

Harlem Avenue Multimodal Bridge Project

Village of Oak Park, Village of Forest Park, Village of River Forest, Illinois, IL-007



Local Government

Capital Project Funding Request

Amount Requested: **\$20,897,656**



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Introduction

The Harlem Avenue Multimodal Bridge Replacement project will upgrade and replace a vital piece of infrastructure serving several transportation modes including automobiles, CTA trains, Metra commuter rail, several CTA and Pace bus routes, freight, pedestrians, and bicycle traffic. This project will allow for safer operations for all users of the bridge providing additional capacity, dramatically upgrading the pedestrian environment on Harlem Avenue, and enhance the journeys of CTA, Metra, and Pace customers.

Multimodal

- ❖ CTA, PACE, METRA
- ❖ Auto Access
- ❖ Divvy, Bike, Pedestrian

Multi-Jurisdictional

- ❖ 3 Villages
- ❖ IDOT, CTA, METRA
- ❖ UP Freight, Harlem Ave Freight Corridor

Project Background

The project is located at the existing underpass which carries (1) Chicago Transit Authority (CTA) rapid transit service, (2) Metra commuter passenger rail, and (3) Union Pacific Railroad freight rail above Harlem Avenue (IL 43). The boundaries of the Villages of Oak Park, River Forest, and Forest Park intersect at this location.



Regional Transit Service

Regional transit for CTA, Metra, and Pace is provided 365 days a year connecting the project site to major employment and community destinations.

- The Chicago Transit Authority (CTA) operates the nation's second largest public transportation system and covers the City of Chicago and 35 surrounding suburbs, including the Villages of Oak Park, Forest Park, and River Forest. On an average weekday, approximately 1.5 million rides are taken on the CTA.

- Metra operates commuter rail service in Northeastern Illinois' six county region with approximately 300,000 riders every weekday.
- Pace covers 3,500 square miles primarily in Chicago's suburbs and is one of the largest bus services in North America, providing over 120,000 rides every weekday.

The project site is an intermodal hub providing local and regional connections between the CTA Green Line, the Metra Union Pacific West Line, and multiple bus routes including the CTA #90 Harlem bus and Pace Routes #305, #307, #309, #318, and #757.

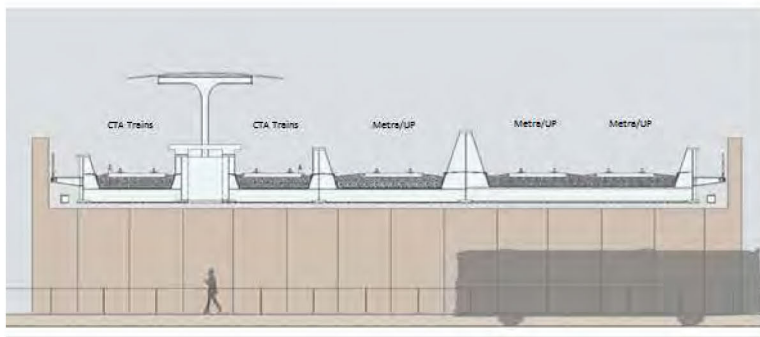
Regional Transit at Project Site			
Rail Lines			
Provider	Rail Line	Average Weekday Ridership	Station Ridership
CTA	Green Line	27,343	3,764
Metra	UP Northwest Oak Park	28,181	1,129
Bus Routes			
Provider	Bus Route	Average Weekday Ridership	
CTA	#90 Harlem	4,967	
PACE	#305 Cicero-River Forest	1,255	
PACE	#307 Harlem	2,765	
PACE	#309 Lake St	811	
PACE	#313 St Charles Rd	1257	
PACE	#318 West North Ave	2,224	
PACE	#757 Northwest Connection	198	



Union Pacific Railroad

Union Pacific Railroad is the principal operating company of Union Pacific Corporation (NYSE: UNP). One of America's most recognized companies, Union Pacific Railroad connects 23 states in the western two-thirds of the country by rail, providing a critical link in the global supply chain. Union Pacific provides value to its roughly 10,000 customers by delivering products in a safe, reliable, fuel-efficient and environmentally responsible manner.

The Union Pacific West Line connects to the West Coast freight operations and moves over 50 trains per day valued at over \$1,000,000. This vital link connect to various intermodal yards for UP's operations in the Chicago Region.



Harlem Avenue

Automotive Uses

Harlem Avenue serves the western suburbs of Chicago as a principal arterial. It is a heavily traveled route that includes a large amount of truck traffic serving the area's commercial and industrial developments. Harlem Avenue is designated by IDOT as a Class II truck route and a Strategic Regional Arterial. The project site is located within ½ mile of I-290 and is a regional north/south route.

The existing bridge has columns in the centerline and at the curb lines. The roadway under the bridge consists of four 10.5-foot lanes and has a posted vertical clearance of 14 feet although trucks periodically strike the bridge.

A detailed study of Harlem Avenue was completed by IDOT in 1996 which recommended that Harlem Avenue be widened to five 10-foot lanes in the project area. It also recommended that the UPRR bridge be replaced and the vertical clearance under the bridge be increased to 14 feet 6-inches. As of 2015, the section of Harlem Avenue that passes under the Harlem Bridge carries over 35,000 cars per day.

Originally constructed in 1911, the Union Pacific Bridge is functionally obsolete for traffic along Harlem Avenue. The bridge, in its current configuration, is a pinch point for automobiles, buses, and trucks restricting access through the local retail corridor extending from Madison to Lake Streets. In addition, the low clearance and pier columns of the bridge create a safety hazard, as they limit lane widths, create driver distractions, obstruct sight lines, and impede roadway geometrics. Pedestrian facilities at the site are not ADA compliant, lack adequate lighting under the bridge creating a safety issue for pedestrians, and the deteriorated condition of the bridge and the sidewalks discourages pedestrian activity creating a barrier between the commercially successful north side and the under developed south side.



The Harlem Avenue Multimodal Bridge Replacement project represents transportation hub providing access for transit, automobiles, freight, pedestrians, and bicycles.



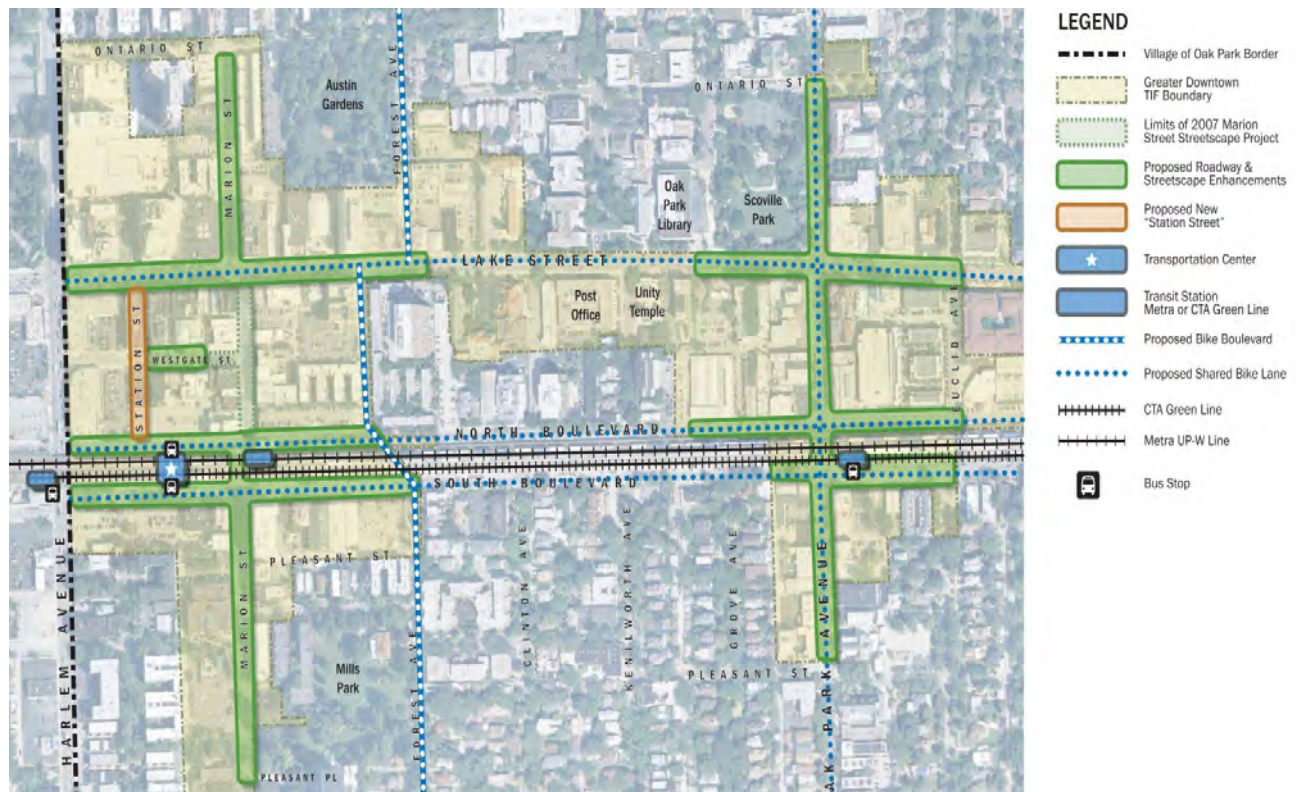
View from CTA platform identifying transit and freight uses

Pedestrian and Bicycle Uses

Retail developments, a walkable urban street grid, high residential density, and the various transit options, attract large volumes of pedestrians to the project site. Thousands of pedestrians pass through this

intersection every weekday, with heavy traffic at peak times. A survey showed that there were over 250 pedestrians traversing the project site in the peak 15 minutes from 5:30 pm – 5:45 pm.

The Village of Oak Park, Village of Forest Park, and Village of River Forest are recognized as communities where complete streets are a consistent part of the urban landscape. In 2012, Forest Park received Bronze recognition from the national organization, Walk Friendly Communities, for its commitment to create a walk friendly town. In addition, the villages have adopted several plans and strategies that will provide better pedestrian and bicycle connections in the future, especially at heavily utilized intermodal



sites. These include:

- [Village of Oak Park Bicycle Plan \(2009\)](#)
- [Village of Forest Park Complete Streets Policy \(2011\)](#)
- [Village of Oak Park Complete Streets Report and Policy Adoption \(2012\)](#)
- [Village of Oak Park Proposal for DIVVY bikeshare system \(2013\)](#)
- [Greater Downtown Oak Park Streetscape \(Draft\)](#)
- [Bicycle Boulevard System Study & Bike Share Feasibility Study](#)

2016 TIGER Program Applicability

The Harlem Avenue Multimodal Bridge Replacement project meets and exceeds the parameters for a TIGER Application as it is (i) difficult to fund outside of this program, (ii) comprises a strong multi-jurisdictional partnership and financial match, (iii) is in the final stages of development, (iv) will create “Ladders of Opportunity.”

Funding

Like many legacy infrastructure investments, this bridge is amongst hundreds of projects competing for limited funding sources. The total project cost of \$26,060,553 is too much for the Villages to take on as a major capital expense.

Multi-Jurisdictional Partnership

This project is an archetypal multi-jurisdictional partnership. The Village of Oak Park, the Village of Forest Park, and the Village of River Forest are project partners. In addition, there is broad support from the agencies that provide transportation, planning, and oversight, including:

- Chicago Metropolitan Agency for Planning
- Illinois Department of Transportation
- Union Pacific Railroad
- Metropolitan Mayors Caucus

The following community and non-profit partners are in full support of this project:

- Downtown Oak Park
- Oak Park-River Forest Chamber of Commerce
- Pleasant District Association
- West Central Municipal Conference

The following elected officials are in full support of this project

- U.S. Senator Richard Durbin
- U.S. Congressman Danny Davis of the 7th district
- Illinois Senator Mark Kirk
- State Representative LaShawn Ford of the 8th District of Illinois
- State Senator Don Harmon of the 39th District of Illinois

[Letters of support from the project partners can be found via this link.](#)

Final Stages of Development

The Harlem Avenue Multimodal Bridge Replacement project is in the final stages of NEPA analysis and is expected for completion in Fall 2016. TIGER funding will allow for Phase II design to begin by early 2017, construction beginning in 2018, and project completion by the end of 201. Coordination has occurred with all users of the viaduct and IDOT has reviewed and approved the current design. The project is included in the FY 2014-2019 Transportation Improvement Plan as Project #04-06-0008.

Ladders of Opportunity



The Harlem Avenue Multimodal Bridge Replacement project creates “Ladders of Opportunity.” Replacing this 105 year-old piece of infrastructure will secure that current users will continue to be connected for the 21st Century will improve the opportunities through connections for local and regional residents to jobs, . These current users include CTA, PACE, and Metra riders, pedestrians, cyclists and drivers.

This project site contains one of the few regional intermodal sites with access to CTA trains, Metra commuter trains, CTA and pace buses making it an intermodal hub. As previously mentioned, CTA and Metra rail lines connect the project site with Chicago’s Central Business District. The CTA Green Line and Metra UP Northwest serve over 50,000 riders and directly serve over 5,000 boardings at Harlem Avenue stops. The Harlem Avenue Multimodal Bridge is necessary for the function of this efficient and cost effective connection to Downtown Chicago.

This project will provide dramatic pedestrian upgrades including ADA accessibility, safer crossing atmosphere with LED lighting enhancements and cross walks, connect with other streetscape projects and future TOD developments. There are currently thousands of pedestrians commuting, connecting, and shopping at the project site.

There are 31,120 residents living representing 14,559 households within 1 mile of the project site, 9.5% of these residents are classified below the poverty level. The annual median income of this area is \$78,084 (ACS Survey 2012). Maintaining this area's infrastructure is incredibly important in guaranteeing economic opportunity for all residents of the neighborhood.

Statement of Work

The Harlem Avenue Multimodal Bridge will replace the existing 105-year old structure spanning IL 43 (Harlem Avenue) in Oak Park, Forest Park and River Forest, IL. The bridge is centered between South Boulevard on the south in Oak Park and Central Avenue on the south in Forest Park, and North Boulevard on the north in Oak Park and Central Avenue on the north in River Forest. The existing structure carries the Union Pacific Railroad freight, Metra Commuter Rail trains and CTA rapid transit trains. The geographic area extends along Harlem Avenue from the intersection of Harlem Avenue and Pleasant Street to the intersection of Harlem Avenue and Lake Street.

The purpose of this project is to improve the existing geometric deficiencies of the UPRR bridge over Harlem Avenue and the associated deficiencies on Harlem Avenue itself; improve the connections between transportation modes associated with the bridge and roadway (Metra, CTA, Pace, pedestrian, and bicycle); and to improve the aesthetics of the infrastructure.

This project is needed for the following reasons:

- The bridge is functionally obsolete for traffic along Harlem Avenue.
- The bridge prevents improvement of Harlem Avenue according to the plan presented in the 1996 SRA study.
- The columns along the curbs and in the center of the roadway reduce the effective lane widths under the bridge which creates a safety risk.
- The low under-clearance continues to result in trucks striking the bridge.
- The low clearance and pier columns of the bridge obstruct sight lines of the intersections, pedestrians, turning vehicles and the traffic signals and intersections.
- The sidewalks through the area do not meet the standards of the Americans with Disabilities Act.
- The bridge is deteriorated and no longer serves the aesthetic needs of the adjacent communities.
- The alignments and geometry of the side streets are substandard and contribute to the crash history and increased crash rates.
- The deteriorated condition of the bridge and the sidewalks discourages pedestrian activity and is a barrier between the commercial successful north side and the under developed south side.
- The poor design and condition of the lighting under the bridge creates a safety issue for pedestrians.

Project Description

Existing Conditions

The current structure, SN 016-0310, was originally constructed by the Chicago and North Western Railway in 1911 and is located at Mile Post 8.67 along the Union Pacific Geneva Subdivision. The structure carries a CTA platform, two CTA tracks and three Union Pacific/Metra tracks running east and west with an out-to-out width of $\pm 87'-0''$. Ballast aggregate lies on several layers of asphaltic waterproofing directly applied to the superstructure concrete.

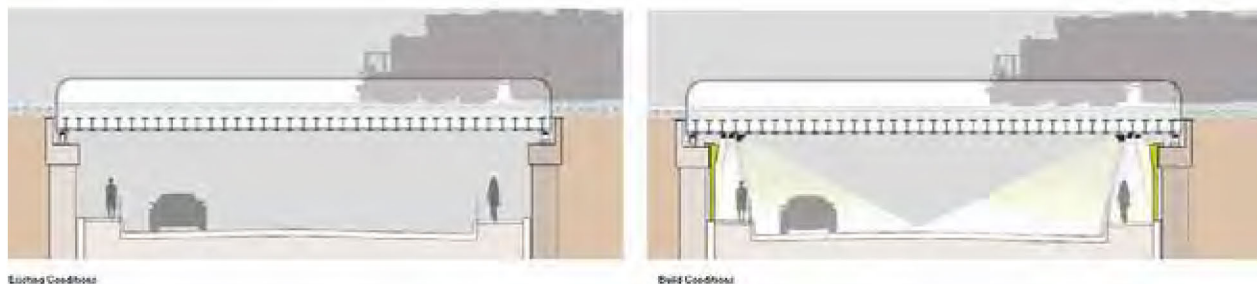
The structure was inspected in 2009 and advanced deterioration was found in many structural components as well as cracking and spalling in the concrete abutments. This deterioration has continued as was expected, especially the spalling of the concrete abutments. Structural steel members required repairs in 2014 and the need for additional repair is expected to become more frequent in the near future. These repairs require lane closures on Harlem Avenue for extended periods which cause significant traffic congestion. Due to the limited number of viaducts under the railroad, that congestion affects the roadway network centered around Harlem Avenue for miles in each direction.

The viaduct between North and South Boulevards serves three separate entities on five tracks. First is the Union Pacific Railroad, which operates three tracks. Second is the Metra UP West Line commuter rail service, which uses two of the Union Pacific Railroad tracks; there is a Metra station located one block to the east of Harlem Avenue. Third is the Chicago Transit Authority (CTA) which uses two tracks for its Green Line service; the CTA's Harlem Avenue station on the Green Line is located above Harlem Avenue on the viaduct and bridge. There are two entrances to the station, one through a CTA building in the southwest corner of the intersection of Circle Avenue and Harlem Avenue and one between S. Maple Avenue and S. Marion Street east of Harlem Avenue.

Harlem Avenue (IL 43, FAP 348) serves the western suburbs of Chicago as a principal arterial. North of the bridge it is approximately 50 feet wide (edge-to-edge) with two 10-foot lanes in each direction, a 10-foot center left turn lane and B-6.12 concrete curbs and gutters. Under the bridge the roadway consists of two 10.5-foot lanes measured face-to-face of the bridge piers in each direction. South of the bridge the roadway consists of two 12-foot lanes in each direction with B-6.12 concrete curbs and gutters. Harlem Avenue is a two-way facility that is designated as a Class II truck route as well as a Strategic Regional Arterial. It consists of a concrete pavement with a bituminous wearing course. Under the structure the pavement is full-depth concrete. No parking is allowed along Harlem Avenue within the project limits. Harlem Avenue is maintained by IDOT.

Proposed Improvements

The Harlem Avenue Multimodal Bridge will feature an open aesthetically pleasing design. Design features include improved sidewalks and LED lighting eliminating perceived pedestrian barriers between the north and south sides and complimenting the expanding retail environment.



The superstructure consists of four spans measuring 70'-4" from center-to-center of bearings. Span lengths are as follows: 10'-8", 24'-6", 24'-6", and 10'-8". The superstructure consists of ± 30 lines of ± 20 " deep concrete filled steel trough girders spaced at $\pm 2'-9$ " on center along with one plate girder at the north fascia. A widening of the original structure consists of four plate girders along the south side. All spans are continuous and moment-fixed to the piers. At the abutments, a steel I-beam reinforced concrete slab serves as an expansion bearing for the superstructure.



Existing Conditions



Build Conditions



Existing Conditions



Build Conditions

Harlem Avenue will be widened to accommodate two 10-foot travel lanes in each direction plus a new left turn lane onto South Boulevard. Pavements will be lowered to achieve a vertical clearance of 14 feet 9-inches. Intersection geometric improvements will allow for increased capacity and safer operations for vehicles, pedestrians, buses, and trucks.

The bridge will be replaced in sections to allow for continued use of the various rail facilities during construction.

	Sidewalk	NB Travel Lane	NB Travel Lane	Turn Lane	SB Travel Lane	SB Travel Lane	Sidewalk	ADA Accessible
Existing	6	10.5	10.5	none	10.5	10.5	6	No
Build Condition	7	10	10	10	10	10	8	Yes

Detailed Project Schedule

Below is the project schedule detailing all previous and future steps.

Project Schedule	
2009	Phase I (NEPA) Planning Study Begin
September 2014	Phase I (NEPA) Planning Study Completion
May 2017	60% Plans and Specifications
November 2017	90% Plans and Specifications
March 2018	100% Plans and Specifications
April 2018	Final Plans and Agreements to IDOT
May 2018	Right of Way Acquisition Complete
June 2018	Project Letting
August 2018	Construction Begins
November 2019	Construction Finished

Budget

The budget with a breakdown by project phase is included below.

Project Budget	
\$21,538,270	Bridge and Roadway Construction
\$111,800	Land Acquisition
\$2,236,000	Design Engineering
\$2,236,000	Construction Engineering
\$26,122,070	Total Project Cost

The requested Federal portion of this project is \$20,897,656. A local match from the project partners of \$5,224,414 will be provided through local capital bonds. Oak Park will provide 50% of the local match for an estimated \$2,612,208, Forest Park will provide 25% of the local match for \$1,306,103, and River Forest will provide 25% of the local match for \$1,306,103.

Project Costs and Benefits

Benefit-Cost Analysis

A Benefit-Cost Analysis was conducted to quantify impacts of the Harlem Avenue Multimodal Bridge project. The [methodology summary](#) and [full analysis](#) are provided through these links.

A cumulative total of benefits for the project of transit value of time savings, crash reduction savings, and property tax revenues are over \$2.9 billion for the life of the project (80 years) in current dollars.

Project Costs and Benefits	
Costs	
Project Capital Costs	\$25,117,375
Debt Financing for Local Match	\$888,353
Net Costs	\$26,005,728
Benefits	
Transit Value of Time Savings	\$2,914,579,031
Crash Reduction Savings	\$28,825,213
Net Benefits	\$2,943,404,244

Since this project is a full replacement of a bridge that is over 100 years-old, it was assumed that the build scenario was the only alternative as routine maintenance will not be able to further extend the life of the current structure. The amount of transit ridership that is reliant on this bridge is the primary driver for the benefits as travel time would be impacted if transit service was reduced or eliminated. Conservative estimates were used to calculate value of time differences for transit riders. Additionally, there will be impacts to crash reduction and real estate tax revenues resulting from the new project. As noted, the methodology [summary](#) and [full analysis](#) are provided through these links.

Other Needs Served by the Project

Traffic on Harlem Avenue is expected to increase significantly by 2040 which includes a substantial number of heavy trucks. Replacement of the bridge and improvement of Harlem Avenue will ensure that this traffic can be accommodated. Additionally, traffic volumes are expected to range from 4,300 to 7,000 vehicles per day in 2040 on adjacent side streets and the improvements will provide the necessary to accommodate the increased volumes.

The Harlem Avenue Multimodal Bridge Replacement project provides a new single-span providing better access and traffic calming measures. The ROW underneath the bridge will be widened to accommodate two 10-foot travel lanes in each direction plus a new left turn lane onto South Boulevard. Pavements will be lowered to achieve a vertical clearance of 14 feet 9-inches. Intersection geometric improvements will allow for increased capacity and safer operations for vehicles, pedestrians, buses, and trucks.

This project will allow for safer operations for all users of the bridge providing additional capacity, dramatically upgrading the pedestrian environment, and enhance the journeys of CTA, Metra, Pace customers. The scope includes:

Safer, brighter, open, aesthetically enhanced design

1. New ADA accessible sidewalks
2. Pedestrians and transit users will have an open, brighter connection through the improved sidewalks and lighting eliminating perceived barriers between the north and south sides.
3. New design will compliment expanding retail environment that attracts large volumes of vehicles and pedestrians.

This project will dramatically improve vehicle safety allowing for safer operations for automobiles, buses, and trucks:

1. Removal of the center columns and new lighting will dramatically improve sightlines for autos making the intersection safer for all users
2. A reduction of vehicle lane width from 10.5 feet to 10 feet under the new structure will provide traffic calming for this heavily-travelled area of Harlem Avenue.
3. Elimination of the intersection offset in the travel path along Harlem Avenue through the Central Avenue / North Boulevard intersection will allow for safer, smoother travel.
4. Increased visibility of the traffic signals will improve driver awareness.

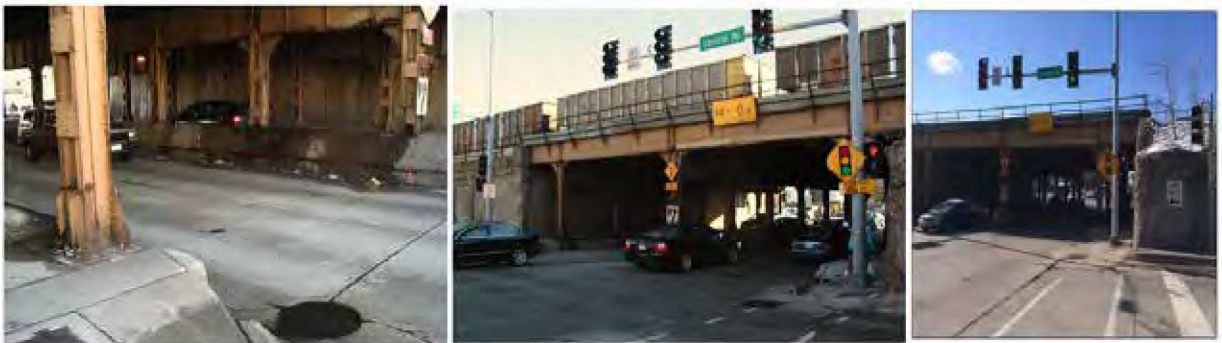
This project will dramatically improve travel mobility in the following aspects:

1. A new turn lane to access South Boulevard.
2. An increased vertical clearance of 14 feet 9 inches for Harlem Avenue to allow for almost all vehicles to safely pass through the structure improving regional freight access.

Selection Criteria

State of Good Repair

Currently, residents of the neighborhood have to walk, commute, and drive through this decaying piece of infrastructure. The viaduct concrete is in a deteriorated state and pieces of loose concrete have fallen on parked vehicles and onto the sidewalks which has created a hazard to pedestrians. The bridge provides a critical link in the area transportation network as a route for trucks and any incidents involving trucks striking the bridge and blocking Harlem Avenue require long detours for large vehicles. Increasing the underclearance will greatly reduce the potential for these events. As noted in the Benefit-Cost Analysis, there are billions of dollars in travel time savings for transit riders resulting from the build condition. Residents of the surrounding area rely on this vital piece of infrastructure, and allowing it to further decay would present negative economic and social impacts for the neighborhood and surrounding region.



Existing Bridge Conditions

Economic Competitiveness

In addition to enhancing the lives of the 31,120 residents of this neighborhood, the Harlem Avenue Multimodal Bridge project will serve 13,273 workers employed at the various businesses located within a 1 mile of the project site (2012 ACS).

Additionally, The Harlem Avenue Multimodal Bridge Replacement project connects CTA and Metra service that connects to Chicago's Central Business District (CBD) located approximately eight miles east of the project site or about a 30 minute transit trip from the project site. Chicago's CBD contains approximately 660,000 jobs almost 20 percent of the region's employment. Currently, 23.6% of the 14,772 households that are in the area commute on public transportation and 17.1% of these households within 1 mile of the project site have zero cars (2012 ACS). The Harlem Avenue Bridge is an irreplaceable piece of the region's infrastructure that facilitates all modes of transportation in the neighborhood and provides enough flexibility for residents to live a multimodal lifestyle.

The area around this station comprises a mixture of dense multi-use buildings creating a vibrant walkable community. The project area's proximity to Chicago's Central Business District, regional employment districts in Suburban Cook County, as well as its versatile building stock, have attracted residential and employment populations.

The Village of Oak Park is coordinated on various initiatives linking economic development, affordable mixed-use housing, and utilizing the transit network to efficiently connect major traffic generators.

The following strategic plans holistically address everything from retail to affordable housing:

- [Village of Oak Park Greater Downtown Master Plan \(2005\)](#)
- [Village Oak Park Market Assessment/Retail Strategy \(2008\)](#)
- [Village of Oak Park: Impediments to Fair Housing Choice \(2010\)](#)
- [Homes for a Changing Region \(2011\)](#)
- Village of Oak Park South Boulevard TOD Planning (2012)
- [Village of Forest Park Land Institute Developer Discussion \(2014\)](#)
- [Envision Oak Park: A Comprehensive Plan for the Oak Park Community \(2014\)](#)

Greater Downtown Master Plan (2005)

The Greater Downtown Master Plan establishes guiding principles for improving the downtown. The plan recommends capital improvements and land uses that support and promote complete streets. The plan's objectives include:

- Reduce traffic congestion
- Revitalize retail
- Provide additional open space
 - Revitalize Marion Mall
- Enhance the pedestrian environment
- Improve transit usage

This plan emphasizes developing spaces for pedestrians and identifies some streets as emphasis streets for connecting public squares, retail, and historic districts. To balance the needs and movement patterns of pedestrians with those of motorists, Oak Park encourages the development of spaces that give priority to pedestrians through improvements to landscaping, lighting, and alleys.

Market Assessment/Retail Strategy (2008)

The primary objective of the retail market assessment is to reduce the risk of the investment that Oak Park will make to achieve the benefits expected of retail expansion. The Village has limited funds to support

and expand retail development—it has to invest where there is the least risk and highest return. A more long term benefit:

Village of Oak Park: Impediments to Fair Housing Choice (2010)

Oak Park is a HUD entitlement community. This project included a comprehensive fair housing analysis. Findings and recommendations include source of inform an ordinance to ensure new multi-family developments are to provide a minimum percentage of accessible rental units.

Homes for a Changing Region (2011)

Oak Park and River Forest were part of the 2011 West Cook Collaborative Communities study including the following components:

- Existing housing supply analysis
- One public or stakeholder workshop
- A sub-regional housing analysis
- A workforce housing analysis
- Future housing analysis including targeted market segments
- Policy and strategic recommendations with targeted goals

Finally, as noted in the Benefit-Cost Analysis, this project is expected to improve property values and make this area a more competitive retail environment.

Quality of Life

Provide affordable and convenient transportation choices

The Harlem Avenue Multimodal Bridge Replacement project continues and enhances safe, reliable and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions and promote public health. Beyond these practical considerations, replacing the delapidated Harlem Avenue Bridge will significantly enhance the aesthetic experience of traveling along Harlem Avenue for pedestrians, bicyclists, transit users, and drivers.

This project provides for the continued transit connection and improved roadway and pedestrian connectivity for the 31,120 residents that reside within 1 mile (2012 ACS). There are many current traffic generators in the vicinity of the project site, including retail shops and numerous multi-unit residential and mixed-use buildings.



In addition Concordia University and Dominican University are both located approximately two miles from the project site and are accessible by connecting bus routes to the project site. These universities have a combined enrollment of over 9,000 students.

The Green Line Lake Street Branch average weekday ridership is 27,343 rides. Saturday average ridership is 15,667 and Sunday ridership is 10,998 rides. CTA Green Line trains serve the connecting rapid transit station connected to the project site seven days per week. The service hours for the Green Line are 4:00 a.m. to 1:00 a.m. on weekdays and 6:00 a.m. to 1:00 a.m. on weekends.

The Metra Union Pacific West line has an average weekday ridership is approximately 27,000 rides. Metra trains serve the connecting commuter rail station connected to the project site seven days per week. The service hours for Metra are 5:00 a.m. to 1:00 a.m. on weekdays and 8:00 a.m. to 1:00 a.m. on weekends.

The project site is also service by CTA and Pace bus service. These buses carry an average of 13,754 passengers each weekday. Some buses run in the peak periods while others serve from the early morning through the late evening hours 365 days a year. Residents have come to rely on all of these services for their daily lives, keeping the Harlem Avenue Bridge in a state of good repair is necessary in maintaining and improving the lives of residents.

Coordination with land-use planning and economic development decisions

The Village of Oak Park and Village of Forest Park are a participant in the West Cook County Housing Collaborative (WCCHC), a joint effort including the municipalities of Bellwood, Berwyn, and Forest Park, Maywood and Oak Park. In November 2011, the U.S. Department of Housing and Urban Development (HUD) awarded WCCHC a nearly \$3 million award as part of the Sustainable Communities Program to increase affordable housing for families near transit centers in West Suburban Cook County.

WCCHC recognized that transportation and access to jobs are prime factors in location decisions for families and individuals. This close proximity to Chicago makes WCCHC communities an optimal place to live, and subsequently, also makes them sensitive to shifts in market factors that impact Chicago, such as housing prices. In the decade before the recent foreclosure crisis, affordable housing in the City of Chicago had dwindled rapidly and many families and individuals turned to the west suburban communities for affordable housing options. The challenge for Chicago and the region has been keeping housing affordable so that a family earning under 120% of the area median income can afford to live in close proximity to work, public transit and amenities. Given this challenge, WCCHC has focused its efforts on creating affordable housing opportunities near public transit. WCCHC is using the HUD Sustainable Communities Challenge grant funds to create a Transit Oriented Housing Loan Fund Strategy

(the Fund) which will guide the creation and implementation of a single-purpose fund to support the pre-development and acquisition of transit oriented projects near major transit centers.

Leveraging Investments: Oak Park Affordable Transit Oriented Development Projects
Three large mixed-use developments are in different **stages of planning and construction** within three blocks of the Harlem Multimodal Bridge. Two are under construction with a third (Oak Park South) anticipated to break ground in fall/winter 2016. Together they will bring 719 new housing units to the area along with significant new retail and commercial space. Two of the developments are replacing parking facilities. The Village believes that an important aspect of that project will include an affordability component for working class households. The Village is actively seeking an affordability component for the rental portion of the project. These new developments are expected to produce an additional 371 car trips and 161 transit trips every day, increasing the need for a Harlem Multimodal Bridge in a state of good repair.

**Rendering of Westgate / Lake Street Development,
Oak Park Station, with 271 units**



Construction progress, as of summer 2015



Oak Park South Development, with 263 units



Environmental Sustainability

The Villages of Oak Park and Rivers Forest are coordinated on various initiatives and are a leader in environmental sustainability. The Oak Park River Forest Sustainability Plan guides major decisions on all aspects of infrastructure and community planning initiatives. The complete plan can be found at

<http://www.oak-park.us/sites/default/files/environment-related/planit-green-plan-2011.pdf>

The Harlem Avenue Multimodal Bridge Replacement project will enhance neighborhood connectivity, strengthen new mixed use/mixed income development adjacent to the facility which will develop new riders and provide opportunities for non-auto trip making, reducing future greenhouse gas emissions.

Project features include:

- Replacement bridge will use LED lighting
- Replacement traffic signal will use LED signal heads
- Sidewalk improvements will remove an impediment to pedestrians and will foster a modal shift from driving to walking.
- Reduced congestion will result in improved air quality
- Modal-shift to walking and mass-transit will reduce pollutant emissions

Safety

The Harlem Avenue Multimodal Bridge Replacement project coordinates with current safety policies, including the Complete Streets Report. As previously mentioned, there are thousands of pedestrians pass through this intersection every weekday, with heavy traffic at peak times. A survey showed that there were over 250 pedestrians traversing the project site in the peak 15 minutes from 5:30 pm – 5:45 pm.

The Village of Oak Park, Village of Forest Park, and Village of River Forest have adopted several plans and strategies that will continue to provide safer pedestrian and bicycle connections in the future, especially at heavily utilized intermodal sites. These include:

- [Village of Oak Park Bicycle Plan \(2009\)](#)
- [Village of Forest Park Complete Streets Policy \(2011\)](#)
- [Village of Oak Park Complete Streets Report and Policy Adoption \(2012\)](#)
- [Village of Oak Park Proposal for DIVVY bike share system \(2013\)](#)
- [Greater Downtown Oak Park Streetscape \(Draft\)](#)
- [Bicycle Boulevard System Study & Bike Share Feasibility Study](#)

A detailed crash analysis has been completed for the on-going planning study. Various crash clusters were recognized, some of which can be reduced or eliminated by replacement of the bridge, elimination of the center and sidewalk columns and widening of Harlem Avenue and the side streets. A reduction in crashes is expected to occur in angle accidents due to the improvement of sight distance, a reduction in sideswipe crashes is expected due to lane widening and a reduction is expected in rear-end crashes due to improved visibility of traffic signals. The existing geometrics can be distracting to drivers and secondary benefits are expected in an overall reduction in crash frequency in the project area. Removal of the center column row also removes the potential for impacts which would likely include injuries.

The following is a list of safety improvements:

- Removal of the center and sidewalk columns will reduce the risk of impacts by vehicles.
- Removal of the center and sidewalk columns will improve sight distance lines for vehicles travelling through the project area, reducing the risk of crashes.
- Increase in underclearance will reduce the risk for vehicles striking the bridge.
- Increase in underclearance will improve the visibility of the traffic signals, improving decision time and reducing the risk of crashes.
- Improved intersection geometrics will result in a safer atmosphere for pedestrians to cross Harlem Avenue.
- A center refuge island is proposed for pedestrians who have difficulty crossing Harlem Avenue during a single green phase of the traffic signal.
- An improved bus stop will be provided to accommodate people with reduced physical capabilities.
- A shift to mass-transit from passenger vehicles will reduce the risk of being involved in a crash
- Replacement of the sidewalks will reduce the risk of injury to pedestrians due to deteriorated conditions and surface irregularities.
- Improved lighting and better pavement visibility under the structure will result in a reduction in crashes
- Improved lighting under the structure will foster a switch to walking, reducing the number of vehicles using the project area and the risk of crashes.

Finally, as noted in the Benefit-Cost Analysis, the build condition is expected to reduce crashes and around the project site.

Innovation

The villages of Oak Park, Forest Park, and River Forest are committed to leveraging innovation in their approach to all major capital projects. For instance, an electric car charging station and a water cistern were both recently implemented at the nearby Marion Streetscape Project. As The Harlem Avenue Multimodal Bridge Replacement proceeds into further design, innovative elements will be fully explored for integration into the project.

Partnership

The Harlem Avenue Multimodal Bridge Replacement project comprises many partners and, in the spirit of DOT guidance, integrates various planning initiatives from other federal agencies with the Oak Park Affordable Transit Oriented Development Project that is located across the street of the bridge.

This project, like all initiatives with the three Villages, undergoes a thoughtful and thorough process to ensure that complimentary initiative can maximize the value for the communities, residents, and business owners.

This project is an archetypal multi-jurisdictional partnership. The Village of Oak Park, the Village of Forest Park, and the Village of River Forest are project partners. In addition, there is broad support from the agencies that provide transportation, planning, and oversight, including:

- Chicago Metropolitan Agency for Planning
- Illinois Department of Transportation
- Union Pacific Railroad
- Metropolitan Mayors Caucus

The following community and non-profit partners are in full support of this project:

- Downtown Oak Park
- Oak Park-River Forest Chamber of Commerce
- Perishable Distribution Solutions, Inc.
- Pleasant District Association
- Weinstein Wholesale Meat, Inc.
- West Central Municipal Conference

The following elected officials are in full support of this project

- U.S. Congressman Danny Davis of the 7th district
- Illinois Senator Mark Kirk
- State Representative LaShawn Ford of the 8th District of Illinois
- State Senator Don Harmon of the 39th District of Illinois

[Letters of support from the project partners can be found via this link.](#)

Oak Park Affordable Transit Oriented Development Project

As previously noted, The Village of Oak Park owns the parking lot on the southeast corner of Harlem Avenue and South Boulevard. The Village has started to identify a private developer to provide a mixed use retail rental building on that corner. The Village believes that an important aspect of that project will include an affordability component for working class households. The Village is actively seeking an affordability component for the rental portion of the project.

Working closely with the Chicago Metropolitan Agency for Planning (CMAP), a 2010 HUD Regional Planning Sustainable Community grantee, WCCHC developed a Site Prioritization Tool to ensure that all projects are meeting the provisions of the Sustainable Communities Grant and its Livability Principles. The proposed project meets all six principles:

Provide more transportation choices. Oak Park's proposed overpass and planned TOD project is consistent with the goal of increasing transportation choices for all income levels. With its proximity to both rail and bus transit, the proposed housing development will particularly reduce the overall costs of transportation to low-income renters. All housing projects (including the Oak Park project) supported by the Fund will be within a half mile radius of a local transit stop.

Promote equitable, affordable housing. The Oak Park project is expected to increase the supply of equitable, affordable housing in the west suburbs as a whole. The project will allow Oak Park to experience increased diversity of income, age and race in an effort to create a viable, sustainable building that represents a true mix of housing types and affordability in our vibrant downtown area.

Enhance economic competitiveness. The Oak Park project will be a mixed-use building which will increase economic opportunities for the lower income residents. The type of retail activities envisioned will provide increased employment opportunities for the lower income residents of the proposed project. Additionally, the retail mix being sought after will provide an increase in economic spending in our downtown area.

Support existing communities. As part of the planning process for conceptualizing the TOD Fund, WCCHC enlisted the help of CMAP as part of their 2010 HUD Sustainable Communities Regional Planning grant to develop a TOD plan and ranking tool that looked at all five WCCHC communities. The Oak Park project ranked very high in desirability which is why it is one of the first projects to proceed under WCCHC's revolving TOD Loan Fund. CMAP reviewed all existing housing and transportation plans as part of this process and developed recommendations that support the overall housing goals of WCCHC. CMAP also created a "Homes for a Changing Region" report which outlines housing needs over the next twenty years and where each town should focus housing development efforts.

Coordinate policies and leverage investment. WCCHC is committed to removing information silos among local agencies through collaboration and resource sharing. The five municipalities that make up the WCCHC have an intergovernmental agreement to align policies and funding to allow for more effective housing collaboration in the west suburbs. In addition, the Village of Oak Park is working closely with both the County and State to leverage additional funding to support overall development activities that are supported out of the TOD Loan Fund.

Value community and neighborhoods. The Village of Oak Park project will bring investments that promote sustainability and community vitality in each community. The Village's project will create the infrastructure necessary to support the additional housing units for all income levels in the downtown area. In turn, the project will create a community and neighborhood within Oak Park's downtown area that will not only serve the residents of the downtown area by giving them access to quality amenities and shopping, but also make the downtown area a destination for the whole region.

Project Readiness

See Draft Project Development Report for Group 2 Categorical Exclusion [via this link](#).

Technical Feasibility

The Harlem Avenue Multimodal Bridge Replacement project is currently in the Preliminary Engineering phase. Design Criteria have been developed based on the IDOT Bureau of Design and Environment Manual and the IDOT Bureau of Local Roads and Streets Manual.

Please note the following items relating to the technical feasibility, including coordination efforts:

- No environmental concerns have been discovered related to biological resources, cultural resources or wetlands.
- Ongoing Public Involvement activities have engaged area stakeholders through a Steering Committee to assist in the development of Purpose and Need, an understanding of the project's context, evaluation of proposed alternatives and concurrence on the preferred alternative.
- The IDOT Central Bridge Office has reviewed and approved the proposed structure and a recommended method of construction.
- IDOT has reviewed and provided minor comments on the documentation for the Intersection Design Study and the Categorical Exclusion.
- The three Villages are in concurrence on the scope of the project.
- The Union Pacific Railroad has reviewed the preliminary structure plans and while they do have questions and concerns have not indicated they have any objection to the project or have identified any fatal flaws in the proposed scope.
- METRA has indicated they have no objection to the project.
- Coordination with the Chicago Transit Authority is ongoing. While the CTA does not object to partial closure of the Harlem Green Line Station, their concerns lie mainly with track closures and the interruption of standard service from the adjacent yard located to the west.
- The cost estimate is based on an actual design that has been advanced to a 30% level of completion.
- A 20% contingency is included in the cost estimate.

Financial Feasibility

Evidence of stable and reliable capital and (as appropriate) operating fund commitments sufficient to cover estimated costs

Village of Oak Park

The Village of Oak Park consistently funds its annual capital improvement program through a combination of dedicated revenue sources. In fiscal year 2015, the Village assigned:

1. Local sales taxes of \$2,460,000 (recurring)
2. Local gasoline tax of \$780,000 (recurring)
3. Telephone Maintenance Agreement fees of \$260,000 (recurring)
4. \$10,400,000 of anticipated new debt issued for capital projects (new)
5. \$1,150,000 of general, operating fund for capital investment (recurring)
6. \$6,375,000 of Madison Tax Increment Financing

These items add to a total of over \$21,425,600 for the year.

In order to augment the annual capital program, the Village has issued debt to cover major investments in the infrastructure of the community. In 2007, the Department of Public Works completed its \$30,000,000 LEEDs certified center to house and coordinate the significant amount of assets dedicated to the maintenance and improvement of the public way. Also in 2007, the Village invested \$5,000,000 of tax increment financing to revamp a former pedestrian mall within the major business district of the Village to create a sustainable, transit-orientated district which provided significant direct and in-direct economic impacts to the community as a whole.

Village of Forest Park

The Village of Forest Park approved a .05% sales tax increase in March of 2014 that is legally and solely bound to infrastructure needs. This adds to a previous successful referendum from 2005 for the same purpose. Based upon historical data, the village of Forest Park will generate \$1 million annually from this tax increase.

Forest Park is a non-home rule community with current annual revenues of approximately \$22,000,000. Over the last four years, the Village has been able to keep expenses under actual revenue.

Village of River Forest

The Village of River Forest has the financial feasibility to pay for this project through the following sources: (1) Capital Improvement Fund – The Village maintains a separate fund for capital improvements which is funded from parking revenue and red light camera revenue. (2) Motor Fuel Tax Fund – The Village receives funds on a monthly basis from the State of Illinois for applicable capital projects that occur in the rights-of-way which this project would qualify. (3) General Fund Reserves – The Village maintains a fund balance of at least 25% and has approximately 35% on hand.

The availability of contingency reserves should planned capital or operating revenue sources not materialize

The Village of Oak Park would offset any need for reserves with an reservation of fund balance within the General Fund and/or utilization of short-term notes as needed.

The Village of Forest Park possesses another source of funding in the Brown Street TIF district, which is adjacent to the proposed project location. There is currently ample increment in this TIF that could be used if necessary.

The Village of River Forest, as a non-home rule community, maintains a limited debt authority to issue general obligation bonds without voter approval. The existing debt will be paid in full by December 1, 2015 and the Village will have the ability to issue additional debt after that point to pay for their portion of the match.

Evidence of the financial condition of the project sponsor

For a detailed review of the Village Finances, the most recent Comprehensive Annual Financial Audit for the fiscal year 2014 is available on the Village's website here: <http://www.oak-park.us/sites/default/files/budgets/finance-reports/CAFR/2014-comprehensive-annual-financial-report.pdf>

As well, the most recent review of the Village's Finance's conducted by Moody's set its rating at Aa3, high quality by all standards.

Evidence of the grant recipient's ability to manage grants

The Village receives a significant amount of Federal, State and County grants each year and is required to submit an audited Schedule of Expenditures of Federal Awards in accordance with OMB Circular A-133. The fiscal year 2014 report is available here: <http://www.oak-park.us/sites/default/files/budgets/finance-reports/single-audit/2014-single-audit-report.pdf>

In FY 2014 alone, the Village received and managed \$2,225,362 per Single Audit, including \$1,583,397 in CDBG and ESG as well as \$183,911 in Sustainable Communities Challenge Grant.

Detailed Budget		
Item	Cost	% of Subtotal
Roadway Removal Items	\$ 167,700	1%
Structure Removal	\$ 838,500	5%
Earthwork	\$ 145,340	1%
Utility Adjustment	\$ 111,800	1%
Drainage	\$ 106,210	1%
Pacement and Sidewalks	\$ 1,101,230	6%
Retaining Walls	\$ 16,770	0%
Detour and Temporary Traffic Control	\$ 167,770	1%
Lighting	\$ 89,440	0%
Traffic Signals	\$ 559,000	3%
Structure	\$ 8,049,600	45%
Temporary Railroad Structure	\$ 5,366,400	30%
Railroad Temporary Track Work	\$ 838,500	5%
Railroad Flagging	\$ 223,600	1%
Environmental Mitigation/Incidental Items	\$ 55,900	0%
Existing Building Modifications	\$ 111,800	1%
ROAD AND BRIDGE CONSTRUCTION SUB-TOTAL	\$ 17,949,490	
Contingencies (20%)	\$ 3,588,780	
Construction Cost	\$ 21,538,270	
Land Acquisition	\$ 111,800	
Design Engineering	\$ 2,236,000	
Construction Engineering	\$ 2,236,000	
TOTAL PROJECT COST	\$ 26,122,070	
<i>All budget items will be funded 80/20 Federal TIGER/Local</i>		

Risk Assessment and Mitigation Strategies

The largest risk item is coordination and review time during design with the CTA. Coordination with the CTA is ongoing and will continue through the design phase. These risks will be mitigated with continuous engagement with CTA. Instead of standard submittals at the 60%, 90% and 100% levels of completion, continual dialogue with the CTA will be employed to avoid surprises, re-work and schedule delays.

Other minor risks include coordination with property owners and IDOT:

- The owners or representatives from the property from which right of way is proposed were members of the Steering Committee and did not voice opposition to the minor right of way impacts. Acquisition of right of way and easements is not considered to be adversarial.

- After reviewing a draft of the Categorical Exclusion, IDOT listed a small number of additional tasks to be completed before they will approve the project for design. None of those items are considered fatal flaws and the planning study should be completed by the beginning of September, 2016.

Other Environmental Reviews and Approvals

After reviewing a draft of the Categorical Exclusion, IDOT listed a small number of additional tasks to be completed before they will approve the project for design. None of those items are considered fatal flaws and the planning study should be completed by the beginning of September, 2016.

- The project requires IDOT approval of Categorical Exclusion. IDOT has provided comments on a draft of the Project Development Report, none of which appear to risk design approval by September, 2016.
- The project requires approval of the proposed type, size and location of the bridge by IDOT. This approval has been received.
- The project will require a permit from the Union Pacific Railroad. The Union Pacific Railroad has reviewed the preliminary structure plans and while they do have questions and concerns have not indicated they have any objection to the project or have identified any fatal flaws in the proposed scope.
- Permission from the Chicago Transit Authority to modify their track, remove and replace a portion of the passenger station and interruption of train service will be required. While the CTA does not object to partial closure of the Harlem Green Line Station, their concerns lie mainly with track closures and the interruption of standard service from the adjacent yard located to the west. Coordination is on-going to identify strategies to mitigate their concerns and the impacts to their operations.
- No permits will be required from the Army Corps of Engineers, the Illinois Department of Natural Resources or the United States Coast Guard.
- A routine permit from the IEPA may be required to relocate a water main under Harlem Avenue.

Environmental studies or other documents—preferably by way of a Web site link—that describe in detail known project impacts, and possible mitigation for those impacts.

A Categorical Exclusion is being prepared and documented with a Project Development Report that will be reviewed and approved by IDOT. In response to a feasibility study prepared, Representative Danny Davis secured funding for the planning study in 2007 as a High Priority Project in the SAFETEA-LU program. All three Villages have demonstrated support for the project by cooperating in the planning study. The project is included in the FY 2014-2019 Transportation Improvement Plan as Project #04-06-0008.