

WATERTOWN-JEFFERSON COUNTY TRANSPORTATION COUNCIL

WATERTOWN TRUCK ROUTE STUDY

FINAL REPORT

February 2022

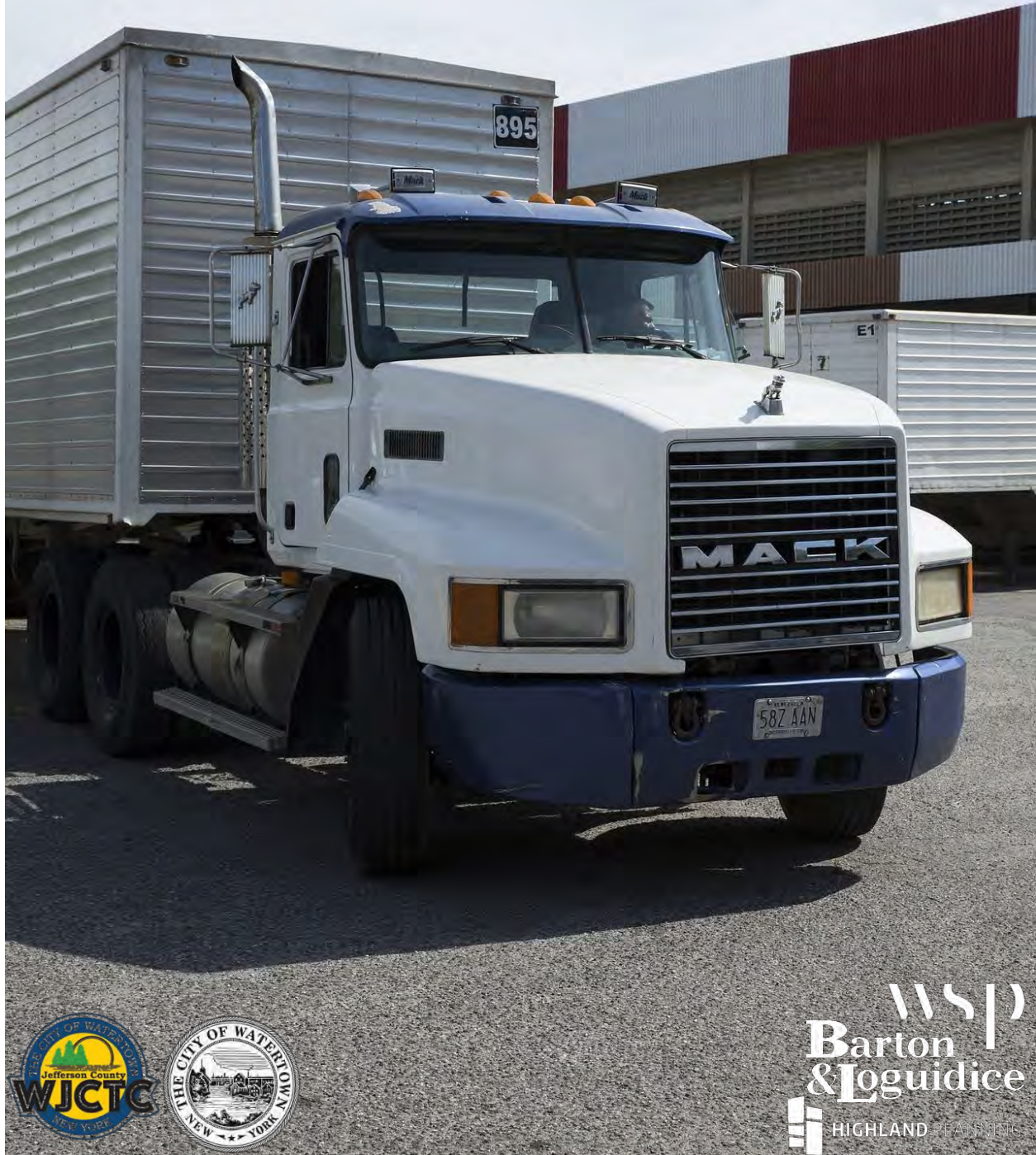


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1 INTRODUCTION

The Watertown Truck Route Study provides for an area-wide study of truck routes within the City of Watertown. The study area includes the City of Watertown and areas immediately adjacent to it, including I-81. The purpose of this Study is to further investigate the issues and opportunities associated with truck traffic, their destinations, and impacts to adjacent land use and property.

Figure 1 Project Area Overview



THE GOAL

The core goal of this study is to evaluate ways to modify the existing designated truck routing between I-81 and Public Square to designate alternative truck routes that better accommodate trucks, other vehicles, and makes downtown safer for multi-modal transportation.

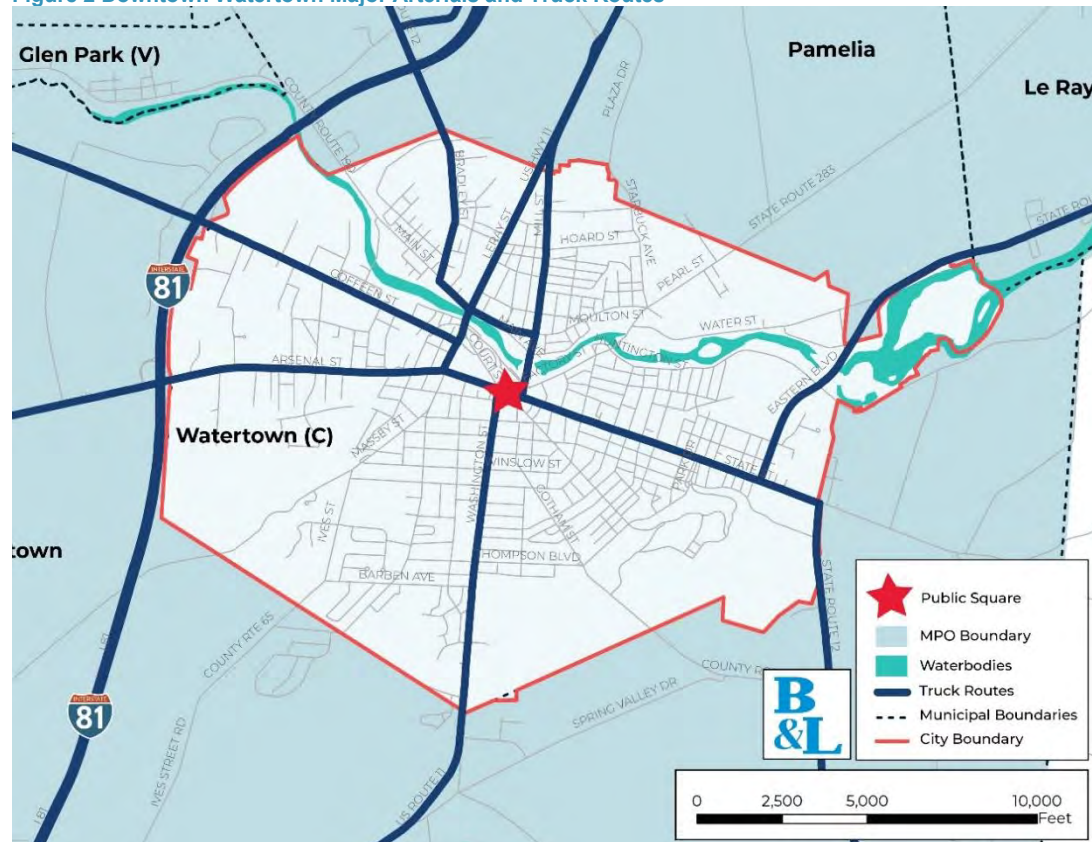
THE CHALLENGE

The City of Watertown has a radial street network with major arterials bisecting the city core. This alignment has resulted in bottlenecks for traffic traveling through the downtown area, particularly around Public Square. The section of downtown around Public Square has designated truck routes that

not only contribute to congestion and traffic bottlenecks, but also pose safety concerns for pedestrians and bicyclists in and around Public Square.

During the development of the WJCTC 2045 Long Range Transportation Plan, the need for a truck study was identified that would look at clarifying the state routing structure across Watertown as well as look at ways to reduce the number of trucks traveling through Public Square. Figure 2 is taken from the WJCTC Long Range Transportation Plan and identifies the major arterials that cut through Downtown Watertown.

Figure 2 Downtown Watertown Major Arterials and Truck Routes



Further, the signing of certain State Routes is confusing and needs to be addressed to create an accurate and seamless NY Route 12 and a US 11 Route through the City.






THE PROCESS

- This study began with a review of previous studies and plans for the City of Watertown and Jefferson County along with a mapping of state routes to understand context.
- Using data from NYSDOT, overall Average Annual Daily Traffic (AADT) and truck-specific AADT were mapped to understand where the heaviest truck volumes existed throughout Watertown.
- NYSDOT data was supplemented with data from FHWA's Freight Analysis Framework (FAF) which integrates data from a variety of sources to create a comprehensive picture of freight movement in metropolitan areas currently and with a 30-year forecast. While this data was limited for the Watertown metro area, it does provide a glimpse into understanding the general freight activity trends in the greater Watertown area, including major generators of truck activity.

- Using data from U.S. DOT's National Performance Management Research Data Set (NPMRDS), which contains field-observed travel time and speed data collected anonymously from a fleet of probe vehicles (cars and trucks) equipped with mobile devices, information on Truck Travel Time Reliability was analyzed. This allows for a glimpse into bottleneck areas where trucks experience congestion.
- Intersection vehicle classification and count data that was collected during the WJCTC Long Range Transportation Plan in 2018 was used to identify intersections that experience higher truck volumes and to understand various truck movements across Watertown.
- Additionally, for this effort, truck-specific turning movement counts were collected by NYSDOT staff in June 2021 to gain a better understanding of the truck movements in and around Public Square.
- Finally, outreach to various freight and logistics stakeholders provided information straight from the source on freight/ truck routes, challenges, trends, activity, and opportunities.
- The input obtained as part of the study was supplemented by a review of best practices to see how other similar size and character regions are dealing with freight and truck challenges.

THE SOLUTION

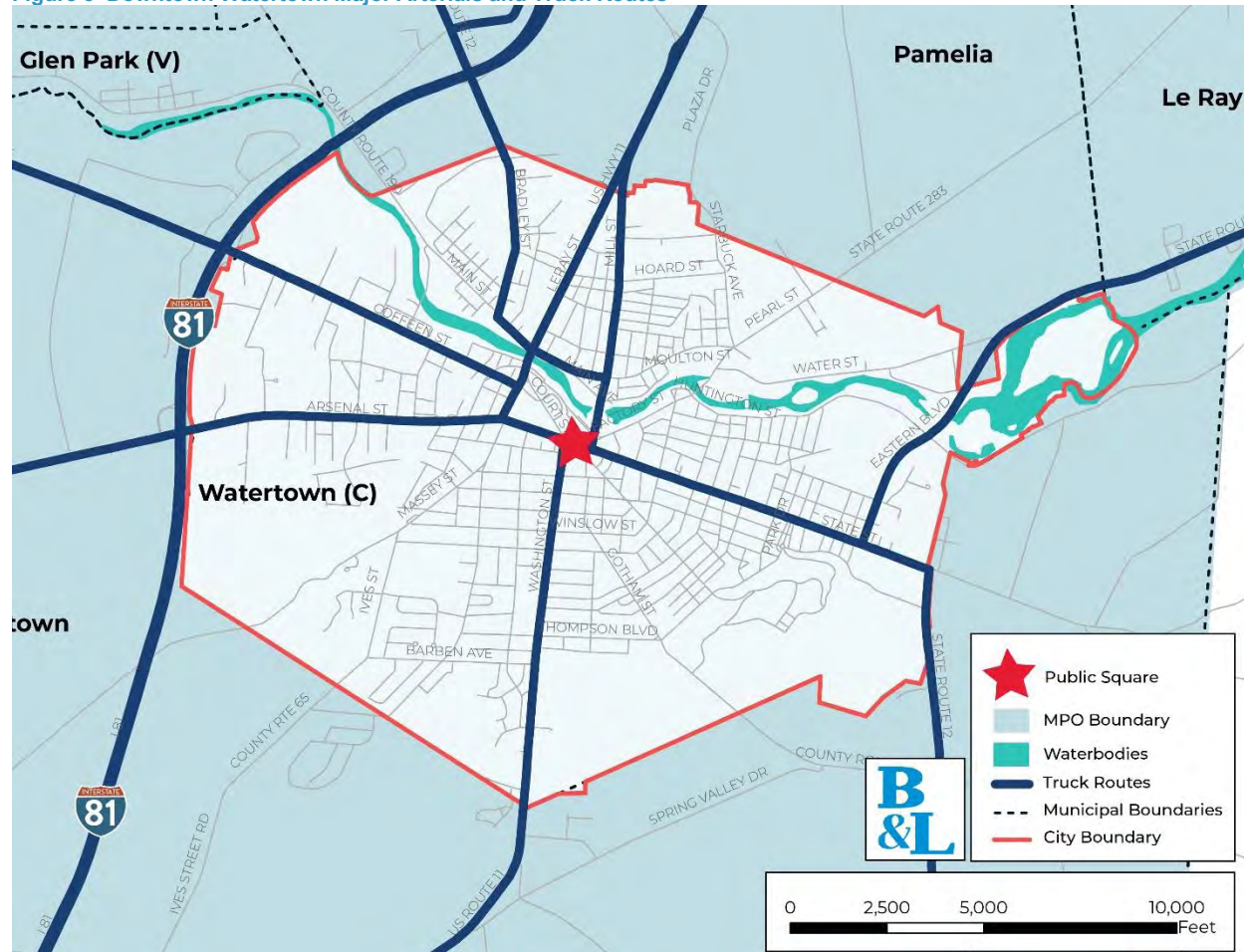
This study proposes several recommendations to address the challenges brought on by trucking and freight movement throughout Watertown and to improve the quality and comfort of Public Square for multi-modal transportation. These recommendations are explained further in the report, and are built around the following categories:

	Routing	Strategies to make the state routing and truck routing system throughout Watertown more clear and consistent, while avoiding Public Square as much as feasible.
Administrative Actions		Those strategies that require an administrative action or an update to a policy or regulation.
	Treatments	Focuses on infrastructure projects and various treatments to roadways that can facilitate truck movements to preferred corridors and help to deter trucks from utilizing Public Square.
Signage		Relating to the signage placed along roadways that directs vehicular and truck traffic.
	Technology	Solutions that are technology-based (such as GPS-based mapping apps, connected vehicle technology, etc.)

2 THE GOAL

During the development of the WJCTC 2045 Long Range Transportation Plan, the need for a truck study was identified that would look at clarifying the state routing structure across Watertown as well as look at ways to reduce the number of trucks traveling through Public Square. Figure 3 is taken from the WJCTC Long Range Transportation Plan and identifies the major arterials that cut through Downtown Watertown.

Figure 3 Downtown Watertown Major Arterials and Truck Routes



The core goal of this study is to evaluate ways to modify the existing designated truck routing between I-81 and Public Square to designate alternative truck routes that better accommodate trucks, other vehicles, and makes downtown safer for multi-modal transportation.

This study was coordinated with the Industrial Park Access Study being conducted concurrently by the MPO. These studies combined can work to not only create improved safety access to the Public Safety Center, but also enhance truck access to/from the industrial park as well as throughout Watertown.

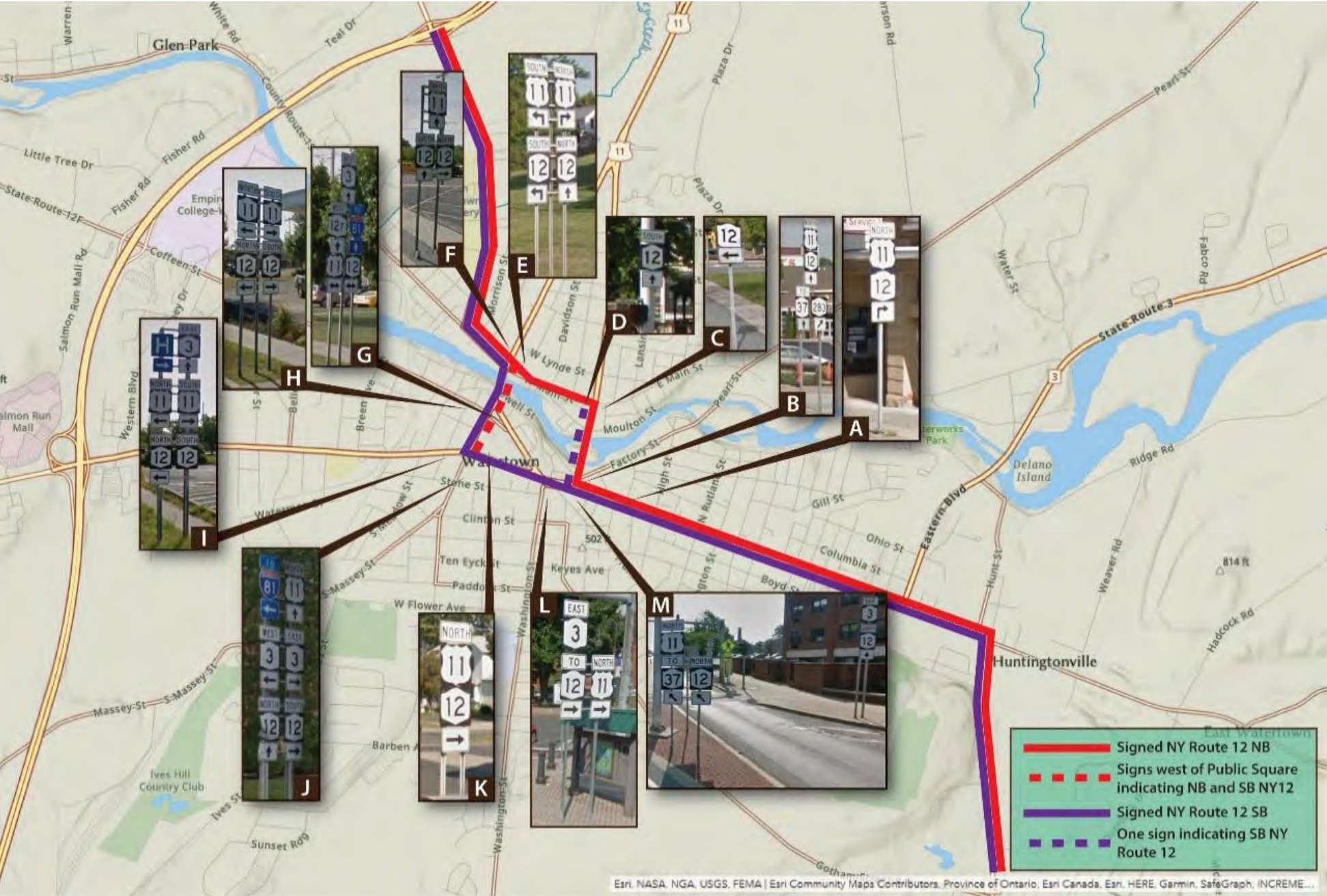
3 THE CHALLENGE

The City of Watertown has a radial street network with major arterials bisecting the City core. This alignment has resulted in bottlenecks for traffic traveling through the downtown area, particularly around Public Square. The section of downtown around Public Square has designated truck routes that not only contribute to congestion and traffic bottlenecks, but also pose safety concerns for pedestrians and bicyclists in and around Public Square.

Several major roadways travel through Watertown (NY 3, NY 12, and US 11) and signage is at times overwhelming, especially in the downtown area because of other wayfinding programming. Further, the signing of certain State Routes is confusing and needs to be addressed to create an accurate and seamless NY Route 12 and a US 11 route through the City. The following figures portray the challenging route structure of NY Route 12 and US 11 through Watertown. Figure 4 shows the various route structures and accompanying signage for NY Route 12. Figure 5 shows the various route structures and accompanying signage of US 11.

Figure 4 NY Route 12 Routing and Signage

LOCATION	DESCRIPTION
A	Northbound NY Route 12 travelers on State Street, as they approach the intersection with Mill Street, are presented with signage indicating that NY Route 12 requires a right turn onto Mill Street.
B	Signage along Mill Street indicates that NY Route 12 continues northbound through the intersection of Factory Street (NY Route 283).
C	Northbound NY Route 12 travelers on Mill Street, as they approach the intersection of W. Main Street/ E. Main Street, are presented with signage indicating NY Route 12 requires a left turn onto W. Main Street.
D	Southbound travelers on Mill Street, as they approach the intersection of W. Main Street/ E. Main Street, are only presented with signage indicating southbound NY Route 12 is a through movement on Mill Street; no indication of NY Route 12 continuing on W. Main Street.
E	Northbound NY Route 12 travelers on W. Main Street, as they approach the intersection with Leray Street, are presented with signage indicating northbound NY Route 12 continues as a through movement on W. Main Street and that southbound NY Route 12 requires a left turn onto Court Street Bridge.
F	Southbound travelers on Leray Street, as they approach the intersection with W. Main Street, are presented with signage indicating that northbound NY Route 12 requires a right turn onto W. Main Street and southbound NY Route 12 is a through movement, continuing onto Court Street Bridge.
G	Westbound travelers on Coffeen Street, as they approach the intersection with N. Massey Street, are presented with signage indicating that NY Route 12 is in both directions on N. Massey Street.
H	Eastbound NY Route 12F travelers on Coffeen Street, as they approach the intersection with N. Massey Street, are presented with signage indicating that NY Route 12 is in both directions on N. Massey Street.
I	Eastbound NY Route 3 travelers on Arsenal Street, as they approach the intersection with N. Massey Street/ S. Massey Street, are presented with signage indicating that northbound NY Route 12 requires a left turn onto N. Massey Street and that southbound NY Route 12 is a through movement continuing on Arsenal Street.
J	Northbound travelers on S. Massey Street, as they approach the intersection with Arsenal Street, are presented with signage indicating that northbound NY Route 12 requires a through movement continuing on N. Massey Street and that southbound NY Route 12 south is a right turn onto Arsenal Street.
K	Westbound NY Route 3 travelers on Arsenal Street, as they approach the intersection with N. Massey Street/ S. Massey Street, are presented with signage indicating that NY Route 12 requires a right turn onto N. Massey Street.
L	Northbound travelers on Washington Street, as they approach Public Square, are presented with signage indicating that a right turn will get you to NY Route 12.
M	Eastbound travelers through Public Square, as they approach the intersection with Mill Street, are presented with signage indicating that northbound NY Route 12 requires a left turn onto Mill Street and southbound NY Route 12 is a through movement continuing onto State Street.



ROUTE 12 FINDINGS

The following section reflects takeaways illustrated in Figure 4.

The NY Route 12 structure is set up as a couplet. Signage directs northbound travelers that are approaching Public Square from the east or south to travel north along Mill Street, and then west along W. Main Street. These travelers will then tie into NY Route 12, continuing along W. Main Street to Bradley Street.

Signage is set up to direct southbound NY Route 12 travelers that are approaching from the northwest and west to take Court Street Bridge and/or S. Massey Street to Arsenal Street where NY Route 12 continues. This couplet structure is set up to offer different northbound and southbound NY Route 12 routing structures – a northbound NY Route 12 that runs along State Street, to Mill Street, to W. Main Street and continuing on W. Main Street to Bradley Street, and a southbound NY Route 12 that runs along W. Main Street, Court Street Bridge, S. Massey Street, and Arsenal Street to State Street (See Figure 4)

However, some exceptions to this are – signage at southbound Mill Street at W. Main Street/ E. Main Street indicates that NY Route 12 continues south along Mill Street with no indication that NY Route 12 is routed along W. Main Street. Signage for roadways approaching S. Massey Street west of Public Square (such as on Coffeen Street and Arsenal Street) directs northbound NY Route 12 travelers north on N. Massey Street to W. Main Street. This structure would indicate that portions of N. Massey Street are northbound NY Route 12 and portions of Mill Street are southbound NY Route 12, thus adding to a confusing routing structure.

Figure 5 US 11 Routing and Signage

LOCATION	DESCRIPTION
A	Northbound US 11 travelers on State Street, as they approach the intersection with Mill Street, are presented with signage indicating that US 11 requires a right turn onto Mill Street.
B	Signage along Mill Street indicates that US 11 continues northbound through the intersection of Factory Street (SR 283).
C	Northbound US 11 travelers on Mill Street, as they approach the intersection of W. Main Street/ E. Main Street, are presented with signage indicating SR 12 requires a left turn onto W. Main Street but no indication as to which way US 11 routing is.
D	Westbound travelers on W. Main Street, as they approach the intersection of Leray Street, are presented with signage indicating northbound US 11 requires a right turn onto Leray Street and southbound US 11 requires a left turn onto Court Street Bridge.
E	Southbound State Route 12 travelers on W. Main Street, as they approach the intersection of Leray Street, are presented with signage indicating northbound US 11 requires a left turn onto Leray Street and southbound US 11 requires a right turn onto Court Street Bridge.
F	Westbound travelers on Coffeen Street, as they approach the intersection with N. Massey Street, are presented with signage indicating that US 11 is in both directions on N. Massey Street.
G	Eastbound SR 12F travelers on Coffeen Street, as they approach the intersection with N. Massey Street, are presented with signage indicating that northbound US 11 requires a left turn on N. Massey Street and southbound US 11 requires a right turn onto N. Massey Street.
H	Southbound US 11 travelers on N. Massey Street, as they approach the intersection with Arsenal Street, are presented with signage indicating that US 11 requires a through movement onto S. Massey Street.
I	Eastbound SR 3 travelers on Arsenal Street, as they approach the intersection with N. Massey Street/ S. Massey Street, are presented with signage indicating that northbound US 11 requires a left turn onto N. Massey Street and that southbound US 11 requires a right turn onto S. Massey Street.
J	Northbound bound travelers on S. Massey Street, as they approach the intersection with Arsenal Street, are presented with signage indicating that US 11 northbound requires a through movement continuing on N. Massey Street.
K	Westbound travelers on Arsenal Street, as they approach the intersection with N. Massey Street/ S. Massey Street, are presented with signage indicating that US 11 northbound requires a right turn onto N. Massey Street, but gives no indication that US 11 southbound is a left turn onto S. Massey Street.
L	Southbound travelers on S. Massey Street, as they approach the intersection with Paddock Street, are presented with signage indicating that US 11 southbound continues with a left turn onto Paddock Street.
M	Eastbound travelers on Paddock Street, as they approach the intersection with Washington Street, are presented with signage indicating that US 11 southbound continues with a right turn onto Washington Street.



N	Northbound travelers on Washington Street, as they approach public square, are presented with signage indicating that US 11 northbound requires a right turn into public square.	P	Eastbound travelers in Public Square, as they approach the intersection with Mill Street, are presented with signage indicating that US 11 northbound requires a left turn onto Mill Street.
O	Eastbound travelers in Public Square, as they approach the intersection with Washington Street, are presented with signage indicating that US 11 Southbound requires a right turn onto Washington Street (Conflicting with a previous sign on Arsenal Street indicating that US 11 southbound follows S. Massey Street).	Q	Westbound travelers in Public Square, as they approach the intersection with Washington Street, are presented with signage indicating that US 11 southbound requires a left turn onto Washington Street.

ROUTE 11 FINDINGS

The following section reflects takeaways illustrated in Figure 5.

US 11 is also set up as a couplet through Watertown. The signage structure directs northbound US 11 travelers that are approaching Public Square from the east or south to travel north along Mill Street, but once on Mill Street, there is no signage indicating where US 11 continues. If a right turn is made onto W. Main Street, there is a sign on W. Main Street indicating US 11 northbound follows Leray Street, or a traveler would continue northbound on Mill Street until it intersects with US 11.

Additionally, the US 11 signage structure directs southbound US 11 travelers that are approaching Arsenal Street from the north or travelers that are on Arsenal Street approaching Public Square from the west, to travel south along S. Massey Street to Holcomb Street. Travelers would then turn onto Paddock Street to reach Washington Street, where southbound US 11 continues. This structure routes US 11 through primarily residential neighborhoods. Conflicting this, once eastbound travelers on Arsenal Street pass S. Massey Street and the signage directing southbound US 11 travelers to turn right onto S. Massey Street, they are met with a sign approaching Washington Street indicating that US 11 southbound is a right turn onto Washington Street. Just beyond that, there is signage indicating that northbound US 11 is a left turn onto Mill Street.

Further, travelers on Arsenal Street approaching Washington Street from the east (once they've passed Mill Street) are directed to turn left onto Washington Street for southbound US 11, rather than following the S. Massey Street route. Further, as westbound travelers on Arsenal Street approach S. Massey Street, there is only signage to make a right turn onto N. Massey Street for US 11 northbound, with no signage for southbound US 11 following S. Massey Street and conflicting with previous signage directing travelers to use Mill Street for northbound US 11.

THE PROCESS

The need for this study was identified through the 2045 WJCTC Long Range Transportation Planning process. In January 2021, the Watertown Truck Route Study was kicked off, led by a Steering Committee consisting of representatives from NYSDOT, Jefferson County, and City of Watertown. The figure below identifies the process this study followed to get from project kick-off to final recommendations.



The following sections provide a synopsis of the analysis conducted as part of this study.

3.1 TRAFFIC ANALYSIS

Figure 6 shows Average Annual Daily Traffic (AADT) and Figure 7 shows Truck AADT, as taken from NYSDOT data sources. This indicates sections of I-81, Arsenal Street, Coffeen Street, and Washington Street handle greater than 10,000 vehicles per day on average. As far as truck traffic is concerned, portions of Arsenal Street, Leray Street, and Coffeen Street are the surface streets that handle the most truck traffic in an average day.

Figure 6 Watertown Total Vehicle AADT

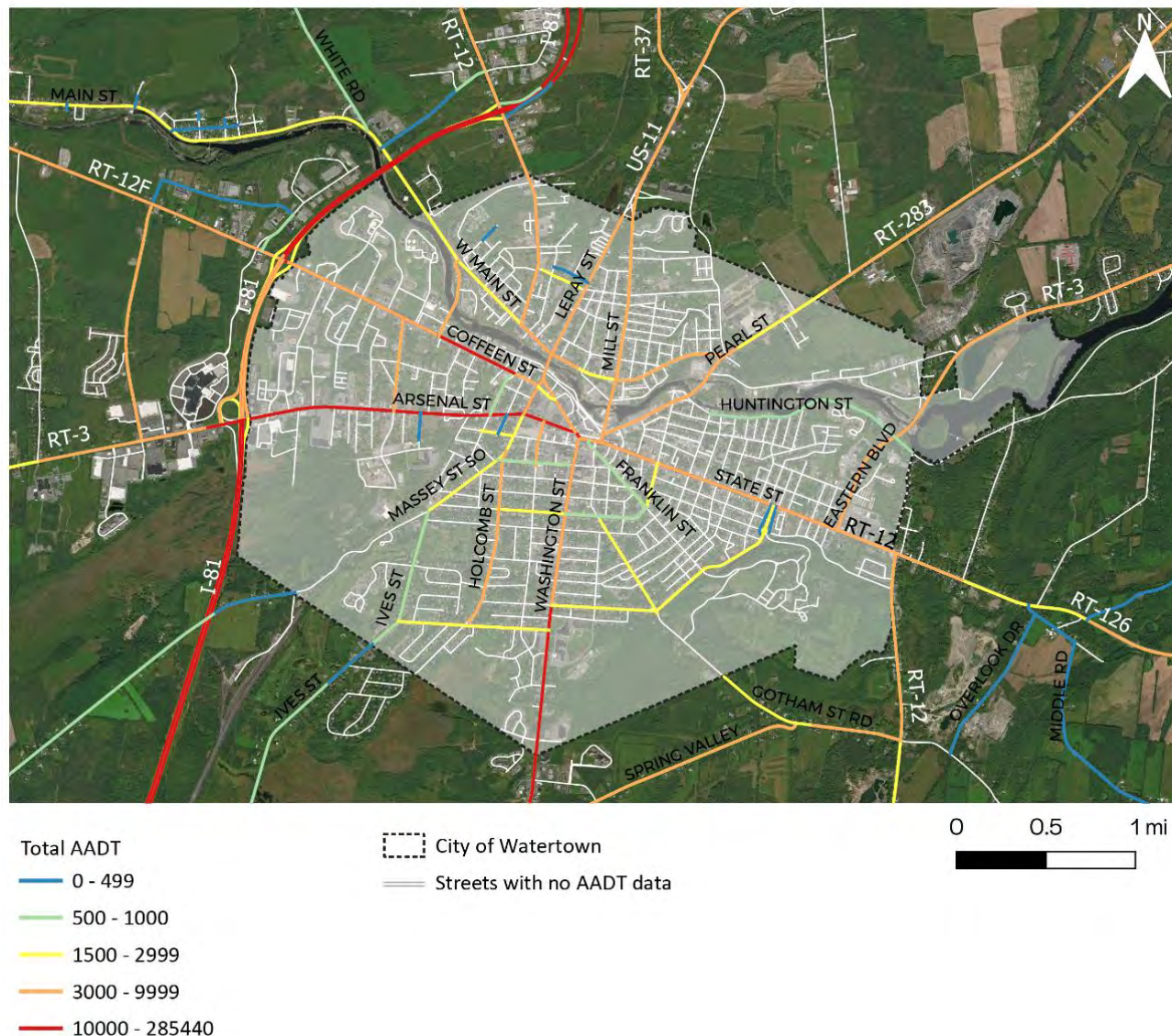


Figure 7 Watertown Truck Vehicle AADT

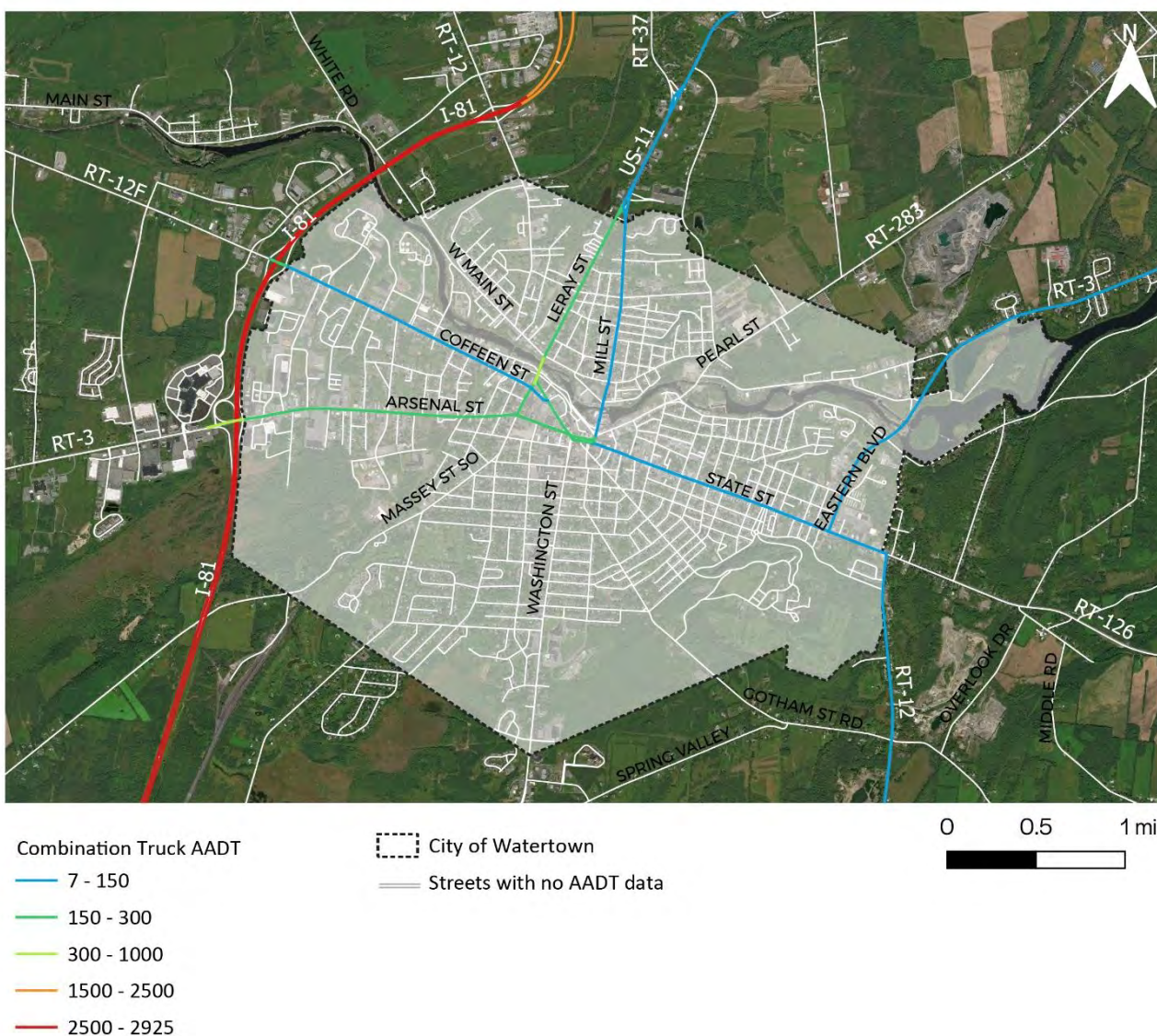
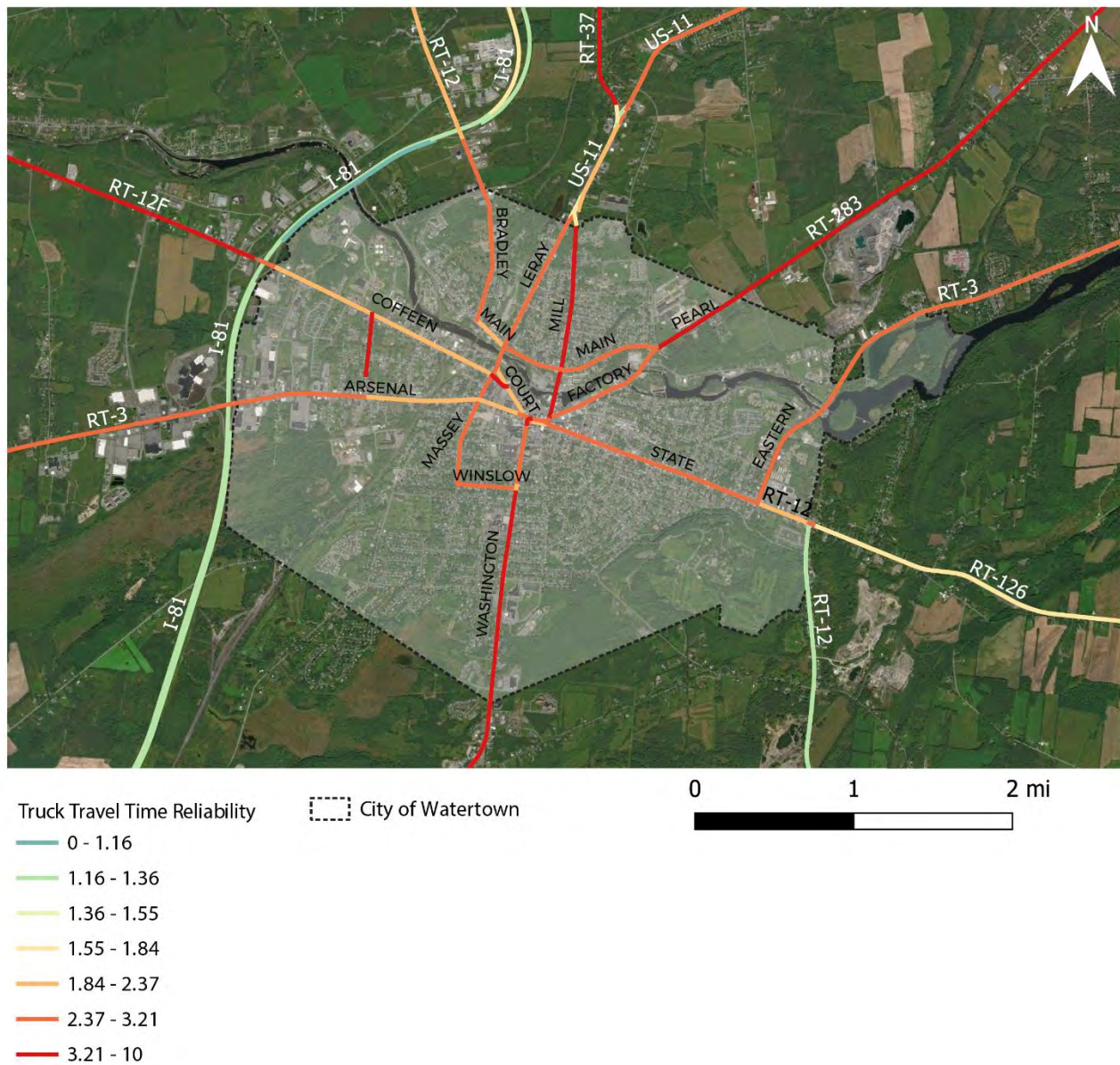


Figure 8 is a depiction of truck time reliability throughout Watertown taken from the NPMRDS. Truck Travel Time Reliability (TTTP) is an index used to show roadways that are reliable for on-time performance based on the percent of person-miles that are traveled below the posted speed limit. In more technical terms, TTTR is defined as the 80th percentile truck travel time divided by the 50th percentile truck travel time for roadway segments during peak times. The lower the TTTR ratio, the more reliable the roadway is. NPMRDS data is taken from the GPS data provided by a transponder located in a number of probe vehicles that travel throughout the country. The figure below suggests high TTTR on I-81, and NY-12 south of NY-126. Within city limits traffic is less reliable, with several road segments showing high variability of travel time.

Figure 8 Truck Travel Time Reliability



3.2 TRUCK TURNING MOVEMENT ANALYSIS

Existing and proposed truck routes were analyzed using AutoTurn 7.0 turn movement software which provides a visual interpretation of truck turning movements. The AutoTurn analysis was performed using a WB-62, a commonly utilized, standard heavy vehicle designation often seen on highways and interstates, to be conservative. The purpose of this analysis is to determine, if any, existing geometric, utility, or various infrastructure constraints that suppress natural turning movements of heavy vehicles at intersections or along corridors and assists in determining the mitigation efforts required to ensure proper lateral clearances. Intersections analyzed include Black River Parkway and Coffeen Street, Washington Street and Arsenal Street, State Street and Mill Street, W. Main Street and Leray Street, N. Massey Street and Arsenal Street, and W. Main Street and Bradley Street.

Below is a summary of potential truck turning movement conflicts along existing and proposed truck routes. The full truck turning template results are located in Appendix A. Of note is that all of the below potential conflicts

already exist for trucks across Watertown, as can be expected with tight turns associated with urban neighborhoods. Recommendations for feasibly alleviating these potential conflicts are outlined in later sections.

- Right turn from westbound State Street to northbound Mill Street – turning trucks potentially conflict with southbound Mill Street left turn lane.
- Right turn from westbound W. Main Street to northbound Leray Street – turning trucks potentially conflict with southbound Leray Street approach lanes.
- Right turn from westbound Arsenal Street to northbound N. Massey Street – turning trucks potentially conflict with existing curb and with southbound N. Massey Street left turn lane.
- Right turn from westbound W. Main Street to northbound Bradley Street – turning trucks potentially conflict with southbound Bradley Street left turn lane.
- Left turn from eastbound W. Main Street to northbound Leray Street – turning trucks potentially conflict with a crosswalk and an existing curb.
- Right turn from southbound Leray Street to westbound W. Main Street – turning trucks potentially conflict with a sidewalk and the eastbound W. Main Street thru/left turn lane.

3.3 FREIGHT ACTIVITY TRENDS

As a continuation of the data analysis and to expand the understanding of the freight and logistics industry in the Watertown region, Freight Analysis Framework (FAF) data was used to assess regional truck volumes, flows, and origin/ destination trends in the region. The FAF is a product from the Bureau of Transportation Statistics that offers a comprehensive picture of freight movement across metropolitan areas. Since Watertown is not a large enough metropolitan area to include as a separate analysis zone, county-wide and state-wide data points were used, which doesn't offer a well-defined picture for the micro-scale assessment being undertaken for this study, but still can offer trends of freight movement throughout the greater region.

FAF data was used to identify the tonnage of goods being imported to Jefferson County, and what those larger generators of inbound freight are. The largest inbound generators of freight are displayed in Figure 9 with the locations of these generators shown on Figure 10.

Figure 9 Jefferson County Top Freight Tonnage Inbound Generators

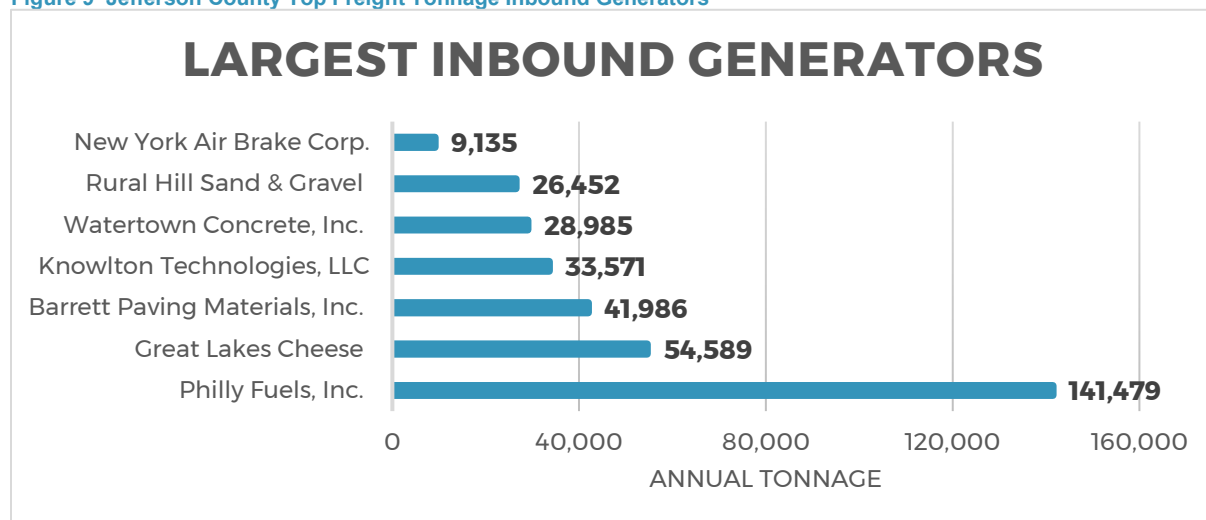
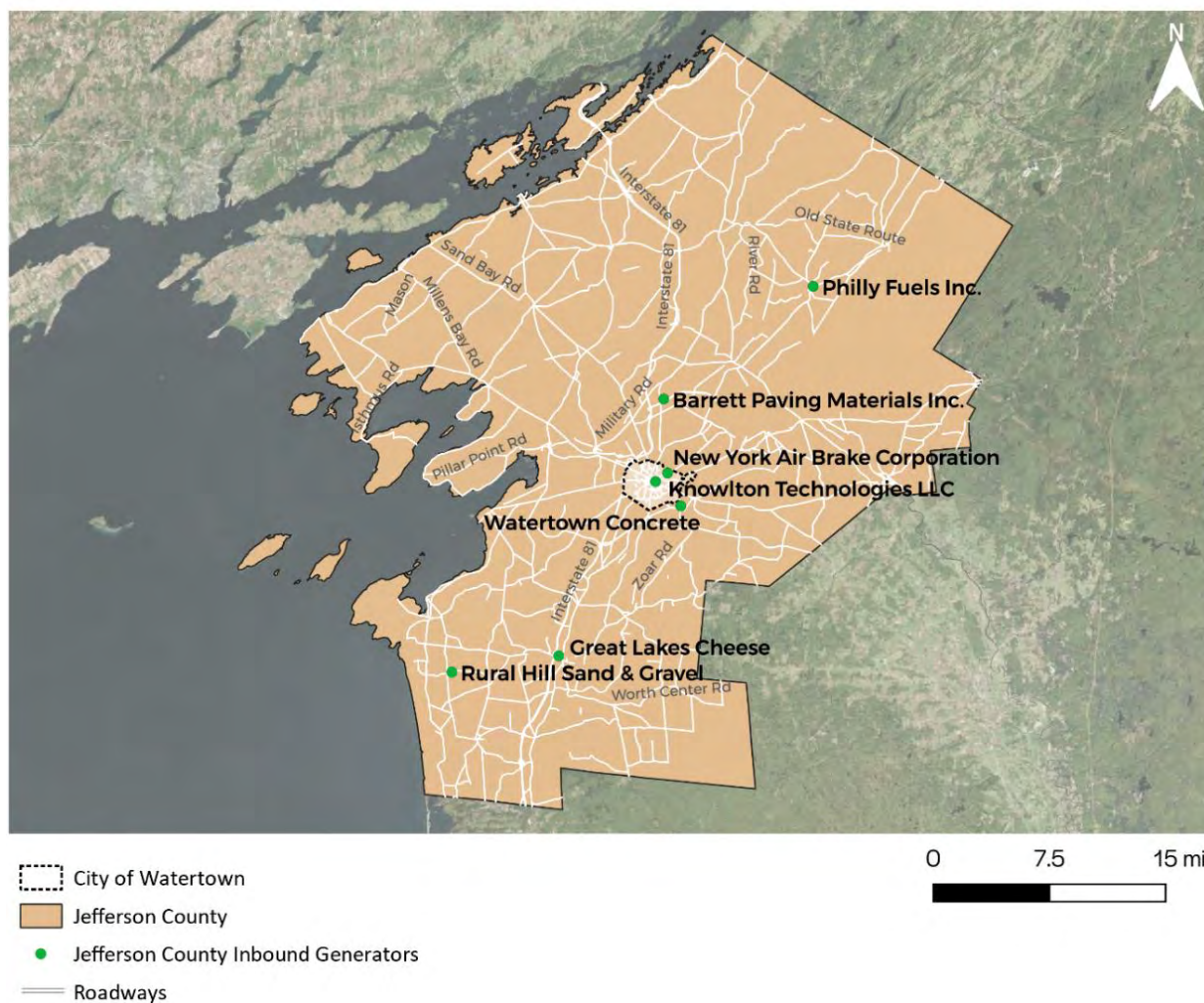


Figure 10 Location of Jefferson County Top Freight Tonnage Inbound Generators



Freight Analysis Framework data was also used to identify the tonnage of goods being exported from Jefferson County, and what those larger generators of outbound freight are. The largest generators of outbound freight are displayed in Figure 11, with the locations of these generators shown in Figure 12.

Figure 11 Jefferson County Top Freight Tonnage Outbound Generators

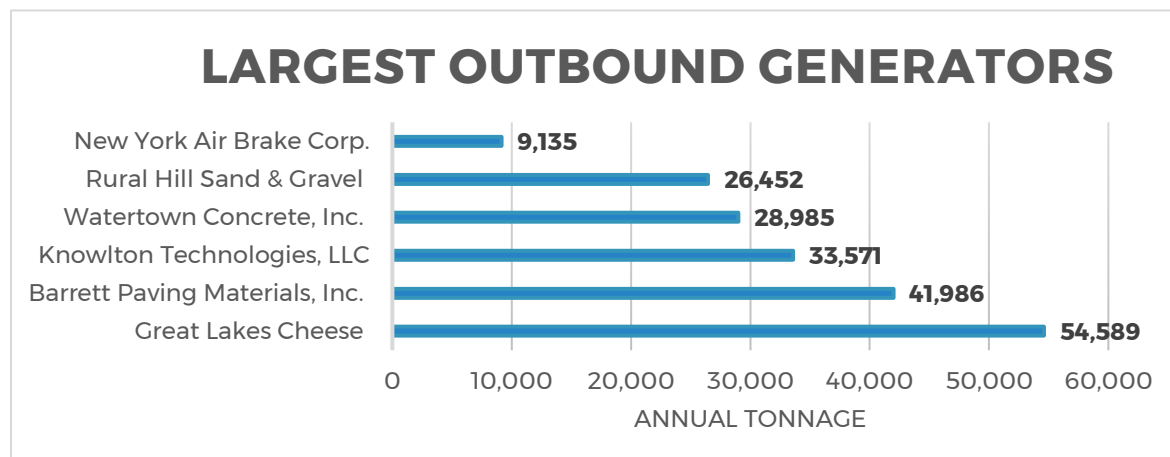
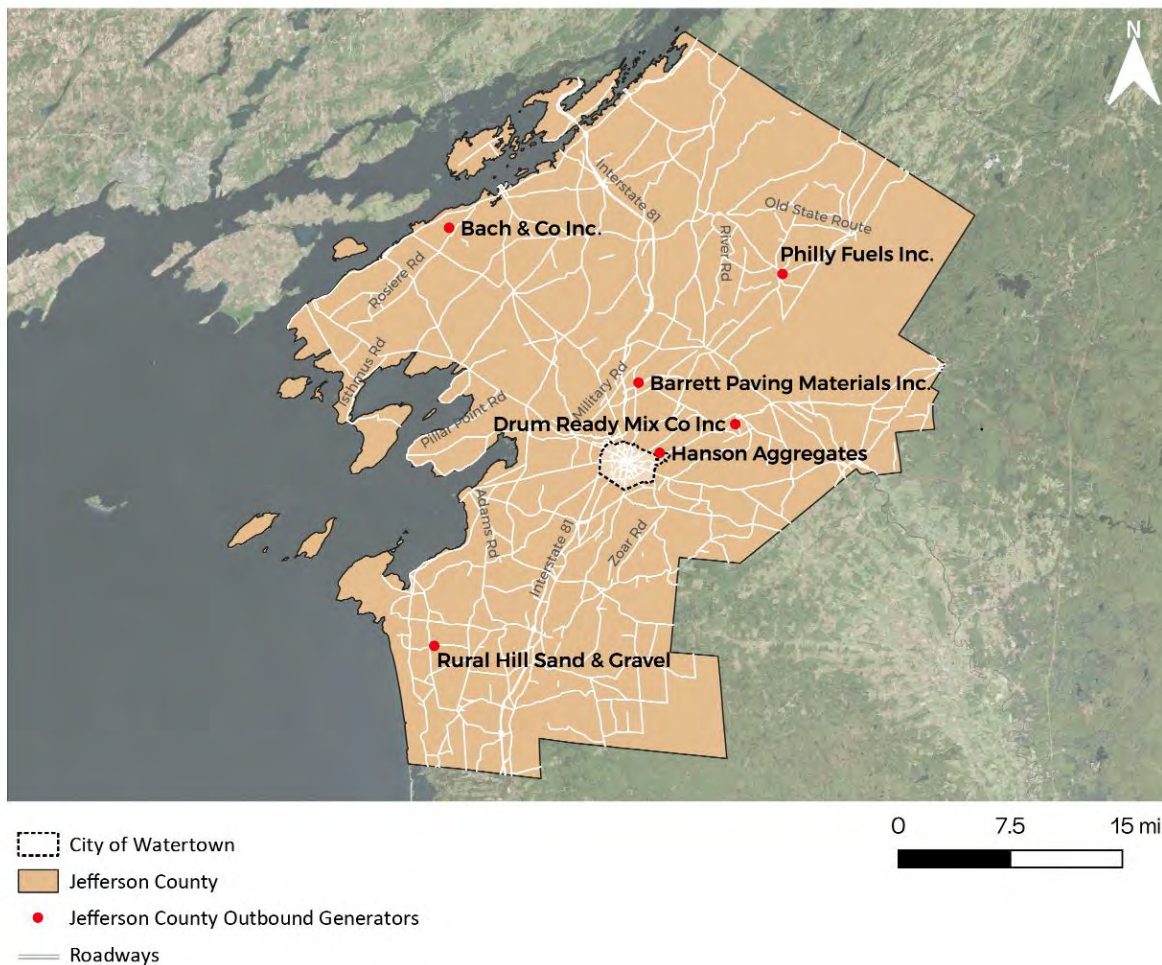


Figure 12 indicates the locations of these industries relative to the City of Watertown.

Figure 12 Location of Jefferson County Top Freight Tonnage Outbound Generators



3.4 FREIGHT & LOGISTIC STAKEHOLDER INPUT

Outreach was conducted with numerous freight and logistics stakeholders throughout Watertown, including:

- White's Lumber
- WESCO Distribution
- P L Gaetano Transportation
- New York Air Brake Corporation
- Morrison's Furniture Store
- Knowlton Technologies LLC
- FedEx Ground
- Erie Materials
- Aviagen Hatchery

These conversations led to an understanding of how each of these companies receive and ship freight at their locations, as well as suggestions for the best opportunities to direct trucks to avoid Public Square. Companies indicated that deliveries to/from their location will use a multitude of routes. Some trucks drive directly through Public Square while others will attempt to avoid Public Square. No discernable route or routes could be detected from these interviews, and the key takeaway is that truck drivers use routes that are either familiar and comfortable with or they will follow a trip routing application. Several companies indicated that the confusing routing system is problematic.

3.5 TRUCK TURNING MOVEMENT ASSESSMENT

In order to gain a more detailed understanding of truck movements throughout Watertown, two rounds of truck movement assessments were conducted.

PEAK PERIOD TRUCK TURNING MOVEMENT COUNTS

The first truck movement assessment utilized turning movement counts that were provided by NYSDOT. These turning movement counts identified vehicle classification, allowing for an assessment of heavy trucks movements at several key intersections. Counts were taken in 2019 for the morning peak (7:00am-9:00am), midday peak (11:00am-1:00pm), and afternoon peak (4:00pm-6:00pm). The following figures portray truck turning movement counts at locations around Public Square and north of Public Square along Mill Street.

This assessment revealed:

- Consistently higher truck movements along the westbound stretch of Public Square, funneling truck traffic from Factory Street, Mill Street, and State Street.
- Very little truck traffic along the eastbound stretch of Public Square.
- Relatively higher number of trucks using Mill Street as a through connection north of Black River Parkway/ Factory Street.
- Some use of Black River Parkway as a truck corridor.

Figure 13 Morning Peak Public Square Area Truck Turning Movements (2019)

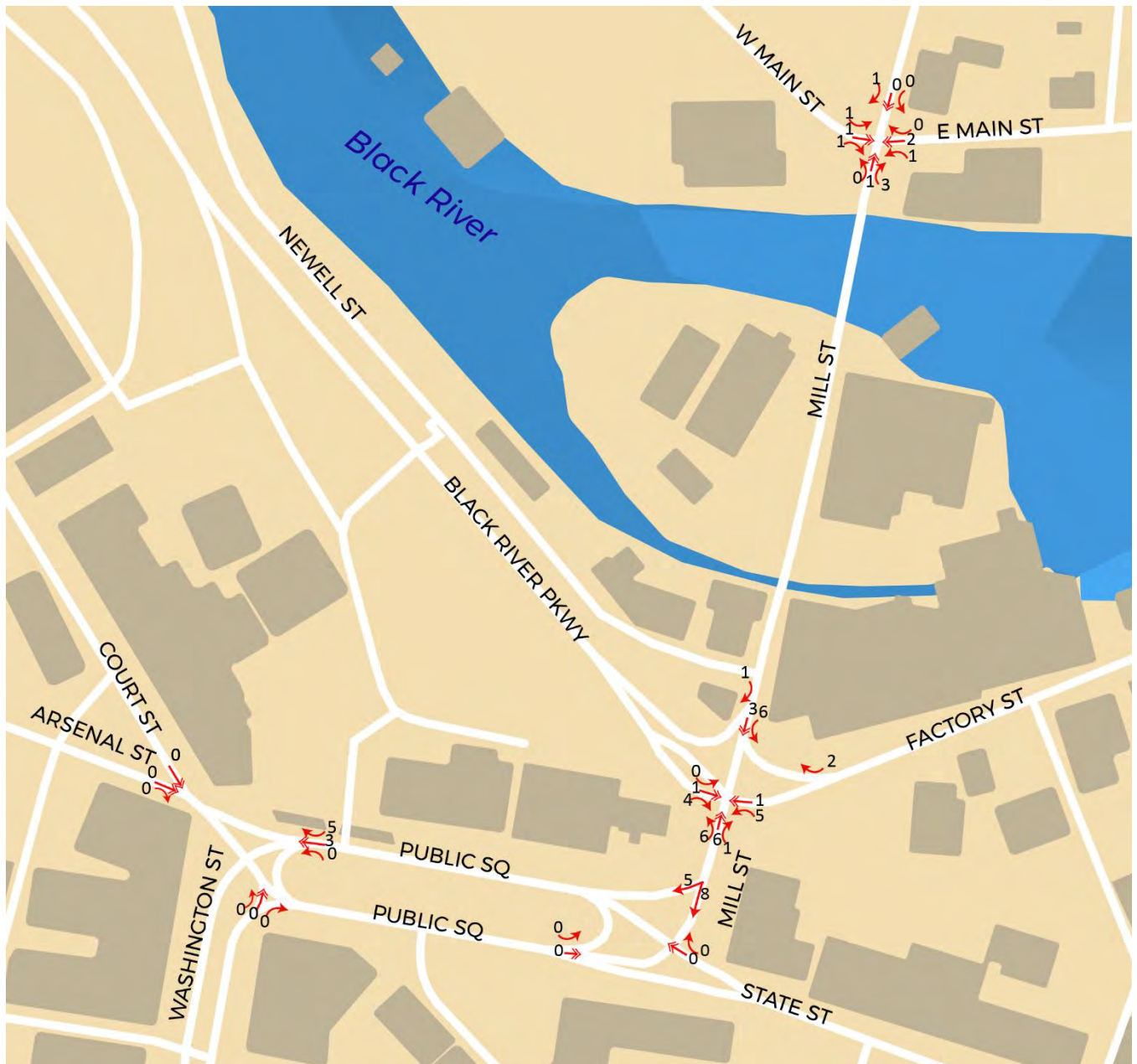


Figure 14 Midday Peak Public Square Area Truck Turning Movements (2019)

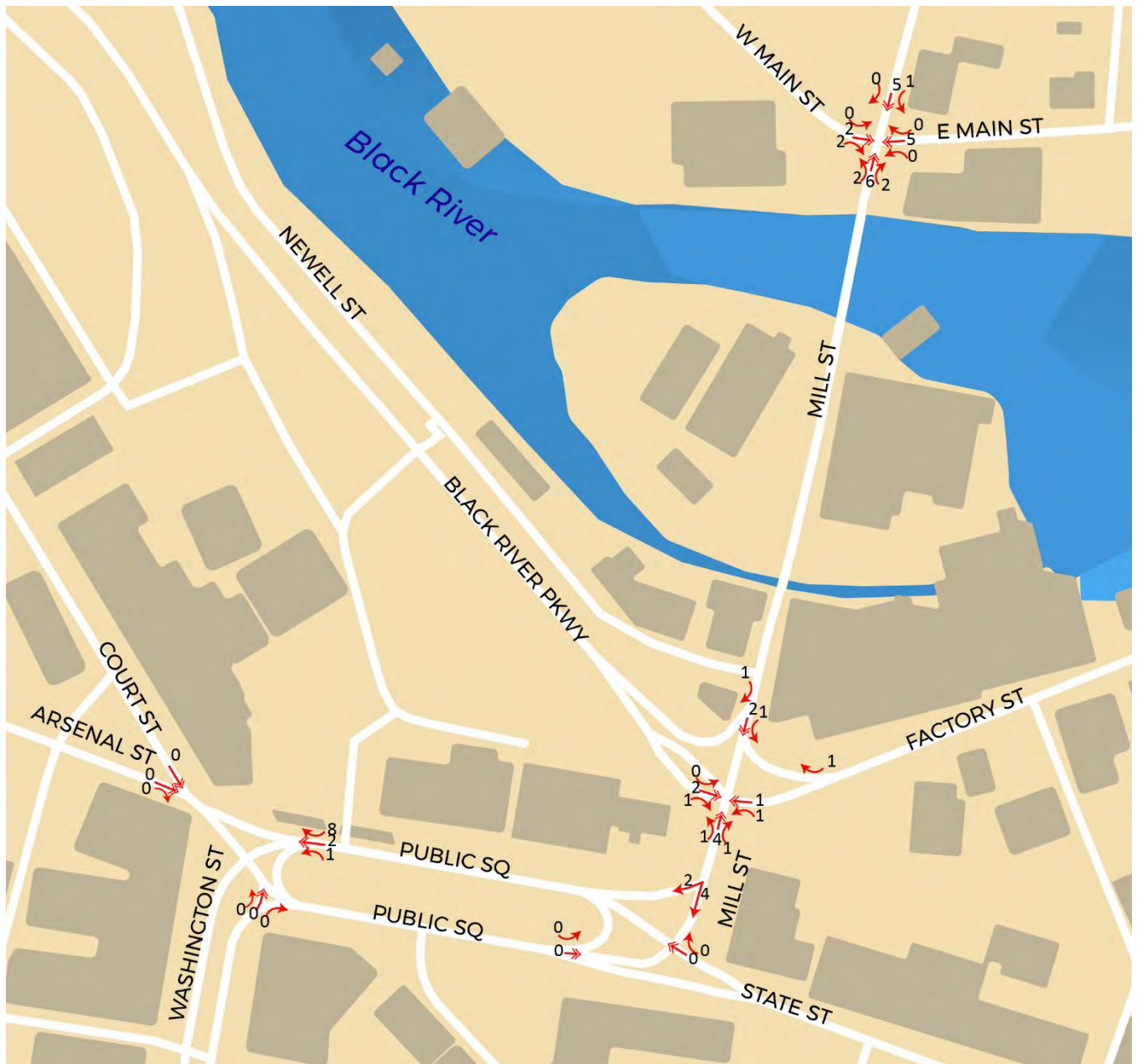


Figure 15 Afternoon Peak Public Square Area Truck Turning Movements (2019)



WEEKDAY TRUCK TURNING MOVEMENT COUNTS

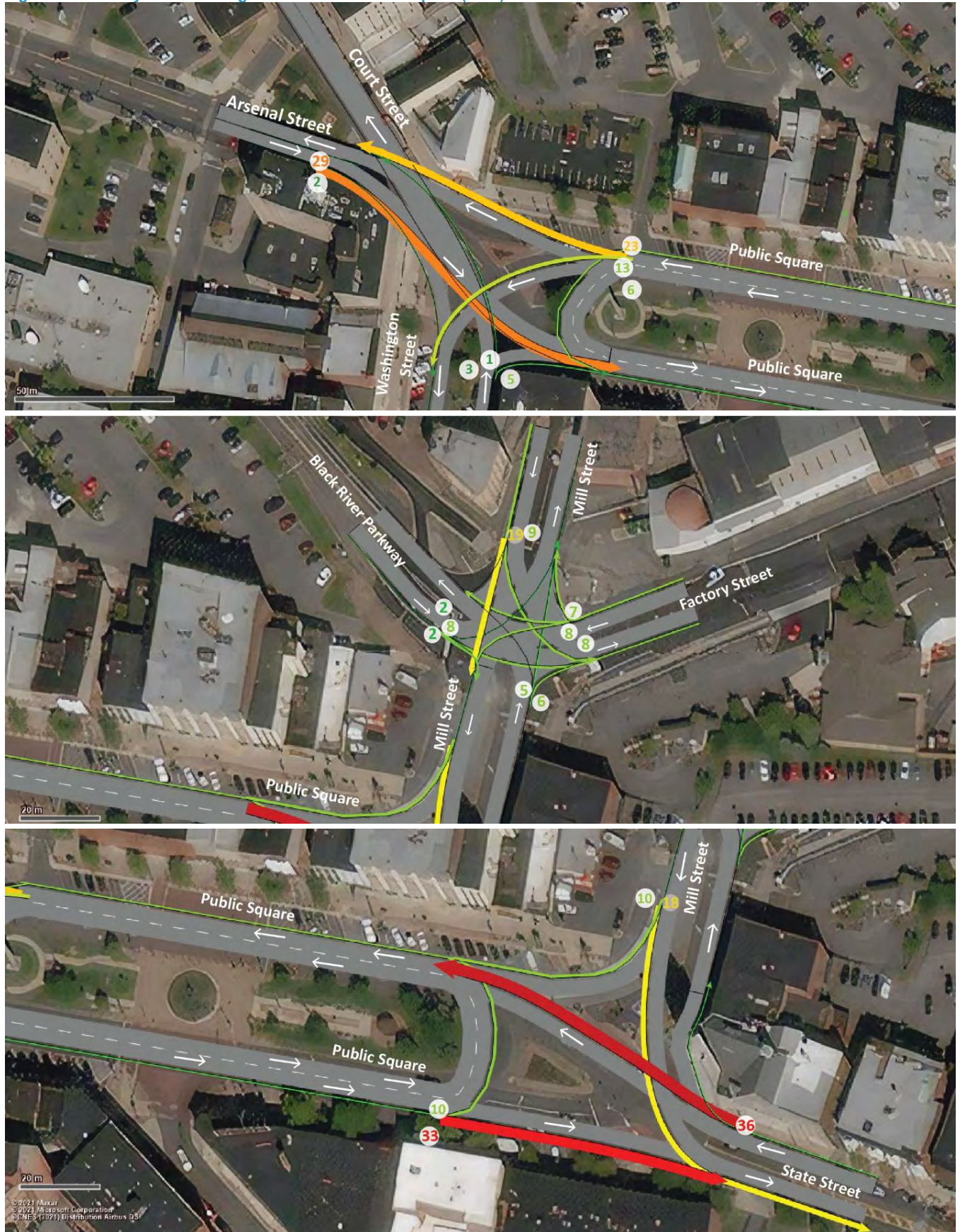
The second truck turning movement assessment utilized turning movement counts that were undertaken by NYSDOT staff on a weekday in June 2021 for key intersections around Public Square for a full day period (9:00am to 5:30pm). This particular truck turning movement assessment focused on trailer trucks. This allows for an understanding of larger truck movements throughout Public Square area throughout the day rather than just peak periods.

The following figures portray truck turning movement counts at locations around Public Square and just north of Public Square along Mill Street for a full weekday period.

This assessment revealed:








- Contrary to the peak period 2019 NYSDOT counts, these counts indicate a much greater truck usage of the eastbound truck movement through Public Square throughout the day, with a total of 43 trucks exiting Public Square as counted at Mill Street.
- The westbound truck movement through Public Square is consistent with the findings from the peak period truck counts, indicating a fairly constant movement of trucks throughout the day, with a total of 42 trucks exiting Public Square as counted at Washington Street.
- Truck movements through Public Square are fairly evenly dispersed throughout the day. The greatest hourly count of eastbound trucks exiting Public Square as counted at Mill Street is 25 in the 9:00am-10:00am hour, and the greatest hourly count of westbound trucks exiting Public Square as counted at Washington Street is 10 in the 10:00am-11:00am hour.
- Interestingly, there were 16 trucks that were observed throughout the day that circled Public Square, meaning they were traveling westbound and circled back to travel eastbound or were traveling eastbound and circled back to travel westbound, possibly because they missed a turn or had a delivery within Public Square and circled to continue in a different direction.
- Very few trucks utilize Black River Parkway throughout the day (12 eastbound trucks approaching the intersection of Mill Street and 8 westbound trucks entering from the intersection of Mill Street); however, the roadway does get some use by trailer trucks.
- Mill Street northbound and southbound sees a steady flow of trucks throughout the day, handling 44 trailer trucks between 9:00am and 5:30pm, a majority of which are traveling southbound.









Figure 16 Weekday Truck Turning Movements in Public Square (2021)










4 RECOMMENDATIONS

This study proposes several recommendations to address the challenges brought on by trucking and freight movement throughout Watertown and to improve the quality and comfort of Public Square for multi-modal transportation. These recommendations are explained further in the report, and are built around the following categories:

CATEGORY	STRATEGY	DESCRIPTION	ACTIONS	TIME-FRAME
ROUTING 	Develop Truck Wayfinding	Identify preferred truck routes through the City of Watertown that direct trucks to avoid Public Square and adjacent residential neighborhoods as much as possible.	<ul style="list-style-type: none"> Install MUTCD compliant truck wayfinding signage 	
	Restructure Routes	Restructure routes (NY 12, US 11) through Watertown to simplify the routing structure and remove from residential neighborhoods.	<ul style="list-style-type: none"> Conduct formal meeting with NYSDOT and FHWA to recommend rerouting. 	
	Connect to Industrial Park	Connect Black River Parkway to Waterman Road, which combined with access improvements to the industrial park, will facilitate truck movements.	<ul style="list-style-type: none"> Conduct a Project Scoping Report to identify feasible alternatives. 	
ADMINISTRATIVE ACTIONS 	Rename Black River Parkway	Rename Black River Parkway to remove the "Parkway" and replace with Boulevard or some other suffix.	<ul style="list-style-type: none"> Work with City of Watertown on renaming and signing. 	
	Post Court Street Bridge Clearance over Black River Parkway	Although not a low clearance, still post bridge clearance on Court Street Bridge	<ul style="list-style-type: none"> City of Watertown to post underpass 	

TREATMENTS 		over Black River Parkway noting 15' 8" clearance.	clearance height.	
	Public Square Restricted Truck Access	Restrict larger through trailer trucks from using Public Square.	<ul style="list-style-type: none"> Implement a Restricted Access resolution and deploy signage. 	
	Restriping of State Street	Restripe the right lane of westbound State Street at the intersection of Mill Street to improve truck turning radii.	<ul style="list-style-type: none"> City of Watertown to restripe. 	
	Mountable Truck Apron	If it is desirable to retain the right lane on westbound State Street at Mill Street, then an alternative could be to incorporate a truck turning apron to improve truck turning radii.	<ul style="list-style-type: none"> Prepare design for truck apron and install appropriate treatments. 	
	Realign Intersection of Mill Street at Public Square	Realign the intersection of Mill Street as in intersects with Public Square to remove channeled turning lanes, provide more pedestrian spaces, and increase the greenspace.	<ul style="list-style-type: none"> Prepare a Project Scoping Report for feasible alternatives. 	
	Display Truck Routing	Update State and US route signage to reflect recommendations.	<ul style="list-style-type: none"> Place MUTCD compliant signs and remove old routing signs. 	
	Display I-81 Truck Routing Signage	Install signage on I-81 directing truck traffic to Watertown to avoid Arsenal Street and use Coffeen Street or Bradley Street.	<ul style="list-style-type: none"> Post signage on I-81. 	
SIGNAGE 				

<div>TECHNOLOGY</div> <div></div>	<div>APP BASED NAVIGATION</div>	<div>Partner with Navigation systems such as Google Maps, Waze, and trucking in-cab systems to communicate to drivers preferred truck routes.</div>	<div><ul style="list-style-type: none">• Apply to ‘Waze for Cities’ online and use other application methods for other navigation systems.</div>	<div></div>
	<div>Traffic Signal Coordination</div>	<div>With new NY Route 12 and US 11 routing, traffic signal coordination would help reduce trucks backing up through the intersection Mill Street and Black River Parkway/ Factory Street and Mill Street and State Street.</div>	<div><ul style="list-style-type: none">• Install Traffic Signal Infrastructure in signal cabinets.</div>	<div></div>
	<div>ITS & Connected Vehicles</div>	<div>Leverage ITS technology and Connected Vehicle systems to enhance freight mobility through “Vehicle to Infrastructure” and “Vehicle to Vehicle” technology and roadside units.</div>	<div><ul style="list-style-type: none">• Install Dynamic Messaging Boards on I-81• Issue RFI for a vendor to prepare a Connected Vehicle architecture and communication system.• Launch Connected Vehicle freight pilot.</div>	<div></div>

Near-Term	Mid-term	Long Term
<div></div>	<div></div>	<div></div>

4.1 ROUTING STRATEGIES

Discussions with freight and logistics stakeholders, as well as NYSDOT, Jefferson County, and City of Watertown officials, led to a conversation on the potential for near-term and longer-term strategies for reducing truck traffic in Watertown, specifically Public Square. Near-term strategies were focused on the less intense infrastructure projects, where the longer-term strategies involve much more intensive infrastructure upgrades.

Near-Term Route Restructure

DEVELOP TRUCK ROUTING AND WAYFINDING SYSTEM

As a near-term strategy, the idea of identifying and signing preferred truck routes throughout the City of Watertown was discussed with the WJCTC. The concept of identifying preferred truck routes would help direct trucks to use alternative routes to avoid Public Square and adjacent residential neighborhoods as much as possible. Truck routes would be identified through a series of MUTCD compliant signs that demarcate the preferred truck route. To remove a number of trucks from using Public Square, a preferred truck routing structure would be set up to route trucks to use NY Route 12F (Coffeen Street) and Black River Parkway to access I-81 and avoid Public Square. This would also remove some truck traffic from NY Route 3 (Arsenal Street). The preferred truck route and truck routing signage locations is outlined in Figure 17.

Example of MUTCD thru truck route signage to be used along roadways to identify the preferred truck route is below. Additionally, MUTCD signage can be placed on roadways prior to reaching Public Square to indicate no thru trucks.

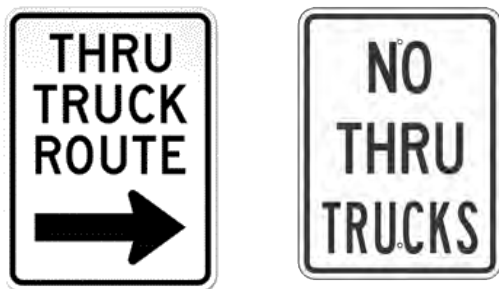
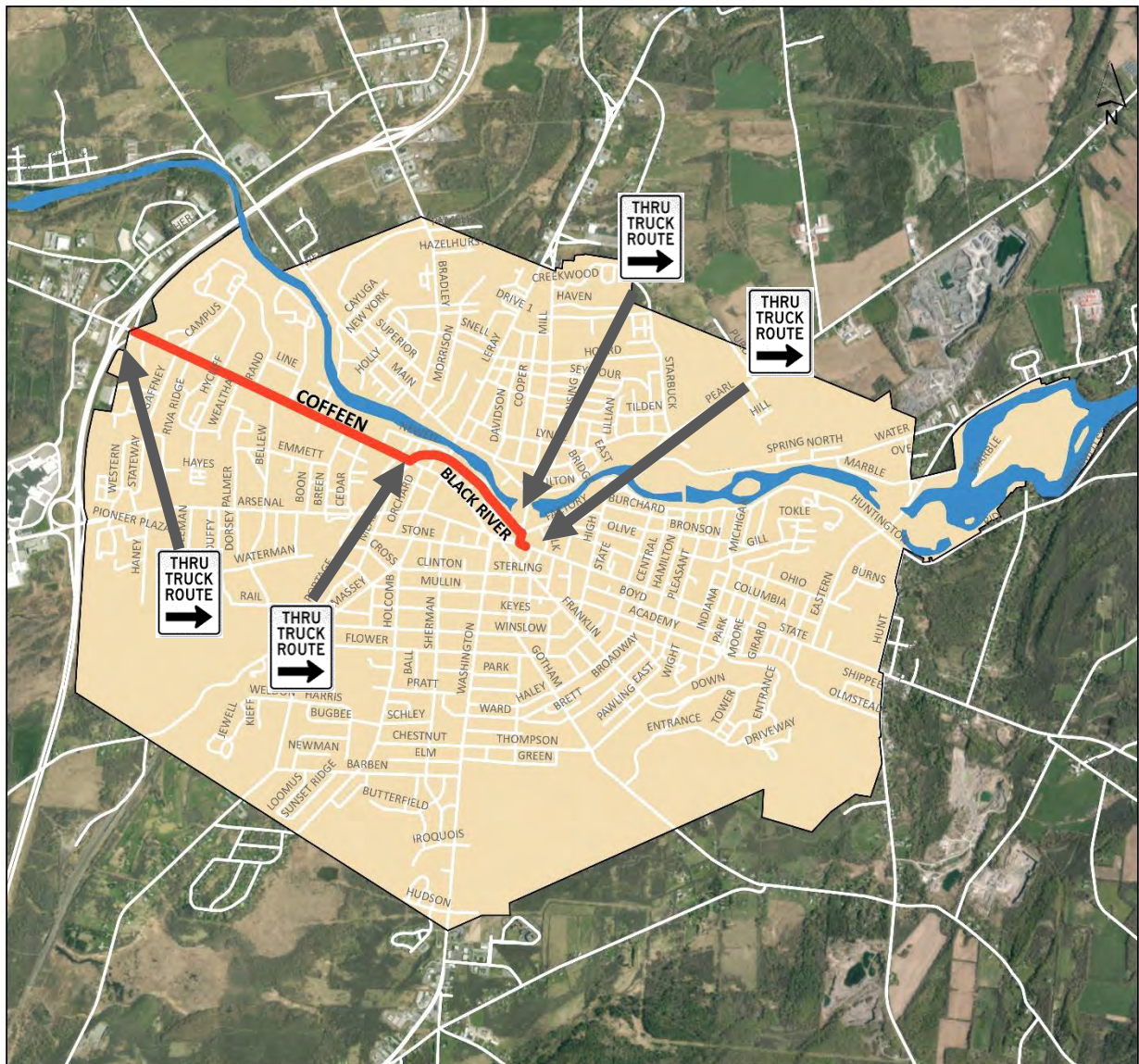


Figure 17 Preferred Truck Routing



Long-Term Route Restructure

RESTRUCTURE ROUTES

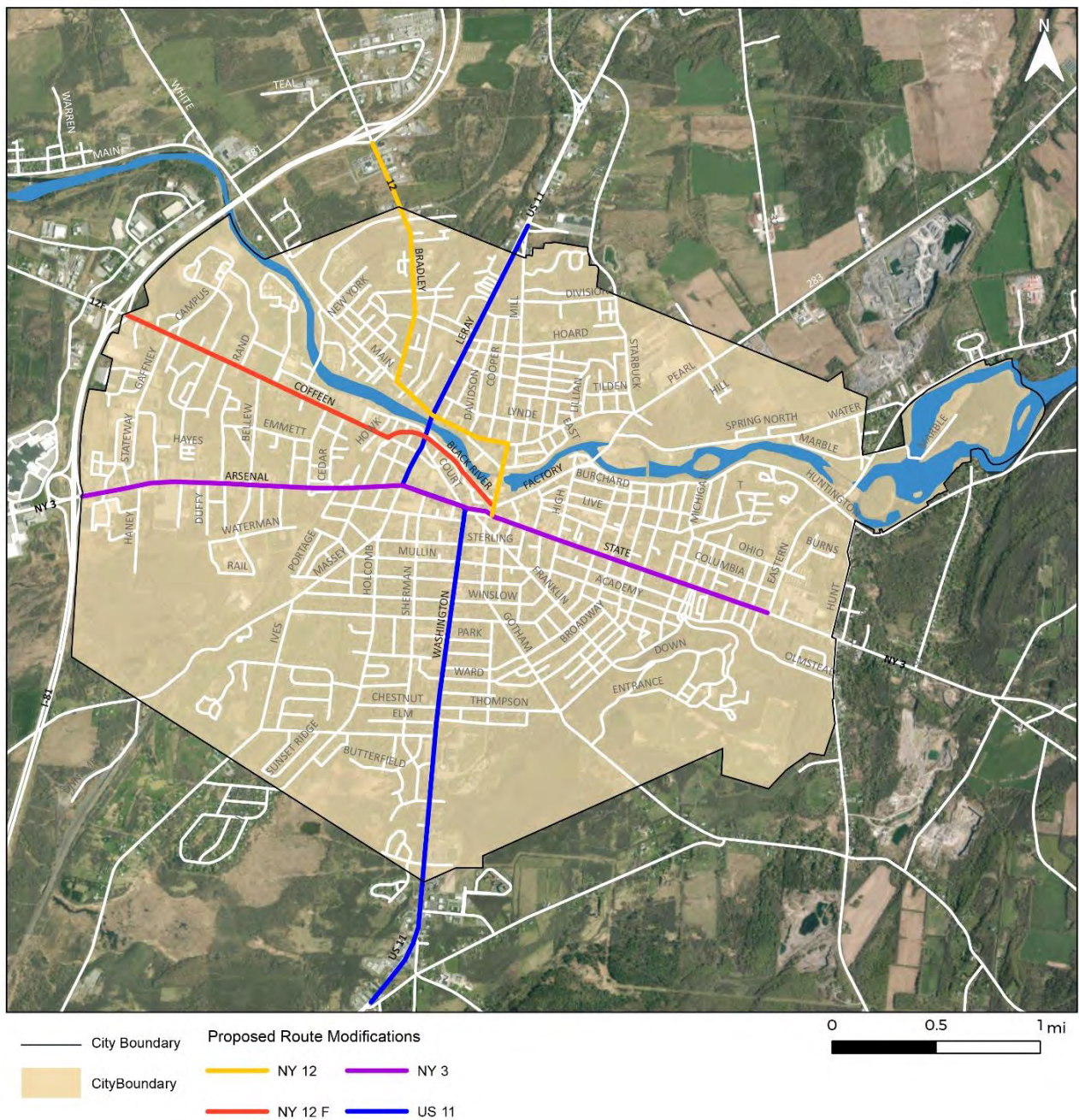
As discussed previously, Watertown consists of couplet routes for NY Route 12 and US 11, which can cause confusion for traveler. To solve this challenge, a route restructure is proposed that would simplify NY Route 12 and US 11 that would involve removing the couplet. Together with proper signage, the potential to further divert even a small percentage of trucks from Public Square, exists.

Coffeen Street (NY Route 12F) as well as Black River Parkway could be used as a truck route if it meant reducing the number of trucks using Public Square. As outlined in Figure 18, a proposed route structure would:

- Retain NY Route 3 as an east-west route along Arsenal Street and State Street.
- Restructure and resign NY Route 12 so that it is a consistent route for both northbound and southbound travelers, as follows from north to south through Watertown: Bradley Street to W. Main Street, to Mill Street, to State Street, to NY Route 12 as it continues south.

- Restructure and resign US 11 so that it is a consistent route for both northbound and southbound travelers, as follows from south to north through Watertown: Washington Street into Public Square, to Arsenal Street, to N. Massey Street, to Leray Street, continuing to US 11 north of Mill Street.
- Retain NY Route 12F along Coffeen Street, however rather than terminating at N. Massey Street, Black River Parkway would be signed as NY Route 12F between Coffeen Street and Mill Street. This would allow for a continuous signed NY Route that would bypass Public Square and allow for a connection between I-81 (Coffeen Street interchange) and NY Route 12 and NY Route 3 east of Public Square.

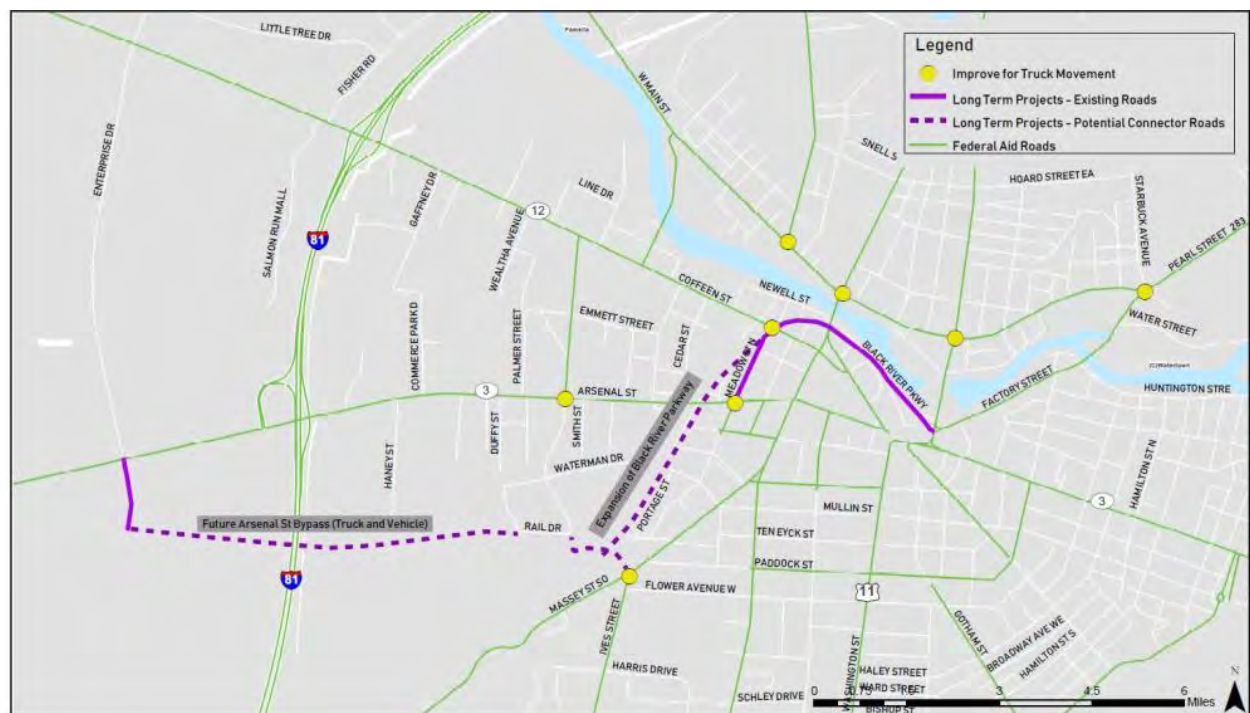
Figure 18 Proposed Route Structure throughout Watertown



CONNECT TO INDUSTRIAL PARK

The longer-term bypass solutions were discussed as ways to further reduce the amount of truck traffic in Watertown, not only Public Square but along Arsenal Street and some other major corridors. One concept discussed was the Black River Parkway extension. This concept would use abandoned railroad right-of-way that parallels an existing CSX Transportation line to construct a Black River Parkway extension between Coffeen Street and Waterman Drive, with an additional extension to S. Massey Street and a potential extension west to connect with NY Route 3 west of the I-81 interchange, see Figure 19 taken from the WJTC 2045 Long Range Transportation Plan. The thought was this would provide a truck bypass route using Black River Parkway and new roadways to bypass Public Square and Arsenal Street.

Figure 19 Weekday Truck Turning Movements in Public Square



The railroad tracks that exist along the portion of right-of-way between Coffeen Street and Waterman Drive are owned and operated by CSX Transportation. Data reported by the Federal Railroad Administration (FRA) indicate the line handles one train switching movement per day, with zero through trains operating on this section of track.

FEASIBILITY ANALYSIS

As part of this Planning Study, a feasibility analysis was conducted to determine the constructability of the Black River Parkway Extension option. This alternative proposes to utilize the existing utility corridor and the defunct railroad bed adjacent to the active CSX railroad. Since the CSX rail line is active, it is assumed that a new at-grade crossing would not be permitted and that a bridge crossing would need to be constructed in order to get the roadway over the active tracks to Waterman Drive. However, this alternative contains significant design obstacles that burden the construction of the proposed access road, including:

- Vertical and lateral clearances over CSX railway
- Vertical and lateral clearances under existing Arsenal Street bridge
- Vertical and lateral clearances of overhead utilities
- Proximity to Black River Parkway & Coffeen Street intersection

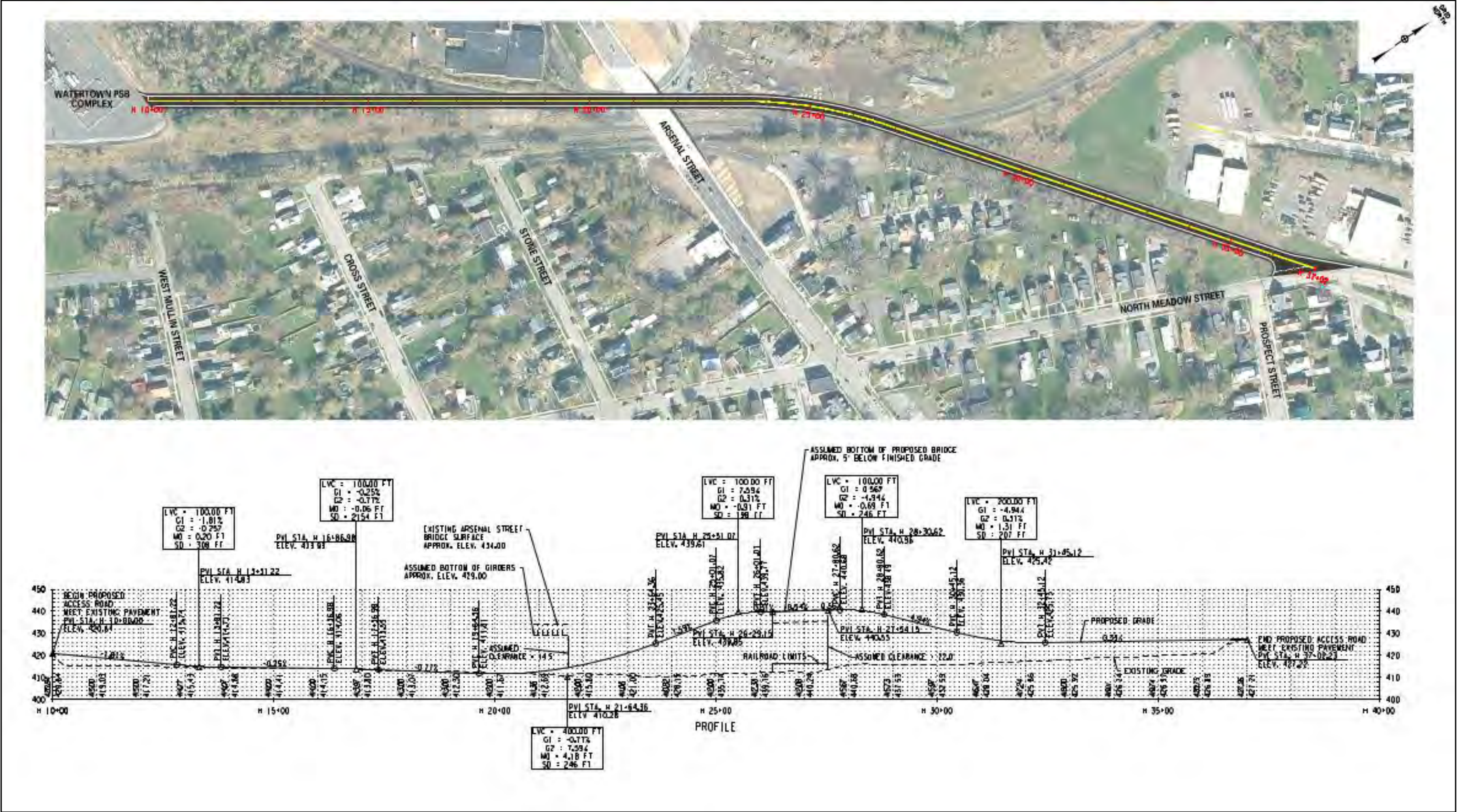
The feasibility analysis of the Black River Parkway Extension option was performed in accordance with standards and guidelines detailed in the NYSDOT Highway Design Manual and NYSDOT Bridge Manual. Additionally, the Arsenal Street bridge and proposed bridge over CSX railway is assumed to have a 5-foot depth from the top of grade to bottom of structure to be conservative; the proposed profile of the access road was designed to include this 5-foot buffer to meet the vertical clearance listed in the design criteria table. The clearance over the CSX railway is designed to be 22 feet from existing grade to the anticipated bottom of the proposed bridge structure in accordance with NYSDOT HDM Chapter 23.10.1.

The proposed access road is designed to be a 34-foot wide roadway composed of 12-foot travel lanes and 5-foot striped shoulders allowing for unhindered heavy truck traffic and supports quicker emergency response times associated with the Public Safety Complex. Additional amenities would be included in the construction of the Black River Parkway Extension including guide railing installed in areas where the excessive shoulder slopes are constructed, new drainage structures, and culverts installed to address existing drainage deficiencies and ensure positive drainage post construction. The construction of the Black River Parkway Extension would involve utility conflicts requiring coordination with private and government utility agencies to relocate transmission poles to provide proper vertical and lateral clearances. The Black River Parkway Extension requires the construction of a new, unsignalized 3-way intersection with North Meadow Street, controlled by a stop sign controlling the extension approach traffic. The intersection constructed at the Public Safety Complex will be a stop controlled on the access road approach.

The Black River Parkway Extension alternative would require grading the defunct railroad bed adjacent to CSX railway to achieve a minimum 14-foot 6-inch vertical clearance under the existing Arsenal Street bridge, and construct a bridge spanning approximately 600-foot over the CSX railroad. The proposed bridge would begin approximately 50 feet north of the existing Arsenal Street bridge to limit the intrusion of embankment within the CSX railway right-of-way. Based on the preliminary design analysis, there are no sight distances or grades that conflict with the NYSDOT design criteria. While this alternative mitigates Arsenal Street truck movements destined for the Industrial Park from the east, truck traffic from the west (I-81 corridor) would continue to utilize the existing Bellew Avenue access. Due to the expansive infrastructure needed for this roadway, it was deemed not cost beneficial to recommend in the short term, but could be an illustrative long-term project.

Figure 20 shows a conceptual profile and plan view that was developed as part of the Industrial Access Study for the Black River Extension alternative.

Figure 20 Watertown Black River Parkway Extension Plan and Profile



INDUSTRIAL PARK COORDINATION

The Watertown Truck Route Study was developed concurrently with the Public Safety Complex/Industrial Park study as some alternatives were developed with truck traffic mitigation in mind. The Public Safety Complex study primarily focused on mitigating response time from emergency personnel from the Watertown Public Safety building to the downtown area avoiding the congestion of Arsenal Street and Bellew Avenue often caused by commercial vehicle and commuter traffic. In regard to accommodating these commercial vehicles by offering an additional access route away from the Arsenal Street corridor, alternatives were developed and presented to the project stakeholders for additional input.

One proposes to construct an access road via the S. Massey Street and Ives Street intersection, changing the existing intersection from a 3-way intersection to a 4-way intersection. Since S. Massey Street is currently designated as a major collector and portions are identified as a county route, it is assumed that S. Massey Street would be designated as a truck route up to this intersection to provide access for northbound commercial vehicle traffic destined for the Industrial park. However, as is with the Black River Parkway Extension alternative, Alternative #3 is not without constructability constraints. The construction of this alternative involves crossing CSX railroad tracks via proposed bridge, impacts to environmentally sensitive areas (i.e. wetlands), conflicts with private and state owned utility infrastructure, and increasing commercial vehicles through residential areas.

Another alternative proposes to construct an access road connecting the southern end of the industrial park to Massey Street, just outside of the Watertown City limits. This alternative would reduce the amount of northbound truck traffic through residential areas and provide an additional access point reducing commercial truck traffic through residential areas that is destined for the industrial complex. The proposed access route is approximately 0.5 miles in length and requires right-of-way acquisitions for construction.

Two other alternatives are best constructed concurrently as they are developed in relation to I-81 interstate commercial vehicle traffic. This alternative proposes to construct an additional, northbound exit ramp strictly serving Industrial Complex traffic reducing the amount of commercial vehicles travelling eastbound on Arsenal Street. Further, a roadway would be constructed for southbound, I-81 commercial traffic and eastbound traffic originating west of the I-81 corridor. This alternative proposes to construct an access road extending south of Towne Centre Road utilizing the existing utility corridor and a bridge crossing over I-81 before tying into the access road constructed. These alternatives serve to reduce the amount of Industrial Park commercial traffic volumes that currently occupy Arsenal Street. Constraints of these alternatives includes disturbing environmentally sensitive areas (i.e. wetlands), private right-of-way acquisitions, and utility conflicts.

Additional connections to/from the Industrial Park were considered, such as a S. Bellew Avenue extension, some discussions led to looking at a route that would allow trucks to exit I-81 at exit 44 and use either Massey Street or Ives Street (via NY Route 232) to avoid the more congested exit 45 at Arsenal Street, but this would require a low clearance bridge on S. Massey Street, south of Ives Street, to be replaced to allow for truck traffic. An alternative access to exit 44 is to utilize Ives Street, which is a county road, to NY Route 232, although this route passes through some residential areas, which is one of the reasons US 11 is proposed to be rerouted – to avoid residential streets.

Many stakeholders felt the best option was to facilitate truck traffic to use either Coffeen Street (NY Route 12F) to I-81 exit 46 or Bradley Street (NY Route 12) to I-81 exit 47. Recommendations to help facilitate this are outlined in the following sections.

4.2 ADMINISTRATIVE ACTIONS

Short-Term Administrative Actions

RENAME BLACK RIVER “PARKWAY” OR DESIGNATE AS A TRUCK ROUTE

An early recommendation to ready for the Truck Routing Strategies is related to some administrative actions that the City of Watertown can take to open up Black River Parkway to truck traffic. New York State law restricts commercial vehicles from using designated Parkways across the state. Black River Parkway while named a “parkway” is not technically designated under this law as a Parkway. Many commercial vehicles drivers are trained to not use any parkway. This may deter truck drivers from using Black River Parkway, thinking that it is commercial vehicle restricted. It is recommended that Black River Parkway either be renamed to something other than Parkway (i.e. Drive, Boulevard) or be specifically listed as a truck route.

POST BRIDGE CLEARANCE OF COURT STREET BRIDGE OVER BLACK RIVER PARKWAY

The bridge clearance of the Court Street bridge spanning Black River Parkway has a clearance of 15 feet, 8 inches. While not a low clearance, it might be helpful to post the bridge clearance on Black River Parkway to give notice to commercial vehicle drivers. Since many New York State Parkways consist of low bridge clearances, thus necessitating commercial vehicle restrictions, many truck drivers may be cautious of the bridge clearance here.

Mid-Term Administrative Actions

PUBLIC SQUARE RESTRICTED ACCESS

Restrict access of through larger/heavier trucks within Public Square using vehicle’s weight, dimensions, emissions, or combination of these factors. Congested roads or roads with heavier pedestrian traffic would benefit from this strategy. These types of restrictions can apply for particular days or times of day depending on the desired outcome. Alternative routes must be planned and circulated prior to access restrictions so that freight trucks can bypass the area and continue to their destination without issue. For this implementation to be successful, time of day restriction signs must be added and the enforcement plan must be strict to reinforce said restrictions. Cameras, physical barriers, and enforcement agencies can be used to ensure trucks follow the access restrictions.

Figure 21 Conditional Restriction Signage, Germany



4.3 TREATMENTS

Near-Term Treatments

In recommending that trucks use a new routing structure proposed for Watertown, due diligence must be taken to make sure trailer trucks are able to make turns without “jumping the curb” and creating an uncomfortable pedestrian environment. Truck turning templates were placed on intersections proposed to be resigned as one of the above truck routes, as discussed earlier.

There was one instance where trailer truck turning movements might make for an uncomfortable pedestrian situation, and thus some mitigation may be warranted. The right turn from westbound State Street to Mill Street (currently signed as a continuation of northbound NY Route 12) consists of a tight turning radius on the northeast corner, shown in Figure 22. There is an existing church at the corner, making any widening unfeasible.

Figure 22 Tight Radius at Intersection of State Street and Mill Street



There are a couple solutions to address this, ranging from a less costly road restriping, to a curb reconstruction, to a full intersection realignment:

MOVE MILL STREET STOP BAR

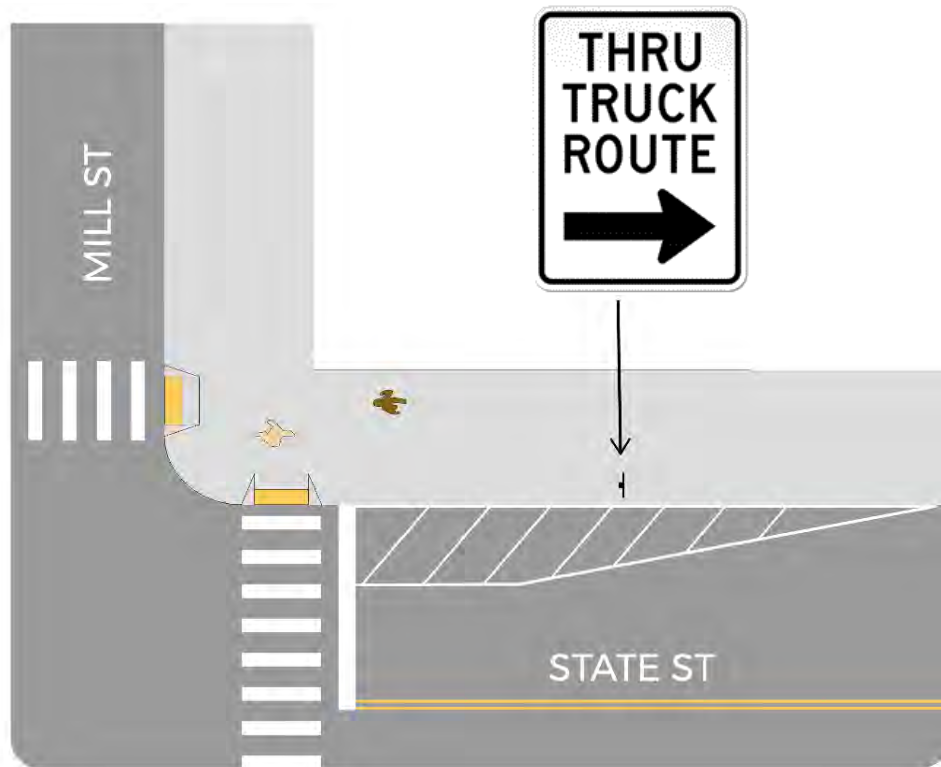
The stop bar for southbound Mill Street at the intersection of State Street could be moved back from the intersection (moved north) to allow for additional space for trucks making a right turn from westbound State Street to northbound Mill Street to take a wider radii turn before correcting into the northbound lane without conflicting with a stopped vehicle in the southbound lane or the curb.

RESTRIPING OF THE ROADWAY

As westbound State Street approaches the intersection of Mill Street, it goes from one westbound lane with on-street parking to two westbound lanes, with the right lane being a combined thru/ right turn. One option is to continue State Street as a one-lane approach with cross-hatched striping along the curb

to avoid use of the curb and to allow for a greater turn radius for trailer trucks onto Mill Street. This would avoid a turning truck having to turn out into the through lane in order to make way for a wider turn as they would already be turning from a lane away from the curb. This recommendation is displayed in Figure 23.

Figure 23 Restriping of Westbound State Street at Mill Street



Mid-Term Treatments

ADD A MOUNTABLE TURNING APRONS

If keeping two through lanes is desirable on the westbound State Street approach at Mill Street, then one option could be to construct a mountable turning apron at the northeast intersection to provide additional turning radii for trailer trucks without effecting pedestrian comfort (see example below). This keeps the sidewalk and area where pedestrians would wait to cross back from the curb, and in some cases, bollards or other decorative stanchions are used to provide additional comfort to pedestrians at the intersection.

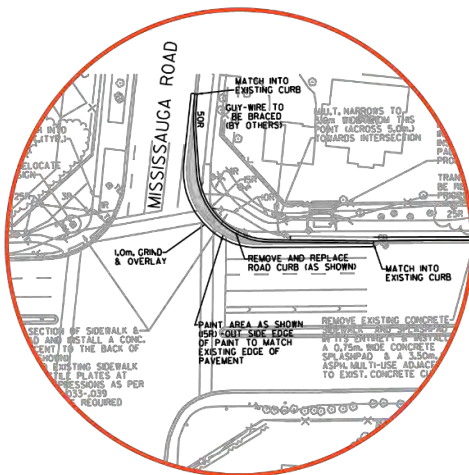


Figure 24 Design Drawing Highlighting Truck Apron, Source: City of Mississauga



Figure 25 Mountable Truck Turning Apron, Source: Google Street View

Long-Term Treatments

REALIGN INTERSECTION OF MILL STREET AT PUBLIC SQUARE

As a much more intensive infrastructure project, the entire intersection of Mill Street and State Street at Public Square could be realigned to remove many of the channeled turning lanes and reduce the amount of pavement. This would help improve the turning radius for the westbound State Street to Mill Street right turn and also make this area of Public Square more pedestrian friendly and comfortable.

This would likely be part of a larger Public Square enhancement project and not specifically a recommendation stemming from this truck study.

4.4 SIGNAGE

Signage will become an integral component in messaging a new and preferred route for trucks to use between I-81 and Watertown. In addition to signage that would help clarify the preferred truck route in the near-term and the proposed NY Route 12, NY Route 12F, and US 11 route structure in the long-term, signs depicting a preferred route to/from I-81 should be displayed on surface streets around Watertown that direct all traffic, but especially trucks possibly by signing “Trucks to I-81”, to use an alternative route to Public Square, such as proposed NY Route 12F – Black River Parkway and Coffeen Street, proposed NY Route 12 – Mill Street, W. Main Street, and Bradley Street, or proposed US 11 – Washington Street, S. Massey Street, and Leray Street.

Signage can also be placed on I-81 to alert trucks on which exits to take if they are carrying a thru load. On the northbound I-81 lanes prior to exit 45, Arsenal Street, which is a heavily used exit for truck traffic in and out of Watertown, a series of signs could be placed on the overhead signs directing thru trucks to use one of the truck routes (exit 46- Coffeen Street or exit 47- Bradley Street). This could also be done in combination with overhead ITS signs that can dynamically adjust to direct trucks to certain exits based on existing traffic conditions.

Figure 26 Examples of Signs



4.5 TECHNOLOGY

The use of technology and various technology driven applications will be an essential tool in helping to reduce the amount of truck traffic in Public Square and to accurately get truck drivers to use alternative routes. The majority of truck drivers use some type of mobile application-based or in-cab navigation system to travel the country, thus having input into the developers of these navigation systems will help direct trucks to avoid Public Square as much as possible and to use one of the proposed alternative truck routes. Below are three technology-based recommendations.

APP-BASED MAPPING AND NAVIGATION (I.E., WAZE, GOOGLE MAPS, APPLE MAPS)

Navigation systems such as Google Maps and Waze are free and widely used applications by personal vehicles as well as commercial vehicles. Currently both applications do not have settings designated for commercial vehicles or trucks, nonetheless the system can communicate access restrictions and potential hazards to truck drivers. Thus, partnering with Google and Waze, as well as other app-based and in-cab navigation systems, would be an effective strategy to communicate information to truck drivers about preferred truck routing. Waze is unique in that it uses crowdsourcing, data provided anonymously and directly by users while they drive, to create a continually updated view of traffic conditions. Waze drivers can update the live map with incidents, hazards, and other hard to road changes that might be harder for transit agencies to measure. Waze has an existing data sharing program, 'Waze for Cities' between Waze and public sector partners. In this partnership Waze shares the live crowdsourced data on current road conditions and in exchange cities/transportation agencies provide the application with planned closures, construction, and restrictions, including preferred truck routing.

In the past, Waze has partnered with cities to facilitate circulation plan updates. Recently the application partnered with the City of Ghent in Belgium to restrict traffic through their downtown area to facilitate a more pedestrian and transit supportive city center. In this case, the physical infrastructure updates restricting access coordinated with updates to the virtual map in Waze, making Waze the only service with a completely accurate map from day one of the new circulation plan. A similar approach could be

taken in Watertown to reflect physical updates to drivers from the first day or implementation. Another solution is to provide the app with preferred routes that bypass the Public Square. Solutions like this are often used in high traffic events to change behaviors without changing the physical connections. ‘Waze for Cities’ makes partnership easier than other navigation applications and currently has approximately 3,000 partners worldwide, including Port Authority of New York and New Jersey (PANYNJ). The ‘Waze for Cities’ hub can be found at <https://www.waze.com/partnerhub/user-sign-up/sign-up>.

TRAFFIC SIGNAL COORDINATION

Since one of the proposed truck routing structures would use Mill Street, there would need to be traffic signal coordination between two closely spaced signalized intersections in Mill Street/ State Street and Mill Street/ Black River Parkway/ Factory Street, to help alleviate a situation where traffic backs up and trucks aren’t able to access appropriate lanes to use a truck bypass route.

This potential situation could occur with truck traffic heading westbound on State Street, turning right onto Mill Street, and then needing to get over to the left lane to make the left turn onto Black River Parkway. Traffic signal coordination would need to align to allow trucks to use the left turn lane from northbound Mill Street to Black River Parkway without backing up through the intersection of State Street.

Similarly, traffic signal coordination would need to align to allow trucks traveling southbound on Mill Street to turn left onto State Street without backing traffic into the intersection of Black River Parkway/ Factory Street. The close spacing of these intersections doesn’t leave much room for stacking of vehicles, particularly if additional trucks are added to the queue.

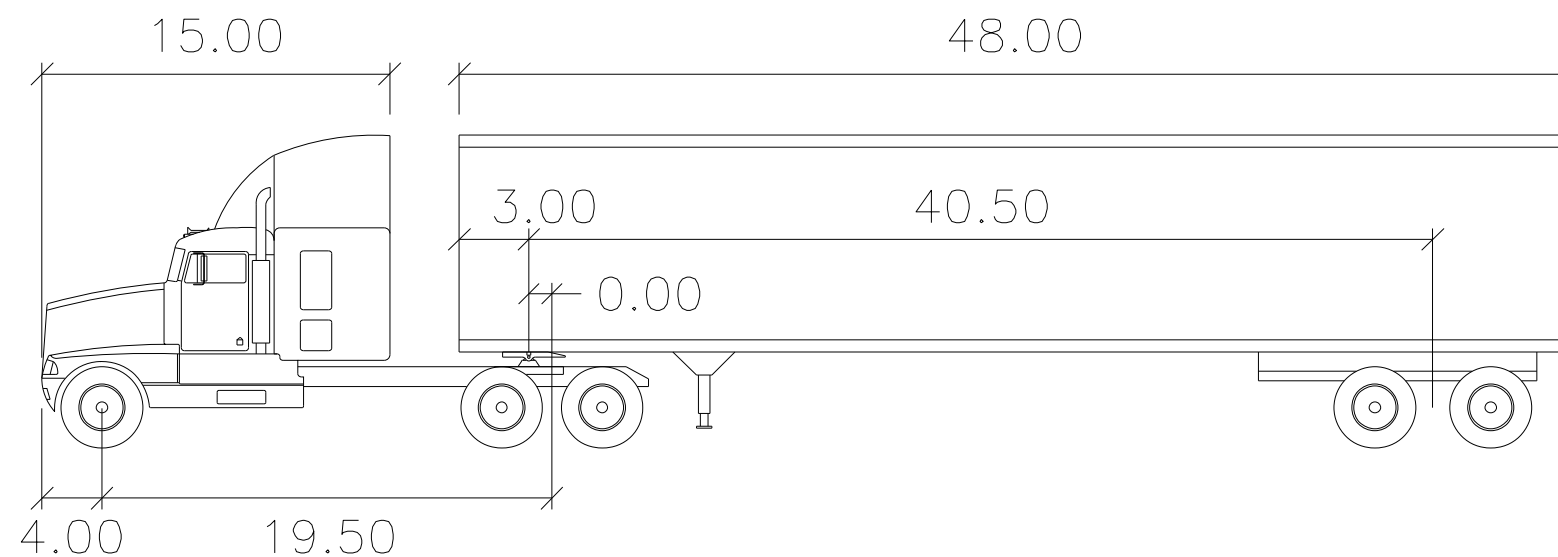
INTELLIGENT TRANSPORTATION SYSTEMS (ITS) AND CONNECTED VEHICLE (CV) TECHNOLOGY

ITS can be used in combination with static signage to dynamically adjust messaging to direct trucks traveling I-81 to certain exits based on existing traffic conditions. This would require the placement of ITS Message Boards on the northbound I-81 lanes south of exit 45, Arsenal Street and on the southbound I-81 lanes north of exit 47, NY Route 12, with the ability to direct trucks to preferred truck routes. An advanced use of ITS would require installation of video cameras and/or sensors and roadside units setup along I-81 and at various locations throughout Watertown equipped with the ability to communicate with in-vehicle navigation systems, directing trucks and general vehicle traffic to preferred routes as part of a larger Connected Vehicle implementation. This would also allow the message to travelers to change based on current conditions.

Connected Vehicle (CV) technology can enable cars, trucks, buses, and other vehicles to communicate with each other through sensors, roadside units, and in-vehicle units. Connected Vehicle capabilities are evolving quickly and it is timely that Watertown invest in ITS infrastructure and data management systems to support a range of existing and future technologies and applications that aim to improve safety and efficiency of roadway users. Current applications of CV technology include driver notifications and alerts of dangerous situations, such as someone about to run a red light as they’re nearing an intersection or an oncoming car, out of sight beyond a curve. CV technology can be used to communicate with the in-cab communications of trucks to connect on routing, safety, congestion, and other ways that can facilitate truck movement.

In Watertown CV technology has tremendous safety potential through vehicle to infrastructure capabilities. Moreover, as vehicle to vehicle technology expands, CV has the potential to impact personal and freight travel by increasing transportation options and reduce travel times.

5 APPENDIX A – TRUCK TURNING ANALYSIS



WB-62

feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

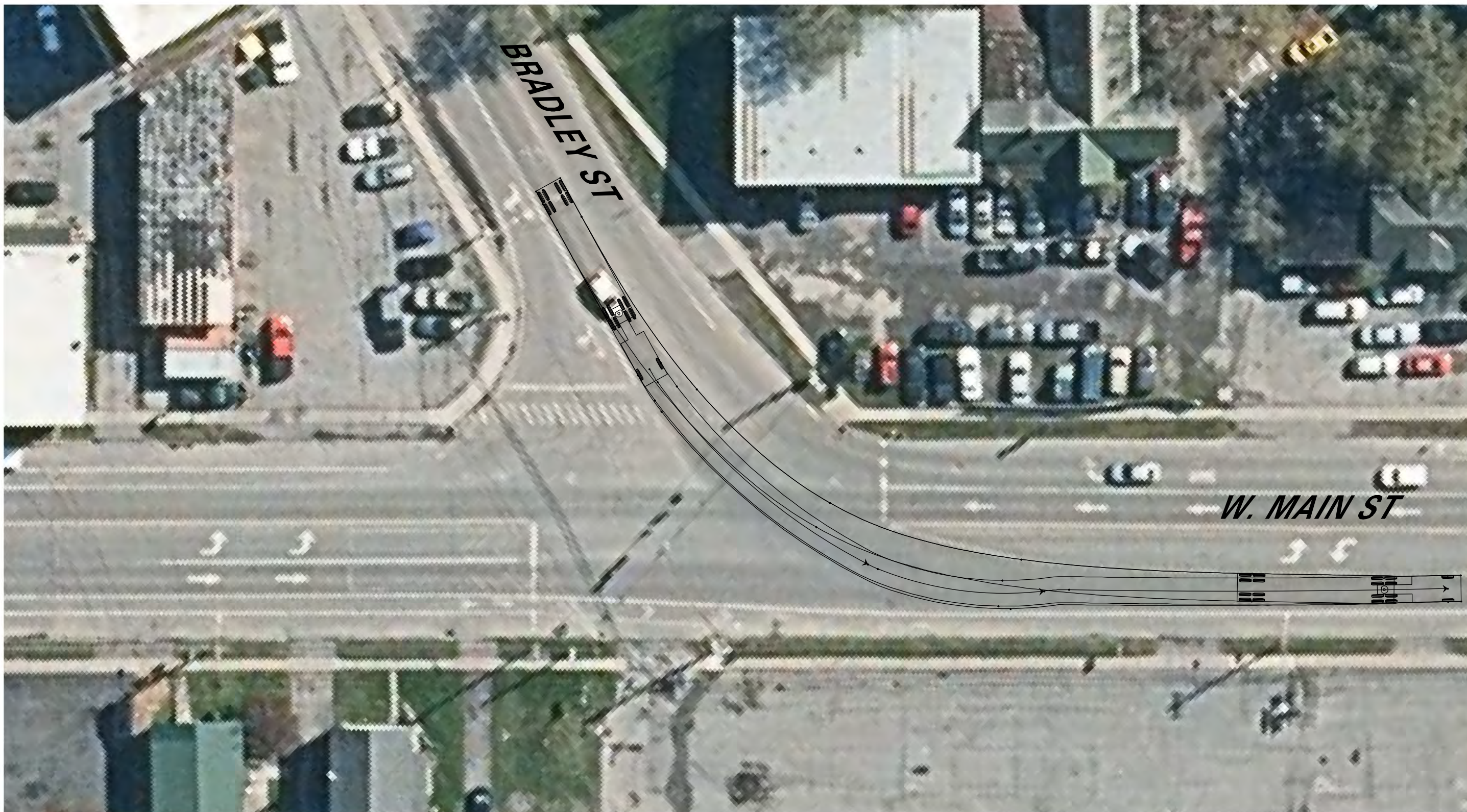


Barton
& **Loguidice**

TRUCKING ROUTE ALTERNATIVE STUDY DESIGN VEHICLE



HIGHLAND
PLANNING



**Barton
& Loguidice**

**TRUCKING ROUTE ALTERNATIVE STUDY
BRADLEY ST & W. MAIN ST - SB LEFT TURN**



**HIGHLAND
PLANNING**



**Barton
& Loguidice**

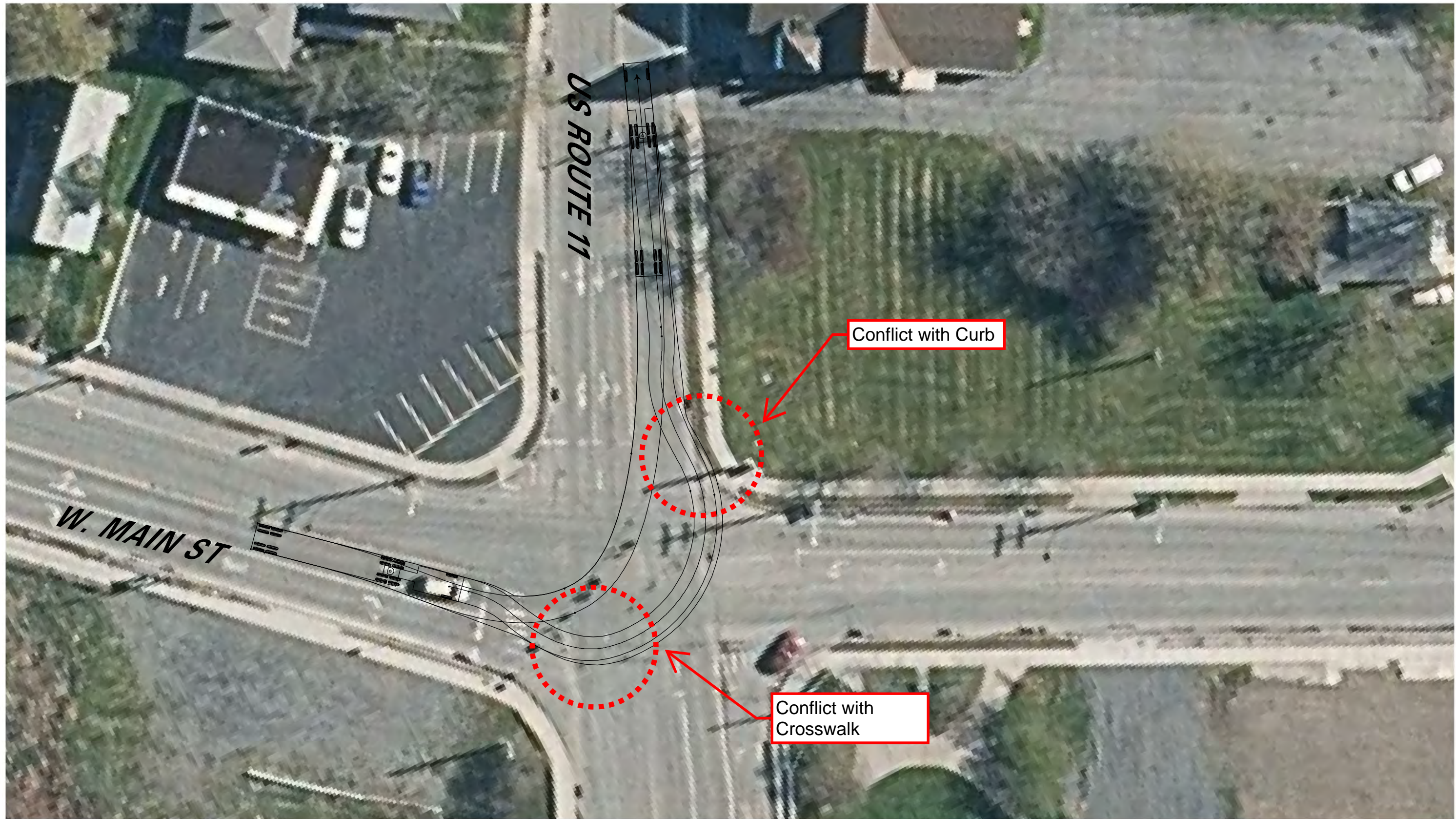
**TRUCKING ROUTE ALTERNATIVE STUDY
BRADLEY ST & W. MAIN ST - WB RIGHT TURN**



**HIGHLAND
PLANNING**







Conflict with Curb

Conflict with Crosswalk



**Barton
& Loguidice**

**TRUCKING ROUTE ALTERNATIVE STUDY
W. MAIN ST & US ROUTE 11 - EB LEFT TURN**



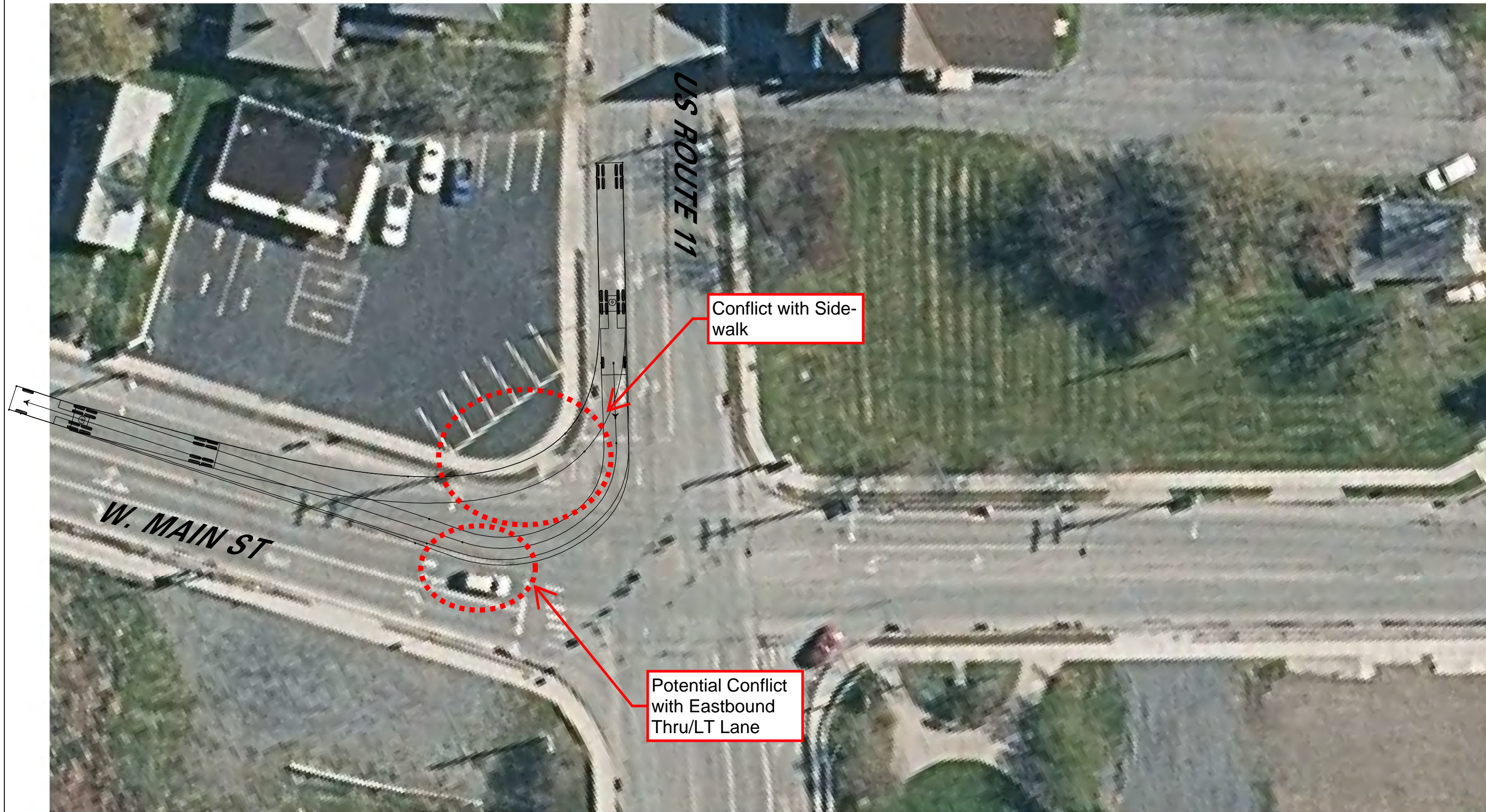
**HIGHLAND
PLANNING**



**Barton
& Loguidice**

**TRUCKING ROUTE ALTERNATIVE STUDY
W. MAIN ST & US ROUTE 11 - SB LEFT TURN**

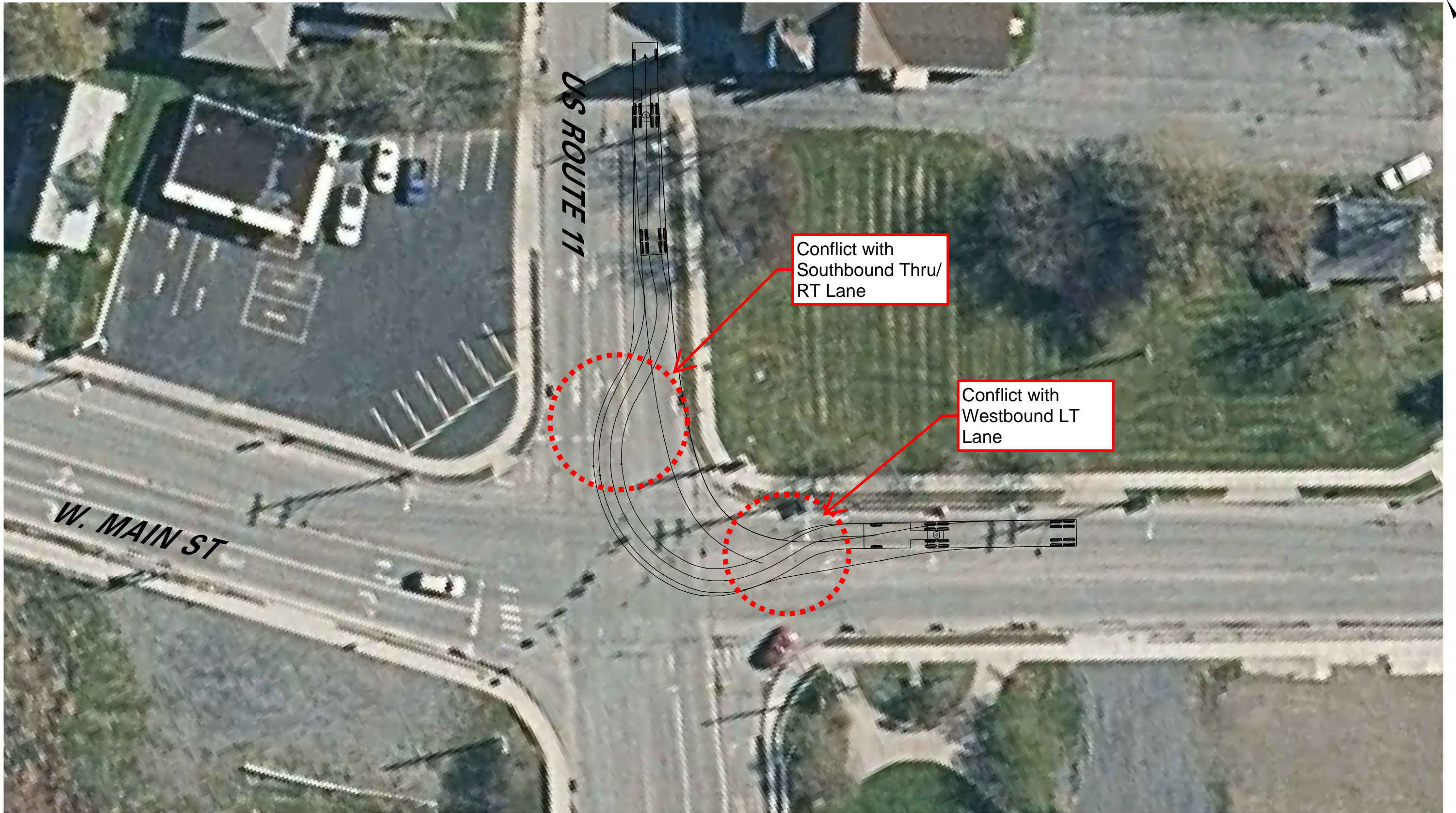




**Barton
& Loguidice**

TRUCKING ROUTE ALTERNATIVE STUDY W. MAIN ST & US ROUTE 11 - SB RIGHT TURN





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& Loguidice**

TRUCKING ROUTE ALTERNATIVE STUDY W. MAIN ST & US ROUTE 11 - WB RIGHT TURN



**HIGHLAND
PLANNING**



**Barton
& Loguidice**

**TRUCKING ROUTE ALTERNATIVE STUDY
BLACK RIVER PARKWAY & COFFEEN STREET
RIGHT TURN ANALYSIS**



**HIGHLAND
PLANNING**



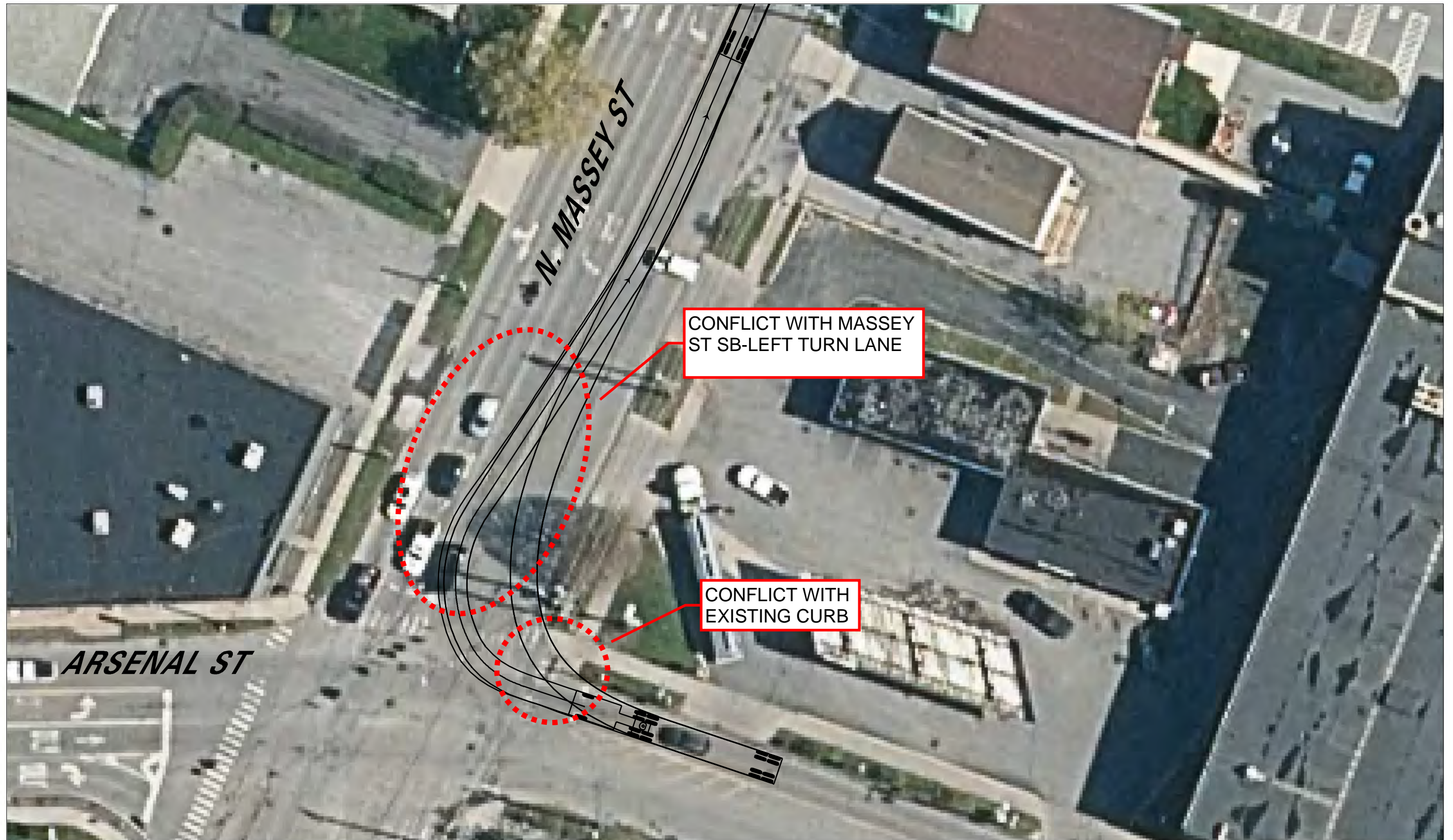
**Barton
& Loguidice**

**TRUCKING ROUTE ALTERNATIVE STUDY
WASHINGTON STREET & ARSENAL STREET
RIGHT TURN ANALYSIS**









APPENDIX B -

STAKEHOLDER INTERVIEWS SUMMARY

Project Title	Watertown-Jefferson County Transportation Council (WJCTC) Truck Route and Public Safety Building Access Studies
Interview Dates	2021
Venue	Phone, email and videoconference
Topic	Preliminary Stakeholder Interviews
Interviewees	See interview summaries
Project Team	Keith Ewald, Barton & Loguidice Evan Cobb, Barton & Loguidice Christopher Dunne, Highland Planning

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OVERVIEW

Background

The Watertown-Jefferson County Transportation Council (WJCTC) is conducting an area-wide study of trucking routes within and around the city of Watertown to gain a better understanding of issues, opportunities and impacts associated with truck traffic in the region's urban center. The current configuration of designated truck routes between Interstate 81 (I-81) and Public Square in Watertown contributes to traffic congestion and bottlenecks and poses potential safety issues for other vehicles, cyclists, and pedestrians.

A related project explores the creation of a new access road to the Metro-Jefferson Public Safety Building (PSB) and the City Center Industrial Park ("the Industrial Park") in the city of Watertown. Bellew Avenue South provides the sole suitable access point to the Industrial Park as well as Waterman Drive, off of which the PSB is located. Resulting delays at the intersection of Bellew and Arsenal Street may make the Industrial Park less attractive to potential tenants and negatively impact emergency response times.

A series of stakeholder interviews were undertaken in 2021 to document issues and opportunities for each study, review proposed alternatives with potentially impacted parties and identify other options and stakeholders to contact. A table of all stakeholders contacted for interviews and responses is included in Appendix A and a map documenting stakeholder comments and identified routes is viewable in Appendix B.

KEY FINDINGS

Truck Route Study

Stakeholders were contacted in the winter and spring of 2021 for interviews via Zoom videoconferencing or phone, or for responses to questions via email. Questions focused on issues and opportunities with respect to the study as well as proposed changes to designated truck routes. Stakeholders contacted were also asked about the related Public Safety Building Access Study. Seven (7) stakeholders representing freight and logistics interests, local economic development organizations and businesses participated. Key findings included the following:

- **The desire to have truck traffic avoid Public Square is widely shared among downtown businesses and drivers themselves.** That Public Square should have minimal truck traffic is

one of the few areas of consensus among the downtown business community. Additionally, truck drivers point to Public Square as an area they generally try to avoid due to congestion and other factors.

- **Some stakeholders are skeptical that routing and signage alone can reduce the number of trucks travelling through Public Square.** The perception that truck drivers are more reliant on private way-finding technologies (e.g., Google Maps, Waze, etc.) than public signage leads some stakeholders to believe changes to designated truck routes are unlikely to shift truck traffic away from Public Square.
- **The presence of industrial or delivery-based businesses in close proximity to Public Square may be contributing to the sense that truck traffic is heavy in this area.** Truck drivers often have to make complex turning maneuvers to dock at businesses such as Knowlton Technologies and Morrison's Furniture at the edges of Public Square. Additionally, businesses such as New York Air Brake and White's Lumber, while not immediately adjacent to Public Square, may be accessed using routes that go directly through downtown.
- **Stakeholders were open to longer term interventions such as a reconfiguration of designated truck routes or extending the Black River Parkway/connections to I-81.** While routes used by drivers were heavily dependent upon origins/destinations, stakeholders saw some of the proposed options for routing around Public Square as workable.

Public Safety Building Access Study

Stakeholders were contacted throughout 2021 for interviews via Zoom videoconferencing or phone, or for responses to questions via email. Questions focused on issues and opportunities with respect to the study as well as specific alternatives¹ developed to improve access to either the Public Safety Building, City Center Industrial Park, or both. Stakeholders contacted were also asked about the related Truck Route Study. Seven (7) stakeholders representing public safety services, freight and logistics interests, local economic development organizations and Industrial Park tenants participated. Key findings included the following:

¹ To avoid confusion with numbering, Public Safety Building Access Study alternatives are referred to by their street names/route numbering throughout this document and when possible, discussions of alternatives have been ordered to proceed clockwise from S. Bellevue Avenue.

- **While both see the current site access at S. Bellew and Arsenal as inadequate, solutions for Industrial Park vs. Public Safety Building tenants are likely to differ.** Travel needs for businesses in the Industrial Park are focused on access to I-81 whereas the Police Department is oriented toward the city. The Sheriff's office must respond to calls throughout Jefferson County. The current single access point creates a potential safety issue since a spill or accident could hem in emergency response vehicles. This intersection is also not well designed for truck-turning movements.
- **The presence of protected wetlands and active rail operations constrain ability of the Industrial Park to expand and may reduce access route options.** According to stakeholders, the Department of Environmental Conservation (DEC) has identified much of the area east of I-81, south of Arsenal Street (Route 3) and west of South Massey as natural wetlands that may not be suitable for development even with remediation efforts. As such, few parcels remaining in the Industrial Park area may be available for development either for tenants or as points of access. Additionally, an at-grade crossing of the railroad tracks at Willow Street, which provided secondary access to the site for Public Safety Building tenants, was closed off by CSX.
- **Alternatives using Coleman Avenue, or the nearby plaza, have been the most extensively considered options for truck access to the Industrial Park.** The idea of building off of the road stub on Waterman Drive to connect with Coleman Avenue/plaza to provide secondary access for trucks to Route 3 has been widely discussed. While viewed favorably by Public Safety Building and Industrial Park tenants, other stakeholders have pointed out potential constraints on using this option including the presence of utilities and businesses that could be impacted.
- **The use of Sand Street to access Route 3 was seen as a good option by the Public Safety Building tenants.** Both the Sheriff's Office and the Police Department saw the use of the Big Apple parking lot and Sand Street to connect the Public Safety Building to Route 3 as a workable secondary access point. These public safety stakeholders saw an additional connection to the street network that avoids the intersection used by Industrial Park-bound trucks as a plus.
- **Ensuring alternatives do not become trafficked by civilians is a priority.** The Police Department pointed out that several of the proposed options risk becoming cut-throughs for regular motorists, which would erode their usefulness to the Public Safety Building tenants.

INTERVIEW SUMMARIES

Interview questions and discussion are summarized below.

Jefferson County Economic Development

David Zembiec, CEO

February 26, 2021

What are the main opportunities and issues for freight/logistics stakeholders in both studies?

- No thoughts on truck studies
- Access point to CCIP: Coleman Ave option is being explored
- Renzi wants to see additional access to CCIP
- Results of discussions with the Local Development Corporation (LDC) and City planners: Coleman Avenue has some physical constraints and potentially high costs associated with it

Who else should we talk to?

- Reach out to Renzi – they do so much shipping out of there. Can get firsthand account of what their challenges are. Roth is expanding as well. They want to utilize rail siding to bring in material.
- Can provide other contacts as well

Watertown Local Development Corporation

Donald Rutherford, CEO

Thursday, February 25, 2021 from 9:00 – 9:20 a.m.

Role of LDC?

- LDC has exclusive option on land at CCIP
- CCIP only has one parcel remaining to sell to prospective buyers. Other surrounding parcels would need wetland remediation for an expansion of the CCIP to happen,

except for small parcel (2.5 acres) in the corner near Blue Mountain Spring Water. The Department of Environmental Conservation (DEC) has not expressed a high level of interest in remediation since these are “natural” wetlands and difficult to replace

What are the main opportunities and issues for freight/logistics stakeholders in both studies?

- Renzi Food Service has a plan to expand their presence at the park but are adamant that they need a separate entrance. We’ve sold them a separate parcel of land, but they will not commit to locating headquarters there until access issue is resolved; at certain times of day, there is a backlog of trucks and Renzi is usually responsible
- Single access point is an issue for PSB: if a spill or accident happened at single entrance, they are hemmed in
- City wants separate entrance points: this is a high priority for the Mayor of Watertown
- Truck routing conflicts with community vision for Public Square: more pedestrian friendly and conducive to holding events
- Challenges: these are New York state routes and GPS directs trucks through the center of town which creates a “thoroughfare” even though there are a lot of sidewalks/pedestrian-level amenities. Not unusual for this to be the case in small communities like ours.

What are some potential access points for the CCIP/PSB?

- There is a stub off Roundhouse Drive near Blue Mountain Spring Water that we were initially we were looking at which connects to Coleman Avenue/plaza though there are some infrastructure issues on that front. Road width is a challenge. Utilities may have to be moved and land ownership is also a potential problem. Also, there are businesses (medical practice, Tractor Supply Co., etc.) that may be impacted. The Tractor Supply storage area might need to be moved for example.

- There was an egress through a parking lot – that's private property and is now blocked off by concrete barriers. (Agritech property access to Willow Avenue)
- There are few residents in the area that would be impacted but businesses could be an issue.

What are some potential alternative routes for trucks around Public Square?

- Black River Parkway provides a bit of a thoroughfare around downtown. Brings trucks from northeast to I-81 through Coffeen Street. The challenge there is proximity to residential areas.
- There are some business parks that are off of Arsenal Street.

Are there any hot button issues we should be aware of before we start engaging the community?

- Re Access study: not sure what issues may be out there. Issues that might arise depends on the alternative(s) selected. These businesses have a lot of traffic coming in and out of the Park so avoiding impacts to daily operations may be a high priority.
- Re Truck Route study: no big hot button issues. People would like to see a more pedestrian-friendly downtown if it can be accomplished without disrupting residential neighborhoods.

Who else should we talk to?

- City Planning Department
- Talk to the City prior to engaging with businesses/residents on either study

Knowlton Technologies

Jon Richards, Supply Chain Manager and William Hardin, Site Manager

March 3, 2021, 3:30 PM

What has been your experience with truck/tractor trailer traffic destined for your business?

- Northbound traffic from I-81: we tell our drivers to take Exit 46, Coffeen Street to Black River Parkway. Our location has the worst possible setting for a tractor trailer to maneuver in: the loading dock is right on the corner of that intersection, so drivers have to make an immediate U-turn in front of the building and reverse in front of Mill St. They usually have to wait for traffic to subside before backing into Dock #1.
- Project to move dock back fifty yards will be progressing with earliest completion in 2022. Currently there's an old water tank used for fire suppression that is in the way which will be decommissioned when Knowlton hooks into the City's water for their fire suppression needs.
- Northbound traffic is 60 – 75% of our traffic.
- Southbound traffic from I-81: we tell drivers to take Exit 47, Bradley Street to West Main to Mill. Shipments in this direction include raw materials from Canada, one that is every other week, one that's three times a month, and a few customers that actually ship out of Montreal (container haulers)
- One major supplier in Carthage but not tractor trailer (just straight boxes). They come down Factory Street and use Dock #2 where we have a tank farm in between the two buildings. (Entrance is north of Dock #1 on Mill Street).
- Public Square was previously (5-10 years ago) just a giant roundabout so it was relatively easy to navigate. With reconfiguration allowing two-way traffic and entrances at multiple points, traffic congestion has gotten a lot worse.
- Other companies have a lot of truck traffic coming from the east and travelling down Factory Street

Possible alternatives?

- In the long-term, Black River Parkway extension would make a lot of sense
- Traffic coming north up Massey (Route 65) would just hit Public Square. We already direct drivers to avoid Public Square.

Who else should we talk to?

- Big furniture store across from us on Factory Street (Morrison's Furniture Store) also has trucks that have to make difficult maneuvers to dock.

Renzi Food Service

John Renzi, President

Tuesday, March 2, 2021, from 10:00 to 10:30 a.m.

Issues and Opportunities for the Access Study?

- Issues:
 - Renzi's has 50 tractor trailers and sees deliveries to their location
 - CCIP has really been built up in the years since Renzi's first located there; there has been a trend of locating retail and government services (Social Security Administration, Public Safety Building) at the CCIP which has exacerbated traffic issues
 - Most of Renzi's fleet is on the road by 6 a.m. – real challenge comes in the afternoon with deliveries, etc.

Thoughts on potential alternatives for the Access study?

- Coleman Avenue
 - Would alleviate traffic issues around Social Security Building, Walgreens and Credit Union at Arsenal/Bellew; (retail is mixing with industrial park)
- Adding access point to the northeast of CCIP/PSB (Black River Parkway Extension)
 - 90% of Renzi's load is traveling between CCIP and I-81 so connection to Arsenal further east of current access point is not particularly helpful
 - Renzi's trucks are in the city all the time but it still represents only about 5%
 - Extending the Black River Parkway could be a good option for Knowlton Technologies' trucks to avoid Public Square - they are smack in the middle of the everything

- Bridge to Massey Street from the southeast corner of the CCIP:
 - might bring more traffic into the CCIP; could be seen as a bypass for regular drivers around downtown so might not help with truck issues

Thoughts on potential alternatives for the Truck Route study?

- Look at Bradley Street exit to go around the city
- Connections to Town Park on Coffeen Street might also be helpful

Who else should we be talking to?

- White's Lumber will be important to include in the process – Dave at JCED should have contact info

Watertown Downtown Business Association

Joseph Wessner, President

Friday, March 19, 2021 at noon.

Issues and Opportunities with truck traffic in Public Square?

- Have to address Google Maps routing truck drivers through downtown
- Truck traffic is probably the #2 issue that people are concerned with; pedestrian crossing is the #1 issue (crossing a six-lane road)
- Trucks are loud, dangerous: just last year a woman was killed by a truck in a crosswalk
- Really not designed for trucks
- Some deliveries for restaurants but not big 53-footers
- Routes:
 - Heading north: new 781 extension could be good
 - Heading east: could also do 342 (nine miles out of the way); only one left turn in the whole thing

- West Main Street is a possibility as a route right through the city; issues with half of it being residential; can't really widen it more than it is
- BID:
 - Bring people back to downtown
 - It's set up as a commercial center; everybody used to be downtown; usual revitalization of the downtown
 - Right now it's just an inconvenient pass through
 - Emphasize unique nature of the Square – turn it into a tourist spot; needs to be pedestrian-friendly
 - Keep studying Public Square configuration but convergence of state and county routes makes it difficult
 - Would love to actually make use of the park in the middle – would love to have 30+ events year-round
- Businesses all have backdoor delivery; really only one building in downtown that doesn't have a backdoor because it's hemmed in by streets; everyone else has streets and alleyways
- Desire to do something about truck traffic is one of the few areas of consensus

How to reach members:

- DBA has
 - E-blasts
 - Newsletters
 - Regular meetings

Hot button issues?

- Parking remains the most contentious issue among downtown businesses

Gaetono Transportation

Balvinder Singh

Kaleb O'Dett

Email, March 30, 2021

Do your drivers try to avoid routing through Public Square in Watertown?

- The drivers try to avoid going through the Public Square, due that it can be tight fit. This all depends on the traffic flow, they will go that way if they need to.

If your drivers are routed through Public Square, what do you see as some viable alternative routes to avoid it?

- Approaching Public Square from the north on Route 11: As a driver, I would take Paddock Street to Holcomb Street then Route 11 south of Public Square
- Approaching from I-81: Route 3 then Leray Street [sic: North Massey south of the River, Leray north of the river]. This would happen on the delivery location or pick up.
- For the most part, we deliver to Renzi foods.
- If we have a load in Lowville, most take Route 11 to Route 12 from the company's yard.

What routes does your fleet use when connecting to I-81?

- Bradley St
- Coffeen St
- Arsenal St
- Route 11 to Route 342 then to I-81

Do you deliver to any of the industrial/business parks in and around Watertown (see truck route map)?

- For the most part our company delivers food grade products. If we make a delivery in the Watertown area it goes to Renzi Foods. Most of the drivers take Route 3 to Renzi's.

In the county's Long Range Transportation Plan, some extensions and bypasses were proposed as possible alternatives to current truck routes (see attached LRTP map). Do you have any thoughts on these proposals?

- The proposed plan for the route is ok. The only issue there is that it could be just an exit on I-81 to the area of Renzi and continue the route [as] planned. [i.e., forego the Black River Parkway Extension]

Erie Materials

Aaron Draper

Email, March 30, 2021

Do your drivers try to avoid routing through Public Square in Watertown? If your drivers are routed through Public Square, what do you see as some viable alternative routes to avoid it?

- We don't normally travel the public Square unless necessary
- Possible [to use] Massey St as alternative

What routes does your fleet use when traveling between I-81 and points east of Public Square in Watertown?

- Bradley St. is most used, because of our location

Do you deliver to any of the industrial/business parks in and around Watertown (see truck route map)?

- Don't normally deliver to industrial parks/ mainly work with contractors

Development Authority of the North Country (DANC)

Hartley Schweitzer

Michelle Capone

June 14, 2021, at 9:00am

- Pedestrian connectivity: Public Square – Franklin St. – most of the public parking is on the opposite side of the street. Ties in with parking issues. Increasing speeds. Are the timings of the ped x correct? Crossing near bus station might not have the timing right
- Arcade and Arsenal light (city-owned).
- The City undertook a NYSDOT-funded study of the light timing for Public Square and surrounding the surrounding area (That's Hartley's commute)
- Just during peak commute times, there are backup issues.
- Sensors may not function properly and while the signage is helpful, Public Square should be more walkable.
- Franklin St. light gets sped through (People feel safer walking in bigger cities!)
- In terms of rerouting trucks to avoid Public Square: northbound trucks off Route 11 to I-81 – I-781 at Kellog Hill
- Look at past DRI project: closure of north side of Public Square was discussed and truck issues came up

Jefferson County Sheriff's Office

Sheriff Colleen O'Neill

Tuesday, August 17, 2021, from 2:30 to 3:00 p.m.

- S. Bellew St Alternative
 - Does not help us. That intersection is really tough and we've requested from Sean Hennesey at NYSDOT to have a left turn arrow there.
 - Some alternatives might better serve PSB and some others might better serve CCIP. Would access to Arsenal actually help?
 - Improvements will be made at Arsenal/Bellew regardless.
 - Emergency Response directions at Bellew / Arsenal: 1/3 left, 1/3 right and 1/3 straight. To access I-81 N, I go north to Coffeen St.
- Sand St Alternative

- Though this option has been crossed off by the project team, it looks like a good option for us because it provides secondary access to Route 3.
- W. Mullin St. Alternative
 - Brings you out into the city but has easy access to Rt. 11. Works well it is the opposite direction from the truck traffic
- Pine St. Alternative
 - This option might work as well.
- Ives St Alternative
 - Better for southwest responses.
- S. Massey St Alternative
 - Same predicament as Ives Street Alternative but just takes you longer
- I-81 NB Exit to CCIP
 - Too close for another clover leaf right there but could be slip ramp to CCIP. Doesn't really help Sheriff's office since we're never in a rush to get *back* to the Public Safety Building.
- Towne Center Alternative
 - Great to reach Sackett's Harbor but that's a huge project
- Overall: best options for the Sheriff's Office are Sand St., W. Mullin St and Ives.
- Watertown PD probably makes a lot more rights than lefts at Bellew. They'll want something that goes into City
- Sheriff's office will provide high-level directional data (possibly w/ emergency vs. non-emergency calls)
- Willow St. was open to PSB until about six years ago. Jersey barriers were put up possibly because of neighbors complaining about traffic.

[Watertown Police Department](#)

Charles Donaghue, Chief of Police

Captain LaBarge

November 9, 2021, at 2:00PM

- S. Bellew Ave. Alternative
 - AmeriCU Credit Union and Walgreen's driveways are too close to Arsenal Street. This should be addressed regardless of what other alternatives are selected but improving the

- S. Bellew Avenue alone will not solve the issue with slow-moving trucks and a single access point
 - The project team will look at potential changes including access management issues at this intersection which could result in recommendations to close some of those driveways.
- Sand St. Alternative
 - Could work quite well if new connection was a one-way / exit only onto Arsenal Street
- Black River Parkway Extension Alternative
 - Would not help police responses
- W. Mullin St. Alternative
 - Would work well for the Department when trying to access points east but could become a heavily trafficked secondary street
 - For example: the current Stone Street gets congested at times with drivers trying to avoid S. Massey / Arsenal intersection
- Pine St Alternative
 - If it connected to S. Bellew, it would potentially increase civilian traffic on Waterman Drive/S. Bellew
 - What if this alternative connected to Pine St. from the access street around the PSB?
 - That would likely increase civilian traffic through and around the PSB
 - What if there was a restricted access connection from the access road around the PSB to Pine Street (so a driveway for the PSB onto this alternative) and all other traffic used W. Mullin Street Alternative?
 - Any increase in traffic on S. Bellew is going to be a problem.
- Ives St. Alternative
 - Would increase access but would not solve the conflict between public safety vehicles and slow-moving truck traffic
- S. Massey St. Alternative
 - Might work for Sheriff's office but it would be really convoluted for police vehicles
- I-81 Exit Alternative
 - Would reduce truck traffic at Bellew Avenue arriving from I-81 north but would need a second ramp option for access to I-81 south
- Towne Center Alternative
 - Would not solve the public safety vehicle-truck issue and would require police vehicles to take a circuitous route
- Coleman Ave Alternatives

- The project team initially rejected this Alternative because the high traffic volumes on Arsenal Street and the fact that this option is more just redundant access without necessarily resolving other issues
- Chief was member of the Complete Streets Committee which explored the Coleman Avenue option
- While use of Coleman Avenue east entrance onto Arsenal was rejected by the Committee, another option was looked at:
 - Convert portions of the plaza's parking lot into a road with curbs that can accommodate truck traffic connecting the current western entrance (sans signage) to the eastern portion of Coleman Avenue near Macar's
 - Prohibit truck movements on Bellew Ave and instead have them use this new Coleman Avenue Plaza Road
 - Coleman Avenue's eastern stretch would become a dead end so businesses and residents along it would retain access but not be impacted by thru traffic
 - The Police Department would prefer an option to the east of the PSB, but this Coleman Avenue Plaza option could work
 - Purchasing right-of-way/ use of eminent domain might be too expensive
- Other options on side streets off of Arsenal: Haney or Duffy are really narrow / rural feeling and thus not appropriate for this kind of traffic
- CSX put the cement barriers up on Willow St. Vehicles from the PSB used to drive across that all the time, especially for emergencies to the east but this is no longer an option

APPENDIX A

Stakeholders Contacted for Interviews

Organization/Firm	Type	Agreed to Participate	Interview/Response Date	Truck Route Study	PSB/Industrial Park Access Study
ABF Freight	Freight/Logistics	No response			
City of Watertown Police Department	Public Safety	Yes	11/9/21		x
Development Authority of the North Country (DANC)	Economic Development	Yes	6/14/21	x	
Erie Materials	Freight/Logistics	Yes	4/5/21	x	x
FedEx Ground Terminal	Freight/Logistics	Declined			
Gaetano Transportation	Freight/Logistics	Yes	3/30/21	x	x
Jefferson County Economic Development (JECED)	Economic Development	Yes	2/26/21		x
Jefferson County Sheriff's Office	Public Safety	Yes	8/17/21		x
Knowlton Technologies	Business	Yes	3/3/21	x	
New York Airbrake	Business	No response			
Northern Logistics	Freight/Logistics				
Renzi's Food Service	Business	Yes	3/2/21	x	x
Roth Industries	Business	No response	3/1/21		
Trucking Association of New York (TANY)	Freight/Logistics	Declined			
Watertown Downtown Business Association	Economic Development	Yes	3/19/21	x	
Watertown Local Development Corporation	Economic Development	Yes	2/25/21	x	x
WESCO Distribution Inc.	Freight/Logistics	Declined			

APPENDIX B

Freight and Logistics Company Routing Map

The below map was created in Google MyMaps to document and visualize routes identified by freight and logistics stakeholders, as well as to record comments on proposed alternatives both for the Truck Route Study and the Public Safety Building Access Study.

[Interactive Map](#)