



INNER LOOP NORTH TRANSFORMATION PROJECT

Project Scoping Report

PIN 4CR0.17

City of Rochester Project 23423

October 2024



Department of
Transportation



City of Rochester, NY
Malik D. Evans, Mayor
Rochester City Council

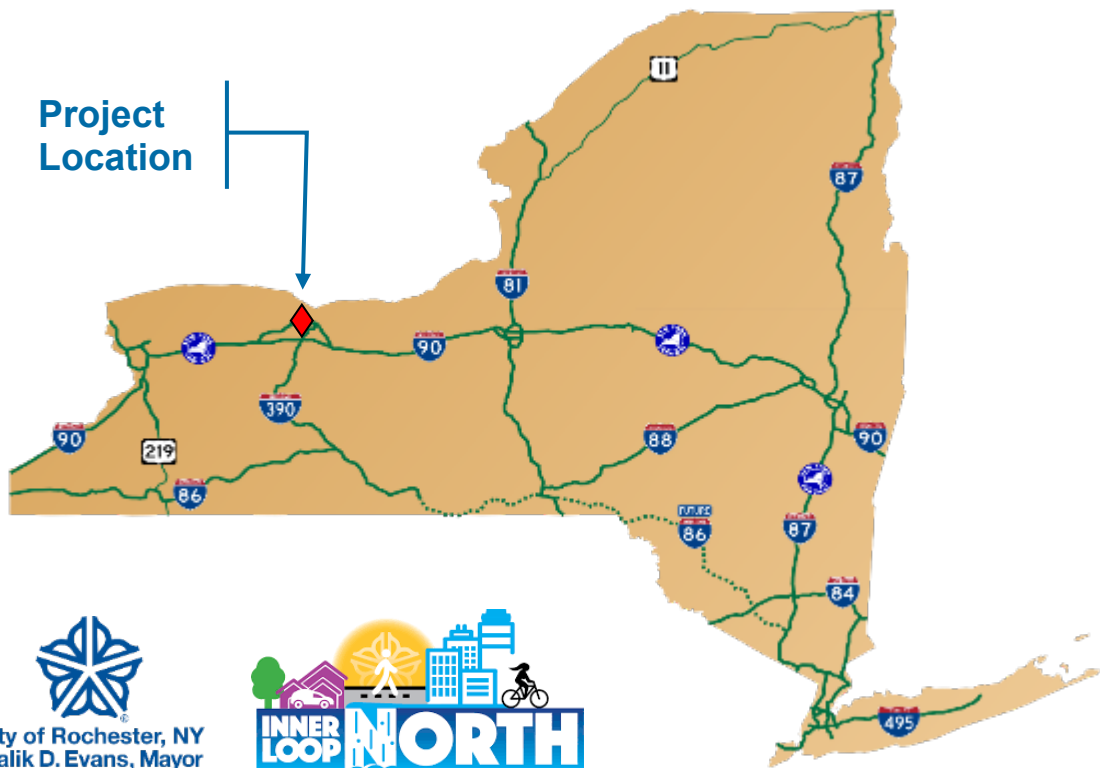


Transportation Project Report

Project Scoping Report

October 2024

Inner Loop North Transformation Project
Project Identification Number (PIN): 4CR0.17
City of Rochester Project: 23423
Monroe County



Department of
Transportation



Project Approval Sheet


<u>Milestones</u>	<u>Signatures</u>	<u>Dates</u>
A. IPP Approval:	The project is ready to be added to the Regional Capital Program and project scoping can begin. The IPP was approved by Christopher Reeve, Regional Director, NYSDOT Region 4	10/20/2022
B. Scope Approval:	The project cost and schedule are consistent with the Regional Capital Program. <i>Christopher Reeve</i> Christopher Reeve, Regional Director, NYSDOT Region 4	11/6/2024
	 Richard J. Perrin, Commissioner, Environmental Services, City of Rochester	11/5/2024

Table of Contents

- 1 INTRODUCTION..... 1**
- 2 PROJECT LOCATION AND CONTEXT 3**
 - 2.1 PROJECT LOCATION.....3
- 3 PROJECT HISTORY, PURPOSE, OBJECTIVES AND NEEDS 7**
 - 3.1 PROJECT HISTORY7
 - 3.2 PROJECT PURPOSE AND OBJECTIVES12
 - 3.3 PROJECT NEEDS13
 - 3.3.1 *Community Cohesion/Neighborhood Restoration*.....13
 - 3.3.2 *Activated Street Grid*.....14
 - 3.3.3 *Economic and Community Development*.....15
 - 3.3.4 *Multi-Modal Access*16
 - 3.3.5 *State of Good Repair*.....22
 - 3.3.6 *Environmental*.....26
- 4 SOCIAL, ECONOMIC, AND ENVIRONMENTAL CONSIDERATIONS..... 28**
 - 4.1 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)28
 - 4.2 STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQRA)28
 - 4.3 PERMITS, APPROVALS, CONCURRENCES, AND CONSULTATION.....28
 - 4.3.1 *Study Areas & Methodology*.....29
 - 4.4 SOCIAL, ECONOMIC, AND ENVIRONMENTAL CONSIDERATIONS.....30
 - 4.4.1 *Land Use and Zoning*30
 - 4.4.2 *Neighborhood and Community Cohesion*33
 - 4.4.3 *Environmental Justice*.....33
 - 4.4.4 *Community and Social Groups Benefitted or Harmed*33
 - 4.4.5 *Schools and Places of Worship*33
 - 4.4.6 *Regional and Local Economies, Businesses*.....37
 - 4.4.7 *Wetlands*.....37
 - 4.4.8 *Surface Water*.....37
 - 4.4.9 *Navigable Waters*37
 - 4.4.10 *Coastal Resources*37
 - 4.4.11 *Floodplains*.....37
 - 4.4.12 *Groundwater Resources, Aquifers, and Reservoirs*.....37
 - 4.4.13 *Stormwater Management*37
 - 4.4.14 *Ecology and Wildlife Resources*38
 - 4.4.15 *Threatened and Endangered Species*.....38
 - 4.4.16 *Historic/Cultural Resources*.....38
 - 4.4.17 *Parks and Recreational Areas*41
 - 4.4.18 *Section 4(f) Resources*.....41
 - 4.4.19 *LWCF Resources*.....41
 - 4.4.20 *Visual Resources*42
 - 4.4.21 *Air Quality*.....42
 - 4.4.22 *Energy Consumption and Greenhouse Gas Emissions*42
 - 4.4.23 *Noise*42
 - 4.4.24 *Asbestos*.....42
 - 4.4.25 *Hazardous Waste/Contaminated Materials*.....43
 - 4.4.26 *Construction effects*.....43
 - 4.4.27 *Indirect and Secondary Effects*.....43

4.4.28	<i>Cumulative Effects</i>	43
5	CONCEPTS	44
5.1	SCREENING CRITERIA	44
5.2	CONCEPTS CONSIDERED AND SCREENING OF CONCEPTS	46
5.2.1	<i>No-Build Concept</i>	46
5.2.2	<i>Concept 1 – Urban Restoration</i>	46
5.2.3	<i>Concept 2 - Central Commons</i>	48
5.2.4	<i>Concept 3 – Community Connection</i>	50
5.2.5	<i>Concept 4 – I-490 Connection</i>	52
5.2.6	<i>Concept 5 – Downtown Bypass</i>	54
5.2.7	<i>Concept 6 and 6A – City Grid Restoration</i>	56
5.3	TRAFFIC ANALYSIS.....	60
5.3.1	<i>Existing Traffic Volumes</i>	60
5.3.2	<i>Future Traffic Volumes</i>	61
5.3.3	<i>Traffic Diversion Summary</i>	62
5.3.4	<i>Crash Analysis Pre-Screening Summary</i>	67
5.3.5	<i>Inner Loop (NYS 940T) between I-490 and East Main Street Safety Screening</i>	69
5.3.6	<i>I-490 between Child Street and Culver Road</i>	72
5.3.7	<i>Existing Street Grid Capacity Summary</i>	78
5.3.8	<i>Concept 6A Capacity Summary</i>	82
5.4	SCREENING SUMMARY.....	87
5.5	CONCLUSION: CONCEPTS THAT WILL BE ADVANCED AS ALTERNATIVES IN THE DAD	89
5.5.1	<i>No-Build Concept</i>	89
5.5.2	<i>Concept 6A</i>	89
6	ANTICIPATED COST AND SCHEDULE	90
7	PUBLIC INVOLVEMENT AND AGENCY COORDINATION	91
7.1	PUBLIC INVOLVEMENT	91
7.1.1	<i>Website and Social Media</i>	92
7.1.2	<i>Mailing Lists/E-Mail lists</i>	92
7.1.3	<i>CAC Meetings</i>	92
7.1.4	<i>TAC Meetings</i>	94
7.1.5	<i>Stakeholder Meetings</i>	95
7.1.6	<i>Other Meetings</i>	96
7.1.7	<i>Public Meetings</i>	97
7.2	SECTION 106 COORDINATION.....	98

Table of Figures

Figure 1 Context Map: Monroe County.....	4
Figure 2 Project Location (Downtown City of Rochester).....	5
Figure 3 Primary and Secondary Study Areas.....	6
Figure 4 Historic Plat Map with Present Day Inner Loop.....	9
Figure 5 Timeline of Planning for the Inner Loop Transformation.....	11
Figure 6 Genesee Riverway Trail Connection Concepts (West of Genesee River).....	20
Figure 7 Genesee Riverway Trail Connection Concepts (East of Genesee River).....	21
Figure 8 Existing Bridges & Culvert.....	23
Figure 9 Existing Overhead Sign Structures.....	24
Figure 10 Existing Retaining Walls.....	25
Figure 11 Structures Inventory Map.....	27
Figure 12 Existing Land Use.....	31
Figure 13 Existing Zoning.....	32
Figure 14 Minority Populations.....	34
Figure 15 Low-Income Populations.....	35
Figure 16 Community Facilities.....	36
Figure 17 Known National Registered Listed Properties.....	39
Figure 18 Parks and Recreational Areas.....	40
Figure 19 Concept 1: Urban Restoration.....	47
Figure 20 Concept 2: Central Commons.....	49
Figure 21 Concept 3: Community Connection.....	51
Figure 22 Concept 4: 490 Connection.....	53
Figure 23 Concept 5: Downtown Bypass.....	55
Figure 24 Concept 6: City Grid Restoration (Full I-490 Interchange).....	58
Figure 25 Concept 6A: City Grid Restoration (Partial 1-490 Interchange).....	59
Figure 26 Existing Traffic Volumes.....	61
Figure 27 Inner Loop East 2023 vs Projected 2035/Full Buildout Volumes.....	62
Figure 28 Traffic Growth Rate and Analysis Timeframes.....	62
Figure 29 Primary Traffic Diversions Concepts 6.....	67
Figure 30 Inner Loop Crash Frequency by Segments.....	69
Figure 31 Inner Loop Crash Frequency by Ramp Facility.....	70
Figure 32 Inner Loop Crash Frequency by Intersection.....	71
Figure 33 I-490 Crash Frequency by Segments.....	72
Figure 34 I-490 Segments with Observed Fatal and Injury Crashes.....	73
Figure 35 I-490 Crash Frequencies by Ramp Facility.....	73
Figure 36 I-490 Ramp Intersection Crash Frequency.....	74
Figure 37 I-490 Collision Type Summary (2021-2023).....	74
Figure 38 I-490 Potential Future Focus Segments.....	75
Figure 39 I-490 Potential Future Focus Ramps.....	75
Figure 40 I-490 Potential Future Focus Ramp Intersections.....	75
Figure 41 Potential Future Focus City Intersections.....	76
Figure 42 Intersection and Road Segment Crash Analysis Summary Map.....	77
Figure 43 Highway Capacity Manual Exhibit 16-16 Generalized Daily Service Volumes for Urban Street Facilities.....	78
Figure 44 Surplus Capacity of Selected Street Segments, Rochester, NY (2024).....	79
Figure 45 Volume-to-Capacity Comparison of University Avenue, 2024.....	80
Figure 46 Volume-to-Capacity Comparison of Andrews Street, 2024.....	80
Figure 47 Volume-to-Capacity Comparison of Central Avenue, 2024.....	81
Figure 48 Volume-to-Capacity Comparison of E. Main Street, 2024.....	81
Figure 49 Volume-to-Capacity Comparison of N. Union Street Southbound, 2024.....	82
Figure 50 Volume-to-Capacity Comparison of N. Union Street Northbound, 2024.....	82
Figure 51 Highway Capacity Manual (HCM) LOS for Freeway/Multi-lane Highway Segments and Signalized Intersections.....	83
Figure 52 I-490 Mainline Segment AM Peak Level of Service (ETC+20).....	83
Figure 53 I-490 Mainline Segment PM Peak Level of Service (ETC+20).....	84

Figure 54 I-490 Intersection AM & PM Peak Level of Service (ETC+20)	84
Figure 55 I-490 Intersection AM Peak Level of Service	85
Figure 56 I-490 Intersection PM Peak Level of Service	86
Figure 57 Summary of Concepts – Key Defining Features	87
Figure 58 Summary of Concept Screening	88
Figure 59 CAC Meetings	93
Figure 60 TAC Meetings	94
Figure 61 Stakeholder Meetings	95
Figure 62 Other Meetings & Pop-ups	96
Figure 63 Public Meetings.....	98

List of Appendices

- A Traffic Analysis Figures
- B Concept Screening Matrix
- C Population Trends
- D Pre-Screening Crash Analysis
- E Environmental Justice Demographic Analysis
- F Public Engagement and Comment Log

1 Introduction

The Inner Loop North (ILN) is a portion of an expressway that currently separates Downtown from historically disadvantaged neighborhoods to the north within the City of Rochester, Monroe County, New York. The Inner Loop North Transformation Project (“Project”) represents a continuation of the previously completed Inner Loop East Transformation Project (completed in 2017) which reconfigured and transformed a segment of the expressway into an urban street grid. The 1.5-mile Inner Loop North segment is the last remaining segment of the Inner Loop. Its transformation into an accessible, multi-modal street network will restore much of the area’s original street grid and reconnect downtown Rochester to the neighborhoods of Brown Square, High Falls, Upper Falls, and Marketview Heights.

The Project will require removal of elevated portions of the existing Inner Loop Expressway, infilling below grade portions, new street construction, existing street reconstruction, milling and resurfacing, multiple intersection re-alignments, construction of protected bicycle facilities, new or upgraded pedestrian facilities, bridge demolition and construction, increased transportation system management and operation capabilities, and other activities. More detailed analysis of design options will be conducted as part of the preliminary design process and discussed in the Design Approval Document (DAD).



Photo: Inner Loop North, looking west (North Clinton Avenue/Inner Loop intersection in the foreground)

Overall, the Project will provide an improved multi-modal transportation network that better meets the needs of all users, particularly those without access to private automobiles and those that choose active transportation options. It will reconnect neighborhoods to Rochester’s downtown and create new parcels for equitable redevelopment and green space.

This Project Scoping Report (PSR) has been prepared in accordance with the New York State Department of Transportation (NYSDOT) Project Development Manual, 17 NYCRR (New York Codes, Rules and Regulations) Part 15, and 23 CFR (Code of Federal Regulations) 771. Transportation needs have been identified, objectives established, and cost-effective concepts assessed (Section 5). It is assumed that construction will include State and Federal funds.

This Scoping Report builds on the previously completed *Inner Loop North Transformation Planning Study* completed in 2022, which identified and analyzed six (6) potential concepts for the transformation of the remaining segment of the expressway. The Planning Study included extensive public involvement and analysis, laying the groundwork for the scoping and preliminary design phases of the Project.

A preliminary environmental screening of the Project assumes the Project to be classified as a Type I Action in accordance with the definitions of the State Environmental Quality Review (SEQR) Act 17 NYCRR Part 15, and as a Class II action under United States Department of Transportation (USDOT) National Environmental Policy Act (NEPA) Regulations 23CFR 771.117(d)(1). The Project is anticipated to comply with the requirements of a Categorical Exclusion with Documentation.

For further information about the Project, please visit the Project website at <https://www.innerloopnorth.com/> or contact David Riley, Project Manager, City of Rochester, david.riley@cityofrochester.gov or (585) 428-6978, 30 Church Street, Rochester, New York 14614.

2 Project Location and Context

2.1 Project Location

The Project includes approximately 1.5 miles of the Inner Loop Expressway, extending from I-490 on the west end of the corridor to North Union Street at the eastern end of the corridor. The geographic context and Study Areas are shown in Figure 1, Figure 2, and Figure 3. The Project limits include logical termini, as the western terminus is located at the I-490 entrance/exit ramps (Exit 13) and the eastern terminus connects to the previously completed Inner Loop East Transformation Project. It is noted that, pending the outcome of detailed traffic analysis, it may be determined that improvements outside the Primary Study Area (referred to as “off-site” improvements) may be necessary to mitigate traffic impacts due to changes in travel patterns or to advance the Project’s multi-modal transportation goals.

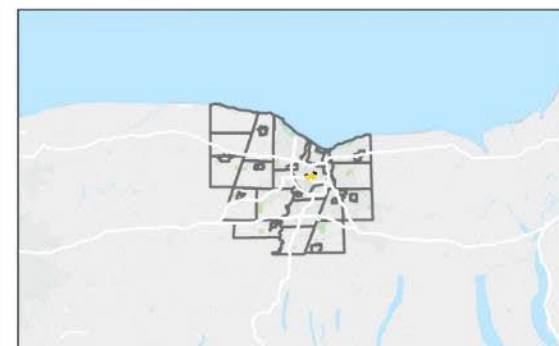
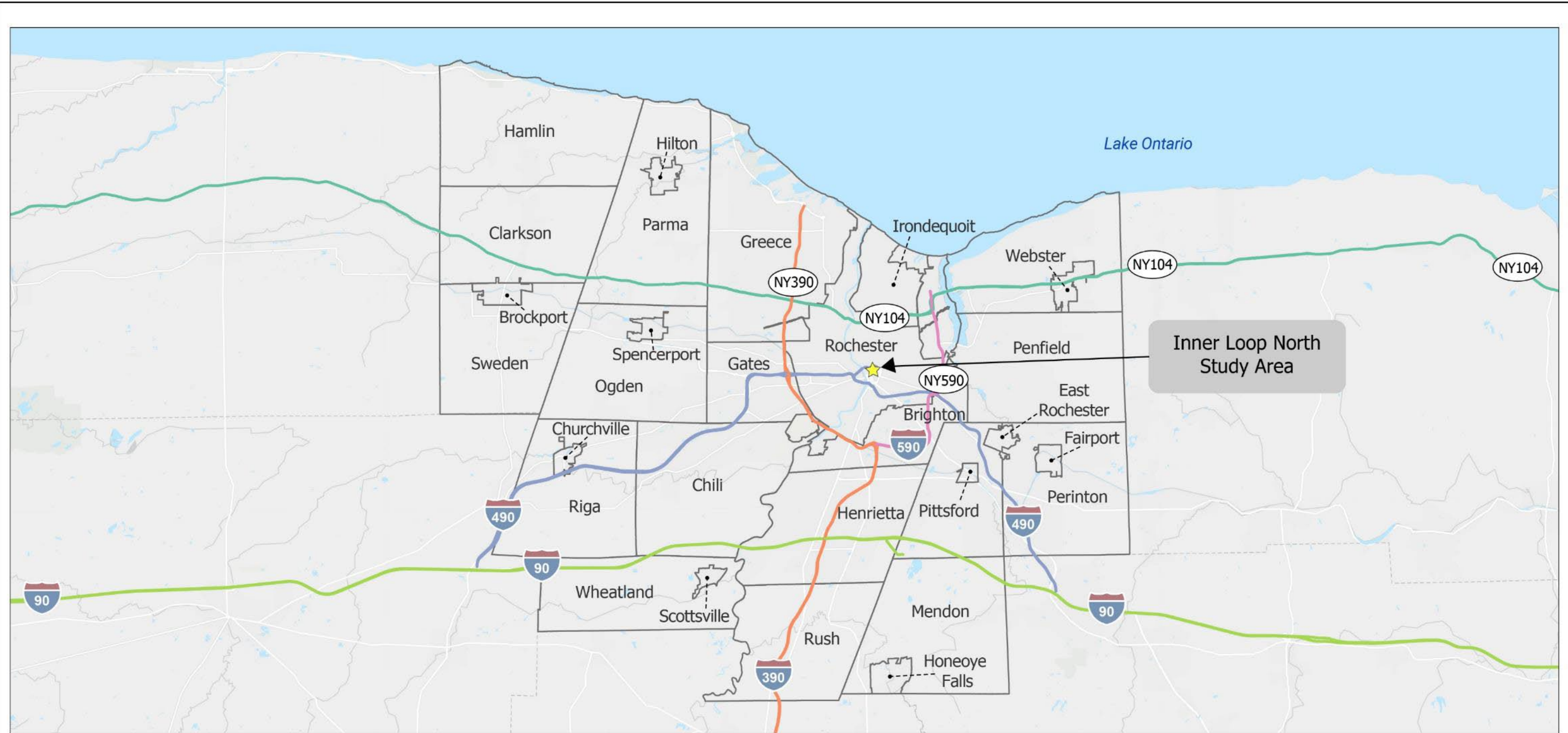
The Inner Loop was built in the 1950s and 1960s to reduce traffic congestion on local city streets and improve motor vehicle access to and from Downtown Rochester. Connecting with I-490 to form a continuous loop, it effectively enclosed downtown Rochester. The official western terminus is at I-490 Exit 13 (near Innovative Field). The eastern terminus was previously at I-490 Exit 15, directly south of Downtown. Since the Inner Loop East Transformation Project removed a portion of the expressway in 2017, the eastern terminus is now located at North Union Street at East Main Street.

The Inner Loop Expressway within the Primary Study Area is a four-to-six lane divided expressway with parallel two-to-three lane frontage roads (Cumberland Street) on each side. Much of the expressway (east of the Genesee River) within the Primary Study Area is depressed via retaining walls that are 15-20 feet below the adjacent frontage roads. The frontage roads are connected to the Inner Loop via entrance and exit ramps located along the expressway. The combination of the Inner Loop and frontage road systems results in a facility that, in some places, has as many as twelve travel lanes, which, in total occupies a width of 180 feet to 350 feet. The Inner Loop Expressway has interchanges at East Main Street, Scio Street, North Street, Joseph/Clinton Avenue, St. Paul Street, and State Street.

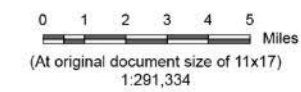
When the Inner Loop was constructed in the 1960s, highway design standards were different than they are today. As a result, the Inner Loop and adjacent frontage roads have features that do not meet current standards such as design speed, shoulder widths, maximum grade, horizontal curvature, superelevation rate, horizontal curvature, and stopping sight distance. The corridor, the crossings carrying streets over the expressway, and many intersecting streets also lack adequate bicycle and pedestrian facilities according to the City’s current Complete Streets policy, the recommendations of the *Active Transportation Plan*, and elements of the *Comprehensive Access and Mobility Plan* and *Rochester 2034* comprehensive plan.

The existing Inner Loop roadway, ramps, and adjacent streets contain a variety of structures. There are ten bridges (one that spans the Genesee River), one culvert, ten overhead sign structures, 15 retaining walls, several types of railings, and a network of underground structures. In addition, there are six CSX railroad bridges located adjacent to the Inner Loop. The Inner Loop North is designated New York State Route 940T, an unsigned reference route, by the NYSDOT. The Inner Loop creates a physical and visual barrier between Downtown Rochester and the neighborhoods to the north (adding to the barrier already presented by the CSX railroad corridor, which parallels the Inner Loop North through a portion of the Study Areas). The Inner Loop can only be crossed by bicyclists and pedestrians via six (6) bridges over the expressway or two (2) underpasses, one at Plymouth Avenue and one at State Street.

The Inner Loop Expressway and I-490 are owned and maintained by the NYSDOT. The bridges crossing the Inner Loop are shared by the NYSDOT and the City of Rochester. The NYSDOT is responsible for superstructure and substructure, and the City is responsible for the pavement, sidewalks, and curbs, and has responsibility for secondary maintenance (e.g., snow and ice removal, etc.) on some bridges. The lighting along the Inner Loop is a mix of Monroe County and City lighting. The County owns lighting on the mainline and ramps, and the City owns lighting on the frontage roads.



 Cities & Towns



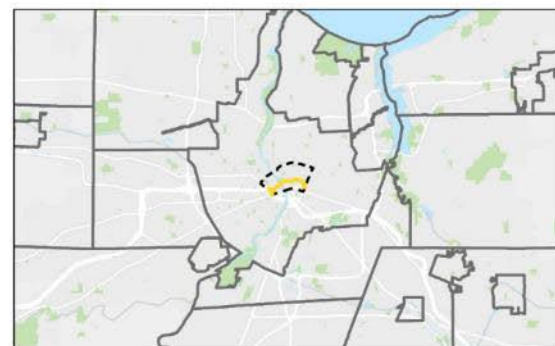
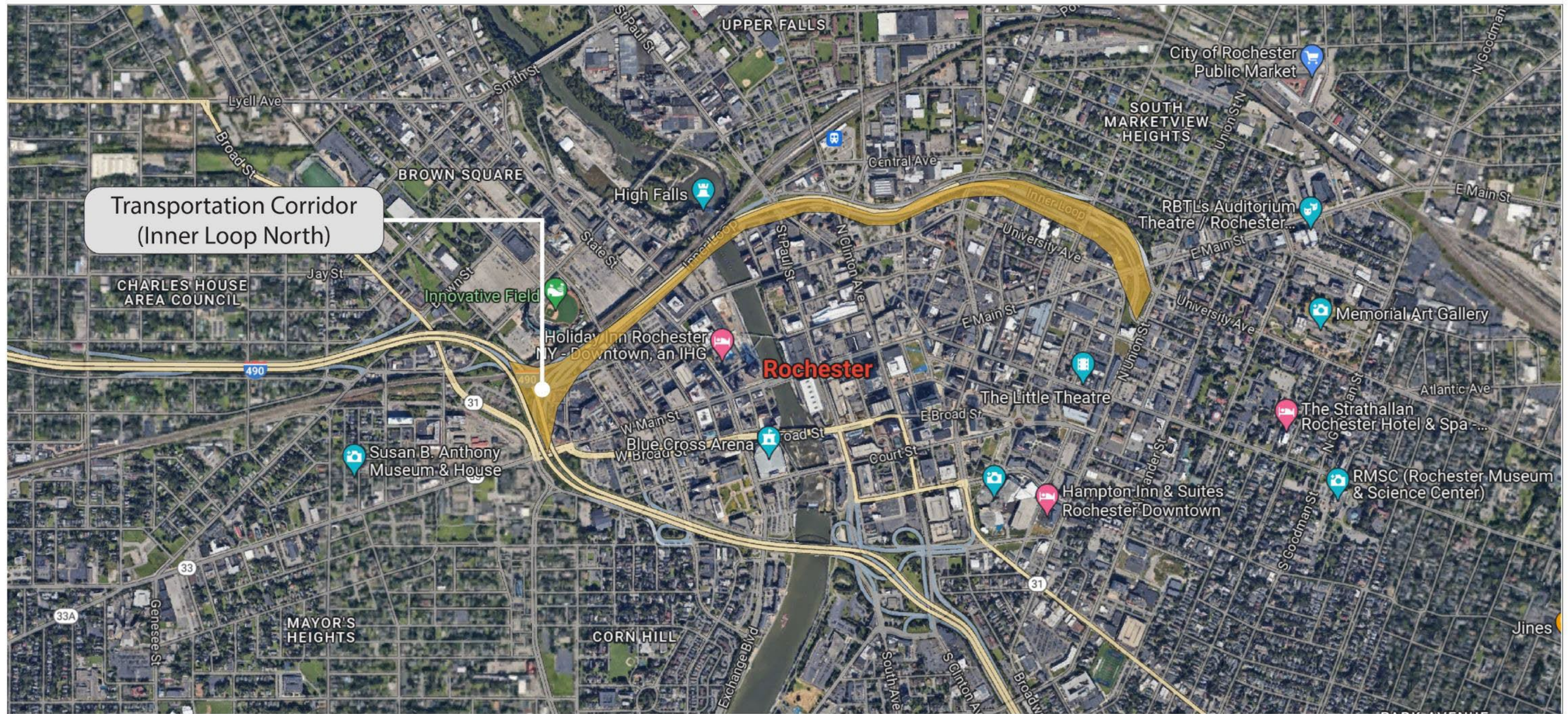
Project Location: City of Rochester, NY
 Prepared by Yeojin Kim on 2024-02-02
 TR by SRC on 2024-02-02
 IR by SRC on 2024-02-02

Client/Project: City of Rochester
 Project: Inner Loop North Transformation Project (PIN 4CR0.17)
 Report: Project Scoping Report (PSR)
 192800254

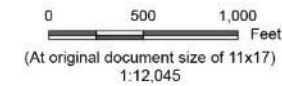
Figure No. 1
 Title

Context Map: Monroe County

Notes
 1. Coordinate System: NAD 1983 2011 StatePlane New York West FIPS 3103 FI US
 2. Data Sources: NYS DOT Roads
 3. Background: ESRI Light Gray Base



Notes
 1. Coordinate System: NAD 1983 2011 StatePlane New York West FIPS 3103 FT US
 2. Data Sources: Property Tax Assessment Administration; DataROC Tax Parcel 2023
 3. Background: ESRI World Imagery & Light Gray Base

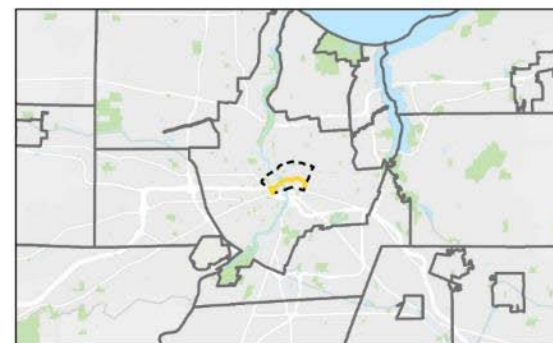
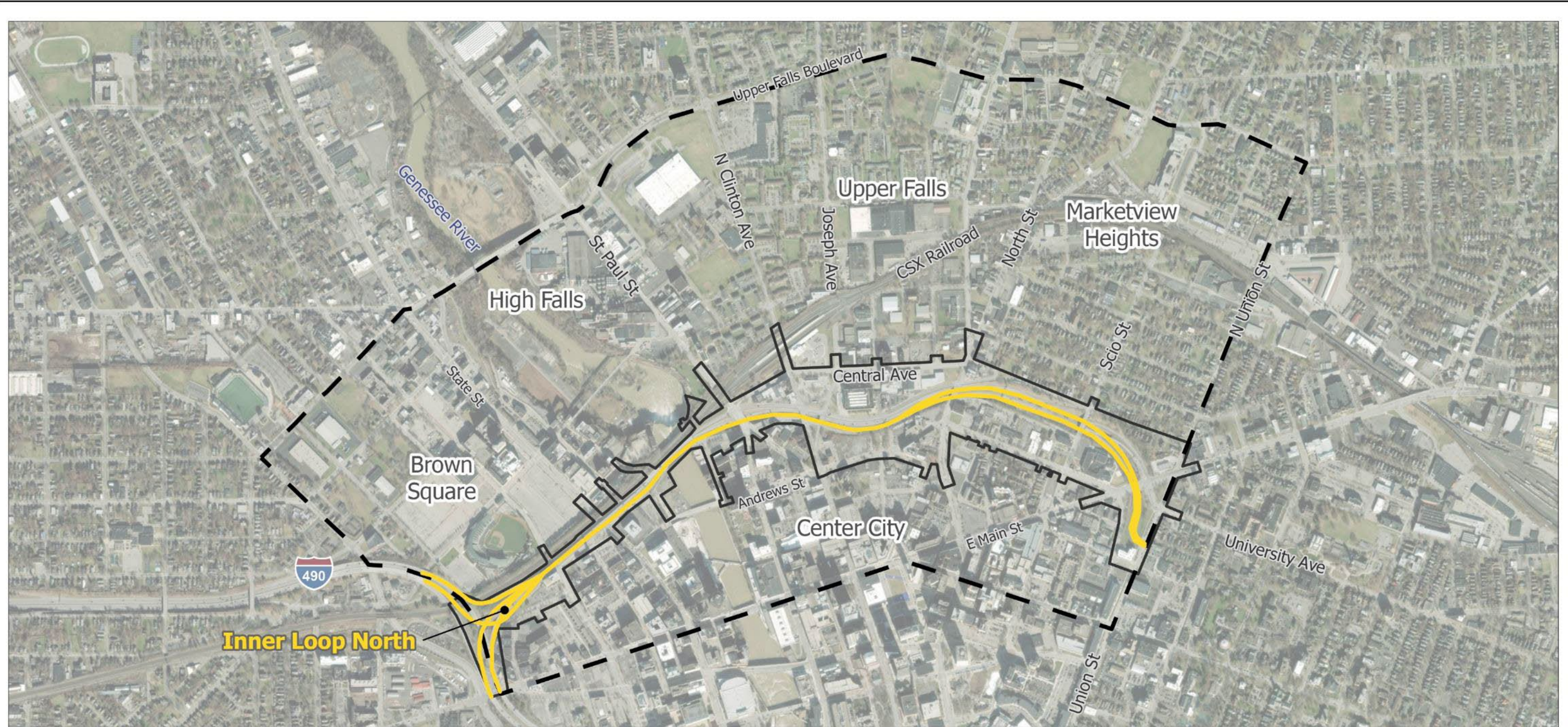


Project Location
 City of Rochester, NY

Client/Project
 Client: City of Rochester
 Project: Inner Loop North Transformation Project (PIN 4CR0.17)
 Report: Project Scoping Report (PSR)

Figure No.
2

Title
**Project Location
 (Downtown City of Rochester)**



- Inner Loop North
- Secondary Study Area
- Primary Study Area

0 500 1,000 Feet
 (At original document size of 11x17)
 1:12,045



Project Location City of Rochester, NY
Client/Project Client: City of Rochester
 Project: Inner Loop North Transformation Project (PIN 4CR0.17)
 Report: Project Scoping Report (PSR)

Figure No. 3

Title

Primary and Secondary Study Areas

Notes
 1. Coordinate System: NAD 1983 2011 StatePlane New York West FIPS 3103 Ft US
 2. Data Sources: Property Tax Assessment Administration; DataROC Tax Parcel 2023
 3. Background: ESRI World Imagery & Light Gray Base

3 Project History, Purpose, Objectives and Needs

3.1 Project History

The Inner Loop was constructed when Rochester's population was growing. In the 1940s, traffic congestion in the City became a major concern and planners began to identify ways to carry vehicles in, around, and through Downtown, including the concept of an urban beltway. The Inner Loop was designed to be a 2.7-mile limited-access beltway, providing quick and easy access for drivers getting into and out of Downtown Rochester.



Construction of the Inner Loop in 1956 (left) and opening of the Inner Loop in 1958 (right)

Construction began in 1952 and continued through the early 1960s. By the time all five segments of the Inner Loop were completed in 1965, Rochester's population had begun to decline. By the end of the 1970s, the city's population had declined by 27% from its peak in 1950. The decline in the City's population may be correlated to the construction of the Inner Loop, which created easy motorist access to and from suburban areas outside of the City, thus enabling a shift in population and vitality away from Rochester's core ¹

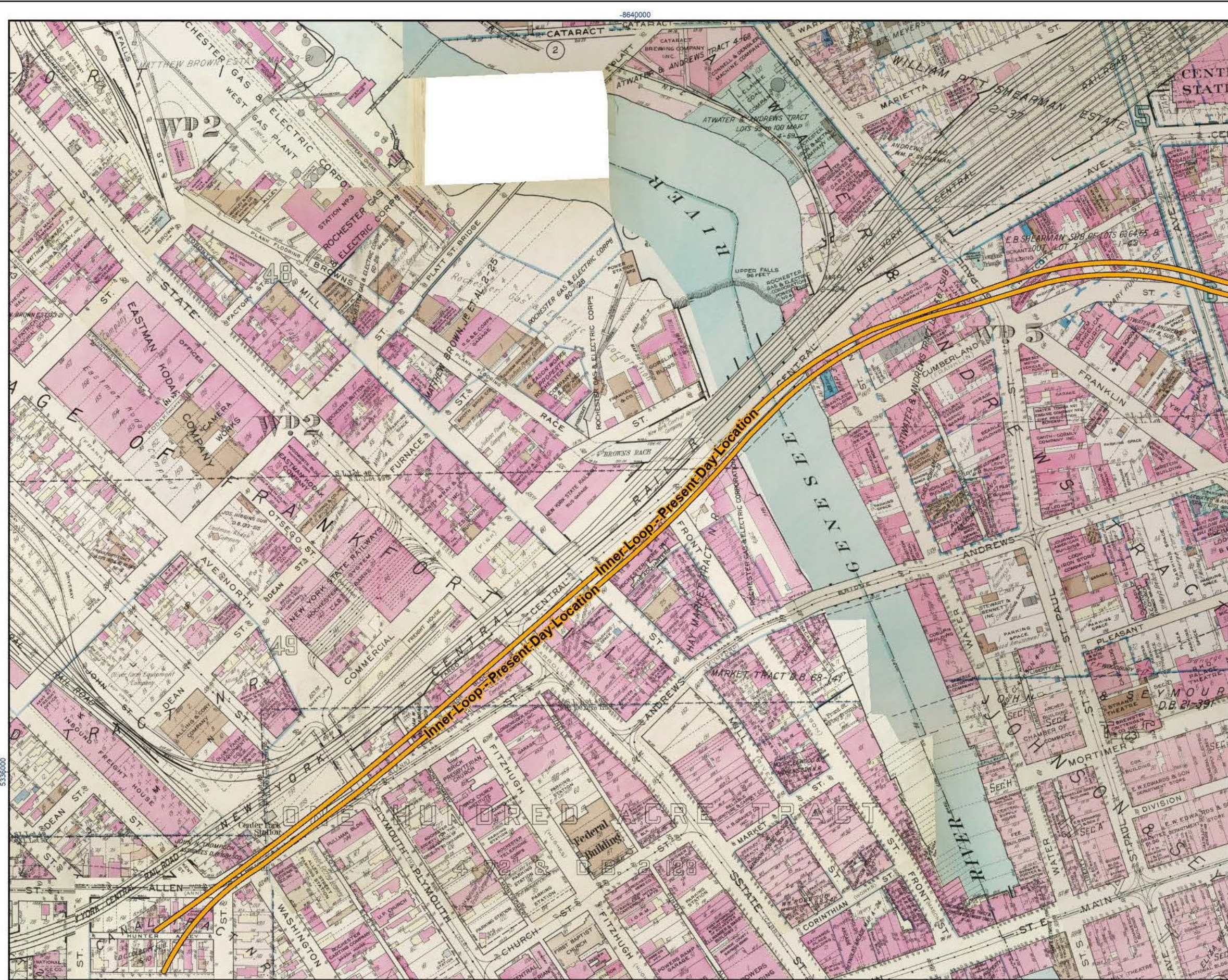
To make way for construction of the Inner Loop, entire city blocks were razed, including hundreds of homes, businesses, houses of worship, and other buildings. The path of construction is illustrated on an historic plat map shown in Figure 4. Residents of mostly Black and immigrant neighborhoods were displaced, and communities were destroyed in the process. The Inner Loop further created a barrier to upward mobility and wealth creation as residents of City neighborhoods became disconnected from Downtown and faced the effects of disinvestment, including increased economic disadvantage and inequitable access to jobs and housing. The effects of this historic context continue to this day. Neighborhoods in and around the Inner Loop experience some of the most severe economic barriers in the region. Many residents face barriers to accessing quality housing, jobs, and services.

¹ Baum-Snow, N. 2007. "Did Highways Cause Suburbanization?" Quarterly Journal of Economics, 122(2): 775-805. Massachusetts Institute of Technology Press, 10.1162/qjec.122.2.775. "Between 1950 and 1990, the aggregate population of central cities in the United States declined by 17 percent despite population growth of 72 percent in metropolitan areas as a whole. This paper assesses the extent to which the construction of new limited access highways has contributed to central city population decline. Using planned portions of the interstate highway system as a source of exogenous variation, empirical estimates indicate that one new highway passing through a central city reduces its population by about 18 percent. Estimates imply that aggregate central city population would have grown by about 8 percent had the interstate highway system not been built."



Construction of the Inner Loop in 1957, with Kodak Tower in the background. Photo credit: Ernest Amato, from the Collection of the Local History and Genealogy Division, Rochester Public Library

The City of Rochester began planning the transformation of the Inner Loop over 30 years ago. In 1990, the City developed the *Vision 2000 Plan* for Downtown Rochester, which advocated for removing a portion of the Inner Loop. This plan was followed ten years later by the *Inner Loop Improvement Study*. Throughout the 2000s and 2010s, planning for the transformation of the Inner Loop continued. In 2013, a Project Scoping Report was completed for the transformation of the eastern segment of the Inner Loop. This was followed by a final design report in 2014. In 2017, the first segment of the transformed Inner Loop (eastern portion) was completed. By 2019, the region and the City had completed a number of additional, related plans that referenced the importance of continuing the overall transformation of the Inner Loop by completing the remaining northern segment. This includes *Rochester 2034*, the City's current comprehensive plan, which was adopted in 2019.



Legend

— Approximate Location of Inner Loop (Present Day)



300 600 Feet
 (At original document size of 11x17)
 1 inch equals 300 feet

Notes
 1. Coordinate System: NAD 1983 2011 StatePlane New York West FIPS 3103 Ft US
 2. Data Sources:
 3. Background: HistoricPlatMaps/ROC_HistoricPlatMaps_1935; GM Hopkins, 1935, City of Rochester, NY, 2014
 National Geographic Style Base: Sources: Esri, USGS
 World Hillshade: Esri, NASA, NGA, USGS, FEMA
 National Geographic Style: Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc. METI/
 NASA, USGS, EPA, NPS, USDA, USFWS

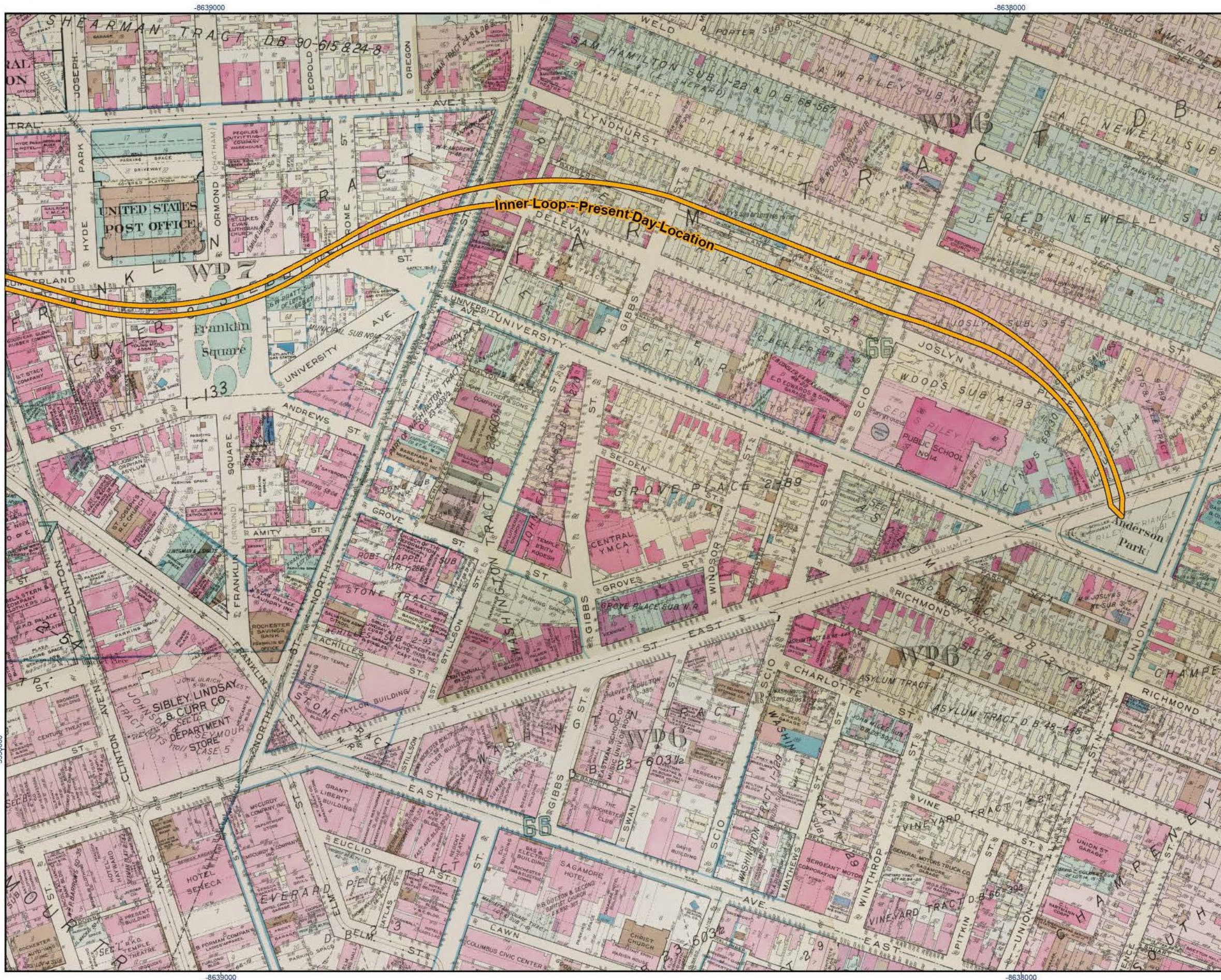


Project Location Prepared by BAO on 2024-02-01
 Inner Loop Phase 2 TR by JH on 2024-02-01
 City of Rochester, Monroe County, NY

Client/Project
 City of Rochester
 Inner Loop Phase 2
 Historical Plat Map

Figure No.
 4a

Title
 Historical Plat Map (1935 and 1936)



Legend

— Approximate Location of Inner Loop (Present Day)



300 600 Feet
 (At original document size of 11x17)
 1 inch equals 300 feet

Notes
 1. Coordinate System: NAD 1983 2011 StatePlane New York West FIPS 3103 Ft US
 2. Data Sources:
 3. Background: HistoricPlatMaps/ROC_HistoricPlatMaps_1935: GM Hopkins, 1935, City of Rochester, NY, 2014
 National Geographic Style Base: Sources: Esri, USGS
 World Hillshade: Esri, NASA, NGA, USGS, FEMA
 National Geographic Style: Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/
 NASA, USGS, EPA, NPS, USDA, USFWS



Project Location
 Inner Loop Phase 2
 City of Rochester, Monroe County, NY
 Prepared by BAO on 2024-02-01
 TR by JH on 2024-02-01

Client/Project
 City of Rochester
 Inner Loop Phase 2
 Historical Plat Map
Figure No. 4b

Title
 Historical Plat Map (1935 and 1936)

Since 1990, the Inner Loop has been identified as a focus area for the City of Rochester. Along those lines, the Inner Loop North Transformation Project builds upon and represents the previous planning studies and, notably, the successful implementation of the Inner Loop East Transformation Project. The Project also is consistent with the City’s current focus on multimodal transportation, starting with the adoption of a Complete Streets Policy and a *Bicycle Master Plan* in 2011. Subsequent City plans, including the *2023 Active Transportation Plan*, and *2019 Comprehensive Access and Mobility Plan*, and the *Rochester 2034 Comprehensive Plan*, have emphasized the need to update transportation infrastructure to better meet the needs of all user groups.

In 2022, the City completed the *Inner Loop North Transformation Planning Study*, which identified six potential concepts and established the groundwork for this Project Scoping Report. Early that same year, New York Governor Hochul announced the State’s \$100 million commitment to the Project.

This 30-plus year-long progression of planning, design, and implementation has been summarized in the table below.

Figure 5 Timeline of Planning for the Inner Loop Transformation

Year	Action
1990	Vision 2000 Plan
2001	Inner Loop Improvement Study
2003	Center City Master Plan
2007	Community Based Vision for Downtown Rochester (Design Charette)
2013	Inner Loop East Transformation Project Scoping Report (PSR)
2014	Inner Loop East Transformation Project Final Design Report
2017	Completion of Inner Loop East Transformation Project
2018	ROC the Riverway Phase I Vision Plan, Housing Market Study, Transit Supportive Corridors Study, East Main Arts & Market District Plan
2019	Rochester 2034 Comprehensive Plan, Comprehensive Access and Mobility Plan
2021	GTC Long Range Transportation Plan 2045
2022	Inner Loop North Transformation Project - Planning Study
2023	Active Transportation Plan
2024	<i>Inner Loop North Transformation Project Scoping Report (PSR) (in progress)</i>
2025	<i>Inner Loop North Transformation Project Design Approval Document (DAD) (anticipated)</i>

3.2 Project Purpose and Objectives

This Project will redesign and reconstruct the remaining segment of the Inner Loop Expressway from I-490 to North Union Street in the City of Rochester, Monroe County. The Project will transform the underutilized, grade-separated expressway into an accessible and multi-modal urban street grid similar to what existed prior to construction of the Inner Loop Expressway. The re-designed corridor will enhance mobility, reconnect several neighborhoods to Rochester's Downtown, and open parcels for equitable redevelopment and green space. This Project follows the successful removal of the eastern portion of the Inner Loop Expressway in 2017 and the completion of *the Inner Loop North Transformation Planning Study* in September 2022.

More specifically, the purposes of the Inner Loop North Transformation Project are:

- Remove the Inner Loop as a barrier and reconnect Downtown Rochester to the communities surrounding the transportation corridor.
- Improve the compatibility of the corridor with adjacent land uses as well as the City's investments in the Genesee River corridor under the ROC the Riverway initiative.
- Restore an urban street grid similar to what existed prior to the Inner Loop.
- Open parcels for redevelopment and green space.
- Advance multi-modal connectivity and accessibility throughout the Project area.
- Ensure adequate transportation network operations for all users.

Inner Loop North Transformation Planning Study Goals and Objectives

The Project includes multiple objectives, which are organized into three major goal categories. These objectives were developed as part of the *Inner Loop North Transformation Planning Study*, which included extensive analysis and involvement with the community. These objectives were also developed to align with 11 placemaking principles outlined in *Rochester 2034*.

1. Goal: Connectivity and Accessibility

- Reconnect neighborhoods and restore a human-scale street grid.
- Promote multi-modal accessibility for all.
- Enhance the street network for all modes of transportation.
- Eliminate the Inner Loop North expressway and ramps as a physical and visual barrier.
- Enhance public access to the Genesee River and High Falls.
- Align with the *ROC the Riverway Phase I Vision Plan*.

2. Goal: Neighborhood Restoration

- Strategic opportunities for new investment.
- Create new job opportunities.
- Promote reuse of vacant and underutilized lands.
- Strengthen and support existing community assets.

3. Goal: Equitable Outcomes

- Ensure the Project supports the needs of all existing and future residents.
- Minimize displacement of existing businesses and residents.
- Identify new housing opportunities.
- Strengthen existing residential neighborhoods.

The Purpose, Goals, and Objectives were developed to inform the criteria used to evaluate the six design concepts addressed in this Project Scoping Report.

3.3 Project Needs

Project needs relate to community cohesion/neighborhood restoration, activated street grid, economic development, multi-modal access, and state of good repair. Each of these needs is described below. The Project purpose and objectives were developed in conjunction with these identified needs.

3.3.1 Community Cohesion/Neighborhood Restoration

The need relative to community cohesion is to eliminate the Inner Loop North expressway as a physical, visual, and socioeconomic barrier--and to reconnect neighborhoods and restore a human-scale street grid.

Through an extensive public engagement process during the Inner Loop North planning phase, the City has identified significant challenges surrounding the northern section of the Inner Loop Expressway. These challenges originated with construction of the Inner Loop, which not only demolished numerous homes and businesses in the community but also created an easy way for vehicles to travel to and from the City to suburban areas and beyond. This further enabled a shift in population away from Rochester's core that began in the late 1950s.

The existing configuration of the Inner Loop expressway exacerbated historic segregation and redlining, which targeted primarily Black and immigrant neighborhoods. What was once a compact, neighborhood street grid is now dominated by an oversized and aging piece of infrastructure dividing lower-income neighborhoods from Downtown Rochester.

The effects of the Inner Loop's construction have compounded over the decades, as the Inner Loop has created not only a physical barrier, but also a socioeconomic one. The Inner Loop has contributed to the lack of upward mobility and wealth creation for residents of the neighborhoods damaged by the expressway's construction. While Downtown Rochester and surrounding neighborhoods have seen new investments over the last few decades, the Inner Loop has impeded true neighborhood connections and similar investments in other parts of the community. The expressway also prevents restoration of a human-scale, urban street grid. Crossings of the Inner Loop are limited to over-passes (bridges) at St. Paul Street, North Clinton Avenue, Joseph Avenue, Cumberland Street, North Street, Scio Street, East Main Street, and underpasses at State Street and Plymouth Avenue.

In the case of St. Paul Street and Scio Street, these locations also include on/off ramps to the Inner Loop, which creates an even wider span for travelers to navigate as they cross the Inner Loop. The half-mile stretch between Joseph Avenue and Scio Street provides just one location to cross (North Street).

Overcoming these challenges to community cohesion requires removing the Inner Loop as a physical and visual barrier, restoring the City streets to a configuration similar to the original grid, breaking up superblocks, enhancing the public realm, and redeveloping reclaimed land in an equitable manner. While some of the barriers will remain, such as the elevated CSX railroad viaduct and utility infrastructure, the Inner Loop represents the most substantial barrier in the Project area. Its removal will enable at-grade intersections, reconnection of numerous City streets, more pedestrian and bicycle friendly connections, as well as the opportunity to extend the Genesee Riverway Trail through the Project area to connect to existing segments to the north and south of the expressway (discussed further in Section 3.3.4.3 Trails).



The above photo shows the Inner Loop bridge crossing over the Genesee River, looking west toward I-490. The CSX rail line can be seen to the north of the Inner Loop (to the right in this photo).

3.3.2 Activated Street Grid

Replacing the Inner Loop North with an at-grade urban street grid would alter the alignment of the corridor and require multiple new signalized intersections. The Project is also anticipated to retain and/or reconfigure connections with I-490, which businesses identified as a priority during the Planning Study Phase. These changes could alter the distribution of traffic within the Project area, potentially affecting some I-490 interchanges and the I-490 mainline, as well as local streets. The Project will work to ensure that vehicular traffic is distributed throughout the street grid (local traffic) and the I-490 system (through movements) in such a way as to minimize the potential for traffic-related issues, including but not limited to queueing on I-490 on/off ramps or mainline due to inadequate capacity.

The Project seeks to activate the street grid (i.e. distribute vehicular and non-vehicular traffic throughout the new street grid) to reduce the potential for traffic-related issues on local streets, and to ensure the redesigned network also meets the City's multi-modal transportation needs (discussed in Section 3.3.4 below). To these ends, an initial traffic analysis was completed to determine the potential effects that could result from the transformation of the Inner Loop Expressway. The Traffic Analysis can be found in Appendix A of this report.

At this time, the Scoping Phase traffic analysis represents an initial and limited evaluation of potential effects on I-490 and key City intersections based on a projected growth rate of traffic volume that could be higher than what is likely to be realized upon completion of the Project. A more detailed analysis of

potential effects on the City street network, inclusive of operational improvements (including traffic signalization) and pedestrian and bicycle traffic, will be completed during Preliminary Design.

The Traffic Analysis used a combination of available traffic data to represent current conditions and input from the Genesee Transportation Council (GTC) regional travel demand model for projections of growth rates upon which future traffic volumes were calculated. Geospatial and field-collected data were used to develop calibrated AM and PM peak period base microsimulation models that provide more detailed outputs than the macro-level GTC travel demand model. The Project's Traffic Analysis area includes segments of I-490 between Mount Read Boulevard and I-590 as well as the multiple interchanges that exist in between. In addition, the Traffic Analysis area includes multiple arterial and local street intersections. Due to the varied expressway, ramp, and local street network conditions, the analysis of concepts required a robust microsimulation model that simulated expressways and arterials; exclusive lanes; merge, diverge, and weaving areas; and unique intersections and conditions under a variety of undersaturated and oversaturated conditions (i.e., low and high levels of automobile traffic utilizing the transportation network).

The Traffic Analysis is described in detail in Section 5 of this report. It explored expected diversion patterns where traffic is expected to redistribute after accounting for the transportation network changes represented by the concepts.

3.3.3 Economic and Community Development

Economic and community development needs pertain to promoting neighborhood restoration by more effectively accommodating existing and planned land uses and economic development initiatives. Over the last two decades, the Rochester community has implemented a variety of economic development initiatives focused on revitalizing Downtown and the surrounding neighborhoods. Neighborhood organizations along the corridor such as Marketview Heights and Coalition of Northeast Associations (CONEA) have developed plans focusing on strengthening their communities through blight removal and infill development, among other strategies. Notably, the Inner Loop East Transformation Project converted 4,400 feet of sunken expressway into an at-grade street that reconnects Downtown to neighborhoods to the east of Downtown. This initial project also created six acres of land for development, which has since generated more than \$200 million in private investment on lands directly created by the project, and an additional \$200 million in development in the immediate vicinity. Developments include over 530 new mixed-income housing units and nearly 200,000 square feet of commercial space.

The Project intends 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. Each of the concepts considered will reclaim land (between 12 to 22 acres, depending on the concept), providing varying levels of opportunity for economic development, including planned infill development, and to meet other community needs, such as green space.

Below is a summary of the economic and community development needs of the Project:

- **New developable lands.** The removal of the remaining northern portion of the Inner Loop Expressway is expected to reclaim a total of eight to 22 acres of land along the corridor as well as restore connections between neighborhoods and key parcels. This will create opportunities to address community needs through new investment in housing and other uses, restoring and creating green space, supporting existing community assets, and creating new job opportunities.
- **Restoration of parks.** Franklin Square on Andrews Street (now known as Schiller Park) is one of the oldest parks in the city, opening to the public in 1826 and later redesigned by Frederick Law Olmsted. But in 1960, the northern portion of this park was severed to make way for the Inner Loop. Anderson Park (named after the first President of the University of Rochester, Martin Brewer Anderson) at East Main Street and North Union Street was also negatively impacted by

the construction of the Inner Loop. The Project will address both parks, taking into account their historic design and uses, as well as contemporary needs.

- **New green space.** The neighborhoods directly surrounding the Inner Loop lack large green spaces, partly because parklands were destroyed by construction of the Inner Loop. A key aspect of community cohesion/neighborhood restoration includes creation of new green space. Much-needed green space will be created directly adjacent to the World of Inquiry School, which is currently sandwiched between the Inner Loop and East Main Street/University Avenue, with limited or no outdoor space for playgrounds, ball fields, or other recreational facilities.
- **Coordinated land use planning.** Parallel to Project Scoping and Preliminary Design, the City of Rochester is developing the *Inner Loop North Mobility and Development Strategy*, focusing on land use and related transportation considerations within the Project area to help maximize equitable redevelopment and green space along the Inner Loop North corridor. Coordination will ensure alignment of land use and transportation goals and associated decisions.

3.3.4 Multi-Modal Access

This section describes the need to upgrade multi-modal accommodations throughout the Project corridor. Specifically, the need is to promote safe, convenient access and a welcoming atmosphere for all modes of transportation. This need is supported by numerous previous planning efforts completed by the City of Rochester (including *Rochester 2034*, the *Comprehensive Access and Mobility Plan*, the *ROC the Riverway Vision Plan*, and the recently completed *Active Transportation Plan*).

The *Inner Loop North Transformation Planning Study* analyzed multi-modal needs, describing two kinds of users who travel on the Inner Loop and within the surrounding corridor. The first type consists of drivers and commuters who use the Inner Loop to travel into and out of Downtown Rochester from elsewhere in the City or the region. The second type of user includes those who live in the surrounding neighborhoods, and who are more likely to travel on foot, by bike, or via transit. According to the US Census, approximately 25 percent of households in the City lack access to personal vehicles. For this second type of user, the Inner Loop restricts access, as there are limited north-south crossings for motorists and non-motorists, alike. Further, the Inner Loop Expressway in its current configuration is not convenient, welcoming, or accessible for all modes of transportation. The long crossing distances, high vehicle speeds, limited north-south crossings and large block sizes create the perception of an unwelcoming and unsafe environment for non-motorists. Cycling and walking are prohibited on the Inner Loop itself. Further, there are very few designated bike facilities around and across the Inner Loop. Some of the bike facilities that do exist do not meet preferred methods for accommodating bicyclists or are in poor condition, and/or are hindered by gaps and other deficiencies that make it challenging for people to bike between neighborhoods and Downtown Rochester. While there is a sidewalk network, the pedestrian experience is compromised by limited crossings, one-way service roads, large intersections with faded crosswalk markings, and other challenges that create conflicts between drivers and pedestrians. Overall, the Inner Loop presents a major barrier to providing equitable transportation options for users regardless of race, income, age, or ability.

The Inner Loop further impedes multi-modal accessibility at a challenging pinch point where the CSX railroad corridor crosses the Genesee River and its gorge. This location is a critical connection point between the neighborhoods and Downtown that is currently impaired by the configuration and design of the Inner Loop.

Multi-modal access is especially critical in the Primary and Secondary Study Areas due to the location of the Louise M. Slaughter Rochester Station (Amtrak) and the current, temporary intercity bus station, which are located north of the Inner Loop. Accessing these facilities requires some pedestrians (including those originating at the RTS Transit Center), bicyclists, and drivers to cross the Inner Loop. Furthering the goal of multi-modal access, the Project also will involve filling in a major gap in the Genesee Riverway

Trail, which does not currently connect Downtown to the High Falls neighborhood, the location of the future High Falls State Park.

3.3.4.1 Pedestrians

The Inner Loop's configuration as a below-grade expressway east of the Genesee River presents a significant north/south barrier to pedestrian mobility within the Primary and Secondary Study Areas. Because pedestrians are prohibited from using the Inner Loop by state law, access and mobility are limited to bridge crossings over the Inner Loop. This creates multi-block spans that make pedestrian movement inconvenient. To travel north or south within the vicinity of the Inner Loop, pedestrians must first travel to the nearest bridge. However, frontage roads generally include multiple vehicle lanes and turning movements, which further exacerbates the uninviting pedestrian environment. Further, above-grade sections of the Inner Loop present additional obstacles to pedestrian movement, as pedestrians must find a suitable crossing in those locations using underpasses.

3.3.4.2 Bicyclists

The Inner Loop is not only a barrier for pedestrians--it presents similar challenges to bicyclists. The configuration as a below-grade highway, high vehicle speeds, the adjacent one-way frontage roads, and the limited north/south connections make bicycle mobility difficult within the Study Area. Bicycles are prohibited from using the Inner Loop by state law. Further, there are few bicycle facilities within the Primary Study Area. Just one bridge crossing over the Inner Loop North carries a standard bicycle lane (St. Paul Street). The St. Paul Street bridge, however, is six lanes with two large intersections on either end, creating an uninviting environment for cyclists. The north end of the bridge features an intersection with the Inner Loop entrance/exit ramps, and frontage roads (Cumberland Street and Central Avenue). The south end of the bridge features an intersection with Cumberland Street, Bittner Street, and the entrances/exits to the Inner Loop. As part of the Inner Loop East Transformation Project, a cycle track was installed along North Union Street. The cycle track currently terminates at University Avenue but is anticipated to be extended through the Inner Loop North area, advancing a City goal to establish a continuous east-west bicycle spine corridor. The Project also offers an opportunity to improve and better connect other existing bike networks and allocate dedicated space within the right-of-way (ROW) to bicyclists on existing streets within the Project limits.

3.3.4.3 Trails

The existing Genesee Riverway Trail (GRT) is an off-road trail for walking, running, and bicycling along the Genesee River. The GRT is used for transportation/daily commuting as well as recreational purposes. It extends through Rochester, from the Erie Canal to Downtown and north to Lake Ontario. The GRT connects nine historic districts and important landmarks, including the University of Rochester, the Erie Canal Aqueduct and the Lake Ontario Lighthouse.

The Inner Loop North, in its current configuration, is a barrier to overall trail connectivity. The GRT terminates at Andrews Street, forcing trail users to cross Allen Street (Inner Loop entrance ramp), travel through a pedestrian tunnel under the Inner Loop, cross the Inner Loop exit ramp on the other side of the tunnel, and then travel under a CSX railroad bridge before reaching Mill Street in the High Falls Neighborhood.

As part of the ROC the Riverway initiative and an ongoing planning study focused on northern trail segments, the City plans to improve the GRT in areas adjacent to the Inner Loop North Study Area. These trail improvements are intended to reconnect residents and visitors with the Genesee River and leverage the waterfront as an asset. The transformation of the Inner Loop North corridor, including significantly enhanced bicycle connectivity, presents an opportunity to create a major east-west bicycle

corridor that intersects with a major north-south multi-use trail corridor, located on the northern edge of Downtown Rochester.

The Project Study Areas include potential key connection points for the GRT along the east and west sides of the Genesee River to complete the trail links between Downtown Rochester and High Falls, with a priority to achieve direct riverfront trail links where feasible.

West Side Trail Connection

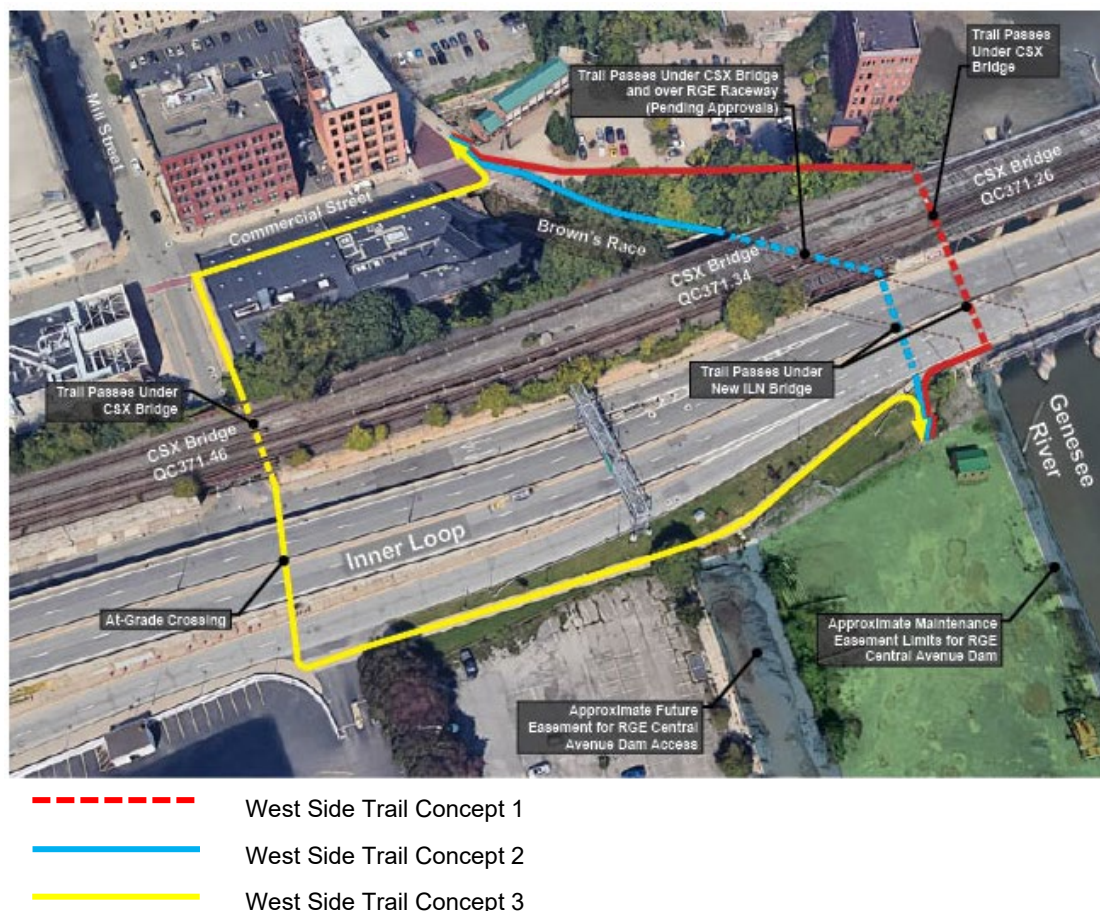
On the west side of the Genesee River, heading north into Downtown, the existing GRT currently terminates at Andrews Street within the recently redeveloped Austin Steward Plaza. North of that park, the entire one block riverfront parcel (84 Andrews Street) between Andrews Street and the Inner Loop is currently owned by the Rochester Gas & Electric Corporation (RG&E). This parcel is currently vacant except at the northern end of the parcel where various structures and utilities related to the RG&E Station 2 and Central Avenue Dam facility exist. The City and RG&E have discussed the potential for a future extension of the GRT on this site. RG&E has indicated that maintenance access to the river for crane operations must be maintained for Federal Energy Regulatory Commission compliance, requiring the need for easements should the property ownership change.

At the northern end of the Andrews Street parcel, the riverside GRT trail could be realigned to the west to avoid the RG&E facilities at the Central Avenue Dam. Three conceptual alignments (Figure 6) have been identified to complete the trail connection across the Inner Loop North and into High Falls as follows.

- **West Side Trail Concept 1** – This concept for the GRT connection could cross under a new lengthened and raised Inner Loop North bridge over the Genesee River, then pass simultaneously over Browns Race, which supplies water to RG&E's Station 2, and under the existing CSX Railroad Bridge QC 371.34 before heading into High Falls. The proposed cycle track along the new Inner Loop North could tie into the trail connection at a location to be determined in Preliminary Design. The Brown's Race crossing could be accomplished with a single-span prefabricated pedestrian structure with abutments set outside of the raceway limits. The bridge's alignment, however, could conflict with an existing 115 kV electric line (#920). Alternatively, a boardwalk structure with intermediate piers set in the raceway itself could be utilized with an alignment that jogs around the 115 kV electric line. In accordance with CSX's standards, a protective canopy may be required over the trail while under the CSX railroad bridge and extending 15 feet beyond the bridge's fascia. Additionally, five feet of clearance from this canopy to the underside of the CSX railroad bridge must also be provided. Initial feedback received from RG&E in February 2024 regarding this alternative included a general safety concern with placing the public in proximity to hydro facilities, electrical lines and a railroad. Additionally, their #920 electric line in the raceway is currently out of service, but there are plans to replace it. However, the location is not known and the raceway may be deepened up to 5.5 feet in the future.
- **West Side Trail Concept 2** – This concept for the GRT connection could run along the riverfront crossing under a new lengthened and raised Inner Loop North bridge and then transition to a cantilevered trail structure along the Genesee River. The trail structure could be cantilevered off the existing ILN bridge pier and CSX railroad bridge abutment passing under the existing CSX Railroad Bridge QC 371.26 and then could turn west into High Falls. Like West Side Trail Concept 1, a protective canopy may be required over the trail while under the CSX railroad bridge and extending 15 feet beyond the bridge's fascia as well as five (5) feet of clearance from this canopy to the underside of the CSX railroad bridge. Feedback received from CSX on this alternative has indicated that they will not allow a public trail structure to be permanently attached to and supported from their bridge structure. This alternative is dismissed from further consideration because there is no other feasible means to support the cantilevered trail structure under the railroad bridge.
- **West Side Trail Concept 3** – This concept for the GRT connection could utilize the existing street grid network and existing crossings. From the northern end of the parcel at 84 Andrews

Street, the trail could run west along the south side of the reconstructed Inner Loop North and then turn north, cross the Inner Loop at grade, and pass under the existing CSX Railroad bridge QC 371.46 at Mill Street into High Falls. The proposed cycle track along the new Inner Loop North could tie into the trail connection at a location to be determined in Preliminary Design. This alternative may not require further RG&E coordination and only minimal CSX coordination to be advanced, which would be determined during Preliminary Design.

Figure 6 Genesee Riverway Trail Connection Concepts (West of Genesee River)



East Side Trail Connections

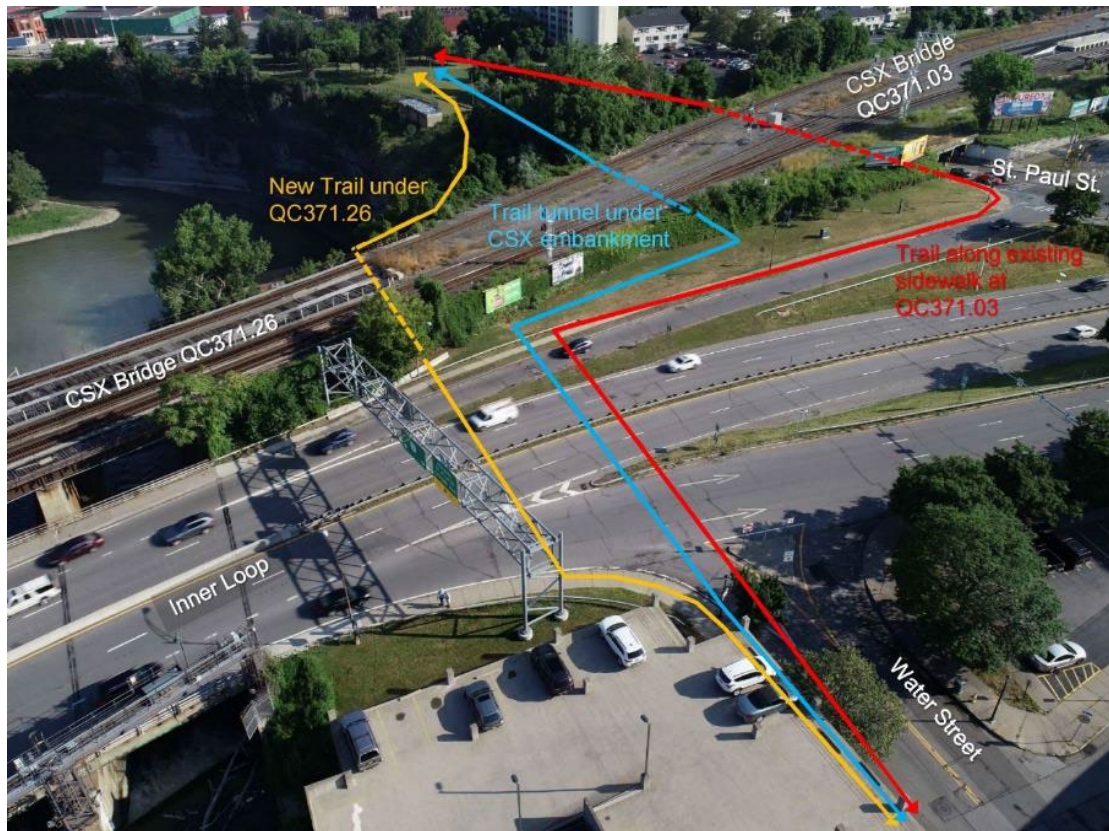
On the east side of the river, the proposed GRT alignment south of the Inner Loop North could be located one block off the riverfront along Water Street. The following three concepts to provide a trail connection from Water Street across the Inner Loop North and the elevated CSX railroad embankment and north to connect to the recently constructed Brewery Line Trail have been identified (Figure 7).

- East Side Trail Concept 1** – This concept for the GRT connection could cross under the new lengthened and raised Inner Loop North bridge over the Genesee River, pass under and directly in front of the east abutment of the existing CSX railroad bridge QC 371.26 over the Genesee River and then run along the edge of the High Falls gorge to connect with the southern end of the Brewery Line Trail. In accordance with CSX’s standards, a protective canopy may be required over the trail where it passes under the CSX railroad bridge, extending 15 feet beyond the bridge’s fascia. Additionally, five feet of clearance from this canopy to the underside of the CSX railroad bridge must be provided. The existing grade under the CSX railroad bridge in front of the abutment where the trail could be located may have to be lowered approximately six feet to achieve the required trail clearance envelope, which could impact the bridge abutment foundations. Due to the steep rock slope of the gorge, a pedestrian bridge with a southern abutment under the CSX railroad bridge and/or rock excavation may be required. Due to these complexities along with concerns over pedestrian safety, general rock quality of the gorge, the

extensive railroad coordination required and overall cost, this concept has been dismissed from further consideration.

- East Side Trail Concept 2** – This concept for the GRT connection could cross under the new and lengthened Inner Loop North bridge over the Genesee River and pass directly through the existing elevated CSX earthen embankment, via a direct bored tunnel structure. Once on the other side of the railroad embankment, the trail could connect with the southern end of the Brewery Line Trail. Based on discussions with CSX, tunneling a structure under its active and heavily used mainline tracks poses risks to railroad operations and potential liability to the City of Rochester. The concept is not supported by CSX. Additionally, there is a high cost for this type of specialized construction. For these reasons, this concept is dismissed from further consideration.
- East Side Trail Concept 3** – This concept for the GRT connection could cross under the new and lengthened Inner Loop North bridge over the Genesee River and then travel east along the north side of the Inner Loop North to St. Paul Street and then turn north, utilizing the existing sidewalk on the west side of St. Paul Street. The trail could then pass under the existing CSX railroad bridge QC 371.03 and continue north, connecting with the southern end of the Brewery Line Trail. As this alignment utilizes the existing street and bridge crossing network there is minimal coordination required with CSX. This alternative will be explored further during Preliminary Design, inclusive of potential improvements to the underpass.

Figure 7 Genesee Riverway Trail Connection Concepts (East of Genesee River)



Source: Colliers Engineering, 2023

- East Side Trail Concept 1
- East Side Trail Concept 2
- East Side Trail Concept 3



To access the Genesee Riverway Trail going south to north, users must cross the Inner Loop entrance ramp and travel through a pedestrian tunnel underneath a raised portion of the Inner Loop (right photo shows the southern entrance to the tunnel, looking east). On the north end of the tunnel, users must cross an Inner Loop exit ramp and travel underneath the railroad bridge to the High Falls Neighborhood (left photo shows the northern entrance to the pedestrian tunnel, looking east.)

3.3.4.4 Transit

The Rochester Genesee Regional Transportation Authority (RGRTA) provides and operates transit services for Rochester and the larger nine-county region. RGRTA's headquarters and bus garage are located along East Main Street, east of the study area. A notable amount of bus traffic traverses the Study Area on a daily basis, primarily traveling along north-south routes ending and beginning at the RTS Transit Center. In addition, there are various RTS routes that serve the immediate area. RGRTA provides bus service to numerous schools within the Rochester City School District (RCSD). Bus traffic serving the west and north side city routes traverses the study area. The RTS Transit Center is located at 60 St. Paul Street, which is about three blocks (approximately 1,000 feet) south of the Inner Loop Study Area.

3.3.4.5 Airports, Passenger Rail, Inter-City Bus, Ports

Two inter-city transportation facilities are located within the Secondary Study Area: The Rochester Amtrak Station is located at 320 Central Avenue (a few blocks north of the Inner Loop between Joseph and North Clinton Avenues). The inter-city bus station is located directly south of the Amtrak station, at 186 Cumberland Street. There are no airports or ports in the study area.

3.3.5 State of Good Repair

The aging infrastructure of the Inner Loop and the needs created by these conditions are described below.

3.3.5.1 Structures

A structural inventory of the corridor includes bridges, culverts, overhead signs, retaining walls, guide railing/highway railing, underground structures, and CSX railroad bridges (see Figure 11 Structures Inventory Map).

Bridges and culverts: Within the Primary Study Area, there are ten bridge structures and one culvert (Figure 8). Two structures carry the Inner Loop over City streets west of the Genesee River. One structure spans the Genesee River. Six structures carry City streets over the cut (below-grade) section of the Inner Loop, east of the Genesee River. One structure is a flyover structure of the Inner Loop near its east end that carries eastbound traffic headed to University Avenue over the westbound Inner Loop lanes. The bridges were constructed between 1952 and 1988. The oldest bridges are in fair condition but are approaching their design lives and could be considered functionally obsolete.

Additionally, there are six CSX railroad bridges located adjacent to the Inner Loop, within the Primary Study Area, which carry railroad tracks over North Plymouth Ave, State Street, Mill Street, and St. Paul Street, as well as over Browns Raceway and the Genesee River.

The existing CSX railroad bridge over St. Paul Street (QC 371.03) has a non-standard vertical clearance. The existing posted vertical clearance is 11'-3". The required minimum vertical clearance without vertical clearance posting is 14'-0" and the preferred minimum vertical clearance is 14'-6" to include an allowance for future resurfacing. The bridge has had a history of bridge strikes, which impacts both vehicular and railroad traffic. This restrictive clearance also limits truck traffic to the Genesee Brewery to the north and is an impediment to traffic flow in the overall street network.

Increasing the vertical clearance at the bridge could have significant benefits to both the City and CSX, improving access for future business development and reducing the cost and impacts of bridge strikes. As the bridge is nearly 200 feet wide, increasing the vertical clearance could also improve the uninviting tunnel-like feel of the crossing for vehicular, bicycle and pedestrian traffic. Increasing the vertical clearance of the bridge could be accomplished by lowering the profile of St. Paul Street by approximately 4 to 5 feet. This could require temporary support and permanent underpinning of the two bridge pier foundations and construction of roadside retaining walls to support the sidewalks. Additionally, there are several underground utilities under St. Paul Street, including storm sewer, water, sanitary sewer, electric and telephone that may need to be relocated.

As the underpinning work needs to be done without disruption to CSX rail traffic and potentially requires a slow-order for train travel to limit the impact forces on the temporary support systems needed for the underpinning, CSX has indicated that significant coordination and approvals could be required.

To open the tunnel-like configuration of the existing bridge, permanent removal of the southern portion of the railroad superstructure that currently features no tracks was discussed with CSX. As this space could be required for future CSX expansion, it is highly unlikely the railroad will approve such a modification based on initial discussions.

The St. Paul Street profile-lowering concept will be explored further in Preliminary Design along with additional CSX coordination that will be required.

Figure 8 Existing Bridges & Culvert

BIN	Feature Carried/Crossed	Structure Type	Number of Spans	Year Constructed
1064009	Inner Loop over North Plymouth Avenue	Steel Multi-Girder	1	1971
1050119	Inner Loop over State Street	Adjacent Prestressed Concrete Box Beams	1	1952
N/A	Inner Loop over Pedestrian Tunnel Walkway	Reinforced Concrete Box Culvert	1	1952
1050109	Inner Loop over Genesee River	Steel Multi-Girder	8	1963
1050099	St. Paul Street over Inner Loop	Steel Multi-Girder	1	1962
1050080	North Clinton Avenue over Inner Loop	Steel Multi-Girder	1	1962
1050070	Joseph Avenue over Inner Loop	Steel Multi-Girder	1	1962
1050060	North Street over Inner Loop	Steel Multi-Girder	2	1962
1050170	Scio Street over Inner Loop	Steel Multi-Girder	4	1965
1073830	Flyover Exit Ramp (Inner Loop Eastbound to East Main Street)	Steel Multi-Girder	1	1988
1050160	East Main Street over Inner Loop	Steel Multi-Girder	2	1965

Overhead sign structures: Within the project limits, there are ten overhead sign structures, including five span structures and five cantilever structures (Figure 9). At least two of the span structures are obsolete “tri-chord” structures. All the span structures cross Inner Loop lanes; one cantilever structure is on the Inner Loop and the remaining four are placed on City streets. As these signs all provide information to vehicles regarding traffic movements within the corridor, any modifications under the subject project will impact the legends on the signs and may make modifications or replacement of sign panels or sign structures necessary.

Figure 9 Existing Overhead Sign Structures

SIN	Approximate Location	Structure Type	Year Constructed
40750	Between I-490 Interchange and North Plymouth Avenue bridge over Inner Loop	Span	1971
40745	Between North Plymouth Avenue and State Street Bridges over Inner Loop	Span	1971
40741	Near Front Street	Span w/ Cantilever	2016
40736	Between Genesee River bridge (BIN 1050109) and Water Street	Span	2014
40737	Clinton Avenue Southbound at Inner Loop Westbound	Cantilever	Unknown
40731	Joseph Avenue Northbound at Cumberland Road (northwest corner)	Cantilever	Unknown
40734	Southeast corner of the Joseph Avenue bridge over Inner Loop	Dual-Arm Butterfly	Unknown
40730	Exit ramp to Joseph Avenue, Clinton Avenue & St. Paul Street	Cantilever	2013
45725	Between North Street and Scio Street bridges over Inner Loop	Span	2011
40723	Exit Ramp to East Main Street	Cantilever	1987

Retaining walls: Within the Primary Study Area, there are 15 retaining walls of various configurations that are owned and maintained by the NYSDOT. The six walls west of the Genesee River carry the Inner Loop roadway on an embankment, supporting the bridges over the City streets previously identified. The nine walls east of the Genesee River support the side walls of the cut section of the roadway from the river to the eastern terminus. These walls also date from the era of original construction of the Inner Loop and are showing signs of age in spalling, surface cracking, leaking joints and other deficiencies, suggesting they are approaching their design lives as well.

Figure 10 Existing Retaining Walls

Wall Number	Location/Description	Approx. length (ft)	Average Height (Range)
RW1	West of N. Plymouth Ave. Eastbound Traffic – fill section	95	14.5 (0.0' – 19.5')
RW2	Between N. Plymouth Ave. & State St. Eastbound Traffic – fill section	545	13.5 (9.2' – 18.7')
RW3	East of State St. Eastbound Traffic – fill section	490	10.5 (0.0' – 19.4')
RW4	Between St. Paul St. & N. Clinton Ave. Eastbound Traffic – cut section	515	11.1 (2.0' – 27.1')
RW5	Between N. Clinton Ave. & Joseph Ave. Eastbound Traffic – cut section	65	23.1 (23.0' – 23.2')
RW6	East of Joseph Ave. Eastbound Traffic – cut section	350	11.1 (3.3' – 19.0')
RW7	East of North St. Eastbound Traffic – cut section	340	12.5 (2.0' – 22.9')
RW8	West of N. Plymouth Ave. Westbound Traffic – fill section	220	12.0 (0.0' – 20.0')
RW9	Between N. Plymouth Ave. & State St. Westbound Traffic – fill section	530	15.5 (13.2' – 19.7')
RW10	East of State St. Westbound Traffic – fill section	490	10.7 (0.0' – 20.0')
RW11	Between St. Paul St. & N. Clinton Ave. Westbound Traffic – cut section	475	11.0 (0.0' – 27.4')
RW12	Between N. Clinton Ave. & Joseph Ave. Westbound Traffic – cut section	60	21.6 (20.8' – 22.5')
RW13	East of Joseph Ave. to Joseph Ave. Ramp Westbound Traffic – cut section	950	11.7 (0.0' – 20.8')
RW14	Joseph Ave. Ramp to North St. Westbound Traffic – cut section	720	10.0 (0.0' – 19.8')
RW15	East of North St. Westbound Traffic – cut section	270	10.5 (1.0' – 20.0')

Guide railing and highway railing: There are several types of railings along the mainline travel lanes, bridges, tops of retaining walls, acceleration ramps and deceleration ramps. Railing types include concrete barriers, steel bridge railings, steel railings mounted on top of retaining walls, steel box beam guide railings, double W-beam median railings, and several different end treatments. Railings are generally weathered and show signs of loss of galvanizing to varying degrees. Locations along the median barriers exhibit impact damage. Various segments of the rail are older in age and therefore do not meet current standards. Concrete shoulder and median barriers are limited to the portion of the Inner Loop on fill at the west end. The barriers generally show vertical face cracking, with intermittent locations exhibiting horizontal cracking, typically at the change of profile on the roadside face and three to six inches below the top of the barrier. The general condition of the barriers could be described as good to fair.

Underground structures: There is a network of underground drainage and utility facilities, as well as large sewer tunnels between East Main Street and the Genesee River. Additional research will be conducted under the Preliminary Design phase to determine details of their current use, conditions, profiles, and invert elevations.

Miscellaneous structures: RG&E owns infrastructure (gas, electric, and dam) at the Inner Loop bridge over the Genesee River, including the Central Avenue Dam, Electric Vault and Brown's Race. The foundations of the dam and piers supporting the sluice gates are integral to BIN 1050109. Brown's Race is located under span one of this bridge, and the electric vault is under the west end of the bridge.

3.3.5.2 Highway Design

When the Inner Loop was constructed in the 1960s, highway design standards were different from today. The Primary Study Area corridor geometrics represent areas where values have changed between past and present design standards. In addition, it is anticipated there are non-conforming features present within the corridor.

3.3.5.3 Pavement

The Inner Loop main line pavement section consists of concrete with asphalt overlays. According to the NYSDOT 2021 Region 4 Pavement Data Report, the portion of the Inner Loop between I-490 and North Clinton Street was most recently milled and resurfaced in 2013 and the other portion from North Clinton Street to East Main Street was done as a cold-in-place recycling with a single course overlay completed in 2005, with crack sealing completed in 2006. The pavement condition of the Inner Loop was given a rating of six out of ten by the NYSDOT in 2021. This rating equates to "fair condition." Longitudinal cracks along the pavement and transverse cracks along the underlying concrete joints are prevalent throughout the corridor. There are patched areas and areas with local surface breakdown, most likely due to an underlying concrete joint failing under the asphalt overlays.

3.3.6 Environmental

A need for sensitivity exists regarding environmental resources adjacent to the Inner Loop Expressway including historic and cultural sites, as well as parks and recreational areas. In addition, further review will need to be undertaken to reduce or maintain the effects of the Project on air quality, noise, contaminated and hazardous materials, and stormwater management. Consideration of these resources and potential impact areas are a need for the Project as detailed assessments are progressed during the Preliminary Design phase.

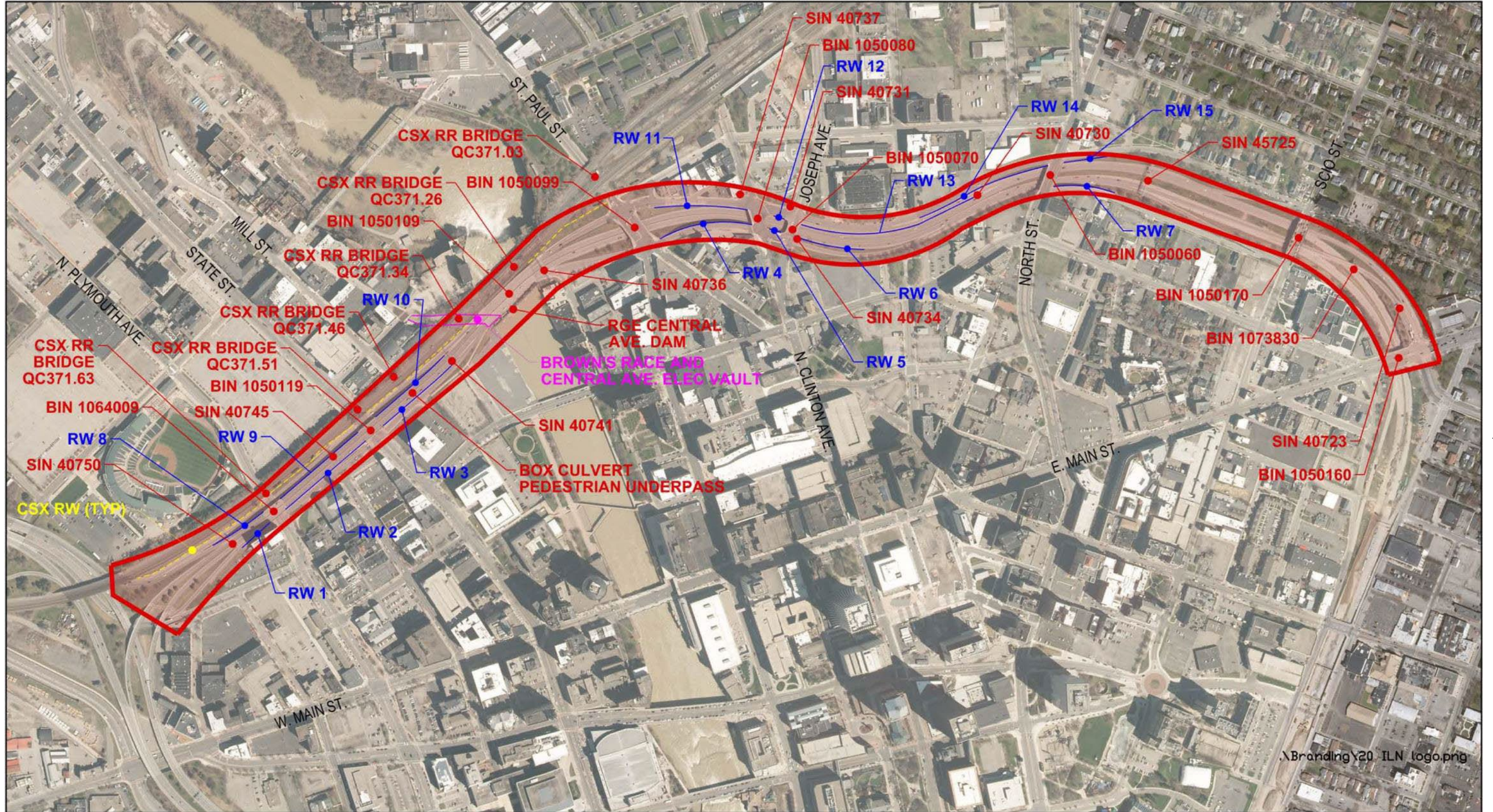


Figure 11. Structures Inventory Map

4 Social, Economic, and Environmental Considerations

The purpose of this chapter in the Scoping Report is to identify NEPA Class and SEQR Type as well as describe briefly the social, economic, and environmental character and issues of the Project. Future investigations will be completed in consultation with agencies, community groups, and elected officials with the results made publicly available during the design phases. The detail and scope of the investigations will be based on the decisions being made for the Project, the sensitivity of the resource, and the size of the impacted area. Preliminary environmental screening activities and preliminary comments as to whether surficial or historical evidence indicates the presence of recognized environmental sites, buildings, or conditions that may result in potential environmental and historical items to be addressed within the project corridor are included here. Some portions of this preliminary screening were originally prepared for the *Inner Loop North Transformation Planning Study*, completed in 2022. Other portions will be completed or revisited. The following discussion summarizes the pertinent information related to the northern segment of the Inner Loop.

4.1 National Environmental Policy Act (NEPA)

This Project is assumed to be a Class II action under United States Department of Transportation (USDOT) National Environmental Policy Act (NEPA) Regulations, 23 CFR 771. A NEPA checklist will be prepared with the final Design Approval Document (DAD). The Project is expected to comply with the requirements of a Categorical Exclusion with Documentation. The Lead Agency for NEPA is the Federal Highway Administration (FHWA).

4.2 State Environmental Quality Review Act (SEQRA)

This Project is assumed to be a Type I action in accordance with 17 NYCRR Part 15 and 6 NYCRR Part 15 "Procedures for Implementation of State Environmental Quality Review (SEQR) Act." This designation will be confirmed during the completion of the Preliminary Design phase. The City of Rochester is anticipated to be the SEQR lead agency. As lead agency, the City will satisfy SEQRA requirements through the preparation of an Environmental Assessment.

4.3 Permits, Approvals, Concurrences, and Consultation

Anticipated permits, approvals, concurrences, and consultation for the Project are listed below. This list will be refined as the NYSDOT and the City of Rochester further develop the Project design and identify potential effects that could result from implementation of the Project. The refined list will be presented in the DAD.

Potential Permits/Certifications/Coordination:

Federal Highway Administration (FHWA)

- Determination under Section 4(f) of the U.S. Department of Transportation Act of 1966: *Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites* (23 CFR § 774)
- Determination under Section 106 of the National Historic Preservation Act of 1966 (NHPA; Section 106)
- Interchange Justification Report

U.S. Department of Interior, Fish and Wildlife Service (USFWS)

- Consultation under Section 7 of the Endangered Species Act of 1973

U.S. Environmental Protection Agency (USEPA)

- Consultation regarding the air quality analysis

NYS Department of Transportation (NYSDOT)

- NYSDOT Highway Work Permit
- NYSDOT approval is required for the final disposition of all excess NYSDOT ROW not required for transportation.

NYS Department of Environmental Conservation (NYSDEC)

- State Pollutant Discharge Elimination System (SPDES) Permit (ECL Article 17)
- Construction Staging Permit
- Consultation regarding the air quality analysis
- Consultation with the Natural Heritage Program (ECL 11-0535)

NYS Office of Parks, Recreation, and Historic Preservation (OPRHP), State Historic Preservation Office (SHPO)

- Consultation under Section 106 of the National Historic Preservation Act
- Section 4(f) coordination as official with jurisdiction for historic sites

Others

- Local Permits

Coordination:

- NYSDEC (pursuant to the “NYSDEC/NYS DOT Memorandum of Understanding Regarding ECL Articles 15 & 24”)
- Federal Highway Administration
- New York Natural Heritage Program
- National Park Service
- Section 1424(e) review by FHWA and EPA (sole source aquifer)
- Genesee Transportation Council
- Municipalities
 - City of Rochester
 - Monroe County
- Utilities
 - Rochester Gas & Electric (RG&E)
 - Monroe County Pure Waters (MCPW)
 - CSX
 - Rochester District Heating (RDH)
 - All public and private utility companies within the corridor, inclusive of telecommunications

4.3.1 Study Areas & Methodology

4.3.1.1 Study Areas

There are multiple study areas used in this Project Scoping Report (see Figure 3 Primary and Secondary Study Areas). These study areas were selected to evaluate the potential effects of the Project, and the existing conditions contained within them are described here. The Primary Study Area includes the project limits, including the Inner Loop corridor itself and immediately adjacent lands. The Primary Study Area is most relevant for certain analyses and data collection efforts, such as the topographical survey.

For some topics, the study area will vary from the Primary Study Area. The Secondary Study Area encompasses a larger area that includes neighborhoods to the north and south of the Inner Loop corridor. The Secondary Study Area is used to address multiple topics in this Project Scoping Report. The corresponding Study Area is noted within each subsection of this report.

The study area for the Traffic Analysis includes the Primary and Secondary Study Area and additional segments of I-490 (between Mount Read Boulevard and I-590) and Downtown Rochester. All resource-specific study areas will be established and documented in the DAD for the Project.

4.3.1.2 Analysis Years

The analysis years will be chosen based on standard NYSDOT procedures and will vary depending on the particular topic. For example, analysis of socioeconomic issues, including environmental justice, will

use a range of years for population, housing, and income data from the US Census Bureau. For traffic noise analysis, the design year will be modeled in accordance with the NYSDOT Noise Policy. Air quality will be analyzed for the Estimated Time of Completion (ETC) and ETC +20 years.

4.3.1.3 Methodologies

The methodologies used to evaluate the potential social, economic and environmental effects resulting from implementation of the Project will follow the FHWA Technical Advisory T6640.8A, Guidance for Preparing and Processing Environmental and Section 4(f) Documents, the procedures in the NYSDOT Project Development Manual (PDM) and the Transportation Environmental Manual (TEM), and applicable guidance and regulations. The DAD will include an assessment of the social, economic, and environmental effects of the Preferred Alternative in comparison to that of the No-Build Alternative.

The sections below describe the social, economic, and environmental topics to be reviewed in the DAD and summarizes the methodologies that will be used for each topic.

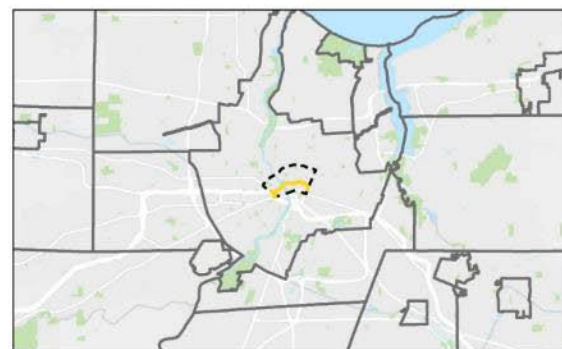
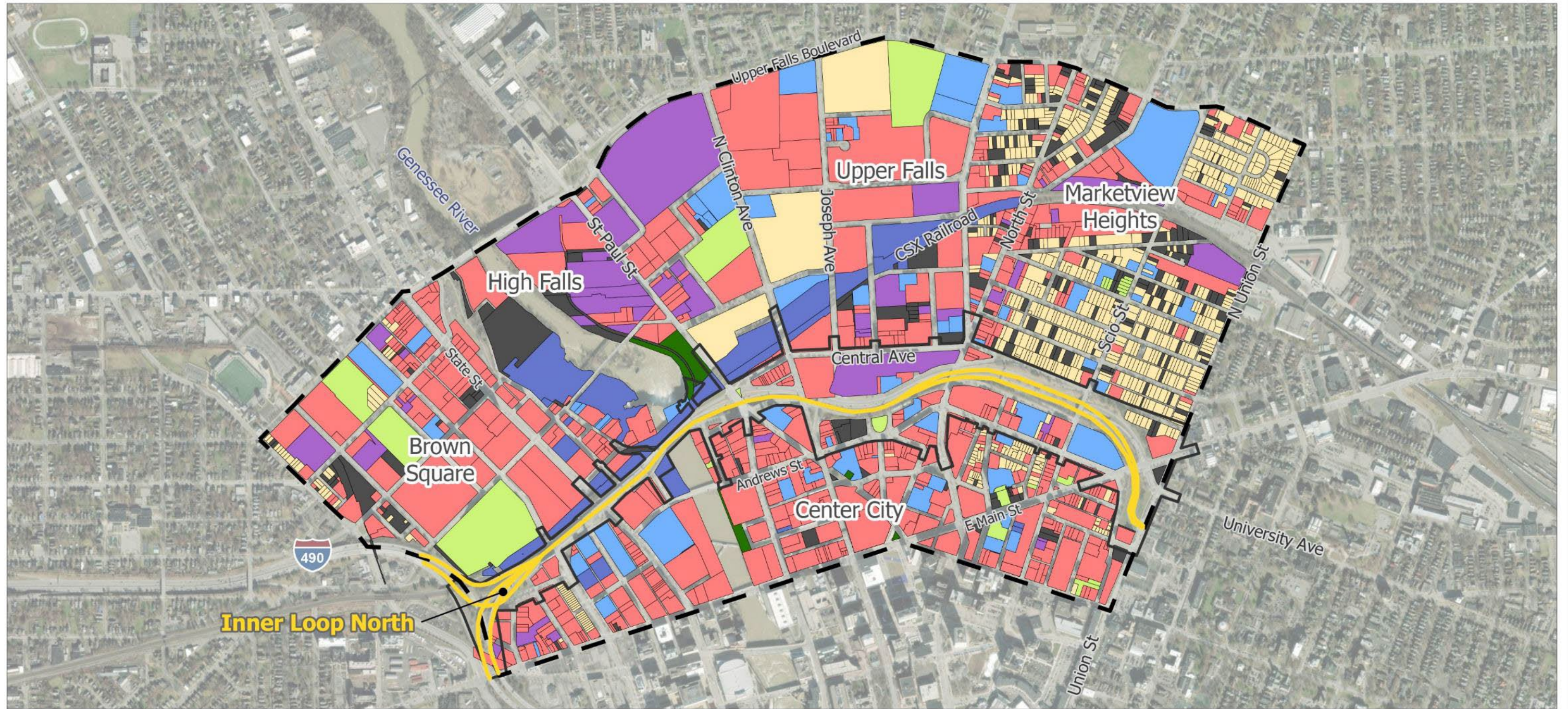
4.4 Social, Economic, and Environmental Considerations

4.4.1 Land Use and Zoning

Effects to land use and consistency with local plans within the Secondary Study Area will be assessed as part of the DAD. The DAD will address local land use patterns, zoning, and recent development trends. The land use study area will consider the areas that will be affected by the Project.

The potential for property acquisitions will be assessed as part of the DAD, as well. At this stage in the project development process, there is expected to be a limited need for acquisitions that would materially affect parcels in the Study Areas. Existing land use and zoning classifications are shown in Figure 12 and Figure 13. The area within the Secondary Study Area consists of multiple land uses and zoning classifications, including commercial, residential, community services, industrial, public services, recreation, vacant land, and public parks.

The City of Rochester Zoning Alignment Project (ZAP) is currently being advanced, and will identify updates to the City's zoning to better align regulations with the guiding principles of *Rochester 2034*. At the completion of this Project, zoning classifications within the Study Areas may be modified.



- Inner Loop North
- Secondary Study Area
- Primary Study Area

Land Use

- Commercial
- Community Services
- Industrial
- Public Services
- Recreation and Entertainment
- Residential
- Vacant Land
- Wild, Forested, Conservation Lands & Public Parks

0 500 1,000 Feet
 (At original document size of 11x17)
 1:12,045



Project Location: City of Rochester, NY
 Prepared by Yeojin Kim on 2024-02-02
 TR by SRC on 2024-02-02
 IR by SRC on 2024-02-02

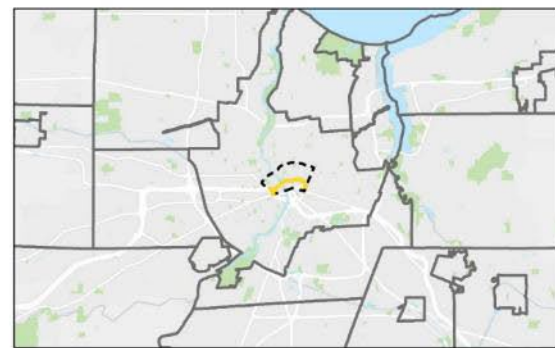
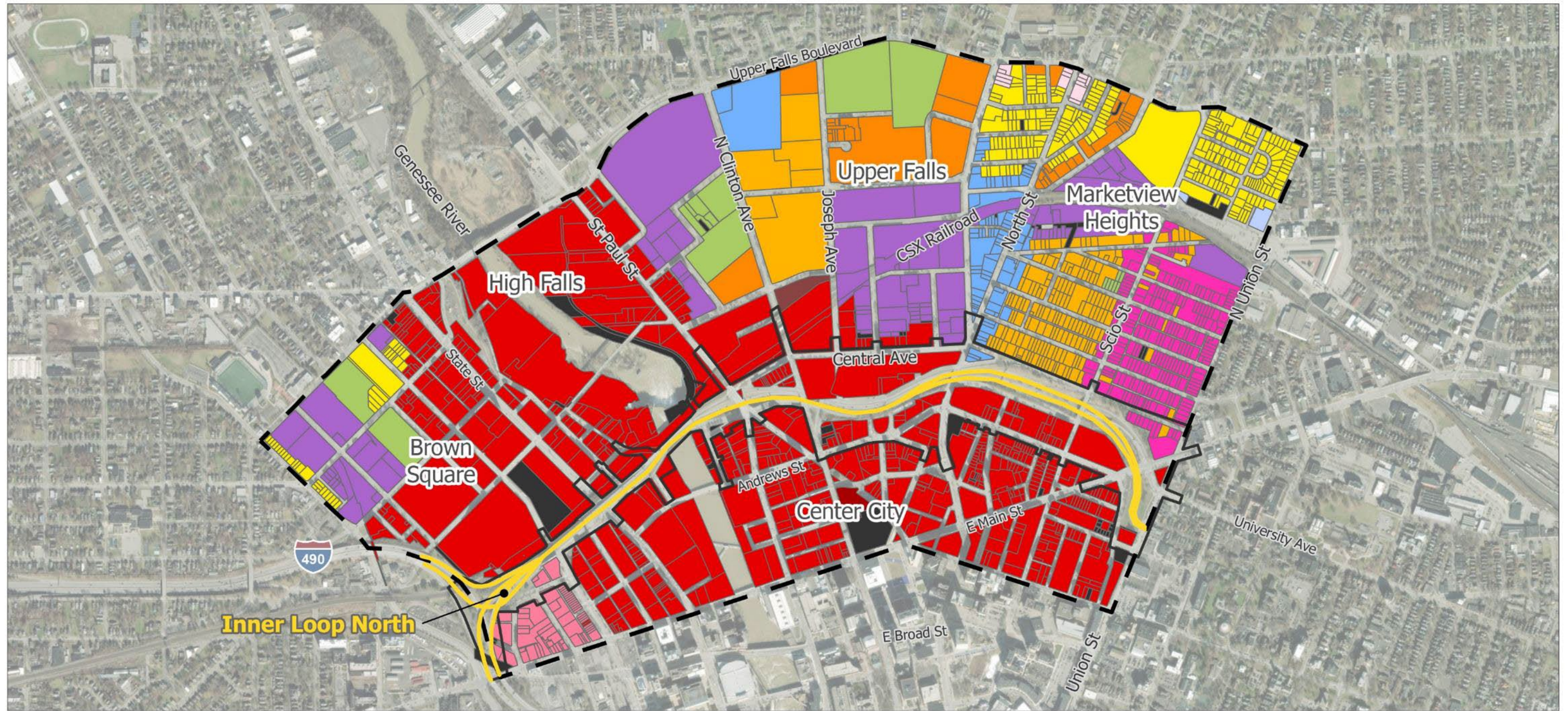
Client/Project: City of Rochester
 192800254

Project: Inner Loop North Transformation Project (PIN 4CR0.17)
 Report: Project Scoping Report (PSR)

Figure No. **12**

Existing Land Use

Notes
 1. Coordinate System: NAD 1983 2011 StatePlane New York West FIPS 3103 Ft US
 2. Data Sources: Property Tax Assessment Administration; DataROC Tax Parcel 2023
 3. Background: ESRI World Imagery & Light Gray Base

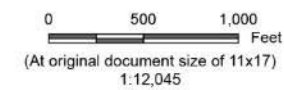


Notes
 1. Coordinate System: NAD 1983 2011 StatePlane New York West FIPS 3103 Ft US
 2. Data Sources: Property Tax Assessment Administration, City of Rochester Article II Zoning Districts; DataROC Tax Parcel 2023
 3. Background: ESRI World Imagery & Light Gray Base

- Inner Loop North
- Secondary Study Area
- Primary Study Area

Zoning

- No Data
- C-1 (Neighborhood Center)
- C-2 (Community Center)
- C-3 (Regional Destination Center)
- CASCADE URD (Urban Renewal District)
- CCD (Center City District)
- M-1 (Industrial)
- MH-URD (MH Urban Renewal District)
- O-S (Open Space)
- PMV (Public Market Village District)
- R-1 (Low Density Residential)
- R-2 (Medium Density Residential)
- R-3 (High Density Residential)
- ST JOSEPHS URD



Project Location City of Rochester, NY
 Prepared by Yeojin Kim on 2024-02-02
 TR by SRC on 2024-02-02
 IR by SRC on 2024-02-02

Client/Project 192800254

Client: City of Rochester
 Project: Inner Loop North Transformation Project (PIN 4CR0.17)
 Report: Project Scoping Report (PSR)

Figure No.

13

Title

Existing Zoning

4.4.2 Neighborhood and Community Cohesion

The DAD will address potential effects to neighborhood character and community cohesion, including the potential to generate new development and/or lead to displacement of current residents and businesses within the vicinity of the Inner Loop North. The study area for assessing neighborhood and community cohesion will include the Primary and Secondary Study Areas (Figure 3).

4.4.3 Environmental Justice

During the next phase of this Project (i.e., Preliminary Design), all feasible concepts will be evaluated for potential Environmental Justice (EJ) impacts in accordance with Executive Order (EO) 12898 (*Federal Actions to Address Environmental Justice to Minority and Low-Income Populations*), US Department of Transportation (USDOT) Order 5610.2C (*Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), Federal Highway Administration's (FHWA) EJ Order 6640.23A (*FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), FHWA's *Guidance on Environmental Justice and NEPA*, and other relevant EOs² and guidance on EJ.

The City of Rochester and the NYSDOT are committed to Title VI of the Civil Right Act, which stipulates that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation, denied the benefits of, or be subjected to discrimination, under any program or activity receiving federal assistance.

A preliminary assessment using U.S. Census Bureau data from 2022 indicates that there are minority and/or low-income populations within the Project Study Areas (see Figure 14 and Figure 15). The EJ study area will be developed in consideration of the areas to be affected by the Project and will include the full extent of the census block groups that intersect with the Primary and Secondary Study Areas. The study area that will be used for the Environmental Justice analysis is illustrated in Figure 14, Minority Populations and Figure 15, Low Income Populations.

4.4.4 Community and Social Groups Benefitted or Harmed

The DAD will include, at minimum, an assessment of effects on persons with disabilities, elderly populations, transit-dependent populations, and non-driver populations. The study area for these groups will be developed in consideration of the areas to be affected by changes in street grid, traffic patterns, and land use modifications from the proposed action, as well as consultation with the representatives from the affected communities. This analysis will utilize the Secondary Study Area.

4.4.5 Schools and Places of Worship

There are numerous community facilities located within the Primary and Secondary Study Areas, including schools and places of worship (Figure 16). The DAD will include an evaluation of effects on community facilities.

² Executive Orders 13895, 14008, 14096 as applicable



- Inner Loop North
- Secondary Study Area
- Census Block Group (.5 - 1 mile around the Study Area)

% of Population where Race/Ethnicity is Self-Identified as Something other than "White"

- <20%
- 20-40%
- 40-60%
- 60-80%
- >80%

0 500 1,000 Feet
 (At original document size of 11x17)
 1:23,483



Project Location: City of Rochester, NY
 Prepared by Yeojin Kim on 2024-02-02
 TR by SRC on 2024-02-02
 IR by SRC on 2024-02-02

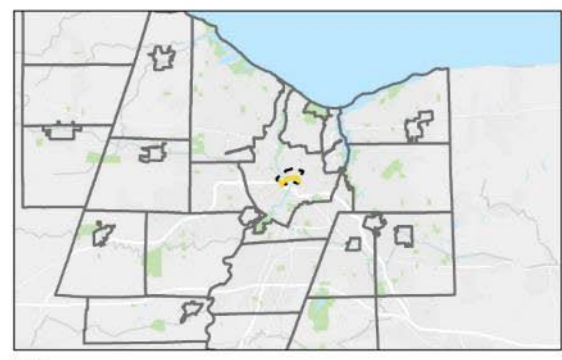
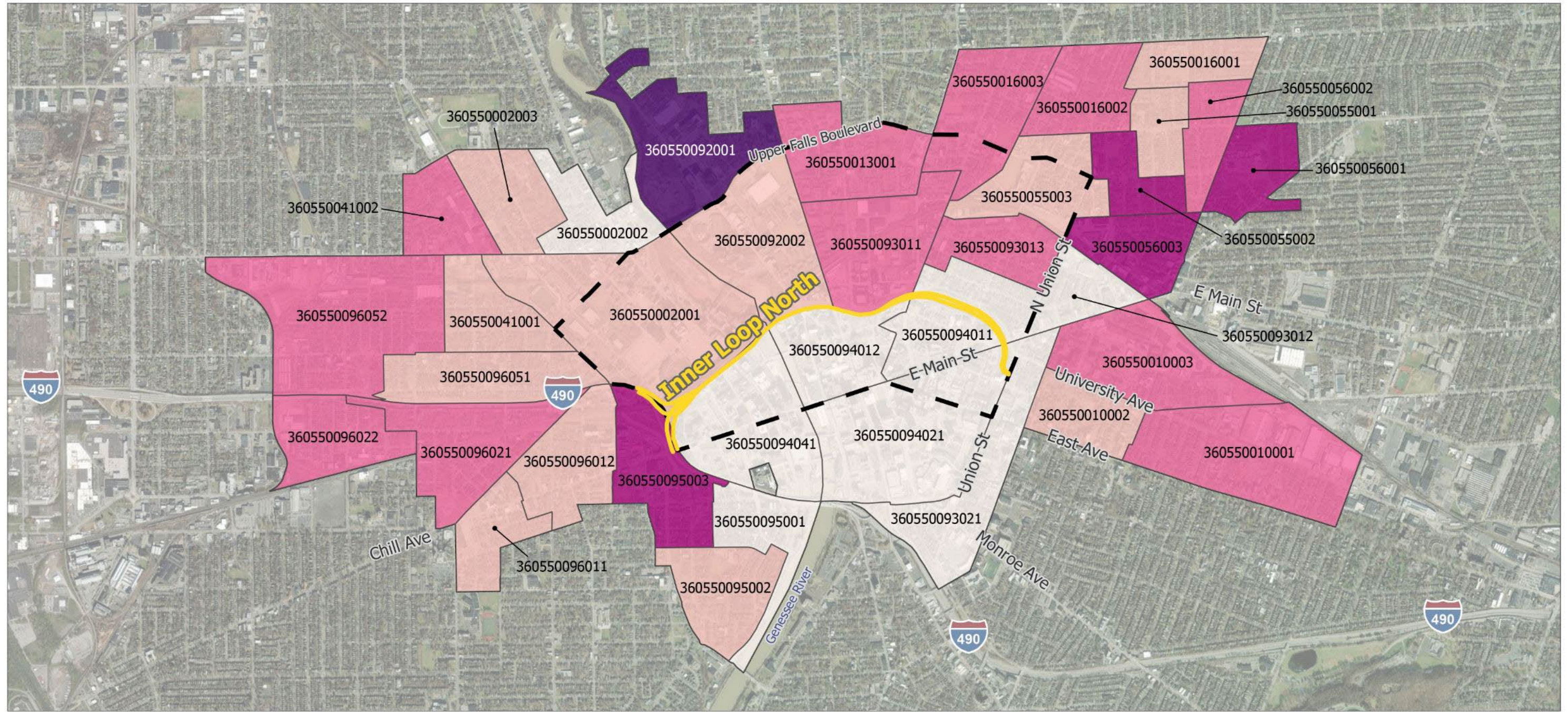
Client/Project: 192800254

Client: City of Rochester
 Project: Inner Loop North Transformation Project (PIN 4CR0.17)
 Report: Project Scoping Report (PSR)

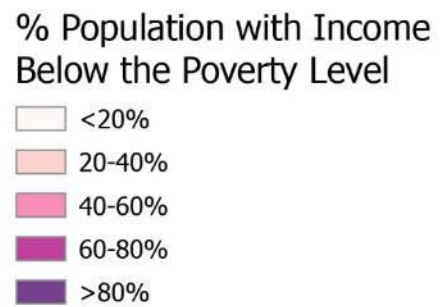
Figure No. 14

Title: Minority Population

Notes
 1. Coordinate System: NAD 1983 2011 StatePlane New York West FIPS 3103 Ft US
 2. Data Sources: US Census Bureau. American Community Survey 5 Year Estimate 2018-2022. "Race"
 3. Background: ESRI World Imagery & Light Gray Base



- Inner Loop North
- Secondary Study Area
- Census Block Group (.5 - 1 mile around the Study Area)



0 500 1,000 Feet
 (At original document size of 11x17)
 1:23,483

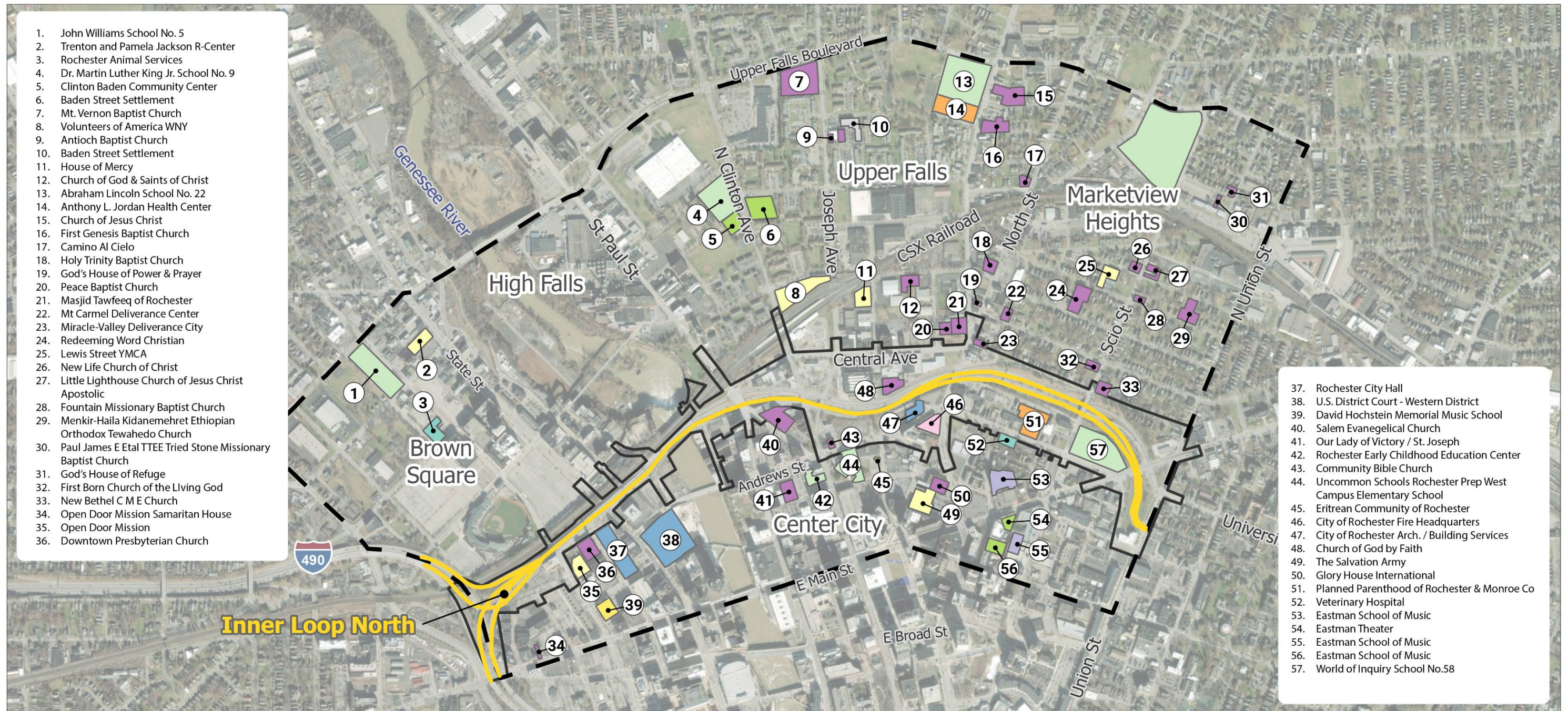


Project Location City of Rochester, NY
Client/Project City of Rochester
 Project: Inner Loop North Transformation Project (PIN 4CR0.17)
 Report: Project Scoping Report (PSR)

Prepared by Yeojin Kim on 2024-02-02
TR by SRC on 2024-02-02
IR by SRC on 2024-02-02

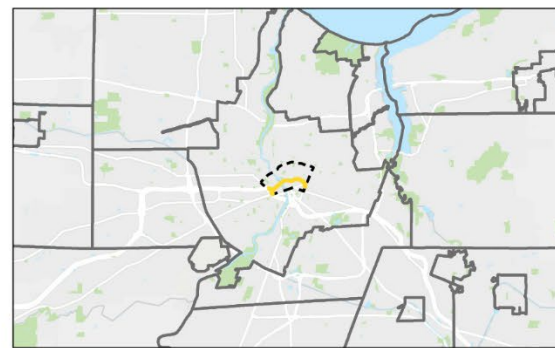
Figure No. 15
Title Low Income Population

Notes
 1. Coordinate System: NAD 1983 2011 StatePlane New York West FIPS 3103 F1 US
 2. Data Sources: US Census Bureau, American Community Survey 5 Year Estimate 2018-2022, "Poverty Status in the Past 12 Months of Families"
 3. Background: ESRI World Imagery & Light Gray Base



1. John Williams School No. 5
2. Trenton and Pamela Jackson R-Center
3. Rochester Animal Services
4. Dr. Martin Luther King Jr. School No. 9
5. Clinton Baden Community Center
6. Baden Street Settlement
7. Mt. Vernon Baptist Church
8. Volunteers of America WNY
9. Antioch Baptist Church
10. Baden Street Settlement
11. House of Mercy
12. Church of God & Saints of Christ
13. Abraham Lincoln School No. 22
14. Anthony L. Jordan Health Center
15. Church of Jesus Christ
16. First Genesis Baptist Church
17. Camino Al Cielo
18. Holy Trinity Baptist Church
19. God's House of Power & Prayer
20. Peace Baptist Church
21. Masjid Tawfeeq of Rochester
22. Mt Carmel Deliverance Center
23. Miracle-Valley Deliverance City
24. Redeeming Word Christian
25. Lewis Street YMCA
26. New Life Church of Christ
27. Little Lighthouse Church of Jesus Christ Apostolic
28. Fountain Missionary Baptist Church
29. Menkir-Haila Kidanemehret Ethiopian Orthodox Tewahedo Church
30. Paul James E Etal TTEE Tried Stone Missionary Baptist Church
31. God's House of Refuge
32. First Born Church of the Living God
33. New Bethel C M E Church
34. Open Door Mission Samaritan House
35. Open Door Mission
36. Downtown Presbyterian Church

37. Rochester City Hall
38. U.S. District Court - Western District
39. David Hochstein Memorial Music School
40. Salem Evangelical Church
41. Our Lady of Victory / St. Joseph
42. Rochester Early Childhood Education Center
43. Community Bible Church
44. Uncommon Schools Rochester Prep West Campus Elementary School
45. Eritrean Community of Rochester
46. City of Rochester Fire Headquarters
47. City of Rochester Arch. / Building Services
48. Church of God by Faith
49. The Salvation Army
50. Glory House International
51. Planned Parenthood of Rochester & Monroe Co
52. Veterinary Hospital
53. Eastman School of Music
54. Eastman Theater
55. Eastman School of Music
56. Eastman School of Music
57. World of Inquiry School No.58



- Primary Study Area
- Secondary Study Area
- Inner Loop North

Community Facilities

- Animal Welfare Shelter
- Benevolent
- College / University
- Culture Building
- Government Building
- Health Building
- Other Educational Facility
- Police / Fire

Recreational Facility

- Religious
- School
- Special Schools

0 500 1,000 Feet
 (At original document size of 11x17)
 1:12,045



Project Location: City of Rochester, NY
 Prepared by Yeojin Kim on 2024-02-02
 TR by SRC on 2024-02-02
 IR by SRC on 2024-02-02

Client/Project: City of Rochester
 Project: Inner Loop North Transformation Project (PIN 4CR0.17)
 Report: Project Scoping Report (PSR)

Figure No. **16**

Title **Community Facilities and Religious Institutions**

4.4.6 Regional and Local Economies, Businesses

Within the Primary and Secondary Study Areas there are multiple large and small mixed-use properties and businesses. This includes a mix of industrial and commercial uses. The DAD will address potential effects to businesses, including access and operation, local tax base implications, changes to passenger traffic patterns, and modifications to the transport of goods.

4.4.7 Wetlands

According to the National Wetlands Inventory (NWI) Mapper, the portion of the Genesee River which transects the Inner Loop North project area is classified as a “freshwater pond.” There are no state or federal wetlands within the Primary Study Area, therefore, no impacts to wetlands will occur.

4.4.8 Surface Water

The Genesee River transects the western portion of the Primary Study Area. This portion of the Genesee River is classified as an impaired segment of a Class B River per the New York State Department of Environmental Conservation (NYSDEC) with a water quality standard of B. The best uses for Class B waters are fishing, primary contact recreation, and secondary contact recreation. No impacts to surface waters are anticipated. Potential impacts will be assessed within the DAD.

4.4.9 Navigable Waters

The Genesee River is a U.S. Army Corps of Engineers (USACE) designated navigable waterway and a major tributary to Lake Ontario. Work within navigable waterways, such as construction, requires a USACE permit. No work within the Genesee River is anticipated, however, potential impacts will be assessed within the DAD.

4.4.10 Coastal Resources

The Primary Study Area intersects a Coastal Area and falls within the boundaries of the City of Rochester Local Waterfront Reutilization Program (LWRP). The Coastal Area and LWRP are relative to the presence of the Genesee River transecting the Primary Study Area. The bridge that carries the Inner Loop over the Genesee River is not proposed for structural expansion or reduction and therefore the work will not negatively impact the Coastal Area.

The LWRP “demonstrates the importance of managing and protecting waterfront resources and development in a way that maintains and promotes health goals and outcomes for diverse neighborhoods, community groups, recreational users and other stakeholders.” Coastal Resources will continue to be assessed within the DAD.

4.4.11 Floodplains

The Genesee River is designated by the Federal Emergency Management Agency (FEMA) as a regulatory floodway. The proposed project within the floodway includes the redesign of existing roadways. Modifications of the bridge span and abutments are not proposed at this time and the project is not set to impact the floodplain. No further review is required (based on the current concept) unless the project design changes to include elements within the floodway.

4.4.12 Groundwater Resources, Aquifers, and Reservoirs

A review of the NYSDEC aquifer database and the Environmental Protection Agency (EPA) Sole Source Aquifer database indicates that the Primary and Secondary Study Areas are not located within a Primary, Principal, or Sole Source Aquifer area. As there are no Primary, Principal, or Sole Source Aquifer area within the Primary and Secondary Study Areas limits, therefore, no impacts to these will occur.

4.4.13 Stormwater Management

Projects that disturb soils and increase the extent of impervious surfaces have the potential to affect the quality and quantity of stormwater run-off that may discharge into subsurface or surface waters. As part of the DAD, the potential effects to surface water quality, including erosion and sediment control practices

proposed in the vicinity of surface water bodies, storm sewer system connections, and combined sewer overflow connections will be evaluated and documented. The study area will include the proposed limits of construction and areas of land that contribute to the stormwater runoff. Consultation with NYSDEC and City of Rochester will be coordinated as necessary. Coverage under the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Construction and Stormwater Pollution Prevention Plan could be required if the total disturbed area exceeds permitting thresholds.

4.4.14 Ecology and Wildlife Resources

Most of the area within the Primary Study Area is densely populated and highly developed. The general landscape is characterized as terrestrial-urban, reflecting the effects of human disturbances to the naturally occurring ecological systems. The Genesee River gorge, located north of the Primary Study Area contains natural areas, parks, and wildlife habitat that is home to a variety of species. The Genesee River gorge is unlikely to be impacted by this Project. However, any effects will be assessed during the development of the DAD.

4.4.15 Threatened and Endangered Species

Preliminary coordination with the NYSDEC indicates that the Peregrine falcon (*Falco peregrinus*) has been documented near the Primary Study Area. Coordination with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) indicates that the northern long-eared bat (*Myotis septentrionalis*), a USFWS listed endangered species, and the monarch butterfly (*Danaus plexippus*), a candidate species under review by the USFWS, and the tricolored bat (*Perimyotis subflavus*), a USFWS proposed endangered species may be present within the vicinity of the Primary Study Area. The USFWS indicates that the work will have no effect on the northern long-eared bat and candidate species are not protected under Section 7 of the Endangered Species Act. Potential impacts to the tricolored bat will be evaluated during the preparation of the DAD.

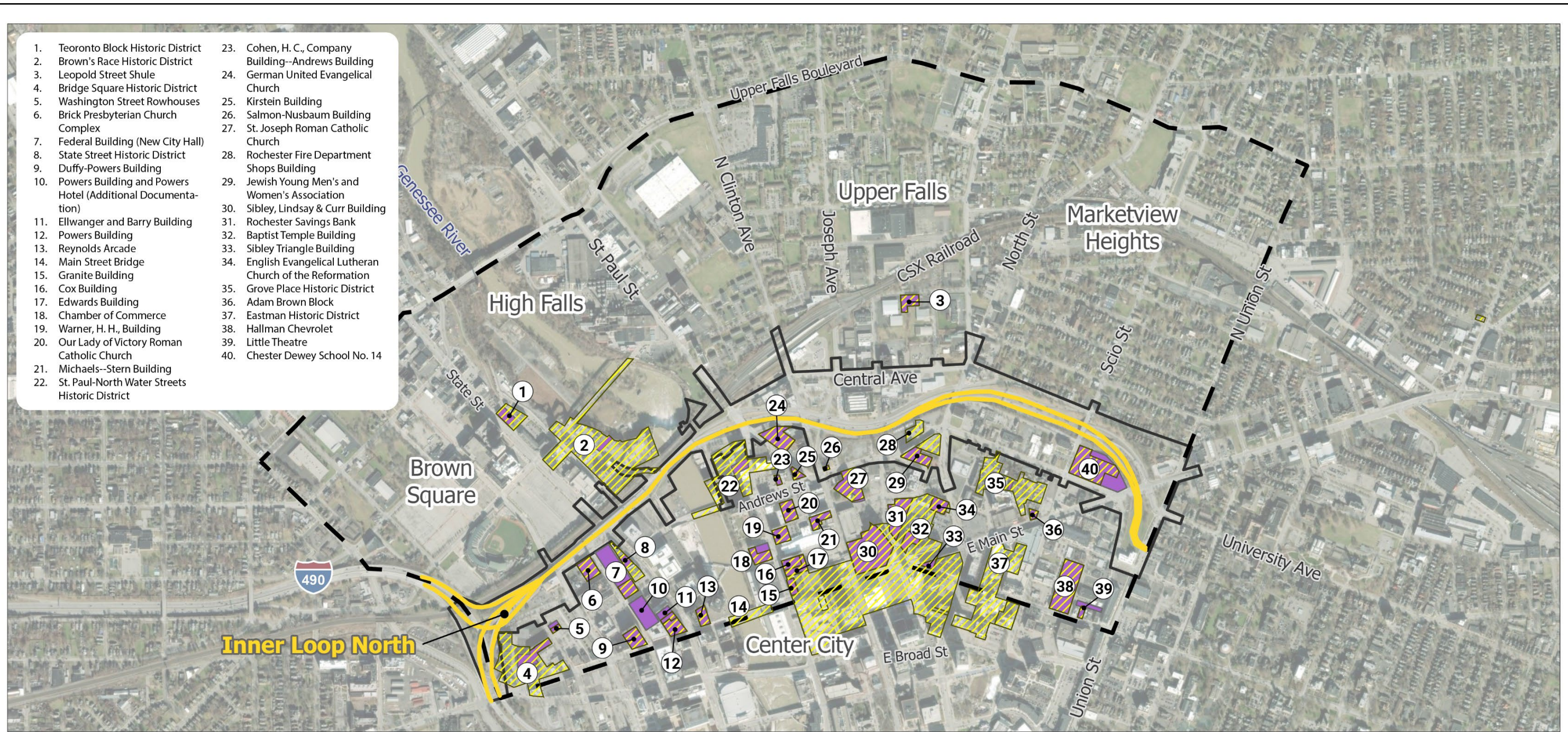
Construction during the Peregrine falcon breeding season may be limited to limit disturbances. Coordination with the NYSDEC is ongoing and will be addressed within the DAD.

4.4.16 Historic/Cultural Resources

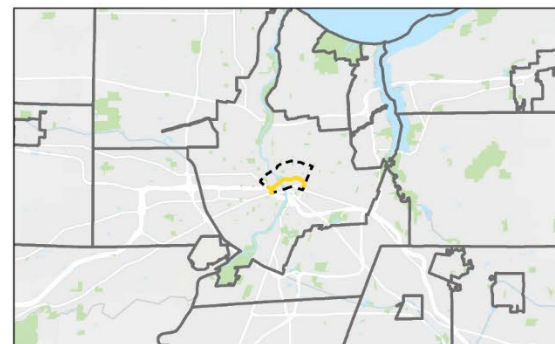
The primary goal related to cultural resources for the Project is to avoid, minimize and/or otherwise mitigate impacts to extant resources. There are numerous institutions and agencies to draw upon where data is available for previously recorded archaeological and historic resources, including the database of the New York State Historic Preservation Office (NYSHPO). The Project is located within the City of Rochester and the majority of the Primary Study Area is previously disturbed by construction activity. It is unlikely, therefore, that potentially significant, previously unknown archeological sites are located within the Primary Study Area.

A preliminary environmental screening of the Project assumes the Project to be classified as a Type I Action in accordance with the definitions of the State Environmental Quality Review, Act 17 NYCRR Part 15, and as a Class II action under United States Department of Transportation, National Environmental Policy Act, Regulations 23CFR 771.117(d)(1).

The Project is a federal undertaking subject to review under Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR §800. Section 106 requires federal agencies to consider the effects of their undertakings on historic properties and archaeological resources. Historic properties identified to date, using information provided by the National Park Service NRHP listing, include properties listed on the NRHP and are depicted in Figure 17.



- | | |
|---|--|
| 1. Teoronto Block Historic District | 23. Cohen, H. C., Company Building--Andrews Building |
| 2. Brown's Race Historic District | 24. German United Evangelical Church |
| 3. Leopold Street Shule | 25. Kirstein Building |
| 4. Bridge Square Historic District | 26. Salmon-Nusbaum Building |
| 5. Washington Street Rowhouses | 27. St. Joseph Roman Catholic Church |
| 6. Brick Presbyterian Church Complex | 28. Rochester Fire Department Shops Building |
| 7. Federal Building (New City Hall) | 29. Jewish Young Men's and Women's Association |
| 8. State Street Historic District | 30. Sibley, Lindsay & Curr Building |
| 9. Duffy-Powers Building | 31. Rochester Savings Bank |
| 10. Powers Building and Powers Hotel (Additional Documentation) | 32. Baptist Temple Building |
| 11. Ellwanger and Barry Building | 33. Sibley Triangle Building |
| 12. Powers Building | 34. English Evangelical Lutheran Church of the Reformation |
| 13. Reynolds Arcade | 35. Grove Place Historic District |
| 14. Main Street Bridge | 36. Adam Brown Block |
| 15. Granite Building | 37. Eastman Historic District |
| 16. Cox Building | 38. Hallman Chevrolet |
| 17. Edwards Building | 39. Little Theatre |
| 18. Chamber of Commerce | 40. Chester Dewey School No. 14 |
| 19. Warner, H. H., Building | |
| 20. Our Lady of Victory Roman Catholic Church | |
| 21. Michaels--Stern Building | |
| 22. St. Paul-North Water Streets Historic District | |



- Inner Loop North
- Known National Register Buildings
- Secondary Study Area
- National Historic District
- Primary Study Area

0 500 1,000 Feet
(At original document size of 11x17)
1:12,045



Project Location: City of Rochester, NY
Prepared by Yeojin Kim on 2024-02-02
TR by SRC on 2024-02-02
IR by SRC on 2024-02-02

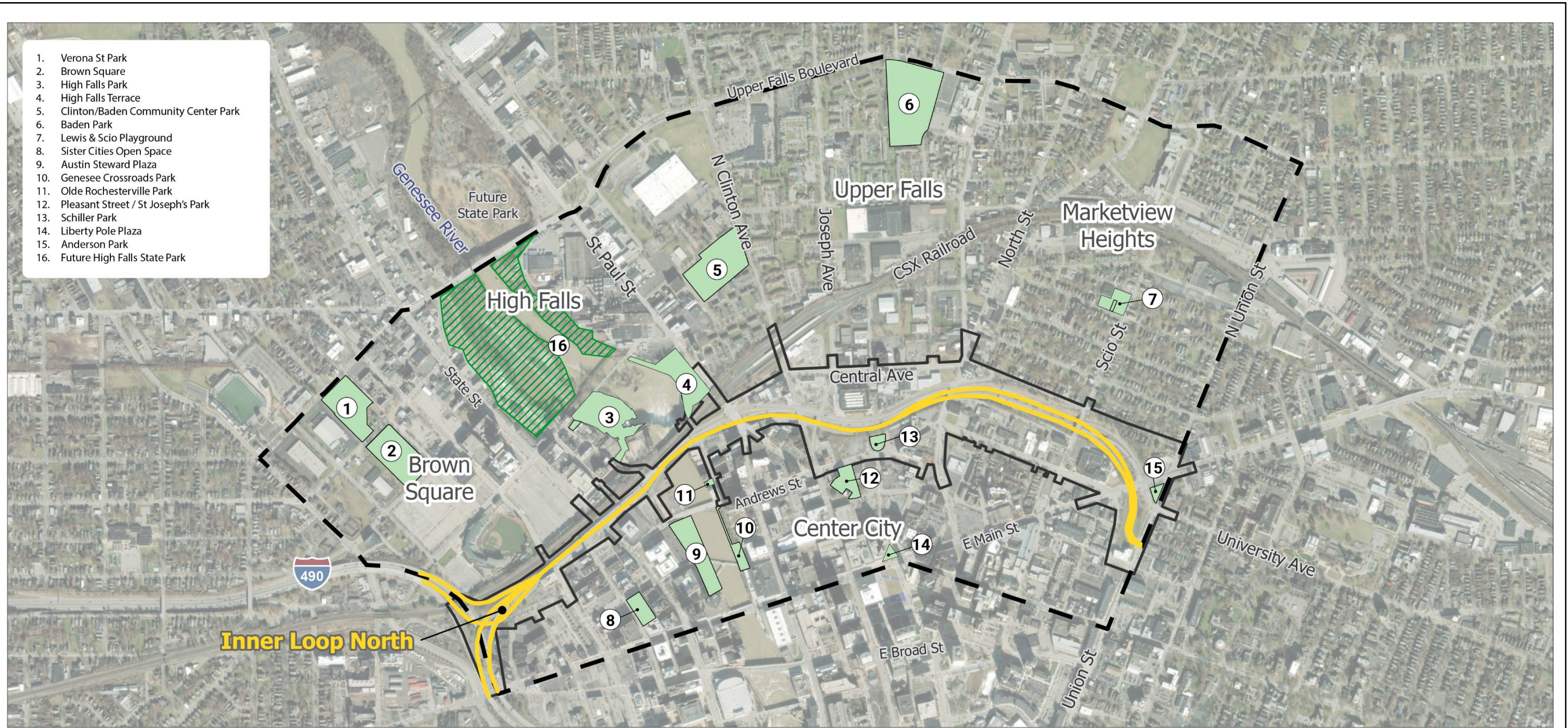
Client/Project: 192800254

Client: City of Rochester
Project: Inner Loop North Transformation Project (PIN 4CR0.17)
Report: Project Scoping Report (PSR)

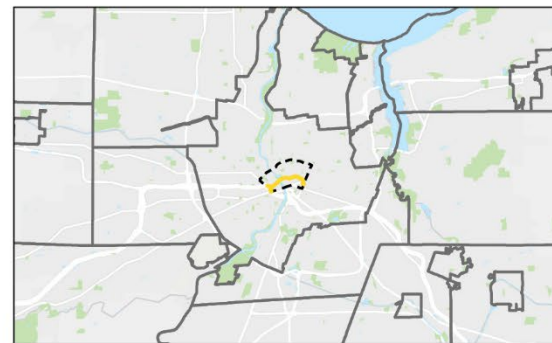
Figure No. 17

Title: Known National Registered Listed Properties and Historic Properties

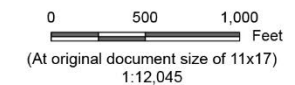
Notes
1. Coordinate System: NAD 1983 2011 StatePlane New York West FIPS 3103 FT US
2. Data Sources: Property Tax Assessment Administration; City of Rochester Article II Zoning Districts; DataROC Tax Parcel 2023
3. Background: ESRI World Imagery & Light Gray Base



1. Verona St Park
2. Brown Square
3. High Falls Park
4. High Falls Terrace
5. Clinton/Baden Community Center Park
6. Baden Park
7. Lewis & Scio Playground
8. Sister Cities Open Space
9. Austin Steward Plaza
10. Genesee Crossroads Park
11. Olde Rochesterville Park
12. Pleasant Street / St Joseph's Park
13. Schiller Park
14. Liberty Pole Plaza
15. Anderson Park
16. Future High Falls State Park



- Inner Loop North
- Secondary Study Area
- Primary Study Area
- Parks
- Future Parks



Project Location City of Rochester, NY
 Prepared by Yejin Kim on 2024-02-02
 TR by SRC on 2024-02-02
 IR by SRC on 2024-02-02

Client/Project 192800254
 Client: City of Rochester
 Project: Inner Loop North Transformation Project (PIN 4CR0.17)
 Report: Project Scoping Report (PSR)

Figure No.
18

Title
Parks

Notes
 1. Coordinate System: NAD 1983 2011 StatePlane New York West FIPS 3103 Ft US
 2. Data Sources: Property Tax Assessment Administration; City of Rochester Article II Zoning Districts; DataROC Tax Parcel 2023
 3. Background: ESRI World Imagery & Light Gray Base

A Phase IA cultural resources survey will be prepared for the Project. The Phase IA will identify any potential archaeological sites and historic properties in the Primary Study Area. The Phase IA survey will include the appropriate contextual background, information, and locations of recorded cultural resources, and will evaluate the potential for the presence of previously unidentified cultural resources in the Primary Study Area. The Phase IA will include an extensive reconnaissance investigation, and propose a scope of work for any necessary, subsequent Phase IB archaeological testing in potentially undisturbed areas.

The Phase IA survey may include the following:

- Review of the NYSHPO database to identify previously recorded archaeological sites located within or immediately adjacent to the proposed Project.
- Identification and review of previous archaeological survey reports conducted in the Primary Study Area.
- Review of historical research materials, with particular emphasis on historic cartographic sources.
- Conduct a site reconnaissance to document existing conditions in the Primary and Secondary Study Areas.
- Estimates of prior ground disturbance at the site, based on previous construction, buried utilities, and observations from the site reconnaissance.
- Preparation of a Phase IB research design and methodology, in accordance with applicable NYSHPO standards and guidelines.

The results of identification procedures and the effects to those properties (if applicable) will be evaluated in a Phase IA Cultural Resources Survey Report.

4.4.17 Parks and Recreational Areas

Section 4(f) (49 US Code 303) of the US Department of Transportation Act of 1966 applies to publicly owned parks, recreational areas, and wildlife and waterfowl refuges, and public or private owned historic properties. Section 4(f) also applies to historic properties identified during the Section 106 process. Section 4(f) prohibits approval of the use of any Section 4(f) resources for a transportation project, except where there is no feasible and prudent alternative that could avoid the use of the Section 4(f) resource, and when the project includes all possible planning to minimize harm to that property.

4.4.18 Section 4(f) Resources

Section 4(f) (49 US Code 303) of the US Department of Transportation Act of 1966 applies to publicly owned parks, recreation areas, and wildlife and waterfowl refuges, and public or private owned historic properties. Section 4(f) also applies to historic properties identified during the Section 106 process. Section 4(f) prohibits approval of the use of any Section 4(f) resources for a transportation project, except where there is no feasible and prudent alternative that could avoid the use of the Section 4(f) resource, and when the project includes all possible planning to minimize harm to that property.

Section 4(f) resources are present within the vicinity of the Project and therefore a Section 4(f) Evaluation will be conducted as part of the DAD. If a Section 4(f) use is identified, mitigation for the use of the Section 4(f) resource will be developed in consultation with the agency holding jurisdiction over the resource.

4.4.19 LWCF Resources

There are no Land and Water Conservation Fund (LWCF) resources which will be impacted by the Project. The Primary Study Area is in the vicinity of the Pont de Rennes, which was funded by the LWCF in 1979 under the State and Local Assistance Program. No impacts are anticipated within the established resources. No further review is required.

4.4.20 Visual Resources

A Visual Impact Assessment will be completed for the Project consistent with the Guidelines for the Visual Impact Assessment of Highway Projects issued by FHWA in 2015 (FHWA0HEP015-029), the NYSDOT visual assessment policy, and the NYSEDEC Program and Policy Assessing and Mitigating Visual Impacts. The VIA will consist of an evaluation of the Project, including photo simulations, to assess its effects, both positive and negative, on the visual resources within the applicable study area. The visual environment includes schools, places of worship, parks, residences, historic sites. If adverse visual effects are anticipated, measures to avoid, minimize and/or compensate for the adverse effect, in accordance with FHWA's guidelines, will be considered.

4.4.21 Air Quality

An air quality analysis screening will be conducted for the Project as part of the DAD in accordance with the methodologies in the NYSDOT Transportation Environmental Manual (TEM), and FHWA guidance and USEPA guidance. The screening will indicate which detailed air quality analyses will be required. If detailed air quality analyses are required, they will be conducted using the most recent version of USEPA's MOVES model and modeling guidance. The study area and analyses will be based on traffic data developed for the Project.

The air quality analyses screening will determine the need for performance of each of the following detailed analyses:

- Mesoscale emissions analysis
- Microscale analysis
- Mobile source air toxics analysis
- Construction air quality analysis

If detailed analyses are required and adverse effects are identified, mitigation measures will be considered.

4.4.22 Energy Consumption and Greenhouse Gas Emissions

Energy consumption impacts are ongoing and will continue throughout the process of the DAD. A traffic study will be conducted in order to analyze emissions. Effects to emissions include removing an energy efficient expressway and increasing the quantity of at-grade signalized/stop-controlled intersections.

4.4.23 Noise

The Project is categorized as a Type I noise project per FHWA noise regulations (23 CFR §772) and the NYSDOT Noise Policy (TEM Section 4.4.18), and thus, requires a traffic noise analysis. The analysis will follow the procedures in the NYSDOT Noise Policy and use traffic data developed for the Project. Existing and future traffic noise levels will be generated using the FHWA Traffic Noise Model (TNM) and used to determine impacts. If impacts are identified, noise abatement measures will be evaluated.

4.4.24 Asbestos

It is understood that elements of the existing Inner Loop roadway including bridges and other features are likely to include asbestos-containing materials. In addition, developed properties located within the Project corridor are also likely to include asbestos-containing materials that may be disturbed relative to construction.

An asbestos assessment preliminary investigation will be conducted for the Primary Study Area in accordance with the NYSDOT TEM, Section 4.4.19 to identify asbestos-containing materials (ACM) that are expected to be disturbed because of the Project. As part of the design process, asbestos content will be positively identified, and measures to ensure the proper handling, transport, and disposal of such materials during construction will be identified, as necessary.

4.4.25 Hazardous Waste/Contaminated Materials

Based on the long commercial and industrial history of the Project, it is understood that potential hazardous waste sites and/or contaminated materials are located in the Primary Study Area.

A hazardous waste/contaminated materials assessment (HW/CMA) will be conducted in accordance with the NYSDOT TEM, Section 4.4.20 to document the likely presence or absence of hazardous waste and contaminated materials within the Primary Study Area. The HW/CMA will consider the proposed limits of construction and an appropriate buffer. Site visits will be conducted to look for observable physical evidence of potential contamination. Potential impacts to hazardous waste sites related to planned construction work will require sampling and testing as part of a Phase II Detailed Site Investigation (DSI) as part of the design process. Measures to properly mitigate, manage, transport, and/or dispose of impacted environmental materials will be identified to protect public health, worker safety, and the environment.

4.4.26 Construction effects

Construction effects resulting from implementation of the Project, such as effects to traffic, air quality, noise, and land use, will be evaluated as part of the DAD.

4.4.27 Indirect and Secondary Effects

Indirect effects are reasonably foreseeable effects that could be caused by the Project but would occur at a later time, or are further removed in distance. Indirect and/or secondary effects will be assessed as part of the DAD.

4.4.28 Cumulative Effects

Cumulative effects are the effects on the environment that could result from the incremental impact of the Project when added to past, present, and reasonably foreseeable future actions. Cumulative effects will be assessed as part of the DAD. If adverse effects are identified to occur as a result of the Project, mitigation measures will be evaluated.

5 Concepts

This section describes the screening process used to evaluate a broad range of concepts and identifies concept(s) that will be advanced for detailed study in the DAD (i.e., reasonable alternative(s)).

5.1 Screening Criteria

The Screening Criteria identified below were developed to align with the Project Goals, Objectives, and Needs, as identified in Section 3. The purpose of the Inner Loop North Transformation Project is to reconnect Downtown Rochester to the communities surrounding the corridor, restore the urban street grid similar to what existed prior to construction of the Inner Loop, improve the compatibility of the corridor with adjacent land uses, open parcels for redevelopment and green space, advance multi-modal connectivity and accessibility, and ensure adequate transportation network operations for all users.

This subsection documents screening criteria relating to each Project Need and Goal, and how each was used to screen the Project concepts and determine whether each concept is a reasonable alternative for the Project.

The table below describes the screening criteria that must be satisfied to meet the Project's Goals, Objectives, and Needs. Bullets marked with a "*" denote criteria that were developed by community members during the Planning Study phase.

Goal 1: Connectivity and Accessibility (Project Needs: Community Cohesion, Activated Street Grid, Multi-Modal Access, State of Good Repair)

Goal 1 Screening Criteria:

- Restores a pedestrian-scale street grid
- Safe and comfortable walkability and bikeability*
- Creates multi-modal access for all users along and across the Inner Loop North corridor
- Optimal block sizes *
- Promotes reduced traffic speeds*
- Balances the network by distributing Inner Loop motor vehicle traffic to appropriate locations throughout the transportation network
- Eliminates the Inner Loop as a visual and physical barrier between neighborhoods and Downtown
- Retains and ensures adequate capacity/operation of I-490 interchange
- Provides acceptable capacity and operations/activates the street grid (i.e. distributes vehicular and non-vehicular traffic throughout the new street grid).
- Improves and enhance public access to the Genesee River and High Falls Neighborhood

Goal 2: Neighborhood Restoration (Project Needs: Community Cohesion, Economic/Community Development)

Goal 2 Screening Criteria:

- Restoration of Franklin and Anderson Parks*
- Maximizes opportunity for green space at World Of Inquiry School No. 58 (WOIS)*
- Creates opportunities for community-based development
- Reduces of impervious surfaces*
- Maximizes creation of developable parcels*
- Supports existing land uses and neighborhood context*
- Increases street trees*

Goal 3: Equitable outcomes (Project Needs: Economic/Community Development, Multi-Modal Access)

Goal 3 Screening Criteria:

- Minimizes displacement of existing residents

- Opportunities to expand existing green space and create new green space*
- Safety for all modes of transportation, inclusive of non-motorized users
- Maximizes opportunities for diverse housing

The project team developed a matrix of these screening criteria to use in evaluating each concept. For each criterion, each concept was given a rating where 1 = low, 2 = medium, and 3 = high. The detailed scoring sheet can be found in Appendix B.

5.2 Concepts Considered and Screening of Concepts

This section describes each of the concepts considered and presents the screening of each concept. This section also identifies which concepts will be advanced for detailed study in the DAD. The concepts described here were screened based on the project Purpose, Objectives, and Needs (described in Section 3).

The *Inner Loop North Transformation Planning Study* included six concepts. Each of the concepts varies in its treatment of the street network, relationship to I-490 and intersections, and other factors. The concepts also vary in how much land is reclaimed and in the amount of developable land and green space that could be created.

The six concepts were reviewed and refined during the Planning Study process by the City of Rochester, Monroe County Department of Transportation (MCDOT), NYSDOT, GTC, and the Project Technical and Community Advisory Committees (TAC and CAC). These same six concepts have been carried forward into this Project Scoping Report for further evaluation and are discussed in greater detail below.

5.2.1 No-Build Concept

The No-Build Concept assumes no improvements as part of this Project. Although the No-Build Concept does not meet the Project purpose and objectives, it must be carried forward for evaluation in the DAD to serve as the baseline condition against which the effects of the Concepts are evaluated.

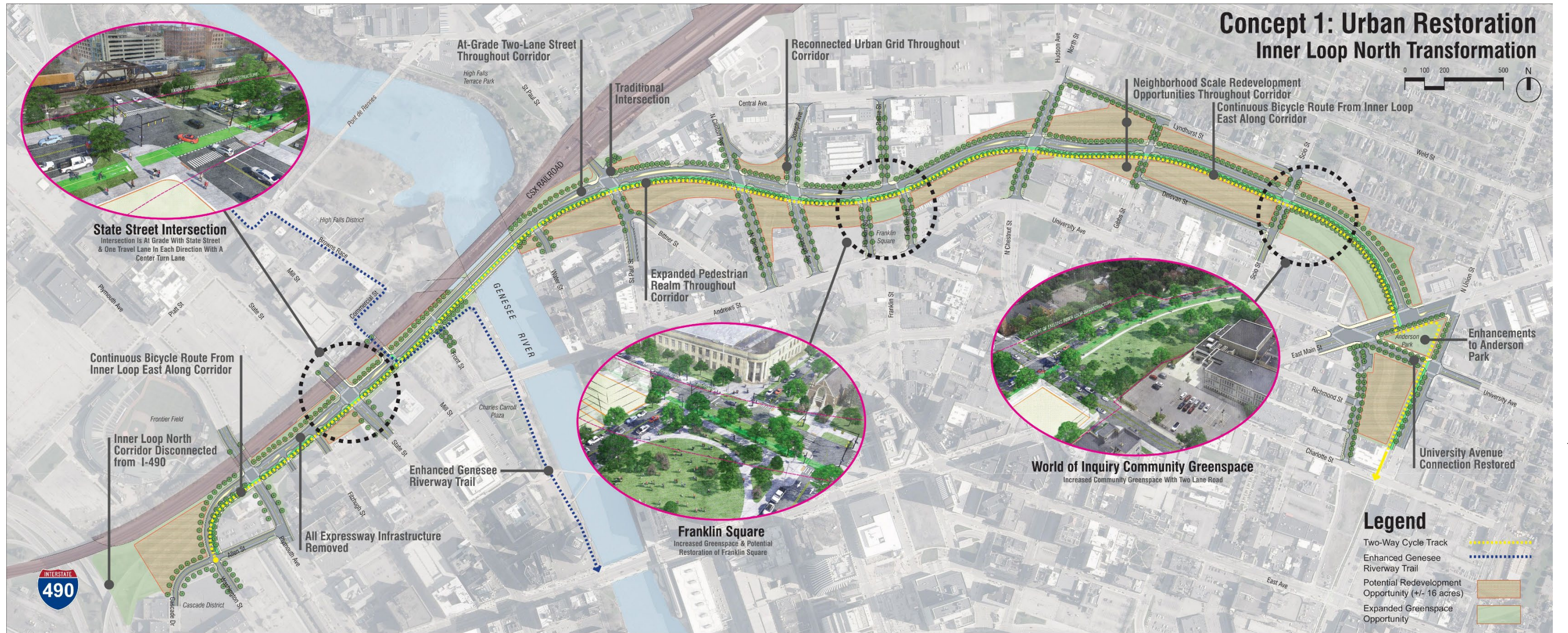
5.2.2 Concept 1 – Urban Restoration

The Urban Restoration concept reflects an at-grade, two-lane street that follows the existing, curving Inner Loop alignment (i.e. existing right-of-way) but does not connect to I-490. This concept, like the others, could require improvements to facilities outside the Primary Study Area, such as mitigating traffic impacts on I-490. This concept could restore the University Avenue connection from East Main Street to North Union Street. All intersections could be traditional, at-grade intersections. A two-way cycle track could parallel the proposed street from Allen Street/Cascade Drive to Union Street (which could connect into the existing cycle track on Union Street). This concept could expand and restore Franklin Square Park and Anderson Park. A limited green space could be created north of the World of Inquiry School. This concept could reclaim 14.5 acres of land for new development and 7.5 acres of land for green space.

Concept 1 Key Defining Features
<ul style="list-style-type: none"> • At-grade for entire corridor within existing alignment • 2-lane street with traditional intersections • Cycle track and pedestrian amenities • Park restoration • Limited open space/green space at the World of Inquiry School No. 58 (WOIS) • No connection to I-490

Concept 1 Screening and Conclusion
<p>This concept does not meet screening criteria related to ensuring adequate operations on the transportation network, including but not limited to I-490, or creating a street grid like the one that existed prior to construction of the Inner Loop. First, this concept lacks a connection to I-490, which could result in heavier traffic diversions and congestion on I-490. This concept does not create a street grid like what was in place prior to construction of the Inner Loop. While the concept includes a cycle track and pedestrian amenities, street widths and large intersections limit multi-modal improvements throughout the new street network. Lastly, while the concept could reclaim considerable acreage, many of the parcels created would likely be long and narrow, limiting potential development opportunities. Therefore, Concept 1 does not meet the purpose and objectives for the Project, is not a reasonable Project concept, and will not be advanced for further study in the DAD.</p>

Figure 19 Concept 1: Urban Restoration



5.2.3 Concept 2 - Central Commons

The Central Commons concept reflects an at-grade, two-lane corridor with one-way couplets and roundabouts between St. Paul and North Streets. The concept could include a two-lane, two-way street west of St. Paul Street and a one-way eastbound street between St. Paul Street and North Street. Central Avenue could be converted into a one-way westbound street from St. Paul Street to North Street. The University Avenue connection from East Main Street to Union Street could be restored. This concept does not have a connection to I-490 and, as such, all connecting ramps could be removed. This concept, like the others, could require improvements to facilities outside the Primary Study Area, such as mitigating traffic impacts on I-490. In addition, this concept could include roundabout intersections at St. Paul and North Streets. All other intersections could be traditional intersections. The concept includes a two-way cycle track along Allen Street/Cascade Drive. Similar to Concept 1, this concept could expand and restore Franklin Square Park and Anderson Park, while creating new open space just north of the World of Inquiry School. The land reclaimed could be 14.5 acres for new development and 7.5 acres for green space.

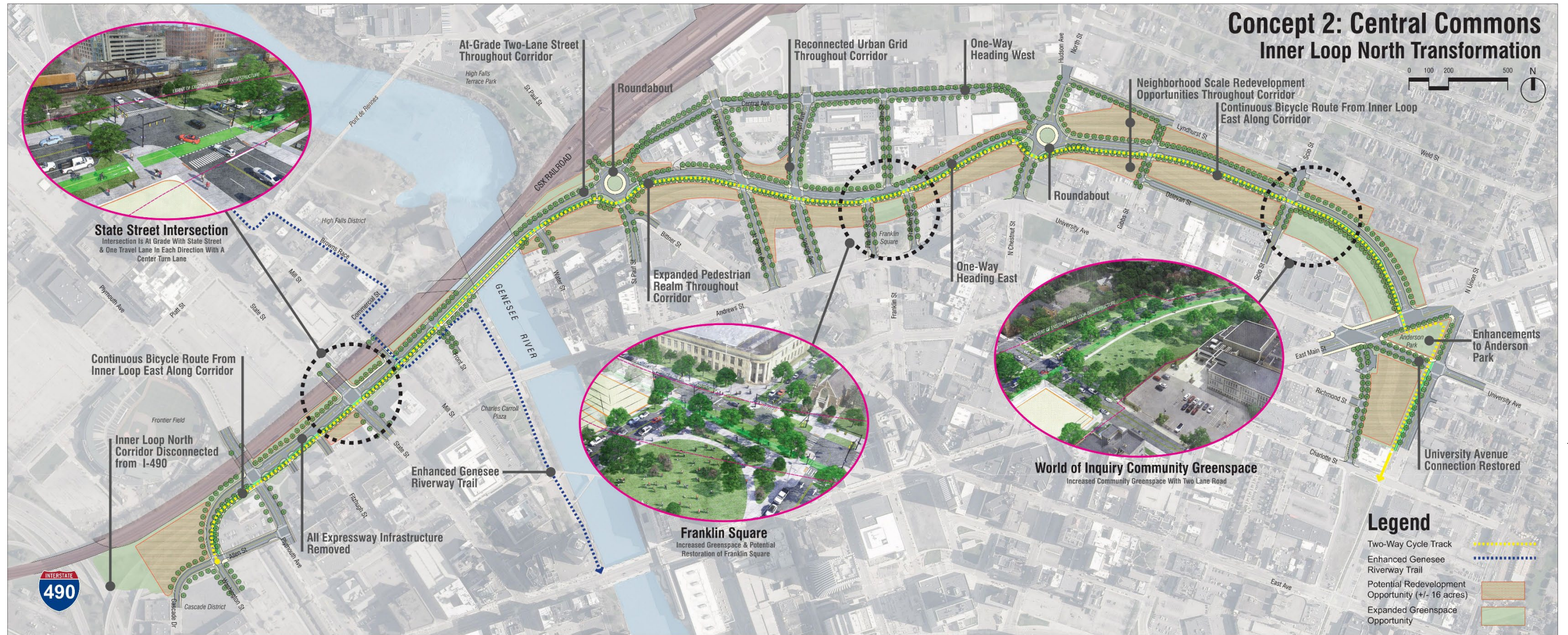
Concept 2 Key Defining Features

- At-grade for entire corridor within existing alignment
- Two-lane street with mix of one-way and two-way segments
- Some roundabout intersections at St. Paul and North Street
- Cycle track and pedestrian amenities
- Park restoration
- Limited open space/green space at World of Inquiry School (WOIS)
- No connection to I-490

Concept 2 Screening and Conclusion

This concept lacks a connection to I-490, which could result in traffic diversions and congestion on I-490. This concept does not meet the project objectives and needs, which include maintaining adequate capacity and operations throughout the transportation network, including but not limited to I-490, or creating a street grid like the one that existed prior to construction of the Inner Loop. Further, this concept creates limited green space at the World of Inquiry School. While the concept includes a cycle track and pedestrian amenities, the overall street network and roundabouts limit improvements to the overall pedestrian environment. Lastly, while the concept could reclaim considerable acreage, many of the parcels created would likely be long and narrow, limiting potential economic and community development opportunities. Therefore, Concept 2 does not meet the purpose and objectives for the Project, is not a reasonable Project concept, and will not be advanced for further study in the DAD.

Figure 20 Concept 2: Central Commons



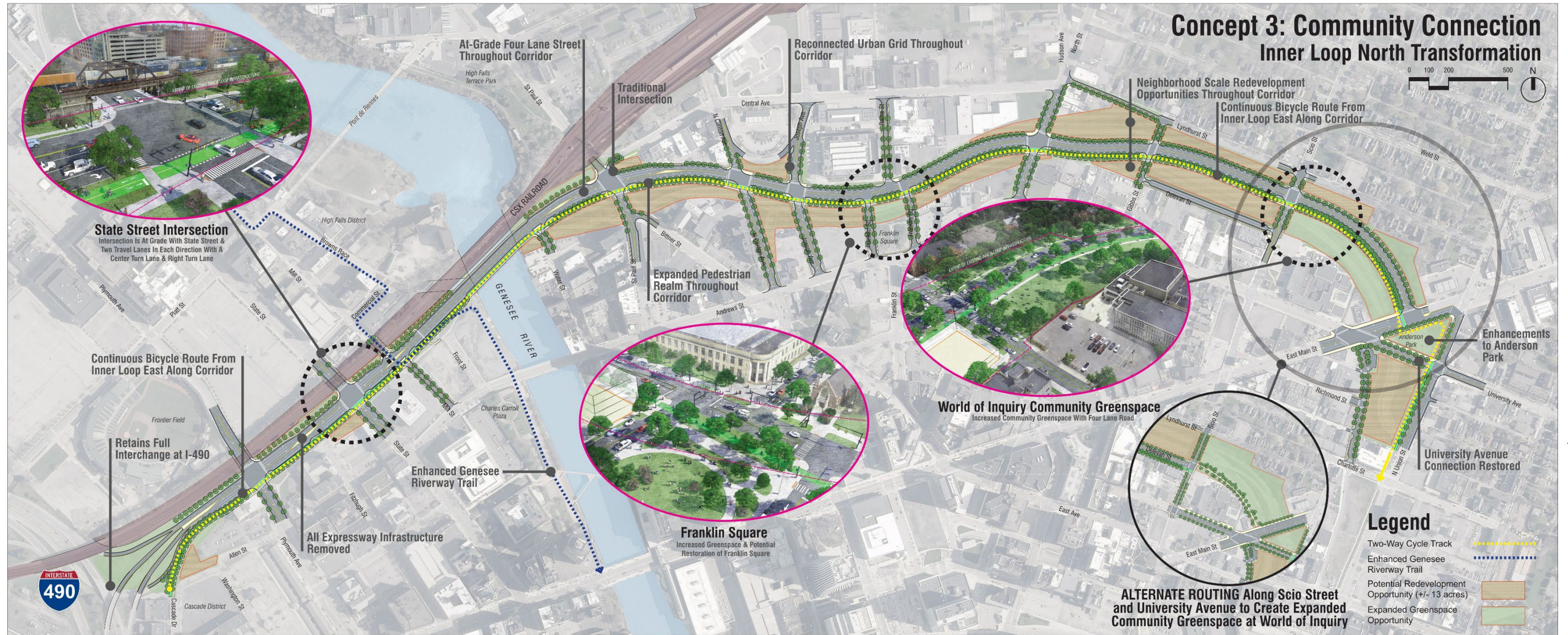
5.2.4 Concept 3 – Community Connection

The Community Connection concept is an at-grade, four-lane street following the alignment of the current Inner Loop and connects to I-490. This concept could replace the Inner Loop with an at-grade, four-lane street that generally follows the alignment of the existing Inner Loop. New connections between I-490 and the street grid west of the Genesee River could be created at grade (at Plymouth Avenue and State Street). Like Concepts 1 and 2, this concept could restore the University Avenue connection from East Main Street to North Union Street. This concept differs from the previous two in that it retains all on and off-ramp connections to I-490. This concept, like the others, could require improvements to facilities outside the Primary Study Area, such as mitigating traffic impacts on I-490. All intersections in the corridor could be traditional, at-grade intersections. Like the first three concepts, this concept could include a two-way cycle track, expansion and restoration of Franklin Square Park and Anderson Park, and limited new green space near World of Inquiry School. The land reclaimed could be slightly less than previous concepts, at 12.5 acres for new development and 5.5 acres for green space.

Concept 3 Key Defining Features
<ul style="list-style-type: none"> • At-grade for entire corridor within existing alignment • Four-lane street with traditional intersections • Cycle track and pedestrian amenities • Park restoration • Limited open space/green space at World of Inquiry School (WOIS) • Maintains all existing ramps to I-490

Concept 3 Screening and Conclusion
<p>While Concept 3 provides a connection to I-490, it does not establish a street grid like what was in place before the Inner Loop was constructed. Green space and development opportunities also are limited compared to other concepts. While the concept incorporates a cycle track and pedestrian amenities, the width of the new street could limit multi-modal improvements throughout the project area. Lastly, while the concept could reclaim considerable acreage, many of the parcels created would likely be long and narrow, limiting potential economic and community development opportunities. Therefore, this concept does not meet the purpose and objectives for the Project, is not a reasonable Project concept, and will not be advanced for further study in the DAD.</p>

Figure 21 Concept 3: Community Connection



5.2.5 Concept 4 – I-490 Connection

The I-490 Connection concept is reflected as a four-lane, at-grade street east of St. Paul Street that follows the alignment of the existing Inner Loop. This concept restores the University Avenue connection from East Main Street to Union Street. This concept could retain all ramps that connect I-490 to the Inner Loop corridor and could retain the elevated expressway west of the Genesee River. This concept, like the others, could require improvements to facilities outside the Primary Study Area, such as mitigating traffic impacts on I-490. In the areas where the expressway could be removed, all intersections could be returned to at-grade and could reconnect the street grid. Like the previous concepts, this concept could include a two-way cycle track expansion and restoration of Franklin Square Park and Anderson Park, and limited new green space near World of Inquiry School. The land reclaimed could include 12.5 acres for new development and 5.5 acres for green space.

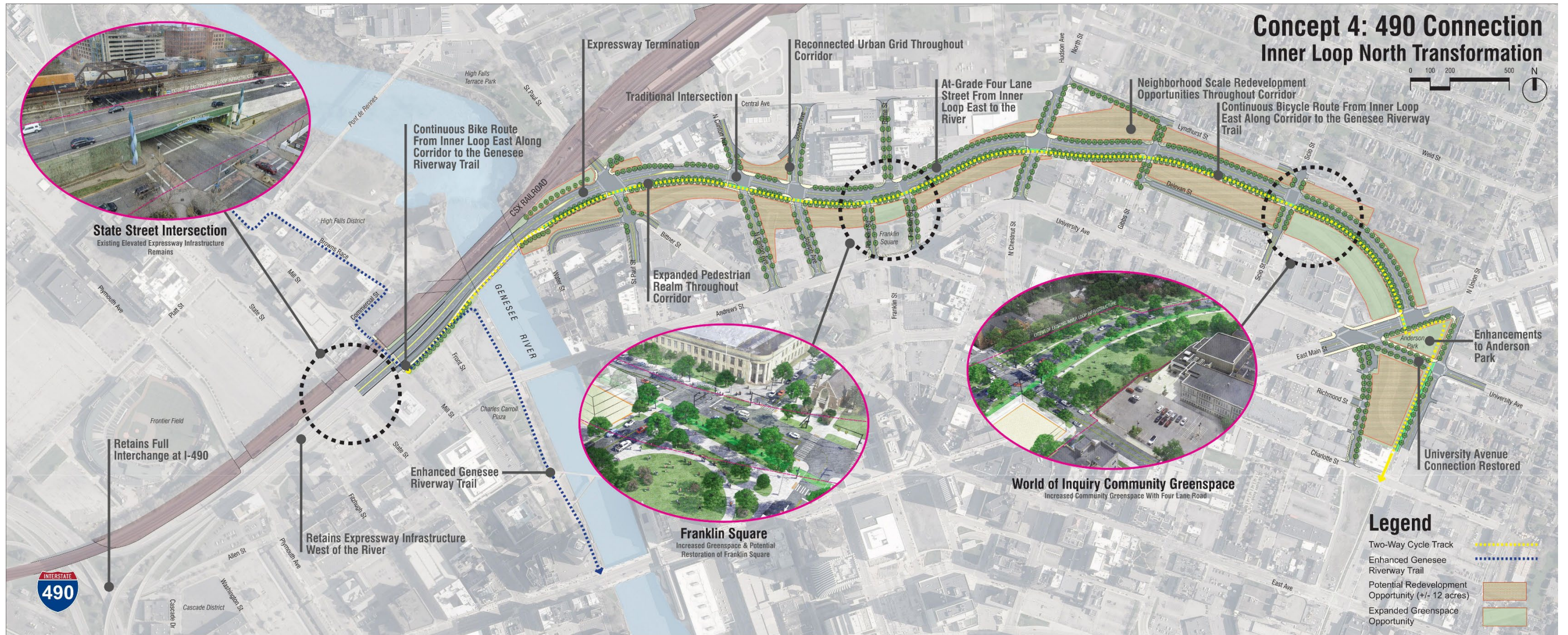
Concept 4 Key Defining Features

- At-grade, four-lane street east of the River
- Retains expressway west of the River
- Uses existing alignment
- Traditional intersections
- Cycle track and pedestrian amenities
- Park restoration
- Limited open space/green space at World of Inquiry School No. 59 (WOIS)
- Maintains all existing ramps to I-490

Concept 4 Screening and Conclusion

While Concept 4 provides a connection to I-490, a significant portion of the elevated expressway would be retained, thus continuing to act as a visual and physical barrier in portions of the corridor located west of the Genesee River. Further, this concept does not establish a street grid like what was in place before the Inner Loop was constructed. Opportunities for green space and development could be limited. The proposed cycle track does not extend through the western end of the project area and pedestrian improvements could be limited due to the retention of the above-grade portion of the Inner Loop. Lastly, while the concept could reclaim considerable acreage, many of the parcels created could be long and narrow, limiting potential economic and community development opportunities. For these reasons, this concept does not meet the purpose and objectives for the Project, is not a reasonable Project concept, and will not be advanced for further study in the DAD.

Figure 22 Concept 4: 490 Connection

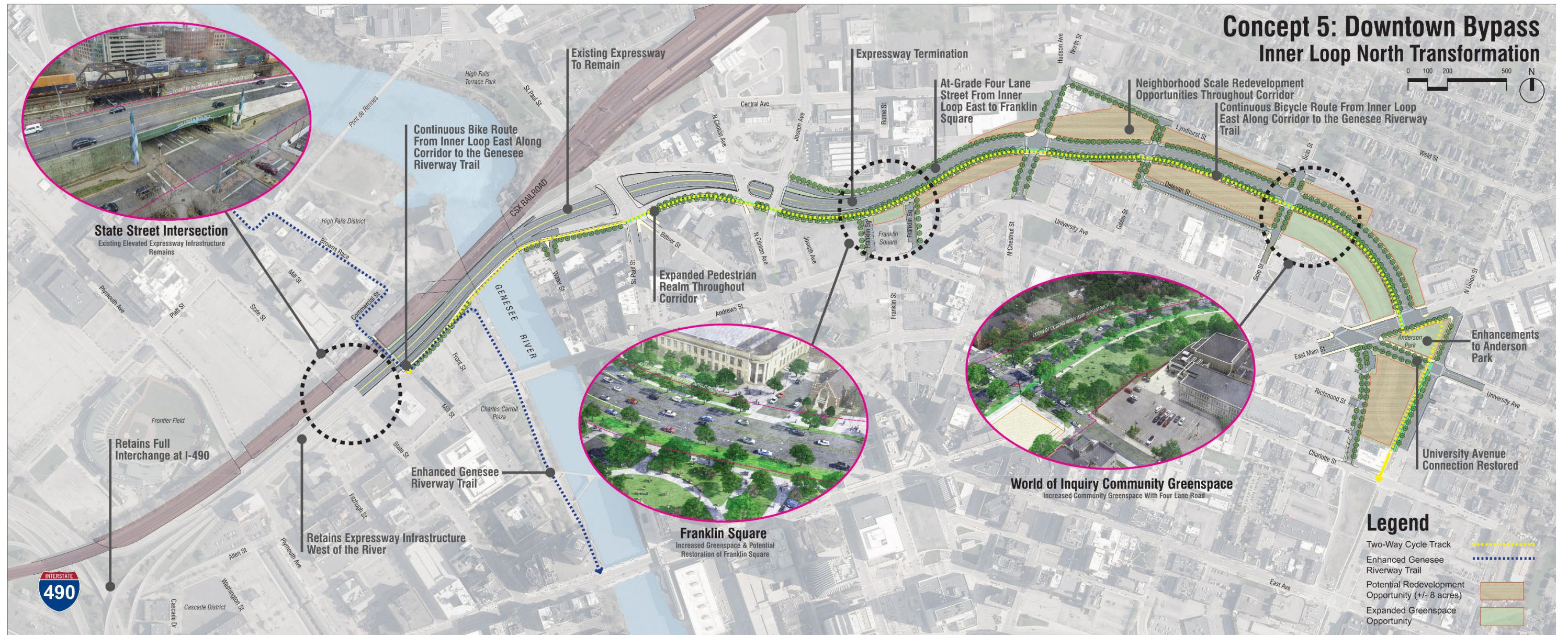


5.2.6 Concept 5 – Downtown Bypass

The Downtown Bypass concept replaces the below-grade portion of the expressway (between Franklin Square and East Main Street) with a four-lane, at-grade street that follows the alignment of the existing Inner Loop. This concept retains the elevated portion of the expressway west of the Genesee River. This concept, like the others, could require improvements to facilities outside the Primary Study Area, such as mitigating traffic impacts on I-490. Like other concepts, this concept could restore the University Avenue connection from East Main Street to North Union Street. This concept retains all ramps connecting to I-490 as well as the grade-separated sections of expressway located west of Franklin Square Park. In the area where the expressway is proposed to be removed, all intersections are returned to grade and reconnected with the street grid. The concept includes a two-way cycle track that parallels a proposed street from Mill Street to Union Street. Like the previous concepts, this concept could include expansion and restoration of Franklin Square Park and Anderson Park, and new green space near World of Inquiry School. The land reclaimed could include eight acres for new development and four acres for green space.

<p>Concept 5 Key Defining Features</p> <ul style="list-style-type: none"> • At-grade, four-lane street east of Franklin Square • Retains expressway from St. Paul to I-490 • Uses existing alignment • Traditional intersections • Cycle track and pedestrian amenities • Park restoration • Limited open space/green space at World of Inquiry School No. 58 (WOIS) • Maintains all existing ramps to I-490
<p>Concept 5 Screening and Conclusion</p> <p>While Concept 5 provides a connection to I-490, a significant portion of the elevated expressway is retained (from Joseph Avenue to the western terminus of the Project), thus acting as a visual and physical barrier in significant portions of the corridor located west of Joseph Avenue. Further, this concept does not establish a street grid similar to what was in place before the Inner Loop was constructed. Multi-modal improvements could be limited by the retention of the existing expressway, as could opportunities for economic and community development and green space. Lastly, while the concept could reclaim considerable acreage, many of the parcels created could be long and narrow, limiting potential development opportunities. For these reasons, this concept does not meet the purpose and objectives for the Project, is not a reasonable Project concept, and will not be advanced for further study in the DAD.</p>

Figure 23 Concept 5: Downtown Bypass



5.2.7 Concept 6 and 6A – City Grid Restoration

5.2.7.1 Concept 6 – City Grid Restoration

The City Grid Restoration (Concept 6) converts the Inner Loop to a street that reconnects the City grid and maintains a fully directional interchange with I-490. Concept 6 brings the Project corridor to grade and removes all expressway infrastructure, while providing all on- and off-ramp connections between the Project corridor and I-490 in both directions. This concept was identified in the *Inner Loop North Transformation Planning Study* as the preferred design concept with the most significant community support. This concept is anticipated to require improvements outside the Primary Study Area (referred to as “off-site” improvements) to mitigate traffic impacts along I-490.

The proposed street generally follows the alignment of the existing Inner Loop west of the river. East of the river, the new alignment of Cumberland Street could connect directly to University Avenue at North Chestnut Street. Central Avenue could connect directly into Lyndhurst Street and North Street. Delevan Street and Gibbs Street could reestablish the street grid in the northeast section of the Project. Like other concepts, the University Avenue connection from East Main to Union Street could be restored. This concept could retain all on- and off-ramp connections to I-490. Like the other five concepts, this concept could include a two-way cycle track, expansion and restoration of Franklin Square Park and Anderson Park, and new green space near World of Inquiry School. The land reclaimed could include 14 acres for new development and eight acres for green space.

Concept 6 Key Defining Features
<ul style="list-style-type: none"> • At-grade complete street • Creates new alignment that reestablishes a traditional street grid • Traditional intersections • Cycle track and pedestrian amenities • Park restoration • Creates parcels with greater potential for redevelopment • Expanded open space/green space at World of Inquiry School No. 58 (WOIS) • Maintains four connections to I-490 (eastbound off ramp and westbound on ramp, eastbound on ramp and westbound off ramp)

Concept 6 Screening and Conclusion
<p>Concept 6 offers the most extensive improvements to multi-modal access of all the concepts screened. In addition, Concept 6 eliminates the elevated/below-grade portions of the expressway, thus eliminating the Inner Loop as a visual and physical barrier. Concept 6 establishes a street grid similar to what was in place before the Inner Loop was constructed. The alignment of Concept 6 could create development parcels that are more readily configured for redevelopment than other concepts. This concept provides enhanced green space adjacent to the World of Inquiry School (almost twice as much green space as Concepts 1 – 5). However, preliminary traffic analysis revealed factors that could negatively affect operations on Plymouth Avenue and I-490. For this reason, Concept 6 does not meet the project objectives and needs without modifications and will not be advanced for further study in the DAD.</p>

5.2.7.2 Concept 6A – City Grid Restoration with Partial I-490 Interchange

Concept 6A represents a variation of Concept 6. A preliminary traffic analysis (beyond what was completed for the *Planning Study*) of Concept 6 conducted during this Scoping process revealed that the proposed configuration of Concept 6 could lead to problematic operations on Plymouth Avenue and I-490.

These factors are described in detail in Section 5.3 Traffic Analysis, and summarized below. The Traffic Analysis conducted for Concept 6 identified the following potential areas of concern.

- The two-lane segments of I-490 westbound may reach capacity during PM peak periods.
- Potential weave movements on the approach to Plymouth Avenue from I-490 exit ramps.
- Queuing at Plymouth Avenue onto I-490 ramps, potentially affecting mainline I-490 operations.

The Project team conducted an initial analysis of potential mitigations, including elimination of select ramps to/from I-490 as well as off-site improvements to I-490.

1. **Elimination of selected ramps.** The I-490 westbound exit ramp to the Inner Loop and the Inner Loop on-ramp to I-490 EB showed very low volumes in the Traffic Analysis. Elimination of these ramps may not significantly affect access to and from I-490 but may mitigate queuing at Plymouth Avenue, provide benefits for multi-modal connections, and eliminate increased diversion volume on I-490 westbound.
2. **Off-site improvements.** Off-site improvements to I-490 to expand the existing two-lane sections to three lanes may mitigate potential capacity issues from the Project and other developments along the I-490 mainline. Initial analysis concluded that an additional lane on the existing two-lane sections of I-490 is achievable within the existing public right-of-way.
3. **Optimized Signal Timing and Queue Monitoring at I-490 interchange.** Given the importance of maximizing the available capacity along Central Avenue at both Plymouth Avenue and State Street, the phasing and timings at these signalized intersections will need to be optimized in coordination with MCDOT. In addition, the potential for queuing on the I-490 eastbound off-ramp between the Central Avenue/Plymouth Avenue intersection and mainline I-490 eastbound will require the use of automated detection zones (physical loops or video-based detection) that will monitor queue lengths and prioritize “green” time for the I-490 eastbound off-ramp when necessary.

These mitigations define the key additional/revised features of Concept 6A compared to Concept 6, which was developed to address the issues identified above.

Concept 6A Key Defining Features
<ul style="list-style-type: none"> • At-grade complete street • Creates new alignment that reestablishes a traditional street grid • Traditional intersections • Cycle track and pedestrian amenities • Park restoration • Creates parcels with greater potential for redevelopment • Expanded open space/green space at World of Inquiry School No. 58 (WOIS) • Maintains two connections to I-490 (eastbound off ramp and westbound on ramp) (compared to four connections in Concept 6) • Provides for enhanced operations at Plymouth Avenue

Concept 6A Screening and Conclusion
<p>Like Concept 6, Concept 6A offers the most extensive improvements to multi-modal access of all the concepts screened. In addition, Concept 6A eliminates the elevated/below-grade portions of the expressway, thus eliminating the Inner Loop as a visual and physical barrier. Concept 6 establishes a street grid similar to what was in place before the Inner Loop was constructed. The alignment of Concept 6A could create development parcels that are more readily configured for redevelopment than other concepts. This concept provides enhanced green space adjacent to the World of Inquiry School (almost twice as much green space as Concepts 1 – 5). Concept 6A better addresses operations on Plymouth Avenue and I-490. For this reason, Concept 6A meets the project objectives and needs and will be advanced for further study in the DAD.</p>

Figure 24 Concept 6: City Grid Restoration (Full I-490 Interchange)

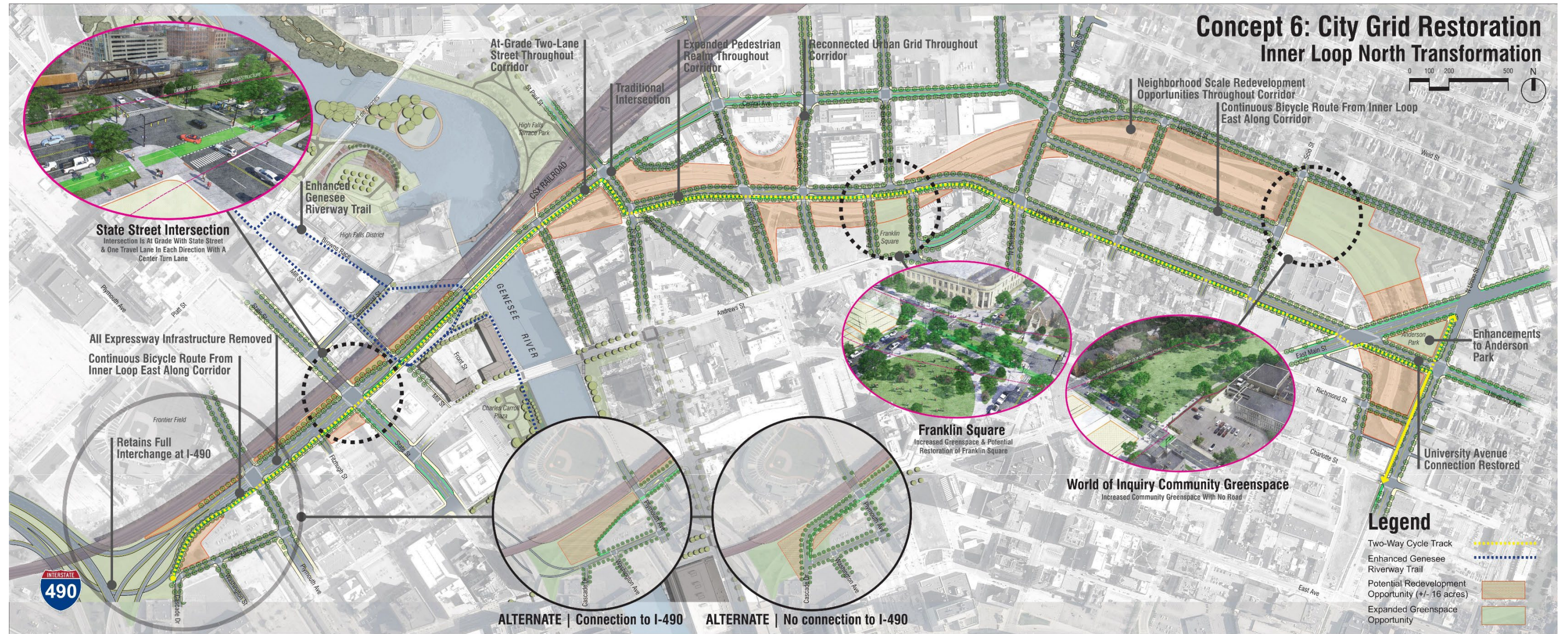
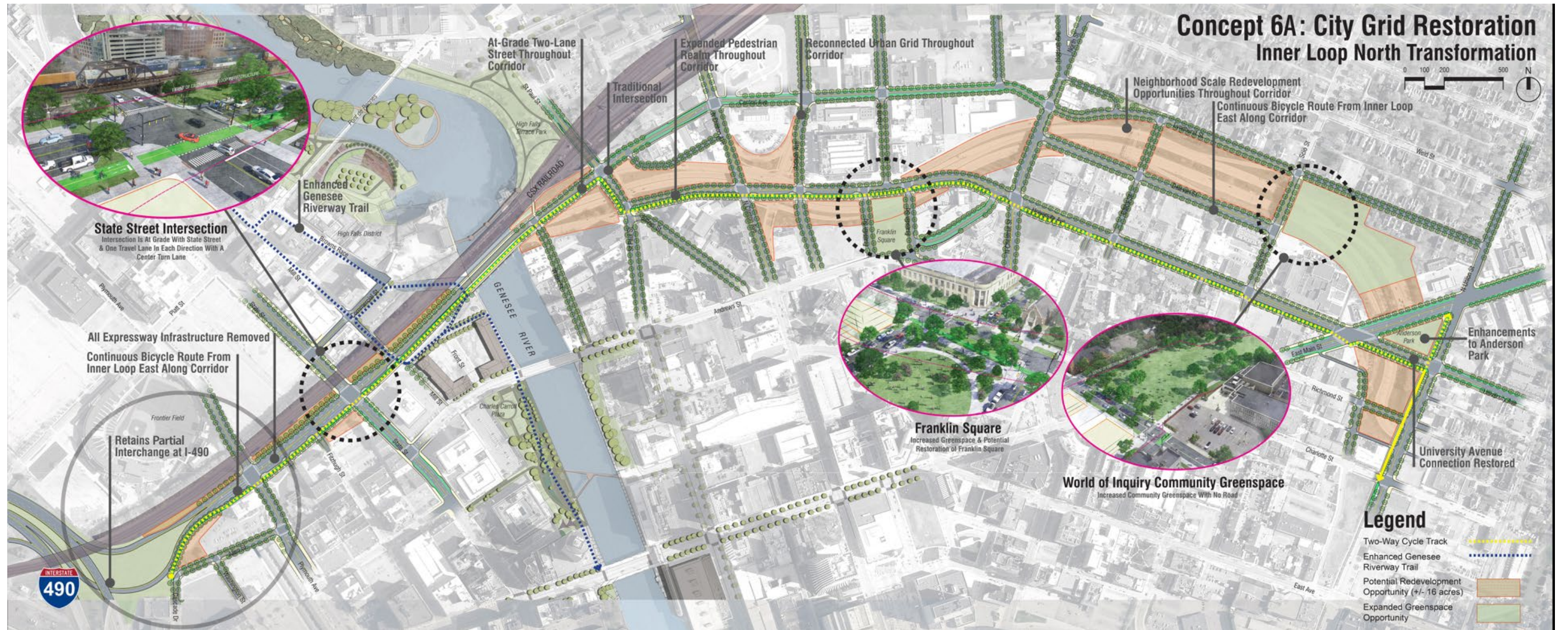


Figure 25 Concept 6A: City Grid Restoration (Partial 1-490 Interchange)



5.3 Traffic Analysis

A Traffic Analysis was conducted to determine potential effects that could result from diverting traffic currently carried by the Inner Loop structures and approaches to other roadways. Key objectives of the Project relate to traffic operations, including:

- Ensure adequate operation of the I-490 interchange.
- Ensure vehicle traffic (diversions) is distributed throughout the City's street network to minimize congestion or potential disproportionate volume-related safety issues on select facilities.

These objectives were carried forward as screening criteria for the each of the concepts considered. The potential traffic effects of Concept 6 and 6A were estimated using the available information about the concept as well as a combination of available traffic data, input from the Genesee Transportation Council (GTC) Travel Demand Model (TDM), geospatial analysis, and field-collected data.

The analysis also relied upon updated runs of the TDM. The TDM has been updated to a 2020 base year model, which uses 2020 Census data for households, 2019 NYS Department of Labor data for employment, and 2019 traffic count calibration. The 2020 TDM was used to verify both the City street grid and the expressway traffic analysis and data collection limits.

Using traffic simulation software, a calibrated base model was used for evaluating the No-Build conditions as well as Concept 6. The Traffic Analysis looked at an extended area that includes segments of I-490 between Mount Read Boulevard and I-590 as well as multiple interchanges that exist in between. Because the Traffic Analysis study area includes multiple arterial and local street intersections, the analysis required a robust microsimulation model (using VISSIM³) that simulated the expressway and arterials, dedicated lanes, merge/diverge/weaving areas, and unique intersections.⁴

The data collection effort included obtaining geospatial data, which was used to develop an origin-destination for dynamic traffic assignment in VISSIM. Field data, including turning movement counts, queue measurements, and travel time runs were collected and used to validate and calibrate the model. More information about the TDM verification process, traffic model simulation, and data collection efforts, please refer to Appendix A.

5.3.1 Existing Traffic Volumes

Analysis of existing traffic volumes showed that the Inner Loop currently functions as a long on- and off-ramp for I-490. Consistent with this finding, traffic volumes on the Inner Loop are significantly higher along the segments located west of St. Paul Street, closer to the I-490 interchange. More specifically, the Inner Loop segments near I-490 currently carry nearly four times the volume of traffic compared to the segments closest to University Avenue. Current traffic data was collected and utilized for the additional analysis conducted for this Project Scoping Report. The analysis focused on I-490, the Inner Loop between I-490 and State Street, select intersections directly adjacent to the I-490 ramps and key intersections expected to see significant diversions. Traffic volume diagrams are located in Appendix A.

³ VISSIM is a German language acronym for a microscopic multi-modal traffic flow simulation software package developed by PTV Planung Transport Verkehr AG in Karlsruhe, Germany. It is an industry-standard traffic simulation application utilized extensively on complex transportation projects.

⁴ Empirical programs like Synchro or Highway Capacity Software (HCS) were not used for this application because they cannot be used to evaluate operational conditions across a network with freeway and arterial segments.

Figure 26 Existing Traffic Volumes



Source: Inner Loop North Transformation Project Planning Study, 2022

5.3.2 Future Traffic Volumes

To understand how vehicle trips could likely be distributed throughout the Study Area upon construction of Concept 6, the Project team modeled the likely growth of traffic volume over time. Working with the NYSDOT, the City of Rochester, and GTC, the team developed future year volumes by applying an initial 0.5% growth rate. This accounts for both regional and local volume growth independent of the development expected to occur as a result of the Project, which will be calculated at a more detailed level. This scenario is considered the high range of potential traffic growth and is being used during the Scoping Phase to evaluate expressway conditions at this stage. Based on the results of the Scoping Phase analysis, a different growth range may be selected during Preliminary Design to provide a more reasonable estimate of potential future traffic volumes. (A more detailed discussion of growth rates can be found in section 5.3.7 and Appendix C).

Under the City of Rochester's 2034 *Comprehensive Access and Mobility Plan* (CAMP) plan, it is estimated that a proportion of existing traffic volumes will convert to non-single-occupancy vehicle modes by 2034 and even further by 2044 as better access to multimodal transportation is provided. The City's *Active Transportation Plan* and *ROC Vision Zero* initiative also establish priority actions to improve active transportation facilities throughout the City. These modes include ride sharing/carpooling, transit, bicycling, and walking. The Scoping Report analysis study did not account for this potential mode shift; however, this may be considered as part of the Preliminary Design phase (including active transportation, transit, and shared mobility elements to be developed or enabled as part of the Project).

The traffic growth rate was developed using a variety of inputs, including past traffic growth over the last 30 years, past and projected future population growth rates (from 1990 to 2040), and data from GTC's regional Travel Demand Model, which accounts for projected growth in traffic volumes based on population, housing, and employment. See Appendix C for a summary of regional population trends.

Worth noting are the growth and volume trends from the recently completed Inner Loop East Transformation Project corridor, which has successfully attracted development within nearly all of the available parcels. Development to date includes over 530 mixed-income housing units, nearly 200,000 square feet of commercial space restaurants, a hotel, and a \$300 million expansion of The Strong Museum of Play.

Despite reaching nearly full buildout of projected development within the corridor, the 2023 traffic volumes at the intersection of Union Street and East Avenue are only 50% of the volumes that were projected at full buildout when the Inner Loop East Transformation Project was designed. This highlights the benefits of an approach that does not understate the effects of development (directly and indirectly attributable to

the Project) on traffic, nor overstate the benefits of travel decisions such as mode shift trends and the timing of non-essential trips. Figure 27 below provides a comparison of volumes.

Figure 27 Inner Loop East 2023 vs Projected 2035/Full Buildout Volumes

Inner Loop East - 2023 vs Projected 2035/Full Buildout Volumes							
Union Street at East Avenue							
Street	Movement	Morning Peak Hour			Evening Peak Hour		
		2023	2035	% of 2035	2023	2035	% of 2035
Union St	NBL	26	124	21.0%	27	50	54.0%
	NBT	193	532	36.3%	287	668	43.0%
	NBR	52	78	66.7%	108	245	44.1%
	SBL	104	198	52.5%	150	229	65.5%
	SBT	170	410	41.5%	166	392	42.3%
	SBR	18	34	52.9%	11	31	35.5%
East Ave	EBL	20	28	71.4%	26	42	61.9%
	EBT	124	191	64.9%	284	470	60.4%
	EBR	15	35	42.9%	35	88	39.8%
	WBL	69	160	43.1%	45	90	50.0%
	WBT	195	331	58.9%	175	367	47.7%
	WBR	103	78	132.1%	103	72	143.1%
Totals		1089	2199	49.5%	1417	2744	51.6%

Figure 28 provides the Scoping Phase growth rate along with the analysis years. The analysis years are referenced to Estimated Time of Completion (ETC) or when construction is complete and the road opens to traffic. Preliminary Design will document the ETC (Year 2028) and ETC+20 (Year 2048) conditions. For the purposes of this report, only ETC+20 was analyzed.

Figure 28 Traffic Growth Rate and Analysis Timeframes

Growth Rate	Time Period
0.5% annual	ETC* = 2028
	ETC + 20 years = 2048

*ETC: Estimated Time of Completion

5.3.3 Traffic Diversion Summary

Using the projected traffic volumes described above, the Project team analyzed where vehicle trips could go upon implementation of Concept 6/6A (both at the estimated time of completion and 20 years after completion). Since the current configuration of the street network would change under Concept 6/6A, vehicle traffic will redistribute, resulting in “diversions” to other on and off ramps on I-490 and City streets in the transportation network. The purpose of the Diversions Analysis is to understand where vehicle trips are likely to go. To support the Diversions Analysis, the Project team will complete an Origin/Destination Study during the Preliminary Design phase, which will provide a deeper understanding of the travel patterns, origins, and destinations of vehicle trips on and around the Inner Loop.

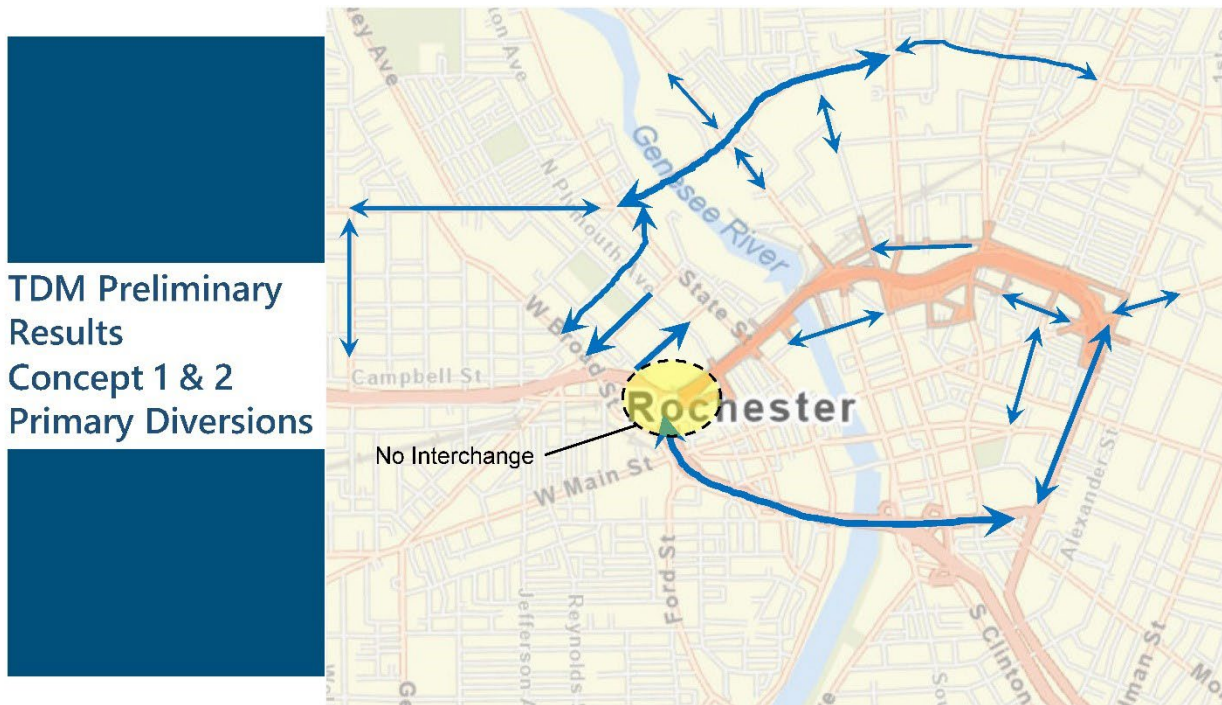
Although Concept 6/6A maintains connections to I-490, construction could result in the redistribution of some existing Inner Loop North traffic to various alternate routes. These anticipated diversions were

analyzed using the overall travel patterns from the GTC TDM and engineering analysis. Consideration was given to excess capacity on alternate routes.

The GTC TDM was utilized to estimate primary potential diversions for each concept. Likewise, the model was run for each concept to assist with screening concepts before selecting which will advance to Preliminary Design, as the analysis defined primary diversion patterns and the magnitude of diversions for each concept. The extent and estimated level of diversion patterns are impacted by the various concept design features which include options for no interchange at I-490, varying sections of grade separation, and differences in linear capacity of roadway segments. Diverted trips are not limited to what is currently using the Inner Loop (namely, as a pass through), they also include additional trips that could be attracted to new development and redevelopment opportunities resulting from the Project, which are of particular note for the at-grade intersections proposed at both Plymouth Avenue and State Street under Concepts 3 and 6.

In reviewing the primary diversion patterns for each concept the level and extent of diversions for Concepts 1 and 2 are the most significant due to the elimination of the interchange with I-490. For Concepts 3, 4, and 5, the level and extent of diversions decrease due to retaining the I-490 connections, varying degrees of grade separation and a four-lane roadway section at Plymouth Avenue and State Street.

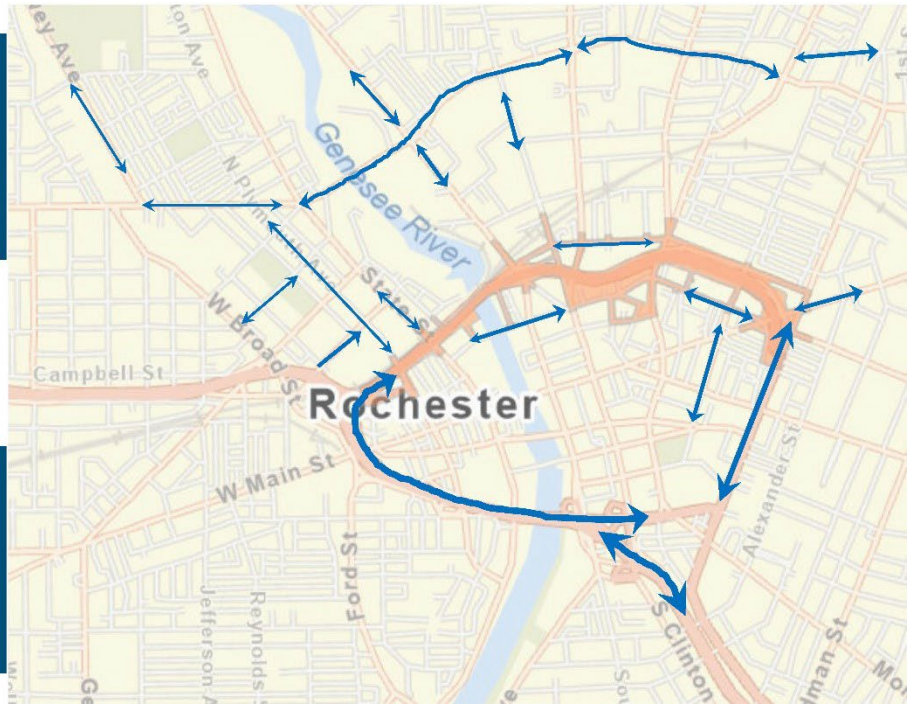
The locations and levels of “primary” diversions for Concepts 1-5 are represented in the following graphics.



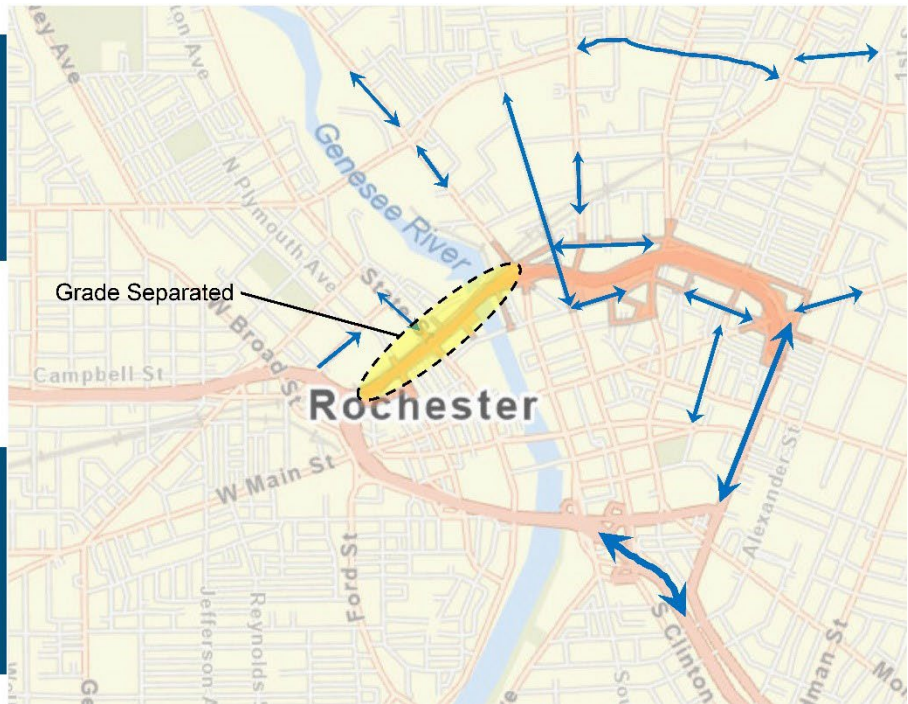


TDM Preliminary Results
Concept 3
Primary Diversions

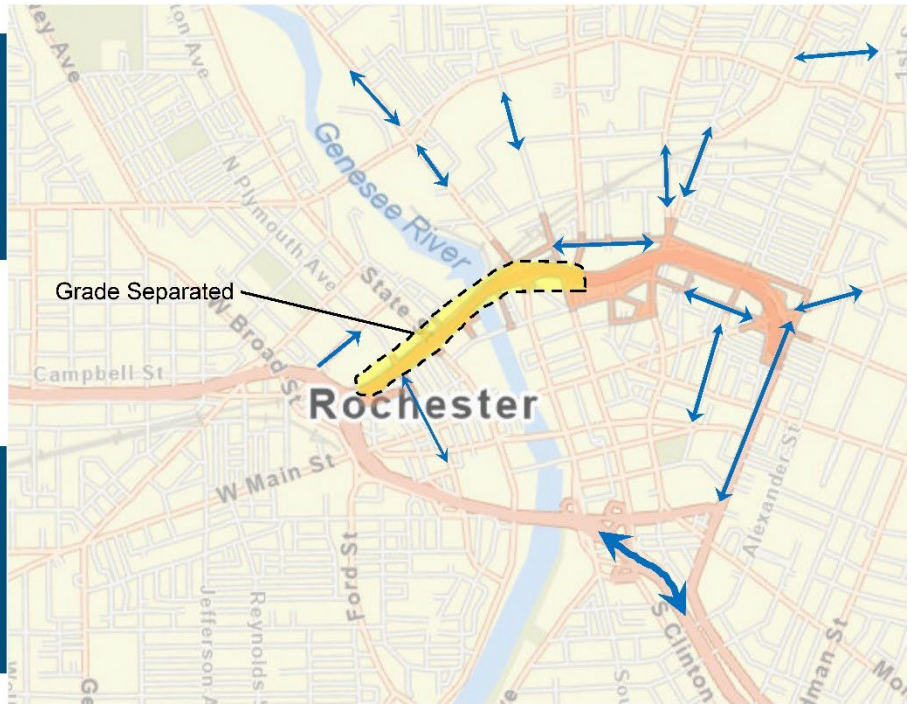
At-grade 4-lane
with Intersections
at Plymouth and State



TDM Preliminary Results
Concept 4
Primary Diversions



TDM Preliminary
Results
Concept 5
Primary Diversions



5.3.3.1 Concept 6/6A Diversions

The Genesee Transportation Council's TDM was utilized to estimate primary potential diversions for each concept. The extent and estimated level of diversion patterns are impacted by the various concept design features which include options for no interchange at I-490, and varying sections of grade separation as well as differences in linear capacity of roadway segments. Diverted trips are not limited to what is currently using the Inner Loop (namely, as a pass-through). Diverted trips also include additional trips that could be attracted to the new development and redevelopment opportunities resulting from the Project, which are of particular note for the at-grade intersections proposed at both Plymouth Avenue and State Street under Concepts 3 and 6.

Concept 6/6A diversions will result from a combination of the following concept components:

- Retaining all current connections with I-490 (Concept 6 only)
- Potential removal of the I-490 EB ramp connection to Plymouth Avenue (Concept 6A only)
- At-grade intersections at both Plymouth Avenue and State Streets (both 6 and 6A)
- Two-lane roadway section between State Street and St. Paul Street (both 6 and 6A)
- Re-establishment of local street grid between East Main Street and St. Paul Street (both 6 and 6A)

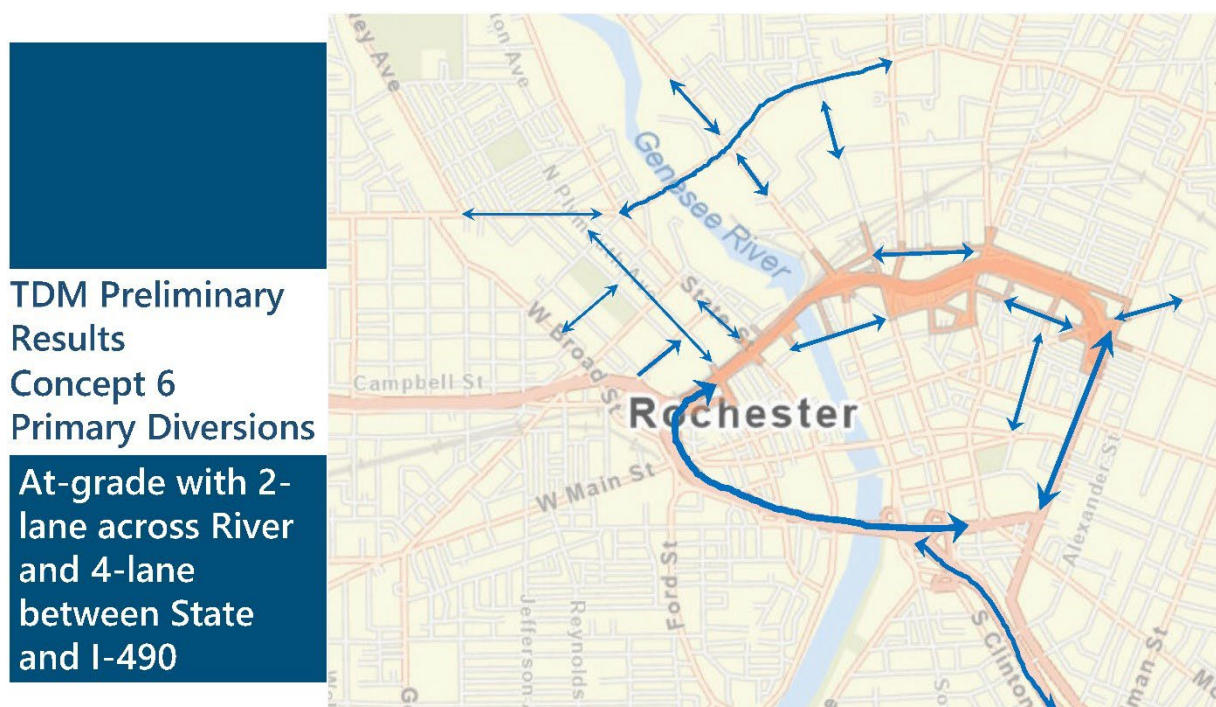
Vehicle trips that currently utilize the Inner Loop are a mix of in-bound, out-bound, and those that originate both inside and outside the Study area. Primary Origin/Destination patterns show that almost 80% of inbound trips are coming from the west, via I-490 eastbound. A similar percentage of outbound traffic is travelling west to I-490 westbound. Inbound traffic traveling east gradually decreases as vehicles approach East Main Street, as traffic exits at St Paul Street, Scio Street, East Main Street and Union Street. The reverse happens in the westbound direction with traffic volume increases toward I-490. For the Scoping Phase, the Project's focus is on understanding potential effects to I-490 operations as well as at key intersections adjacent to I-490. Further analysis of trip diversions will be addressed during Preliminary Design and further influenced by the final layout of the street network of the preferred alternative.

Most I-490 trip diversions for Concept 6/6A are estimated to occur from the following corridors/areas:

- East Main Street and University Avenue corridors east of Inner Loop (~400 to 500 peak hour vehicles).
- Businesses and neighborhoods north of the CSX railroad (~100 to 200 peak hour vehicles).
- Intra-city trips (non-Inner Loop) attracted to the new at-grade intersections at Plymouth Avenue and State Street under Concept 6 (~600 to 800 peak hour vehicles).

A portion of the current Inner Loop trips travelling along the East Main Street and University Avenue corridors traveling to I-490 are expected to use the Union Street to Howell Street corridors, while trips originating from businesses and neighborhoods north of the CSX railroad could utilize Upper Falls Boulevard to access I-490 via either Broad Street or Lyell Ave. Non-Inner Loop trips could also use I-490 to bypass local streets from points east of Downtown (e.g., interchanges at Culver, Goodman, Monroe, etc.).

Figure 29 Primary Traffic Diversions Concepts 6



The output from GTC's TDM shows that new at-grade intersections at Plymouth Street and State Street, as configured in Concept 6, could result in a significant amount of additional non-Inner Loop based trips that will utilize the I-490 westbound off-ramp and I-490 eastbound on-ramp. The majority of these trips are predicted to generate in excess of 500 eastbound right turns at the new Plymouth Avenue and Central Avenue signalized intersection, as proposed in Concept 6. This creates some challenges due to the short distance between I-490 and Plymouth Avenue and could increase weaving movements resulting from the current I-490 eastbound and I-490 westbound off-ramp configurations. Note that weaving is different than merging. Weaving occurs when there is traffic entering the expressway as well as exiting the expressway within a short distance. In addition, trip diversions to the I-490 eastbound on-ramp estimated from the GTC TDM may also create weaving on I-490 due to the number of on-ramps within this area.

Concept 6A mitigates the level of additional non-Inner Loop trips and the potential weaving issues between I-490 and Plymouth Avenue. A capacity analysis of Concept 6A is included in Section 5.3.7.

5.3.4 Crash Analysis Pre-Screening Summary

An initial screening of the crash history was completed with a focus on the following areas (illustrated in Figure 42):

- Inner Loop (NYS Route 940 T) between I-490 and East Main Street
- I-490 between Child Street and Culver Road
- Select intersections including:
 - West Broad St/West Main St,
 - West Main St/South Plymouth Ave,
 - West broad St/South Plymouth Ave,
 - South Plymouth Ave/Spring St,
 - West Main St/Exchange Blvd,
 - West Broad St/ Exchange Blvd,
 - Court St/Exchange Blvd,
 - West Main St/South Ave,
 - West Broad St/South Ave,

- Court St/South Ave,
- West Main St/N Chestnut St,
- West Broad St/N Chestnut St,
- Court St/N Chestnut St,
- Woodbury Blvd/N Chestnut St,
- Monroe Ave/Howell St,
- North Union St/East Ave,
- North Union St/Howell St,
- South Goodman St/Monroe Ave,
- South Goodman St/East Ave,
- South Goodman St/University Ave,
- Culver Rd/East Ave,
- State St/Lyell Ave,
- State St/Brown St,
- St. Paul St/Upper Falls Blvd,
- State St/Andrews St,
- St. Paul St/Andrews St,
- North Clinton Ave/Andrews St,
- North Chestnut St/Andrews St,
- Scio St/University Ave,
- Morrie Silver Way/North Plymouth Ave,
- Morrie Silver Way/State St,
- Commercial St/State St,
- Central Ave/Joseph Ave,
- Central Ave/North Clinton Ave,
- Central Ave/North St,
- Hudson Ave/North St.

Crash reports for the study area were obtained from the New York State Department of Transportation Crash Location & Engineering Analysis & Reporting (CLEAR) Safety application for a 22-month period between June 01, 2021, to March 31, 2023, as this provides information that accounts for the noticeable nationwide changes in driving behavior that began during and has continued since the COVID-19 pandemic. The purpose of this safety screening is to identify segments, ramps, and intersections within the study area that exhibit the following:

1. Potential for Safety improvements (PSI)⁵ greater than zero based on the Excess Observed Crash Frequency⁶ for a comparable facility type based on the NYSDOT Safety Performance Functions.
2. Site locations that are within the limits of previously identified priority investigation locations (PILs).
3. Crash/collision types that are overrepresented such as pedestrian/bicyclist crashes.
4. High injury and fatality crashes.

A list of sites and systemic patterns have been identified for further evaluation under a crash analysis during Preliminary Design. Locations for further review will be determined based on impacts from construction or a result of traffic diversions. Appendix A provides individual screenings for each of the focus areas listed above. In addition, the detailed screening in Appendix A also provides a comparison between the Scoping Report crash analysis (2021-2023) and the *Inner Loop North Transformation Planning Study* (2014-2019) crash analysis focusing on any changes in frequencies and patterns. This comparison is limited by the

⁵ The predicted crash frequency was determined using the Safety Performance Functions from the NYSDOT Highway Safety Improvement Program Procedures and Techniques ('Red Book').

⁶ For this initial screening and based on the guidance provided by the FHWA Highway Safety Manual for data sets including less than two years of data and varying availability of traffic volume data, Excess Observed Crash frequency was used as the metric to measure the potential safety improvement.

study area of the Planning Study crash analysis. The complete pre-screening analysis memorandum is contained in Appendix D. The following is a summary of the key findings:

5.3.5 Inner Loop (NYS 940T) between I-490 and East Main Street Safety Screening

5.3.5.1 Crash History Overview

A total of 294 crash reports (MV-104A) for the Inner Loop mainline and ramp facilities between I-490 and East Main Street were reviewed, locations were checked for accuracy, and the data was corrected as necessary for the 22-month period between June 1, 2021, to March 1, 2023. Of the total number of crashes evaluated, 49 (16.7%) involved injuries, 243 (82.7%) involved property damage only, and two (0.007%) resulted in a fatality.

5.3.5.2 Observed Crash Frequency Analysis

The following sections summarize the comparison between the predicted crash frequency and the observed crash frequency for each segment, ramp, and ramp terminus intersection. For the intersections that overlap with those studied for the *Inner Loop North Transformation Planning Study*, the observed crash frequencies have been provided for a comparison. Crashes involving injuries and fatalities have also been tabulated for the sites studied within the Inner Loop limits.

The table below provides a summary of crash frequencies by segment. (Green shading indicates intersections with crash frequencies less than predicted crashes when compared to other similar intersections. Yellow shading indicates crash frequencies higher than predicted.)

Figure 30 Inner Loop Crash Frequency by Segments

Location	# of Crashes	Observed Crash Frequency	Predicted Crash Frequency	PSI
ILN On- Allen St On Ramp (EB)	7	3.82	1.43	2.39
Allen St On-Cumberland St Off Ramp (EB)	4	2.18	0.61	1.57
Cumberland St Off-On Ramp (EB)	8	4.36	1.54	2.82
Cumberland St On- Delevan St Off Ramp (EB)	4	2.18	0.85	1.33
Scio St Off-E Main On Ramp (EB)	2	1.09	2.34	-1.25
ILN On-Lyndhurst On Ramp (WB)	1	0.55	0.33	0.22
Lyndhurst St On-Cumberland St Off (WB)	3	1.64	0.9	0.74
Cumberland St Off-On Ramp (WB)	15	8.18	2.12	6.06
Cumberland St On-Allen St Off Ramp (WB)	13	7.09	0.52	6.57
Allen St Off-On Ramp (WB)	30	16.37	1.79	14.58

5.3.5.3 Inner Loop Ramp Crash Frequencies

As shown in following table, several ramps connecting to and from the Inner Loop exhibited higher than predicted crash frequencies. The direct connection ramps between the Inner Loop and I-490 are among the ramps with the highest observed crash frequencies. It should be noted that the ramp from I-490 westbound to the Inner Loop was listed as a Primary Investigation Location (PIL) by the NYSDOT and will be considered as a site for further investigation.

Figure 31 Inner Loop Crash Frequency by Ramp Facility

Location	# of Crashes	Observed Crash Frequency	Predicted Crash Frequency	PSI
Inner Loop to I-490 EB Ramp	14	7.64	0.5	7.14
I-490 WB to Inner Loop EB	4	2.18	0.22	1.96
I-490 EB to Inner Loop Ramp	7	3.82	1.22	2.60
Inner Loop Ramp to I-490 WB	2	1.09	0.34	0.75
Allen St EB On-Ramp	1	0.55	0.06	0.49
Allen St-WB Off-Ramp	1	0.55	0.1	0.45
Scio St - Off Ramp	1	0.55	0.12	0.43
ILN Entrance Ramp @ E Main St	1	0.55	0.23	0.32
Cumberland St EB On-Ramp	0	0.00	0.04	-0.04
Cumberland St WB Off-Ramp	0	0.00	0.07	-0.07
Lyndhurst St On Ramp	0	0.00	0.07	-0.07
Cumberland St-WB On-Ramp	0	0.00	0.1	-0.10
Cumberland St EB Off-Ramp	1	0.55	0.3	0.25
ILN Exit Ramp @ E Main St	0	0.00	0.42	-0.42
ILN Entry Ramp @ N Union St	5	2.73	0.27	2.46
ILN Exit Ramp @ N Union St	4	2.18	0.46	1.72

5.3.5.4 Inner Loop Intersection Crash Frequencies

As shown in the table below, several intersections along the Inner Loop (either ramp terminus intersections or frontage road intersections) are exhibiting higher than predicted crash frequencies. Eight (8) locations (highlighted green) identified under the previous Planning Study crash analysis saw a reduction in crashes in 2021-2023. Beyond the limits of the previous Planning Study crash analysis, the current crash analysis also identified one (1) location (highlighted yellow) with crash frequencies higher than predicted.

Figure 32 Inner Loop Crash Frequency by Intersection

Location	# of Crashes	Observed Crash Frequency 2021-2023 (2014-2019) ³	Predicted Crash Frequency	PSI
Ramp P at Plymouth Street	10	5.46 (0.6)	4.00	1.46
Allen Street EB at Plymouth Street	0	0 (0.4)	1.55	-1.55
Allen Street WB at Plymouth Street	1	0.55 (1.6)	1.97	-1.42
Allen Street EB at State Street	11	6 (9.6)	4.86	1.14
Allen Street WB at State Street	11	6 (8.2)	5.25	0.75
Allen St WB at Mill Street	0	0 (0.4)	0.33	-0.33
Cumberland Street EB at St. Paul Street	14	7.64 (12.6)	6.89	0.75
Cumberland Street WB at St. Paul Street	17	9.27 (12.2)	5.34	3.93
Cumberland Street WB at Westcott Street	1	0.55 (0.4)	0.33	0.22
Cumberland Street EB at N. Clinton Ave	20	10.91 (8.4)	1.31	9.60
Cumberland Street WB at N. Clinton Ave	6	3.27 (7)	1.95	1.32
Cumberland Street EB at Joseph Avenue	2	1.09 (3.6)	2.60	-1.51
Cumberland Street WB at Joseph Avenue	13	7.09 (7.4)	3.04	4.05
Cumberland Street WB at North Street	2	1.09 (3.6)	2.69	-1.60
Delevan Street at North Street	0	0 (1)	0.63	-0.63
Lyndhurst Street at North Street	1	0.55 (0.8)	0.64	-0.09
Lyndhurst Street at Scio Street	5	2.73 (4)	1.36	1.37
Delevan Street at Scio Street	3	1.64 (1.4)	1.02	0.62
Lyndhurst Street at Lays Alley	0	0 (0.2)	0.11	-0.11
Lyndhurst at N. Union Street	2	1.09 (0.8)	0.97	0.12
E. Main Street at University Ave/Pitkin St	7	3.82 (3.2)	2.53	1.29
E. Main Street at University Ave/Inner Loop	12	6.55 (18.6)	5.88	0.67
E. Main Street at N. Union Street	17	9.27 (11.4)	4.78	4.49
N. Union Street at University Avenue	12	6.55 (8)	3.50	3.05
N. Union Street at Inner Loop	2	1.09 (0.6)	1.09	0.00

5.3.6 I-490 between Child Street and Culver Road

5.3.6.1 Crash History Overview

A total of 400 crash reports (MV-104A) along I-490 were reviewed, locations were checked for accuracy, and the data was corrected as necessary for the 22-month period between June 1, 2021, to March 1, 2023. Of the total number of crashes evaluated, 58 (14.5%) involved injuries, 341 (85.3%) involved property damage only, and one (0.003%) included a fatality.

5.3.6.2 Observed Crash Frequency Analysis

The following sections summarize the comparison between the predicted crash frequency and the observed crash frequency for each segment, ramp, and ramp terminus intersection within the I-490 study limits. Also summarized are the locations of injury and fatality crashes.

5.3.6.3 I-490 Segment Crash Frequencies

As shown in table below, several segments of I-490 exhibited higher-than-predicted crash frequencies. In particular, the eastbound segment between Exit 12 and Exit 13 as well as the WB segment between Exit 13 and the direct connection ramp from the Inner Loop exhibited the highest crash frequencies for I-490 within the study area. Further investigations will be completed on any I-490 segments identified during preliminary design that may be impacted from project traffic diversions or any changes in roadway design/geometry.

Figure 33 I-490 Crash Frequency by Segments

Location	No of Crashes	Observed Crash Frequency	Predicted Crash Frequency	PSI
Wilder St On Ramp- Exit 12 Off Ramp (EB)	12	6.55	9.07	-2.52
Exit 12 Off-Exit 13 ILN Off Ramp (EB)	27	14.73	5.94	8.79
Exit 13 ILN Off-Platt St On-Ramp (EB)	3	1.64	1.58	0.06
Platt St On-ILN On Ramp (EB)	7	3.82	3.96	-0.14
ILN On- Boys Club On Ramp (EB)	7	3.82	3.32	0.50
Boys Club On- S Plymouth On Ramp (EB)	2	1.09	1.87	-0.78
S Plymouth On- Exit 15 Off Ramp (EB)	12	6.55	8.79	-2.24
Exit 15 Off - Howell/Woodbury On Ramp (EB)	4	2.18	6.23	-4.05
Howell/Woodbury- Byron St On Ramp (EB)	1	0.55	1.45	-0.90
Byron St On- Exit 17 Off Ramp (EB)	19	10.37	17.38	-7.01
Exit 17 Off-On Ramp (EB)	13	7.09	6.75	0.34
Exit 17 On-Exit 18 Off Ramp (EB)	5	2.73	2.54	0.19
Exit 18 Off-On Ramp (EB)	4	2.18	7.06	-4.88
Exit 18 On- Exit 19 Off Ramp (EB)	4	8.73	5.13	3.60
Exit 19 Off-On Ramp (EB)	16	13.64	10.75	2.89
Exit 19 Off-On Ramp (WB)	25	9.82	5.06	4.76
Exit 19 On-18 Off Ramp (WB)	18	2.73	3.69	-0.96
Exit 18 Off-18 On Ramp (WB)	5	3.82	4.91	-1.09
Exit 18 On -17 Off Ramp (WB)	7	2.73	1.76	0.97
Exit 17 Off-On Ramp (WB)	5	2.73	4.52	-1.79
Exit 17 On- 16 Off Ramp (WB)	5	3.82	7.11	-3.29
Exit 16 Off- Howell St On Ramp (WB)	7	10.91	8.23	2.68
Howell St On- Exit 14 Off Ramp (WB)	20	8.18	7.96	0.22
Exit 14 Off- 13 Off Ramp (WB)	15	12	6.33	5.67
Exit 13 Off-ILN On Ramp (WB)	22	12	4.91	7.09
ILN On-Broad St On Ramp (WB)	22	8.18	8.12	0.06
Broad St On-Child St Off Ramp (WB)	15	7.09	14.95	-7.86

Within these segments, there were 28 total crashes involving injuries and 0 involving fatalities. The Table below displays the segments with observed crashes with severity types K (Fatal Injury), A (Suspected Serious Injury), B (Suspected Minor Injury), and C (Possible Injury).

Figure 34 I-490 Segments with Observed Fatal and Injury Crashes

Location	Number of Crashes	Injury	Fatality
Exit 14 Off- 13 Off Ramp (WB)	6	6	0
ILN On-Broad St On Ramp (WB)	1	1	0
Howell St On- Exit 14 Off Ramp (WB)	1	1	0
Exit 16 Off- Howell St On Ramp (WB)	7	7	0
Platt St On-ILN On Ramp (EB)	1	1	0
Byron St On- Exit 17 Off Ramp (EB)	3	3	0
Boys Club On- S Plymouth On Ramp (EB)	1	1	0
Exit 12 Off-Exit 13 ILN Off Ramp (EB)	4	4	0
Howell/Woodbury- Byron St On Ramp (EB)	3	3	0
Wilder St On Ramp- Exit 12 Off Ramp (EB)	1	1	0

Figure 35 I-490 Crash Frequencies by Ramp Facility

Location	Observed Crash Frequency	Predicted Crash Frequency	PSI
West Exit Ramp (WB) to Washington Street	1.09	0.11	0.98
East Exit Ramp (EB) to Brown Street	0.00	0.09	-0.09
East Exit Ramp to South Avenue	1.09	0.11	0.98
West Entrance Ramp from Howell Street	0.55	0.4	0.15
West Exit Ramp (NB) to Clinton Avenue	0.00	0.33	-0.33
East Entrance Ramp (EB) from Boys Club Place	0.00	0.04	-0.04
East Entrance Ramp (EB) from Platt Street	0.00	0.04	-0.04
West Entrance Ramp from Monroe Avenue	0.00	0.05	-0.05
West Entrance Ramp from South Goodman Street	0.00	0.05	-0.05
West Entrance Ramp from Culver Road	0.00	0.06	-0.06
East Entrance Ramp from Monroe Avenue	0.00	0.07	-0.07
East Entrance Ramp from South Goodman Street	0.00	0.08	-0.08
East Exit Ramp (NB/SB) to South Goodman Street	0.00	0.13	-0.13
Entrance Ramp (WB) from Brown Street	0.00	0.14	-0.14
East Entrance Ramp from Culver Road	0.00	0.16	-0.16
East Entrance Ramp from Byron Street	0.00	0.19	-0.19
East Exit Ramp (NB/SB) to Culver Road	1.09	0.19	0.90
East Exit Ramp (NB/SB) to Monroe Avenue	0.00	0.19	-0.19
West Exit Ramp (NB/SB) to Monroe Avenue	0.00	0.22	-0.22
East Entrance Ramp (EB) from South Plymouth Avenue	0.00	0.24	-0.24
West Exit Ramp (NB/SB) to South Goodman Street	0.00	0.26	-0.26
West Exit Ramp (NB/SB) to Culver Road	0.55	0.26	0.29
East Entrance Ramp from South Avenue	0.00	0.69	-0.69
East Exit Ramp to Howell Street	0.00	0.69	-0.69
East Entrance Ramp from Woodbury Boulevard	0.00	0.78	-0.78
East Entrance Ramp from Howell Street	0.00	1.09	-1.09

5.3.6.4 I-490 Ramp Intersection Crash Frequencies

As shown in table below, four (4) intersections exhibited higher-than-predicted crash frequencies. The intersection of Brown Street/West Broad/Campbell St/I-490 westbound on-ramp ha the highest potential for safety improvement. If this location is impacted by traffic diversions, it will be prioritized for investigation as the intersection geometry likely contributes to high crash rates.

Figure 36 I-490 Ramp Intersection Crash Frequency

Location	Observed Crash Frequency	Predicted Crash Frequency	PSI
Allen Street & Brown Street	4.36	3.75	0.61
Brown Street & W Broad Street	14.18	3.77	10.41
S Plymouth Ave & Troup St	0.55	2.78	-2.23
S Goodman St & I-490 EB On/Off Ramp	3.27	5.36	-2.09
Monroe Ave & I-490 EB On/Off Ramp	1.64	3.95	-2.31
Culver Rd & I-490 EB On/Off Ramps	2.18	5.58	-3.4
Culver Rd & I-490 WB On/Off Ramps	7.64	5.78	1.86
Monroe Ave & I-490 WB On/Off Ramp	1.09	3.94	-2.85
S Goodman St & I-490 WB On/Off Ramps	1.64	5.96	-4.32
Woodbury Blvd & South Avenue	6.55	3.19	3.36

5.3.6.5 I-490 Facility-Wide Crash Frequency

The facility-wide observed crash frequency calculated by combining the observed crash frequencies from the segments, ramps, and intersections is 218 crashes per year. When compared to the facility wide predicted crash frequency of 220 crashes per year, the potential for safety improvement is -2.94. This indicates that under existing conditions, I-490 as a facility is not exhibiting a higher number of crashes than predicted for similar facilities. However, this will be used to study the impact of traffic volume changes at various locations due to the Inner Loop North alternatives.

5.3.6.6 Collision Types Summary

Several collision types were reported within the study area for the I-490 between Child Street and Culver Road. A breakdown of collision types is provided below in the table.

Figure 37 I-490 Collision Type Summary (2021-2023)

Collision Type	2021-2023	
	Total	Percent
Rear End	151	38%
Right Angle	18	4%
Overtaking	86	21%
Left Turn	30	7%
Fixed Object	74	19%
Other	16	4%
Right Turn	1	0.3%
Sideswipe	15	4%
Unknown	0	0%
Head On	2	0.6%
Pedestrian	3	0.8%
Bicyclist	1	0.3%

5.3.6.7 I-490 Facility Screening Summary

As a result of the I-490 screening, the following locations, collision types and future focus segments were identified as areas for potential further investigation ranked by priority under the crash analysis for the Preliminary Design phase of the Project. Future investigation locations will be identified based on Project effects (construction or traffic related).

Predominant Collision Types:

- Rear End
- Overtaking
- Other

Figure 38 I-490 Potential Future Focus Segments

Priority	Location	PSI
1	Exit 12 Off-Exit 13 ILN Off Ramp (EB)	8.79
2	Exit 13 Off-ILN On Ramp (WB)	7.09
3	Exit 14 Off- 13 Off Ramp (WB)	5.67
4	Exit 19 Off-On Ramp (WB)	4.76
5	Exit 18 On- Exit 19 Off Ramp (EB)	3.60
6	Exit 19 Off-On Ramp (EB)	2.89
7	Exit 16 Off- Howell St On Ramp (WB)	2.68
8	Exit 18 On -17 Off Ramp (WB)	0.97
9	ILN On- Boys Club On Ramp (EB)	0.50
10	Exit 17 Off-On Ramp (EB)	0.34
11	Howell St On- Exit 14 Off Ramp (WB)	0.22
12	Exit 17 On-Exit 18 Off Ramp (EB)	0.19
13	Exit 13 ILN Off-Platt St On-Ramp (EB)	0.06
14	ILN On-Broad St On Ramp (WB)	0.06

Figure 39 I-490 Potential Future Focus Ramps

Priority	Location	PSI
1	West Exit Ramp (WB) to Washington Street	0.98
2	East Exit Ramp to South Avenue	0.98
3	East Exit Ramp (NB/SB) to Culver Road	0.90
4	West Exit Ramp (NB/SB) to Culver Road	0.29
5	West Entrance Ramp from Howell Street	0.15

Figure 40 I-490 Potential Future Focus Ramp Intersections

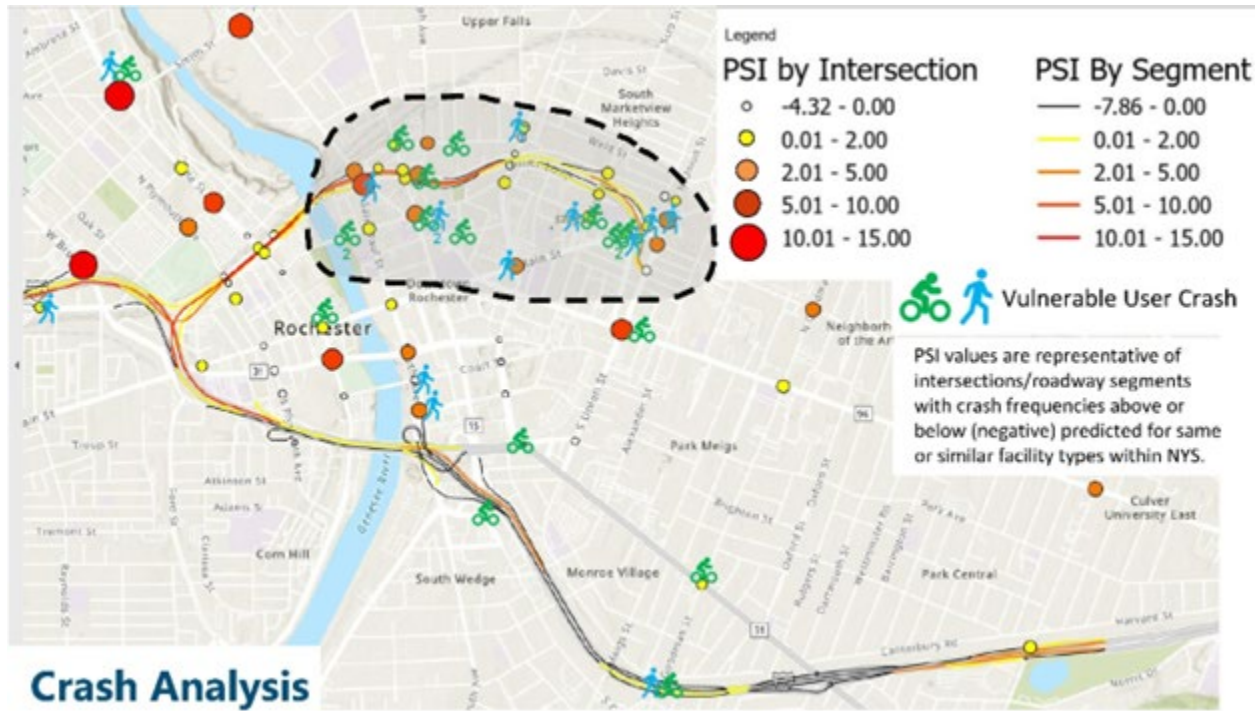
Priority	Location	PSI
1	Brown Street & W Broad Street	10.41
2	Woodbury Blvd & South Avenue	3.36
3	Culver Rd & I-490 WB On/Off Ramps	1.86
4	Allen Street & Brown Street	0.61

Figure 41 Potential Future Focus City Intersections

Priority	Location	PSI
1	State St/ Lyell Ave	10.91
2	St Paul Str/ Upper Falls Blvd	8.13
3	N Union St/ East Ave	6.4
4	Morrie Silver Way/State Street	6.09
5	W/E Broad St / Exchange Blvd	6.09
6	Morrie Silver Way/N Plymouth Ave	4.41
7	N Clinton Ave/ Andrews St	4.35
8	W/E Main St/ N Chestnut St	3.43
9	S Goodman St/ University Ave	3.12
10	Culver Rd/ East Ave	2.95
11	W Broad St/ South Ave	2.87
12	Central Ave/Joseph Ave	2.14
13	Scio St/ University Ave	1.86
14	State St/ Brown St	1.77
15	St Paul Str/Andrews St	1.73
16	Central Ave/N Clinton Ave	1.7
17	N Chestnut St/ Andrews St	1.7
18	Hudson Ave/North St	1.46
19	W/E Main St / Exchange Blvd	1.33
20	E Main St/ South Avenue	0.98
21	W Broad St/W Main St	0.91
22	S Goodman St/ East Ave	0.9
23	S Goodman St/ Monroe Ave	0.66

The figure below shows a summary of intersection and vulnerable user crashes. A positive PSI indicates a location with crash frequencies greater than predicted crashes for the same or similar facility types within New York State. Note the cluster of vulnerable user crashes within the Primary Study Area.

Figure 42 Intersection and Road Segment Crash Analysis Summary Map



5.3.6.8 Crash Analysis Screening Summary

As a result of these screenings, the crash history within the Project study areas outlined above has resulted in several locations (23 segments, 15 ramps, and 43 intersections) and systemic patterns (Rear End, Right Angle, Overtaking, Left turn, and Other) that warrant further investigation as part of the Preliminary Design of the Project. Specific patterns and recommendations will be identified in the analysis completed under Preliminary Design once the final alternative layout has been advanced sufficiently. Additional locations may be studied depending on the expected effects on traffic volumes at key locations identified under the traffic impact study. Vulnerable user crash patterns will be a key component of the detailed analysis completed during Preliminary Design especially within the Primary Study Area.

5.3.7 Existing Street Grid Capacity Summary

To provide context for the effect motor vehicle diversions may have on the existing street grid’s capacity after construction of this project, the team reviewed existing capacity (maximum number of vehicles that could be accommodated while retaining an acceptable level of service) for selected surface street segments within the Primary and Secondary Study Areas. The analysis of existing capacity compares current motor vehicle traffic volumes to estimated street capacity using the Highway Capacity Manual (HCM) (Figure 43), which defines generalized daily service volumes for Urban Street Facilities. The HCM methodologies provide an estimate of the maximum number of vehicles per hour (LOS E) that an urban city street with traffic signals can accommodate in one direction.

Figure 43 Highway Capacity Manual Exhibit 16-16 Generalized Daily Service Volumes for Urban Street Facilities

Exhibit 16-16
Generalized Daily Service Volumes for Urban Street Facilities

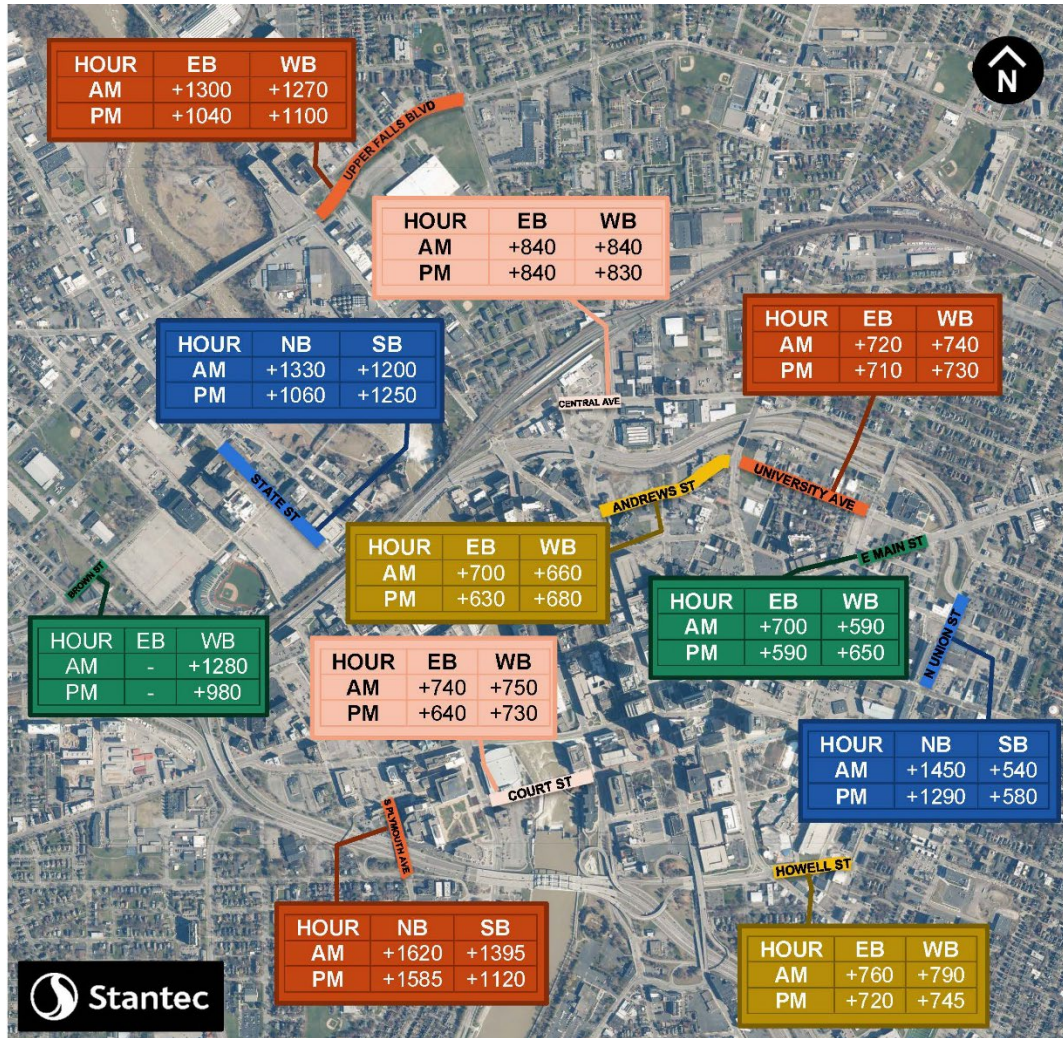
K-Factor	D-Factor	Daily Service Volume by Lanes, LOS, and Speed (1,000 veh/day)											
		Two-Lane Streets				Four-Lane Streets				Six-Lane Streets			
		LOS B	LOS C	LOS D	LOS E	LOS B	LOS C	LOS D	LOS E	LOS B	LOS C	LOS D	LOS E
<i>Posted Speed = 30 mi/h</i>													
0.09	0.55	NA	1.7	11.8	17.8	NA	2.2	24.7	35.8	NA	2.6	38.7	54.0
	0.60	NA	1.6	10.8	16.4	NA	2.0	22.7	32.8	NA	2.4	35.6	49.5
0.10	0.55	NA	1.6	10.7	16.1	NA	2.0	22.3	32.2	NA	2.4	34.9	48.6
	0.60	NA	1.4	9.8	14.7	NA	1.8	20.4	29.5	NA	2.2	32.0	44.5
0.11	0.55	NA	1.4	9.7	14.6	NA	1.8	20.3	29.3	NA	2.1	31.7	44.1
	0.60	NA	1.3	8.9	13.4	NA	1.7	18.6	26.9	NA	2.0	29.1	40.5
<i>Posted Speed = 45 mi/h</i>													
0.09	0.55	NA	7.7	15.9	18.3	NA	16.5	33.6	36.8	NA	25.4	51.7	55.3
	0.60	NA	7.1	14.5	16.8	NA	15.1	30.8	33.7	NA	23.4	47.4	50.7
0.10	0.55	NA	7.0	14.3	16.5	NA	14.9	30.2	33.1	NA	23.0	46.5	49.7
	0.60	NA	6.4	13.1	15.1	NA	13.6	27.7	30.3	NA	21.0	42.7	45.6
0.11	0.55	NA	6.3	13.0	15.0	NA	13.5	27.5	30.1	NA	20.9	42.3	45.2
	0.60	NA	5.8	11.9	13.8	NA	12.4	25.2	27.6	NA	19.1	38.8	41.5

Notes: NA = not applicable; LOS cannot be achieved with the stated assumptions.
 General assumptions include no roundabouts or all-way STOP-controlled intersections along the facility; coordinated, semiautomated traffic signals; Arrival Type 4; 120-s cycle time; protected left-turn phases; 0.45 weighted average *g/C* ratio; exclusive left-turn lanes with adequate queue storage provided at traffic signals; no exclusive right-turn lanes provided; no restrictive median; 2-mi facility length; 10% of traffic turns left and 10% turns right at each traffic signal; peak hour factor = 0.92; and base saturation flow rate = 1,900 pc/h/ln.
 Additional assumptions for 30-mi/h facilities: signal spacing = 1,050 ft and 20 access points/mi.
 Additional assumptions for 45-mi/h facilities: signal spacing = 1,500 ft and 10 access points/mi.

The analysis shows that numerous streets within the vicinity of the Primary and Secondary Study Areas have substantial surplus capacity to accept additional vehicle volumes. For example, University Avenue between North Union Street and Scio Street has an approximate maximum surplus capacity of over 700 vehicles per hour during the AM and PM peak hours, in both directions.

Similar excess capacity conditions are seen along other street segments in the City, including segments of Upper Falls Boulevard, Central Avenue, State Street, Andrews Street, Court Street, Howell Street, and South Plymouth Avenue. The surplus capacity of these segments is illustrated in Figure 44.

Figure 44 Surplus Capacity of Selected Street Segments, Rochester, NY (2024)

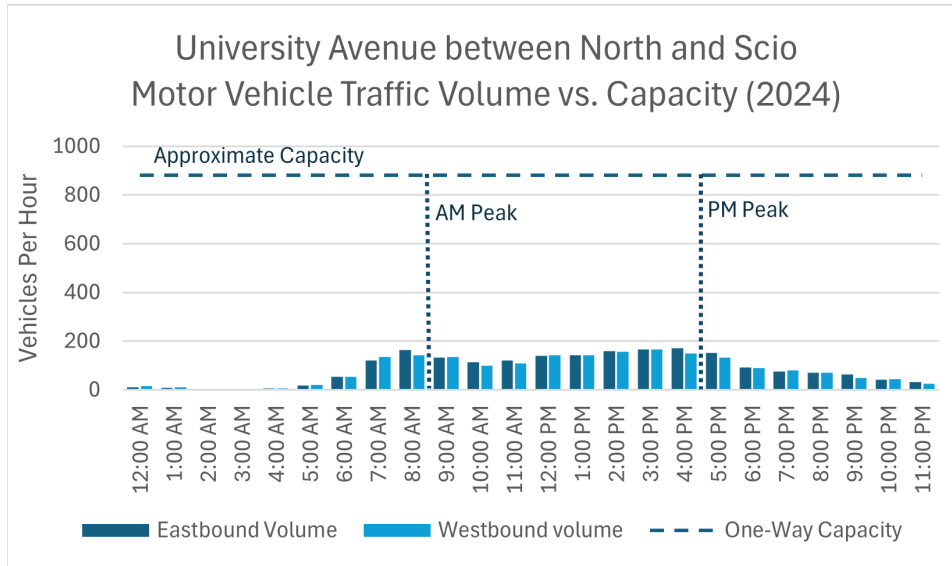


Source: Stantec (Spring 2024 Traffic counts & HCM Exhibit 16-16)

Figure 45 through Source: Stantec (Spring 2024 Traffic counts & HCM Exhibit 16-16)

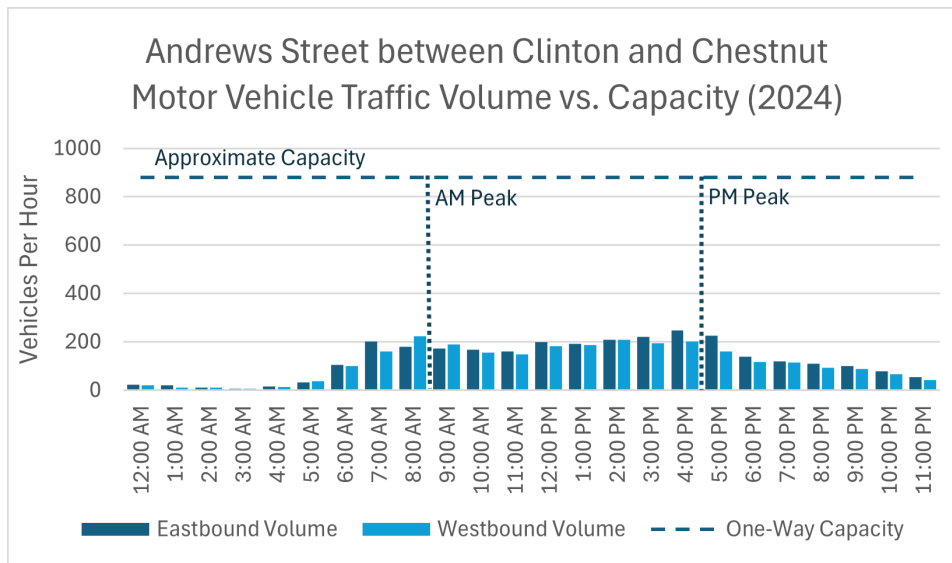
Figure 50 show the volume and approximate capacity volume of each of these street segments in more detail, illustrating the existing volume throughout the day relative to the existing street capacity.

Figure 45 Volume-to-Capacity Comparison of University Avenue, 2024



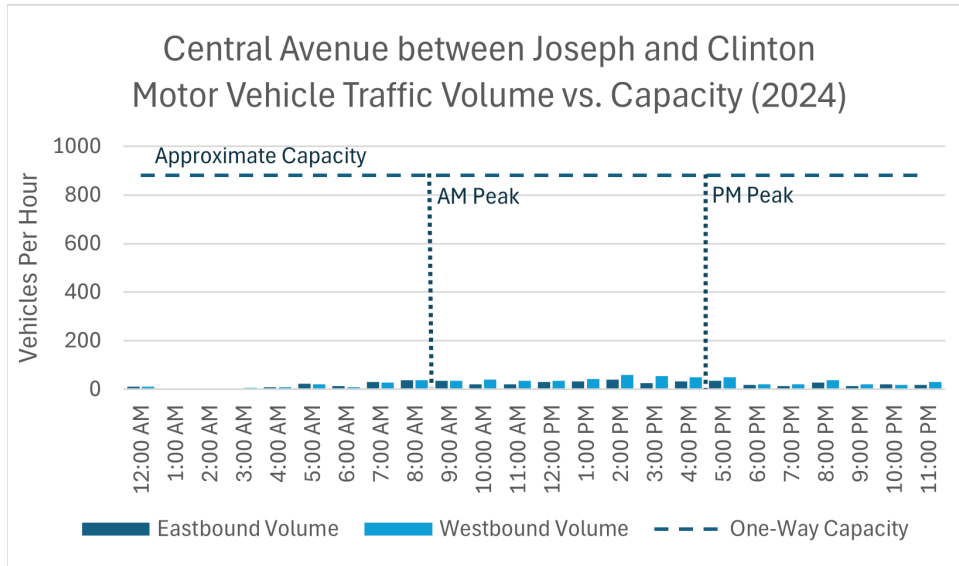
Source: Stantec (Spring 2024 Traffic counts & HCM Exhibit 16-16)

Figure 46 Volume-to-Capacity Comparison of Andrews Street, 2024



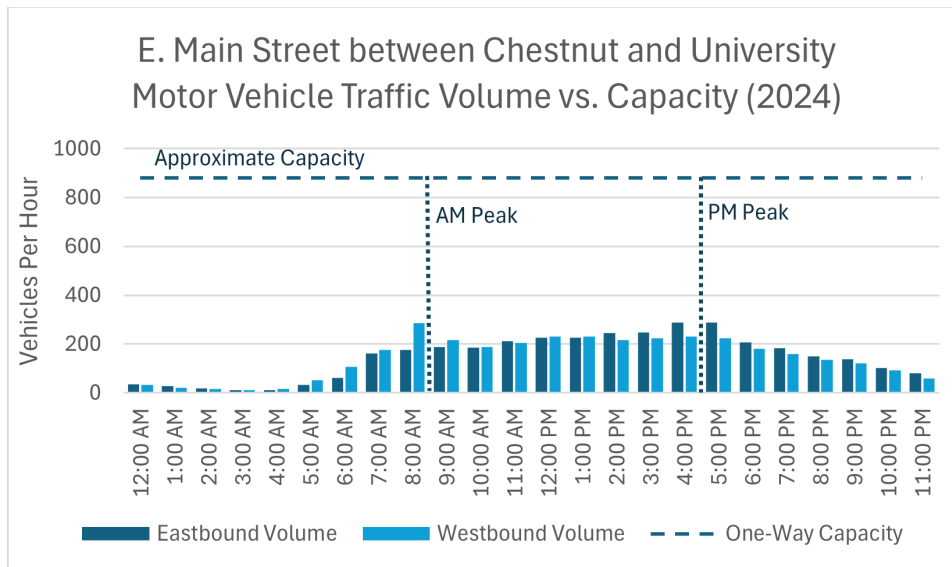
Source: Stantec (Spring 2024 Traffic counts & HCM Exhibit 16-16)

Figure 47 Volume-to-Capacity Comparison of Central Avenue, 2024



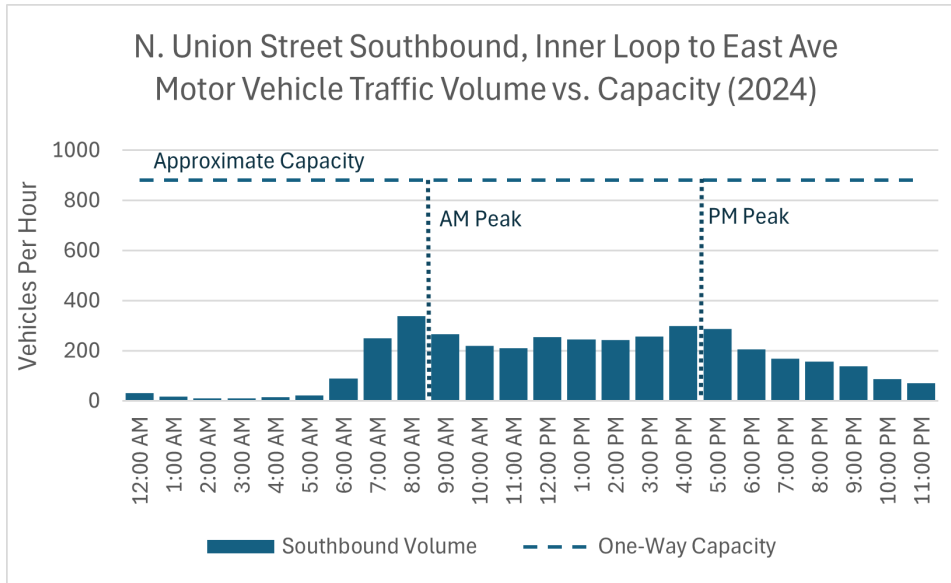
Source: Stantec (Spring 2024 Traffic counts & HCM Exhibit 16-16)

Figure 48 Volume-to-Capacity Comparison of E. Main Street, 2024



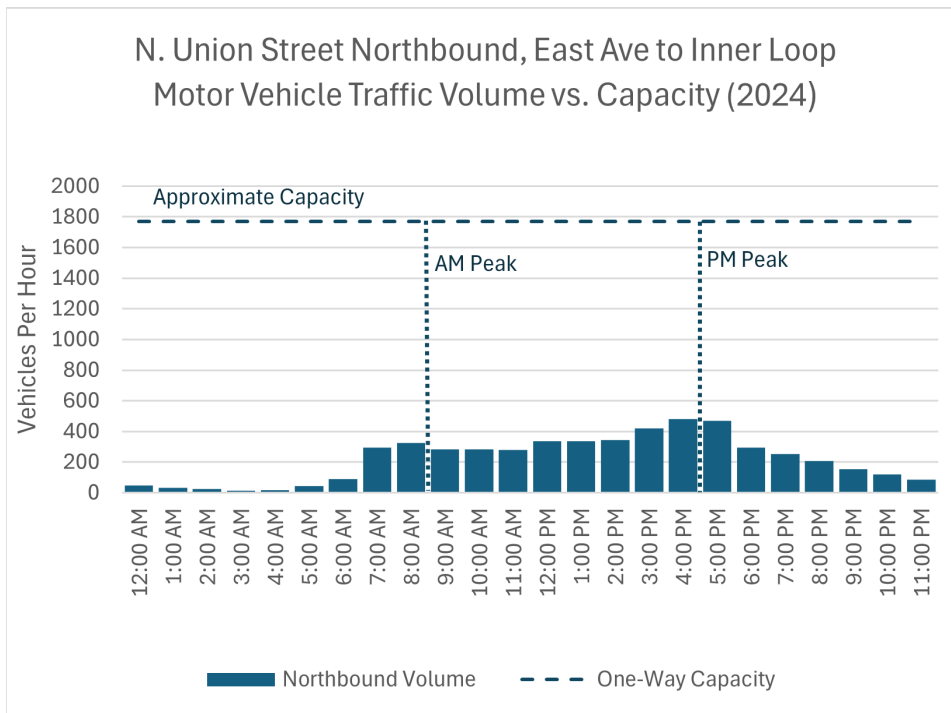
Source: Stantec (Spring 2024 Traffic counts & HCM Exhibit 16-16)

Figure 49 Volume-to-Capacity Comparison of N. Union Street Southbound, 2024



Source: Stantec (Spring 2024 Traffic counts & HCM Exhibit 16-16)

Figure 50 Volume-to-Capacity Comparison of N. Union Street Northbound, 2024



Source: Stantec (Spring 2024 Traffic counts & HCM Exhibit 16-16)

5.3.8 Concept 6A Capacity Summary

Because Concept 6A envisions at-grade, signalized intersections at Plymouth Avenue and State Street, the traffic analysis explored how the expected diversions noted above could affect the capacity of these

potential new intersections, and how the performance of those intersections (such as queuing) could affect the I-490 interchange, as well as I-490 mainline operations and capacity.

The traffic software used for this analysis is VISSIM, which is a robust microsimulation program capable of analyzing freeway, ramp and local intersections in a coordinated fashion. These capabilities allow the model to analyze the interface between local streets and the adjacent highway network. The model simulates operating conditions within the roadway network and can provide a number of capacity-related metrics including (but not limited to) travel times, delays, and vehicle density. Operating conditions can be expressed in terms of 'Level of Service' (LOS), which is a qualitative measure used to analyze highways by categorizing traffic flow and assigning quality levels of traffic based on performance measures. LOS is expressed in terms of vehicle density on the highway network (passenger cars per lane per hour) and in seconds of delay per vehicle for signalized intersections. Thresholds are defined via an 'A' thru 'F' ranking, with LOS 'A' conditions characterized by free-flow speeds and no congestion/no delays and LOS 'F' being very slow speeds and heavy congestion/large delays. Figure 51 defines summarizes LOS thresholds for both signalized intersections and Freeway segments. It is important to note that LOS A/B is not necessarily considered ideal in that it may indicate that a roadway was "overbuilt" and provides more capacity than is required for safe, efficient operation.

Figure 51 Highway Capacity Manual (HCM) LOS for Freeway/Multi-lane Highway Segments and Signalized Intersections

Signalized Intersection Delay (sec/vehicle)	LOS	Freeway Density (pc/ln/hr)
≤10	A	0-11
>10 and ≤20	B	11-18
>20 and ≤35	C	18-26
>35 and ≤55	D	26-35
>55 and ≤80	E	35-45
>80	F	>45

The following tables summarize the ETC+20 (Year 2048) LOS projections for I-490 segments, incorporating assumptions discussed above on future growth in traffic volumes.

Figure 52 I-490 Mainline Segment AM Peak Level of Service (ETC+20)

Segment of I-490		No-Build (ETC+20)		Concept 6A (ETC+20)	
		LOS	Density (pc / ln / hr)	LOS	Density (pc / ln / hr)
490 EB	Between Brown St & Inner Loop Off Ramp	F	49.2	F	52.2
	Between Inner Loop Off Ramp & Broad St On Ramp	E	42.5	F	48.2
	Between Broad St On Ramp & Ford St On Ramp	E	39.5	E	35.6
	Between Ford St On Ramp & Plymouth Ave On Ramp	F	57.7	F	57.8
	Between Plymouth Ave On Ramp & Howell St Off Ramp	D	32	D	30.6
490 WB	Between Howell St On Ramp to Spring St Off Ramp	C	23.9	C	25.4
	Between Spring St Off Ramp to Central Ave On Ramp	C	24.3	D	27.9
	Between Central Ave On Ramp to Broad St On Ramp	D	27.4	D	29.3

Figure 53 I-490 Mainline Segment PM Peak Level of Service (ETC+20)

Segment of I-490		No-Build (ETC+20)		Concept 6A (ETC+20)	
		LOS	Density (pc / ln / hr)	LOS	Density (pc / ln / hr)
490 EB	Between Brown St & ILN Off Ramp	E	43.4	E	38.4
	Between ILN Off Ramp & Broad St On Ramp	E	42.5	F	48.0
	Between Broad St On Ramp & Ford St On Ramp	D	33.4	D	33.8
	Between Ford St On Ramp & Plymouth Ave On Ramp	F	50.0	F	49.7
	Between Plymouth Ave On Ramp & Howell St Off Ramp	D	30.9	D	32.0
490 WB	Between Howell St On Ramp to Spring St Off Ramp	C	25.5	D	28.8
	Between Spring St Off Ramp to Central Ave On Ramp	D	33.5	E	35.9
	Between Central Ave On Ramp to Broad St On Ramp	E	43.3	E	38.5

The results indicate most segments could experience little change between No-Build and Concept 6A conditions, with some segments experiencing improvements due a reduction in volume. Concept 6A could result in two (2) segments experiencing a one LOS level drop in the AM peak and three (3) segments with a one level LOS drop in the PM peak. As previously discussed, the use of a 0.5% growth rate is considered on the high side of the reasonable range, and results in multiple segments under LOS 'F' conditions in the No-Build condition that may or not materialize. In reviewing the model simulations, mainline traffic is anticipated to flow consistently with no apparent or significant slowing or queuing.

Beyond the mainline conditions, several key signalized intersections were also selected to display approximate operating conditions under Concept 6A within preliminary estimated diversions. Due to geometric and grade separation changes proposed in Concept 6A, it is not possible to compare No-Build and Concept 6A operating conditions. The following intersections were selected based on the geometric and/or estimated volume changes:

- Central Avenue (former Inner Loop) at N. Plymouth Avenue
- Central Avenue (former Inner Loop) at State Street
- Howell Street / Chestnut Street / Monroe Avenue
- Howell Street at Union Street

Figure 54 shows a tabulation of the overall LOS for the AM and PM peak hours at ETC+20 (Year 2048).

Figure 54 I-490 Intersection AM & PM Peak Level of Service (ETC+20)

Intersection	Level of Service	
	AM	PM
Central Ave & N. Plymouth Avenue	D (53.6)	E (67.2)
Central Ave & State St	E (58.5)	E (64.9)
Howell St & Chestnut St / Monroe Ave	C (31.6)	D (36)
Howell St & Union St	B (16.5)	B (18.1)

Note: (1) Numbers in parentheses represent average seconds of delay that vehicles may expect on any given approach for any given movement; (2) Overall intersection LOS is the weighted average of the modeled volumes (vehicles per hour) multiplied by average vehicle delay (in seconds), divided by the total volume of traffic; (3) Results represented in this table may not fully illustrate all movements through the intersections listed. Traffic analysis shows that turning movements and approaches to these intersections may experience queuing and delays and the volume-to-capacity ratio for certain movements could be exceeded. Further analysis will be completed and mitigations identified during the Preliminary Design phase.

Figure 55 I-490 Intersection AM Peak Level of Service

Site #	Intersection	Approach		Movement	Modeled Volume (vph)	Avg. Vehicle Delay (sec/veh)	LOS	Avg. Queue (ft)	Max Queue (ft)
110	N Plymouth Ave & Central Ave	N Plymouth Ave	NB	Left	56	88.7	F	277	334
				Thru	175	81.6	F	277	334
				Right	115	126.3	F	277	334
		N Plymouth Ave	SB	Left	1	78.9	E	9	74
				Thru	32	44.3	D	9	74
				Right	9	22.5	C	16	94
		Central Ave	EB	Left	69	72.0	E	795	1645
				Thru	901	89.0	F	795	1645
				Right	272	41.1	D	795	1645
		Central Ave	WB	Left	97	25.5	C	30	341
				Thru	868	6.5	A	30	341
				Right	16	5.1	A	33	356
180	State St & Central Ave	State St	NB	Left	110	117.4	F	133	364
				Thru	182	91.5	F	133	364
				Right	44	99.1	F	133	364
		State St	SB	Left	61	191.5	F	213	310
				Thru	128	111.1	F	213	310
				Right	56	74.1	E	98	183
		Central Ave	EB	Left	71	81.4	F	534	711
				Thru	854	68.1	E	534	711
				Right	76	61.8	E	534	711
		Central Ave	WB	Left	38	47.2	D	476	1149
				Thru	815	16.8	B	476	1149
				Right	126	14.0	B	490	1173
220	Howell St & Chestnut St / Monroe Ave	Monroe Ave	NB	Left	192	47.9	D	96	561
				Thru	176	39.1	D	96	561
				Right	23	31.4	C	110	587
		Chestnut St	SB	Left	52	31.8	C	58	332
				Thru	197	36.6	D	58	332
				Right	394	3.3	A	7	193
		Howell St	EB	Left	229	63.0	E	154	795
				Thru	259	24.0	C	154	795
				Right	171	19.7	B	188	832
		Howell St	WB	Left	2	43.1	D	68	377
				Thru	357	38.0	D	68	377
				Right	59	35.5	D	68	377
310	S Union St & Howell St / Lafayette Pl	S Union St	NB	Left	62	29.9	C	34	256
				Thru	156	22.1	C	34	256
				Right	4	21.4	C	34	256
		S Union St	SB	Left	3	17.2	B	27	304
				Thru	75	13.1	B	27	304
				Right	459	9.5	A	40	343
		Howell St	EB	Left	254	23.5	C	39	270
				Thru	2	25.4	C	39	270
				Right	7	18.8	B	56	301
		Lafayette Pl	WB	Left	2	18.8	B	0	28
				Thru	2	10.9	B	0	28
				Right	2	4.9	A	1	48

Figure 56 I-490 Intersection PM Peak Level of Service

Site #	Intersection	Approach		Movement	Modeled Volume (vph)	Avg. Vehicle Delay (sec/veh)	LOS	Avg. Queue (ft)	Max Queue (ft)
110	N Plymouth Ave & Central Ave	N Plymouth Ave	NB	Left	200	64.3	E	271	336
				Thru	135	67.5	E	271	336
				Right	65	121.9	F	271	336
		N Plymouth Ave	SB	Left	3	101.3	F	7	49
				Thru	42	31.2	C	7	49
				Right	14	8.7	A	13	69
		Central Ave	EB	Left	91	103.3	F	1127	1674
				Thru	734	131.5	F	1127	1674
				Right	186	63.0	E	1127	1674
		Central Ave	WB	Left	88	22.7	C	18	202
				Thru	727	4.0	A	18	202
				Right	9	1.3	A	19	216
180	State St & Central Ave	State St	NB	Left	57	94.8	F	290	430
				Thru	396	97.9	F	290	430
				Right	30	101.6	F	290	430
		State St	SB	Left	68	72.5	E	52	252
				Thru	123	40.9	D	52	252
				Right	16	27.5	C	5	125
		Central Ave	EB	Left	77	127.4	F	579	711
				Thru	636	88.1	F	579	711
				Right	77	90.9	F	579	711
		Central Ave	WB	Left	27	31.1	C	655	1148
				Thru	752	22.6	C	655	1148
				Right	37	16.7	B	675	1172
220	Howell St & Chestnut St / Monroe Ave	Monroe Ave	NB	Left	304	55.2	E	182	584
				Thru	184	41.5	D	182	584
				Right	5	32.9	C	193	611
		Chestnut St	SB	Left	26	46.2	D	241	728
				Thru	231	49.3	D	241	728
				Right	921	19.9	B	183	584
		Howell St	EB	Left	125	54.1	D	118	805
				Thru	294	28.4	C	118	805
				Right	103	24.0	C	152	850
		Howell St	WB	Left	4	65.4	E	123	639
				Thru	400	48.8	D	123	639
				Right	49	47.5	D	123	639
310	S Union St & Howell St / Lafayette Pl	S Union St	NB	Left	37	22.8	C	18	187
				Thru	166	12.6	B	18	187
				Right	2	13.0	B	18	187
		S Union St	SB	Left	4	5.6	A	40	353
				Thru	97	16.2	B	40	353
				Right	397	12.4	B	56	392
		Howell St	EB	Left	277	29.5	C	67	424
				Thru	1	23.1	C	67	424
				Right	8	22.7	C	85	455
		Lafayette Pl	WB	Left	1	45.5	D	0	14
				Thru	3	13.3	B	0	14
				Right	0	0.0	A	1	27

The traffic analysis at this early stage of project development explored the overall magnitude of operating conditions in Figure 54 which are reflected in the LOS conditions. Figures 55 and 56 provide the LOS for

individual movements by approach for key intersections. These conditions reflect the AM/PM peak hours only and are not reflective of conditions during mid-day and off-peak. The most significant potential delays could occur only during a one- or two-hour period across a 24-hour period.

Conditions at the future Central Avenue at-grade intersections are greatly influenced by the need to maximize capacity for the I-490 EB off-ramp traffic (in order to minimize potential queuing on I-490)As a result, the I-490 eastbound off-ramp to Central Avenue (former Inner Loop) could experience some queueing that builds throughout the peak hour but does not extend back to the mainline. These results should be considered over-estimating delay by incorporating the high range of estimated traffic volumes.

The Project should provide a facility that allows for adequate levels of service for automobiles in pursuit of larger community and economic development goals and initiatives. The Preliminary Design traffic analysis will need to consider the following additional factors in order to further evaluate and analyze the preferred alternatives:

- **Reassessing and potentially adjusting the traffic growth rate** given population trends (see Appendix C) and additional mainline I-490 counts that are being progressed to document any notable trends since November 2023.
- **Changes to the estimated diversions.** Preliminary Design will utilize a much larger VISSIM model that will offer the opportunity to use a feature called Dynamic Trip Assignment, which allows the model to automatically assign/calculate trip diversions. Diversions will be revisited.
- **Multi-modal access and mode shifts** given the extensive bicycle, pedestrian, and transit improvements being implemented by the City, indicating that some vehicle trips could be replaced by active transportation.
- **Disappearance factor.** Once construction begins, up to 10% of the existing volumes may find permanent alternate routes/modes not captured in the analysis.
- **Freight movement** analysis and discussion will be ongoing as it relates to any changes in access at I-490 (including potential improvements in vertical clearance on St. Paul Street underneath the CSX bridge) and needed ingress and egress from new development resulting from the Project.

5.4 Screening Summary









This section summarizes the screening process for all six concepts. The table below includes a reference guide for all six concepts, illustrating key defining features of each concept relative to the other concepts.

Figure 57 Summary of Concepts – Key Defining Features

Concept	Restores street grid	Eliminate expressway as a barrier	Connection to I-490	Primarily a 2-lane Section	Multimodal Cycle track & ped	Enhanced greenspace
No-Build	No	No	Yes	No	No	No
Concept 1	No	Yes	No	Yes	Yes	No
Concept 2	No	Yes	No	No	Yes	No
Concept 3	No	Yes	Yes	No	Yes	No
Concept 4	No	No	Yes	No	Yes	No
Concept 5	No	No	Yes	No	Yes	No
Concept 6	Yes	Yes	Yes	Yes	Yes	Yes
Concept 6A	Yes	Yes	Yes	Yes	Yes	Yes

Each concept was evaluated using a matrix of screening criteria. The screening criteria were derived from the Project Goals, the community evaluation criteria used to evaluate the Planning Concepts, and technical transportation/engineering requirements. For each criterion, the concept was given a rating where 1 = low, 2 = medium, and 3 = high. The detailed scoring sheet can be found in Appendix B.

Figure 58 Summary of Concept Screening

Concept	Advanced for further study?	Rationale for Dismissal/Notes
No-Build		Does not meet project purpose or objectives, but is required for baseline comparison.
Concept 1 Urban Restoration		Does not meet project objectives to restore the City street grid or maintain connection to I-490. Would result in long and narrow development parcels.
Concept 2 Central Commons		Does not meet project objectives to restore the City street grid or maintain connection to I-490. Would result in long and narrow development parcels.
Concept 3 Community Connection		Does not meet project objectives to restore the City street grid, does not provide adequate green space at WOIS. Would result in long and narrow development parcels.
Concept 4 I-490 Connection		Does not meet project objectives to restore the City street grid, does not provide adequate green space at WOIS, retains portion of expressway as visual and physical barrier. Would result in long and narrow development parcels.
Concept 5 Downtown Bypass		Does not meet project objectives to restore the City street grid, does not provide adequate green space at WOIS, retains portion of expressway as visual and physical barrier. Would result in long and narrow development parcels.
Concept 6 City Grid Restoration		Meets project objectives but creates potential operational issues at Plymouth Avenue and I-490.
Concept 6A		Meets project objectives. Will be analyzed in the DAD as the Preferred Alternative.

5.5 Conclusion: Concepts that will be advanced as alternatives in the DAD

5.5.1 No-Build Concept

The No-Build Concept assumes no improvements made to the corridor other than those planned by others or implemented by routine maintenance. Although this concept does not address the identified needs or meet the stated purpose and objectives for the Project, the No-Build Concept must be carried forward as an alternative to serve as the baseline condition against which the Build Alternative is evaluated.

5.5.2 Concept 6A

Based on a comprehensive and objective evaluation of a range of concepts (potential alternatives) during the scoping process, the City of Rochester has determined that the Concept 6A – City Grid Restoration, is the only reasonable (feasible and practical) alternative for the Project. Concept 6A is considered the Build Alternative for the Project. The documentation within this section of the Scoping Report supports this determination. None of the other Project concepts meet the Project purpose, objectives, and needs, which address the identified transportation needs within the area and define the fundamental reasons why the Project is being proposed. The potential effects resulting from implementation of the Build Alternative will be assessed and documented in the Project DAD. Measures to mitigate adverse effects, including those that avoid, minimize and compensate for adverse effects, will also be developed as effects are determined.

6 Anticipated Cost and Schedule

The project team updated a cost estimate developed for Concept 6 during the Inner Loop North Transformation Planning Study to reflect current industry costs. The update of this original estimate totals \$160,000,000 (construction/design/inspection). The vast majority of the increase reflects construction cost escalation since development of the Planning Study estimate.

Additional costs were identified during Scoping that may be necessary for the project to advance. These items will be reviewed in further detail during the Preliminary Design phase and include:

- I-490 Westbound Improvements (2-lane to 3-lane conversion): \$27,000,000
- Monroe County Pure Waters Tunnel Rehabilitation Work: \$21,000,000
- Signature Elements to Genesee River Bridge Crossing: \$15,000,000

Combined with the original estimate, these costs total \$223,000,000 (in 2028 dollars). Construction of the Build Alternative could take approximately three years. The City of Rochester and the NYSDOT anticipate that the DAD will be approved in the latter half of calendar year 2025.

7 Public Involvement and Agency Coordination

Public engagement has been an integral part of the project development process, starting with the planning phase, and will continue through the Preliminary Design phase.

The environmental provisions of 23 USC 139 require that lead agencies establish a plan for coordinating public and agency participation and comment on the environmental review process for the Project. Accordingly, a Public Involvement Plan (PIP) has been developed, which describes the process and communication methods for coordinating with the agencies involved in the Project and providing meaningful opportunities for public involvement. The PIP contains an Environmental Justice Public Engagement Plan that describes methods for targeted outreach to identified EJ communities affected by the Project. The PIP will be in effect throughout the project development process. The PIP is a flexible, “living” document that will be amended as needed during the process.

Executive Order 12898 “Federal Actions to Address Environmental Justice in Minority Populations and low-Income Populations” requires federal agencies to provide meaningful opportunities for affected minority and/or low-income communities to provide input on a project. Public meetings for the Project have been and will continue to be sited, scheduled, advertised, and planned to provide opportunities for participation by minority and/or low-income (environmental justice) populations.

7.1 Public Involvement / Engagement

Public involvement is an integral part of the scoping process and has been re-initiated based on previous planning phase efforts. The City of Rochester provided meaningful opportunities for public involvement throughout the Inner Loop North Transformation Planning Study process. Community engagement was prioritized throughout the planning process with multiple opportunities and methods for community members to get involved. Public engagement activities were held in various locations to ensure a diversity of population segments were reached and had opportunities to share their perspectives. A detailed list of activities conducted during the planning phase is provided in the following sections.

Individuals who do not speak English as their primary language and/or those who have limited ability to read, speak, write, or understand English are considered “limited English proficient” (LEP). As shown in the Environmental Justice Analysis (Appendix E), Limited English Proficiency Census Data, English is the primary language spoken in approximately 70% percent of the population in the EJ Study Area (Figure 14). Spanish is the primary non-English language spoken. Approximately 15% of the population in the EJ Study Area speaks Spanish as their primary language.

The PIP was developed in consideration of non-English speaking populations, including the following:

- Ensuring advertisements for meetings provided in both English and Spanish
- Providing a Spanish language interpreter at public meetings
- Promoting meetings on local Spanish radio stations, such as Poder 97.1

The City of Rochester will continue to conduct public involvement activities for the Project with LEP populations’ needs considered.

A minority community is one where the minority population of the area exceeds 50% of the total population, as defined by the Council on Environmental Quality (CEQ)’s Environmental Justice Guidance

under the National Environmental Policy Act (December 1997). Approximately 67% of the population of the EJ Study Area is considered a minority population.

Low-income individuals are defined as having household incomes that fall at or below the poverty guidelines for a community. Approximately 36% of the population of the EJ Study Area fall under the Census Bureau's poverty threshold and are considered low-income.

The City of Rochester is committed to transparent and extensive engagement with LEP, low-income, and minority communities. The extensive outreach that occurred during the planning phase of the Project is continuing throughout the duration of the design phase, with a priority on soliciting input and feedback from Environmental Justice communities. Engagement is providing the community with meaningful opportunities for dialogue, questions, and comments. Engagement opportunities will continue to be held at times and locations convenient for the community. Any adverse impacts of the project will be carefully considered given the density of vulnerable populations within the EJ Study Area.

In addition, public meetings have been and will continue to be held in locations that comply with the Americans with Disabilities Act (ADA) to assure that individuals with disabilities have convenient access to meetings. Public notices announcing public meetings will be provided in English and Spanish and will provide instructions for requesting special accommodations.

7.1.1 Website and Social Media

A Project website (www.innerloopnorth.com) was created as part of the Planning Study and continues to be expanded and updated as part of the scoping process. The website provides community members with access to Project information and documents, online surveys, meeting schedules and summaries, and general feedback, and will continue to be updated throughout the design phase. The public is able to provide feedback to the Project team directly through the Project website.

An online survey was provided via the website during the planning phase and was available in both English and Spanish. The website is also translatable to seven languages. Additionally, the Project team manages Project-related social media accounts on Facebook, X (formerly known as Twitter), and Instagram.

The website and social media platforms will be updated on a regular basis throughout the scoping and design phases.

7.1.2 Mailing Lists/E-Mail lists

An extensive list of contacts, including members of the public, community organizations, public agencies, stakeholders, etc., has been developed and will continue to be maintained and expanded throughout the Scoping and Preliminary Design phases. Opportunities to sign up for the mailing list are offered at every public meeting, and via a sign-up form on the Project website. The mailing list is used to notify the community about upcoming public events. Mailings promoting public meetings have been, and will continue to be, sent to all residences within the Project area in both English and Spanish.

7.1.3 CAC Meetings

The Community Advisory Committee (CAC) met seven times throughout the development of the Planning Study to discuss project status, review project deliverables and provide valuable feedback to the Project team from a wide range of community representatives.

In addition to the seven CAC meetings, members of the CAC formed a subcommittee, the Racial Equity Subcommittee (RESC). The subcommittee sought to center racial equity throughout the planning process by examining the history of racial trauma caused by municipal planning decisions, such as the siting and displacement of residences and businesses during the original Inner Loop North construction. The RESC

identified criteria for consideration when evaluating design alternatives to ensure these impacted populations were considered in the design process. The RESC met 13 times.

The CAC has been reactivated as part of the scoping phase, with additional meetings anticipated to occur. An overview of CAC meetings held to date can be found in the table below.

Figure 59 CAC Meetings

Meeting Number	Meeting Location	Purpose	Meeting Date
Planning Phase			
CAC Meeting #1	Colliers Engineering & Design Office	Introduce project; Review Public Engagement Plan; Review Scope and Schedule	March 9, 2020
CAC Meeting #2	Virtual	Provide an update on public engagement; Review survey responses; Review existing conditions; Racial Equity Subcommittee Discussion	May 28, 2020
CAC Tour	ILN Study Area	Walking tour of portions of ILN study area	August 6, 2020
CAC Meeting #3	Virtual	Provide an update on public engagement and project status; Review key findings (traffic, multimodal and market analyses, etc.)	October 29, 2020
CAC Meeting #4	Virtual	Urban Design Kick off; Traffic Analysis Update; Future Conditions Input	February 2, 2021
CAC Meeting #5	Virtual	Review public feedback received so far; Review Study Goals, Introduce Design Concepts; Prepare for upcoming public workshops	June 15, 2021
CAC Meeting #6	Virtual	Review project goals and context; Review concept evaluation process; Introduce Preferred Concept	November 2, 2021
CAC Meeting #7	Colliers Engineering & Design Office	Recap of planning process; Introduce Draft Study	April 11, 2022
Scoping/ Preliminary Design Phase (Anticipated)			
CAC Meeting #1	Prayer House Church of God by Faith	Reintroduce project and CAC; Review scope of Design Phase and next steps	November 14, 2023
CAC Meeting #2	Prayer House Church of God by Faith	Traffic, Land Use & Mobility Study, Public Engagement	May 30, 2024
CAC Meeting #3	Virtual	Feedback on draft Project Scoping Report, general updates	August 28, 2024
CAC Meeting #4	In-person	Design workshop	October 22, 2024
CAC Meeting #5	TBD	TBD	December 10, 2024
CAC Meeting #6	TBD	TBD	Winter 2025

7.1.4 TAC Meetings

The Technical Advisory Committee (TAC) met seven times over the course of the development of the Planning Study to discuss project status, review project deliverables and provide valuable feedback to the Project team. The TAC consists of technical representatives from the City of Rochester, Monroe County, and a variety of regional entities (NYSDOT, Empire State Development, Genesee Transportation Council, etc.). The TAC has been reactivated for the scoping phase and it is anticipated that the TAC will meet up to five times during the design phase of the Project.

An overview of TAC meetings can be found in the table below.

Figure 60 TAC Meetings

Meeting Number	Meeting Location	Purpose	Meeting Date
Planning Phase			
TAC Meeting #1	Virtual	Introduce project; Review Public Engagement Plan; Review Scope and Schedule	January 31, 2020
TAC Meeting #2	Virtual	Review existing conditions, project status, and public engagement progress	April 17, 2020
TAC Meeting #3	Virtual	Review project status updates (traffic analysis, schedule updates, future engagement activities); Discuss Multimodal and Market analyses	October 6, 2020
TAC Meeting #4	Virtual	Urban Design Kick off; Traffic Analysis Update; Future Conditions Input	January 26, 2021
TAC Meeting #5	Virtual	Review public feedback received so far; Review Design Concepts; Discuss concept evaluation	June 7, 2021
TAC Meeting #6	Virtual	Review project goals and context; Review concept evaluation process; Discuss Preferred Concept	October 6, 2021
TAC Meeting #7	Virtual	Recap of planning process; Introduce and discuss Draft Study and next steps	March 17, 2022
Scoping/ Preliminary Design Phase (Anticipated)			
TAC Meeting #1	Virtual	Re-introduce the project, review Scoping and Preliminary Design phases.	March 7, 2024
TAC Meeting #2	Virtual	Discuss Project Scoping Report.	September 9, 2024
TAC Meeting #3	Virtual	TBD	Winter 2025
TAC Meeting #4	Hybrid	TBD	Spring 2025
TAC Meeting #5	Hybrid	TBD	Summer 2025

7.1.5 Stakeholder Meetings

Over the course of the planning phase, the City of Rochester conducted multiple rounds of stakeholder meetings with individual stakeholders and community groups to discuss topics selected by the stakeholders in relation to the Project. Stakeholder meetings will occur as needed throughout the design process.

An overview of past stakeholder meetings can be found in the table below.

Figure 61 Stakeholder Meetings

Stakeholder Agency / Organization	Meeting Date	Meeting Date
Planning Phase		
Marketview Heights Collective Action Project		August 10, 2020
City of Rochester REAL Initiative		October 2, 2020
Grove Place Association		October 10, 2020
World of Inquiry School		Multiple dates
Lewis Street Center for Equity		April 6, 2021
Prayer House Church of God by Faith		October 6, 2021
B&L Wholesale		December 16, 2021
Scoping and Preliminary Design Phase		
Rochester Community Design Center		April 12, 2024
NYSDOT Regional Design Engineers Site Tour		April 16, 2024
Rochester Downtown Partnership Board		April 23, 2024
Leadership Rochester		April 24, 2024
New Bethel Church		May 9, 2024
Spiritus Christi Church		June 18, 2024
HINGE Neighbors		June 25, 2024
Salem United Church		June 25, 2024
RGRTA Meeting		July 25, 2024
High Falls Business Improvement District		August 15, 2024
Reconnect Rochester		September 6, 2024
NYDOT & Gov. Hochul’s Executive Chamber Staff Tour		September 6, 2024
RDDC Board		September 12, 2024
Lewis Street YMCA – Fairy Grandparents Group		September 5, 2024
Partnership for Downtown Rochester		September 12, 2024

7.1.6 Other Meetings

The Project Team conducted a variety of pop-up engagement opportunities throughout the planning phase of the Project. Pop-up events are intended to inform the public about the project and solicit feedback from the community in an informal and non-traditional manner as compared to a formal public workshop.

A summary of pop-up events that occurred during the planning phase can be found in the table below.

Figure 62 Other Meetings & Pop-ups

Event / Location	Purpose	Event Date
Planning Phase		
Rochester Public Market	Provide project overview to event attendees	June 17, 2021
Frontier Field: Red Wings Game	Provide project overview to event attendees	June 18, 2021
YWCA (N. Clinton Avenue)	Provide project overview and solicit feedback to residents	June 22, 2021
Live on the Loop (Scio Street)	Share information about the preferred concept to event attendees	June 5, 2022
Scoping and Preliminary Design Phase (including planned events)		
Pop-up at the Family Dollar	Build awareness and seek feedback	May 6, 2024
Pop-up at New Bethel Church	Build awareness and seek feedback	May 9, 2024
Pop-up at Black Girls Do Bike Silent Ride	Build awareness and seek feedback	May 15, 2024
Pop-up at Strong Museum of Play	Build awareness and seek feedback	May 19, 2024
Pop-up at Tops	Build awareness and seek feedback	May 25, 2024
Pop-up at Reconnect Rochester’s ROC’n Roll Community Bike Ride	Build awareness and seek feedback	June 2, 2024
Pop-up at La Marketa International Plaza	Build awareness and seek feedback	June 16, 2024
Pop-up at the ROC Juneteenth 5K Run with Spiritus Christi	Build awareness and seek feedback	June 19, 2024
Pop-up at the Public Market	Build awareness and seek feedback	June 22, 2024
Pop-up at Salem United Church	Build awareness and seek feedback	June 25, 2024
Pop-up at YWCA	Build awareness and seek feedback	June 26, 2024
Pop-up at High Falls BID meeting	Build awareness and seek feedback	July 11, 2024
Pop-up at Tops	Build awareness and seek feedback	July 21, 2024
Pop-up at Midday Bash	Build awareness and seek feedback	July 24, 2024
Pop-up at Black Culture Fest	Build awareness and seek feedback	July 27, 2024
Pop-up at the Puerto Rican Fest	Build awareness and seek feedback	August 1, 2024
Pop-up at Jordan Health Porch Fest	Build awareness and seek feedback	August 3, 2024

Pop-up at Downtown Presbyterian Church	Build awareness and seek feedback	August 11, 2024
Pop-up at Strong Museum of Play	Build awareness and seek feedback	August 12, 2024
Pop-up at Midday Bash	Build awareness and seek feedback	August 14, 2024
Pop-up at the Public Market	Build awareness and seek feedback	August 17, 2024
Pop up at Rochester Summer Soul Music Festival	Build awareness and seek feedback	August 24, 2024
Pop-up at La Marketa	Build awareness and seek feedback	September 15, 2024

7.1.7 Public Meetings

Over the course of the planning phase, the Project team held 10 public workshops. Public workshops were advertised on the Project website and social media, as well as through radio interviews. Over 22,000 direct mailers were sent to addresses as part of the Planning Study. Mailers and project flyers were provided in English and Spanish. Workshops occurred both in-person at multiple venues, and virtually over Zoom.

Public meeting #1 was held on March 21, 2021, via Zoom at 12 PM and 6 PM. The first round of public workshops introduced the 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. Almost 100 people attended the sessions.

The second round of public meetings were held on June 23, 25, and 29, 2021. 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, with a virtual option via zoom offered on June 25. The six concept alternatives for the re-design of the Inner Loop North corridor were presented to the public for comment. Community members also identified what they saw as opportunities for different parts of the study area. The in-person sessions offered a number of project boards and multiple opportunities for participants to provide direct feedback and talk to members of the Project Team. Almost 90 people attended the in-person sessions, and 41 attended the virtual session, for a total of 130 participants.

The final round of public meetings occurred on December 2, 6, and 7, 2021. The workshops were held in-person at Prayer House Church of God by Faith, YMCA Center for Equity at Lewis Street (at 12 PM and 6 PM), and virtually via Zoom. The preferred concept, built from community feedback, was revealed to community members at these sessions. Potential impacts of the implementation of the preferred concept, including traffic and greenhouse gas emissions, were discussed. At each in-person session, the Project team provided a presentation about the Project overview and goals, the preferred concept and concept evaluation process, ongoing analyses, community engagement, etc. After the presentation, the attendees had the opportunity to ask questions, talk to the Project team, and participate in interactive boards. The virtual session offered a detailed presentation and break-out discussion rooms. Over 100 individuals

participated in the final round of meetings.⁷An overview of the public meetings that occurred during the Planning Phase is below.

There will be up to five public workshops held throughout the scoping and design phases of the Project. Tentative dates and topics for the Public Workshops are noted below.

Figure 63 Public Meetings

Meeting Number	Meeting Location	Purpose	Meeting Date
Planning Phase			
Public Meeting #1	Virtual	Introduced the Inner Loop North project to the community; Outlined the planning process; Identified initial project goals	March 21, 2021 (Two sessions)
Public Meeting #2	YMCA Center for Equity at Lewis Street	Introduced six design concepts for public comment; Identify areas of opportunity for future development	June 23, 2021
Public Meeting #2	Virtual	Introduced six design concepts for public comment; Identify areas of opportunity for future development	June 25, 2021
Public Meeting #2	Genesee Brew House	Introduced six design concepts for public comment; Identify areas of opportunity for future development	June 29, 2021
Public Meeting #2	RIT Center for Urban Entrepreneurship	Introduced six design concepts for public comment; Identify areas of opportunity for future development	June 29, 2021
Public Meeting #3	Prayer House Church of God by Faith	Preferred concept revealed for public comment	December 2, 2021
Public Meeting #3	Virtual	Preferred concept revealed for public comment	December 6, 2021
Public Meeting #3	YMCA Center for Equity at Lewis Street	Preferred concept revealed for public comment	December 7, 2021 (Two sessions)
Scoping and Preliminary Design Phase			
Public Workshop #1	World of Inquiry School	Project Update (meeting completed)	March 12, 2024
Public Workshop #2	Lewis Street YMCA Neighborhood Center and Virtual	Presentation of draft Project Scoping Report	August 21, 2024 in person; August 22, 2024 virtual
Public Workshop #3	TBD	Design Review	Winter 2025
Public Workshop #4	TBD	Design Reveal	Spring 2025

7.2 Section 106 Coordination

Participants in the Section 106 process include SHPO, FHWA, NYSDOT, ACHP, federally recognized Native American tribes, and other Consulting Parties. Public involvement under Section 106 will be

⁷ Article 2 of NYS Eminent Domain Procedure Law (EDPL) requires a formal public hearing prior to acquisitions for the project unless requirements for an exemption under section 206 of EDPL have been met.

accomplished in coordination with NEPA public outreach, to provide information and seek public comment regarding the Project's effects on historic properties. Individuals and organizations with a demonstrated interest in the Project may participate in the Section 106 process as Consulting Parties, due to the nature of their legal or economic relation to the Project or affected properties, or their concern with the Project's effect on historic properties. Their participation is subject to approval by the FHWA.

Consulting parties will be provided an opportunity to express their views at specific points in the Section 106 process, including the identification and evaluation of historic properties, the assessment of effects and the development of measures to avoid, minimize, or mitigate any adverse effects on historic properties.

Appendix F includes a summary of public engagement activities and comments received for the Scoping Report.

For additional information or to provide comments, please contact:

David Riley, Project Manager
David.Riley@CityofRochester.Gov
(585) 428-6978.

Project: (PIN) 4CR0.17 Inner Loop North Transformation Project

Mailing Address
City of Rochester
30 Church Street
Room 300B
Rochester, NY 14614