

Inner Loop North Transformation Planning Study















Contents

01

About the project

An introduction to the project purpose and goals and the historic context of the study area.

22

Community engagement

A summary of community engagement events and key themes from community feedback.

28

Existing conditions

An analysis of existing social, physical, and economic conditions in the study area.

98

Concept alternatives

An exploration of several new designs for the Inner Loop North corridor.

114

Preferred concept

A detailed explanation of the preferred concept and its potential impacts. 166

Implementation

A guide to moving the preferred concept to the next phase of the design process.

Appendices

- **1** Community Engagement Summary
- 2 Market Analysis
- 3 Multi-modal Accessibility Analysis
- 4 Traffic Inventory and Assessment
- **5** Crash Analysis

- 6 Structures and Utilities Inventory
- 7 Concept Alternatives
- 8 Alternatives Evaluation Matrix
- **9** Preferred Concept Traffic Analysis
- **10** Housing Opportunities
- 11 Greenhouse Gas Emissions Analysis
- 12 Benefit-Cost Analysis
- 13 Construction Staging

About the project

An introduction to the project purpose and goals and the historic context of the study area.



Study area page 02



Project goals page 04



Historic context page 06



Past plans page 14



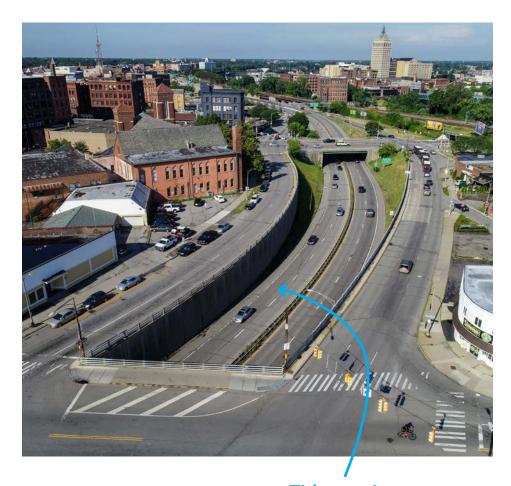
Planning timeline page 20

Introduction

This planning study identifies a preferred concept to re-design Inner Loop North as an equitable, accessible, multi-modal corridor.

The Inner Loop North Transformation Study builds on the momentum of the recently completed Inner Loop East Transformation Project to fill in the last remaining segment of the Inner Loop Expressway. The re-designed Inner Loop North corridor is intended to restore much of Rochester's original street grid and reconnect Downtown to the northern neighborhoods of Brown Square, High Falls, Upper Falls, and Marketview Heights. The new alignment will cater to multi-modal users, providing pedestrian and cyclist facilities on low-speed, city-style streets. Several acres of land along the corridor will be reclaimed, providing significant opportunities for development, including planned infill development and green space creation.

The completion of this planning study sets the stage for final design, engineering, and construction in the coming years.



This needs to be fixed!

Study area

The planning study area includes the "Inner Loop North" segment of the Inner Loop Expressway from the I-490/Plymouth Avenue interchange to North Union Street, as well as several blocks north and south of the corridor.

The study area includes the northern half of Downtown Rochester as well as portions of the North and South Marketview Heights, Upper Falls, High Falls, and Brown Square neighborhoods, which were disconnected from downtown when the Inner Loop was constructed.

The 1.5-mile Inner Loop North segment within the study area is the last remaining segment of the Inner Loop, following the completion of the Inner Loop East Transformation Project in 2017.

Study area stats



717 total acres



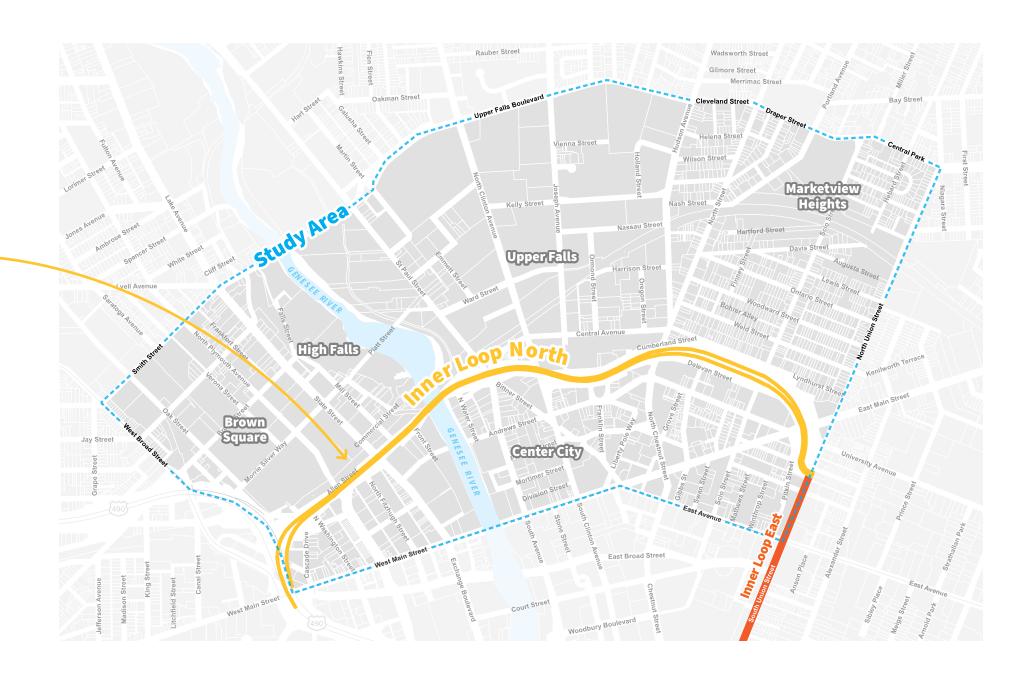
1.5 miles of Inner Loop



7,738 residents



\$16,000 median income



Project goals

This project aims to achieve the following goals:





Equitable outcomes

Ensure project outcomes support the needs of all existing and future residents.

Minimize displacement of existing businesses and residents.

Identify new housing opportunities and strengthen existing residential neighborhoods.



Alignment with Roc 2034 principles





Equity







Partnership

Prosperity

2 Neighborhood restoration

Identify strategic opportunities for new investment.

Create new job opportunities.

Facilitate opportunities for community-based development.

Promote reuse of vacant and underutilized lands.

Strengthen and support existing community assets.



3 Connectivity and accessibility

Reconnect neighborhoods and restore a human-scale street grid.

Promote multi-modal accessibility for all.

Enhance the street network to improve safety and accessibility for all modes of transportation.

Eliminate Inner Loop North as a physical and visual barrier.

Enhance public access to the riverfront and High Falls and integrate with the ROC the Riverway Vision Plan.



Design at the pedestrian scale



Create beautiful spaces



Provide diverse housing options



Celebrate assets



Strengthen multi-modal travel



Focus growth

Historic context

The construction of the Inner Loop had a lasting, negative impact on city neighborhoods and residents that is still being felt today.

The Inner Loop was constructed at a time when Rochester's population was booming and showed no signs of slowing. Traffic in the city was at an all time high. The City partnered with the New York State Department of Transportation to create a plan to reduce congestion and so the Inner Loop was born. It was one of the first in a trend of urban arterial highways that swept the country. Designed as a limited-access beltway, the Inner Loop made it quick and easy for drivers to get into and out of downtown without so much as stopping at a traffic light. But by the time construction was completed in 1965, Rochester's population had already started to fall as residents fled the city for the suburbs. What remained was an oversized and underutilized roadway, whose lasting impacts persist to this day for the residents and neighborhoods in the Inner Loop North study area.

Rochester Grows Auto Registration Rises

CITY TRAFFIC AT NEW HIGH

City Planners Okay Inner Loop Design

Here's the answer to downtown traffic and parking problems

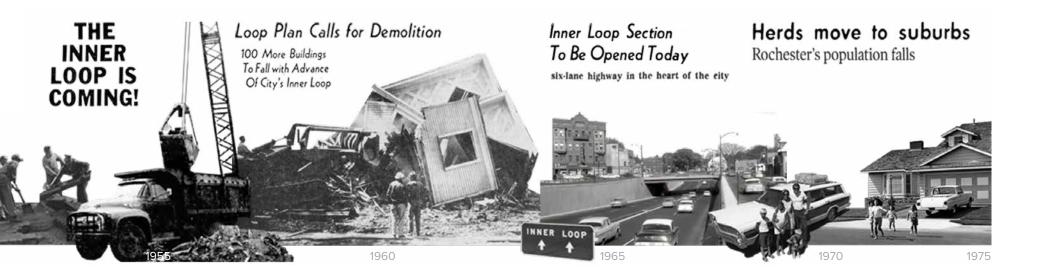


1940s

Population growth combined with an explosion of personal vehicle ownership and a decline in public transportation use creates poor traffic conditions and congested downtown streets.

Late 1940s

The Inner Loop is planned as a solution to downtown traffic congestion. It follows the prevailing planning sentiment at the time and is designed as an urban beltway, where cars can cruise unimpeded around downtown.



1952 -

Construction on the Inner Loop begins. The roadway was built in five segments, from 1952 to 1965, beginning at Central Avenue west of the Genesee River and continuing counterclockwise.

1950s and 60s

To make way for the Inner Loop, entire city blocks were destroyed, hundreds of homes and buildings were demolished, residents were displaced, and communities were torn apart, never to be the same again.

1965 -

The Inner Loop is completed and the 2.7-mile beltway around downtown is open for use.

1970s -

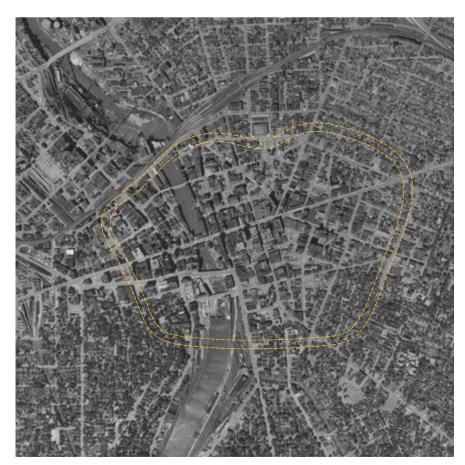
By the end of the decade, Rochester's population had declined more than 27% from its peak in 1950, due in part to the increased accessibility between downtown and the suburbs created by the Inner Loop.

Historic context

The Inner Loop sliced through areas already segregated by redlining, targeting primarily Black and immigrant neighborhoods, and creating a new barrier between these communities and Downtown Rochester.

It also created a barrier to upward mobility and wealth creation for neighborhood residents who, now disconnected from downtown and living in a disinvested neighborhood, faced growing disadvantage and inequity.

These legacy effects have persisted to this day. Neighborhoods in the study area face some of the most severe economic constraints in the city. Many residents are low income and have trouble accessing quality housing and job opportunities. Physical connectivity is also impaired. What was once a compact, urban street grid is now dominated by a huge piece of transportation infrastructure.



1951

Study area
40%
poverty rate

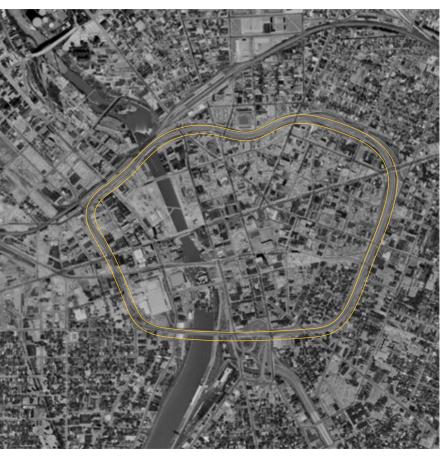


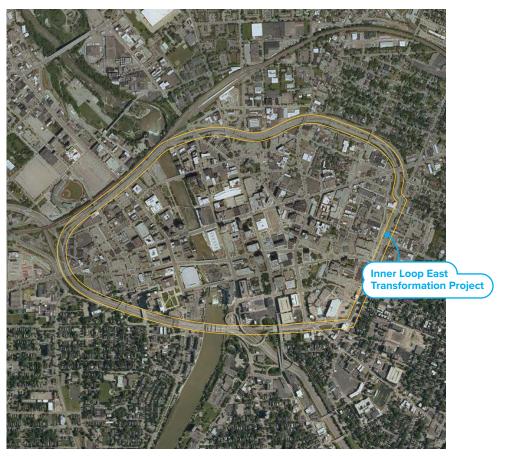












1969 2021

Historic context

The effects of the Inner Loop's construction in the study area are particularly striking. Huge swaths of land were acquired, hundreds of buildings were condemned and destroyed, and residents uprooted.

In the study area, some blocks and an entire street – Joslyn Place (which was located just south of Lyndhurst Street) – were eliminated completely. Anderson Park and Franklin Square were also impacted, each reduced to roughly half their original size. Historic structures and community landmarks were razed indiscriminately as well. The First United Presbyterian Church, which stood at 131 N. Plymouth Avenue since 1849, was demolished in the summer of 1952. The historic Waverly House (later renamed the Savoy), constructed in 1848 on the corner of State Street and Central Avenue, met the same fate.

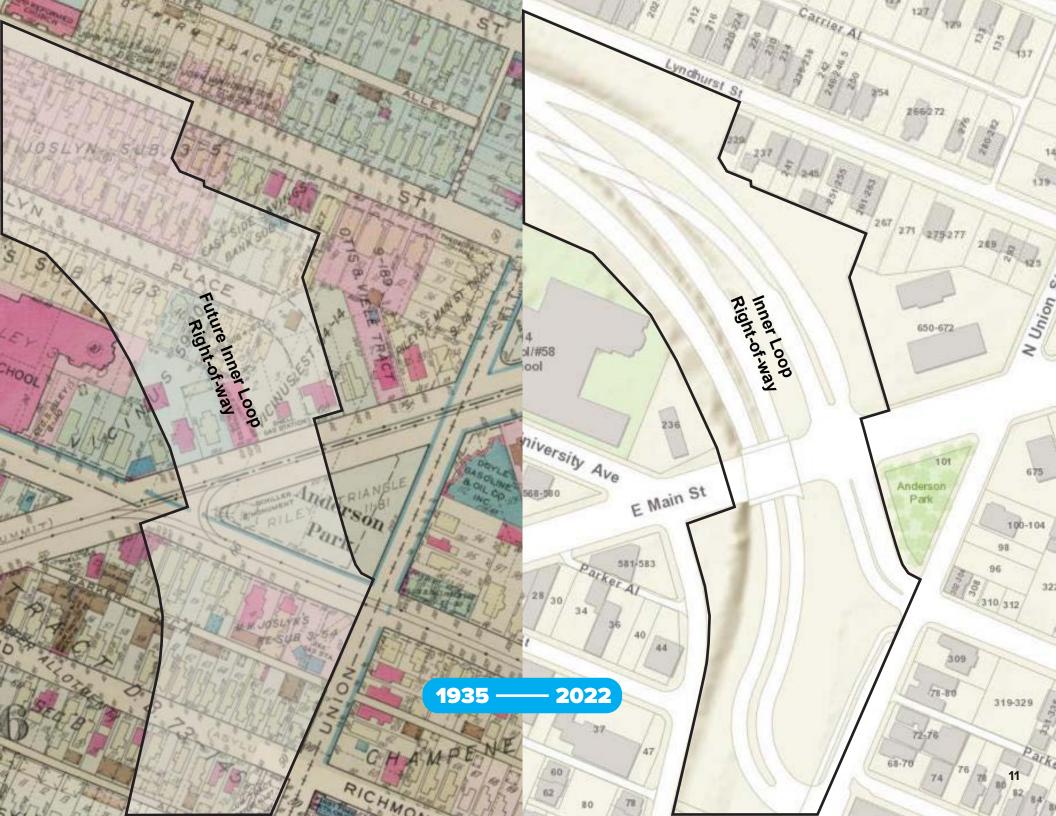
Homes and businesses could not escape the wrecking ball either. From Front Street to North Street, over 250 structures were destroyed in what was then the predominantly Black and immigrant Seventh Ward neighborhood and hundreds of residents unjustly displaced.

Stories of resistance

Some residents were unwilling to give up their homes and communities without a fight. While some filed protests, others refused to leave. Mrs. George R. Woods was one of those. She refused to leave her apartment at 72 Joslyn Place when her landlord stopped collecting rent in January 1962. Even after the utilities were turned off, her standoff continued. She kept warm by lighting candles and wearing her wooliest clothing and she got water from the fire hydrant down the street.

When the landlord or state agents came to the door, she continually gave them the run-around, leaving notes that read: "Leave my things alone until I get moved tomorrow afternoon." Tomorrow never came until five months later in May of 1962 when she relented and moved to a new home on Maple Street. Her building was the last on Josyln Place to be demolished.

Source: "A Before and After Look at the Neighborhoods of the Inner Loop," Rochester Public Library, Local History and Genealogy Division



Then and now

The construction of the Inner Loop erased entire blocks, destroyed countless landmarks, and displaced hundreds of residents.

Between 1952 and 1965, the bulldozers that carved the way for the Inner Loop were unrelenting and unsympathetic, destroying thousands of structures and ripping apart entire neighborhoods. Businesses, homes, even churches were not spared the wrecking ball. On the east side of the river, more than 160 homes were condemned and their residents displaced.



1935

In 1935, the blocks of Lyndhurst and Delevan between North and South Scio Streets were part of a densely-populated mixed-use neighborhood.

2022

Today, the Inner Loop runs through them.

A home is leveled in 1962.



Past plans

The City of Rochester began planning for the transformation of the Inner Loop corridor more than 30 years ago.

In 2017, these plans started to become reality with the implementation of the Inner Loop East Transformation Project. This Inner Loop North Transformation Planning Study follows and learns from the Inner Loop East project and seeks to replicate its success on the Inner Loop North corridor in a way that meets the community's needs for housing, transportation, and economic opportunity.

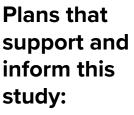
This planning study is also informed by several other recently completed plans and studies, including the Rochester 2034 Comprehensive Plan and the ROC the Riverway Plan, both of which identify the Inner Loop North project as a priority for the City of Rochester.



Plans for the Inner Loop:

Vision 2000 Plan: A Plan for Downtown

Advocated the removal of the southeastern portion of the Inner Loop to re-connect Center City to the surrounding communities.





Rochester 2034

Provides a 15-year plan to guide Rochester's development. Identifies the Inner Loop North project as a priority and critical steps towards improving equity in housing, transportation, and economic growth.



Comprehensive Access and Mobility Plan

Recommends actions to support connectivity and multi-modal accessibility in Rochester.



Inner Loop Improvement Study

Analyzed ways to transform the Inner Loop into a more appropriate scale, size, and configuration to meet the community's needs. Ultimately determined that the removal of the southeastern segment of the Inner Loop was feasible.





Inner Loop East Transformation Project

Developed and implemented a new alignment for the Inner Loop East segment, which was raised to street level and capped with a two- to four-lane street. Several development sites were also created along the corridor.



Inner Loop North Transformation Planning Study

A concept-level planning study to explore alternatives and identify a communityinformed, preferred concept for the redesign of the Inner Loop North corridor.



ROC the Riverway

Identifies a series of transformational projects along the Genesee Riverfront in Downtown Rochester, several of which are in close proximity to the Inner Loop North study area including: a riverfront promenade at Front Street and improvements to High Falls Terrace Park and the Pont De Rennes Bridge. Transforming the Inner Loop North corridor was identified as an important complementary project to the recommendations of the plan, as the redesigned corridor could link into proposed ROC the Riverway projects in the area and support river-oriented development.



GTC Long Range Transportation Plan 2045

Provides a framework for transportation policy, planning, and investment in the Genesee-Finger Lakes Region. Identified the transformation of the Inner Loop as a key project of regional importance.



Housing Market Study

Provides a base of information on current housing market conditions in the city. Identifies low-incomes as the primary obstacle to housing affordability.



Transit Supportive Corridors Study

Identifies several corridors within the Inner Loop North study area as prime locations for transit-supportive development including: East Main Street, Joseph Ave, Hudson Ave, N. Clinton Ave, and Upper Falls Blvd.



E. Main Arts & Market Initiative

Identifies multi-modal circulation improvements for the area of East Main Street immediately east of Center City, including the eastern portion of the Inner Loop North study area.

Sidebar

Inner Loop East

The Inner Loop East Transformation
Project converted 4,400 feet of sunken
4- and 6-lane expressway into a lowspeed, at-grade, two-way street that
reconnects downtown to the East End.

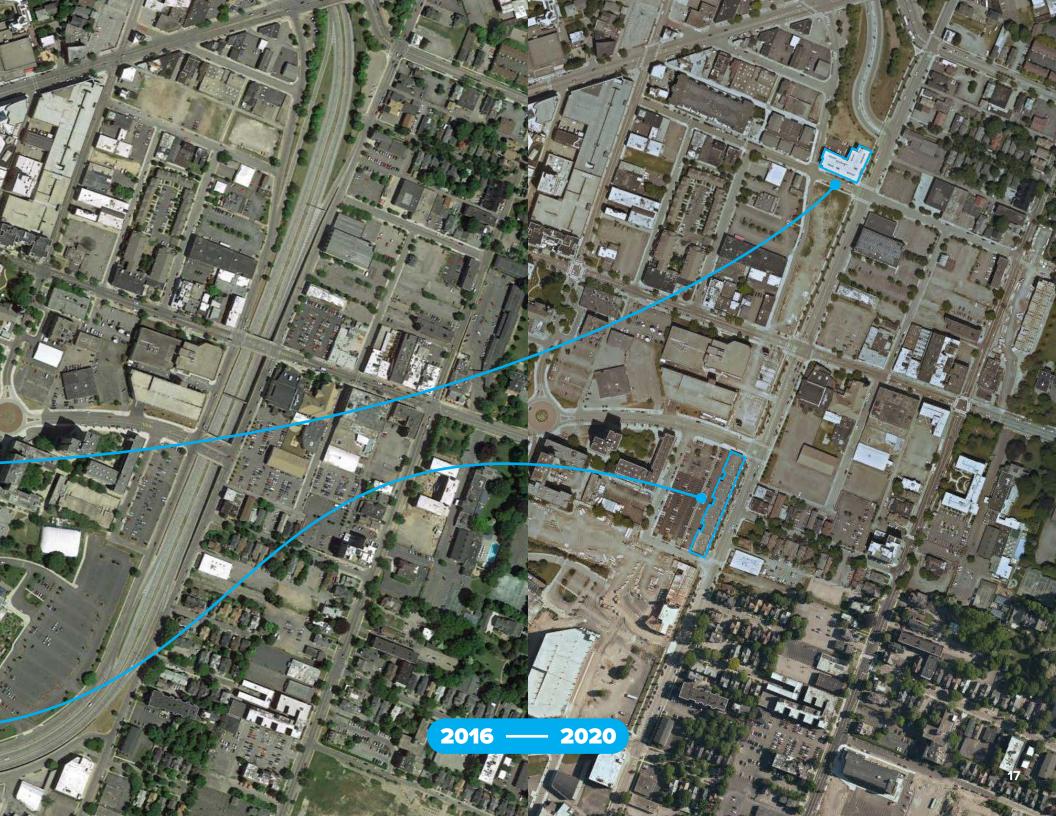
The project created 7 development sites along the newly transformed corridor and has since generated \$229 million in investment. Over 530 housing units have been constructed to date – more than half of which are **affordable** – along with 152,000 square feet of commercial space.

The project was funded with a \$16.8 million federal TIGER (now known as RAISE)* grant as well as \$3.8 million in subsidies from New York State and \$414,000 from the City of Rochester.

*The Transportation Investment Generating Economic Recovery (TIGER) and Rebuilding American Infrastructure with Sustainability and Equity (RAISE) programs fund transformative road, rail, transit, and port projects.







Sidebar

Inner Loop East







2013

Sunken Inner Loop East segment at Broad Street, looking west

2016

Inner Loop East is filled in

Feedback: During engagement for the Inner Loop North project, stakeholders indicated that the modern architectural style of the new developments along Union Street would not fit with the character of the Inner Loop North study area. They suggested architectural styles with more historic architecture as an alternative.





2019

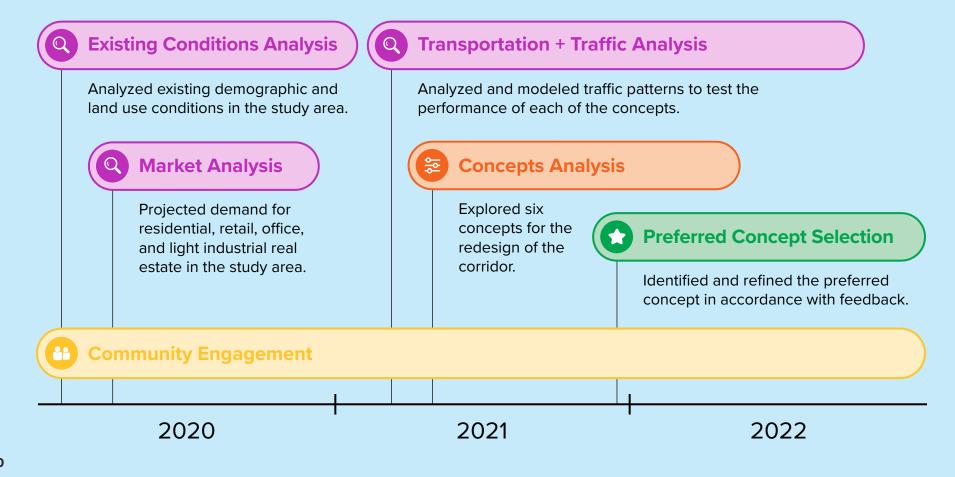
Construction at development sites

Today

Union Street is a low-speed, at-grade corridor with new and planned developments

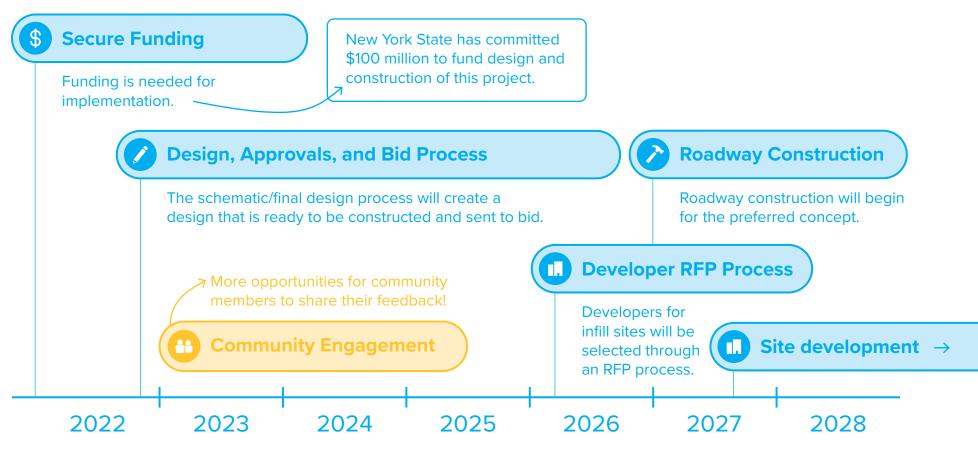
Planning timeline

This planning process involved multiple layers of analysis and explored several concept alternatives before identifying a preferred design. See schedule below:



Next steps

Once funding is secured, the preferred concept will advance to the design, engineering, and construction phases on the tentative schedule shown below:



Community engagement

A summary of community engagement events and key themes from community feedback.



Engagement activities page 22



Community feedback page 26

Introduction

The Inner Loop North Transformation Planning Study is a communitybased study to identify a re-design for the corridor that best meets the community's vision and needs.

Community engagement was prioritized throughout the planning process, with many different ways and opportunities for community members to get engaged. The Community Advisory Committee (CAC) – which was made up of over 50 representatives from local neighborhood groups and community organizations – helped guide the direction of the project. Additional feedback was gathered from community members at public workshops and pop-up events and was used to refine deliverables and findings throughout the planning process.

Public engagement activities were held in many locations throughout the study area to ensure a diversity in local perspectives. Engagement opportunities and project information were available on the project website (www.lnnerLoopNorth.com).

The CAC hard at work!

Engagement activities

A variety of engagement activities were offered throughout the planning process to encourage broad participation.

Public workshops

Stakeholder meetings

CAC meetings

TAC meetings

RESC meetings

Survey responses

Website views

6,500+ 22,000+

Direct mailers sent to area

residents and businesses

Technical Advisory Committee (TAC)

A group of 20 technical experts from City, County, and State agencies as well as other organizations who provided technical quidance to the project team and reviewed deliverables for accuracy.



Community Advisory Committee (CAC)

A group of 50+ representatives from neighborhood groups and organizations that helped guide the direction of the project with local considerations in mind. The CAC also participated in a walking tour of the study area to identify issues and opportunities on the ground.

Pop-up events

Pop-up events were held at the Public Market, the YWCA, and at Frontier Field during a Red Wings game to inform community members about the Inner Loop North project, to gather ideas, and to spread the word about upcoming meetings.

Racial Equity Subcommittee (RESC)

A subcommittee to the CAC whose mission was to foreground racial equity throughout the planning process by exploring the history and impacts of past planning decisions and making recommendations to foster greater equity in the future.

Mission:

This subcommittee seeks to center racial equity throughout the planning process of the Inner Loop North redevelopment by examining the history of racial trauma caused by municipal planning decisions, and crafting recommendations that create accountability and build authentic community.

Vision:

The racial equity subcommittee aspires to redefine the city building process as a vehicle for reparations that provides for the economic, social, and emotional well-being of Black and Brown residents.

Stakeholder meetings

Several small group meetings were conducted with interested or affected stakeholders in the study area so that the project team could better understand their visions and concerns. Stakeholder groups included the Lewis Street Committee, student groups from the World of Inquiry School, the Grove Place Association, and various businesses including Genesee Brewery and B&L Wholesale.

Public Workshop Round 1 March 24, 2021

The first round of public workshops introduced the Inner Loop North project to the community, outlined the planning process, and identified initial project goals. Attendees were encouraged to engage with the project team and share their ideas.



Public Workshop Round 2 June 23, 25, and 29, 2021

The six concept alternatives for the redesign of the Inner Loop North corridor were presented to the public for comment at the second round of public workshops. Community members also identified what they saw as opportunities for different parts of the study area. These workshops were held at the YMCA Center for Equity at Lewis Street, the Genesee Brew House, and at RIT's Center for Urban Entrepreneurship.



Public Workshop Round 3 December 2, 6 and 7, 2021

The preferred concept based on community feedback was revealed to community members at the third round of public workshops. Potential impacts of the implementation of the preferred concept, including traffic and greenhouse gas emissions, were reviewed. The project team asked for public comments to ensure that the preferred concept meets the community's needs as much as possible.

Online engagement www.InnerLoopNorth.com

The project website served as the repository for project-related materials throughout the planning process. Users could learn about upcoming events, view meeting summaries, access important project documents, respond to survey questions, and send feedback through an online comment form.

Community feedback

We have to proactively address gentrification.

Keep the connection to 490.

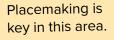
Make sure bike lanes connect to each other.

This is a unique opportunity to create bike connections to the existing cycle track and riverway trails and to create new north-south connections as well.

Ensure architectural diversity with new development. Don't just replicate the Inner Loop East project.

Reconnect the World of Inquiry School to the neighborhood.

There is so much potential to connect to High Falls in this area.



Create walkability for all people including those with disabilities, parents with strollers, etc.

Make sure street design works for all not just cars!

Address vacant properties, blighted properties, and out of area landlords.

Interpret the social history of the neighborhood, which is still reflected today.

Appendi

1

For a summary of all engagement activities and feedback, see **Appendix 1, Community Engagement Summary.**

Incorporate streetscape amenities like benches, trash, and others.

Restore Franklin Square and Anderson Park.

We need to focus on increasing homeownership in the neighborhood. We need more public art!

Emphasize walkability and bikeability.

Focus on rebuilding communities.

Need more trees!

Connect Center City with Hinge and the Marketview Heights neighborhoods.

Existing conditions



An analysis of existing social, physical, and economic conditions in the study area.



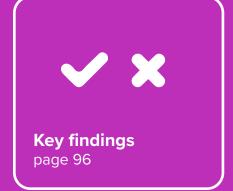
Community profile page 30



Market projections page 54

INNER LOOP

Transportation system page 68

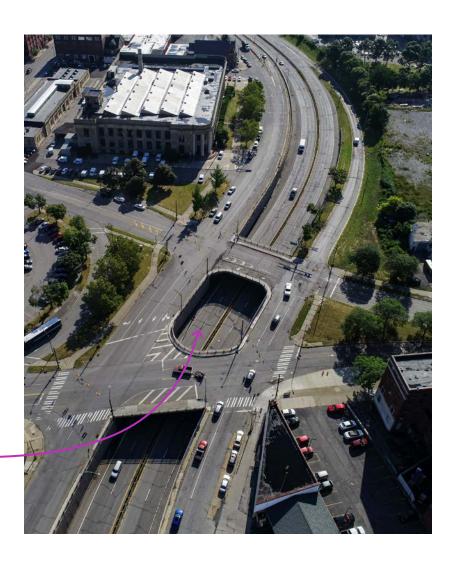


Introduction

This chapter profiles the Inner Loop North study area and presents an overview of the people who live there, its current economic conditions and potential, and the effectiveness (or not) of the existing transportation system.

The existing conditions analysis provides a baseline to compare future changes against. Several key issues and opportunities were identified as part of this analysis and can be found in the **Key Findings** section of this chapter (page 96). These issues and opportunities, along with community feedback, provided the basis for the initial development of the alternative conceptual redesigns for the Inner Loop North corridor.

The 11-lane-wide Inner Loop North corridor disrupts the urban fabric in the study area.



Community profile

An introduction to the people, economy, and character of the Inner Loop North study area.



Regional context page 32



Community character page 34



Demographics page 40



Population page 44



Employment page 46



Housing page 48



Business page 52



Community profile

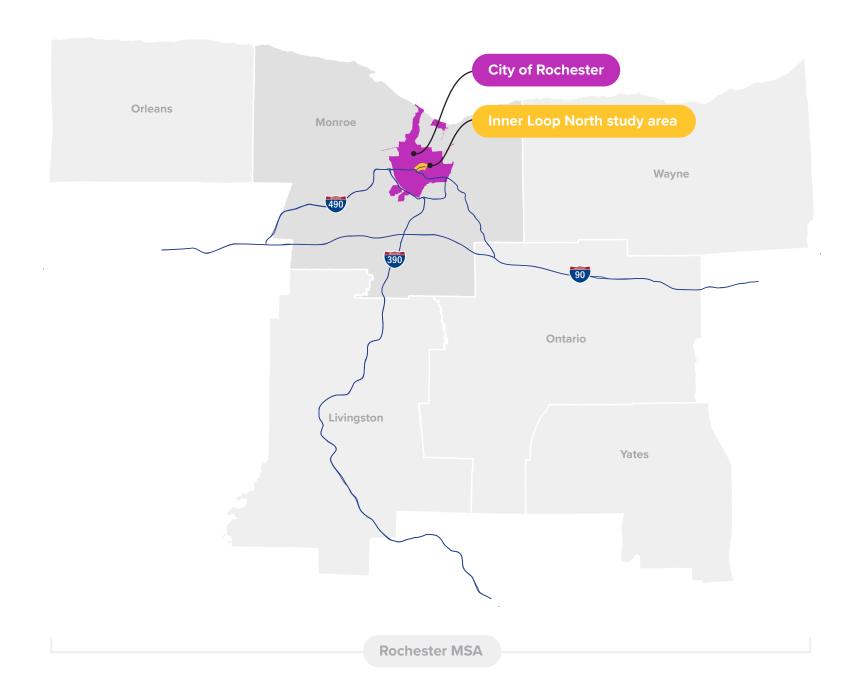
Regional context

The study area is located in the heart of the City of Rochester and straddles the northern segment of the Inner Loop corridor.

The City of Rochester is the anchor of the Rochester Metropolitan Statistical Area (MSA). When compared to other Rust Belt cities, the diversity of Rochester's local economy, which has historically been supported by manufacturing, science, technology, healthcare, and higher education, has allowed the city and the region to experience a greater level of economic stabilization, while minimizing impacts of deindustrialization.

The study area faces considerable economic disadvantage when compared with the Rochester MSA. Despite this, the study area has been growing at a faster rate per year than the larger region over the past decade. This growth and the recent success of the nearby Inner Loop East Transformation Project signals the potential of the study area and the power of visionary transportation projects to transform communities – this time for the better.





Community character

Many unique sub-areas make up the Inner Loop North study area including part of the northern portion of Downtown Rochester, the up-and-coming High Falls area, established single-family neighborhoods in Marketview Heights, industrial uses in Upper Falls, and almost a mile of Genesee River frontage.

The study area is incredibly diverse in its uses, feel, and physical character for a relatively compact 1.5-mile corridor. The urban character of downtown, with its high-rise office and residential buildings and ground-floor retail, gives way to small-lot, single-family housing just across the Inner Loop. To the west, these urban neighborhoods give way to much larger lots with lower-density industrial and apartment complexes. And across the river is an evolving commercial district with an abundance of surface parking. The presence of the Inner Loop impacts all of these districts and disrupts the urban fabric between them. Connectivity is limited by it, the river, and the CSX railroad, and the physical and psychological barrier created by the loop has real impacts on community cohesion and equity in economic opportunity.







Study area Land use



11%













commercial

residential

industrial

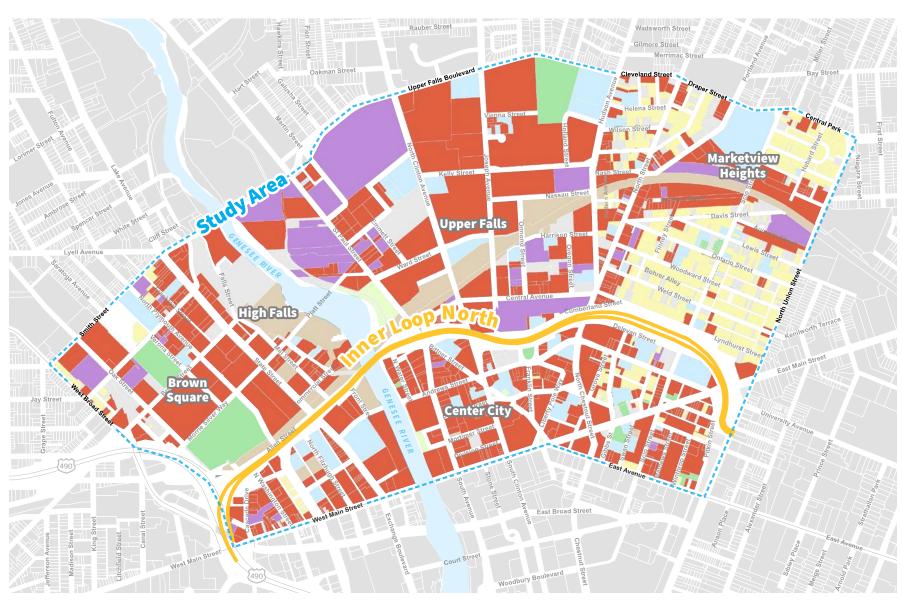
community services

vacant

public services

recreation/ entertainment

parks



Community character

Zoning

There are several zoning districts located in the study area, including all densities of residential, several types of neighborhood and community centers, as well as urban renewal and planned development.

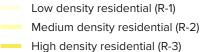
The Center City District (CCD) is the largest zoning type within the corridor and can be found immediately adjacent to the entire extent of the Inner Loop North corridor and throughout Downtown Rochester. This special district is intended to foster a vibrant, welcoming, and accessible Center City by encouraging residential development and retaining the broad range of commercial, office, cultural and entertainment, institutional, and public uses present within the city. The CCD includes a set of design-based criteria and identifies specific areas where historical and architectural precedents guide future development such that it is compatible with the existing identity of the community.

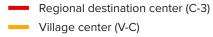




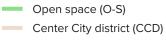


Study area **Zoning**





Community center (C-2)

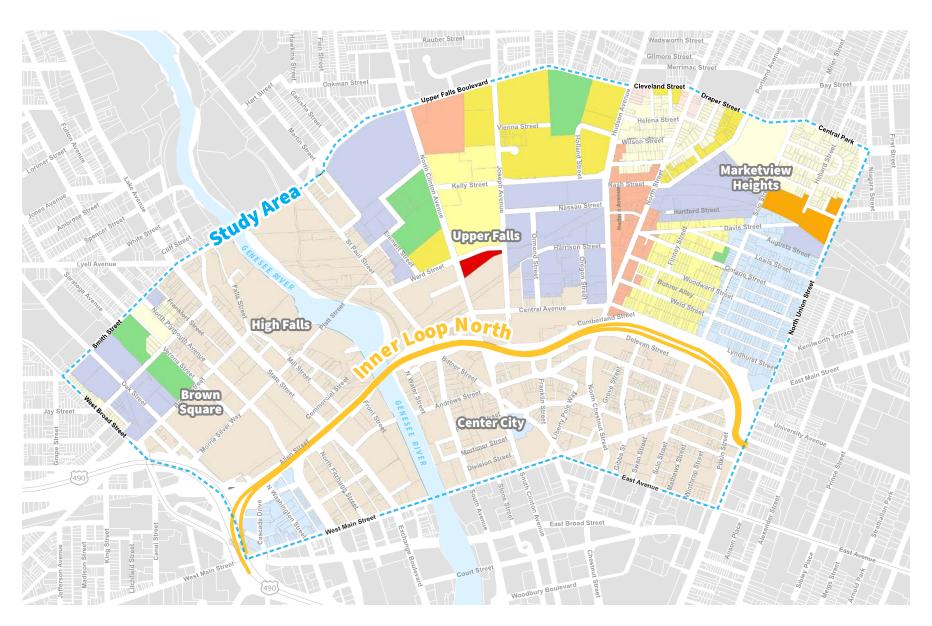


Urban renewal district (URD)

Neighborhood center (C-1)

Industrial (M-1)

Planned development district (PD)



Sidebar

Zoning Alignment Project

The City of Rochester's Zoning Alignment Project (ZAP) is focused on identifying updates to the city's zoning code to align regulations with the guiding principles established in the Rochester 2034 Comprehensive Plan.

Following the policy recommendations included in Rochester 2034, ZAP will update development regulations and, in some cases, modify zoning district boundaries to implement the vision outlined in the comprehensive plan.* The city's zoning map will be updated based on the Future Land Use Plan adopted as part of Rochester 2034. Proposed zoning changes in the study area (see map at right) promote increased mixeduse development both at neighborhood and downtown scales. Increased residential density is also encouraged through up-zoning of some areas to medium- (up to 4 units) and high-density (5+ units) residential.

*As of writing, the ZAP code is still in draft form and is not yet adopted.

Potential impacts in the Inner Loop North Study Area:

Flexible mixed-use (FMU)

The Flexible Mixed-Use (FMU) District is a unique district intended to permit a range of uses to help revitalize clusters of existing obsolete industrial complexes and large-scale buildings that have challenges in meeting market demands. This district reflects the growing popularity of loft residences, unique businesses, artisanal crafts and production, light industrial, and creative adaptive reuse of legacy commercial and industrial buildings. While the reuse of existing buildings is the primary goal of this district, new construction is permitted, subject to requirements that ensure compatibility with adjacent uses.

Downtown mixed-use (DMU)

The Downtown Mixed-Use (DMU) District is intended to foster a vibrant, safe, live-work-play district by encouraging residential development and a broad range of commercial, office, institutional, public, cultural, and entertainment uses and activities. The regulations are intended to define and promote Downtown Rochester as the anchor for the region and as a desirable place with a dense, pedestrian-oriented environment.

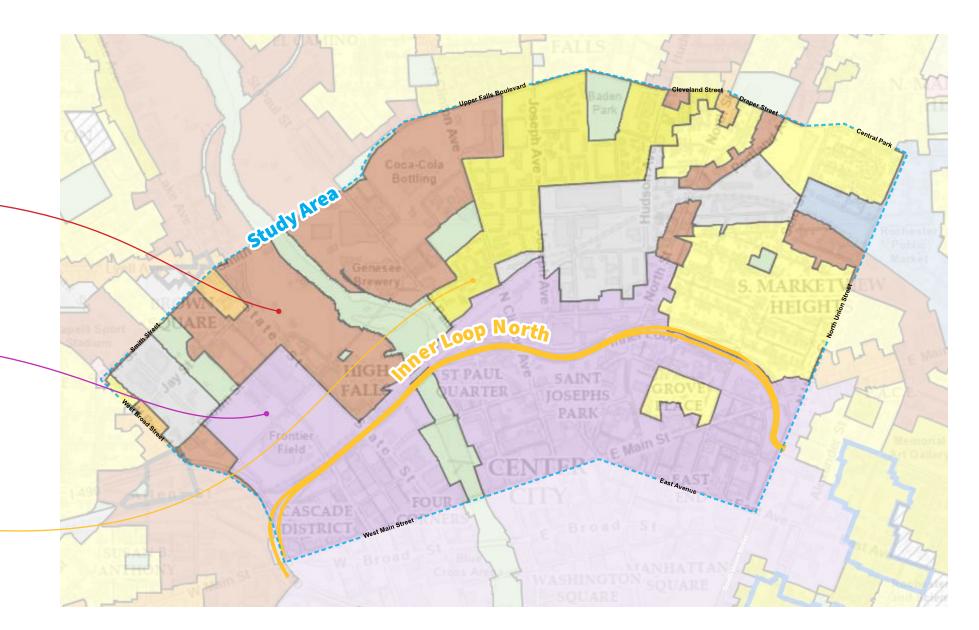
High-density residential (HDR)

The High-Density Residential (HDR) District protects, preserves and enhances existing residential areas of higher density which include multifamily dwellings of five or greater units, mixed with other housing types. The HDR District is intended to provide residential areas that accommodate higher-density housing while protecting, maintaining and enhancing existing residential areas. The HDR District may include various housing types ranging from single-family detached to high-density apartments. The district adds to the urban character of Rochester and provides diversity in housing types, including high-rise apartment living. As in the other residential districts, the district includes and encourages home occupations and other live-work options and permits low intensity commercial uses in existing as-built commercial buildings and within the first floor of buildings with 20 housing units or more.

Proposed Zoning Districts

- Downtown mixed-use (DMU)
- Flexible mixed-use (FMU)
- Neighborhood mixed-use (NMU)
- Open space (OS)

- High density residential (HDR)
- Medium density residential (MDR)
- Village center (VC)
- Industrial (IND)



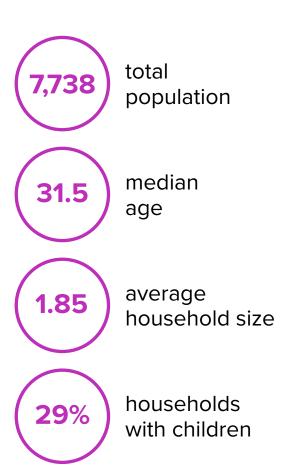
Demographics

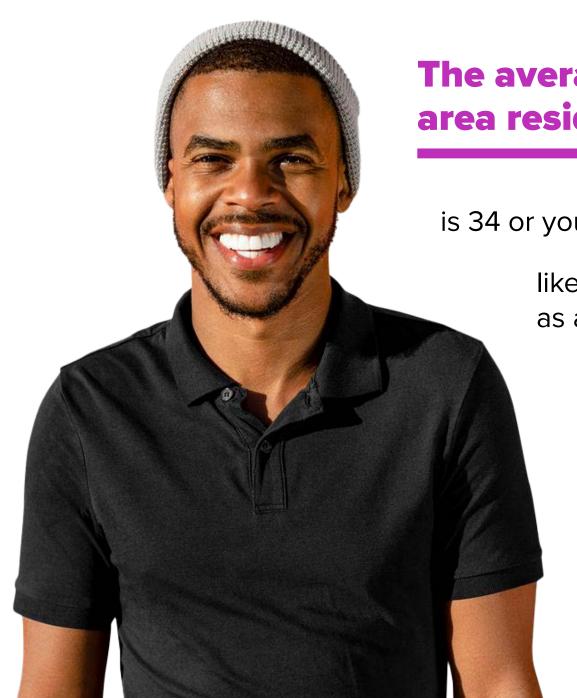
The Inner Loop North study area is a young and growing community, with a diverse population.

The study area's diversity, both in demographics and in socioeconomic status, is so great that generalizations for the whole study area do not capture the true diversity that exists between neighborhoods and especially north and south of the Inner Loop corridor.

What is true for the whole study area is that residents are generally younger with smaller household sizes and fewer children living at home when compared with the larger Rochester region. The study area is also incredibly diverse, with residents of many races, ethnicities, and cultures. The study area's diversity index (81, on a scale of 1 to 100) is almost double that in Monroe County (48) and the larger Rochester region (45).

The downtown segment of the study area on the south side of the Inner Loop corridor has gained momentum as of late as a popular location for young professionals. In general, household incomes and education rates here are higher than those of residents who live north of the Inner Loop corridor. Residents of these northern neighborhoods are more likely to face financial and educational constraints that impact their housing and employment accessibility.





The average study area resident

is 34 or younger

likely identifies as a minority

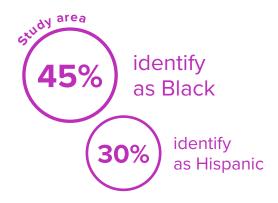
> does not have a college degree

> > makes less than \$15,000 a year

lives alone or with one other person

Demographics



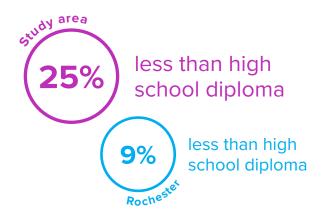


Age

Study area residents are generally younger, with over half being 34 or younger and relatively few being over the age of 65. Residents aged 15 to 24 make up the largest share at nearly 20% of the total study area population. Another 19% of residents are children 14 and under.

Race and ethnicity

The study area is incredibly diverse. The majority of residents identify as minorities and 45% identify as Black. Many residents (30%) also identify as having Hispanic origin, with a significant concentration of residents having Cuban, Mexican, Puerto Rican, South or Central American, or Spanish origin.





Education

Study area residents generally have lower education levels than the overall City of Rochester average. 52% of study area residents have only a high school diploma or less. Educational achievement is also notably lower for residents who identify as Black or Hispanic, compared to those who identify as white, signifying a racial inequity in education attainment.

Household income

The median household income in the study area is \$16,000, which is considerably lower than the \$35,590 median income in the City of Rochester. Almost half (48%) of study area residents make less than \$15,000 per year. For comparison, the federal poverty rate* is \$13,590 for an individual and \$18,310 for a family of 2.

*U.S. HHS Federal Poverty Guideline, 2022

Population

The study area has been slowly growing over the past 10 years. Recent and anticipated construction projects are attracting new residents to the area south of the Inner Loop corridor and forecasts suggest that the population will continue to grow into the future.

In 2019, a total of 7,738 residents lived in the study area – a 5.2% increase since 2010. Despite representing less than 1% of the county population, the study area captured 3.2% of its nine-year growth, indicating increased momentum in population growth in the urban core of Rochester, particularly in the part of the study area south of the Inner Loop. Population growth cohorts bear this finding out, with Millennials and Baby Boomers seeing the strongest absolute growth in the study area from 2010 to 2019. Urban living often appeals to these young professionals and empty-nesters looking to downsize.

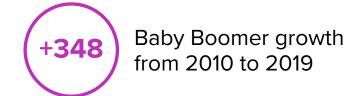
Extrapolating these trends out, and considering a sustained interest in urban living across the country, suggests that population in the study area will continue to increase, with most of this increase concentrated in the downtown segment. New housing options developed as part of the Inner Loop North transformation have the potential to bring residents to areas north of the roadway corridor, as well.

Study area stats, 2019

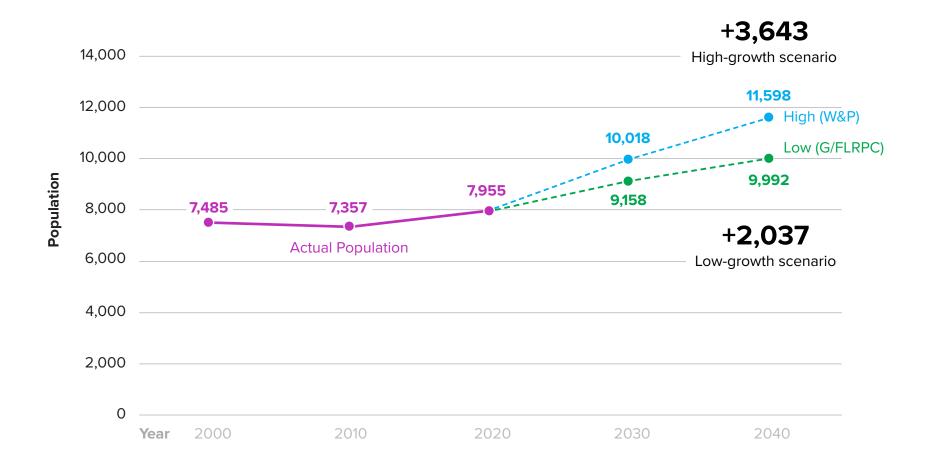








Population forecasts



Employment

The study area is an important economic anchor for the region, offering professional office space downtown, light industrial and warehousing space north of the Inner Loop, and large anchors like the Kodak Tower Campus, Genesee Brewing Company, and B&L Wholesale Supply.

The study area is home to 24,477 jobs. Wholesale Trade, driven by companies concentrated immediately to the north of the Inner Loop like FIFCO USA (Genesee Brewing) and Coca Cola Vending, represents the largest sector with approximately 5,860 jobs. Professional and Technical Services (3,710 jobs) and Public Administration (3,648 jobs) follow.

The study area is a major commuting destination with more than 24,000 employees commuting to the study area to work. Conversely, 2,500 study area residents commute out of the study area for work and only 250 both live and work in the study area.







*White Collar jobs are defined as those in the management, business/financial, professional, sales, or administrative support sectors. Services and Blue Collar jobs are the other main employment categories.

Select major employers

Those listed are just a few of many employers in the Inner Loop North corridor.







Genesee Brewing Co. 445 St. Paul Street

Services: brewery

Number of employees: 600

Coca Cola Vending
123 Upper Falls Boulevard

Services: distributor of Coca Cola

products

Number of employees: 90

B&L Wholesale Supply 70 Hartford Street

Services: wholesale distributor of residential and commercial building

products

Number of employees: 100

Housing

The study area has one of the largest concentrations of affordable and incomequalified housing in the city. Recently, there has been considerable new marketrate construction downtown south of the Inner Loop North corridor.

Most units (85%) in the study area are multi-family, which reflects the urban nature of the area. There are approximately 70 apartment communities in the Inner Loop North study area. Nearly 80% of all housing units are renter-occupied and the data suggests that many single-family units are also renter occupied. Rents vary considerably, especially on either side of the Inner Loop, with higher rents generally south of the corridor in downtown. Median home values in the study area (\$80,000) are considerably lower than in the Rochester region (\$145,000).

Study area stats, 2019





Several formal affordable and income-qualified housing developments are located just north of the Inner Loop corridor including: Andrews Terrace, the YWCA, St. Simons, FIGHT Village, Wilson Commencement Park, Chatham Gardens, Los Flamboyanes, Lena Gantt Estates, Holland Townhouses, VOA Liberty Landing, Upper Falls Square, and Harriet Tubman Estates. These housing developments are significant assets to the study area – and will be important partners to work in concert with as the Inner Loop North Transformation Project moves forward – as they provide a large supply of rent-controlled units that are affordable to neighborhood residents.

From 2010 to 2019, the study area outpaced the county in terms of housing unit growth. It grew by almost 11%, adding 419 units, while the county grew by only 3%. Much of the new residential investment in the study area has been multi-family rental units targeting young professionals or empty-nesters downtown. Nearby, several developments have popped up along the Inner Loop East corridor (Union Street), including Charlotte Square Apartments and the VIDA Apartments and Townhomes.

Housing

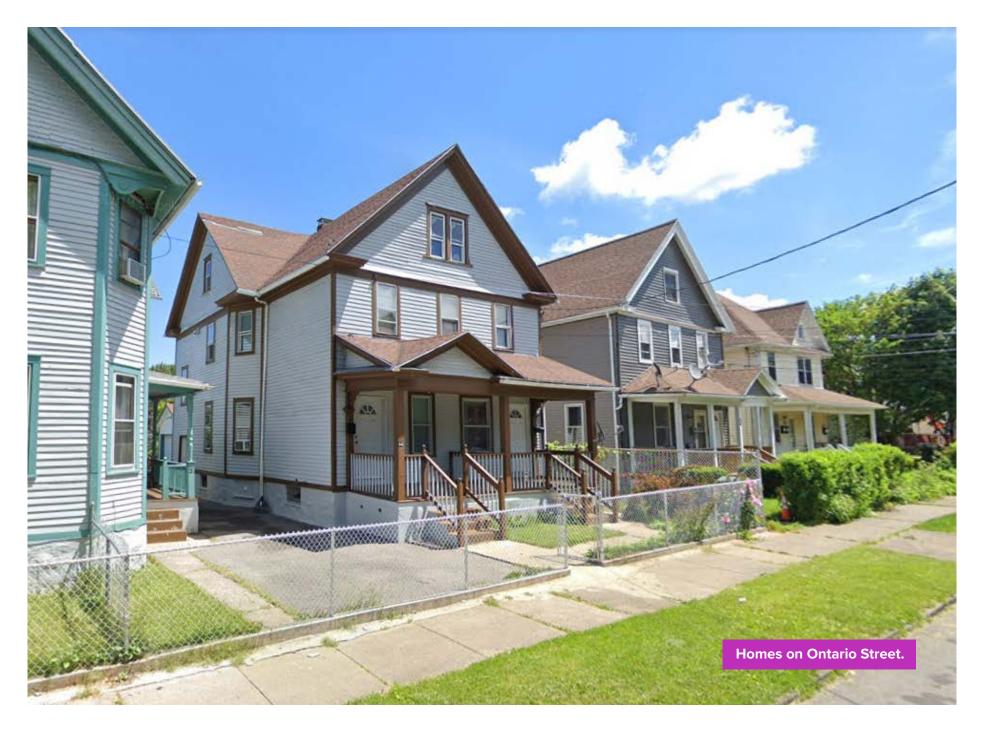
The study area is well-positioned, perhaps more than anywhere else in the city, to add mixed-income housing units while minimizing risk of displacing existing residents and while maintaining a large supply of low-income units.

Because the area has a huge concentration of affordable and income-qualified housing for low, very low, and extremely low income residents, rents at many units are regulated, thereby providing a buffer of protection against potential rent and housing price increases as a result of new development in the immediate area. **Furthermore, re-design of the Inner Loop corridor itself will not displace any residents because redevelopment will occur almost entirely within the existing transportation right-of-way.**

Adding mixed-income units (including affordable, workforce, market-rate, and moderate- to higher-end) will diversify housing options in the study area and create a healthier mix of units that is attractive across the entire income range. Mixed-income housing will attract middle- and higher-income residents, underwrite market-rate units, and encourage the development of additional uses like business, retail, arts and culture, and entertainment that will ultimately benefit all neighborhood residents. Incorporating housing that is affordable to neighborhood residents into new developments (potentially through City-issued RFP requirements) can also help expand the supply of accessible, affordable housing and promote housing affordability in the study area. The City also can consider proactive strategies to support existing renters and homeowners and to help maintain and improve existing housing stock.

Low incomes, not high housing costs, are the root of affordability challenges in Rochester. New supply, affordable or marketrate, is unlikely to address this challenge. Housing policy alone will not be the direct solution."

City of Rochester Citywide Housing Market Study (2018)



Business

The Inner Loop North study area is home to hundreds of businesses, millions of square feet of office space, and is a hub for light industrial uses.

Several large companies, including Kodak, Monroe Community College, and Carestream Health, are balanced by a diverse supply of small and local businesses. Light industry is a successful and promising sector in the study area. Light industry businesses in the study area account for one-fifth of the region's jobs in this sector, underscoring the importance of the light industry sector to economic growth locally and in the larger region.

Retail offerings, while diverse, seem not to accommodate residents' basic needs, as there is considerable sales leakage outside the study area, especially for food-related businesses like restaurants and food and beverage stores.



Light industrial

The Inner Loop North study area is home to a concentration of light industrial spaces, especially north of the Inner Loop. These types of businesses include large wholesale distribution centers for FIFCO USA (Genesee Brewing Co.) and Coca-Cola Vending, as well as smaller businesses that benefit from easy access to the interstates via the Inner Loop. In this area, many light industrial buildings are fully occupied but are reaching obsolescence based on more modern standards. Given that nearly 20% of the region's Wholesale Trade and Transportation and Warehousing jobs are located in the study area, it will be important to incorporate light industrial needs as a consideration in future planning.

Sales leakage



food services and drinking places*

es \$19 million

restaurants and other eateries* \$12 million

food and beverage stores \$2 million

clothing stores

\$2 million

general merchandise stores

*includes food service contractors, caterers, mobile food services, and alcoholic beverages *includes full- and limited-service restaurants, cafes, and nonalcoholic beverages

Leakage (spent outside study area)

Surplus (spent inside study area





Office

Most of the office space in the Inner Loop North study area is located south of the Inner Loop in Rochester's Central Business District (CBD). Major office spaces include the Kodak Tower Campus, the First Federal Plaza Building, and the Cascade District. Recent planning and incentive efforts, including the Downtown Innovation Zone, have been successful in supporting some growth in CBD business development, but net absorption rates from 2015 to 2020 have been negative or 0 (even prior to the effects of COVID-19) – meaning that more companies were moving out of the CBD offices than into them. However, vacancy rates were considerably lower in the study area (which excludes the part of the CBD south of Main Street) for Quarter 1 of 2020, averaging at 15% compared to 25% in the CBD.

Retail

There is approximately 3 million square feet of retail space in the study area and 175 retail properties. Retail space is generally concentrated on major transportation corridors including State, Main, and North Streets. Retail offerings in the study area can be categorized into three main groups: (1) food and beverage/restaurants, (2) consumer services like hair and beauty salons, pharmacies, and gyms, and (3) grocers and food sales. Aside from the Upper Falls Shopping Center (which includes a Tops Market), residents must travel outside of the study area to access many of their basic retail needs. In 2018, the study area had \$64 million in sales leakage (which represents resident spending *outside* the study area), likely because their needs were not being met by available offerings in the study area.

Market projections

Projections for future residential, retail, office, and light industrial demand in the study area.



Market demand page 56



Downtown potential page 60



West of the river segment potential page 62



Central segment potential page 64



Residential/eastern segment potential page 66



Market demand

Based on demand forecasts, the Inner Loop North study area will be able to support a variety of land uses over the next 20 years, including residential, office, retail, and light industrial space.

In the short-term, demand is most heavily weighted towards residential and office opportunities. Retail development becomes more viable in the future as more residents come to the area, and both population density and consumer spending potential increase. Light industrial development will likely be incremental, with a portion of demand going towards revitalization of existing spaces in the area.

Each type of development is best suited to different parts of the study area based on demand potential and existing neighborhood character. Location-specific development potential is explored in the sections that follow.

Impact of COVID-19: It should be noted that market demand projections were calculated towards the beginning of the COVID-19 pandemic. Many things have changed since that time – including significant increases in building materials and other development costs, potential decreases in demand for physical office space in light of the switch to remote work, etc. – and it is not known at this time what the long term trends or consequences of these changes will be on future development demand.

Case study:

Inner Loop East Transformation Project







7 development sites



534 housing units created



50% percent affordable housing units



152,000 sf commercial space



Market demand

+1,186 to +2,111 units





by 2040

+132,000 to +406,300 sf.

by 2040

Residential demand

Most indicators suggest that demand for urban residential options will continue into the future, regardless of the effects of the pandemic. In the study area, most residential demand will likely be for multi-family products. Multi-family will likely be primarily renter-occupied, but there will be opportunities for for-sale townhouse units as well (as has been seen on Inner Loop East). Future single-family detached demand will be infill, redevelopment of existing units in the established neighborhoods, or on newly-created sites.

Impact of COVID-19: There is expected to be some softness in the rental market in the short-term. Absorption of new units is likely to be delayed in some markets as existing tenants struggle to make rent payments or new residents delay household formation. This trend is likely to drive new rent specials and reduce annual rent increases.

Office demand

Based on projected employment growth, the study area could reasonably add between 132,000 and 406,300 square feet of office space by 2040. These figures are moderated by a considerable amount of existing available office space, including 800,000 square feet at the Kodak Tower Campus. From a financing perspective, some portion of the study area's vacant office inventory would need to be leased before lenders consider investing in new properties, particularly for multi-tenant space. It should be noted that a portion of the vacant inventory has reached obsolescence and might be converted to other uses or demolished.

Impact of COVID-19: Now that companies know their employees can work remotely, office work is unlikely to return to the same format as prepandemic and, long-term, companies may reduce their office space needs. This may dampen the projected demand for office space shown above.

+27,500 to +55,000 sf.

by 2040

Retail demand

Considering increases in population density and area income, retail demand is expected to support between 27,500 (low-growth scenario) and 55,000 (high-growth scenario) square feet of new retail space in the study area by 2040. Most of the demand in both scenarios is expected to be focused in food-related businesses, reflecting the notable leakage these businesses demonstrated. Other large potential spending categories include convenience and drug store purchases.

Impact of COVID-19: Retail is widely expected to be one of the most impacted industries during and following the COVID-19 pandemic. Local retailers have been hit particularly hard, with many having to close their doors as consumer spending and store traffic plummeted. It should be noted that some retailers, primarily grocery, pharmacy, and building supply stores have fared well during this time. COVID-19 has also amplified trends that were already impacting retail, including shifting spending online and away from brick and mortar.

+117,549 to +292,877 sf.

by 2040

Light industrial

The study area is expected to generate demand for between 117,549 and 292,877 square feet of new light industrial space over the next 20 years. These estimates consider the existing concentration of light industry jobs in the study area as well as factors like transportation accessibility and access to labor force.

Impact of COVID-19: Light industrial development, particularly warehouse and distribution space, has been bolstered by the COVID-19 pandemic, largely driven by the increase in online shopping as brick and mortar retailers closed. Pre-pandemic, the light industrial sector had been experiencing strong growth as people sought to obtain their online order quicker and distribution companies competed to address last-mile distribution gaps. This trend is expected to continue in the short- and long-term.

Downtown potential

Opportunities for development in the downtown segment of the study area are diverse. Residential, retail, and office space all have significant development potential.

Consistent with other urban cores across the U.S., Downtown Rochester has experienced reinvestment in recent years, attracting both new construction and renovation of existing buildings. Recent private investment has been focused on multi-family residential targeting young professionals and empty-nesters. The Center City neighborhood has also been able to leverage the success of the Inner Loop East Transformation Project and the ROC the Riverway initiative.

Demand for urban living has experienced strong momentum as both young professionals and empty-nesters seek to live in culturally-rich areas that offer a wide range of mobility options. Residential, retail, and office space represent key areas of real estate potential. While the retail market downtown has historically been limited, future potential could be supported through the development of new residential units.

Downtown is and will remain an important employment node for the region. It attracts a large inflow of commuting employees and is an economic anchor for the region, hosting a notable concentration of professional and government office buildings. As companies seek locations that are effective in attracting young talent, many are looking at urban locations like Downtown Rochester.

Development Potential



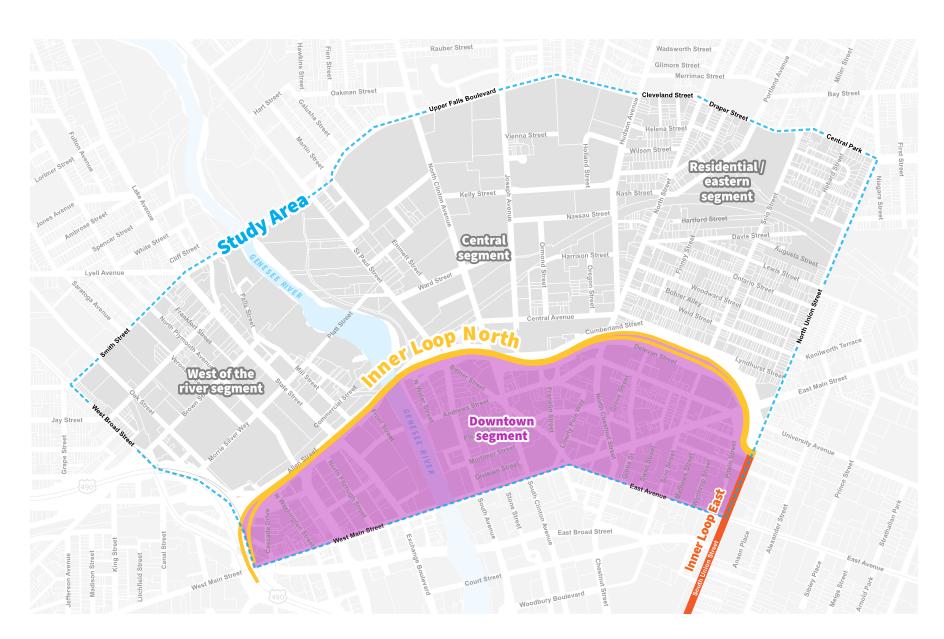
Downtown segment











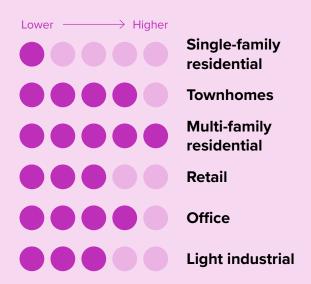
West of the river segment potential

The segment of the study area west of the Genesee River is undergoing a notable resurgence, making many types of development possible in the future.

Recently, the Brown Square area has begun a significant transformation, from a major employment node driven by a single employer (Kodak), to a more diverse employment base supporting new businesses and a higher-education facility (MCC). Recent revitalization efforts in High Falls have brought new residential units and commercial spaces to this uniquely-charming, mixed-use area. Plans are also in the works to create a State Park at High Falls which would significantly increase development potential here.

Of all spaces in the study area, the segment west of the river has the largest concentration of surface parking lots, some of which are severely underutilized. This space represents opportunities for redevelopment and, with additional streetscaping and connectivity improvements, could be designed to compete with downtown office products, which have the advantage right now of a more urban and accessible land use pattern. Targeted light industrial and townhome development would also fit in this part of the study area.

Development Potential



West of the river segment











Central segment potential

The central segment of the study area is uniquely positioned to host light industrial development (or redevelopment) as well as a variety of housing options that are accessible to neighborhood residents.

The central segment of the study area, which includes the Upper Falls neighborhood, has a diverse mix of land uses, but is bisected by an active rail line which creates physical and psychological barriers for residents and employees. Recent investments, including the new Genesee Brewhouse and Amtrak station, have increased visitation to the area but, beyond these nodes, there has been little other investment.

The central segment supports a range of light industrial businesses, including manufacturing, warehousing, and distribution. Most industrial buildings are older and serve long-term tenants. These buildings may not be suitable for new businesses as modern building standards are evolving. Development of new light industrial space in this area would likely take the form of redevelopment of existing, obsolete buildings.

The neighborhood's residential uses are concentrated mostly on the north side and are primarily lower-density multi-family developments with surface parking. Protecting and expanding these and other types of housing options that are attainable to existing residents and a range of income levels should be a focused goal for this segment.

Development Potential



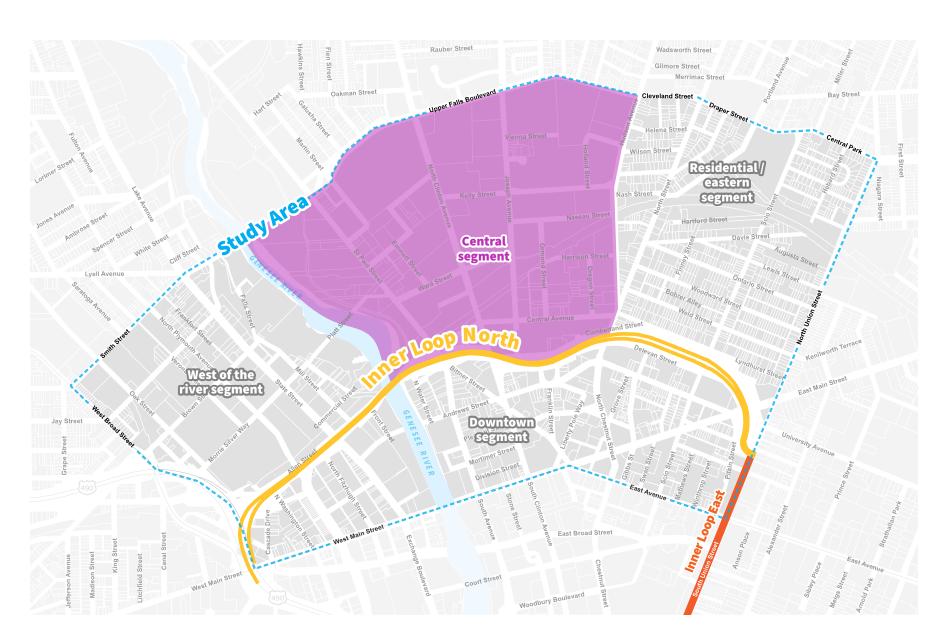
Central segment











Residential/eastern segment potential

The largely residential nature of the eastern segment of the study area makes it a good fit for housing development, especially single-family and lower-density.

Future land use patterns in the eastern segment of the study area should reflect and be consistent with the character of the single-family residential neighborhoods – including Marketview Heights – that have long-been established in this area. As such, development potential in this segment will likely be driven by new, infill, or redevelopment projects that are residential in nature. These projects should have a focus on providing quality housing to varying income levels. Non-residential development should be considerate of adjacent uses and neighborhood edges.

Development Potential



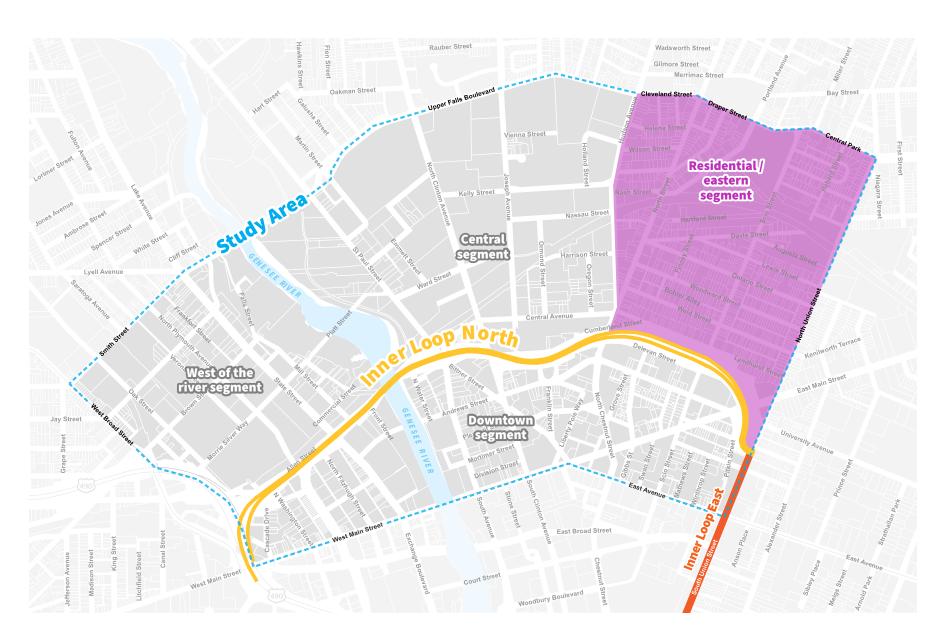
Residential/ eastern segment











Transportation system

A look at the Inner Loop and multi-modal accessibility in the study area.



Vehicular travel page 70



Crash analysis page 74



Pedestrian network page 78



Bicycle network page 80



Transit network page 84



Roadway infrastructure page 90



Urban design page 94



Vehicular travel

On the Inner Loop, the car is king. Motorists can cruise through Downtown Rochester without having to navigate intersections or wait for cross-traffic. But in the neighborhoods that surround the Inner Loop, it's a different story.

The Inner Loop's uninterrupted east-west travel and the barrier it creates in north-south connectivity create two distinct types of users. First are those that use the Inner Loop as part of a much longer journey. These drivers most likely live in western city neighborhoods or surrounding suburbs and are using the Inner Loop to travel into Downtown Rochester or to east-side neighborhoods. They use the Inner Loop as it was designed – to quickly move through the city.

The second group of users are those who live in the neighborhoods surrounding the corridor. They use the Inner Loop comparatively less and for shorter trips. They are also more likely to favor walking or using public transit, sometimes due to fiscal constraints. These users see the Inner Loop as a barrier both to physical and community connectivity and to economic opportunity.

Inner Loop North by the numbers:

Speed limit:

45 mph

Average trip length for trips that use the Inner Loop:

10+ miles

According to travel patterns, trips that use the Inner Loop as a leg of the journey are regional, averaging 10 miles or more in length.

Average trip length for trips that start or end in Inner Loop neighborhoods:

< 5 miles

Vehicular trips that start or end in the neighborhoods adjacent to the Inner Loop are much more local in nature than travel along the Inner Loop itself. Nearly 60% of trips are less than 5 miles in length, with 25% being less than 2 miles and 10% being less than 1 mile.



Vehicular travel

Appendix

For an analysis of existing traffic conditions, see **Appendix 4, Traffic Inventory and Assessment.**



I-490 interchange

About 80% of Inner Loop trips are either coming from or going to the I-490 interchange, which suggests the continued importance of the interchange regardless of the re-design of the Inner Loop.

Access to and from 490 will continue to be important to commuters who travel into and out of the study area for work and to local businesses who rely on convenient access to 490 for their operations.



Data from NYS DOT, Annual Average Daily Traffic (AADT) counts, 2019 (pre-pandemic)



- 4,000 vehicles per day or less
- 10,000 vehicles per day or less
- 25,000 vehicles per day or less
- 50,000 vehicles per day or less
- more than 50,000 vehicles per day

Traffic volumes

Traffic volumes along the Inner Loop are generally highest at the far west end near I-490 and decrease heading east, with a significant drop-off in volume east of the river. The Inner Loop carries the most traffic of all streets in the study area.

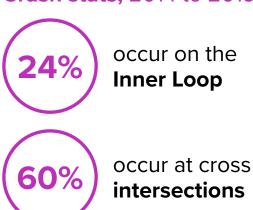
A re-designed Inner Loop will undoubtedly alter traffic patterns. Considerations must be made to ensure that traffic re-balances without placing undue burden on other streets and without creating lengthly backups on the re-designed corridor during peak periods.

Crash analysis

Most crashes within the Inner Loop corridor occur on streets that cross the loop and at intersections, not on the mainline itself. Crash types are typical for an urban street network, including rear end and right angle collisions. However, several areas of special concern do exist along the corridor where crash rates exceed the statewide average.

For the five-year period from August 2014 to July 2019, a total of 1,042 roadway crashes were reported along the Inner Loop North corridor and its cross-streets, averaging to roughly 200 crashes per year. Most of these crashes (60%) occurred on cross-streets, particularly where north-south roadways either move under or over the Inner Loop. Driver error, including inattention, unsafe actions, and improper movements, was listed as the leading contributing factor to intersection crashes. While driver inattention and unsafe actions are not related to roadway design, improper movements often result from complicated roadway designs that may be confusing to drivers. Crashes that occur on the Inner Loop mainline are less frequent (24%) but are often related to speeding. Lighting and weather conditions do not appear to have contributed substantially to crash frequency or severity. Fortunately, most crashes on the corridor resulted in property damage only (44%), less than 20% resulted in injuries, and none were fatal.

Crash stats, 2014 to 2019



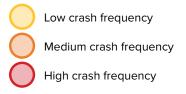






Crash analysis

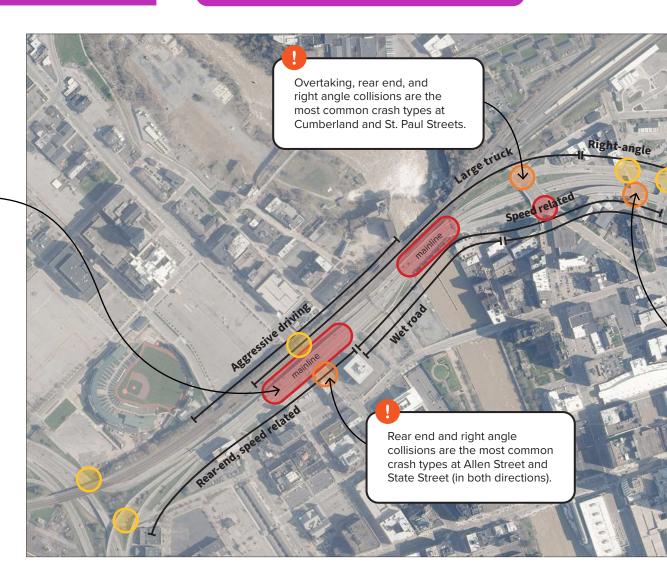
For more information about crashes in the study area, see Appendix 5, Crash Analysis.



Crash frequency

Most of the crashes that occurred on the Inner Loop mainline occurred east of I-490 near the State Street overpass, where westbound evening peak period queuing (backups from I-490) contribute to rear-end crashes, and along the bridge over the Genesee River. A number of crashes were also reported under the Saint Paul Street, North Clinton Avenue, and North Street bridges, where hydroplaning caused by rainwater ponding resulted in collisions with other vehicles or fixed objects.

Rear ends, right angles, and overtaking crashes made up about two-thirds of crashes that occurred at intersections. These types of crashes are typical for urban intersections.







Areas of special concern

The New York State Department of Transportation (NYSDOT) has identified several Priority Investigation Locations (PIL) along the Inner Loop mainline where crash rates exceed the statewide average for similar facilities by 2.5 to 3-times and, as a result, there is a 99.9% level of confidence that a safety problem exists. Most PILs are located on the western segment of the Inner Loop where an unusually high concentration of rear-end, speed-related, and wet roadway crashes occur. The eastern segment of the Inner Loop also sees higher-than-average rear-end crash rates between Joseph Avenue and Scio Street.

Pedestrian network

Large block sizes, long crossing distances, and a limited number of north-south connectors make the pedestrian experience less comfortable than it should be, especially in an area that's within walking distance of so many destinations.

While the sidewalk network is mostly complete in the study area, the pedestrian experience is severely compromised by the Inner Loop and its ripple effects on walkability. Being separated and disconnected from the rest of the city streets, the Inner loop limits crossings to a few locations along the corridor and makes walking routes indirect and inconvenient. The one-way service roads that parallel the Inner Loop create long blocks, with fewer intersections and crosswalks, and narrow sidewalks. North of the Inner Loop, marked crosswalks are much sparser, which presents a number of safety and accessibility issues, including difficulties for pedestrians with disabilities or visual impairments and challenges for drivers in terms of visibility and yielding compliance.

Redesigning the Inner Loop with pedestrians in mind has significant potential to enhance pedestrian safety and comfort and increase the rate of walking as a means of commuting or traveling to daily destinations.

Pedestrian facilities

North of Inner Loop



have sidewalks on both sides



do not have marked crosswalks

South of Inner Loop

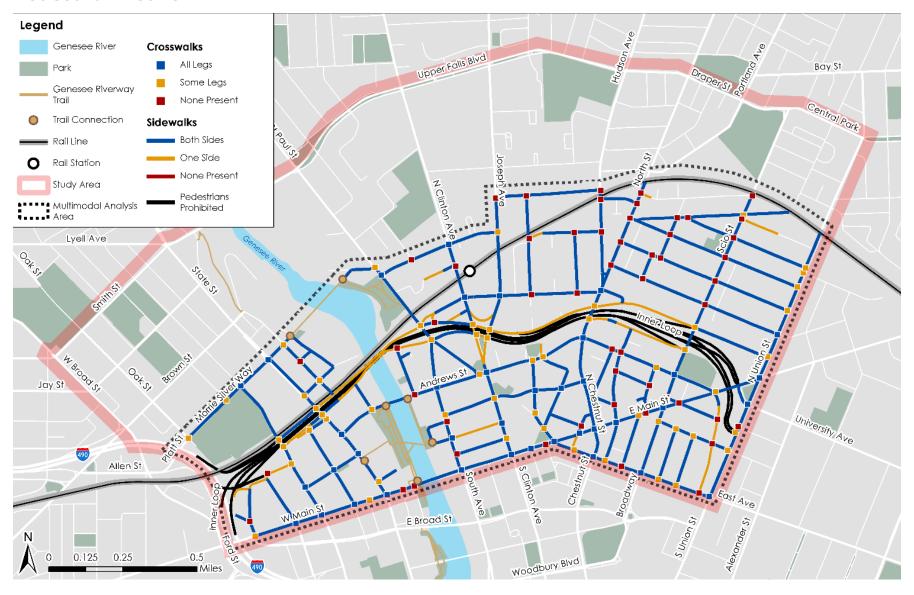


have sidewalks on both sides



do not have marked crosswalks

Pedestrian network



Bicycle network

The Inner Loop is a significant barrier to cycling. Not only is cycling prohibited on the Inner Loop North roadway but there are very few designated north-south bike facilities for cyclists to safely move through the area.

Even with many jobs and key destinations within biking distance of residential areas in the study area, very few travelers opt to bike to them. Even the short ride between Center City and High Falls, Upper Falls, and Marketview Heights to the north is uncomfortable for most riders. The St. Paul Street bike lane, one of the few north-south routes in the study area, in its current condition does not serve as the main corridor it should be and is hindered by gaps and other deficiencies.

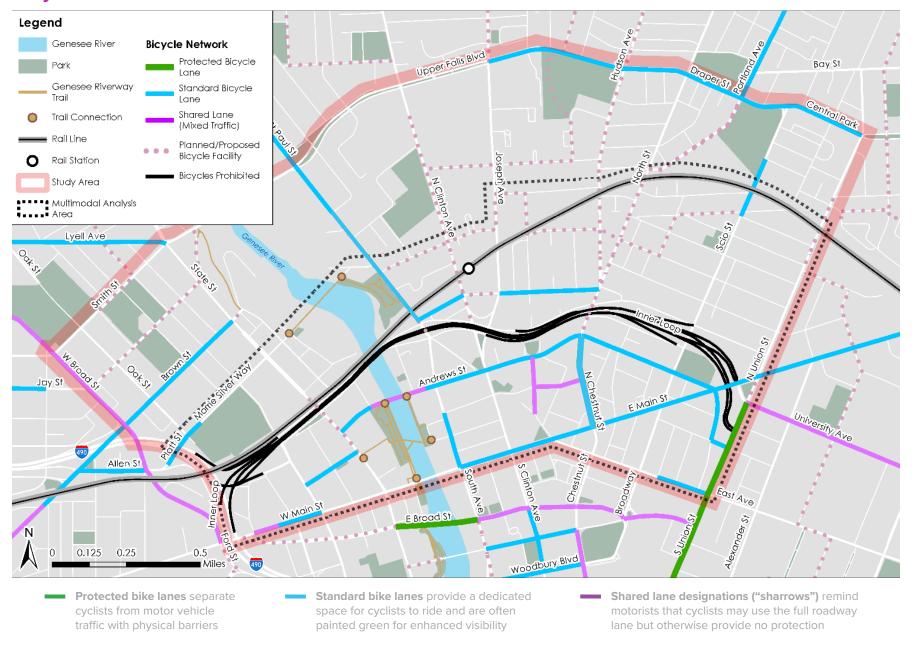
Filling in the gaps in the broader bicycle network and adding other north-south connectors – some of which have already been planned or proposed – is key to making cycling a safer and more appealing form of transportation in the study area.







Bicycle network



Bicycle network

Bicycle Level of Traffic Stress

To better understand how comfortable cyclists feel when riding in the Inner Loop study area, major streets* were assessed with a methodology called Bicycle Level of Traffic Stress (BLTS).

BLTS is made up of a range of scores from 1 to 4, based on factors such as bicycle facility type/width, traffic speeds and volumes, street width (number of travel lanes), and presence of onstreet parking. The combination of these factors contributes to the level of stress that a bicyclist may feel as they travel along a city street.

A street with a BLTS score of 1 provides a comfortable and low-stress riding experience for bicyclists of all ages and abilities, while a street with a score of 4 provides a low-comfort/high-stress environment in which to ride a bicycle.

Within the study area, the level of stress experienced by cyclists varies. Much of the study area is ranked as BLTS 2, 3, or 4. Even in areas where a bike lane is present, a high score is not guaranteed – the combination of street width, traffic volumes, and on-street parking present "friction" and conflicts that contribute

to a higher stress environment for cyclists. The full protection of the Union Street cycle track, for example, gives it the highest possible score of 1. Other dedicated bicycle facilities, such as the East Avenue bike lanes, score between 2 and 3, due to the lack of physical protection and the presence of adjacent on-street parking.

The presence of the Inner Loop and its effect on BLTS scores is notable. As mentioned above, very few streets that cross the Inner Loop have dedicated bicycle facilities. The design and physical features of these cross streets, such as traffic volumes, number of lanes, and traffic speeds, compound to give them the lowest possible BLTS score of 4. The high stress faced by cyclists when using these Inner Loop cross streets further demonstrates the barrier-like nature of the expressway itself.

*Major streets that underwent BLTS analysis include State Street, St. Paul Street, N. Clinton Avenue, Joseph Avenue, Franklin Street, N. Chestnut Street, North Street, Scio Street, Union Street, East Avenue, Main Street, Church Street, Andrews Street, University Avenue, Central Avenue, Morrie Silver Way, and the Inner Loop's service roads (Cumberland Street, Delevan Street, Lyndhurst Street, and Allen Street).

The lack of safe places to ride (and to cross the Inner Loop), the amount of turning movements at intersections, and the reality of traffic speeds and volumes makes cycling uncomfortable in the study area.

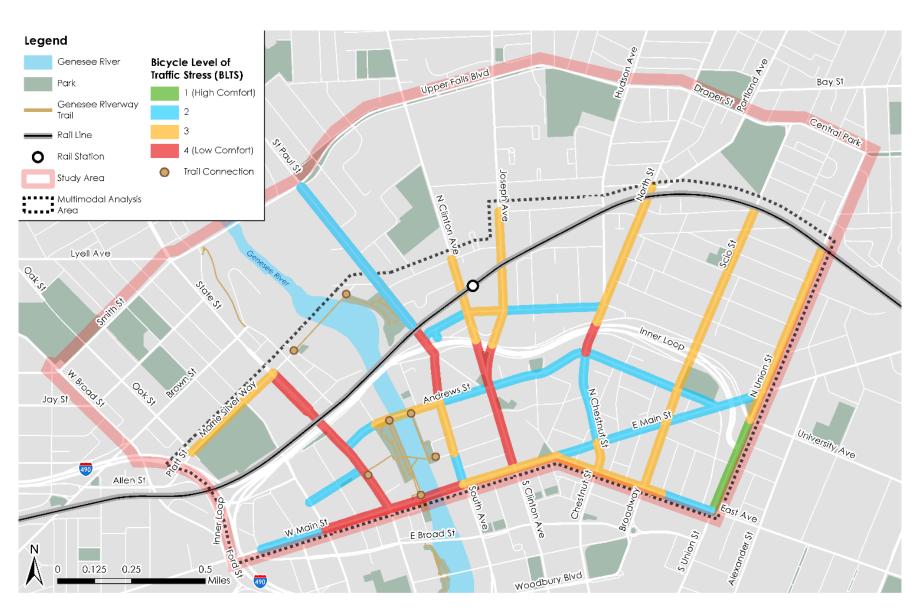
Study area **BLTS**











Transit network

Frequent, reliable, and accessible transit is particularly important in the neighborhoods surrounding the Inner Loop, where residents are more likely to ride the bus.

Frequency and coverage of bus service is highly variable within the Rochester transit system. In 2021, the Reimagine RTS initiative realigned routes in the study area and across Monroe County to provide faster, more direct service with shorter wait times and increased frequency. Bus service times were also made more frequent on several major corridors in the study area, including those on State Street, Joseph Avenue, Hudson Avenue, and Main Street. These "frequent service" routes operate every 15 minutes at peak times, and 30 minutes at all other times. "Local service" routes fill gaps in and extend the frequent service network, and operate every 30 to 60 minutes depending on the day and time of week.

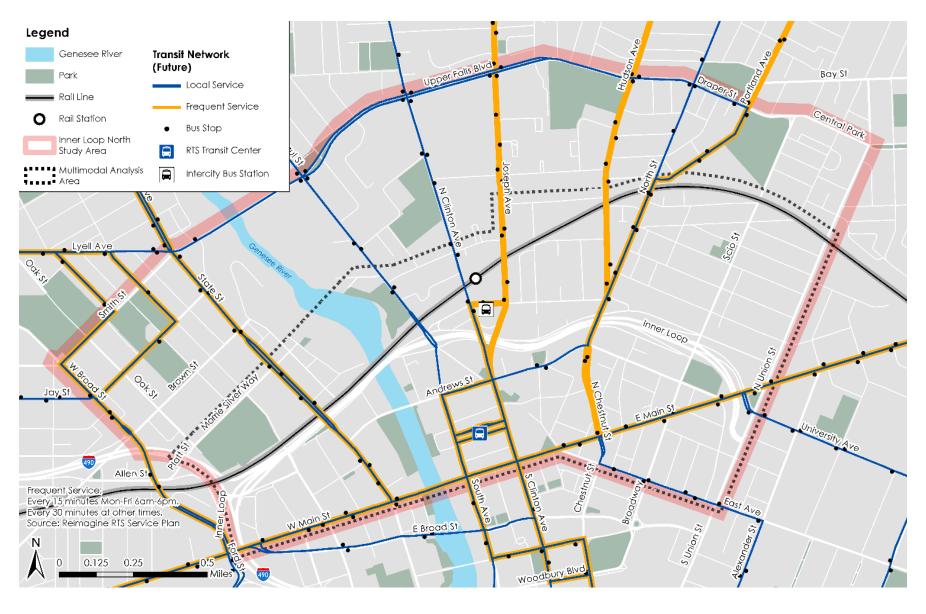
These frequency improvements are one step toward addressing transportation equity in the study area and will complement a safer, more walkable, and more bikeable Inner Loop.











Reimagine RTS: an initiative launched in 2021 to realign routes and adjust service times to increase frequency and reduce wait times

Frequent service: Includes major corridors and highest ridership routes. Operates every day, with service every 15 minutes between 6AM and 6PM on weekdays and every 30 minutes at all other times. Local service: Fills gaps in and extends coverage from the frequent service network. Operates every day, with service every 30 minutes between 6AM and 6PM on weekdays and every 60 minutes at all other times.

Transit network



Louise M. Slaughter Rochester Station

Intercity rail service to and from Rochester is available from the Louise M. Slaughter Rochester Station, which was recently renovated in 2017. Three long distance Amtrak intercity passenger rail routes connect Rochester to Chicago, Toronto, Niagara Falls, Buffalo, Syracuse, Albany, New York City, and Boston. Rochester Station is designed to be an intermodal station; it is anticipated that the intercity bus station will be relocated to this site in the near future.



Intercity Bus Station

Rochester's intercity bus station is currently located in a small, temporary structure between Central Avenue and Cumberland Street, directly adjacent to Rochester Station. The facility is served by several operators with multiple departures each day.

RTS transit statistics









RTS Transit Center

The RTS Transit Center is the origin and destination of all downtown bus routes and transfers. The facility, which is located on Mortimer Street, features an indoor waiting area and 30 covered bus bays that can accommodate 100 buses per hour. Additional features of the Transit Center include electronic displays, ticket vending machines, customer information desks, trip planning kiosks, on-site security, public and family restrooms, and ADA-compliant features.



RTS Bus Stops

Downtown Rochester is well-served by on-street bus stops. There are 69 on-street bus stops in the study area that are served by local bus service. Conditions and amenities vary, with some in the core of Center City featuring covered bus shelters and seating, while others on the periphery of the downtown core simply consist of signage and route information.

Transit network

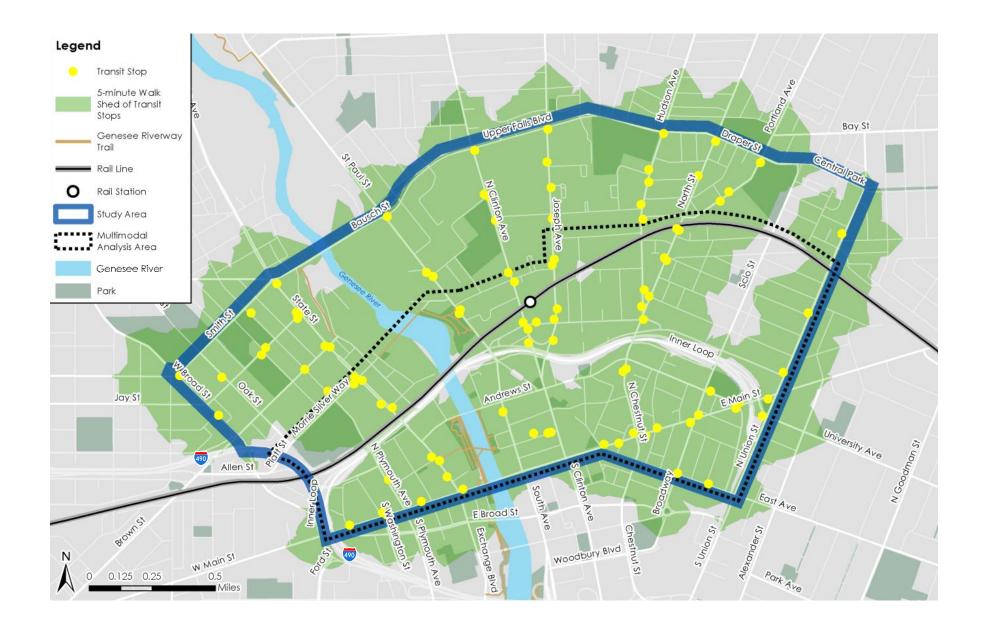
Transit accessibility

As shown in the figure at right, a large number of residents (8,832) and jobs (45,000) are within a 5-minute walk of transit stops within the study area, which suggests that this area is highly transit accessible. Almost the entirety of the study area is within a 5-minute walk from a bus stop, with the notable exception of Scio Street north of the Inner Loop, which has no service.

While the study area benefits from a high concentration of bus stops, Rochester's transit system, like that in many cities, struggles with longer-than-ideal wait times during off-peak hours and service spans that make opting for or relying on transit difficult, unappealing, or sometimes downright impossible, an especially troubling problem for people who rely on transit for their everyday transportation.

Within a **5-min walk** of a transit stop in the study area:





Roadway infrastructure

What we call the "Inner Loop" is really a complicated superstructure of miles of roadway, thousands of feet of retaining walls, dozens of bridges, and multiple on- and off-ramps that all need to be functioning correctly and continuously maintained to allow the roadway to operate smoothly.

Despite the complexity of the structure, roadway infrastructure along the Inner Loop North corridor is generally in fair to good condition according to most recent routine inspection reports. Because of the age of the structure, some infrastructure elements are showing signs of deterioration and others are outdated or no longer conform to current design standards. While these elements do not compromise the performance of the Inner Loop today, their maintenance needs are anticipated to be particularly costly over the long-term, especially as compared to a typical, at-grade city street.



1.5 miles of roadway



10 bridges



10 sign structures

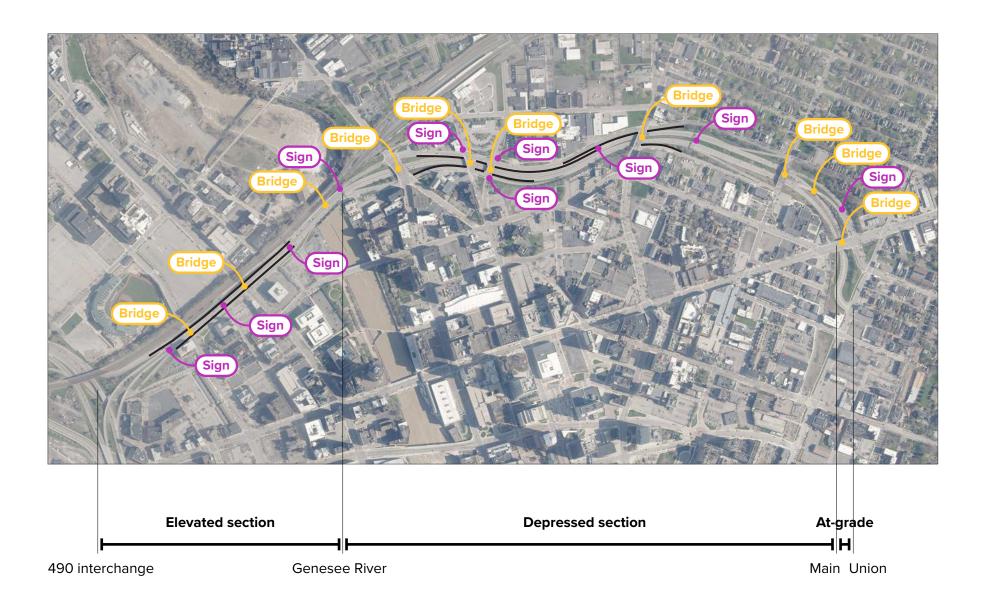


7,000 ft of retaining walls



To find out more, see **Appendix 6, Structures and Utilities Inventory.**

Structures map



Roadway infrastructure





Overhead signs

Purpose: provide directional signage to drivers **Condition:** fair to good (NYSDOT ratings of 4 to 6) **Issues:** signs of aging, five structures are outdated and no longer conform to current design standards

Bridges

Purpose: carry the Inner Loop or its cross-streets **Condition:** fair to good (NYSDOT ratings of 4 or 5) **Issues:** signs of aging, some structures show signs of advanced deterioration, Scio Street Bridge has four yellow structural flags

NYSDOT General Recommendation rating scale for bridge and structure conditions:





Retaining walls

Purpose: support the depressed and elevated sections of the

Inner Loop

Condition: good, no evidence of settlement or foundation issues

Issues: some horizontal and vertical cracking

Safety railings

Purpose: separate travel lanes and create protective barriers at grade changes

Condition: fair to good condition, conform to current standards **Issues:** weathering, loss of galvanizing, impact damage in some locations

NYSDOT Flagging System for dangerous conditions that should be addressed prior to next inspection:



Red Flag signals the failure or potential failure of a primary structural component that is likely to occur before the next scheduled biennial inspection



Yellow Flag signals a potentially hazardous condition which could become a clear and present danger before the next scheduled biennial inspection

Urban design

The Inner Loop was designed as a vehicular thoroughfare and, because of that, the loop and its cross-streets lack the streetscape elements and placemaking amenities that would make them feel safe, human-scale, and pedestrian friendly.

At present, streets that cross or run parallel to the Inner Loop offer little-to-no amenities that contribute to an appealing and accommodating streetscape. Blocks are long and barren, and they lack features such as street trees or benches. Access to parks and public space is made more difficult due to the Inner Loop's barrier-like nature and its effects on walking and cycling.

A future redesign of the Inner Loop has the potential to transform the expressway and its excess transportation right-of-way into a corridor that exhibits the same level of quality, human-scale urban design seen in the Inner Loop East project. Similarly, transitioning the Inner Loop away from an expressway and into an urban street allows for expanded use by groups like pedestrians and cyclists who could not previously use this right-of-way.

Case study

The intersection of Union Street and East Avenue was redesigned as part of the Inner Loop East Transformation project with new streetscape and urban design elements like landscaping, seating, and bike racks, that make it a much more walkable and bikeable environment.



Intersection of Union Street and East Avenue, looking west (2018).







Part 4

Key findings

Issue:

Disrupted urban fabric

The Inner Loop has left a lasting negative impact on the neighborhoods it cut through, with ripple effects that have persisted for decades, including economic disadvantage, severely reduced connectivity, and community disconnection.

Opportunity:

Leverage and learn from Inner Loop East

The Inner Loop North corridor's connection to Union Street (former Inner Loop East) creates opportunities to encourage reciprocal investment and development on Inner Loop North, enhance connections between the corridors (i.e. cycle track), and apply best practices learned from ILE.

Opportunity:

Growing fast and still growing

The Inner Loop North study area has grown at a faster annual rate than the larger region for the last decade and population projections expect this trend to continue. This aligns with an increasing trend nationwide in population growth in urban cores, especially those with diverse housing options and multi-modal accessibility.

Issue:

Fiscal constraints

Study area residents face economic disadvantages that make it harder for them to afford their housing costs or to be able to access a car for travel. They are more likely to rely on walking, biking, and transit for daily commutes.

Opportunity:

Market potential

Market forecasts indicate that the study area can support a variety of development over the next 20 years.

Opportunity:

Fostering a healthy, mixed-income neighborhood

Diversifying housing options to include affordable, workforce, market-rate, and moderate- to higher-end units could make the study area attractive to a wider range of income earners and help support additional investment, business creation, retail offerings, and amenities with potential to benefit all residents.

Issue:

Lack of bike connections

There are very few north-south bicycle connections in the study area.

Issue:

Poor walkability

Certain street blocks have sidewalks that are too narrow or are only on one side of the street and have intersections with long crossing distances. These constraints create indirect and inconvenient walking routes and a lower level of comfort.

Issue:

Unsafe crossings

The lack of marked crosswalks at some intersections presents a number of safety issues, including difficulties for pedestrians with disabilities or visual impairments and challenges for drivers when yielding.

Opportunity:

Improved connectivity

Bringing the Inner Loop back to street level makes it possible to create additional north-south sidewalk and bike connections that do not exist today.

Opportunity:

Safe travel for all modes

A re-designed Inner Loop North corridor can make travel safer for all modes of transportation by providing improved and expanded facilities for biking and walking, reducing vehicular speeds, and making intersections safer.

Issue

I-490 connection

Most trips that use the Inner Loop are either coming from or going to the I-490 interchange, making it important to retain access to it regardless of the re-design of the corridor.

Opportunity:

More direct routes

Re-establishing the city grid network will create more direct and convenient routes and will strengthen connections between destinations that were always close together but hard to get to because of the Inner Loop.

Opportunity:

Future cost savings

Re-designing the Inner Loop now helps avoid upcoming repair costs that the aging, deteriorating structure is expected to need in the long-term.

Opportunity:

Reclaim valuable land

Re-designing the Inner Loop North corridor as an urban street allows acres of land that was previously devoted to the expressway to be reclaimed and reused, creating significant opportunity for development or green space.

Issue:

Traffic changes

Traffic routes and volumes will be altered by the implementation of a new street network. The new roadway should be designed to accommodate the projected levels of traffic without re-routing excess traffic onto other streets or creating lengthy backups.

Concept alternatives



An exploration of several new designs for the Inner Loop North corridor.



Concept 1 page 100



Concept 2 page 102



Concept 3 page 104



Concept 4 page 106



Concept 5 page 108



Concept 6 page 110



Concept comparisons page 112

Introduction

Six different concepts were explored for the re-design of the Inner Loop North corridor. These concepts are explained and compared in this chapter.

The concepts vary in their design of the street network; some retain the connection to I-490 while others don't, some have two-lane streets while others have four, and some use roundabouts while others employ traditional intersections. They also vary in the amount of land they reclaim – anywhere from 12 to 22 acres – and in the amount of developable land and green space they create.

Some features essential to the creation of a high-quality public realm are consistent across all concepts. These include: a two-way cycle track, sidewalk and crosswalk improvements, the creation of new green space, and the restoration and expansion of existing green spaces.

Throughout the planning process, these concepts were refined and with feedback from the City of Rochester, MCDOT, NYSDOT, GTC, technical and community advisory committees, and the public, a preferred concept was identified. The preferred concept is explained in detail in **Chapter 5**, **Preferred Concept**.



Appendix

For plans of all the different concepts, see **Appendix 7**, **Concept Alternatives**.

"Urban Restoration"

Concept 1

An at-grade, two-lane street that follows the old alignment of the Inner Loop North corridor, but does not connect to I-490.

Street network: Inner Loop replaced by at-grade, two-lane street that generally follows the horizontal alignment of the existing ILN expressway. The University Avenue connection from East Main Street to Union Street is restored.

490 Connection: No connection, all connecting ramps removed.

Intersection design: Traditional, at-grade intersections.

Bicycle network: Two-way cycle track paralleling the proposed street from Allen Street/Cascade Drive to Union Street, connecting with the existing Union Street cycle track.

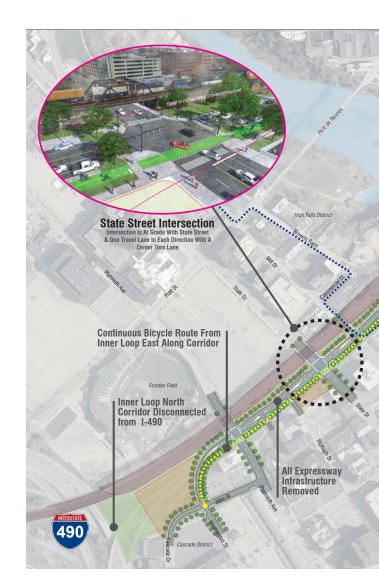
Pedestrian network: Pedestrian accommodations are upgraded throughout the corridor with new sidewalks and crosswalks.

Public space: Franklin Square Park and Anderson Park are expanded and restored, while a new community green space is created north of the World of Inquiry school.

Land reclaimed: 14.5 acres for development, 7.5 acres for green space.

Concept 1 features





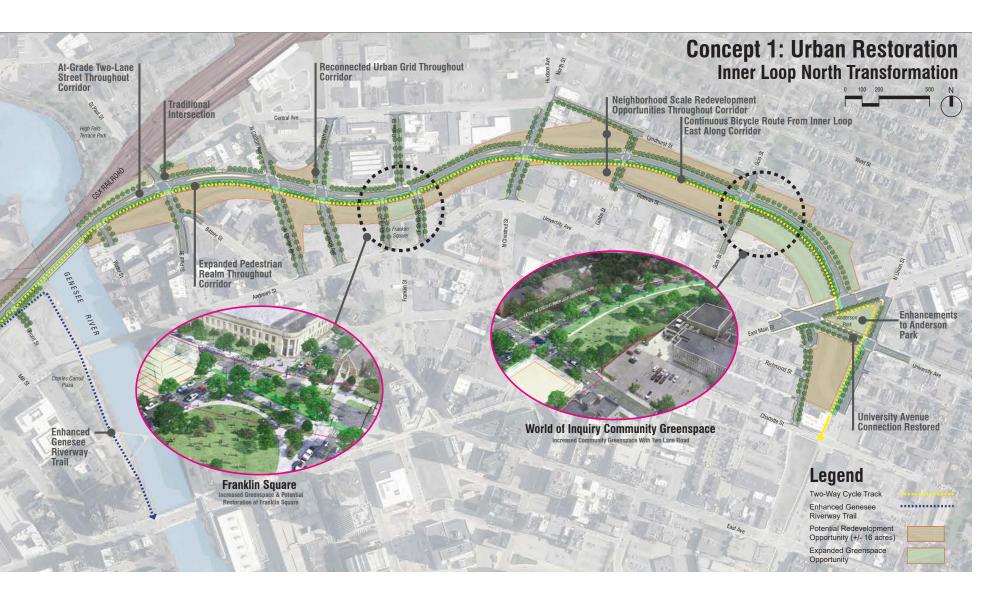












"Central Commons"

Concept 2

An at-grade, two-lane corridor with one-way couplets and roundabouts between St. Paul and North Streets.

Street network: Two-lane, two-way street west of St. Paul Street and east of North Street. One-way eastbound street between St. Paul Street and North Street. Central Avenue is converted to a one-way westbound street from St. Paul Street to North Street. The University Avenue connection from East Main Street to Union Street is restored. All streets at-grade.

490 Connection: No connection, all connecting ramps removed.

Intersection design: Roundabout intersections are installed at St. Paul Street and North Street, while traditional at-grade intersections are created at all the other locations.

Bicycle network: Two-way cycle track paralleling the proposed street from Allen Street/Cascade Drive to Union Street, connecting with the existing Union Street cycle track.

Pedestrian network: Pedestrian accommodations are upgraded throughout the corridor with new sidewalks and crosswalks.

Public space: Franklin Square Park and Anderson Park are expanded and restored, while a new community green space is created north of the World of Inquiry school.

Land reclaimed: 14.5 acres for development, 7.5 acres for green space.







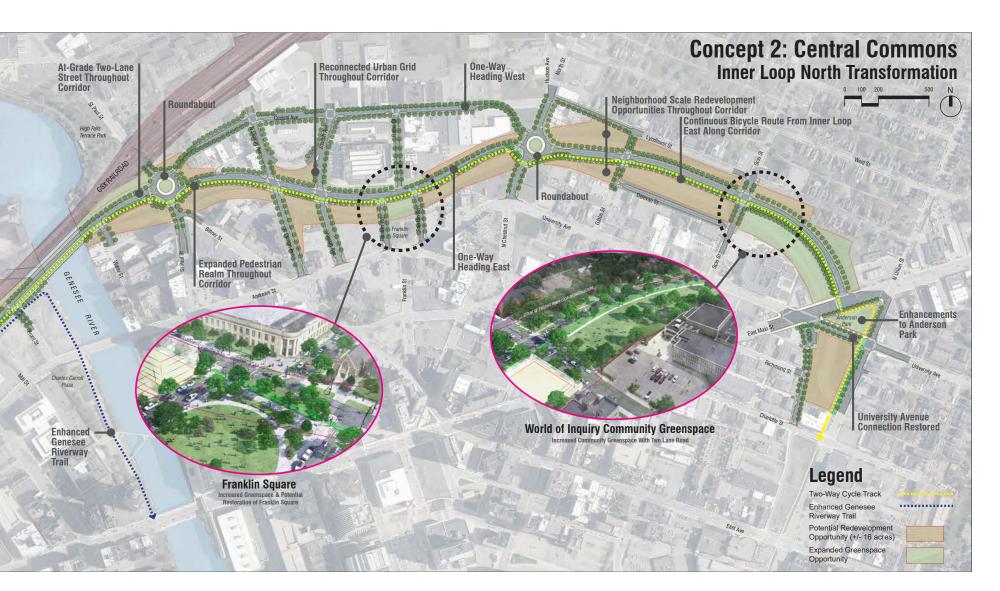












"Community Connection"

Concept 3

An at-grade, four-lane street that follows the old alignment of the Inner Loop North corridor and connects into I-490.

Street network: The Inner Loop is replaced with an at-grade, four-lane street that generally follows the horizontal alignment of the existing Inner Loop North expressway. At grade intersections at Plymouth Avenue and State Street create new connections between I-490 and the street grid west of the Genesee River. The University Avenue connection from East Main Street to Union Street is restored.

490 Connection: Retains all on- and off-ramp connections to 490.

Intersection design: Traditional, at-grade intersections.

Bicycle network: Two-way cycle track paralleling the proposed street from Allen Street/Cascade Drive to Union Street, connecting with the existing Union Street cycle track.

Pedestrian network: Pedestrian accommodations are upgraded throughout the corridor with new sidewalks and crosswalks.

Public space: Franklin Square Park and Anderson Park are expanded and restored, while a new community green space is created north of the World of Inquiry school.

Land reclaimed: 12.5 acres for development, 5.5 acres for green space.







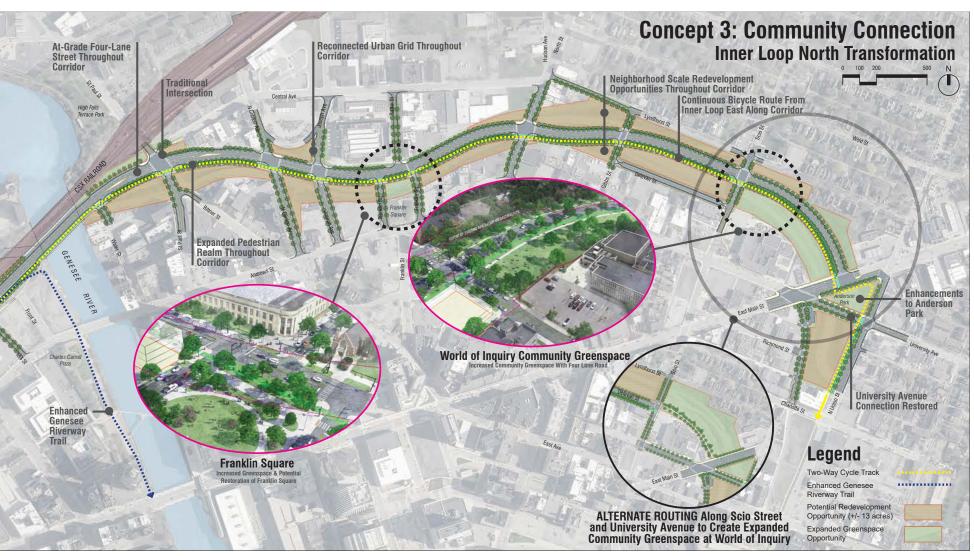












Note: A sub-concept was explored for Concept 3 that re-routed the street network along Scio and University near the WOI School.

"490 Connection"

Concept 4

An at-grade, four-lane street east of St. Paul Street and the existing, elevated Inner Loop North corridor west of St. Paul Street.

Street network: The depressed expressway between St. Paul Street and East Main Street is replaced with an at-grade four-lane street that generally follows the horizontal alignment of the existing Inner Loop North expressway. The University Avenue connection from East Main Street to Union Street is restored.

490 Connection: All ramps connecting 490 and the Inner Loop North corridor, as well as the elevated expressway west of the Genesee River are retained.

Intersection design: In the area of expressway removal, intersections are returned to grade to reconnect the street grid.

Bicycle network: Continuous two-way cycle track paralleling the proposed street from the Genesee Riverway Trail (Mill Street) to Union Street, connecting with the existing Union Street cycle track.

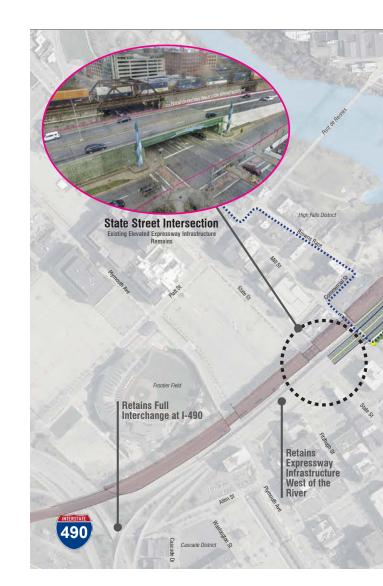
Pedestrian network: Pedestrian accommodations are upgraded east of Mill Street with new and improved sidewalks and crosswalks.

Public space: Franklin Square Park and Anderson Park are expanded and restored, while a new community green space is created north of the World of Inquiry school.

Land reclaimed: 12.5 acres for development, 4.5 acres for green space.

Concept 4 features





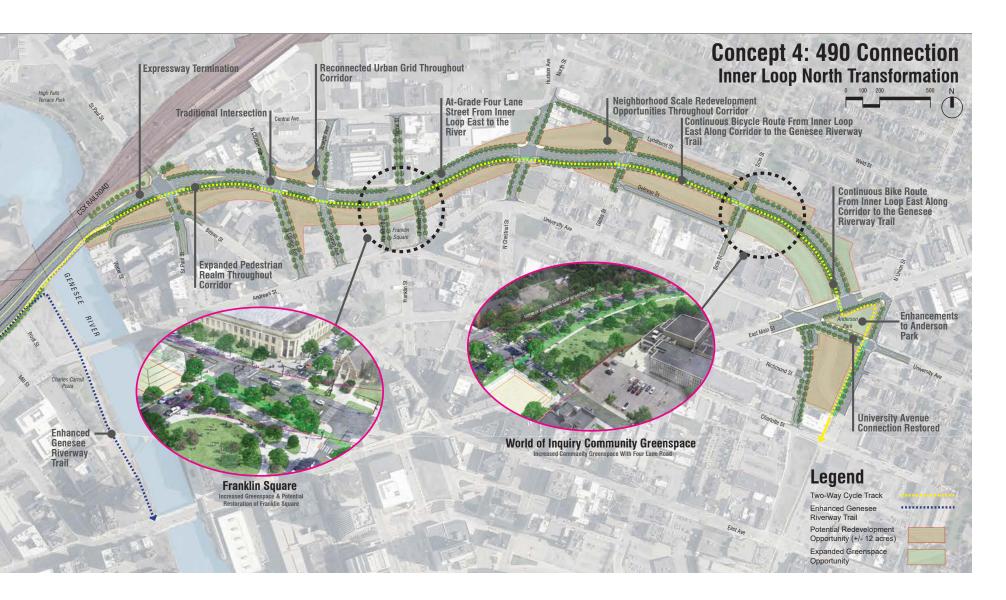












"Downtown Bypass"

Concept 5

An at-grade, four-lane street east of Franklin Square, the existing depressed Inner Loop North corridor east of St. Paul Street, and the existing elevated corridor west of the river.

Street network: The depressed expressway between Franklin Square and East Main is replaced with an at-grade four-lane street the follows the horizontal alignment of the existing Inner Loop North expressway. The University Avenue connection from East Main to Union is restored.

490 Connection: All ramps connecting 490 and the Inner Loop North corridor, as well as the grade-separated sections of expressway west of Franklin Square Park are retained.

Intersection design: In the area of expressway removal, intersections are returned to grade to reconnect the street grid.

Bicycle network: Continuous two-way cycle track paralleling the proposed street from the Genesee Riverway Trail (Mill Street) to Union Street, connecting with the existing Union Street cycle track.

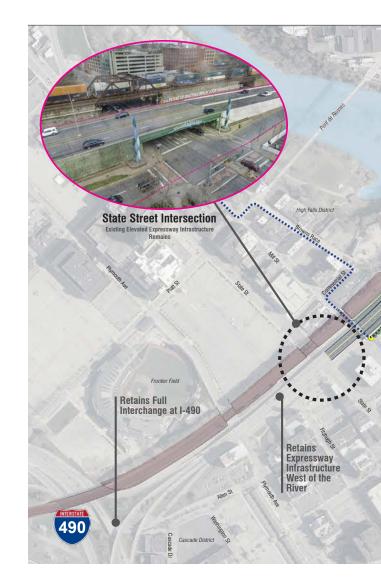
Pedestrian network: Pedestrian accommodations are upgraded east of Mill Street with new and improved sidewalks and crosswalks.

Public space: Franklin Square Park and Anderson Park are expanded and restored, while a new community green space is created north of the World of Inquiry school.

Land reclaimed: 8 acres for development, 4 acres for green space.







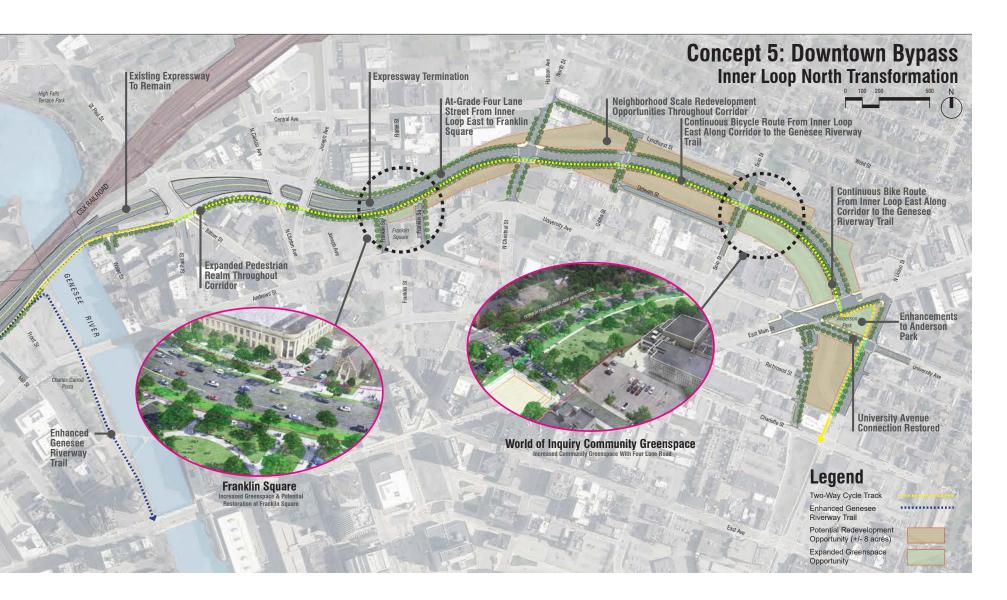












"City Grid Restoration"

Concept 6

An at-grade, two-lane street that reconnects the city grid and maintains the 490 connection.

Street network: At-grade two-lane street incorporating auxiliary turn lanes at intersections as needed. At-grade intersections at Plymouth Avenue and State Street provide new connections between 490 and the street grid west of the river. The proposed two-lane street generally follows the horizontal alignment of the existing ILN expressway west of the river. East of the river, the new alignment of Cumberland Street connects directly into University Avenue at North Chestnut. Central Avenue connects directly into Lyndhurst Street at North Street. Delevan Street and Gibbs Street reestablish the city grid in the northeast section of the project. The University Avenue connection from East Main to Union is restored.

490 Connection: Retains all on- and off-ramp connections to 490.

Intersection design: Traditional, at-grade intersections.

Bicycle network: Two-way cycle track paralleling Central Avenue, Cumberland Street, and University Avenue from Allen Street/Cascade Drive to Union, connecting with the existing Union Street cycle track.

Pedestrian network: Pedestrian accommodations are upgraded throughout the corridor with new sidewalks and crosswalks.

Public space: Franklin Square Park and Anderson Park are expanded and restored, while a new community green space is created north of the World of Inquiry school.

Land reclaimed: 14 acres for development, 8 acres for green space.







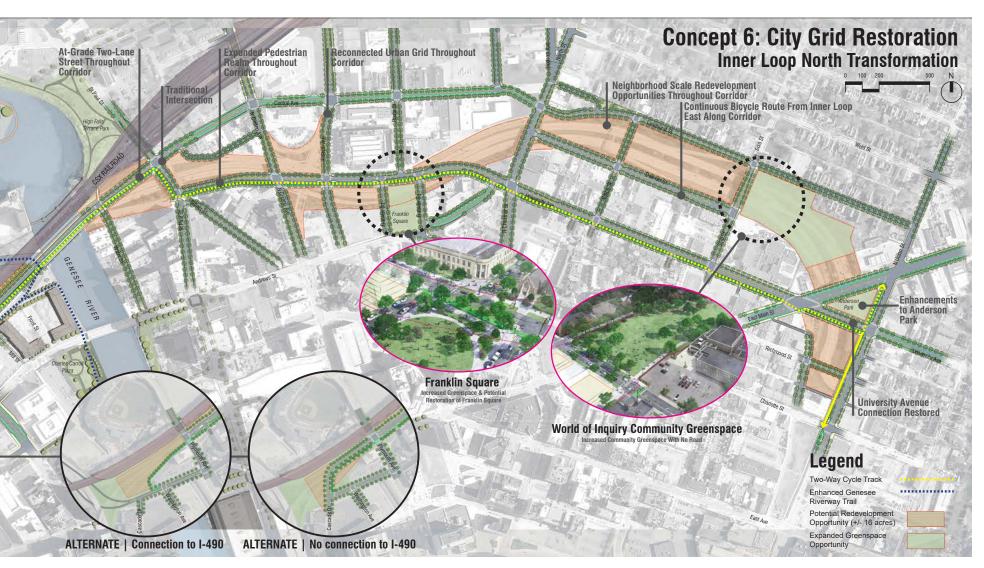












Note: Two other sub-concepts were explored for Concept 6 – an alternate connection to 490 and no connection to 490 at all.

Concept comparisons

An evaluation matrix was developed to compare the different concepts against each other and to aid in identifying a preferred concept.

Concepts were compared based on several criteria including impacts on the pedestrian realm and traffic, potential for green space and development site creation, as well as construction and long-term maintenance costs. The Racial Equity Subcommittee was instrumental in establishing the evaluation criteria and ensuring that considerations for equity informed the decision-making process. Concepts were ranked on a scale of most favorable to least favorable for each criteria. The results of the evaluation matrix were combined with public feedback to identify **Concept 6: City Grid Restoration** as the preferred concept.

Appendix

8

For the complete evaluation matrix, see **Appendix 8**, **Alternatives Evaluation Matrix**.

Evaluation criteria



The more circles filled in, the better a concept compares.

Pedestrian realm	Walkability
	Bikeability
	Block size
Traffic	Traffic speed
	Traffic volumes pushed to other streets
Green space	New green space created
	Restoration of Franklin and Anderson Parks
	Green space at WOI School
Streetscape	Increase in street trees
	Reduction of impervious surfaces
Land use	New developable land created
	Supports existing land uses
Cost	Construction cost
	Long-term maintenance costs

Concept 1 Urban Restoration	Concept 2 Central Commons	Concept 3 Community Connection	Concept 4 490 Connection	Concept 5 Downtown Bypass	Concept 6 City Grid Restoration

Preferred concept



A detailed explanation of the preferred concept and its potential impacts.



Street network page 118



Traffic impacts page 126



Development opportunities page 134



Housing opportunities page 146



Green space creation page 154



Greenhouse gas impacts page 162



Benefit-cost analysis page 164

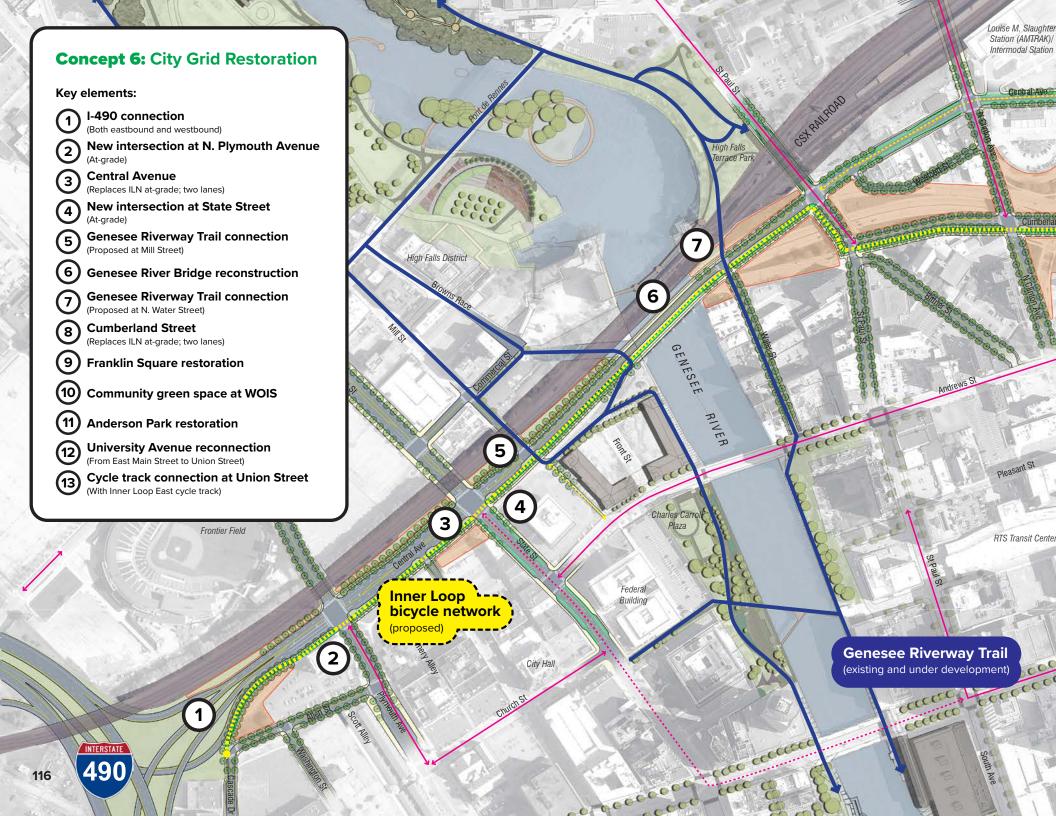
Introduction

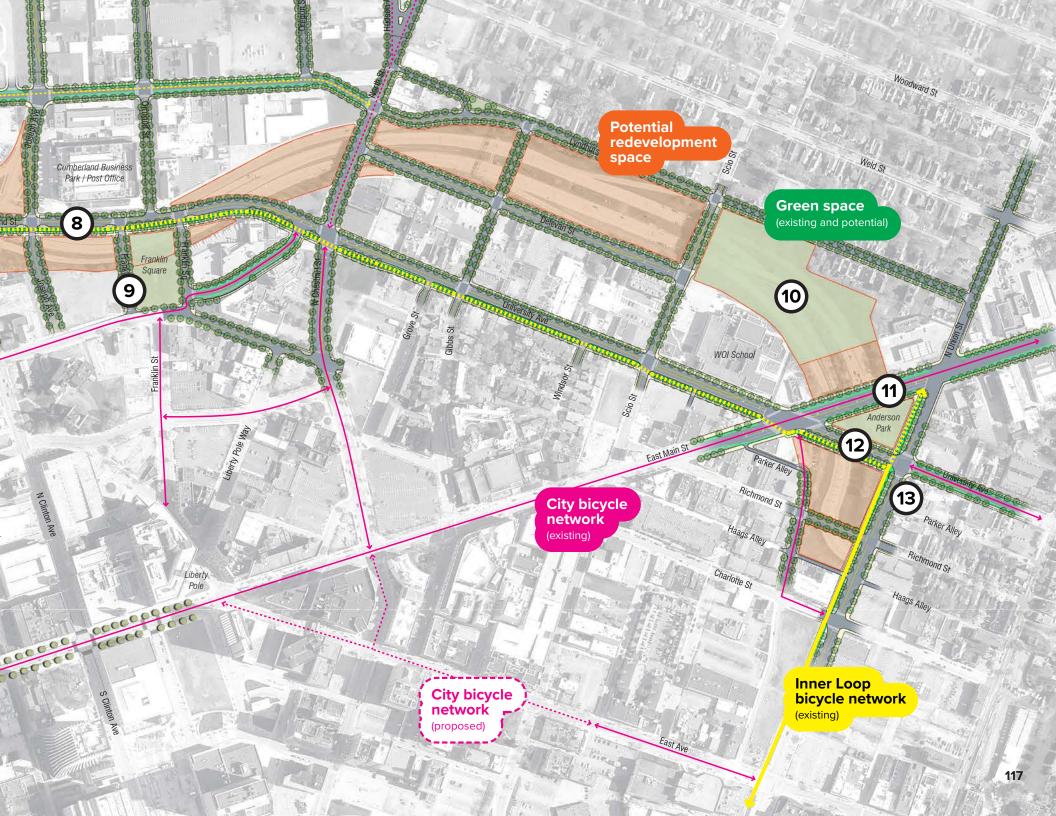
The preferred concept for the re-design of the Inner Loop North corridor is **Concept 6: City Grid Restoration**.

This chapter explains key elements of the preferred concept including the street network and its expected impacts on traffic as well as the opportunities created for development, housing, and green space creation. The results of a benefit-cost analysis that measures the benefits of the preferred concept against its costs is presented at the end of this chapter.



Proposed improvements on Central Avenue!





Street network

The preferred concept transforms the Inner Loop from a grade-separated expressway into an urban boulevard with a dramatically improved streetscape.

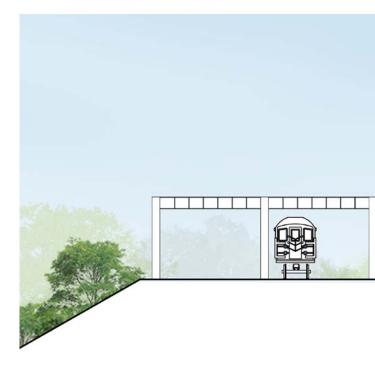
The re-designed street condenses the former Inner Loop's four lanes, parallel service roads, and multiple on- and off-ramps to two travel lanes, with parking and turning lanes where appropriate. Pedestrians and cyclists are afforded their own dedicated facilities, with widened and enhanced sidewalks and crosswalks and a two-way separated cycle track that runs the whole length of the corridor and connects into the Union Street cycle track.

Excess land is reclaimed along the edges of the corridor, creating opportunities for new development, small business, and green space creation. Pedestrian amenities, traffic calming features, and placemaking elements make the corridor safe for all ages, abilities, and travel modes and give it a human-scale feel that is far more appropriate for a compact urban setting than the Inner Loop ever was.

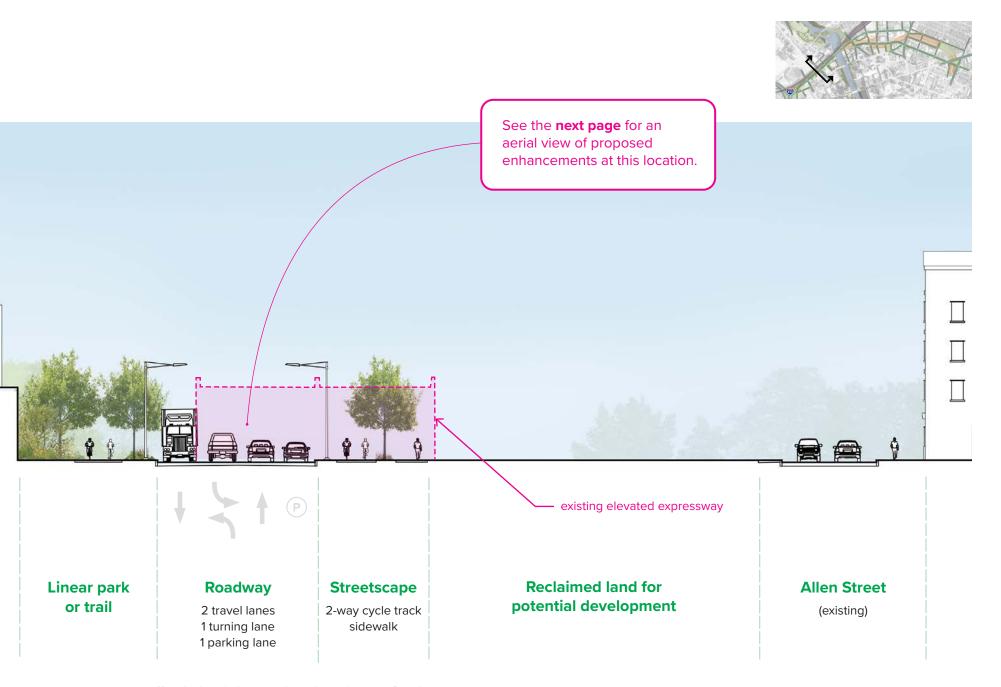
POTENTIAL

Street section near State St.

Looking east

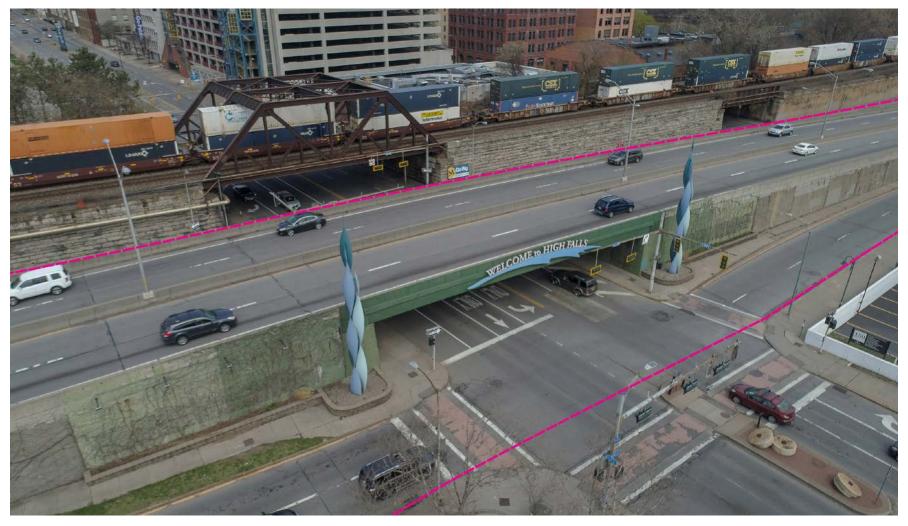


CSX Railroad

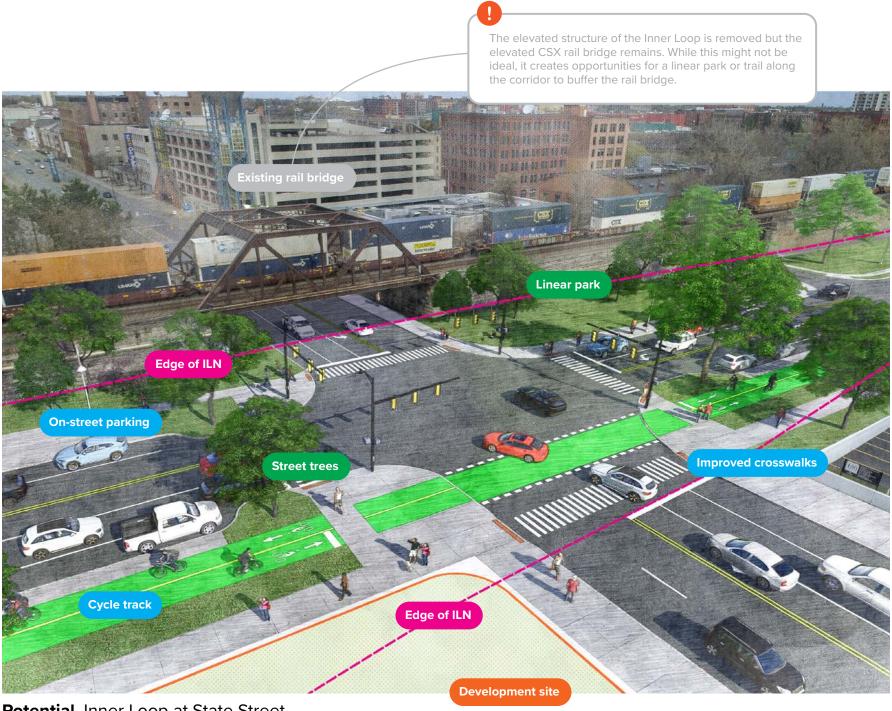


Note: As shown in the master plan on the previous page, Central Avenue could also be designed with 2 travel lanes in each direction and a central turning lane to better accommodate traffic flows.

Street network

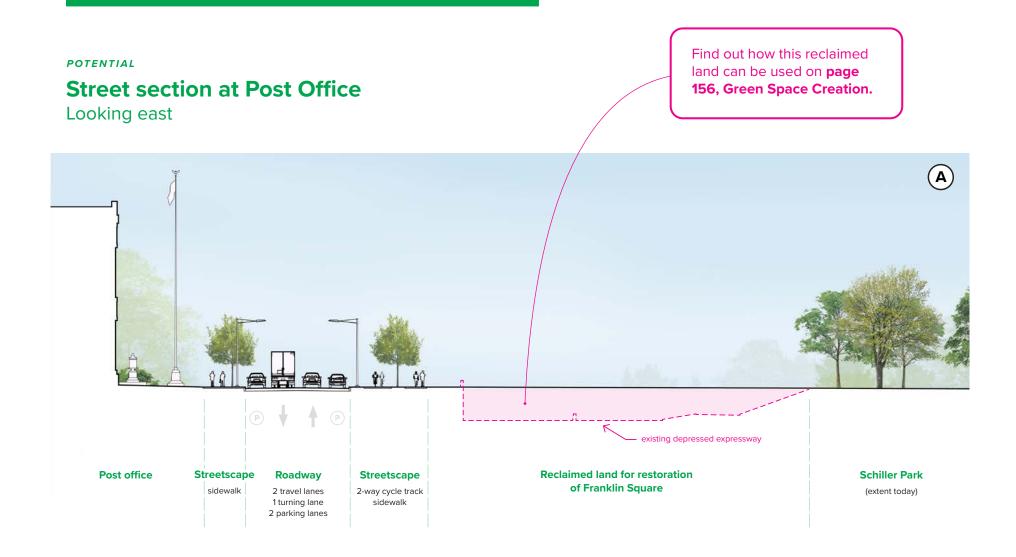


Existing, Inner Loop at State Street



Potential, Inner Loop at State Street

Street network



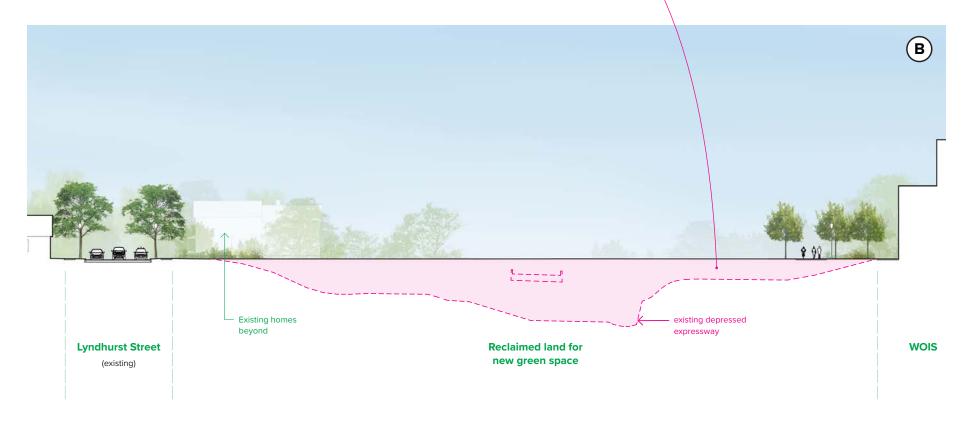
Find out how this reclaimed land can be used on page 158, Green Space Creation.



POTENTIAL

Street section at WOIS

Looking east



Street network

POTENTIAL

Streetscape enhancements



Potential, Clinton and Cumberland

Incorporating a "leading pedestrian signal" that gives pedestrians a 3- to 7-second head start when crossing an intersection (with a corresponding green signal in the same direction of travel) has been shown to reduce pedestrian-vehicle collisions by as much as 60%. Leading pedestrian signals enhance the visibly of pedestrians and reinforce their right-of-way over turning vehicles.



Potential, St. Paul and Cumberland



Existing, Clinton and Cumberland



Existing, St. Paul and Cumberland



Existing, St. Paul and Central



Existing, N. Plymouth and Central



Potential, St. Paul and Central



Potential, N. Plymouth and Central

Traffic impacts

The re-designed Inner Loop North corridor will create a gridded street network with stoplights and reduced speeds that are more characteristic of an urban environment. These changes will alter traffic flows on the corridor and surrounding streets.

Traffic modeling from the Genesee Transportation Council (GTC) Regional Travel Demand Model indicates that the re-designed street network will likely result in an overall decrease in traffic along the former Inner Loop North corridor. This will result in subsequent increases in traffic on some surrounding streets as traffic re-distributes and finds alternate routes. Likewise, as is to be expected, the transition from a high-speed expressway to an urban street with lower speeds and stoplights will result in longer travel times on the corridor for drivers.

The return of the at-grade street and the addition of pedestrian and cyclist amenities, however, will help transform the streetscape into a safer and more welcoming environment for all modes of transportation.

Key findings:





Appendix

For more information, see Appendix 9, Preferred Concept Traffic Analysis.

Traffic impacts

Traffic volumes

Modifying the Inner Loop North corridor from a direct throughroute to a series of signalized intersections will likely result in some vehicles using alternative routes. Much of the existing traffic on the corridor is expected to redistribute to surrounding streets and highways. Driver re-education may be necessary to identify the best available alternative routes and to prevent unnecessary redistribution of traffic into neighborhood streets.

Overall, much of the former Inner Loop North corridor will likely see decreases in traffic volumes, especially west of North Street/N. Chestnut Street. Some existing local streets, such as Central Avenue, University Avenue, and Union Street are expected to experience increased traffic volumes. Targeted improvements planned as part of the preferred concept should allow these streets to effectively absorb increases in traffic. Additional modeling will be performed in the schematic and final design phases of this project to confirm these preliminary findings or to identify any refinements necessary to ensure acceptable traffic flows.

Most new and existing intersections are also expected to operate at acceptable levels of service (LOS D and above), with limited queuing and delays during peak travel times. Special consideration will be taken at the East Avenue/Union Street intersection during the schematic and final design phases of this project to mitigate potential congestion that may result from the re-designed roadway.



Intersection Level of Service (LOS) measures traffic operational conditions based on traffic demand and roadway capacity at a given time:



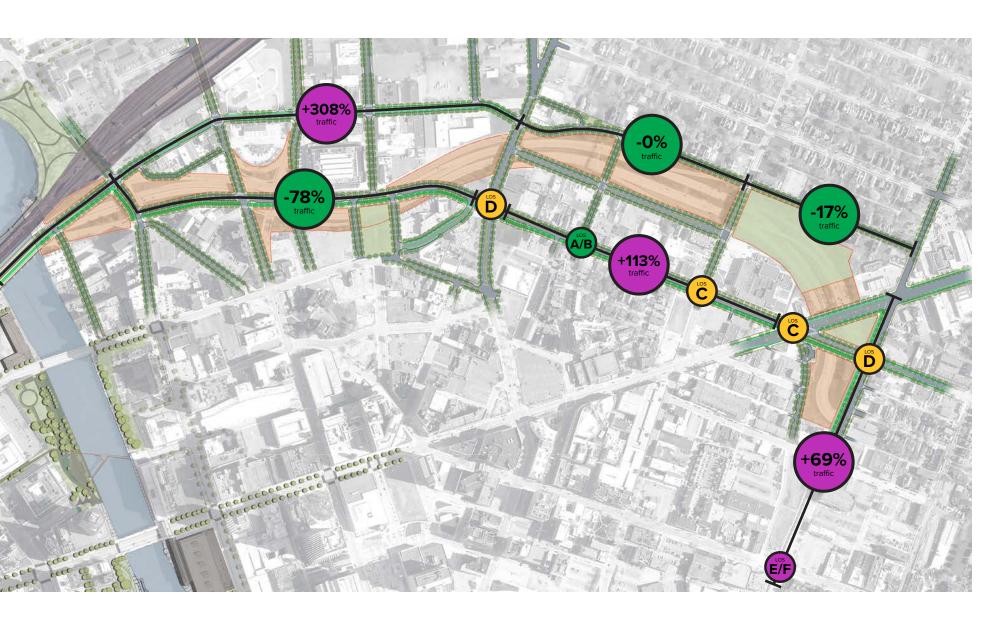
LOS A/B: Free-flow condition with little congestion. Delay under 20 seconds per vehicle.



LOS C/D: Moderate to increasing congestion but still acceptable. Delay 20 to 55 seconds per vehicle.



LOS E/F: Congested to stop-and-go conditions. Delay of 55 seconds or more per vehicle.



Traffic impacts

Travel time

Reducing speeds and introducing traffic signals on the re-designed Inner Loop has the expected effect of slightly lengthening travel times along the corridor. Traveling the entire corridor from 490 to E. Main Street, which takes 1 minute and 30 seconds on the existing Inner Loop North corridor, could take 6 minutes with the implementation of the preferred concept (if travelers stay on the newly-designed corridor for the length of the trip). Other trips will potentially increase between 30 seconds and 4 and a half minutes for those who choose to stay on the Inner Loop corridor depending on their origin and destination.

Trip*



+4.5 min

490 to E. Main (eastbound)



+3.5 min

E. Main to 490 (westbound)



+0.5 min

490 to St. Paul (eastbound)



+1.5 min

St. Paul to 490 (westbound)

*These travel times reflect routes that stay on the re-designed Inner Loop corridor for the length of the trip. Quicker routes may be available if travelers use other streets for part of the trip.





Traffic impacts

Bridge crossings

Traffic in Rochester has long been impacted by the Genesee River, which causes east-west traffic to concentrate at a limited number of river crossings. Indeed it was congestion at downtown bridges that, in part, led to the construction of the Inner Loop.

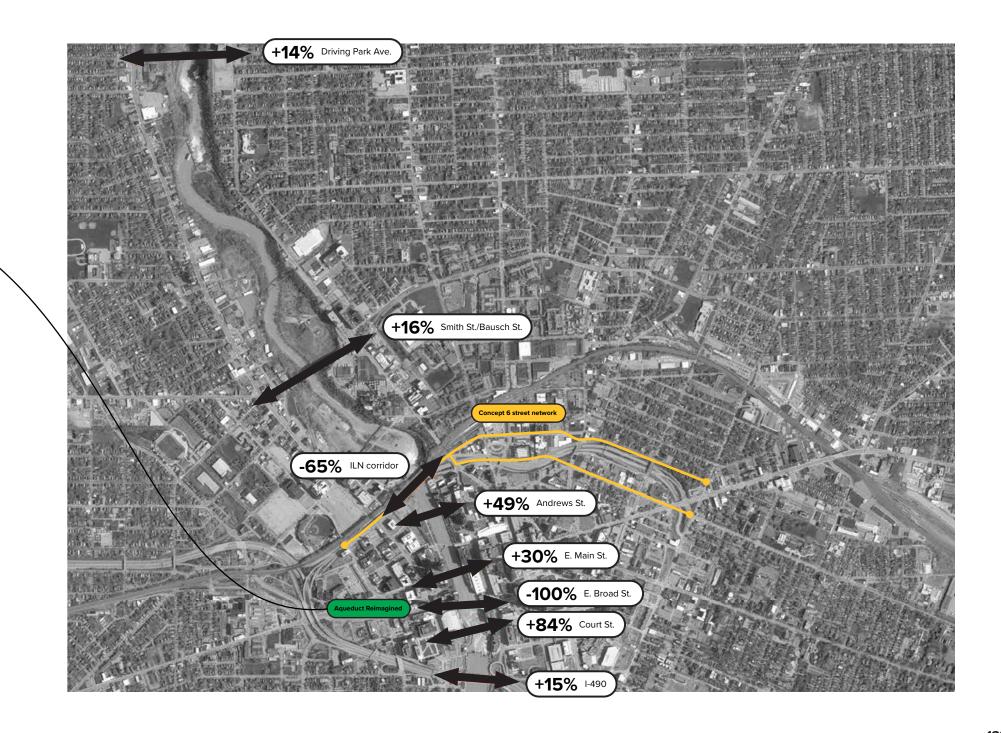
The modified street network of the preferred concept is expected to cause traffic to shift among the river crossings as some drivers choose new routes to get to their destinations. While the Inner Loop North corridor is projected to see a considerable decrease in bridge crossings (consistent with its decrease in traffic volumes), other nearby bridges could see increases in traffic ranging from 4% (Ford Street) to 84% (Court Street). Despite these increases and even with the pending removal of vehicular traffic at the Broad Street Bridge as part of the "Aqueduct Reimagined" Project, these increases appear to be manageable for the existing infrastructure.

Additional research and modeling will be conducted during the schematic and final design phases of both the Inner Loop North Transformation Project and the Aqueduct Reimagined Project to ensure that increases in traffic on adjacent bridges are manageable and that overall Level of Service (LOS) remains acceptable.

Aqueduct Reimagined Project

The Aqueduct Reimagined Project is the centerpiece of the City of Rochester's larger ROC the Riverway initiative. It is a bold vision to transform the Broad Street Bridge from a vehicular street into a central gathering place. In coming years, the vehicular deck of the bridge will be removed and the historic aqueduct structure will be reimagined as an iconic public space. The project will also allow the Genesee Riverway Trail to be extended on the riverfront through Downtown Rochester.

Note: To account for the impending removal of the Broad Street Bridge and to analyze traffic patterns without this river crossing, the traffic modeling analysis conducted for this study was performed under the assumption that the Broad Street Bridge was no longer a vehicular thoroughfare.



West of river segment

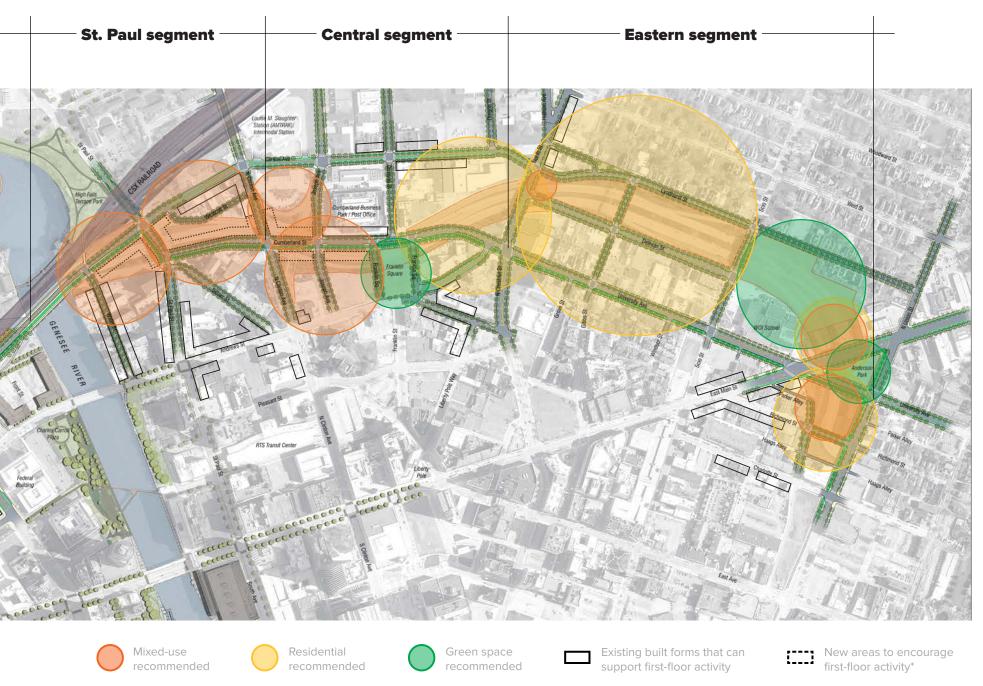
Development opportunities

The preferred concept reclaims a total of 22 acres of land along the Inner Loop North corridor, 14 of which can be used for new development and 8 of which are dedicated for green space creation.

The diagram at right divides the Inner Loop North corridor into four character areas and identifies potential future land use recommendations for the sites within each area. These land use recommendations are point-in-time estimates and may or may not be feasible based on market conditions at the time of construction and/or developers' willingness to build based on projected demand. These recommendations should be re-examined when the City begins to develop RFPs for site development.

A visual preference survey was also conducted with community members to identify most favored development styles. In general, historic-style, mixed-use buildings that fit with the character of existing buildings in the study area were preferred. (Results of this survey can be found on the following pages.) It is important to note that, while community desires are important, they must be weighed alongside the realities of the real estate market, construction costs, availability of housing subsidy programs, vacancy issues in other downtown spaces, and other factors.





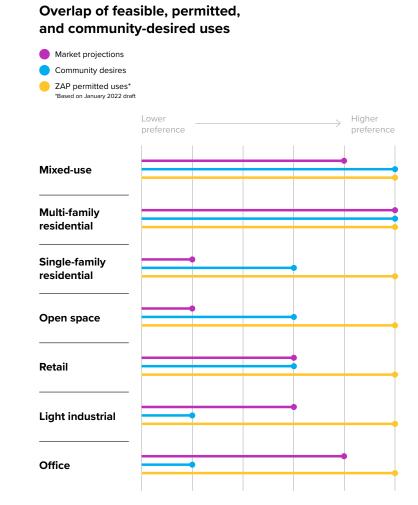
Development opportunities

West of river segment

Though new development on the Inner Loop North corridor west of the river is constrained by a limited amount of reclaimed land, there is considerable opportunity to leverage High Falls and recent momentum in this area.

The re-designed Inner Loop is expected to create under an acre of developable land at two sites in this area – one at Allen Street and the other at the corner of State Street and Central Ave. Considering market projections, community desires, and the new zoning districts proposed in the ZAP, the most appropriate and feasible uses in this area are likely multi-family residential and mixed-use. The Allen Street site is best-suited for a single-use – likely residential – while mixed-use with ground floor retail should be encouraged at the State/Central site to complement the existing first floor activity along State Street.

While new development may be limited in this area, significant potential exists for public realm improvements, especially those directed at improving north-south connectivity along the newly at-grade Plymouth/ Central and State/Central intersections, enhancing connections and access to the riverfront, and leveraging nearby High Falls. A continuous waterfront trail connection from the existing terminus of the Genesee Riverway Trail (GRT) at Andrews Street to the High Falls district was identified as a priority by the CAC and community members.





developable land

stories

medium density



mixeduse







Representative bulk and density** —





Mixed-use

Existing built forms that can support first-floor activity

New areas to encourage first-floor activity***

Green space

recommended

Residential

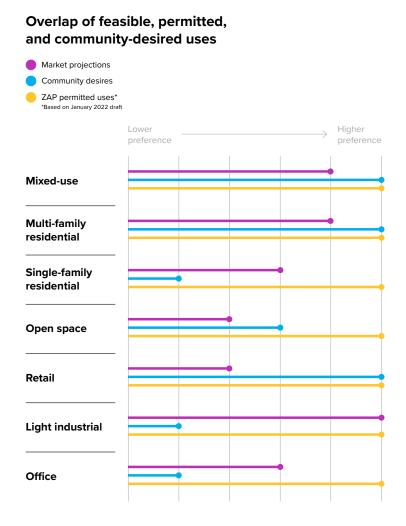
***Building footprint subject to change

Development opportunities

St. Paul segment

The re-designed Inner Loop North corridor creates considerable new street frontage in this area that could potentially support active ground floor uses and extend the mixed-use character of St. Paul Street northward from Andrews Street.

Roughly 2.5 acres of developable land is expected to be created in this area, with significant street frontage along Central Avenue, St. Paul Street, and Cumberland Street. Active ground floor uses should be encouraged, as practicable, for new development in this area in order to complement existing first floor uses and continue the streetwall along St. Paul Street. Community members were particularly interested in retail, small business, and entertainment uses to add to the existing slate of unique business offerings in the area. Residential units could occupy upper floors of these mixed-use buildings.





developable land



medium density



mixeduse

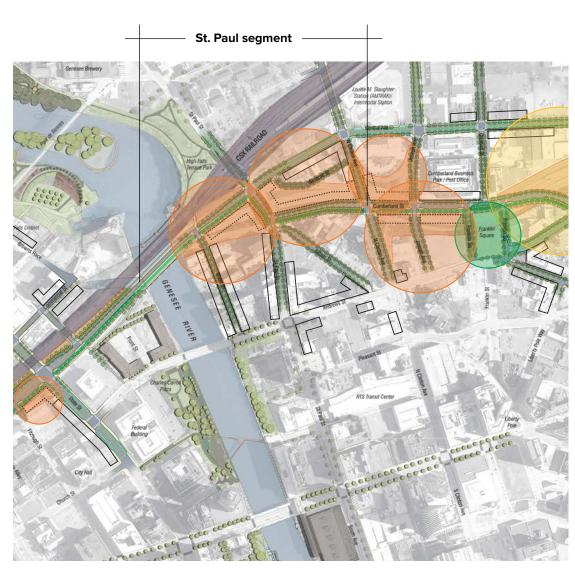


multi-family residential



retail





Representative bulk and density** -







Green space



Existing built forms that can support first-floor activity



Residential recommended

New areas to encourage first-floor activity***

***Building footprint subject to change

^{*}Based on community input.

^{**}Based on visual preference survey.

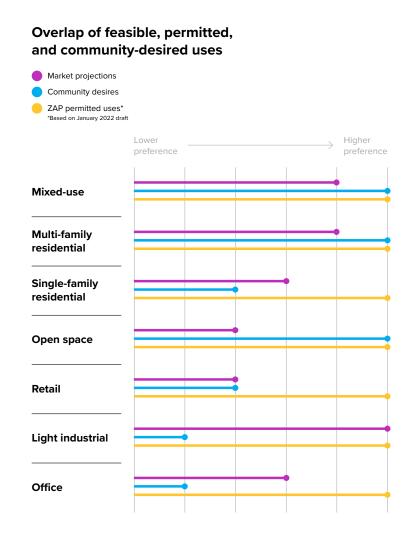
Development opportunities

Central segment

In the central segment of the Inner Loop North corridor, several new development sites will front the newly-created Cumberland Street. Potential exists in this emerging district to encourage mixed-use development and a vibrant pedestrian realm.

The central segment is arguably the segment that can be viewed most as a "blank slate" since, throughout almost the entire extent of this segment, the newly created street is fronted by new development sites. This creates significant potential to direct development in a way that fosters the kind of mixed-use, walkable corridor that the re-designed Inner Loop is envisioned as. Feasible new uses include mixed-use and multi-family residential as well as light industrial.

Community members expressed desire to see additional public realm improvements in this area, particularly streetscape enhancements and enhanced bicycle and pedestrian connectivity. Enhancements at and the potential expansion of Franklin Square are also opportunities unique to this segment – as is multi-modal, transportation-oriented development that leverages the Train Station and proximity to the RTS Transit Center.





developable land



medium density



mixeduse



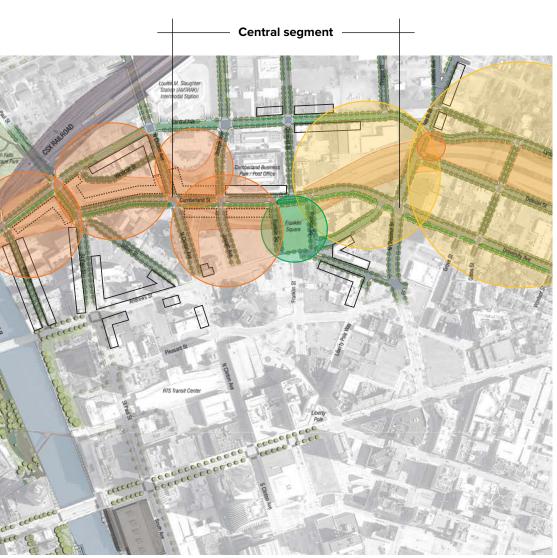
multi-family residential



streetscaping



bike/ped connectivity



*Based on community input.

Representative bulk and density** -







recommended



Existing built forms that can support first-floor activity



recommended

New areas to encourage first-floor activity***

Green space

***Building footprint subject to change

^{**}Based on visual preference survey.

Development opportunities

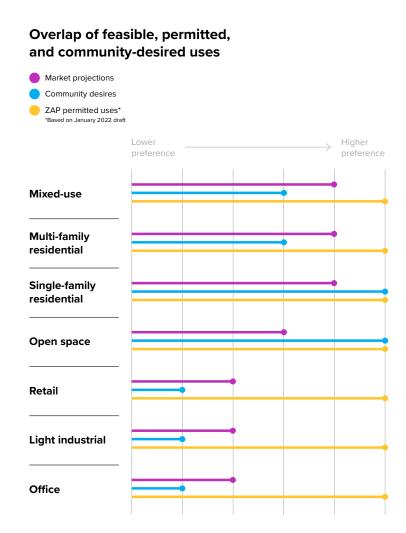
Eastern segment

New development in the eastern segment of the corridor can reconnect and re-establish entire neighborhood blocks that were destroyed by the Inner Loop. A significant, new community green space at the WOIS will also expand recreation options and access to nature in this area.

The eastern segment of the Inner Loop North corridor offers the largest amount of developable land at 8 acres. Considering the existing character of the area as well as market potential and community desires, much of this land – especially that between Lyndhurst and Delevan Streets – should be devoted to low-density, single-family residential development. Creative financing strategies, homeownership programs, and other supportive policies could help make a percentage of these units accessible to neighborhood residents.

Along Main and Union Streets, new development can be either mixeduse or single-use residential depending on market dynamics. Leveraging recent development along Union Street from the Inner Loop East project could make this area of the corridor particularly attractive to developers.

This segment is also unique in that it presents two opportunities to enhance community green spaces at the WOIS and Anderson Park.





developable land



low density



single-family residential



green space



infill



homeownership program



Representative bulk and density** —









Green space recommended

Existing built forms that can support first-floor activity

New areas to encourage first-floor activity***

***Building footprint subject to change

^{*}Based on community input.

^{**}Based on visual preference survey.

Hinge Neighbors plan

Hinge Neighbors – a neighborhood organization that advocates for residents currently separated by the Inner Loop North corridor – developed a refined, community-based plan for the eastern segment of the corridor.

To create the plan, Hinge Neighbors conducted a series of four workshops at the Lewis Street Community Center in Fall of 2021. The resulting plan (shown at right) shows strong community desire for: single-family homes, streetscapes, small businesses that will enhance the neighborhood, walkability, green spaces, social and cultural activities, stability, and to be an integrated part of the larger city. The recommendations of the Hinge Neighbors plan informed the recommended land uses for new development sites shown on the previous page.

As the City advances final design, it would be beneficial to develop similarly focused, community-informed land use plans as another method to identify preferred future land uses prior to the creation of developer RFPs – to be weighed in concert with the findings from any market studies and zoning regulations applicable at the time.



Housing opportunities

Removing the Inner Loop creates tremendous opportunity to rebuild neighborhoods that were torn apart by its construction, to reconnect and revitalize surrounding communities, and to positively impact thousands of Rochester residents.

Market conditions along the corridor make it difficult to develop conventionally financed, market-rate housing projects. Ground-up, new construction – as would be required in the new developable land created by the removal of the Inner Loop – is often expensive and sometimes impractical in many markets across New York State. These market conditions will require the use of what are widely considered complex financing structures.

Despite these challenges, with strategic planning, phased development, and creative financing solutions, it is possible to reinvest in and reshape neighborhoods that were divided and, in some instances, destroyed by the Inner Loop. The City of Rochester also has a long and successful history of delivering affordable housing, which will be important to creating a healthy mix of incomes in the study area.





Existing, Scio and Lyndhurst

Potential

Housing opportunities

There are several pathways and creative financing solutions to achieve the community's housing goals, despite challenging market conditions.

Appendix 100

To learn more about housing potential in the study area, see **Appendix 10**, **Housing Opportunities**.



What residents want:

How to make it happen:

A say in future development

Before the City issues RFPs for development at specific sites, additional community engagement and outreach should occur. Neighborhood representatives should be included in discussions and decisions regarding proposed developments. Community input should be considered alongside other factors, like market realities as well as available subsidies and funding streams, to ensure that future developments align with the community vision and benefit existing residents while also attracting new residents, businesses, and uses to the area.



To revitalize the existing housing stock

Revitalizing existing and blighted housing stock in combination with infilling vacant lots is key to rebuilding strong and healthy neighborhoods.

New York State administers several programs that provide funding for housing rehabilitation to local governments, non-profits, and also direct to homeowners and homebuyers, depending on the program. These programs include: the Community Development Block Grant (CDBG) Program, the New York State HOME Program, New York State Affordable Housing Corporation's Affordable Home Ownership Development (AHOD) Program, and the Neighborhood and Rural Preservation Program (NPP and RPP).



Homeownership opportunities

Homeownership is one of the best tools for low-to-moderate income earners to build wealth. Providing healthy, new, for-sale housing stock accessible to residents along the corridor is critical to successfully revitalizing neighborhoods in an equitable and inclusive way.

The most effective way to finance the development of affordable for-sales homes in New York State is the Affordable Home Ownership Development Program (AHODP), which is available through NYS Homes and Community Renewal. The program provides between \$35,000 to \$40,000 in grant funding per home and limits a project to a \$1 million capital request. Projects funded with AHODP can add many as 28 new affordable homes to a neighborhood per project.

Housing opportunities



What residents want:

How to make it happen:



Affordable multi-family and senior housing

Affordable multi-family and senior housing development should be encouraged along the corridor, especially if it is mixed with other income units. Where feasible, it is possible that these developments be mixed-use so that they can provide the neighborhood with additional amenities, like a grocery store, urgent care, daycare center, hair salon, or other programming. These services can benefit the neighborhood and also create jobs for neighborhood residents.

The Low Income Housing Tax Credit (LIHTC) program is the most effective financing mechanism for the development of affordable and mixed-income housing. Depending on the sites selected along the corridor, rental housing financed with LIHTC could range in size between 40 and 180 units per project.



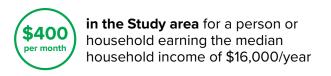
Affordable single-family rental housing

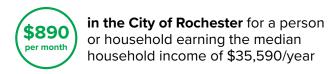
The 9% Low Income Housing Tax Credit allows developers to develop single-family rental housing. This financing approach can produce 35 to 65 new homes per project, but usually takes 2 to 4 years to be funded by New York State.

While each unit is required to remain a rental product for the first 15 years, the family or individual living in the home after the initial 15year Compliance Period is eligible to buy the home thereafter, usually at a cost much below market value and at favorable financing terms.

Community desire for single-family housing must be weighed against market realities, which indicate that residential potential in the study area is much more strongly weighted toward multi-family units (95%) than singlefamily units (5%).

Affordable monthly rents







More opportunity

Supporting existing residents while also attracting new residents, businesses, and uses is critical to growing the study area, creating new job opportunities, encouraging investment, and improving quality of life for all. Housing development in the study area should build on the area's existing supply of affordable and income-qualified housing as a foundation and look to create mixed-income options that include some affordable units as well as mixedincome, moderate, and high-income (including market-rate) units as well. Together, new mixedincome and the existing affordable housing developments in the area will help to create a healthy, mixed-income neighborhood where new residents and new investments can help support larger neighborhood development and revitalization goals.

Housing affordability in Rochester

Based on current home values and gross rents, Rochester's housing market is considered generally affordable for households earning modest incomes and widely affordable for households earning middle class incomes and higher. Yet housing affordability is a significant issue in the city. Nearly 60% of renter households and nearly 25% of homeowner households in the city are "cost burdened," paying more than 30% of their gross income to housing costs. The main driver of this problem is that incomes for many households in the city are very low. More than 40% of city households have incomes below \$25,000/year. In the study area, the median household income is \$16,000/year.

Housing affordability challenges in Rochester are rooted in very low incomes, not high and rising housing costs. This distinction is critical to understand because low incomes are a different problem to solve than high housing costs, and they are a problem that housing policy cannot directly solve on its own. Strategies around economic development, workforce development, education, financial literacy, and others must be seen as critical components to addressing affordable housing challenges that are specific to our market.

Sidebar

Local case studies





> L2P Westside

Southwest neighborhoods, Rochester, NY

L2P Westside is new-construction, affordable housing, consisting of 41 single-family houses for rent on sites across southwest Rochester neighborhoods. The homes will transition to homeownership after the initial 15-year rental compliance period. In year 16, the homes are sold at substantially discounted prices, granting significant equity to the homebuyer. The homes are energy efficient, designed to complement the surrounding neighborhood, and feature front porches, storage sheds, laundry hook-ups and off-street parking. Qualified residents must have incomes at or below 60% of area median based on family size. Residents are required to provide basic, loving-care maintenance of their homes and yards, and participation in home maintenance training and financial counseling is required.

Units: 41 single-family rental homes

Type: New construction on multiple sites throughout southwest Rochester

Total cost: \$13 million

Funding sources: LIHTC, NYSERDA, City of Rochester HOME, City of Rochester Land Bank, Federal Home Loan Bank of NY

Developer: ULREDC, Home Leasing



> Stadium Estates

JOSANA Neighborhood, Rochester, NY

Units: 91 affordable homes in 58 residential buildings

Type: New construction on multiple, scattered sites that

were formerly vacant lots

Total cost: \$13 million

Funding sources: LIHTC, NYSERDA, City of Rochester HOME, City of Rochester Land Bank, Federal Home Loan

Bank of NY

Developer: Cornerstone Group / Charles Settlement House



> Long Pond Senior Housing

1 GBC Pkwy, Greece, NY

Units: 54 one- and two-bedroom apartments for low-

income seniors (62+)

Type: Single-site new construction

Total cost: \$11 million

Funding sources: LIHTC, HTF, Monroe County HOME,

CDBG, private equity

Developer: Cornerstone Group

Green space creation

Reclaimed space along the corridor presents opportunities to restore existing green spaces that were damaged by the Inner Loop and to create new green spaces, as well.

Under the preferred concept, Franklin Square (existing Schiller Park) and Anderson Park would be restored and returned to their original size. A large new community green space would be created north of the World of Inquiry School, to be used by students and community members alike. Opportunities for additional green space creation in the form of small plazas, pocket parks, and a linear trail paralleling the CSX rail corridor are also possibilities.





Green space creation

Franklin Square restoration

Franklin Square (now known as Schiller Park) was opened to the public in 1826, making it one of the oldest parks in the city. Through the next century, the Square served as a pastoral respite for downtown residents. It hosted baseball games and political demonstrations and was the first home to the Spanish-American War Monument (that now resides at the War Memorial Terrace adjacent to the Blue Cross Arena). In 1893, the square was redesigned by Frederick Law Olmsted, the renowned landscape architect who designed Central Park in New York City.

In 1960, the northern side of Franklin Square was lobbed off to make way for the Inner Loop, creating a huge gash between the park and St. Luke's Church, the Post Office, and the rest of the neighborhood to the north.

Transforming the Inner Loop North corridor into an urban boulevard creates the opportunity to restore Franklin Square to its original size and grandeur, potentially restore the Olmsted design, reconnect it back to the northern neighborhoods, improve access to green space for residents, and enhance quality of life.

1940



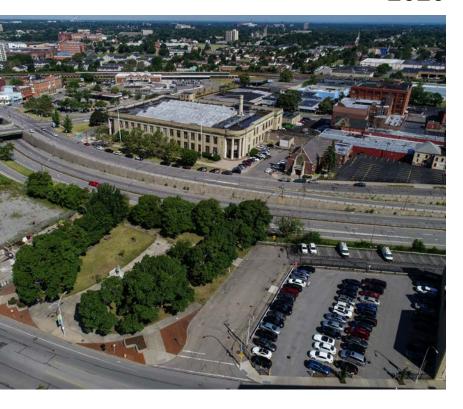
Park programming Suggested by community members

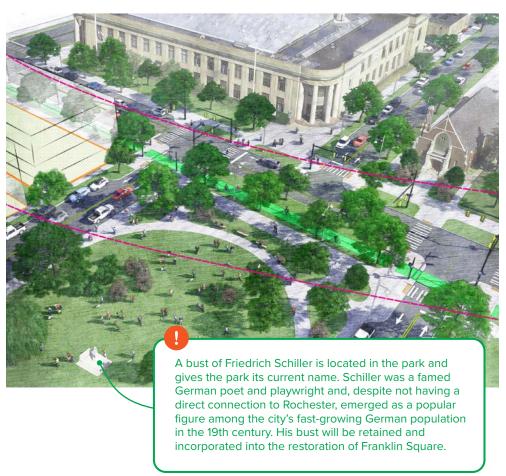












Green space creation

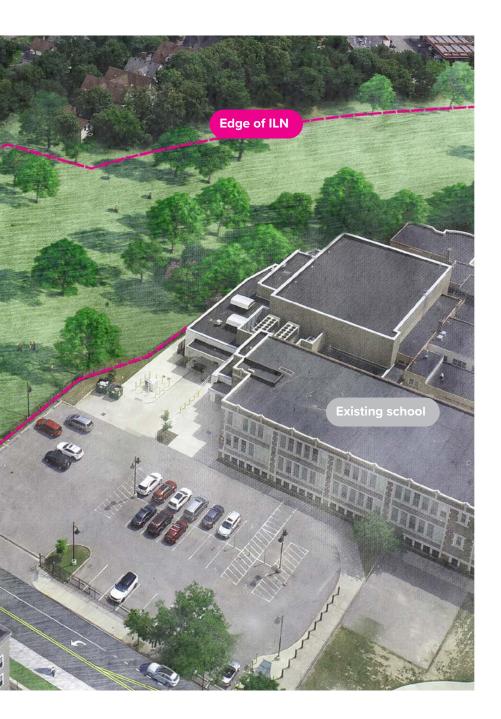
Community green space at World of Inquiry School

Removing the Inner Loop North corridor immediately north of the World of Inquiry School creates the possibility for almost 5 acres of community green space. A green space in this location would not only provide much needed outdoor activity space for students, but would also put more residents within closer walking distance to a park. This space could be programmed in multiple ways, from an informal, large open space, to a multi-use sports field with basketball courts, tennis courts, soccer fields, and other facilities. Ownership and maintenance responsibilities (either City or School) are to be determined but the green space is intended to be accessible to the larger community.

Another option would be to extend the existing singlefamily housing on the east side of Lyndhurst Street down the block to Scio Street, while maintaining the rest of the reclaimed land as green space.



Potential, Scio Street at WOIS







Existing, Scio Street at WOIS

Sidebar

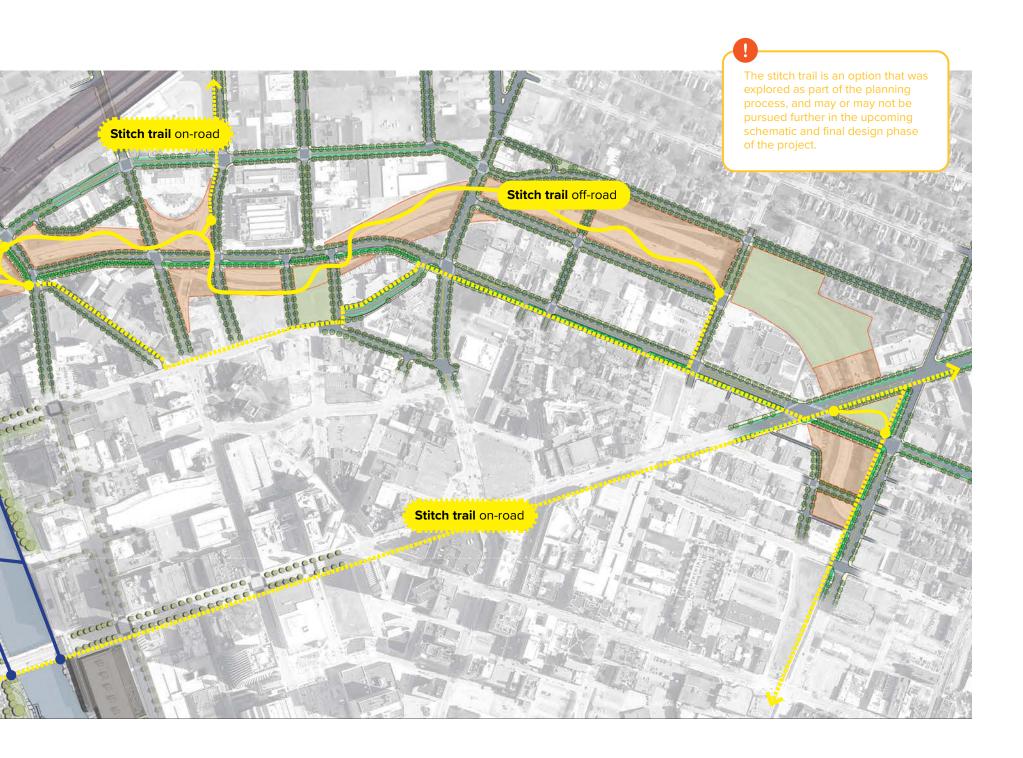
Stitch trail

The concept of a "stitch trail" that weaves through the reclaimed land along the re-designed Inner Loop corridor was explored to increase connectivity between the new development sites and the existing trail network.

The stitch trail would weave mid-parcel on newly reclaimed sites while leaving space and street frontage on these sites for new development. On these sites, the trail would be designed with an off-road character, buffered with vegetation, and furnished with pedestrian amenities and lighting. Spurs of the stitch trail would transition on-road (and be identifiable by a unique paving pattern or other design element) to connect the trail into the existing sidewalk network and into the Genesee Riverway Trail at several points.

While it may not be feasible or desirable to implement the stitch trail in full, implementation of targeted portions of the trail may be explored further in the schematic design phase of this project.





Greenhouse gas impacts

The preferred concept is expected to significantly reduce greenhouse gas emissions in the project area by reducing car trips and facilitating travel by more environmentally-friendly alternatives, like walking and biking.

Re-designing the Inner Loop North corridor will alter travel behavior in the area. Enhanced pedestrian and cyclist facilities, including expanded sidewalks and a cycle track, will make the area significantly more walkable and bikeable. While trips will still be made by car, they may be fewer and shorter. A re-connected, at-grade street grid will make routes more direct and convenient and trips that used to rely on cars could be easily made on foot or by bike instead.

This change in travel modes is expected to reduce vehicle miles traveled on the Inner Loop North corridor, which will reduce fuel consumption and CO_2 emissions as a result. On an annual basis, the preferred concept is expected to reduce emissions by 1,786 tons compared to existing conditions with the grade-separated expressway, which is equivalent to the CO_2 emissions of consuming 180,000 gallons of gas or the carbon sequestration potential of 2,000 acres of forest.

Some carbon emissions will occur during construction (that would not have occurred if the existing expressway was retained as is) due to the production and transport of materials and the use of equipment on-site. These short-term increases in emissions will be offset in the long-term by the reduction in vehicle miles traveled per year on the new corridor.

Elements included in the analysis:*

Average vehicle speed
Vehicles miles traveled
Vehicle mix (type of vehicles)
Fuel consumption rate
Total vehicular fuel use
Construction energy
Roadway maintenance energy

*Based on NYSDOT Draft Energy Analysis Guidelines for Project-Level Analysis (2003)



Find the complete analysis in Appendix 11, Greenhouse Gas Emissions Analysis.

-1,786 tons/yr

reduction in CO₂ emissions within the project area*

*Does not account for impacts outside the project area.

Greenhouse gas equivalencies:

U.S. EPA



180,000

gallons of gas consumed

CO₂ emissions equivalent



4,000,000

miles driven by a car

Greenhouse gas emissions equivalent



4,000

barrels of oil consumed

CO₂ emissions equivalent



200

homes' energy use for one year

CO₂ emissions equivalent



2,000

acres of forests in one year

Carbon sequestration equivalent



30,000

tree seedlings grown for 10 years

Carbon sequestration equivalent

Benefit-cost analysis

The Inner Loop North Transformation Project has a benefit-cost ratio of 2.25 and is expected to deliver significant returns on investment, totaling \$30 million* in net benefit to the community over the next 30 years.

The benefit-cost ratio (BCR) was calculated by quantifying the costs and benefits associated with the preferred concept, including everything from the effects of increased property values to the effects of reduced speeds on the corridor. Projects with BCRs greater than 1.0 are favorable investments.

The Inner Loop North's BCR of 2.25 is greater than that forecast for the Inner Loop East project (1.8 to 2.2 BCR), which signals that the Inner Loop North project is both a worthy investment and that it has potential to be even more transformative than the Inner Loop East project.

The largest net benefit is in the cost savings of removing the old Inner Loop North infrastructure, which is estimated to be significantly less expensive than continuing to maintain and repair it (and eventually to rehabilitate and replace it).

It is possible that the \$30 million return on investment figure actually underestimates the total net benefit of the project because several benefits could not be reasonably quantified as part of the benefit-cost analysis. These unquantified benefits include: increased connectivity, transition to alternative modes of travel, and improved equity.

Appendix

Find the complete analysis in **Appendix 12, Benefit-Cost Analysis.**

*A 7% discount rate is applied to the net benefit to give the present, non-inflated value (in 2019 dollars).

2.25

benefit-cost ratio

equivalent to \$30 million* in net benefit to the community over the next 30 years



+\$41 M

change in cost of regular maintenance and inspection



+\$6 M

reduction in crashes, injury, and property damages



+\$23 M

health benefits of improved pedestrian facilities



+\$2 M

health and community benefits of restored parks



+\$13 M

increase in property values



+\$1 M

residual value of assets



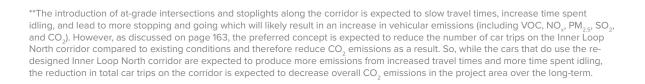
+\$9 M

health benefits of improved bicycle facilities



+\$0.5 M

societal benefits of urban tree canopy





-\$28 M

travel time delays due to reduced speeds



-\$1 M

increase in combined VOC, NO_x, PM_{2.5}, SO₂, and CO₂ emissions due to increased stopping and going**



The increased prevalence, both now and in the future, of electric vehicles (EVs) and vehicles with stop-start systems (which automatically shut down the engine when the car is stopped to reduce time spent idling) will likely reduce vehicular emissions and some of the negative cost benefit associated with increased travel times and more stopping and going on the newly re-designed corridor.

Implementation



A guide to moving the preferred concept to the next phase of the design process.



Next steps page 168



Phasing page 172



Costs and funding page 176

Introduction

Implementing the preferred concept for the Inner Loop North corridor is a key priority for the City. Successful implementation will require community and financial support, coordination among multiple agencies, and committed partners to make the project a reality.

This chapter presents a planning-level overview of the next steps in development of the project as well as a proposed scheme for implementing the project in discrete phases. Funding sources in the process of being secured and other potential funding sources are also identified.

As the project moves into the design, engineering, and construction phase, some of the information presented in this chapter may change as the project is refined and details are solidified.



Next steps

With the completion of the planning process, the Inner Loop North project will now advance to the final design and engineering process.

The City of Rochester's efforts in planning for the future of the Inner Loop North corridor and its successful transformation of the Inner Loop East corridor have been recognized by the State, which committed \$100 million to fund the final design and construction of the Inner Loop North Transformation Project. This commitment will accelerate the implementation process.

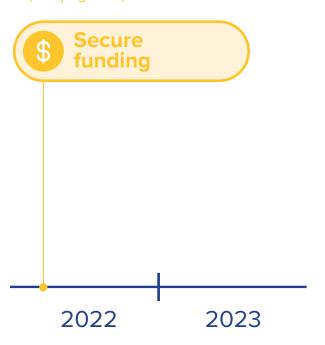
The final design and engineering phase will refine the concept level plan created as part of this planning process into a preferred alternative for which construction-ready documents will be developed. An extensive review of social, economic, and environmental considerations also will be conducted. A contractor will be identified through a competitive bidding process to lead the construction of the project, which will likely be phased in several parts as explained in the next section. As phases are completed and development sites are brought on-line, the City will use an RFP process to identify preferred developers for specific sites to implement the types and intensities of development identified in this planning study and any future studies.

Estimated timeline:*

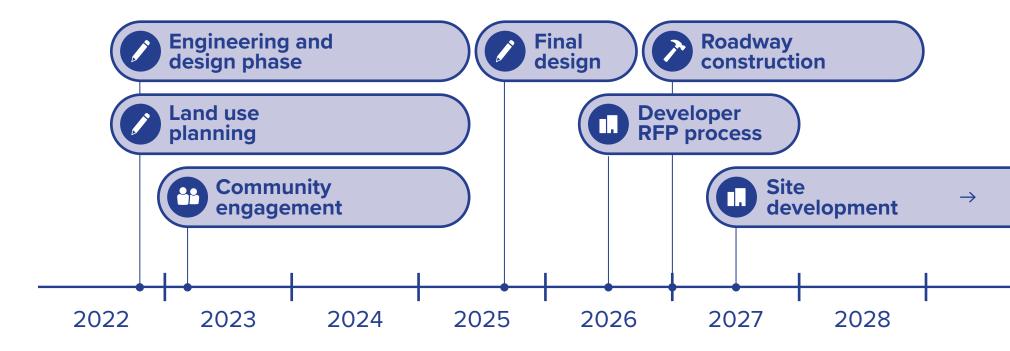
*Subject to refinement as project advances.

In progress steps:

(see page 176)



Upcoming steps:



Schematic and final design

The initial planning phase of the Inner Loop North Transformation Project developed a community-preferred, concept level re-design for the Inner Loop North corridor. The upcoming schematic and final design phase of the project will refine and finalize this concept into a construction-ready design.

The schematic and final design phase will involve:

1 Traffic Modeling

Additional traffic analysis and modeling will supplement the preliminary analyses conducted as part of this planning study. The final design will ensure that all streets and intersections, both those within the former Inner Loop North corridor as well as any neighborhood streets impacted by redistributed traffic, are operating at LOS D or above – NYSDOT's minimum standard for acceptable traffic flows. The preliminary traffic analyses identified several street segments and intersections that may require further design and mitigation to ensure acceptable flows.

Special consideration will be taken at these locations, including:

- **Central Ave** from Plymouth to Clinton and from St. Paul to North St.
- University from Chestnut to E. Main
- N. Union from University to East Ave
- At-grade Plymouth Avenue and State
 Street intersections
- N. Union/East Ave intersection

2 Street Alignments

The roadway design identified as the preferred concept during the planning phase provides a base-level design that will be refined and modified as necessary to produce a final, construction-ready design. During this refinement process, alterations may be made to the alignment of streets, the number of lanes in some segments, and other design elements to account for updated traffic modeling and other issues that may become apparent in the more in-depth schematic and final design phases.

Some elements that could be considered in more detail include:

- Squaring up intersections. Where
 possible, odd-angled intersections
 should be avoided and streets should
 meet at perpendicular angles as much
 as possible to restore the city grid.
- Alleys. New and reconstructed blocks should be designed with alleys to allow for rear, vehicular access to homes and discourage front-loaded parking areas.

③ Streetscape Design

Walkability, bikeability, and improved safety for all modes of transportation emerged as key themes during the initial planning phase of the Inner Loop North Transformation Project. The following details will be fleshed out in the schematic and final design phase to implement these themes:

- Lane widths. Narrower lanes maximize space for other uses, like sidewalks and bike lanes, encourage slower vehicular speeds, and enhance pedestrian safety and walkability.
- Bike lanes. Bike lanes make roads safer for everyone, cyclists, pedestrians, and motorists included. The City may wish to consider one-way protected bike lanes as an alternative option to the proposed two-way cycle track on the Inner Loop North corridor. Final design will also enhance the corridor's connection to the existing Union Street cycle track.
- On-street parking. Where feasible, onstreet parking should be provided and parking lanes should be protected from traffic lanes by bump-outs.
- Streetscape amenities. Furnishings like benches, pedestrian lighting, trash receptacles, signage, landscaping, and other amenities make the streetscape more welcoming. Locations, types, and styles of furnishings will be determined as part of the final design phase.

- Transit amenities. Bus stops within
 the Inner Loop North corridor can
 be enhanced with seating, improved
 signage, and shelters where
 appropriate. These amenities make
 waiting for the bus more comfortable
 and can encourage more people to use
 the transit system.
- Placemaking. Public art, monuments, signage, and other placemaking features can celebrate the identity of the community and serve as remembrances and acknowledgments of the area's history of displacement.

4 Lot Delineations

The re-design of the Inner Loop North corridor creates large areas of new land that can be used for development or green space creation. Presently, these areas area shown as uninterrupted swaths in the preferred concept plan. Prior to development, the City will need to subdivide these areas into lots. The size and shape of these lots is important to consider, as these factors affect the types of development that can feasibly occur at the site. The City should strongly consider creating smaller lots in some areas, as smaller lots create opportunities for small, neighborhood developers to participate in the revitalization of their community.

Other Considerations

National Highway System
Classification. The re-design of the former Inner Loop North corridor may alter its federal functional classification. The corridor currently provides the northern National Highway System (NHS) connection to South and Clinton Avenues and is the intermodal connection to the train and bus stations. Reclassifying the roadway and removing it from the NHS may require reclassification of adjacent streets and could also impact truck routes.

Development without Displacement Policies. While the re-design of the Inner Loop North corridor will not directly displace any existing residents, increased development in the study area in the future may put upward pressure on rents and home prices. As a complement to the schematic and final design phase, the City may wish to consider adoption of policies that protect existing tenants and rental housing, promote community and resident ownership, expand the affordable housing stock, and ensure equitable public investment and development opportunities.

Construction

Phasing

Given the size and scope of the Inner Loop North project, construction work will likely be accomplished in phases and may consist of multiple individual projects advanced in a coordinated way.

A phased approach would minimize impacts on surrounding neighborhoods and the road network by limiting detours and road closures and allowing traffic to flow on road segments that are not being worked on as part of the current phase.

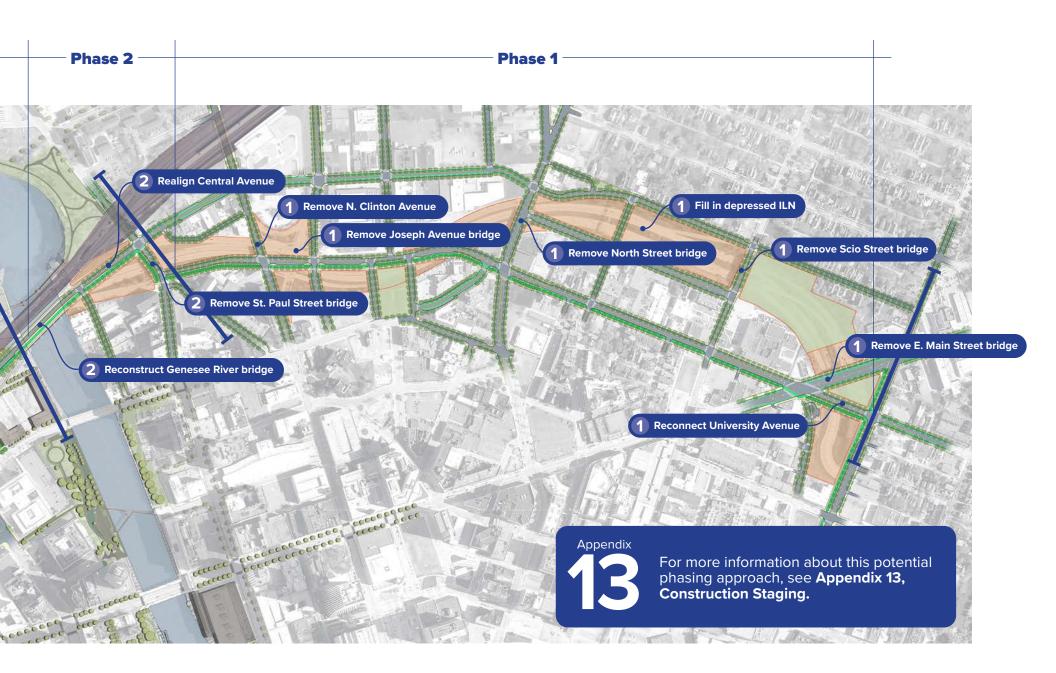
A potential phasing approach is detailed below and shown at right:

Phase 1: Fill in the depressed section of the Inner Loop North corridor from Union Street to just east of St. Paul Street. Reconnect University Avenue between Union Street and East Main Street. Remove the East Main Street, Scio Street, and several other bridges.

Phase 2: Remove the St. Paul Street bridge. Reconstruct the Genesee River bridge. Reconstruct Central Avenue to its new alignment.

Phase 3: Remove the elevated Inner Loop North corridor from the I-490 ramps to the river. Construct the new at-grade Central Avenue in its place, with intersections at Plymouth Avenue and State Street.





Development

Phasing

Given that development along the redesigned Inner Loop is unlikely to take place for at least five years, opportunities for development, preferred land uses, and potential phasing should be reconsidered at that time.

Prior to preparing RFPs for development sites, the City should reconsider the local market, revise the land use recommendations made in this study as necessary to better align with current market conditions, and consider any new or impending issues or opportunities that may impact development at that time.

Ideally, development should be phased such that high-impact, prime location parcels are developed first so that activity generated at these developments is highly-visible and can catalyze demand at other sites. Growing the residential population (especially with moderate- to higher-income residents who have the kind of discretionary spending that can support business growth in the area) in early phases is key to creating demand for future phases. A solid concentration of people and activity will stimulate the need for supportive goods and services around it.

Encouraging preferred development types

The City of Rochester can use several methods to encourage the preferred types of development and uses identified in this study or in any future studies:

1 Zoning

The city's zoning code outlines permitted uses for the districts along the Inner Loop North corridor. Both current and proposed zoning (through ZAP) will be largely supportive of all desired uses identified as part of this study.

2 RFP design and process

Requests for Proposals (RFPs) can be specifically designed to solicit, evaluate, and select developers to build out the development sites with uses, massing, and architectural styles consistent with those identified in this study.

3 Subsidies

Much privately-funded development in the Rochester market does not "pencil out." Subsidies from the City, State, and federal government, and other philanthropic sources can help encourage preferred development types.

Building a better RFP

The City can design RFPs so that they are more prescriptive in their building design and use requirements, that they incorporate lessons learned from the Inner Loop East development process, and such that resulting developments are better aligned with the community vision.

Development objectives

Economic development. Proposals can be required to maximize opportunities for local, small, BIPOC- and women-owned businesses in both business creation associated with the development and construction activities. Developers can also be encouraged to work with local organizations to help promote entrepreneurial opportunities, like the RIT Center for Urban Entrepreneurship (CUE).

Affordable/income-restricted housing.

Thresholds can be set for the amount and level of affordable and homeownership units included in the development.

Alignment with vision. Developments can be required to incorporate the vision of past planning projects, including this study. For example, preference can be given to proposals that support household wealth creation and the provision of housing accessible to existing residents.

Design guidelines

Use guidelines. RFPs can prescribe particular uses for development sites. They can be as descriptive as stating, for example, that commercial and/or retail uses must be located on the ground floor and residential uses must be included on the upper floors.

Massing, height, and orientation. Building massing and height can be required to respond to that of surrounding buildings. Ground floor uses can be required to front on particular streets to maintain the continuity of the street wall.

Architectural design and character. Building styles can be explicitly required in the RFP. For instance, RFPs can encourage modern styling or styling that reflects the character of surrounding buildings. Specific requirements can also be made for designs that encourage ground floor transparency or provide an identifiable distinction between uses.

Access and circulation. Building entrances and on-site pathways can be required to make clear connections between nearby amenities. Public transit and bicycle use can be promoted by requiring improved bus stop facilities and/or bike racks.

Public realm improvements. Developments can be required to enhance the public realm by providing streetscape and pedestrian amenities, landscaping, and/or public green or plaza space. To the extent possible, public art can also be encouraged on site.

Sustainability. RFPs can also include requirements for sustainable building and construction practices including: using locally-sourced materials, incorporating renewable energy technologies, promoting ecological site design, reducing waste generation, and requiring on-going monitoring of projects among other factors.

Incremental development

In disinvested neighborhoods like the Inner Loop North study area, small-scale, small-site, incremental development is often faster, less expensive, and better suited to creating opportunities for local investors and entrepreneurs to build wealth in their own communities as small developers. To support small developers, the City can strategically parcel out the land reclaimed by the Inner Loop's transformation into smaller lots. Small lots create right-sized opportunities for small developers to participate in the development process and would also celebrate the historic character of the city grid in this area. The City could further support small developers by providing training to local community members interested in pursuing the process.

Costs and funding

Implementation of the preferred concept for the re-design of the Inner Loop North corridor is expected to cost approximately \$96 million.* The Governor has committed \$100 million in State funding for the design and construction of the Inner Loop North Transformation Project.

The estimated cost for the Inner Loop North project includes demolition and construction as well as contingencies (see cost breakdown at right). It is possible that the ultimate cost of the project may change slightly during the final design and engineering phase and as prices for building materials fluctuate. The City can supplement State funding with additional funding from other State, federal, and philanthropic sources, as well (see following page).



Governor Hochul announced the State's \$100 million commitment to the Inner Loop North project in March 2022.

^{*\$96} million total cost is in 2028 dollars.

Roadway demolition and construction	Roadway	demolition	and	construction
-------------------------------------	---------	------------	-----	--------------

Demolition of elevated Inner Loop from interchange at I-490 to the bridge crossing at the Genesee River. Removal of Inner Loop from river to University Avenue, including guide railing, drainage, and sign structures. Construct new alignment of Central Avenue from I-490 interchange east to St. Paul Street. Reconfigure road network on eastern side of corridor and construct new at-grade intersections. Install two-way cycle track on south side of new corridor.	\$21,000,000
Structural demolition and construction Removal of Genesee River bridge superstructure and substructure to the tops of the existing piers. Demolition of seven bridge structures east of the river, as well as nine retaining walls and four overhead signs. Construct new superstructure for Genesee River bridge and rehabilitate/modify existing piers as necessary. Install low-profile retaining walls to support landscaping along the corridor.	\$12,500,000
Utilities construction Construct new or replace watermains in select areas. Install street lighting on new roadways. Add sewer trunk line along Central Avenue. Adjust, replace, and provide new manholes as necessary. Install catch basins and tie-ins to provide drainage throughout the corridor.	\$5,000,000
Landscaping construction Place topsoil and seeding to reestablish ground vegetation. Install roadside vegetation and streetscape components. Install improvements at Franklin Square and Anderson Park and construct greenspace at WOIS.	\$7,500,000
Common construction Includes survey and stakeout, work zone traffic control, mobilization, and other efforts necessary to complete construction but do not necessarily remain as part of the work upon completion.	\$7,000,000
Ancillary costs "Soft" costs including engineering, design, and construction inspection. (For this planning level estimate, a 20% contingency was added to the estimated construction cost, on top of which a 12% contingency was added for engineering and a 10% contingency was added for construction inspection.)	\$25,000,000
TOTAL COST (2021 dollars) TOTAL COST (2028 dollars)*	\$78,000,000 \$96,000,000
Pedestrian tunnel A pedestrian tunnel under the CSX rail line west of St. Paul Street has been explored to provide additional north-south pedestrian and bicycle connectivity. The tunnel is not currently considered as part of the proposed roadway re-design but could be considered an add-on if and when funds become available to move it forward.	\$10,000,000

^{*}The cost estimate in 2028 dollars assumes 3% annual inflation.

Costs and funding

The City can supplement State funds with funding from additional sources. These funds can also be used to cover additional costs that were not originally estimated or add-on projects, like the CSX pedestrian tunnel, that were not originally scoped in the project.

Reconnecting CommunitiesU.S. DOT

Provides funding to reconnect communities divided by transportation infrastructure – particularly historically disadvantaged communities too often nearly destroyed or cut in half by a highway. Funding will go to state, local, metropolitan planning organizations, and tribal governments for planning, design, demolition, and reconstruction of street grids, parks, or other infrastructure to address these legacy impacts.

Rebuilding American Infrastructure Sustainably and Equitably (RAISE) U.S. DOT

Competitive grant program for road, rail, transit, and other surface transportation of local and/or regional significance. Selection criteria include: safety, sustainability, equity, economic competitiveness, mobility, and community connectivity.

National Infrastructure Project Assistance (MEGA)

U.S. DOT

Competitive grant program for multi-modal, multi-jurisdictional projects of regional or national significance. Communities are eligible to apply for funding to complete critical large projects that would otherwise be unachievable without assistance.

Safe Streets and Roads for All U.S. DOT

Provides funding directly to and exclusively for local governments to support their efforts to advance "vision zero" plans and other complete street improvements to reduce crashes and fatalities, especially for cyclists and pedestrians.

Highway Safety Improvement Program (HSIP)

U.S. DOT

Provides funding to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads. Funds can be used for the installation of roadway improvements that separate pedestrians and vehicles, including medians and pedestrian crossing islands, for pedestrian hybrid beacons and for other similar projects.

Transportation Alternative Program (TAP)

NYSDOT

Funding supports bicycle, pedestrian, and multi-use path and non-motorized projects. Funds can be used to construct pedestrian and bicycle facilities and recreational trails or for projects that reduce congestion and gas emissions.

Consolidated Local Street and Highway Improvement Program (CHIPS)

NYSDOT

Funds the construction and repair of highways, bridges, highway railroad crossings and other facilities not in the State highway system. Funds can also be used for resurfacing, shoulder improvements, new drainage systems, sidewalk improvements, traffic calming, and bus shelters.

Community Development Block Grant Program (CDBG)

NYSDOT

Provides funds to revitalize neighborhoods, encourage economic development and improve community facilities. Funds can be used for public improvements, including for streets and sidewalks.

Environmental Protection Fund Grant Program for Parks, Preservation and Heritage (EPF) NYSDOT

Funding for capital projects that protect the environment and enhance communities through the creation or improvement of public parks, open spaces, and trails.

Green Innovation Grant Program (GIGP)

NYSDOT

Provides funding for projects that utilize innovative stormwater infrastructure design and cutting-edge green technologies. The installation of permeable pavements, stormwater street trees, and other green infrastructure installation projects are eligible for funding.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

NYSDOT

Funds projects that reduce emissions from transportation-related sources. Eligible projects include pedestrian and bicycle facilities, travel demand management and ride sharing, congestion reduction and traffic flow improvements, transit improvements, and alternative fuel and clean vehicle projects.

