor, and the Program's upcoming bid opportunities.

6.10. Trespassing Injury & Fatality Reduction & Prevention

EW2A is in Cook County, Illinois, which ranks second among U.S. counties for the Most Railroad Trespasser Casualties (Not Including Suicides), as detailed in the "[National Strategy to Prevent Trespassing on Railroad Property](#)" (p. 1). Though trespassing related injuries and fatalities are not a documented problem on the corridor (as it is entirely grade separated), reducing delay both in and outside the Project area will decrease the threat of trespassing for the purpose of theft and pilferage from idling trains, in addition to reducing associated operational risks and security costs.

6.11. Emissions Reduction Information

EW2A reduces Metra and Amtrak's emissions on the corridor, by cutting idling and delay by 3,258 hours from 2033-2052 ([BCA](#), p.12), through its upgrades to track segments and signals. Detailed in the [BCA](#) (p.13), this will cut Metra's and Amtrak's carbon dioxide (CO₂) emissions by 2.5 metric tons annually. Also, by avoiding an increase in car VMT, due to the suspension of the SWS line from a potential track closure, EW2A prevents an increase of 9,085 metric tons in combined emissions (CO₂, NO_x, SO_x, PM_{2.5}) from 2033-2052 ([BCA](#), p.15). By avoiding

diversions to truck (due to a closure on the corridor), EW2A also prevents a combined 25,624 metric tons in emissions between 2047-2051 (BCA, p.17). Detailed in [Chicago’s 2022 Climate Action Plan \(CAP\)](#), the City’s carbon reduction goal of 62% by 2040 is heavily driven by reducing on-street transportation and railway emissions, which accounts for 1/6th of that total reduction goal (p.16-17). Preventing emissions increases due to truck diversions (detailed above) will play a key role in helping the City achieve its climate action goals. These emissions reductions also directly benefit surrounding environmental justice communities. As revealed by the [Climate and Economic Justice Screening Tool \(CEJST\)](#), most of the Project area census tracts rank around the 90th percentile for PM_{2.5}, diesel particulate matter risk, and correlating health problems like asthma, reflecting the need to improve air quality in these communities (see [Exhibit 3G: CEJST Outputs](#)).

6.12. Community Emergency Plans & Maglev Grants

Neither community emergency plans nor Maglev grants are applicable to Project EW2A.

Figure 6. Congressional District Map



VII. Project Location

EW2A invests over \$485 million in the Chicago IL-IN 2020 Census Designated Urban Area, in six Chicago communities: Auburn Gresham, Ashburn, Chatham, Chicago Lawn, Englewood, and Greater Grand Crossing. EW2A is located in Illinois congressional districts 1 and 7. Coordinates for EW2A’s western limits are 41°45’25.3” N 87°41’16.0” W; at its northeastern limits, they are 41°45’50.4” N 87°38’21.5” W; at its southeastern limits, they are 41°45’01.0” N 87°38’21.8” W.

VIII. Evaluation and Selection Criteria

8.1. Project Readiness

Detailed in **Figure 7**, EW2A is currently in its final design stage, which began in Q1 2021 and will be completed in Q1 2026. If the Project is selected for CRISI funding, execution of the Project’s grant agreement would occur by Q3 2025, contractor procurement would be completed by Q4 2026, and construction work would begin in Q4 2026 and end in 2033. Train movements

railroads (NS, Metra, BRC, and CSX) will oversee the design and construction, with IDOT and City of Chicago providing project oversight and permitting coordination.

8.1.3 Lifecycle Stage Summary

EW2A is in the Track 3 lifecycle stage (Final Design and Construction). Track 1 (Systems and Project Planning) began in 2007 with the completion of the program-wide feasibility study, which defined the scope, objectives, and benefits of the four projects of the 75th St CIP, including EW2A. The Project completed its Track 2 phase with the development and approval of the [75th St CIP's \(EIS\)](#) and ([ROD](#)) in 2014, and its preliminary engineering report approval in 2015. EW2A's final design work began in January 2021 and is planned to conclude by Fall 2025, contingent on the award of CRISI funding to initiate construction.

8.1.4. Project & Partner Coordination

CREATE is a partnership between all six North American Class I railroads, short line railroads, and various agencies, including Amtrak, Metra, IDOT, the City of Chicago, and Cook County. CREATE Program partners regularly coordinate with FHWA and FRA around the development of the 75th St CIP (including EW2A) and have ensured its inclusion in relevant state and local plans (like the CMAP's Transportation Improvement Program or "TIP"). CREATE also updated the 75th St CIP's [Stakeholder Involvement Plan \(SIP\)](#) in August 2020, with the goal of guiding the collection and organization of input from all stakeholders. To date, EW2A has secured over 90 [support letters](#) from elected officials, agencies, organizations, and community stakeholders.

8.2. Technical Merit

8.2.1. Scope of Work

The proposed tasks and subtasks are appropriate and in accordance with CREATE's best practices for construction projects of similar size and scope. CREATE projects are developed through a rigorous process of design and review to assure that they are designed to the highest engineering standards, are in compliance with all federal, state, and local regulations, and are delivered in a manner that is accountable and responsible. As detailed in **Section 8.1.3** (p.15), EW2A project's preliminary design has been approved, with the final design nearing completion.

8.2.2 Qualifications and Experience of Key Personnel

CREATE partners have extensive experience completing projects with a similar scope. CREATE has administered 16 federal grants awarded to the Program's projects over the last 20 years, totaling \$750 million. Each project is managed by an organization sponsor that leads procurement, engineering, and construction activities. For EW2A, IDOT serves as the sponsor and assumes its traditional role of financial management, partner coordination, and oversight of the environmental review. NS will oversee the design and construction, with partner railroads providing review support and concurrence. The Chicago Transportation Coordination Office (CTCO) will oversee continued rail operations through the corridor during the Project, with IDOT and City of Chicago assisting with project oversight and permitting coordination. The personnel responsible for EW2A's delivery have a strong and successful track record of similar project completion under the Program:

- **Amtrak: Joseph Shacter (Director, Program Management)**. Mr. Schacter holds over 14 years of leadership experience at Amtrak and IDOT and will assist with agency coordination.

- **Association of American Railroads: Bill Thompson (Chief Engineer)**. With over 40 years of experience in heavy haul rail operations, design and research, Mr. Thompson will support IDOT as project sponsor, and NS as the contracting implementing railroad.
- **Belt Railway Company of Chicago: Christopher Steinway (General Counsel), Adam Brock (Chief Mechanical & Engineering Officer)**. Mr. Steinway has 15 years of legal counsel experience at BRC. Mr. Brock has a total 12 years of mechanical engineering and maintenance experience at BRC and UP. Both will support design and construction work.
- **City of Chicago: Jeff Sriver (Dir. of Transportation Planning & Programming), Joe Alonzo (Transportation Planner)**. Mr. Sriver has led planning and engineering at CDOT for 15 years. Mr. Alonzo has served as a transportation planner at CDOT for 30 years. Both have been CREATE partners since 2003, and will provide oversight and assist with permitting.
- **Cook County: Jesse Elam (Dir. of Strategic Planning & Policy), Tara Orbon (Asst. Superintendent)**. Mr. Elam is a planner with 18 years of agency experience, at Cook County and CMAP. Ms. Orbon is a transportation engineer with 25 years of experience, including 8 years of leadership at Cook County. Both will assist with oversight and agency coordination.
- **CSX: Brett Guarino (Project Manager), Tom Livingston (VP, Government Affairs)**. Ms. Guarino is a construction engineer and project manager with 14 years of experience at CSX and will support the construction process. Mr. Livingston has 21 years of government relations experience at CSX and will assist with agency coordination.
- **HNTB (IDOT PMO): David Zarowny (Project Manager)**. Mr. Zarowny serves as the CREATE project manager, holding over 40 years of experience in railroad operations.
- **IDOT (Project Sponsor): Velicia Goode-Moore (Freight Rail Section Chief) Jason Osborn (Dir., Office of Intermodal Project Implementation)**. Ms. Goode-Moore has 24 years of IDOT engineering experience and serves as the CREATE Program Manager. Mr. Osborn has 24 years of transportation and government administration experience at IDOT and Metra. Both will oversee project management, grant administration, procurement, and coordination.
- **Metra: David Kralik (Director, Planning & Programming), Paul Bobby (Operations Engineer)**. Mr. Kralik oversees transportation planning at Metra, with over 22 years of experience at the agency. Mr. Bobby is an engineer with 24 years of experience at the agency. Both will provide support final design and agency coordination work.
- **NS (Lead Railroad): Jeff Page (Planning Engineer), Leo Russell (CTCO Superintendent & Director), Herbert Smith (Regional VP, Government Affairs)**. With 25 years of engineering experience at NS, Mr. Page will oversee final design and construction. Mr. Russell, with 9 years of rail operations experience at NS, will oversee service operations during construction. With 15 years of government relations experience at NS, Mr. Smith will assist with agency coordination and public engagement.
- **Union Pacific: Mark Bristol (Assistant VP – Network Development)**. Mr. Bristol holds 35 years of government relations experience at UP and will assist with agency coordination.
- **WSP (IDOT Corridor Management Consultant): Chris Ferguson (Project Manager)**. A supervising signal engineer with 20 years of experience in private consulting and at NS, Mr. Ferguson will assist IDOT with project management, coordination, and railroad oversight.

8.2.3. Private Sector Participation

This application is noteworthy for its high level of private sector cooperation and financial commitment. Private railroad funding contributions represent 42.7% of the non-federal funding match for construction. This private sector funding commitment is consistent with CREATE's original mission and vision. Additionally, this matching contribution leverages the private railroad partners' ongoing investments in the maintenance and state of good repair of the improvements in the Terminal, totaling \$8 billion since 1998.

8.2.4. Legal, financial, and technical capacity

IDOT is the project sponsor and lead applicant for EW2A and has the legal, financial, and technical capacity to oversee its successful implementation. Funding and delivery of EW2A will be supported by the other CREATE partners (detailed in **Section 8.1.4**, p.15-16), and in its role as grant administrator, IDOT will work closely with affected railroad operators and funding partners. A core capability and day-to-day responsibility of each of the CREATE partners is the development and execution of complex transportation infrastructure capital projects.

8.2.5. Innovation

EW2A incorporates innovative and effective technology, approaches to project delivery, and funding and financing solutions. The technologies used in the Project, including modern bridge design, centralized traffic control, rail friction management, and updated PTC-capable rail traffic signals are established solutions, but represent significant upgrades on the corridor. EW2A also advances and supports the protection of the corridor's assets and operations through its innovative cybersecurity framework, overseen by AAR and the participating railroads, who comprise the CREATE Rail Information Security Committee (RISC). RISC procedures will be followed in the procurement of information technology for EW2A and subsequent operations.

EW2A was also developed through CREATE's project segmentation method, which separates larger projects into successive distinct phases that strategically maximize public and private partner priorities at each stage. To that end, EW2A will meaningfully deliver public-oriented improvements to safety and mobility as well as critical upgrades to the track and signal infrastructure, benefitting all operators. These improvements are designed to be minimally disruptive to train operations and lay the groundwork for additional major future improvements (like Project P2). The procurement process for EW2A's contracted portion will request that bidders propose methods for maximizing the efficiency of the construction work, to minimize interruptions to rail traffic, and motorized and non-motorized traffic under the viaducts. This may include detailing use of advanced bridge construction methodologies and traffic management plans, and value engineering recommendations made by the contractor to reduce costs.

Lastly, CREATE has stood as national model of an effective public-private partnership. As detailed in **Section III** (p.2), EW2A continues this approach as its funding plan offers significant private match (\$78.2 million) and total non-federal match (\$171.1 million).

8.2.6. Consistency with Planning Guidance & Documents

This Project is subject to local approvals through the Chicago Metropolitan Agency for Planning (CMAP) Transportation Improvement Program (TIP) and is included in the federal fiscal year 2022-2026 TIP. The TIP ID number for this Project is [01-05-0012](#). Projects in the TIP are consistent with CMAP's [ON TO 2050 Comprehensive Regional Plan](#), where it is emphasized that "the CREATE Program has greatly improved rail movement in the region and nationwide, [but that] the effort requires continued investment with a focus on public benefits." The 2050

Plan also highlights the 75th St CIP as the “largest, most complex, and most significant remaining component of the CREATE program,” making it a regionally significant infrastructure investment. The CMAP TIP is included in the [Illinois Statewide Transportation Improvement Program \(STIP\)](#). The Project’s IDOT State Job Number is D-20-002-20. The CREATE Program is featured prominently in the current versions of the [Illinois State Rail Plan](#), the [State Freight Plan](#) and the [Long Range Transportation Plan](#). As documented above, the Project has been included in metropolitan and State planning documents ([TIP](#) and [STIP](#)) as required.

8.3. Project Benefits

EW2A creates \$691.6 million in net benefits, by increasing fluidity and reducing congestion on the freight and passenger rail system, improving safety and state of good repair, and reducing emissions related to a service outage on the corridor. These improvements will encourage optimization and continued usage of the rail system and will help avoid the potential diversion of freight shipments from rail to truck, as well as passenger trips from rail to automobile. This will lead to reduced vehicle miles traveled (VMT) on the highway and subsequent benefits to (A) system and service performance; (B) safety, competitiveness, reliability, trip time and resilience; (C) improved integration with other modes; and (D) the ability to meet existing or anticipated demand. The BCA was prepared according to current USDOT guidance. This section presents the benefits and how they apply to the primary selection criteria as described in D.2.b.ii of the NOFO. A crosswalk of benefits categories and the CRISI selection criteria is summarized in **Table 4**. Each criterion is further described in the following subsection. With a discounted total project cost of approximately \$311.2 million, the **EW2A benefit-cost ratio is 2.22**. Detail on the analysis is provided in the BCA Calculations and [BCA Technical Memorandum](#).

Table 4. CRISI Primary Selection Criteria Crosswalk

	Benefit Categories	Monetized Benefits (mil.)	CRISI Selection Criteria
1A	Avoided rail delay under typical operations	\$42.6	A, B, D
1B	Avoided passenger rail cost under typical operations	\$0.7	A, B, C
2A	Avoided freight delay from track closures	\$21.2	A, B, D
2B	Avoided passenger trip diversion from track closures	\$12.5	A, B, C, D
3	Avoided freight diversion to trucks, due to reduced capacity	\$13.6	A, B, C, D
4	Avoided rail diversions from reduced capacity	\$373.1	A, B, D
5	Traffic delay savings	\$56.6	A, B, D
6	Reduced crashes	\$16.8	B
7	Reduced crime	\$8.9	B
8	Reduced maintenance costs	\$27.0	A, B, D

- (A) Effects on system and service performance
- (B) Effects on safety, competitiveness, reliability, trip or transit time, and resilience
- (C) Efficiencies from improved integration with other modes
- (D) Ability to meet existing or anticipated demand

8.2.1. Avoided rail delay under typical operations

Benefit 1A is a function of reduced delay time for both freight and passenger trains, when comparing the Base and Build scenarios. By realigning track, introducing new track segments, and adding a wye, serving to reduce dwell times on the freight main lines through the corridor, EW2A will yield 3,258 hours of avoided delay for passenger trains and 69,969 hours of avoided delay for freight trains in the Terminal from 2033-2052 [BCA](#) (p.12). By avoiding delay under typical operations, EW2A ensures that freight and passenger service will operate efficiently in the Terminal (A), and that trip reliability and travel times improve (B), so existing and anticipated demand can be accommodated (D).

8.2.2. Avoided passenger rail cost under typical operations

Benefit 1B estimates the additional cost savings to passenger rail providers resulting from the reduction in idling time, including costs associated with fuel, emissions, and crew costs. Detailed in the [BCA](#) (p.13) the total cost savings is estimated at \$48,041 in starting 2033. Avoiding passenger rail costs under typical operations will serve to advance cost-effective service performance (A) and cost-competitive fares (B), thereby encouraging multi-modalism (C).

8.2.3. Avoided freight delay from track closures

Benefit 2A estimates avoided freight delay in the Terminal, through prevention of a closure on the corridor under the Build scenario, using RTC Model forecasts ([Exhibit 3A](#)). The [BCA](#) (p.14) estimates a 10% chance of a closure occurring, starting in 2032. During the analysis period (2033-2052), there are 36,096 hours of avoided delay, resulting in \$21.2 million in savings from avoided O&M costs and emissions. By avoiding delay due to track closures, EW2A ensures freight service will operate efficiently in the Terminal (A), and that trip reliability and system resiliency will be preserved (B), so existing and anticipated demand can be accommodated (D).

8.2.4. Avoided passenger trip diversion from track closures

In the event of a closure on the corridor, Metra SWS would be suspended, resulting in a portion of existing ridership shifting to automobile trips. The [BCA](#) (p.15) estimates a 10% chance of this occurring in the no-build scenario, starting in 2032. Benefit 2B estimates that by preventing this closure and a subsequent mode shift, 50.6 million vehicle miles traveled due to the diversion would be avoided. This benefit advances FRA's four evaluation criteria, by preserving system performance (A), reliability and resilience (B), preserving multi-modalism (C), and enabling future demand (D).

8.2.5. Avoided freight diversion to trucks, due to reduced capacity

Under the No-Build scenario, as Terminal congestion increases, and as the chance of a closure on the corridor reaches 10% by 2032, Benefit 3 projects that by 2047 a portion of the Terminal's freight traffic would divert to commercial trucks travelling within 255 highway-mile trips. This will increase truck VMT in the Terminal by over 37 million from 2047-2051 ([BCA](#), p.17). In turn, Benefit 2B advances FRA's four evaluation criteria, by preserving system performance (A), reliability and resilience (B), and multi-modalism (C), and by enabling future demand (D).

8.2.6. Avoided rail diversions from reduced capacity

By 2047 under the No-Build scenario, the [BCA](#) (p.18) forecasts at least 5% of non-intermodal freight movements interchanging in Chicago would be diverted away from the Terminal to other regions, to avoid capacity constraints. Traffic is assumed to switch from UP or BNSF to NS or CSX (and vice versa) for freight traveling east and west in these territories, respectively. In the analysis period (2047-2051), an estimated 13 billion ton-miles of freight rail shipments would be

diverted, costing the Chicago region \$373 million in economic value annually (BCA, p.23). By upgrading track segments and by restoring the corridor's 14 grade-separated structures to a state of good repair, EW2A prevents this scenario and preserves system performance in the Terminal (A), as well as reliability and resiliency (B), so that anticipated demand is accommodated (D).

8.2.7. Traffic delay savings

Benefit 5 assesses EW2A's impact on roadway delay, from reducing the gate down time at 37 at-grade railroad crossings in the Terminal, factoring in both delays associated with typical rail operations and from a forecasted track closure. This analysis assumes that 9% of the AADT at these crossings are commercial trucks and that the average impacted user experiences half the total gate down time, which includes a 20-second warning buffer. Under the Build scenario, EW2A prevents 52,737 annual vehicle hours of gate down time under typical operations and 42,620 annual vehicle hours of gate down time resulting from a closure on the corridor (BCA, p.19). By reducing delay at-grade crossings in the Terminal, EW2A preserves system performance (A), improves trip reliability and travel times (B), and enables future growth in the Terminal's rail and road network (D).

8.2.8. Reduced crashes

Benefit 6 estimates the reduction in crashes in the Project area resulting from the improved lighting under the viaducts. Detailed in the BCA (p.20), EW2A's improvements will reduce future crashes and auto-related injuries by 30% from 2033-2052, improving safety (B).

8.2.9. Reduced crime

Benefit 7 forecasts a 4% reduction in crime in the Project area beginning in 2033, due to improved lighting under the viaducts (BCA, p.21), thus improving safety in the Project area (B).

8.2.9. Reduced maintenance costs

The maintenance costs of a rail structure's first 50 years of life mainly include inspection costs, versus routine repair costs. In turn, by restoring the corridor's structures to a state of good repair, EW2A will yield \$2.5 million in annual maintenance cost savings from 2033-2052 (BCA, p.22). Reducing these costs on the corridor will serve to support the efficient system performance (A) and cost-competitive operations (B), thereby supporting existing and future demand (D).

8.4. Selection Criteria

8.4.1. Eligibility for Other FRA Programs

CRISI is the FRA program most aligned with EW2A's scope, as the program funds safety, state of good repair, and efficiency improvements for both intercity passenger and freight rail projects. Regarding other programs, many current FRA grants are restricted to the agency's intercity passenger rail projects (under the Corridor ID program and the Interstate Rail Compacts Program), and since EW2A does not include any at-grade rail crossings, it does not qualify for the Railroad Crossing Elimination Grant Program.

8.4.2. Federal Share

Factoring in the \$291,179,049 grant request from CRISI, the \$11,172,757 in match from Metra (using FTA formula funding), and the \$11,172,757 in match from Amtrak (using FRA annual grant funding), the federal share of the Project is 64.6%. The non-federal funding match is provided by IDOT, Cook County, the City of Chicago, and CREATE railroad partners.

8.4.3. Maximizing Net Benefits

EW2A creates **\$691.6 million in net benefits**, by improving throughput and reducing congestion in the Terminal, improving safety and state of good repair, reducing emissions, and preventing impacts from a service outage on the corridor. EW2A's benefit-cost ratio is 2.22. A summary of project benefits is included in **Section 8.1** (p.13) and detailed in the [BCA Tech Memo](#).

8.4.4. Preventing trespassing and reducing associated injuries and fatalities

EW2A is located in Cook County, IL, which ranks second nationally among the top 25 U.S. Counties for the Most Railroad Trespasser Casualties (Not Including Suicides), as detailed in the "[National Strategy to Prevent Trespassing on Railroad Property](#)" (p. 1). Though trespassing-related injuries and fatalities are not a documented problem on the corridor, reducing delay in the Project area decreases the threat of trespassing for the purpose of theft and pilferage of idling trains.

8.4.5. Alignment with Administration Priorities

EW2A advances the following US DOT administration priorities as defined in the NOFO:

Safety

Increasing safety is a primary goal in the Project's [Purpose and Need statement](#), achieved by reducing rail-rail conflicts, highway-rail crossing problems, and community mobility problems. EW2A advances safety by upgrading the corridor's infrastructure, reducing crashes and crime at the viaducts, and by preventing health impacts from potential truck diversions on streets throughout the Terminal. The upgrades to infrastructure will address safety by preventing an out of service failure for the many bridges and viaducts on the corridor, and by reconfiguring track segments and signals, to increase safety and efficiency of train movements at interlockings. The viaduct improvements will encourage safe passage for pedestrians, bicyclists, buses, and drivers, and reduce the probability of accidents, injuries, or fatalities by enhancing visibility, road surface quality, and protections for non-motorized travelers, and by reducing flooding at the viaducts. Crime will also be reduced by improving lighting at the viaducts and reducing threat of theft and pilferage from idling trains by trespassers.

Climate Change and Sustainability

EW2A produces significant environmental benefits, including emissions reductions, air quality improvements, and enhancements that advance climate resiliency and active transportation. The Project will cut idling and delay time by 3,258 hours from 2033-2052 ([BCA](#), p.12), through planned upgrades to track segments and signals, which will reduce Metra's and Amtrak's carbon dioxide (CO₂) emissions by 2.5 metric tons annually and their fuel consumption by 248 gallons annually. By avoiding an increase in car VMT, due to the suspension of the SWS line from a potential track closure, EW2A also prevents an increase of 9,085 metric tons of combined emissions (CO₂, NO_x, SO_x, PM_{2.5}) from 2033-2052 ([BCA](#), p.15). By avoiding diversions to trucks that stem from a corridor closure, EW2A also prevents a combined 25,624 metric tons in emissions between 2047-2051 ([BCA](#), p.15). Additionally, by improving road conditions at the Project area's viaducts (benefitting 8 CTA fixed route bus routes and 3 dedicated City bike routes), EW2A encourages the use of active transportation modes, which produce fewer GHG emissions than passenger vehicles. EW2A's improvements also include the installation of LED light fixtures, tree replacement, and new drainage and runoff control measures at the viaducts, which will improve their resiliency against flash flooding and combined sewer overflow events. These positive outcomes align with [Chicago's 2022 Climate Action Plan \(CAP\)](#), by reducing transportation-related emissions and the impacts that they place on local environmental justice communities. Lastly, by upgrading the

infrastructure throughout the corridor, EW2A also encourages infill development and brownfield remediation efforts in the Project area.

Equity & Justice40

Aligning with the [Justice40 Initiative](#), EW2A advances equity, multimodal options, and quality of life within communities on Chicago's South Side. The Project invests over \$485 million in six Chicago neighborhoods (Auburn Gresham, Ashburn, Chatham, Chicago Lawn, Englewood, and Greater Grand Crossing) that are majority African American, with median household income levels below the county and regional average. Shown in [Exhibit 1G](#), 90% of the corridor's population reside in census tracts designated as either Areas of Persistent Poverty (APP), Historically Disadvantaged Communities (HDC), Opportunity Zones (OZ), or have more than one designation. Shown in US DOT's Equitable Transportation Community tool, EW2A's 13 census tracts are all also considered "transportation disadvantaged," with 10 of them ranking above the 90th percentile. EW2A addresses these "transportation cost burden" challenges, by improving transit service and mobility within the Project area's communities. EW2A will improve the Metra SWS line, by reducing passenger train delay by 3,258 hours from 2033-2052 ([BCA](#), p.12), and by avoiding \$1.1 million in annual automobile operating costs that result from a suspension of the SWS line, due to a track closure ([BCA](#), p.15). Additionally, as 2 hospitals, 10 fire stations, 4 police stations and 127 schools exist within 2 miles of the Project area (see [Exhibit 3H. EW2A Community Institutions](#)), EW2A will preserve and enhance access for emergency vehicles and critical services through the corridor by improving road conditions at the viaducts, benefitting a population of 40,110 residents and 14,529 households within Project census tracts ([Exhibit 3E. Census Tract Tables](#)). EW2A also makes investments in community infrastructure, including implementing pedway and lighting improvements at Hamilton Park in the Englewood (located at 73rd Street, west of the NS line), which will enable residents to safely access a popular local park that features a baseball field, outdoor pool, and tennis courts. EW2A also improves connectivity with regional job centers, including intermodal facilities like NS Landers.

Workforce Development, Job Quality, and Wealth Creation

EW2A advances US DOT's workforce development, job quality, and wealth creation priorities, through the CREATE program's ongoing commitment to fostering DBE entrepreneurship; including under-represented vendors in the contracted work; partnering with regional training programs; investing in education; and delivering projects in partnership with trade unions. EW2A incorporates the CREATE Program's Community Partnership, which emphasizes inclusion of DBEs in its design and construction work. The contracted work element of EW2A will include outreach to support local hiring in the surrounding communities, conducted in partnership with City Colleges, community organizations, and elected officials. IDOT data from 2022 showed that of CREATE's ten most recent general rail construction projects, the Program achieved a DBE participation goal of 23%, exceeding its 21% target, representing \$39 million in completed awards. An additional \$30 million in DBE contract awards is planned through 2028. Specifically for Projects P3 and GS19, the DBE goal has been even higher, at 30%. To date, 19 of the 26 subconsultants and contractors hired for P3 and GS19 have been DBEs. CREATE partners are also performing a procurement analysis for EW2A that will enable setting of project-specific construction DBE and local hiring goals, considering the technical capacity required to complete the work and the capabilities of local firms. CREATE also maintains a mentor-protégé program that advances participation and experience development for under-represented vendors.

High quality job creation is also advanced through the CREATE's numerous workforce development and training partnerships. CREATE provides funding for construction industry qualifications trainings, and for on-the-job training in 75th St CIP projects, involving entry-level individuals who have graduated from IDOT's Highway Construction Careers Training Program (HCCTP). The HCCTP is offered at numerous Chicago area schools, including Dawson Technical Institute of Kennedy King College, South Suburban College, and Richard J. Daley College. To date, the HCCTP has advanced 600 graduates, 300 of which have been placed in highway careers. The CSX Railway Career Pathways Program is also held at Dawson Technical Institute, which prepares students for rail industry careers. In 2022, thirty-one students attended the program, and it continues to grow. NS has also contributed \$200,000 to [HIRE360](#)'s workforce development center, helping to cultivate Chicago's next generation of construction workers and DBE entrepreneurs. Additionally, CREATE Partners have funded STEAM programs in 75th St CIP communities since 2019, including over \$200,000 from NS to Chicago Public Schools and the Chicago Public Library Foundation. These programs encourage student interest in transportation, engineering, and technical fields throughout a CREATE project's design and construction phases. Partners also led bridge building competitions at elementary schools and RFP Competitions with local high schools, having engaged over 130 elementary and 30 high school students to date.

As with all CREATE projects, the contractor work will be carried out by 100% union labor, including skilled and semi-skilled laborers, equipment operators and specialty craftspeople, represented by Laborers, Steel Workers, Electrical Workers, Heavy Equipment Operators, Brotherhood of Railroad Signalman, Brotherhood of Maintenance of Way Employees unions, and others. All contractor employees will be covered by Davis-Bacon Act (23 USC 113) requiring payment of prevailing wage rates. Additionally, EW2A is fully supported by the [Chicago Federation of Labor](#).

IX. Project Implementation and Management

9.1. Project Oversight and Contracting

CREATE projects are managed by an individual sponsor that leads procurement, engineering, and construction activities. All projects follow federal standards through preliminary engineering, NEPA, and final design, to ensure eligibility for federal funding. As grant administrator, IDOT will coordinate closely with affected railroad operators and funding partners. The 75th St CIP's [EIS](#) and [ROD](#) (inclusive of EW2A) was completed in 2014 and preliminary engineering in 2015. EW2A's design criteria is based on specifications developed by the railroads and agreed to by IDOT. EW2A's cost estimate (detailed in [Exhibit 2C](#)) is based on historical railroad unit costs and professional engineer experience. Cost estimates were recently updated in the [75th Street CIP Annual Financial Plan \(Exhibit 2F\)](#), approved by US DOT in April 2024. Cost estimates were also evaluated in 2023 through US DOT'S Construction Schedule and Risk Analysis (CSRA) process (detailed in [Exhibit 2G](#)). EW2A's estimate includes a 15% contingency and 5% Project Management Reserve (PMR). The project budget is escalated to year of expenditure (2030) dollars and the contingency and Project's Management Reserve serve to mitigate budget risks. Additional detail is provided in [Exhibit 2E. Estimate Contingency Plan](#).

EW2A will follow established CREATE processes and procedures for engineering, design, and procurement work. The CREATE Program has a proven record of successfully and expeditiously managing grant funding. The project will require significant coordination to ensure that 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. CREATE partners will release all construction bid packages using established federally approved processes. Much of the work, including track and signal construction, is force account and will be performed directly by the railroads, under union agreements. EW2A's construction work will adhere to FRA, partner agency, and railroad standards, as well as [CREATE Partnerships and Management Practices \(Exhibit 2M\)](#). Lastly, portions of the work will be made available for bid by qualified local and DBE firms. Detailed in **Section 8.4.5** (p.21), CREATE has established procedures for securing DBE participation in projects, and will achieve similarly strong DBE participation goals in EW2A's construction activities, per IDOT's requirements.

9.1.1. Project Management Experience

Among its public and private partners, the CREATE Program has extensive experience completing large and complex projects, having administered 16 federal grants over the last 20 years, totaling \$750 million. Each CREATE project is managed by an individual organization sponsor that leads procurement, engineering, and construction activities. For this Project, IDOT will serve as the sponsor, and assume its traditional role related to financial management, partner coordination, and oversight of the environmental assessment process. NS (as the lead railroad) will oversee the design and construction process, with Metra, BRC, and CSX providing support. IDOT and City of Chicago will assist with project oversight and permitting coordination.

9.1.2. Qualifications and Experience of Key Personnel

Qualification descriptions and experience of key personnel is found in **Section 8.2.2** (p.15).

9.2. Implementing the Project Management Plan

CREATE developed a [Project Management Plan \(Exhibit 2P\)](#) for the entire 75th St CIP in July 2020, including EW2A. It includes construction phase plans, pertaining to procurement, organizational management, controls, communication, documentation, reporting, and closeout.

9.3. Assessment of Project Risks and Mitigation Strategies

Project risks and mitigation strategies are detailed in [Exhibit 2I. EW2A Risk Registry](#), and include real estate acquisition, unanticipated environmental issues, necessary design revisions, cost increases, material supply delays, labor shortages, unidentified utilities, and local permitting. Described in [Exhibit 2J. Right of Way Acquisition Plan](#), property acquisition, permanent and temporary easements are required, which could present a minor schedule risk. Detailed in the [EIS](#), the Project also requires partners to deliver mitigation strategies for different environmental concerns. These are illustrated in [Exhibit 4. Environmental Commitments](#) and focus on issues like environmental justice, traffic, and air quality during construction; noise and vibration; and stormwater permitting, among others. Partners also mitigate project cost risks that arise during implementation, in accordance with the [Estimates and Contingency Plan \(Exhibit 2E\)](#).

9.4. Project Progress Reporting

IDOT and CREATE will comply with all US DOT reporting requirements, detailed 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 US DOT and CREATE, for the purpose of monitoring project progress toward achieving strategic agency goals. CREATE partners have experience around performance monitoring on similar projects and have incorporated performance reporting into project management activities. **Section 6.5** (p.11) provides EW2A's proposed performance measures.

9.5. Small Business Participation

Detailed in **Section 6.9** (p.12) and **Section 8.4.5** (p.21), CREATE maintains strong DBE goals and a mentor-protégé program, which increases participation and experience development for under-represented vendors. Specifically, \$39 million in awards to DBEs from the ten most recent general rail construction projects, and the Program's mentor-protégé program is ongoing.

X. Other Information

10.1. Environmental Compliance Documentation

EW2A's environmental compliance documentation includes the combined [EIS](#), [ROD](#), and preliminary design report for the 75th St CIP, as well as EW2A's environmental commitments. The Project will also require securing various permits from numerous state and local agencies, and while the final list of required permits will be determined in the final design process, the permitting requirements for Projects P3 and GS19 (included as [Exhibit 2H. Potential Required Permits](#)) illustrate the potential needs:

- **City of Chicago:** Office of Utility Coordination (OUC), Department of Water Management (DWM), Department of Transportation (CDOT), Bureau of Forestry
- **State of Illinois:** Environmental Protection Agency (IEPA), Historic Preservation Agency, Bureau of Design & Environment (BDE), Department of Natural Resources (IDNR)

10.2. Final Agreements, per 49 U.S.C. 22905(c)(1)

The [CREATE - Joint Statement of Understandings \(Exhibit 2N\)](#) details the established programmatic agreement between partner agencies and organizations (including rail operators and owners) that dictate all of the planning, design and construction activities in the program.

10.3. Letters of Support & Funding Commitments

Support letters for EW2A, provided on [application website](#) and included with this submission, are responding jointly to the FY23/24 CRISI and FY25/26 MPDG grant requests. Signed letters of funding commitment have also been provided by IDOT, Cook County, City of Chicago, AAR (representing participating private railroads), Amtrak, and Metra. These commitment letters have also been included with this submission and are provided on [application website](#).

10.4. Exhibits

Exhibits are included in this submission and on EW2A's [application website](#), organized under the following categories: (1) Map, Graphics & Engineering Drawings; (2) Detailed Scope, Schedule, Estimate, Management Documents; (3) Data Outputs; (4) Environmental Commitments.