



Chapter 1. Purpose of and Need for Action

Between the issuance of the DEIS and this FEIS the Transportation Improvement Program (TIP) was reviewed and information from the proposed TIP was added to the 75th Street CIP description. No other substantial changes have been made to this chapter. Revised text is shown as double underline.

1.1 Introduction

The 75th Street Corridor Improvement Project (CIP) is a major element of the CREATE (Chicago Region Environmental and Transportation Efficiency) Program. The CREATE Program, initiated in 2003, is a first-of-its kind multi-modal public-private partnership to improve the rail and roadway transportation network within the Chicago region.

1.1.1 CREATE Program

Leading up to the CREATE Program, the Association of American Railroads (AAR) established the Chicago Transportation Coordination Office (CTCO) to develop managerial solutions for railroad operating problems. To enable this effort, CTCO developed a computer model to simulate freight and passenger rail operations in the Chicago region. This model has been used for subsequent analysis of projects within the Program.

The first major step in the CREATE Program was the development of the Systematic, Project Expediting, Environmental Decision-making (SPEED) Strategy by the FHWA Illinois Division Office, IDOT, and CDOT. The intent of the SPEED Strategy is to evaluate the CREATE Program's component projects systematically, while still allowing the lower risk projects to advance through the project development process.¹ The SPEED Strategy also allows potential environmental impacts of component projects to be assessed in a proportional, graduated way.

The first task in the SPEED Strategy process was to draft the CREATE Program Feasibility Plan, which listed the individual component projects making up the CREATE Program.² These component projects were developed to achieve the overall goals of the CREATE Program.

CREATE Partners:

- Federal Highway Administration (FHWA)
- Illinois Department of Transportation (IDOT)
- Chicago Department of Transportation (CDOT)
- Association of American Railroads (AAR)

AAR Members:

- Amtrak
- BNSF Railway Company (BNSF)
- CN Railway Company (CN)
- Canadian Pacific Railway Company (CP)
- CSX Transportation (CSX)
- Metra
- Norfolk Southern Railway Company (NS)
- Union Pacific Railroad Company (UP)

Other Railroad Participants:

- Belt Railway Company of Chicago (BRC)
- Indiana Harbor Belt Railroad Company (IHB)



The CREATE Program currently consists of 70 individual projects designed to improve the movement of passengers and freight, largely within four rail corridors, and to reduce delays to travelers on the roadway system. Figure 1-1 shows the four corridors for the CREATE Program.

The majority of the individual projects making up the CREATE Program involve upgrading existing track structure, adding a second or third track to certain existing lines, constructing rail-highway grade separations and rail-rail flyovers, and installing new or improved signaling. The overall program includes 36 freight railroad projects, 6 passenger projects, 25 highway grade separation projects, and 3 “other” projects. The projects are identified with a combination of letters that correspond to the corridor plus sequential numbers. For example, EW2 is project number 2 in the East-West Corridor. Highway-rail grade separation projects begin with “GS.”

Funding for the projects will be provided by a combination of public and private contributions. According to the *CREATE Program Final Feasibility Plan Amendment 1 (Modified)*, the eight participating railroads will also provide an amount equal to the potential economic benefits they expect to receive from the program.² The remaining funds will come from federal, state, and local governments.

The second step in the SPEED Strategy was the Component Project Preliminary Screening, originally documented in the *CREATE Program Final Preliminary Screening* report of August 2005.³ This process tested each component project for logical termini, independent utility, and any restriction of alternatives. Where individual projects failed one or more of these tests, they were grouped with related projects to form a linked set meeting all of the tests. It was through this process that linkages between CREATE projects EW2, P2, and P3 were originally identified. Subsequently, a linkage with CREATE project GS19 was identified in Amendment 1 to the *Final Preliminary Screening* report in November 2009.⁴ Together, these four linked component projects form the 75th Street Corridor Improvement Project, which is the subject of this document.

CREATE Program Rail Corridors

See Figure 1-1

- **Passenger Corridors (Yellow)** – The Passenger Corridors include a 17.3-mile section of Metra’s SouthWest Service (SWS) Line, a 13.6-mile section of the Heritage Corridor line, and a 3.0-mile section used by Amtrak running parallel to the Chicago Skyway (I-90). The SWS Line is also used by Amtrak’s *Cardinal/Hoosier State* route north of 75th Street, and the Heritage Corridor is used by Amtrak’s Texas Eagle and Lincoln Service routes.
- **East-West Corridor (Red)** – This 15.4-mile long corridor includes the Belt Railway of Chicago (BRC) tracks. The East-West Corridor runs parallel to the SWS Passenger Corridor from Union Avenue (700 W) to Western Avenue (2400 W) in Chicago.
- **Beltway Corridor (Blue)** – This 30-mile long corridor is primarily the circumferential Indiana Harbor Belt Railroad line.
- **Western Avenue Corridor (Pink)** – The Western Avenue Corridor includes the UP and CSX.



Figure 1-1: CREATE Program Project Map



1.1.2. 75th Street Corridor Improvement Project

The 75th Street Corridor Improvement Project (CIP) is located in a rail corridor that generally follows 75th Street on the south and southwest sides of the City of Chicago (see the regional view in Figure 1-1 on the previous page, and a detail view in Figure 1-2).

Initial planning of the project began in 2005, included only CREATE component projects EW2, P2, and P3, and covered a somewhat smaller project study area. In August 2009, FHWA made two recommendations to change the scope of the project environmental review and to facilitate the consideration and evaluation of environmental impacts across all areas potentially affected by the interrelated projects:

- ◆ Link Project GS19 to previously-linked Projects EW2, P2, and P3. Further analysis indicated that the proximity and interrelationship of the projects would restrict the consideration of reasonable alternatives in both locations. Combining the projects would also allow construction efficiencies.
- ◆ Modify the proposed approach to the National Environmental Policy Act (NEPA) environmental review and documentation process for the project from an Environmental Assessment (EA) to an Environmental Impact Statement (EIS).

In addition, in response to railroad proposals, it was agreed to extend the project study area to the southeast and southwest to include areas where additional track change alternatives could improve operations and to cover additional track, signal, and bridge work which may be required in these areas.

In November 2009, the name of the project was changed from EW2-P2-P3-GS19 to the 75th Street CIP, and on May 7, 2010, the Notice of Intent to prepare an EIS was published in the Federal Register.⁵ Following IDOT's Context-Sensitive Solutions process, IDOT formed a Project Study Group (PSG) with primary responsibility for the project development process.

The 75th Street CIP contains four individual project components of the overall CREATE Program:

- *CREATE Project EW2* – This project would reduce congestion and delays between the Dan Ryan Expressway at the southeast end of the study area - through 80th Street Junction, Belt Junction, and along Landers Yard - to Ashburn Junction at the southwest end of the study area.
- *CREATE Project P2* – This project proposes to reduce rail conflicts for Metra operations by constructing a flyover bridge to connect Metra SouthWest Service (SWS) to the Rock Island District Line.
- *CREATE Project P3* – This project would eliminate conflicts at Forest Hill Junction between the Metra SouthWest Service and the CSX tracks through the construction of a rail-rail flyover.
- *CREATE Project GS19* – This project proposes to grade-separate 71st Street and the CSX tracks.

Project Study Group (PSG) Members

- FHWA
- IDOT
- CDOT
- AAR & affected member railroads:
 - Amtrak
 - BRC
 - CSX
 - Metra
 - NS
 - UP
- Study Team consultants

The 75th Street CIP is included in the Chicago Metropolitan Agency for Planning’s (CMAP) *GO TO 2040* Comprehensive Regional Plan for the Chicago region,⁶ in the Fiscal Year (FY) 2010-2015 Transportation Improvement Program (TIP), and in the proposed 2014-2019 TIP.⁷ There are three TIP identification numbers associated with the 75th Street CIP: 01-07-0001 (P2 and P3), 01-06-0058 (GS19), and 01-05-0012 (EW2). Portions of the project are contained in the fiscally constrained TIP; however, the project has funding needs beyond the horizon years of the TIP. Segments of the project will be moved in the TIP as its horizon years are advanced and funding is identified.

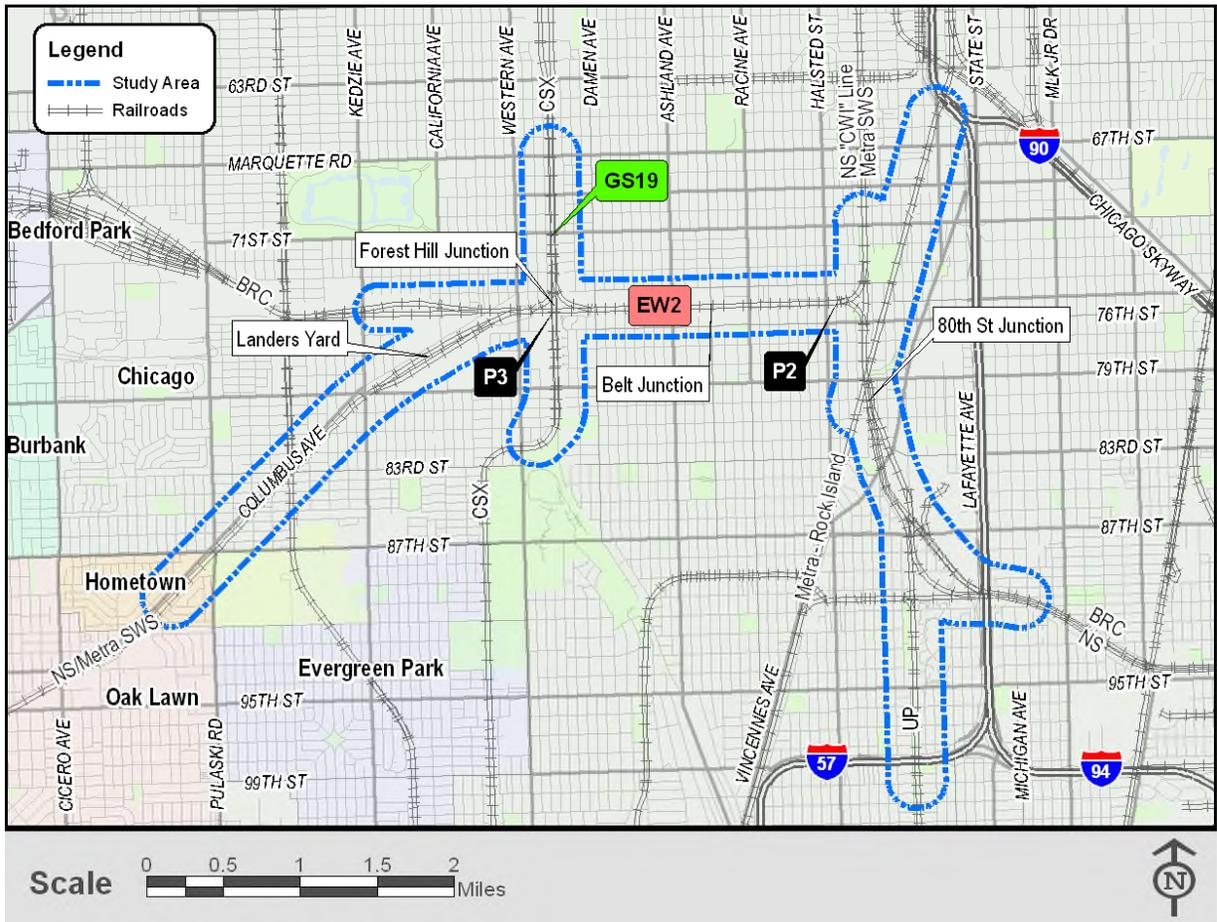


Figure 1-2: 75th Street CIP Project Study Area



1.2 Overall Goals of the CREATE Program

A substantial portion of freight and passenger rail traffic in the Chicago region suffers from congestion, low operating speeds, and service delays due to traffic demands that exceed the capacity of the regional rail system. The *CREATE Program Final Feasibility Plan*¹ established overall Program Level Goals and Strategies and the *CREATE Program Final Preliminary Screening*³ (both published in August 2005) presented the purpose or objective of each component project within the program. These documents have since been amended and modified, most recently in January 2011².

1.2.1 Freight Rail Traffic Volumes and Delays

The Chicago region is the busiest rail freight gateway in the United States, handling more than 37,500 rail freight cars each day. By 2023, that number is expected to increase to 67,000 cars per day. Each year, the CREATE Program corridors handle rail freight valued at approximately \$350 billion. More than 60 percent of the rail freight moving through the Chicago region is high-value traffic, including intermodal service and newly assembled vehicles.²

Based on the latest CTCO Train Model output for the base year of 2009, on an average day there were a total of 996 hours of individual freight train operations within the CREATE Program area. Of that total, approximately 138 hours, or nearly 14 percent, consisted entirely of freight train delay time when the trains were held up due to rail congestion and conflicts with other trains.⁸ During this delay time, the locomotives were idling, consuming fuel, and emitting air pollutants; and the train crews were occupied in non-productive time.

It is a stated objective of the CREATE Program to expedite the movement of freight trains through chronically congested areas within the Chicago region.

1.2.2 Passenger Rail Volumes and Delays

Metra provided 81.3 million rides system-wide in 2012.⁹ This is down 6.3% from the record high of 86.8 million rides in 2008, but it is still the sixth highest total on record. Since a low of 56.5 million trips in 1983, Metra ridership has increased 44%, or an average of 1.26% per year (see Figure 1-3). If this trend continues, Metra could carry over 101 million passenger-trips per year by 2030.

Nine of Metra's eleven commuter rail lines operate on tracks owned or controlled by freight railroads. In general, Metra and the freight railroads coordinate schedules to minimize conflicts, and freight trains often stand aside during Metra's peak service periods.

Goals of the CREATE Program:

- Reduce rail and motorist congestion;
- Improve the efficiency and reliability of freight and passenger rail service;
- Enhance public safety through the reduction of rail-highway conflict points;
- Promote economic development and job creation;
- Improve air quality; and
- Reduce noise from idling or slow-moving trains throughout the Chicago metropolitan area.

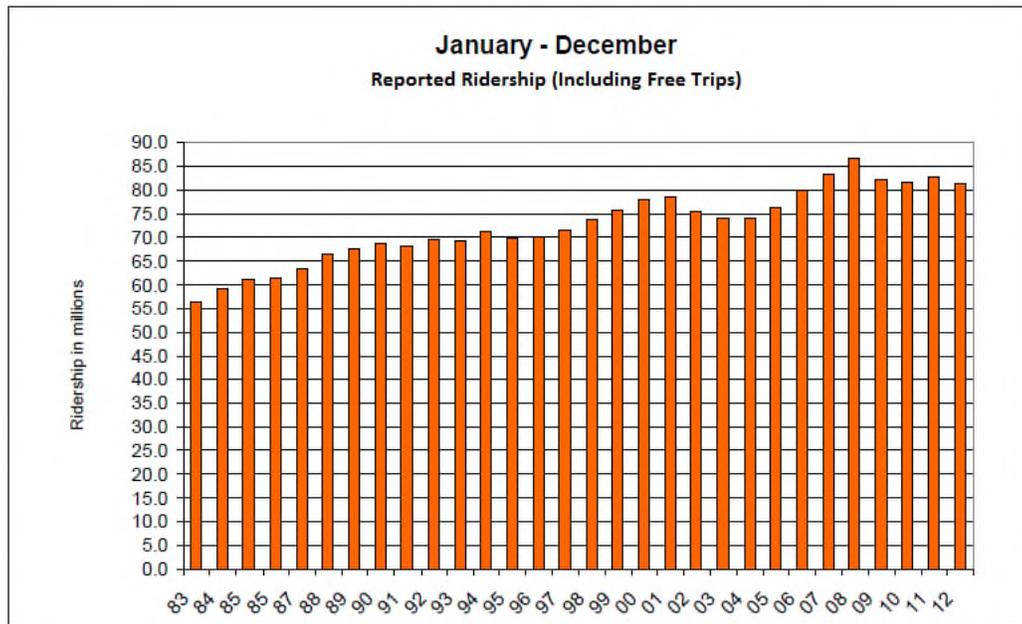


Figure 1-3: Metra System Annual Ridership

For the most part, this operating approach allows passenger rail traffic to operate essentially on schedule, although some corridors have better on time performance than others. However, freight traffic must avoid locations where their operations conflict with daily passenger operations, resulting in substantial delays. Delays for any reason to any given train can cause a cascading effect, delaying other passenger and freight trains in the rail system.

Amtrak ridership is also near record highs in Illinois and nationwide. A total of 31.2 million passengers nationally boarded Amtrak trains in fiscal year 2012, the largest annual total in Amtrak’s history. Chicago Union Station was the fourth busiest Amtrak station in the nation – after New York; Washington, DC; and Philadelphia – serving a total of 3,483,313 passenger-trips.¹⁰

In 2013, trains on Amtrak routes to the east and south encountered more than 950 hours of delay entering and exiting the Chicago area due to interference from freight, commuter, and other Amtrak trains.¹¹ This is an average of 2.6 hours of delay per day. Like Metra, these trains operate on trackage owned or controlled by freight railroads.

It is a stated objective of the CREATE Program to expedite the movement of passenger trains through chronically congested areas within the Chicago region.

1.2.3 Delays and Safety at Grade Crossings

Motorists and pedestrians are also delayed at highway-rail grade crossings. The CREATE Program corridors have a total of 164 at-grade highway-rail crossings in the region, with a combined total average daily vehicular traffic in 2002 of over 1.2 million vehicles per day. On average, over 100,000 vehicles are delayed at area rail crossings every day, with a combined total

Motorists are delayed over 3,600 hours per day at grade crossings along CREATE Program corridors.



average delay of over 3,600 hours each day. Each grade crossing also presents a potential safety hazard, with a predicted total of approximately eight annual collisions occurring at grade crossings in the CREATE Program area.¹² It is a stated objective of the CREATE Program to increase the safety of grade crossings within the Chicago region. Based on coordination with the City of Chicago and data from the Illinois Commerce Commission and the US Department of Transportation, the CREATE Program includes the proposed grade separation of 25 critical grade crossings in the Chicago region.¹³

1.3 Purpose and Need for 75th Street Corridor Improvement Project

Specific needs presented in this section have been identified through review of the CREATE Program *Feasibility Plan* and *Final Preliminary Screening* reports, coordination and consultation with the Project Study Group, technical evaluation of transportation data by the study team, and consultation with a variety of local stakeholders through IDOT's *Context Sensitive Solutions* process. Details of the various public outreach efforts are presented in Chapter 4 (Comments and Coordination).

Input that helped define the purpose and need for the project came from local elected officials, two Community Advisory Groups (CAGs), and general public meetings held at two locations within the study area. On August 27, 2010, the study team met with local elected officials to discuss transportation issues in the project study area. Community Advisory Groups were also formed for the 75th St. CIP in the east and west sides of the study area. On April 19 and 20, 2011, the study team met with these two stakeholder groups to specifically discuss transportation problems and related issues in the study area, including the relationship of the communities to the rail lines. Because the rail lines were constructed well over a century ago, the communities within the study area actually developed around the rail lines. Both stakeholder groups provided generally similar information on current transportation problems. On June 7 and 9, 2011, public meetings were held in the west and east sides of the study area, respectively. Approximately 135 people attended to learn about the project and provide their views on problems in the area. These views echoed the input received from the CAGs and have all been considered in developing the purpose and need statement for the 75th Street Corridor Improvement Project.

The purpose of the 75th Street Corridor Improvement Project (CIP) is to improve mobility for rail passengers, freight, and motorists. The specific needs of this project include:

- Reducing conflicts that affect rail;
- Reducing highway-rail crossing problems;
- Reducing local mobility problems; and
- Improving rail transit passenger service

1.3.1 Reduce Rail-Rail Conflicts

Several major rail lines come together in rail-rail crossings at three locations in the study area:

- ◆ Forest Hill Junction,
- ◆ Belt Junction, and
- ◆ 80th Street Junction.

These conflict points are shown in Figure 1-4. Since many of the desired train movements through these junctions must cross paths, often only one train can pass through each of these crossings at any given time. The crossings thus become choke points, causing long delays for many trains attempting to pass through the study area. Due to the length of the trains and the location of junctions, conflicts within the study area can cause delays throughout the entire CREATE Program region. In addition to conflicts at these three junctions, there are also conflicts for Metra SWS trains on their current route north of the study area, where NS operations to their 47th Street Intermodal Yard and their Ashland Avenue Yard can block Metra SWS trains heading north to Union Station.

Elimination of these causes of delay is important to the Program’s goal of reducing both passenger and freight rail delays across the entire region.

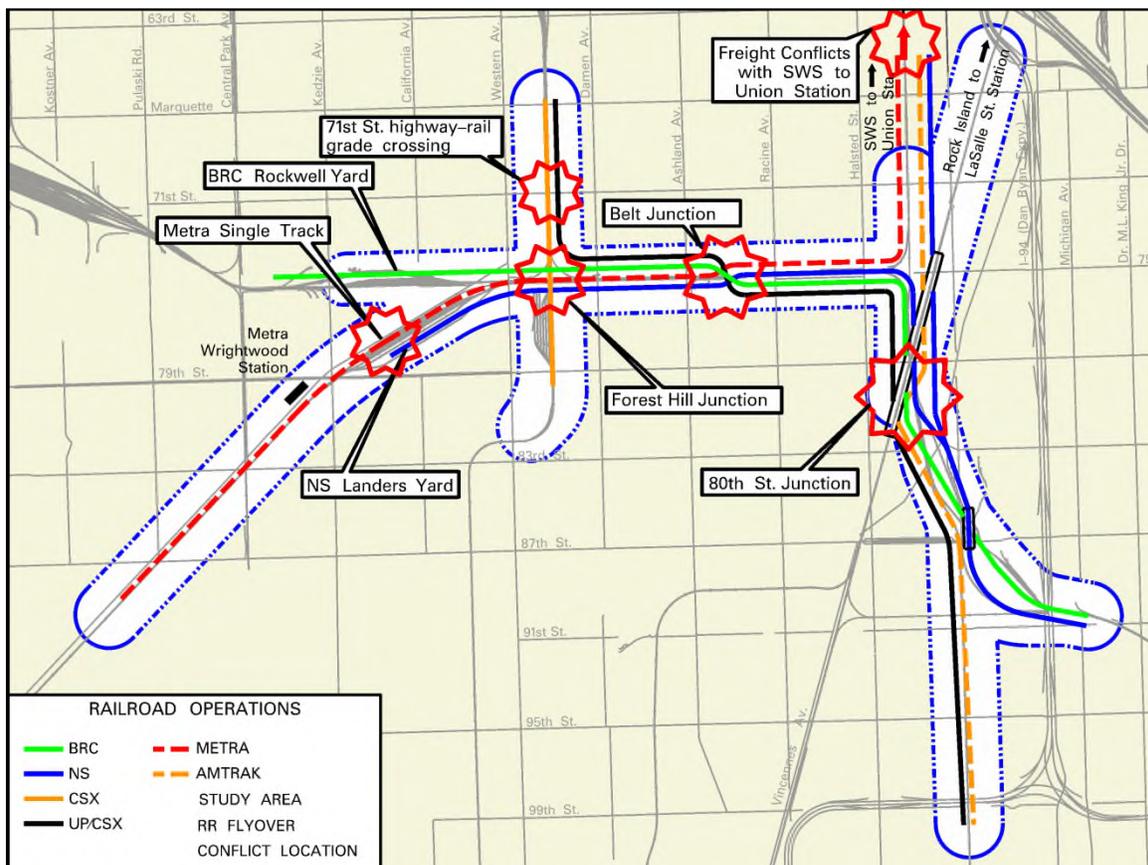


Figure 1-4: 75th Street CIP Conflict Map



1.3.1.1 Forest Hill Junction

At Forest Hill Junction (see photo in Figure 1-5) two north-south CSX railroad tracks cross two east-west BRC tracks and two east-west NS tracks that are also used by the Metra SWS Line at an at-grade rail diamond crossing. Thus, this junction can only pass north-south or east-west traffic at any one time. Approximately 98 trains per day pass through the diamond crossing at Forest Hill Junction.



Figure 1-5: Forest Hill Junction, looking southeast

1.3.1.2 Belt Junction

Five tracks carrying trains from the BRC, CSX, Metra, NS, and the UP converge to two tracks at Belt Junction (see Figure 1-6). Most trains coming into Belt Junction need to cross to another track, much like changing lanes on a highway. For example, all CSX and UP trains must currently move from the northernmost track to the southernmost (or vice versa), while all NS trains going to or from Landers Yard (see Figure 1-4) must cross the BRC, CSX, and UP movements. These requirements make it generally impossible for trains of different railroads to pass through Belt Junction simultaneously. A total of 30 Metra trains and approximately 52 freight trains per day pass through Belt Junction.

1.3.1.3 80th Street Junction

Five tracks carrying trains from Amtrak, the BRC, CSX, NS, and UP railroads converge to two tracks at 80th Street Junction (see Figure 1-7). With approximately 60 freight trains per day, the total train traffic demand through this junction exceeds the capacity of the two existing tracks, forcing trains to delay until the junction is clear.

The distances between these three junctions are shorter than modern train lengths. It is only 5,010 feet from Forest Hill Junction to Belt Junction and 5,805 feet from Belt Junction to 80th Street Junction, while a typical freight train is 7,000 feet long. It is not possible for the waiting trains to queue between two junctions without blocking one or the other. In order to prevent gridlock, trains must wait entirely beyond the junctions until they clear. This means a train has farther to travel once the junctions do clear, and most must start up from a dead stop. The slow acceleration of a freight train thus makes the transit time even slower than if the train had not needed to wait for the junctions to clear, further limiting the capacity of the corridor.



Figure 1-6: Belt Junction, looking west



Figure 1-7: 80th Street Junction, looking north

1.3.1.4 Chicago and Western Indiana (CWI) Line

Additional rail-rail conflict points also exist along the CWI line north of the study area where freight rail operations conflict with Metra operations (see Figure 1-9). Amtrak, Metra's SWS trains, and the NS all share the CWI line northward toward Union Station. NS access from this line to their 47th Street Intermodal Yard creates conflicts for passenger trains, as do NS operations to their Ashland Avenue Yard. In most instances the freight operations are delayed while they allow Amtrak and Metra trains to pass, although there are sometimes delays to passenger service resulting from these conflicts.

1.3.1.5 Conflicts With Metra Operations

Metra commuter trains running through the 75th Street corridor and north to Union Station in the CWI corridor also restrict freight rail traffic. The Metra SouthWest Service currently passes through both Forest Hill and Belt Junctions, and through the CWI corridor. By mutual agreement, the freight railroads generally suspend operations through these areas as needed for approximately three hours during both the morning and evening peak commuting hours to allow Metra to maintain the frequency of operations their service requires. By allowing Metra relatively full use of the corridor for essentially six hours of each day, the actual daily freight capacity of the entire corridor is substantially reduced during these periods.



1.3.2 Reduce Highway-Rail Crossing Problems

There are four locations within the 75th Street corridor project area where major highways, with average daily traffic of over 10,000 vehicles per day, cross rail mainlines at-grade. One of these major at-grade crossings – where four north-south tracks for the CSX railroad cross 71st Street (7100 S) at-grade near Bell Avenue (2232 W) – is included in the 75th Street Corridor Improvement Project (see photo of crossing in Figure 1-8). The three remaining major at-grade crossings, as well as four minor crossings, located in the study area are discussed in Section 1.3.2.4.



Figure 1-8: 71st Street Grade Crossing at CSX

At all of these grade crossings, the large number of trains each day can block the crossings for substantial periods. Also, trains that must stop and wait for a rail conflict point to clear, such as at Forest Hill Junction, sometimes will be parked for extended periods in locations that block the minor crossings, blocking access for schools, churches and emergency services. This can lead to situations where pedestrians are induced to attempt to cross between the cars of the train.

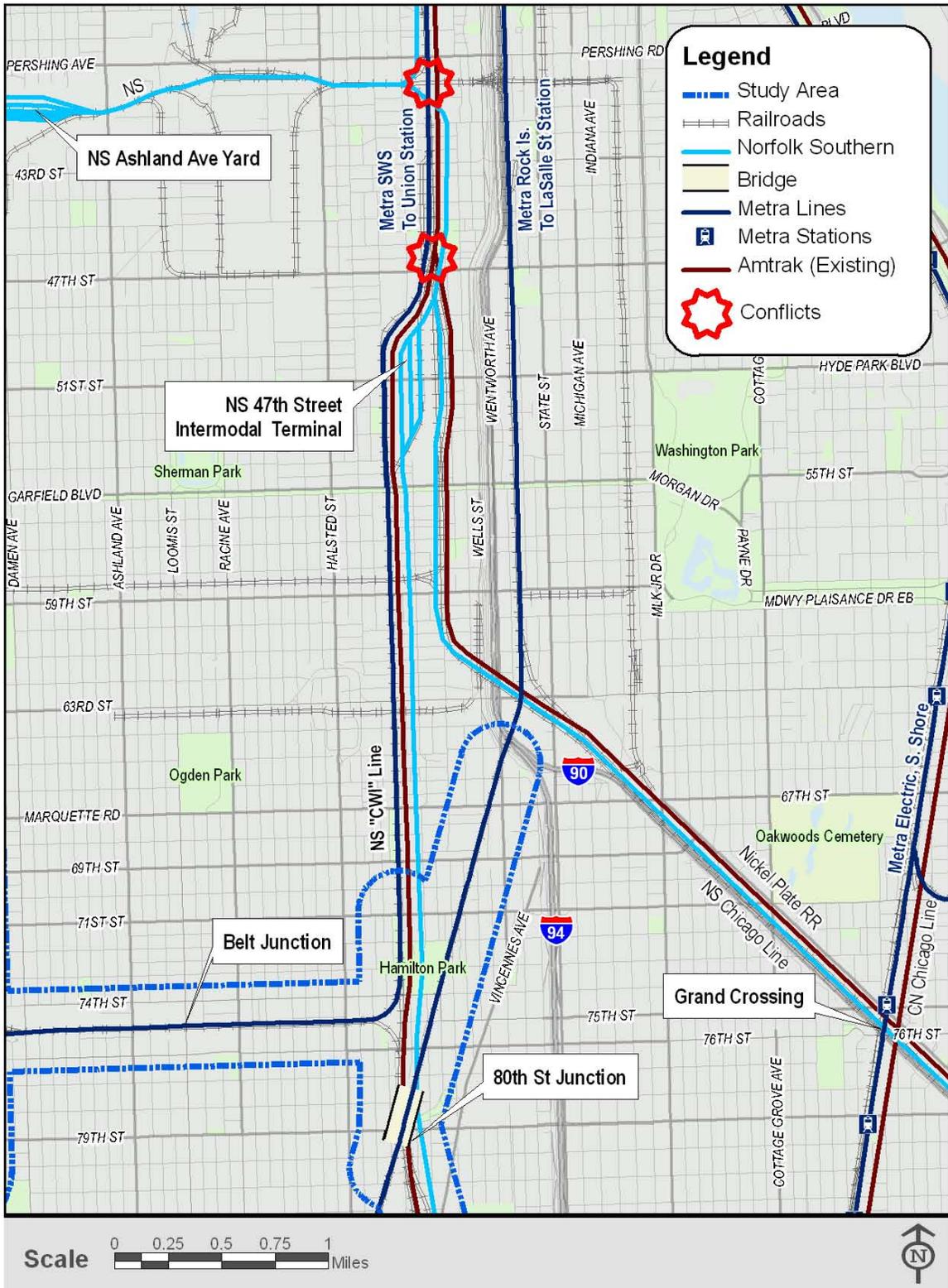


Figure 1-9: Rail Conflicts along CWI Alignment



1.3.2.1 Safety at 71st Street Grade Crossing

The 71st Street highway-rail grade crossing presents safety concerns for vehicles and pedestrians failing to observe the crossing protection. Table 1-1 summarizes Illinois Commerce Commission (ICC) crash records for the 71st Street grade crossing dating back to 1955. The decline in crash frequency over time mirrors statewide and national trends at highway-rail grade crossings. The most recent crash data for Cook County shows 167 collisions at the 786 public grade crossings from 2007 through 2012.¹⁴ Based on this data, an average of one crash per grade crossing would be expected every 28 years. While the crash frequency at any particular crossing can be expected to vary, in part based on the volumes of train, automobile, and pedestrian traffic at the intersection, there have been nine crashes in the past 30 years at the 71st Street grade crossing, and one crash in the past 10 years.¹⁵

The crash frequency at the 71st Street grade crossing is seven times the Cook County average.

Table 1-1: 71st Street Grade Crossing Crash History

5-Year Period	Reported Crashes	5-Year Period	Reported Crashes
1955-1957	1	1983-1987	5
1958-1962	1	1988-1992	0
1963-1967	3	1993-1997	2
1968-1972	0	1998-2002	1
1973-1977	4	2003-2007	1
1978-1982	9	2008-2012	0

1.3.2.2 Delay at 71st Street Grade Crossing

The large volume of rail traffic through the 71st Street grade crossing creates delays for vehicular and pedestrian traffic on 71st Street. The amount of motorist delay at a highway-rail grade crossing is directly related to the amount of time the gates are down for freight or passenger trains and the volume of traffic on the roadway. The 71st Street grade crossing was observed for 24 hours on October 20, 2010. The railroad crossing gates were down 33 times for a total of 246 minutes, or 17% of the time in the day. Illinois Department of Transportation (IDOT) traffic counts from 2006 show an annual average daily traffic (AADT) volume of 11,200 vehicles on 71st Street between Damen Avenue (2000 W) and Western Avenue (2400 W).¹⁶

The cumulative calculated delay to vehicles on 71st Street based on the gate down time observations on October 20, 2010 was 353 total vehicle-hours per day, or nearly 129,000 vehicle-hours per year. The estimated economic cost of lost time to drivers and passengers in the vehicles is approximately \$2,000,000 per year.¹⁷ This is a conservative estimate as it does not include delays to pedestrians on 71st Street. Delays to traffic and train horn noise were also cited as problems by local elected officials.

1.3.2.3 Emergency Services

Figure 1-10 shows the emergency service facilities nearest to the 71st Street grade-crossing. Holy Cross Hospital (2701 W. 68th Street) is the nearest hospital, approximately one mile to the northwest. The nearest fire station – Engine Company 101 – is two blocks north of the crossing at 2240 W. 69th Street. Any emergency service vehicles using 71st Street would be subject to the same delays as motorists.

Because the crossing gates on 71st Street are down such a large percentage of the time, it is an unreliable emergency service route. This was confirmed in a phone interview with the Chicago Fire Department’s Engine Company 101. They stated that the engines, trucks, and ambulances from the fire station respond to an average of approximately 1,300 calls per month. For calls that require crossing the CSX railroad tracks, they typically use the 69th Street grade separation, partly due to convenience given their building’s location, but also to avoid potential delays for trains at 71st Street.¹⁸

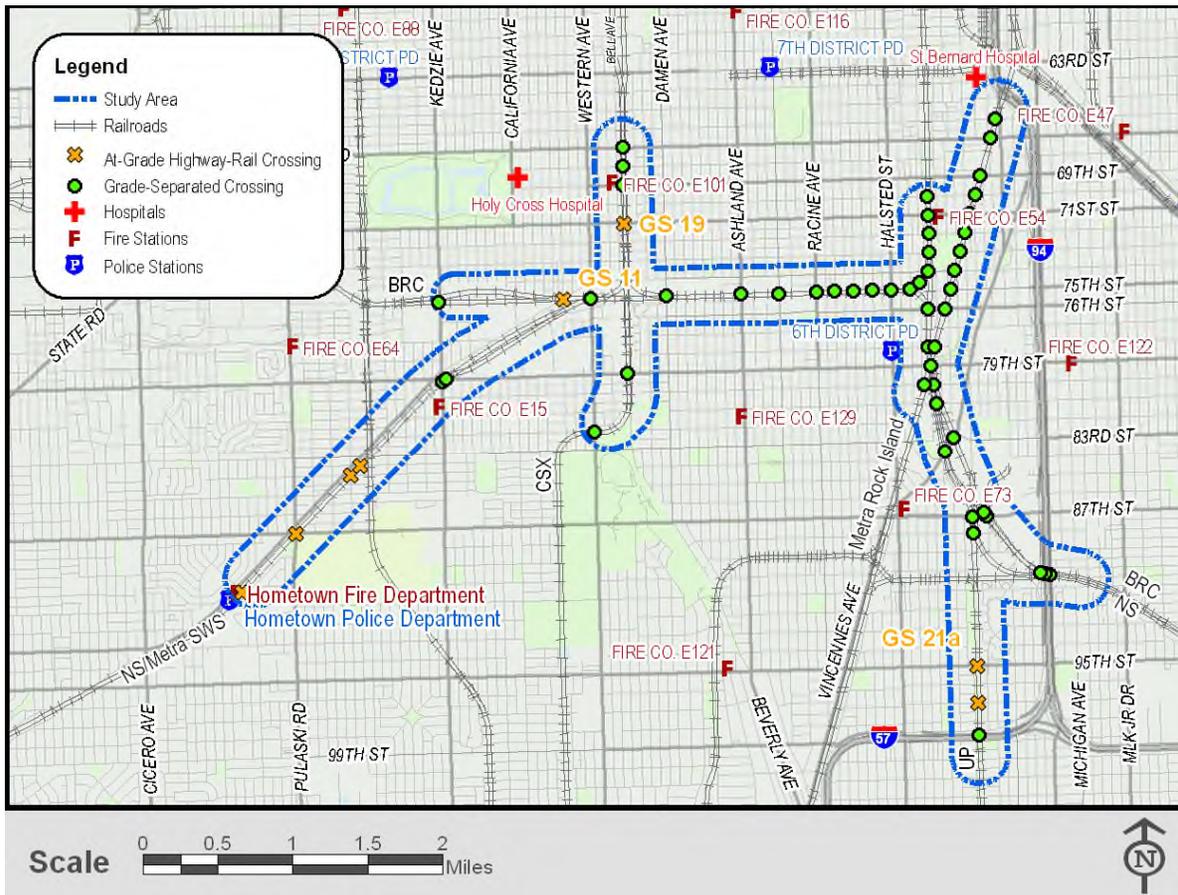


Figure 1-10: Emergency Service Facilities near 71st Street Grade Crossing



1.3.2.4 Other Highway-Rail Grade Crossings

There are three other major highway-rail grade crossings within the study area – at Columbus Avenue and the BRC tracks just east of the Rockwell Yard, at 95th Street and the UP tracks, and at 87th Street and Pulaski Road (see Figure 1-10). Local elected officials cited all of these crossings as causing delays to traffic and producing annoying train horn noise, particularly for the congregation of Trinity United Church of Christ at 95th Street and the UP rail line. Two of these rail-highway conflicts are being addressed by other separate projects in the CREATE Program - GS 11 at Columbus Avenue and GS 21a at 95th Street. Both were reviewed in the CREATE *Final Preliminary Screening Amendment 1* report,⁴ were found to be fully independent of the 75th Street CIP, and determined to place no restrictions on any alternatives for the 75th Street CIP. No grade separation is currently planned at the other major crossing at 87th Street & Pulaski Road.

The Columbus Avenue and 95th Street grade crossings are included in the CREATE Program as separate projects, and are not addressed by the 75th Street CIP.

There are also four other minor roadway-rail grade crossings within the 75th Street CIP study area (see Figure 1-10 and Table 3.3-4 in Chapter 3.3), but none were included in the 2005 *CREATE Final Feasibility Plan's* List of Chicago Area Road Crossings for Grade Separation Projects³. Roadway traffic volumes at these four crossings were lower than at the three major streets where grade separation structures are being studied.

1.3.3 Reduce Local Mobility Problems

The rail lines within the 75th Street corridor study area create barriers to vehicular, bicycle, and pedestrian transportation. In some areas, they provide a complete transportation barrier for substantial lengths. Within the approximately 14 miles of rail corridor, there are seven stretches of more than a half mile where it is impossible to cross the rail corridor. In other areas, travel is not completely blocked, but the presence of the railroads does make travel through the neighborhoods more difficult, particularly for bicyclists and pedestrians. North of 79th Street and Kedzie Avenue at the west end of the project, and north of 87th Street and Eggleston Avenue to the east, the railroad is on a raised embankment and the roadway crossings of the corridor are primarily underpasses of the railroad. There are a total of 44 underpasses in the project study area. Both the physical conditions and general unattractiveness of many of these underpasses were noted by both elected officials and members of the Community Advisory Groups as local concerns, and as reasons why some residents might avoid using them, thus limiting their mobility within the neighborhood. Issues raised include:



Figure 1-11: Union Avenue Viaduct

- ◆ **Poor visibility** – Inadequate or inoperative lighting under the viaducts makes the use of the sidewalks unappealing and a security concern after dark. Likewise, poorly maintained vegetation reduces visibility for both pedestrians and turning motorists.
- ◆ **Poor drainage** – Water drips from some of the bridge decks overhead and runs down the abutment faces. This creates messy and unattractive conditions for pedestrians and bicyclists, causes accelerated deterioration of the sidewalks and pavement, and in winter can lead to icy sections of sidewalk. Broken or clogged storm drains contribute to the drainage problems.
- ◆ **Crumbling concrete** – Concrete from the bridge decks crumbles and portions can fall to the street below or onto passing cars, creating hazards for motorists, bicyclists, and pedestrians.
- ◆ **Poor pavement** – Insufficient maintenance has led to poor roadway pavement conditions at many of the viaducts.

Based on extensive public input, there is a need for the 75th CIP to improve local mobility in the study area by eliminating as many of these identified obstacles as is feasible.

Detailed surveys of the viaducts conducted by the study team (see summary tables in Appendix A) confirmed these general problems hindering mobility, as noted by the residents of the community through the Context Sensitive Solutions process. As an example, only 31 percent of the viaducts surveyed met City standards for adequate lighting of both roadways and pedestrian walkways, and 69 percent were found to not have adequate safety barriers between the roadway and the pedestrian walkway.

1.3.4 Improve Rail Transit Passenger Service Reliability

Metra currently runs 30 weekday passenger trains and 6 Saturday trains on the SouthWest Service (SWS) Line through the 75th Street corridor. Ridership has grown steadily over the past decade from approximately 1.5 million trips in 1999 to over 2.5 million trips in 2012 (see Figure 1-12)⁹. Future job growth in downtown Chicago and higher fuel prices could contribute to continued gains in SWS ridership.

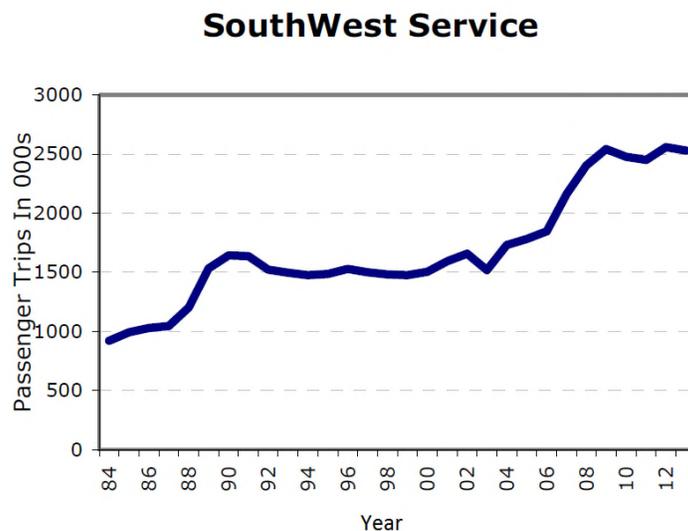


Figure 1-12: Metra SouthWest Service Annual Ridership



Currently, the SWS operates on a single track from Wrightwood Station west of Kedzie Avenue (3200 W) to Western Avenue (2400 W) and must cross rail tracks at Forest Hill Junction handling 68 freight trains per day. While the freight railroads are generally scheduled to avoid operating through Forest Hill Junction at times when Metra service is scheduled, there can be instances when congestion and operational issues cause freight trains to interfere with Metra movements.

For example, in the one year period from August 2012 through July 2013 there was an average of 5.1 hours of train delays per month on the SWS Line, with approximately 25 percent of that due to freight train interference. Approximately 40 percent of the total delays on the line occur within the study area. The average duration for a delay for an individual train was 13.5 minutes.¹⁹

Unreliable passenger service can also result from the single track section for Metra operations alongside Landers Yard, to the northeast of Wrightwood Station. The single track does not allow Metra trains to operate in both directions at the same time through this section, so one opposing train must idle at either side of the single track section waiting for clearance. When one train is delayed for this planned meeting, the other may be forced to hold to avoid meeting in the single track section. This can cause subsequent delays to crossing freight movements.

These train delays add up to more than 5,000 annual hours of passenger delay at Forest Hill Junction (P3), 9,000 hours per year at Belt Junction (EW2), and 18,000 hours annually between 74th Street and 21st Street (P2).¹¹

Amtrak runs two daily trains, one inbound and one outbound, on the *Cardinal/Hoosier State* route through the 75th Street corridor. The trains use the Union Pacific tracks south of 80th Street Junction and connect to Norfolk Southern tracks north of 80th Street Junction. North of 75th Street, the route follows the same path as the existing Metra SWS, along the CWI line. Amtrak provided three months of data (June-August 2010) showing the minutes of delay within the study area by type of delay and location.²⁰ On average, interference with Metra SWS trains is responsible for approximately 0.6 minutes of delay per Amtrak trip. Interference with freight trains within the study area – mostly in the vicinity of 80th Street Junction – is responsible for 2.6 minutes of delay per trip on average. Total delay for Amtrak passengers due to this rail interference in the 75th Street corridor totals approximately 4,700 passenger-hours per year.

Purpose and Need statement for the 75th Street Corridor Improvement Project:

- Reduce rail-rail conflicts
- Reduce highway-rail crossing problems
- Reduce local mobility problems
- Improve rail transit passenger service reliability

Endnotes:

- ¹ Association of American Railroads, Chicago Department of Transportation, Chicago Transportation Coordination Office, Federal Highway Administration, Federal Railroad Administration, Federal Transit Authority, and Illinois Department of Transportation. *CREATE Program Final Feasibility Plan*. August 2005. Print.
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- ¹⁴ "ICC: Crossing and Collision Statistics in Illinois: Cook County." ICC: Illinois Commerce Commission. Web. 27 Aug. 2013. <<http://www.icc.illinois.gov/railroad/crossingmap.aspx>>.
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- ¹⁶ Traffic Count Database System (TCDS). *Illinois Department of Transportation*. Web. [11 August 2014](#). <<http://idot.ms2soft.com/tcds/tsearch.asp?loc=Idot&mod=>>.
- ¹⁷ Based on median per capita income of \$29,396 per year for Chicago MSA (2009 US Census American Community Survey), average occupancy of 1.1 passengers per vehicle (2000 US Census), and 40-hour work week for 50 weeks per year.
- ¹⁸ "Captain Hunt - Chicago Fire Department Engine Company 101." Telephone interview. 1 Sept. 2010.
- ¹⁹ Metra (data) and Jacobs (analysis). 2012Aug-2013Jul_SWSdelays_forCREATE_v01a.xls, 2013. Raw data. Chicago.
- ²⁰ Amtrak. *Host Responsible Delay Minutes Between 21st Street and Thornton Jct - Excluding CN - By Segment/Road and Type of Delay - Trains 50, 51, 850, 851*. June-Aug. 2010. Raw Data. Chicago.



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