

Archer Avenue and Belt Railway of Chicago (BRC) Grade Separation Project (CREATE GS9)



Moving the Nation's Economy and Improving Local Equity



2021 Infrastructure for Rebuilding America Grant

Basic Information		
What is the Project Name?	Archer Avenue and Belt Railway of Chicago Grade Separation Project (CREATE GS9)	
Who is the Project Sponsor?	Illinois Department of Transportation (IDOT)	
Was an INFRA application for this project submitted previously?	No	
Project Costs		
INFRA Request Amount	\$30,000,000	
Estimated Federal funding (excl. INFRA), anticipated to be used in INFRA funded future project.	\$0	
Estimated non-Federal funding anticipated to be used in INFRA funded future project.	\$20,000,000	
Future Eligible Project Cost	\$50,000,000	
Previously incurred project costs (if applicable)	Expended \$1,600,000 for Phase I, Planned \$9.5 million for Phase II	
Total Project Cost	\$61,100,000	
Are matching funds restricted to a specific project component?	No	
Project Eligibility		
Approximately how much of the estimated future eligible project costs will be spent on components of the project currently located on National Highway Freight Network (NHFN)?	\$0	
Approximately how much of the estimated future eligible project costs will be spent on components of the project currently located on the National Highway System (NHS)?	\$50,000,000	
Approximately how much of the estimated future eligible project costs will be spent on components constituting railway-highway grade crossing or grade separation projects?	\$50,000,000	
Approximately how much of the estimated future eligible project costs will be spent on components constituting intermodal or freight rail projects, or freight projects within the boundaries of a public or private freight rail, water (including ports), or intermodal facility?	\$50,000,000	
Project Location		
State(s) in which project is located	Illinois	
Small or large project	Small	
Urbanized Area in which project is located, if applicable	Chicago	
Population of Urbanized Area (according to 2010 Census)	8,608,208	
Is the project located (entirely or partially) in an Opportunity Zone?	No	
Is the project currently programmed in the: TIP, STIP, MPO Long Range Transportation Plan, State Long Range Transportation Plan, State Freight Plan?	Yes: TIP ID 01-06-0054	

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Executive Summary

The Archer Avenue and the Belt Railway of Chicago (BRC) Grade Separation Project (defined as “GS9”) will grade separate Archer Avenue roadway and two existing BRC tracks in Chicago, IL to eliminate road-rail conflicts, avoid first responder delays, and reduce traffic congestion. The GS9 improvements will **support national and regional economic vitality, address climate change and environmental justice impacts and advance racial equity and barriers to opportunity**. The project will provide safety, mobility and air quality benefits and result in **a composite benefit-cost ratio of 1.03:1 or better, a Total Benefit Value of \$41.5 million, and a Net Present Value of \$1.2 million¹**.

GS9 is among 70 railroad projects developed and pursued by the public and private partners in the [Chicago Region Environmental and Transportation Efficiency \(CREATE\)](#) Program, a public-private partnership with 31 projects completed to date. The Illinois Department of Transportation (IDOT) is pleased to submit this application for an INFRA grant on behalf of the CREATE program for its next project, GS9, to continue support a railroad network that serves annually \$641 billion in goods movement across the nation and creates jobs in the Chicago region.

Federal support will **leverage public and private funding** commitments for GS9 that will improve rail and roadway safety and fluidity of the Chicago Railroad Terminal, or the railroad network in the greater Chicago region, contribute to an intermodal connector of the National Highway Freight Network, and reduce congestion for a significant roadway that is part of the Strategic Regional Arterial and Chicago Region National Highway Systems.

Applicant and Project Eligibility

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. This application is submitted with full support of the CREATE partners including [Chicago Department of Transportation \(CDOT\)](#), [Cook County Department of Transportation and Highways \(CCDOTH\)](#), [Chicago Metropolitan Agency for Planning \(CMAP\)](#), the federally-designated metropolitan planning organization serving the Urbanized Area, and the [Association of American Railroads \(AAR\)](#).

GS9 meets the Small Project requirements, as outlined in Section VII of this application narrative. GS9 is eligible per Section C.3.a. of the NOFO as it is considered a highway project carried out on the National Highway System, a railway-roadway grade separation, and a freight rail project.

¹ Per USDOT BCA guidance, all project costs and benefits are discounted to 2019 at 7% except carbon-related benefits which are discounted at 3%.

The contact for this application is:

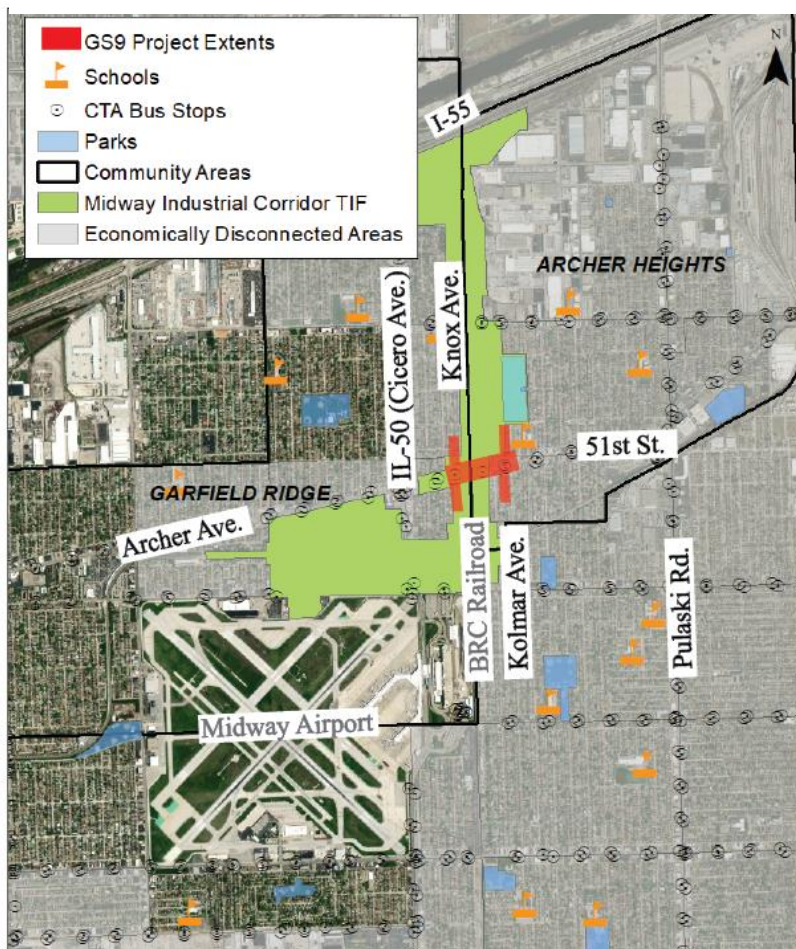
John Oimoen
Deputy Director of Railroad, Office of Intermodal Project Implementation
Illinois Department of Transportation
69 West Washington Street, Suite 2100
Chicago, Illinois 60602-3134
312-793-4222
john.oimoen@illinois.gov

I. PROJECT DESCRIPTION

The overall goals of the CREATE Program are to improve freight rail, passenger rail, and highway operations in the Chicago metropolitan area while reducing the environmental and social impacts of rail operations on the public. [GS9](#) is a grade separation project included among CREATE's 25 critical grade crossings and CMAP's 13 prioritized grade crossings in Chicago². Located at the intersection of Archer Avenue and The Belt Railway of Chicago (BRC), the project is in an Economically Distressed Area (EDA) with residents that stand to benefit from an equity improvement through better safety, mobility and air quality. EDAs are discussed further in *Section V.2 Climate Change and Environmental Justice Impacts*.

BRC operates two tracks at Archer Avenue crossing (DOT crossing I D 843806F). This crossing has large volumes of freight trains and roadway vehicles, buses, pedestrians and bicyclists. As shown in Figure 1, GS9 is located less than one mile away from [Chicago Midway International Airport](#), just over one mile from Interstate 55 (I-55), and near several city neighborhoods with a mix of commercial, residential,

Figure 1 Project Location and Context



Full size graphics are available [here](#).

² CMAP Northeastern Illinois Priority Grade Crossings, Revised July 2019
https://www.cmap.illinois.gov/documents/10180/29222/PriorityGradeCrossings_letter_20190802.pdf/30f87037-1302-930a-4c66-85e297667677

institutional and industrial land uses. Archer Avenue is a principal arterial, Class II truck route and part of the [Chicago Region National Highway System](#) and [Strategic Regional Arterial System](#). The project corridor is also bounded by two other Strategic Regional Arterials and National Highway System mainline roads; IL 50 (Cicero Avenue) and Pulaski Road (which connect directly to I-55). The at-grade crossing is considered a “911 critical” location for emergency services, which means that the railroad must report blocked crossings in excess of 10 minutes to the City of Chicago’s Emergency Control Center.

The freight trains using the BRC tracks have a permitted speed limit of 25 miles per hour and an average train length of 6,000 feet³. The total daily gate down time is 127 minutes resulting in 59,600 annual hours of vehicle delay⁴. Freight trains also experience delay when BRC routinely performs crossing maintenance at this location due to the high volume of roadway traffic and salt use during winter weather conditions. Heavy application of road salt causes rail circuitry wiring to short out, resulting in false deployment of the failsafe mechanisms in the crossing warning lights and gates that requires immediate repair. BRC’s scheduled summer 2021 maintenance for the at-grade crossing will cost \$250,000.

The railroad tracks at GS9, as shown in **Figure 1**, are an integral link to connecting the railway network serving the Chicago metropolitan area, including the 55th Street Interlocking and an industrial district directly south in Bedford Park. The 55th Street Interlocking is a diverging point for trains to and from the Clearing Yard to the west. Also, the CSX Bedford Park Intermodal Yard (facility ID IL19R) is located approximately two miles south and is considered an intermodal connector for the [National Highway Freight Network](#). GS9 is located within the Core/Midway freight cluster, home to the largest intermodal facilities in the region.

Eliminating the at-grade crossing will reduce roadway congestion, improve safety, eliminate railroad-roadway conflicts, and reduce the likelihood of delays for trains operating in the GS9 corridor. The grade separation project will benefit an area with a minority population by improving safety, air quality, emergency response times and transit service reliability while enhancing pedestrian and bicyclist facilities. Further, the GS9 improvements will leverage the City of Chicago’s efforts in creating jobs and improving employment opportunities in three Tax Increment Finance (TIF) districts within the project corridor. The City’s TIF districts are further discussed in *Section V.7 Additional Considerations*.

The total cost for the GS9 improvements is \$61.1 million and includes preliminary engineering and environmental studies (Phase I), design engineering (Phase II) and construction (Phase III) costs. The Phase I costs of \$1.6 million funded by the City of Chicago will be expended by July 2021. Phase II costs of \$9.5 million is planned and funded by CDOT and IDOT, and the future eligible costs for construction is \$50 million. *Section IV.1 Previously Incurred Expenses and IV.2 Future Eligible Costs* further discusses the project costs and sources.

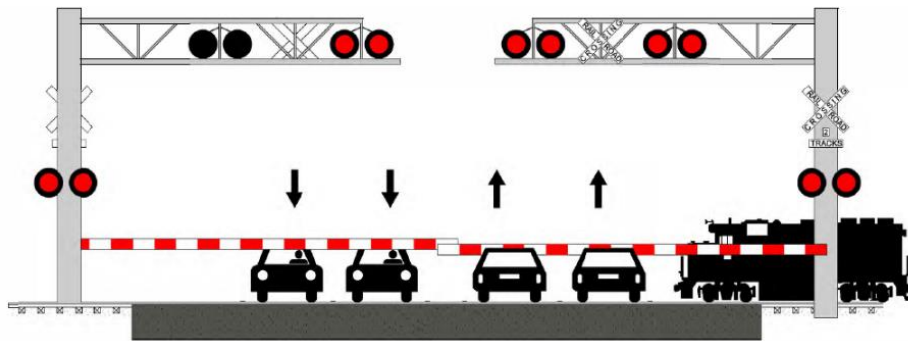
³ BRC 2020 railroad data.

⁴ CDOT Grade Separation of Archer Avenue and the Belt Railway of Chicago (CREATE Project GS9) Project Design Report, November 19, 2018

I.1 Project Elements

Error! Reference source not found. shows the existing conditions of the GS9 at-grade crossing. Archer Avenue is a four-lane, two-way roadway with a parking lane and sidewalk on both sides. The two existing BRC tracks are at 80-degree skew to the roadway with two quadrant automatic gates and overhead cantilever warning signals at the crossing in the eastbound and westbound directions. The at-grade crossing requires vehicles, including trucks and buses, to idle while freight trains cross Archer Avenue.

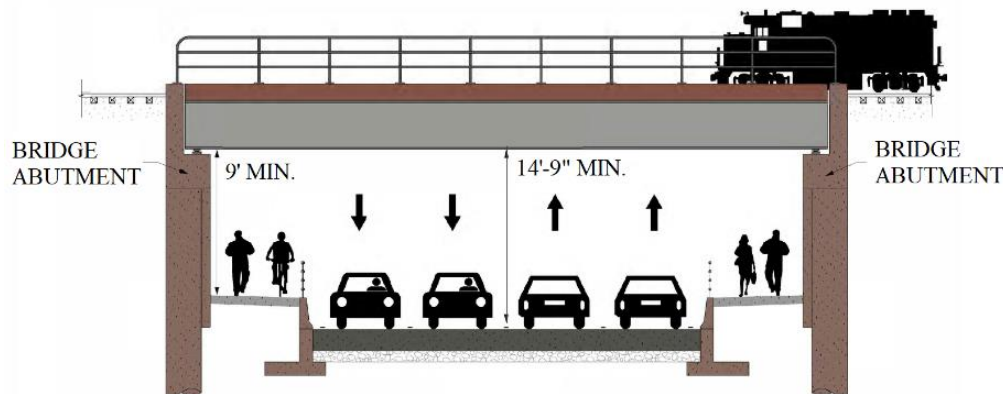
Figure 2 Existing GS9 Conditions, Cross-Section View Looking North



Source: Archer Avenue at BRC Grade Separation Study, 2018. Full size graphics are available [here](#).

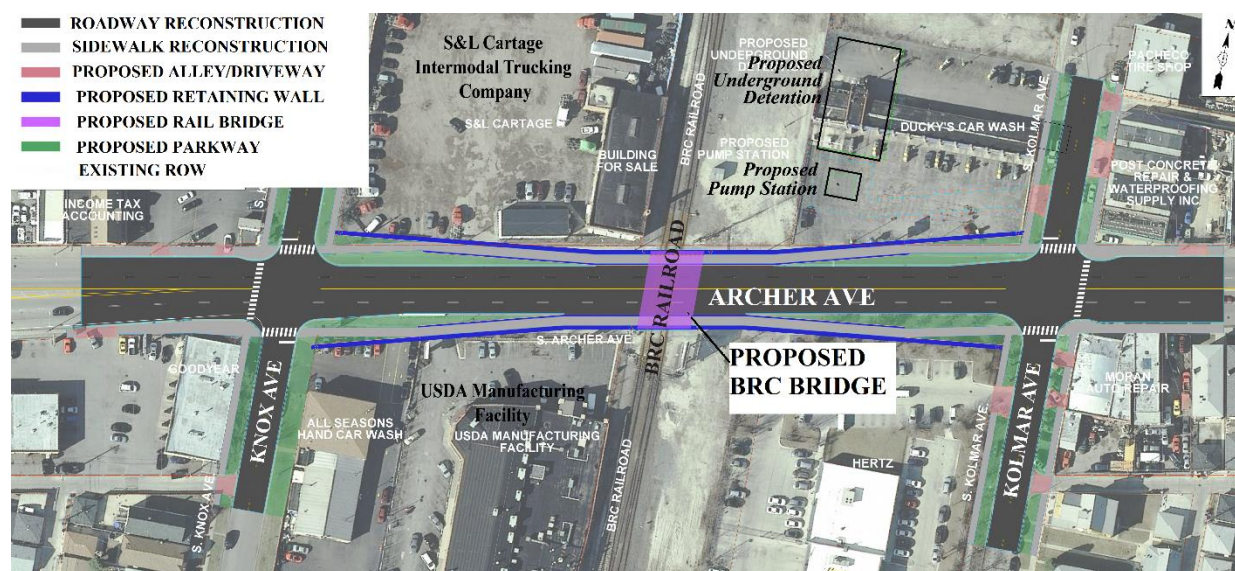
As shown in **Figures 3 and 4**, the GS9 project proposes to grade separate the roadway and railroad tracks to improve travel and safety conditions for all modes of transportation and the surrounding communities, businesses and industries. Archer Avenue will be reconstructed and lowered approximately 15 feet under a new bridge to serve the existing BRC tracks.

Figure 3 Proposed GS9 Improvements, Cross-Section View Looking North



Source: Archer Avenue at BRC Grade Separation Study, 2018. Full size graphics are available [here](#).

Figure 4 Proposed GS9 Improvements, Plan View



Source: Archer Avenue Grade at BRC Separation Study, 2018. Full size graphics are available [here](#).

The complete list of GS9 improvements includes:

- Reconstruct and lower Archer Avenue with two travel lanes in each direction and elevated sidewalks under the BRC tracks.
- Reconstruct Knox Avenue and Kolmar Avenue that bookend the underpass in kind.
- Construct bridge for two BRC tracks and 10-foot wide maintenance road. Future bridge widening will be evaluated in final design.
- Construct a temporary shoo-fly with crossings and replace existing two BRC tracks in the vicinity of the new underpass.
- Improve accommodations for people walking and bicycling:
 - » Widen sidewalks for ADA accessibility,
 - » Maintain two pedestrian crossings and two [Chicago Transit Authority](#) (CTA) bus stops,
 - » Accommodate future five-foot bicycle lanes approaching the underpass,
 - » Install multi-use, eight-foot wide sidewalks with railing and signage at the underpass for unrestricted crossing at BRC tracks.
- Install four retaining walls abutting proposed bridge.
- Install separate storm sewer system, pump station, and underground detention facility.
- Install a combined storm and sanitary sewer for services along Archer Ave and rehabilitate combined sewers adjacent to the project site.
- Relocate utilities in Archer Avenue to new utility corridors behind the proposed retaining walls abutting the bridge.
- Replace existing street lighting within the project limits and install underpass lighting.

I.2 Project History and Context

The CREATE Program is a **unique multimodal public-private partnership to improve rail and roadway transportation** within the Chicago region. CREATE represents a unique partnership between [USDOT \(nonvoting member\)](#), [IDOT](#), [CDOT](#), [CCDOH](#), the rail freight carriers [Burlington Northern Santa Fe \(BNSF\)](#), [Canadian National \(CN\)](#), [Canadian Pacific \(CP\)](#), [CSX Transportation](#), [Norfolk Southern \(NS\)](#), [Union Pacific \(UP\)](#), [Belt Railway of Chicago \(BRC\)](#), and [Indiana Harbor Belt \(IHB\)](#), and passenger railroads [Amtrak](#) and [Metra](#). Since the inception of the CREATE Program in 2003, 31 of 70 total CREATE projects are complete and 20 are in planning, design or construction. **Figure 5** shows the regional scope of CREATE and the location of GS9.

Figure 5 GS9 and CREATE Program Projects



Source: Archer Avenue At BRC Grade Separation Study, 2018. Full size graphic is available [here](#).

The CREATE Program is an unprecedented level of cooperation between the private and public sectors, sustained for nearly two decades, to address critically needed infrastructure investments with local, regional and national benefits. Achievements in the history of the CREATE initiative include the following:

- \$1.6 billion committed to CREATE Program improvements to date.
- Tracked project performance under previous Federal funding agreements shows that completed improvements have reduced the average travel time of a rail car through the Chicago Railroad Terminal by an estimated 35 percent.
- Ninety percent of CREATE projects were completed at or under budget.

I.3 National and Regional Significance

The Chicago Railroad Terminal comprises an estimated 3,865 track-miles of rail – more track mileage than 40 other states combined. Most of these rail lines are more than a century old and not configured for the volume, traffic pattern, and various goods now carried. Chicago is North America's preeminent rail hub: one-fourth of the Nation's freight rail traffic and half of all intermodal trains originate, terminate, or pass through the Chicago region on their journey to market. Approximately 37,500 rail cars are enroute to or traveling through Chicago at any given time, with about 5,000 cars and 22,000 containers handled in the region daily⁵. These volumes are expected to nearly double by 2045⁶.

As the nation's rail hub, congestion in the Chicago Railroad Terminal negatively affects national supply chain and passenger rail movements. ***The CREATE Program's corridors handle rail freight valued at more than \$641 billion annually.*** Without the CREATE Program's planned improvements, national and regional economic activity will be disrupted adversely. Implementation of the overall CREATE Program will result in ***national economic benefits estimated at approximately \$31.5 billion over a 30-year period*** due to reduced travel time for rail passengers and freight, reduced motorist and cargo delays, improved rail and highway safety, improved air quality, and construction related benefits.⁷

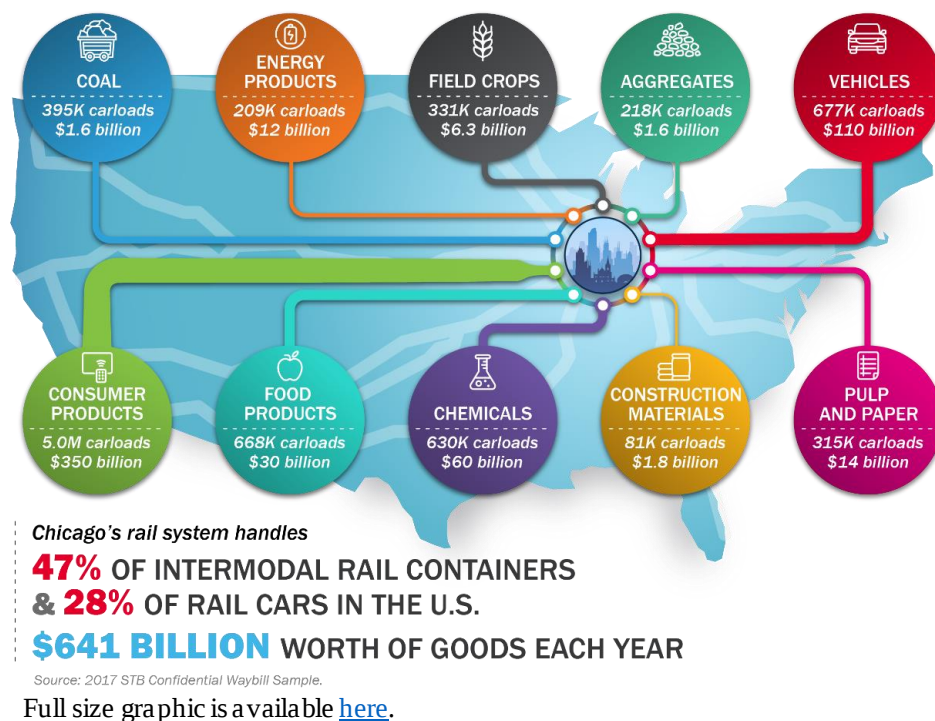
Figure 6 describes the annual freight flows that rely upon the Chicago Railroad Terminal. Improving the capacity and operational flexibility of the Terminal is essential to the mobility of nationally consumed commodities.

⁵ CMAP, Chicago Intermodal Facility Lift Counts and Regional TEU Estimates, 2017

⁶ Federal Highway Administration Freight Analysis Framework 4.0

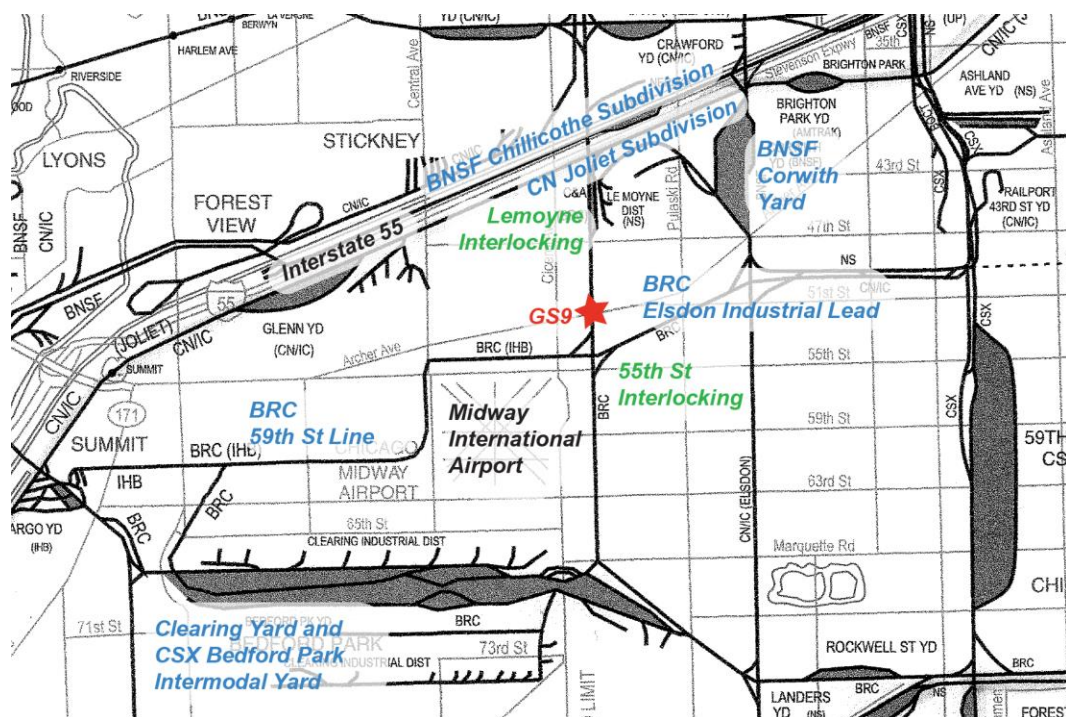
⁷ CREATE Program: https://3g3gvj4frs8o1sqqfs1qioxo-wpengine.netdna-ssl.com/wp-content/uploads/CREATE_Brochure.pdf

Figure 6 CREATE Program in a National Context



GS9 contributes to nearby rail assets and moving commerce through the Chicago Railroad Terminal along with serving local industries located near BRC Clearing Yard and CSX Bedford Park Yard. As shown in **Figure 7**, GS9 connects to the 55th Street Interlocking to the south and Lemoyne Interlocking to the north. The 55th Street Interlocking serves BRC's east west corridor including the Elsdon Industrial Lead and 59th Street Line with access to Clearing Yard and CSX Bedford Park Yard, an intermodal connector for the National Highway Freight Network serving an industrial district. The Lemoyne Interlocking serves BNSF Railway's Chillicothe Subdivision and CN Joliet Subdivision, two northeast and southwest corridors. BNSF's Corwith Yard is located approximately one mile to the east.

Figure 7 Rail Assets Connected to GS9 Project



Source: Chicago Operating Rules Association Chicago Terminal District Map, April 2000. Full size graphic is available [here](#).

Archer Avenue is part of the [Strategic Regional Arterial \(SRA\)](#) and Chicago Region [National Highway System \(NHS\)](#). The NHS includes only four percent of the nation's roads, but carries more than 40 percent of all highway traffic, 75 percent of heavy truck traffic, and 90 percent of tourist traffic. The SRA designation is a network of highways designed to accommodate long distance regional traffic, to complement the region's major highway and transit facilities, and to supplement the interstate system. Archer Avenue is also an important arterial route, providing access to the southwest suburbs of City of Chicago, Chicago Midway International Airport, I-55, commercial businesses, and industries.

[Core / Midway Freight Cluster](#)

GS9 is included in the [Core/Midway freight cluster](#) for its freight activity and freight-intensive or freight-supportive land use. The area has the largest intermodal facilities and the largest concentration of manufacturing and food processing space in the region. The cluster is characterized as having extensive legacy infrastructure, the oldest median building age and the highest building vacancy rate in the Chicago region. The cluster includes 817.2 miles of railroads, 80.2 miles of national highway freight network, and 71.2 miles of truck routes⁸.

The presence of a freight cluster near GS9 demonstrates the importance of the location for freight and the potential for further development. Part of the area is also classified by CMAP as a [service](#)

⁸ CMAP Freight Land Use Cluster: https://www.cmap.illinois.gov/updates/all/-/asset_publisher/UIMfSLnFfMB6/content/freight-land-use-clusters-in-northeastern-illinois

[producing trade cluster](#), which is an area with potential for local economic development. Improvements to the at-grade crossing could potentially reduce the building vacancy rate and encourage the replacement of legacy infrastructure, growing the regional and local economy and creating employment opportunities. State and regional agencies are working together to collectively invest in multimodal transportation and freight related projects. GS9 is one of many projects being undertaken to improve multimodal freight infrastructure with the intent of increasing economic opportunities and potential for future development in the region.

I.4 Transportation Challenges Addressed

The railroad and roadway improvements addressed by GS9 reduce railroad delays, improve traffic flow, increase the safety of vehicular, pedestrian and transit travel, increase the mobility of emergency services through a 911 critical crossing, and enhance economic development. The project also addressed removing a barrier to opportunity for racial minorities in the surrounding neighborhoods by lessening east-west neighborhood and transportation network bifurcation caused by railroad tracks.

Railroad Operations

There are 25 daily freight trains that operate on the existing two BRC tracks. These trains experience delay during BRC's routine maintenance at the crossing from heavy roadway vehicle use. Further, trains experience delays with the malfunction of circuitry wiring for the lights and gates caused by the heavy application of road salt for highway treatment during winter months. Additional BRC maintenance is required at every snow fall and again when the snow and ice melts. ***GS9 will address this operational concern by grade separating the roadway and railroad.***

Roadway Traffic Operations

Archer Avenue accommodates large traffic volumes, including 19,800 vehicles, 250 CTA buses and 35 bicyclists daily, which experience delay during train crossings. The gate closure time ranges from one to 24 minutes⁹ and results in traffic backing up to the adjacent intersections, Kolmar Avenue and Knox Avenue.

[CTA Bus Route 62](#) operates 24-hour service along Archer Avenue, extending 12.5 miles from the city limits at Harlem Ave on the west to Downtown Chicago on the east and connecting with 45 other bus routes and 13 stations serving 7 of CTA's 8 rail transit lines along the way. Delays to buses at the GS9 crossing affect more than 11,000 daily bus riders all along this route. This segment of Archer Avenue has also been identified as a proposed bicycle route in [CDOT Streets for Cycling Plan 2020](#), to provide a safe and continuous access for people bicycling in this corridor.

The amount of time to idle and cross the tracks at a 911 critical crossing is unacceptable for safety and community health in terms of both air quality and access for emergency responders serving the area's communities, which include majority Latino and Hispanic populations that meet the [Executive Order 13985](#) definition for underserved communities. It is also an inconvenience for pedestrians and bicyclists who wait for trains to pass.

⁹ CDOT Grade Separation of Archer Avenue and the Belt Railway of Chicago (CREATE Project GS9) Project Design Report, November 19, 2018

By grade separating Archer Avenue and the BRC tracks, the GS9 project will eliminate traffic and transit service delay for the traveling public and road freight, improve reliability for emergency response, and enhance accommodations for people walking or bicycling in this area.

Roadway Safety

According to Federal Railroad Administration's (FRA) Highway-Rail Crossing Accident/Incident Report, 15 *vehicle-train* accidents have occurred at the BRC crossing at Archer Avenue between 1976 and 2020. These vehicle-train accidents resulted in five injuries and were mainly caused by drivers driving around or through lowered crossing gates. Further, the crossing was the site of 49 *vehicle* crashes between 2010 and 2016. Of the recorded crashes, 19 resulted in injuries; there were no fatalities. Rear end collisions accounted for 53 percent of the crashes, which point to congestion at the crossing as the problem.

Significant improvements to safety will be accomplished by grade separating the at-grade crossing. The project will reduce congestion-related crashes and injuries, and eliminate roadway-rail conflicts.

II. PROJECT LOCATION

Chicago is the ***rail transportation hub of the nation*** and the ***third largest metropolitan area*** in the U.S. It is critical to ensure that goods can traverse our national highway system and the Chicago Railroad Terminal safely, efficiently, and reliably on their way across the nation. GS9 is located in the City of Chicago, in Cook County, Illinois, the in Chicago, IL-IN Urbanized Area (UACE 16264). The project location is in an Economically Disconnected Area as identified by the CMAP and defined as areas with a concentration of low-income residents and either minority residents or residents with limited proficiency in English.

The proposed improvements are located along Archer Avenue between Cicero Avenue and Kostner Avenue, near the northeast corner of the Midway International Airport. The BRC operates two tracks at the crossing with Archer Avenue, which is between Knox Avenue and Kolmar Avenue. The project is located at the intersection of Archer Ave and the BRC at 41°47'58.0" latitude, -87°44'17.0" longitude, as depicted in **Figure 1**.

III. PROJECT PARTIES

This application is noteworthy for its ***private sector cooperation and financial commitment***. The lead applicant for this INFRA grant funding request is IDOT, serving as the fiduciary recipient and grant administrator for Federal funds for the CREATE Program. Joining in the application are the CREATE railroad partners as a financially contributing partner for the project construction and a participant in project delivery. 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. FHWA guidelines are being followed for Phase I and will be followed for Phase II to ensure eligibility for Federal funds. In its role as grant administrator,

IDOT will coordinate closely with the affected railroad owner, operators, and funding partners including:

- BRC – participating entity in Phase I, II, III
- IDOT District 1 – participating agency for Phase I and II, and anticipated lead agency for Phase III
- CDOT – lead agency for Phase I and II, and participating agency in Phase III

IV. GRANT FUNDS, SOURCES AND USES OF ALL PROJECT FUNDING

INFRA prioritizes innovative project delivery and the leveraging of Federal dollars with non-Federal contributions, including private investment, which aligns with the CREATE Program’s public-private partnership approach and method for delivering projects. For these reasons, ***the CREATE partners’ INFRA grant request includes a non-Federal share from IDOT and the railroad partners, private Class I and III railroads.***

IV.1 Previously Incurred Expenses

The total cost for GS9 improvements is \$61.1 million, which includes Phase I, II and III costs. The Phase I and Phase II are receiving local and state funding and no federal funding. CDOT is funding \$1.6 million for Phase I, which is 98% complete. This is expected to be expended by July 2021 upon completion of Phase I. CDOT and IDOT have secured funding for Phase II costs of \$9.5 million. Phase II procurement was recently advertised and will start during the fourth quarter of 2021. The Phase II costs include final engineering and right-of-way acquisition. **Table 1** summarizes project funding sources and uses by project phase.

IV.2 Future Eligible Costs

A reliable and reasonable cost estimate for GS9 was developed during the Phase I preliminary engineering and environmental study and included a **20 percent contingency** of the construction and construction management costs for unanticipated cost increases. The future eligible cost for the project’s construction is \$50 million. The GS9 construction will be financed with the INFRA request of \$30 million and \$20 million funded by IDOT and CREATE railroad partners without restrictions or required conditions. The funding commitment of \$20 million by IDOT and CREATE railroad partners is available [here](#). ***No other federal funds are being used for this project. GS9 is a grade separation project and therefore INFRA funds are not subject to the freight rail limitations.***

FY2021 INFRA Grant Application
Archer Avenue and Belt Railway of Chicago (BRC) Grade Separation (GS9)

Table 1: GS9 Improvement Costs, Funding Sources and Uses (in millions)

Uses	Federal (INFRA)	Non-Federal (CREATE Partners)		Total	% of Total Phase Cost	Total Federal (INFRA)%
Phase I Planning	\$0.0	\$1.6		\$1.6	100.0%	0.0%
Phase II Design	\$0.0	\$9.5		\$9.5	100.0%	0.0%
Phase III Construction:		IDOT	RR			
Roadway	\$5.8	\$3.9	\$0.0	\$9.7	19.4%	60.0%
Drainage	\$1.3	\$0.9	\$0.0	\$2.2	4.4%	60.0%
Structures	\$5.0	\$3.3	\$0.0	\$8.3	16.6%	60.0%
Lighting	\$0.2	\$0.2	\$0.0	\$0.4	0.8%	60.0%
Landscaping / Erosion Control	\$0.1	\$0.1	\$0.0	\$0.2	0.4%	60.0%
Track and Appurtenant Work	\$7.4	\$1.9	\$3.0	\$12.3	24.6%	60.0%
Utilities	\$1.1	\$0.7	\$0.0	\$1.8	3.6%	60.0%
Construction Management	\$3.0	\$2.0	\$0.0	\$5.0	10.0%	60.0%
Contingency	\$6.1	\$4.0	\$0.0	\$10.1	20.2%	60.0%
Total Phase III Construction	\$30.0	\$17.0	\$3.0	\$50.0	100.0%	60.0%
Total Project Costs	\$30.0	\$31.1		\$61.1	-	49.1%

IV.3 Federal Funding Status and INFRA Request

The requested Federal share of 60% for future eligible costs in the amount of \$30 million for GS9 meets the requirement for Federal share and complies with INFRA funding eligible uses.

IV.4 Non-Federal Funding Commitment

IDOT and the CREATE railroad partners will provide a ***non-Federal funding match of 40 percent*** for GS9 Phase III construction. The private funding commitment has been successfully negotiated amongst all parties and comes in the form of available private capital funding for the proposed improvement, but also in a commitment to long-term maintenance and operations.

Funding Stability: Each CREATE partner plays a role in the advancement of CREATE, while investing funds in projects beyond the formal CREATE process. The partnership framework and management processes are detailed in [Partnerships and Management Practices](#).

Ongoing Maintenance: IDOT and CREATE railroad partners will maintain the INFRA-funded roadway and railroad facilities, respectively, in a state of good repair at no cost to federal agencies.

The private investment amounts up to \$60 million through 2050 for maintenance of facilities designed or constructed with INFRA funds.

Financial Condition of the Project Sponsor: [IDOT's Multiyear Plan](#) for 2021-2026 includes more than \$21.26 billion in projects, with more than \$3.15 billion in project spending in fiscal year 2021. [IDOT's Rail Freight Program](#) from 2018 to 2022 will provide \$245.6 million in financial assistance, leveraging \$57.3 million in non-Federal investments. IDOT can access capital markets by selling general obligation debt backed by the full faith and credit of the state government.

Ability to Effectively Manage Grants: The CREATE Program and IDOT have successfully administered and managed grant funding, including the use and management of eight federal and two county grants. A total of 17 projects were implemented with federal or county grants.

V. MERIT CRITERIA

The GS9 proposal aligns with INFRA's merit criteria and reflects USDOT's Key Program Objectives. The criteria, including the Benefit-Cost Analysis (see Section V.1), are discussed below. Additional outcomes included in the merit criteria are qualitative and supplement the BCA.

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

The Northeastern Illinois railroad system facilitates the movement of approximately 28 percent of all freight trains and 47 percent of all intermodal trains in the nation.¹⁰ This represents approximately \$641 billion in annual value.¹¹ The rail hub serves as the main interchange point between western and eastern railroads including six of the seven Class I railroads, three switching and terminal railroads and five short-line railroads.¹² It is essential to enabling the economic activity of the nation including rural locations, and it is responsible for a regional economy with freight-dependent industries representing nearly one-quarter of all jobs in the region.¹³

The CREATE program supports national and local economies. It complies with the Buy America Act for federally funded construction to maximize the use of goods, products, and materials produced in, and services offered in the United States. The CREATE program supports the American industries it serves and is committed to local job creation through CREATE and railroad industry construction projects. CREATE has developed a [brochure](#) for the public on how to apply for jobs which are marketed through partnerships with community-based organizations. Further, the CREATE program has a procurement and selection process for notifying the public of bid construction opportunities, which includes advertisement in local papers, posts on the CREATE

¹⁰ *Update on Freight Rail Activity*, CMAP, October 2015 available at <http://cmap.is/1GnYRe3>

¹¹ *Overview of Freight Flows into and out of the Chicago Region*, CMAP, October 2014, available at <http://cmap.is/1vCpgch>

¹² *Northeastern Illinois Priority Grade Crossings*, CMAP, July 2019 available at https://www.cmap.illinois.gov/documents/10180/29222/PriorityGradeCrossings_letter_20190802.pdf/30f87037-1302-930a-4c66-85e297667677

¹³ *Metropolitan Chicago's Freight Cluster: A Drill-Down Report on Infrastructure, Innovation, and Workforce*, CMAP, 2012 available at <https://www.cmap.illinois.gov/documents/10180/69902/CMAP-FreightReportSummary-07-11-12.pdf/63e101aa-b69c-4d12-b055-54ecc9e0557e>

website and social media, and email to a procurement contact list.

GS9 is integral to the “Core/Midway” freight cluster, including the largest intermodal facilities and concentration of manufacturing and food processing space in the Chicago region. It serves Bedford Park Yard, an intermodal connector for the National Highway Freight Network. Further, Archer Avenue at the location of GS9 is part of the SRA and NHS systems signifying regional and national importance. Archer Avenue is part of a network of highways to accommodate long distance regional traffic, complement the region’s major highway and transit facilities, and supplement the interstate system. Archer Avenue provides connectivity within the City of Chicago and the southwest suburbs, Chicago Midway International Airport, I-55, and numerous residences, commercial businesses, institutions and industries.

GS9 has safety, mobility and economic benefits at the regional and local level. As a grade separation, it will eliminate road-rail conflict opportunities, increase mobility for people walking, bicycling, taking transit, driving and delivering freight by truck as well as rail. GS9 will eliminate constraints to local and regional economic systems and increase economic opportunities and potential for future development in the region overall.

Benefit-Cost Analysis

GS9 will create \$41.5 million in benefits by improving traffic flow and safety on Archer Avenue.¹⁴ Quantifiable project benefits include reducing traffic and transit delay, crash exposure and first responder delays, and avoiding idling impacts and crossing maintenance. With a discounted total project cost (including funds previously expended) of approximately \$43.3 million, the **composite benefit-cost (B/C) ratio for all Project components is 1.03:1 or better, with a Net Present Value (NPV) of \$1.2 million.** Table 2 summarizes the benefits that accrue from the project.

Table 2: Benefit Cost Analysis Results, 7% Discount Rate (2019\$)

Discounted Benefit Costs Analysis Results	Value (millions)
Reduced Traffic Delay Cost	\$11.96
Reduced Crash Exposure	\$8.92
Reduced First Responder Delay	\$19.95
Avoided Traffic Idling	\$0.55
Avoided Crossing Maintenance	\$0.15
TOTAL BENEFITS	\$41.54
Residual Value	\$2.95
NET BENEFITS	\$44.48
Total Capital Costs	\$43.34
BENEFIT-COST RATIO	1.03
NET PRESENT VALUE	\$1.15

Source: IDOT BCA Analysis, March 2021

¹⁴ Per USDOT BCA guidance, all project costs and benefits are discounted to 2019 at 7% except carbon-related benefits which are discounted at 3%.

The Benefit-Cost Analysis (BCA) was prepared according to the specifications outlined in the Benefit-Cost Analysis Guidance for Discretionary Grant Programs for 2021 issued by the United States Department of Transportation (USDOT). Complete documentation of BCA inputs, methodology and results can be found in the separate [Benefit-Cost Analysis Technical Memorandum](#) and [Benefit-Cost Analysis Model](#).

V.2 Criterion 2: Climate Change and Environmental Justice Impacts

Climate Change and Environmental Justice in Project Planning Efforts

The CREATE Program follows the National Environmental Policy Act (NEPA) and requires the preparation of Environmental Class of Action Documents (ECAD) for all CREATE projects. The ECAD represents the first level of environmental analysis and evaluates social/economic resources, agricultural resources, cultural resources, air quality, noise and vibration, energy, natural resources, water quality /resources, floodplains, wetlands, special waste, and special lands. In preparation of the ECAD for GS9, the project specifically assessed air quality, community cohesion, Title VI and other protected groups, environmental justice, public facilities and services, and pedestrian and bicycle facilities among other resources. The sources used to evaluate the environmental justice impacts were Department of Health and Human Services (HHS) Poverty Guidelines for 2015 and U.S. Bureau of Census, American Community Survey 2011-2015.

The project planning efforts included the goal to reduce travel times and emissions production to combat climate change. CMAP included GS9 in its [FFY 2019-2024 Transportation Improvement Program \(TIP\)](#) under [TIP ID 01-06-0054](#), which underwent a conformity analysis that demonstrates emissions resulting from the TIP conform to the regulations governing air quality.¹⁵ ***The project directly supports air quality improvement and reduced emissions through elimination of the road-rail crossing that causes idling vehicles and trains.*** The grade separation will eliminate this interference allowing both modes to pass the location without idling.

The CMAP Regional Strategic Freight Direction is the MPO's more detailed planning document informing the freight-related recommendations of their Long Range Transportation Plan (LRTP). The document states the importance of the region's freight network to the nation and the region given the volume of goods that pass through the Chicago region and the opportunities it presents to the regional economy in terms of industry and jobs. The document also recognizes the need to balance freight with local quality of life and the industry's impacts on congestion, condition of roads and bridges, safety, noise, and vibration. These impacts are felt by those living in closest proximity to freight facilities, which are frequently residents of economically disconnected areas (EDAs), which are defined as a high proportion of low-income households and a high proportion of either minority population or a limited English proficiency population.¹⁶ EDAs are present within the identified Core/Midway freight cluster where GS9 is located as shown in Figure 8. The document recommends continued implementation of the remaining projects of the CREATE program. It further recommends that after completion of the 75th Corridor Improvement Project

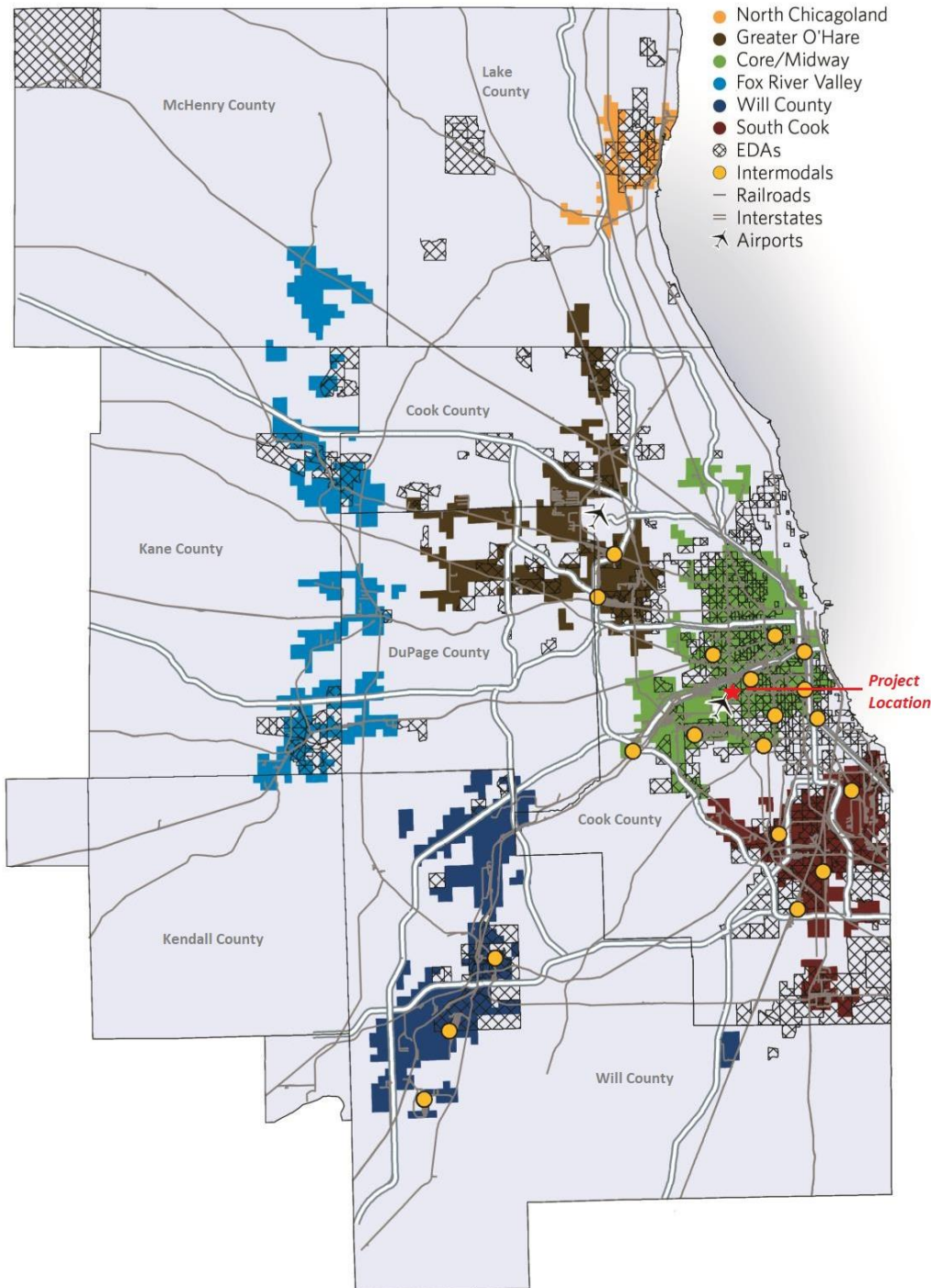
¹⁵ *Conformity Analysis*, Chicago Metropolitan Agency for Planning, August 2013 available at <https://www.cmap.illinois.gov/mobility/roads/conformity-analysis>

¹⁶ *Regional Strategic Freight Direction*, Chicago Metropolitan Agency for Planning, January 2018

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(CIP), another CREATE project currently being designed and constructed, that the remaining Passenger Corridors and grade separation projects should be prioritized.

Figure 8 Economically Disconnect Areas (EDAs) and regional freight clusters¹⁷



Full size graphic is available [here](#).

¹⁷ *Regional Strategic Freight Direction*, Chicago Metropolitan Agency for Planning, January 2018

Elements Dedicated to Mitigating or Reducing Impacts of Climate Change

The existing intersection of Archer Avenue and the BRC rail lines causes traffic congestion with the passing of long trains that cause motorists to idle and emit greenhouse gases. The gate closure time ranges from one to 24 minutes, with a total gate down time of 127 minutes resulting in 59,600 annual hours of vehicle delay. ***The GS9 project promotes energy efficiency and improved air quality through the elimination of vehicle dwell time at the intersection.***

The reduction in motorist delay also applies to the CTA buses servicing the neighborhoods along Archer Avenue, many of which are low-income and minority households. ***Because bus delays at the crossing affect service all along this 12.5-mile bus route, the GS9 project will significantly improve transit service reliability for more than 11,000 daily transit riders.*** A more reliable bus service will also encourage the use of public transit and lessen the number vehicles occupying the roadways.

Additionally, ***the GS9 project will improve conditions for people walking and bicycling along Archer Avenue in this area and promote sustainable modes of transportation.*** Bicycle and pedestrian improvements are described in Section 1.1.

V.3 Criterion 3: Racial Equity and Barriers to Opportunity

Planning and Policies

The CREATE program strives to foster opportunities for Disadvantaged (DBE) firms to increase participation in design and construction contracts. The CREATE program typically requires a DBE goal between 20 and 30 percent for bid construction projects. The CREATE program also hosts business-to-business networking events with railroad supplier diversity and procurement professionals to promote contracting opportunities for DBE firms, small businesses, and rail-industry prime contractors.

In addition to meeting Federal regulatory requirements for public engagement during the planning phase, the GS9 planning phase created a [Stakeholder Involvement Plan](#) using the principles of Context Sensitive Solutions (CSS) developed by IDOT. The CSS approach to transportation planning “provides a collective and inclusive approach to the advancement of transportation projects by evaluating the needs of all stakeholders and carefully considering all trade-offs in the process. This approach strives to integrate strong community involvement and input from diverse stakeholders in all phases of program delivery.”

The planning phase of GS9 included four Community Advisory Group (CAG) meetings and one public meeting. Outreach work was subcontracted to a certified Disadvantaged Business Enterprise (DBE) and certified Chicago Women-Owned Business Enterprise. For the public meeting, property owners in the project area received packets containing information about GS9. Newspaper notices were published in three local newspapers and English and Spanish posters and palm cards were placed at neighborhood libraries, churches, community centers, cafes, and aldermen’s offices. Social media posts were made by community representatives from the United Business Association of Midway (UBAM), Garfield Ridge Chamber of Commerce, Archer Heights Civic Association, Garfield Ridge Neighborhood Watch, and aldermen and congressional

offices. The project website is maintained regularly and includes [documentation on the project's public outreach](#).

In addition, IDOT applies its Highway Construction Careers Training Program (HCCTP) to CREATE projects. The training program, created in collaboration with FHWA, provides training to increase the participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. HCCTP has recruited from educational institutions near GS9 including the City Colleges Dawson Technical Institute and South Suburban College.¹⁸

Project Investments

GS9 as a grade separation addresses Racial Equity and Barriers to Opportunity through eliminating a road-freight rail intersection congestion point at the project location in two Chicago Community Areas with a high percent of racial minorities. The Archer Heights and Garfield Ridge Community Areas are 77% and 50% Hispanic or Latino, respectively, which is far greater than the 23% Hispanic or Latino population in the Chicago region.^{19,20} The Latino population is one of the underserved communities identified in [Executive Order 13985](#) as a community that has been historically denied equity.

Archer Avenue serves 19,800 vehicles and 250 CTA buses daily through the project location, which likely serves many individuals in the surrounding communities of Archer Heights and Garfield Ridge. The proposed grade separation will eliminate delay for more than 2,700 vehicles daily. This location is a “911 Critical Crossing,” which means it is a critical location for emergency services to access communities that have a high frequency of train movements or delays. The grade separation will improve mobility resulting in more reliable emergency and transit services, better access for freight via truck and rail to industries in the surrounding underserved communities, opportunities for economic growth and the creation of new jobs. More reliable transit service will benefit the community through reducing equity barriers and improving access to jobs, institutions, and resources.

The design of the grade separation removes interruptions for people walking, bicycling, commuting, or delivering freight along Archer Avenue, which generally increases safety, comfort and convenience for community members to move more easily east and west of the BRC tracks, mitigating neighborhood bifurcation. The project plans to maintain two pedestrian crossings at adjacent side streets to safely cross Archer Avenue to access CTA bus stops, several schools ranging from elementary to high school, and William Beaty Archer Park located directly north of the GS9 location.

¹⁸ Highway Construction Careers Training Program, Illinois Department of Transportation accessed on March 2, 2021 at <https://idot.illinois.gov/about-idot/employment-opportunities/specialized-training/highway-construction-careers-training-program>

¹⁹ Community Data Snapshot Archer Heights Chicago Community Area, Chicago Metropolitan Agency for Planning, June 2020 available at <https://www.cmap.illinois.gov/documents/10180/126764/Archer+Heights.pdf>

²⁰ Community Data Snapshot Garfield Ridge Chicago Community Area, Chicago Metropolitan Agency for Planning, June 2020 available at <https://www.cmap.illinois.gov/documents/10180/126764/Garfield+Ridge.pdf>

V.4 Criterion 4: Leveraging of Federal Funding

The Project requests a funding amount of \$30 million from the FY2021 INFRA grant program, which represents a 60% Federal percentage of the project's future eligible project costs. The non-Federal percentage of the project's future eligible project costs being funded by IDOT and CREATE railroad partners is \$20 million, or 40%.

To date, the CREATE Program has received funding commitments totaling \$1.6 billion:

- Federal funds totaling \$660.5 million, including Railroad Relocation and PNRs funds, an INFRA grant, CRISI grants, TIGER I and TIGER IV grants, ARRA High Speed Rail grant, National Highway Freight / Illinois Competitive Freight Program fund, and FRA railroad safety grant through the STEP Program.
- State funds totaling \$463.5 million, including state bond funds, federal grant matching funds, and support for railroad infrastructure and grade separations.
- Local government funds totaling \$150 million, including County and City funds for viaduct improvements, railroad infrastructure, 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 from 1998 through 2018, the CREATE private sector railroad partners have invested over \$6.92 billion in ongoing infrastructure maintenance and improvement in the Chicago Railroad Terminal above and beyond investments in the CREATE Program.

IDOT and CREATE railroad partners funds for GS9 construction are stable, dependable and available to complete the project, meeting the criteria for Key Program Objective of Leveraging of Federal Funding (NOFO section A.2.d) and U.S. DOT's goals for the INFRA program (NOFO section E.1.a).

V.5 Criterion 5: Potential for Innovation

INFRA calls for innovation, which aligns with the preferred CREATE approach of developing future-focused infrastructure solutions to the multimodal challenges of the legacy railroad network of the Chicago Railroad Terminal. This GS9 package will use ***CREATE processes and procedures unique to this type of multimodal investment***, as detailed in the CREATE Program [Partnerships and Management Practices](#) guidelines.

Innovation Area 1: Accelerated Deployment of Innovated Technology and Expanded Access to Broadband

Plans for managing traffic during the project construction will be further developed during Phase II. The maintenance of traffic will be critical due to the project's proximity to Chicago Midway International Airport and many businesses and industries, and for maintaining access for public transit, emergency responders and BRC freight traffic. The traffic plans may consider Intelligence Transportation Systems (ITS) to inform the public, transit and local agencies of delays and provide a safe environment during the project's construction.

The use of ITS technologies for traffic management during construction are directly related to U.S. DOT's Key Program Objective of Innovation and the deployment of innovated technology

that will enhance the safety, efficiency and performance of the transportation network (NOFO section A.2.e).

Innovation Area 2: Use of Innovative Permitting, Contracting, and Other Project Delivery Practices

GS9 will improve transportation outcomes by implementing a safety-oriented design. The project goal is to improve safety for all users by eliminating the at-grade crossing and incorporating ADA accommodations and high-visibility crosswalks for pedestrians to safely cross Archer Avenue. Further, Phase I lead agency, CDOT is committed to [Vision Zero](#), eliminating fatalities and serious injuries from traffic crashes.

As discussed in *Section V.3 Criterion 3 Racial Equity and Barrier to Opportunity*, a **robust community engagement was conducted during Phase I and will continue during Phase II and Phase III**. The project Stakeholder Information Plan included various methods for reaching the public.

The project delivery approach also includes an innovative method of meeting environmental requirements. **All NEPA documents prepared for the CREATE Program are part of a tiered NEPA review process that enable rapid start-up of the low risk projects**. It is part of a CREATE decision-making policy referred to as the Systematic, Project Expediting, Environmental Decision-Making ([SPEED](#)) Strategy.

The CREATE Program seeks to achieve the advantages of an expedited process by **separating roadway and railroad improvements to respectively be performed by IDOT and BRC**. **This approach will align with the ideal sequencing of work, minimize rail and roadway network disruption and advance the overall Program efficiently**.

Safety-oriented design is directly related to the U.S. DOT's goals for the INFRA program to improve the safety, efficiency and reliability of the movement of freight and people (NOFO section E.1.a). Additionally, the project delivery methods are directly related to U.S. DOT's Key Program Objective of Racial Equity and Barriers to Opportunity (NOFO section A.2.c) through implementing a safe and more accessible design solution for the residents near GS9 that are majority Hispanic or Latino. The public engagement process was inclusive to proactively address racial equity.

Innovation Area 3: Innovative Financing

The private-public partnership of the CREATE program has diversified the funding for the GS9 project. CDOT, IDOT and CREATE railroad partners have dedicated or committed funds for GS9 Phase I, Phase II and Phase III. As a private sector railroad, the CREATE railroad partners have committed \$3 million for Phase III, project construction.

Additionally, in 2019, the Illinois governor signed into law a \$45 billion infrastructure plan financed by increases in taxes and fees. The law increased the motor fuel tax from 19 cents to 38 cents per gallon. \$592.8 million of this new revenue source will go to the [State Construction Account Fund](#) for roads and bridges, under which CREATE projects would be included.

The use of private sector contributions from CREATE railroad partners and revenue resulting from recent increases to fuel taxes are evidence of the region's support and understanding of the economic activity of the CREATE program both to the benefit of local and state revenues and its residents' economic success. This is directly related to the U.S. DOT goal for the INFRA program to generate national or regional economic benefits and an increase in the global economic competitiveness of the U.S. (NOFO section E.1.a).

V.6 Criterion 6: Performance and Accountability

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

Plan to Address Full Life Cycle Costs

The CREATE partner railroads and IDOT are committed to operating and maintaining the Federally-funded roadway and railroad facilities in a state of good repair throughout the life cycle of the infrastructure at no cost to federal agencies. The proposed railroad bridge will replace the at-grade crossing and will have an estimated lifecycle cost of \$260,000 for 75 years. The partner railroads have a history of fully funding maintenance on their assets in the Chicago region, including the 31 completed projects in the CREATE Program, many of which were built with Federal grant funding.

Implementation of Accountability Measure

The project's success will be indicated after the grade separation is constructed and delays for all modes of transportation and crashes resulting from the at-grade crossing reduce to zero.

Both IDOT and the CREATE railroad partners are committed to the operation and maintenance of the project's infrastructure. IDOT and the BRC will enter a maintenance agreement for IDOT to maintain the substructure at the roadway level and for BRC to maintain the superstructure and railroad elements. BRC is a private sector entity with reliable funds from its operations. IDOT's [Transportation Asset Management Plan](#) includes a strategic and systematic process of operating, maintaining, and improving physical assets with a focus on engineering and economic analysis based upon quality information to sustain a state of good repair.

V.7 Additional Considerations

The GS9 improvements will leverage the City of Chicago's efforts to create jobs and improve employment opportunities in three Tax Increment Finance (TIF) corridors within the project corridor: Midway Industrial, Cicero/Archer, and 51st/Archer. The City's [TIF program](#) is intended to secure new businesses, improve structures, remediate environmental sites and support job training to maximize proximity to Midway International Airport, rail routes and I-55 with safe and convenient mobility for pedestrians and trucks alike. The GS9 project will remove constraints and provide improved mobility and safety to the corridors.

VI. PROJECT READINESS

VI.1 Technical Feasibility

All CREATE projects are documented in the [Feasibility Plan](#) as amended in 2011, which supports the tiered environmental process for the overall Program, serves as the foundation for CREATE projects, and details their general and conceptual information including project descriptions, problems being addressed, impacts on train speed and volume, benefits, and conceptual cost estimates.

The feasibility study established the Phase I scope. The GS9 design criteria and proposed improvements were based on FHWA, IDOT, CDOT, BRC, and Chicago Department of Water Management's (CDWM) design requirements. The project coordinated with these agencies along with Chicago Department of Aviation throughout Phase I and will continue during Phase II and Phase III. The cost estimate for GS9 Phase II and Phase III presented in this application was established during Phase I and included an adequate contingency for both phases. See *Section IV.1* for information on the cost estimate and contingency.

GS9 construction will consist of relocating utilities to the utility corridor prior to commencing the roadway and railroad construction. A temporary two-track shoo-fly will be constructed adjacent to the BRC tracks along with a temporary roadway runaround for one lane of vehicular traffic in each direction while the proposed underpass bridge is constructed. The existing BRC tracks and at-grade crossing will also be removed during this stage. The railroad traffic will be shifted to the newly constructed underpass and the roadway traffic will continue to utilize the temporary runaround while the two south lanes of Archer Avenue, the retaining walls and sidewalk on the south side are constructed. Once this stage is complete, roadway traffic is shifted to the two newly constructed south lanes while the two north lanes of Archer Avenue, retaining walls and sidewalk on the north side along with Knox Avenue and Kolmar Avenue are constructed. The temporary runaround is removed during this stage. The roadway traffic is then restored to two lanes of traffic in each direction on Archer Avenue while the lighting, landscaping and signing is completed.

VI.2 Project Schedule

The CREATE partners will let all RFPs for design and bids for construction using the established FHWA approved process. The GS9 project will adhere to all other Federally recognized guidelines pertaining to GS9 and the CREATE [Partnerships and Management Practices](#).

The current schedule for GS9 is summarized in **Table 3** below and illustrates initiation of construction phase activities in advance of the statutory deadline of September 30, 2024 for FY2021 funds. ***Phase I for GS9 is 98 percent complete and Phase II procurement was advertised at the beginning of March 2021. The CREATE Program is included in CMAP's [FFY 2019-24 Transportation Improvement Program \(TIP\)](#) indicating its readiness for construction.***

Table 3: Project Schedule

Project Milestone	Begin Date	End Date
Phase I Design / NEPA Approval	-	July 2021
Design Consultant Procurement (Phase II)	July 2021	July 2022
Phase II Design / PS&E Development	July 2022	December 2023
PS&E Approval (FHWA, IDOT, CDOT)	-	December 2023
ROW Acquisition	September 2022	December 2023
Railroad and IDOT Agreements	September 2022	December 2023
Construction Letting, Bid, Award Contract	January 2024	June 2024
Phase III (Construction)	July 2024	December 2025

VI.3 Required Approvals

Environmental Permits and Reviews

The GS9 Phase I study is anticipated to receive design and environmental approval by July 2021. The project is expected to receive Categorical Exclusion determination and environmental approvals and will be included in the GS9 Phase I Project Report. The GS9 Phase I Project Report will be available after receiving state and federal approval.

The CREATE partners will adhere to the environmental commitments made during the Phase I. All required permits will be obtained by IDOT prior to initiation of construction activity, as identified in the Plans Specifications and Estimates (PS&E) during Phase II. Permits required for GS9 will be identified in the ECAD of the GS9 Phase I Project Report.

State and Local Approvals, and Federal Transportation Planning Requirements

Broad agency and public support for the CREATE Program are demonstrated by the state and local approvals and adopted plans described below.

State Transportation Plans: The IDOT [State Rail Plan](#) adopted in 2017 supports the CREATE Program. Likewise, IDOT’s 2019 [Long Range Transportation Plan \(LRTP\)](#) identifies IDOT as a “key partner of the CREATE program” and calls out the benefit of reduced accidents at existing grade crossings and improvement to emergency vehicle routes.

Cook County Transportation Plan: The [2016 Cook County LRTP](#) identified CREATE as a successful “pathbreaking effort” and supported its continued fiscal backing as a means of improving train traffic and maintaining the region’s role as North America’s freight capital. The [2018 Cook County Freight Plan](#) further reiterated this support.

Metropolitan Planning Organization: *Continued investment in the CREATE Program is recommended in the Chicago Metropolitan Agency for Planning [ON TO 2050 Comprehensive Regional Plan](#)* in the Mobility chapter under the recommendation to “maintain the region’s status as North America’s freight hub.” ***Support for the CREATE program and GS9 specifically is included in the FFY 2019-2024 Transportation Improvement Program (TIP) under [TIP ID 01-06-0054](#).*** The CREATE Program is one of CMAP’s 12 high-priority recommendation areas.

American Society of Civil Engineers: [2021 Infrastructure Report Card](#) demonstrates the CREATE program's board public support. The report recommends funding regional freight rail investment plans, including the CREATE program, to support efficient operation and reduce delays by eliminating bottlenecks.

Letters of Support

Many agencies and partners have committed their support and funding to the Project. This grant application is supported by transportation agencies, industry and trade associations, and units of government. All [support letters](#) are available on the CREATE Program webpage.

VI.4 Assessment of Project Risks and Mitigation Strategies

Project risks during construction will be handled through IDOT's change orders approval process. The most significant threats that could delay the schedule, and their associated mitigation strategies, include the following:

- Railroad operations delaying construction and construction delaying railroad operations: The Chicago Transportation Coordination Office will manage the mitigation of these threats and ensure close coordination between the railroads and the contractor related to peak time needs and potential conflicts.
- Bridge material delivery and construction delays: Coordination and advanced scheduling of any long lead-time materials and bridge construction in advance will mitigate potential delay and minimize local traffic management.
- Utility relocation delays: Communication and coordination with the utility companies will mitigate much of this delay, although the threat of encountering unknown utilities could still have an impact.
- Weather impacts: The construction schedule could be improved should the region experience mild winters and/or the contractor is able to schedule specific construction activities during winter months.

The most significant cost risks that could impact GS9 construction cost are superstructure cost increases, substructure cost increases, and potential change orders. Opportunities to further reduce costs will be mitigated by aggressively managing scope changes during construction. To monitor, manage, and drive cost and schedule performance, CREATE utilizes a program management consultant (PMC). [Partnerships and Management Practices](#) guide the management and mitigation activities used by the PMC and the CREATE partners.

VII. LARGE / SMALL PROJECT REQUIREMENTS

The total project cost for GS9 is \$61.1 million, meeting the project size requirement to qualify as a **small project** for an INFRA grant. The minimum large project size requirement is the State of Illinois FY2020 Federal-aid appropriation of \$100 million (NOFO section C.3.c.i). As a small project, the project must demonstrate the following requirements.

1. Does the Project generate state or regional mobility? *Yes, as described in Section V: Merit Criteria.*
2. Is the Project cost-effective? *Yes, as described in Section V.1: Benefit-Cost Analysis.*