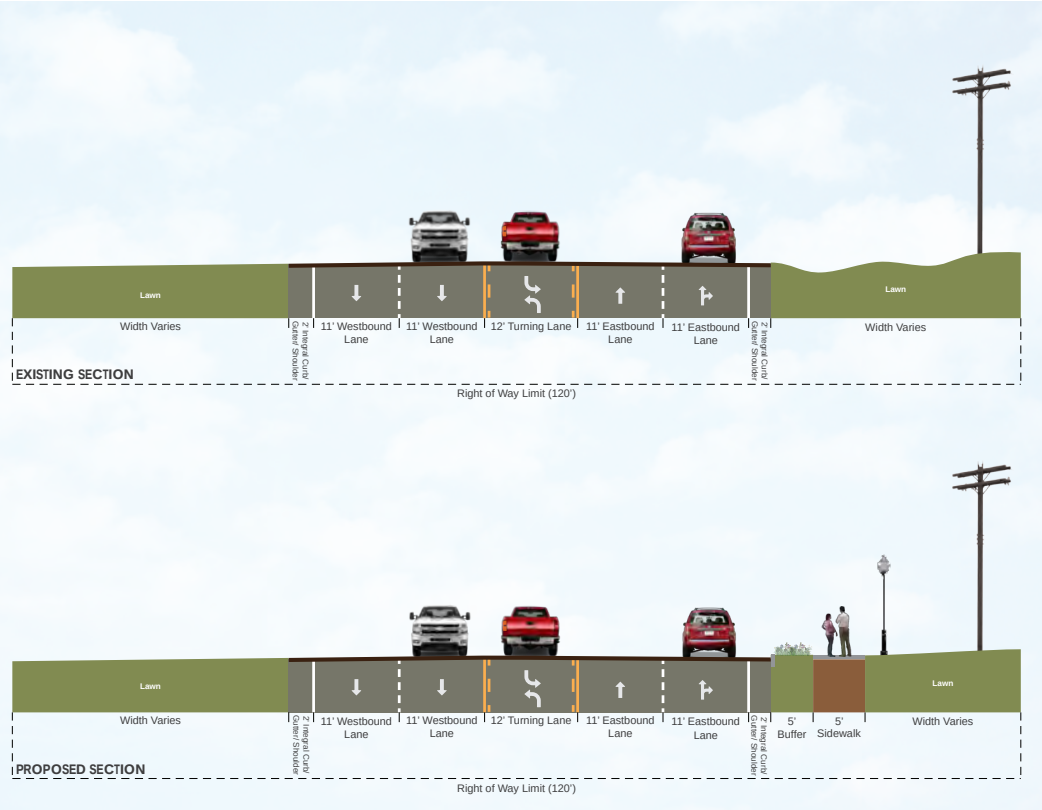
Project Area Needs and Recommendations

- Construct new 5-foot sidewalk along the west side of Towne Center Drive/Sam's Drive/CR 202, providing a continuous pedestrian connection from Autumn Ridge Apartment Complex to the intersection with NYS Route 3.
- Construct new 5-foot sidewalk along the south side of NYS Route 3 extending to the intersection with Towne Center Drive.
- Consider upgrading the intersection at Kay Jewelers (NYS Route 3 and Towne Center Drive) to accommodate and safely support future sidewalk crossings along the south side of NYS Route 3.
- Study the feasibility to implement intersection improvements at NYS Route 3 and Towne Center Drive/Sam's Drive, including new crosswalks on all approaches, pedestrian signal poles, lighting, and related pedestrian safety amenities.
- Grading and drainage improvements.

CROSS SECTION IMPROVEMENTS



Planning Phase Cost Estimate

Item No.	Description	Unit	Estimated Quantity	Cost/Unit	Total Cost
1.	Sidewalk Improvements (including excavation, sidewalk, and adjacent lawn areas)	LF	2660	$ 120.00	$319,200.00
2.	Pedestrian Signals (including curb ramps, crosswalks, signage, and pedestrian beacons)	LS	1	$24,200.00	$24,200.00
3.	Basic Work Zone Traffic Control	LS	1	$20,600.00	$20,600.00
4.	Survey Operations	LS	1	$6,900.00	$6,900.00
5.	Field Change Payment	DC	17200	$1.0	$17,200.00
6.	Mobilization	LS	1	$13,700.00	$13,700.00
				Construction Cost	$401,800.00
				20% Contingency	$80,400.00
				Total Project Cost Estimate	**$482,200.00**

CARTHAGE ELEMENTARY SCHOOL CONNECTION

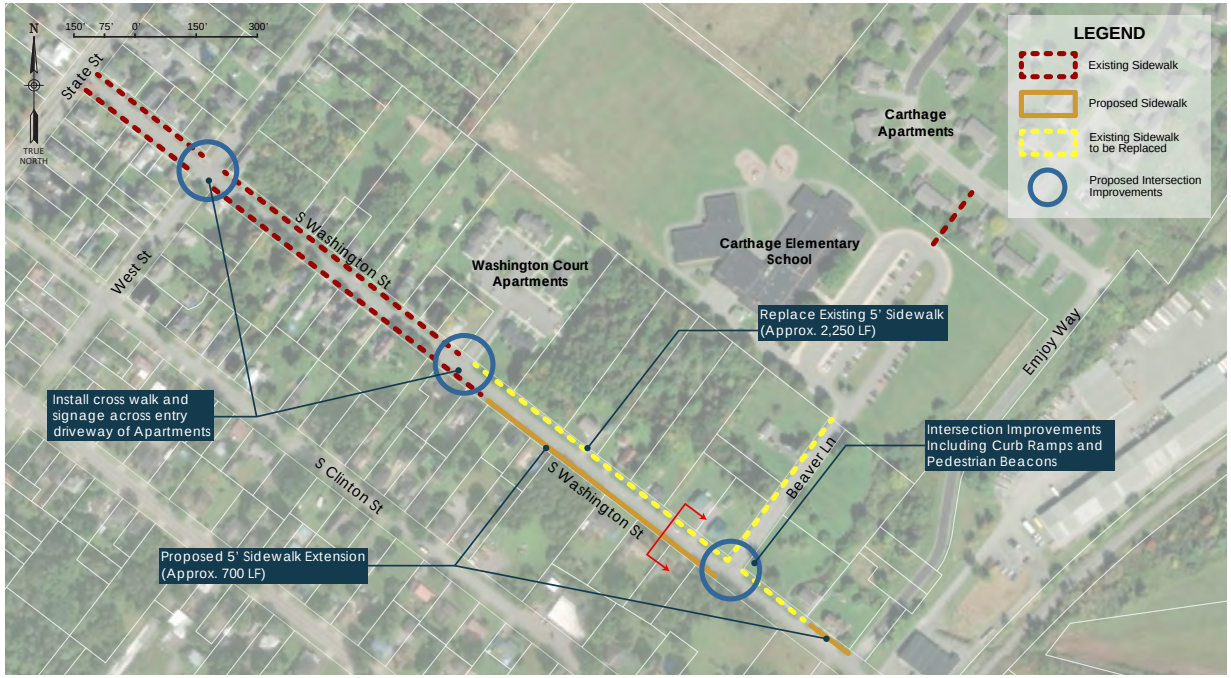
Project Area Overview

South Washington Street serves as a key local connector within the Village, linking several important community assets, including Carthage Elementary School, Washington Court Apartments, and Carthage Apartments. As it extends westward, it connects directly to State Street—a designated minor arterial roadway—enhancing accessibility between residential areas and the broader transportation network. Due to the presence of both school and multi-family residential developments, South Washington Street experiences increased pedestrian activity. This growing foot traffic highlights the critical need for a continuous, ADA-compliant sidewalk along both sides of the street to ensure safe and accessible travel for all users, especially schoolchildren and residents. The concentration of educational and multi-family residential uses along this corridor generates substantial pedestrian activity throughout the day.

Project Area Issues & Needs

- Discontinuous sidewalk on the west side of Washington Street from Washington Court apartments to Beaver Lane.
- Existing sidewalks do not meet current ADA standards, limiting safe access for individuals with mobility challenges.

CONCEPT PLAN

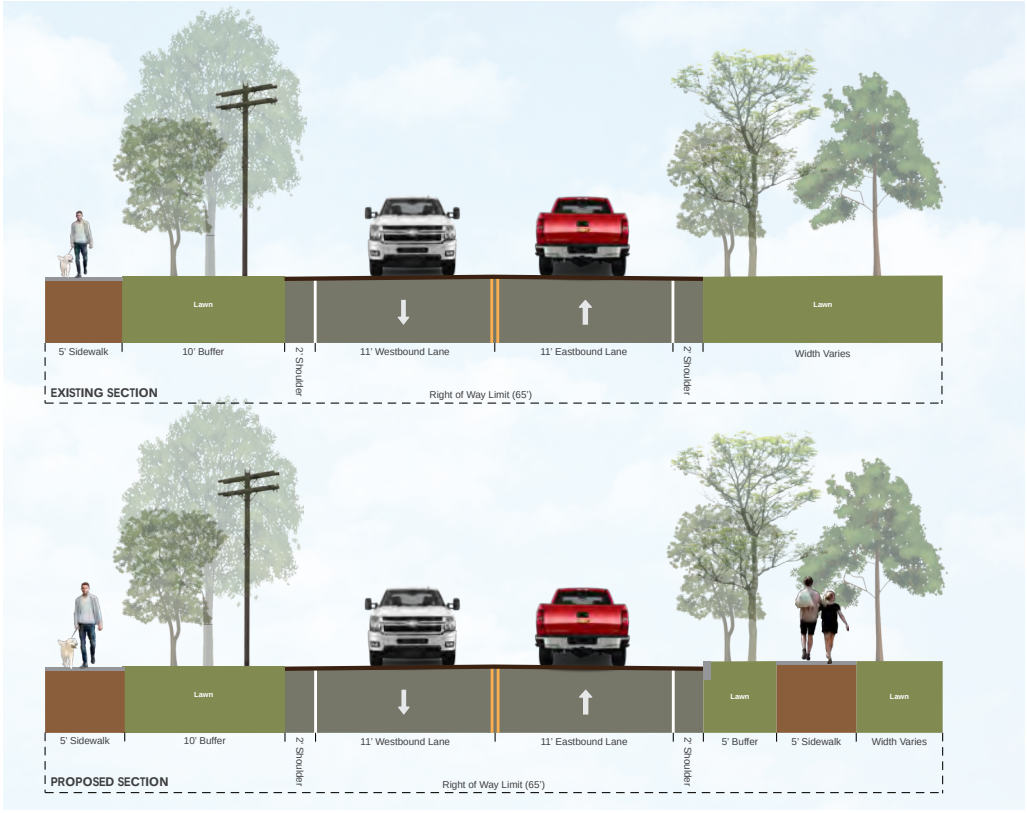


- There is no marked pedestrian crosswalk at the intersection of South Washington Street and Beaver Lane, posing safety concerns for crossing pedestrians and students particularly at the entrance of the school.
- The corridor lacks essential pedestrian infrastructure such as school zone signage, wayfinding, or other safety features between State Street and Carthage Elementary School.

Project Area Needs and Recommendations

- Reconstruct continuous 5-foot ADA-compliant sidewalk along the south side of Washington Street from Washington Court Apartments to Beaver Lane, extending to Carthage Elementary School.
- Construct short run of new 5-foot sidewalk along the north side of Washington Street to Emjoy Way, ensuring continuous pedestrian connectivity.
- Study the feasibility of installing designated pedestrian crosswalks at key locations, particularly at the intersection of South Washington Street and Beaver Lane, and implement school zone pedestrian safety improvements including signage, lighting, and pavement markings.

CROSS SECTION IMPROVEMENTS



Washington Street Looking South

Planning Phase Cost Estimate

Item No.	Description	Unit	Estimated Quantity	Cost/Unit	Total Cost
1.	Sidewalk Improvements (including excavation, sidewalk, and adjacent lawn areas)	LF	2335	$ 120.00	$280,200.00
2.	Pedestrian Signals (including curb ramps, crosswalks, signage, and pedestrian beacons)	LS	1	$12,300.00	$12,300.00
3.	Basic Work Zone Traffic Control	LS	1	$17,600.00	$17,600.00
4.	Survey Operations	LS	1	$5,900.00	$5,900.00
5.	Field Change Payment	DC	14600	$1.0	$14,600.00
6.	Mobilization	LS	1	$11,700.00	$11,700.00
				Construction Cost	$342,300.00
				20% Contingency	$68,500.00
				Total Project Cost Estimate	**$410,800.00**

CARTHAGE NORTH BROAD STREET CONNECTOR

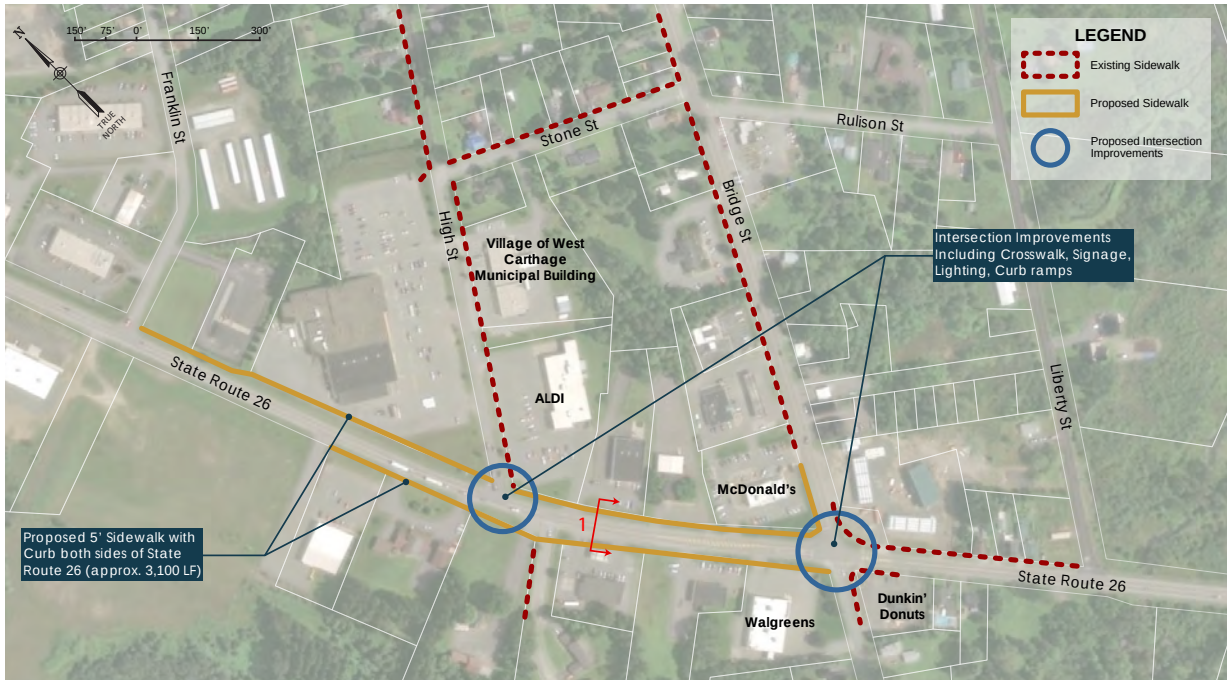
Project Area Overview

North Broad Street (Route 26) functions as a principal arterial corridor traversing the Village of West Carthage, serving as a key route for regional and local traffic. The corridor supports a concentration of commercial land uses and provides critical access to local businesses and services, reinforcing its role as a major economic spine within the Village. The intersection of North Broad Street and Bridge Street forms a prominent commercial node that experiences consistent vehicular volumes and elevated pedestrian activity throughout the day. Proximity to surrounding residential neighborhoods further contributes to foot traffic along this corridor.

Project Area Issues & Needs

- No sidewalks on either side of North Broad Street (Route 26) beginning at the Bridge Street intersection.
- No marked pedestrian infrastructure, including crosswalks, curb ramps, signage, and lighting.
- Many driveways to local businesses create a need for heightened awareness of turning movements.

CONCEPT PLAN



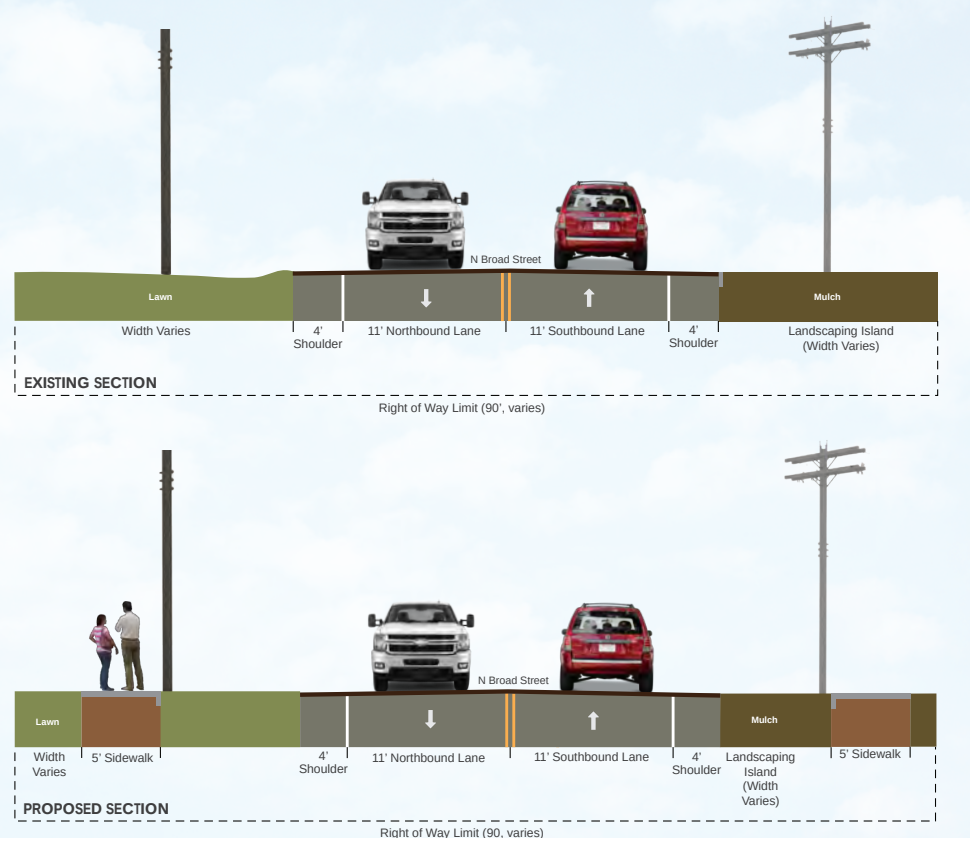
Intersection of Bridge Street and State Rout 26 Looking East

Priority Area

Project Area Needs and Recommendations

- Construct a new 5-foor ADA-compliant sidewalk along the east side of North Broad Street from Franklin Street to Bridge Street.
- Extend the new sidewalk from the intersection of Bridge Street and North Broad Street along the north/ west side of Bridge Street to connect with the existing sidewalk infrastructure.
- Consider intersections Improvements at North Broad Street/High Street and Bridge Street/North Broad Street with clearly marked crosswalks, ADA-compliant curb ramps, pedestrian signage, and improved lighting to increase safety and accessibility.

CROSS SECTION IMPROVEMENTS




State Route 26 Looking South

Planning Phase Cost Estimate

Item No.	Description	Unit	Estimated Quantity	Cost/Unit	Total Cost
1.	Sidewalk Improvements (including excavation, sidewalk, and adjacent lawn areas)	LF	3180	$ 210.00	$667,800.00
2.	Pedestrian Signals (including curb ramps, crosswalks, signage, and pedestrian beacons)	LS	1	$54,500.00	$54,500.00
3.	Basic Work Zone Traffic Control	LS	1	$43,300.00	$43,300.00
4.	Survey Operations	LS	1	$14,400.00	$14,400.00
5.	Field Change Payment	DC	36100	$1.0	$36,100.00
6.	Mobilization	LS	1	$28,900.00	$28,900.00
				Construction Cost	$845,000.00
				20% Contingency	$169,000.00
				Total Project Cost Estimate	**$1,014,000.00**

CARTHAGE -DOWNTOWN WATERFRONT

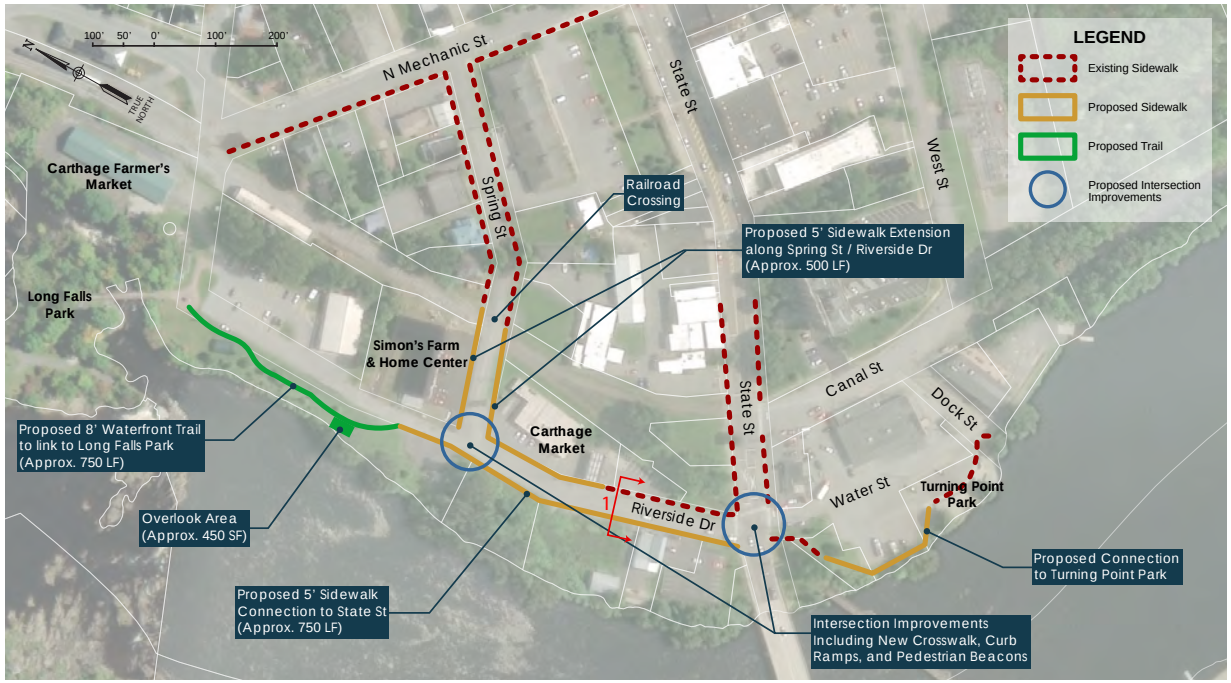
Project Area Overview

Water Street, which transitions into Riverside Drive north of its intersection with State Street, functions as a key local roadway providing direct access to nearby commercial and community destinations, including Carthage Market, Sunoco Gas Station, and Simon's Farm and Home Center. Together, Water Street and Riverside Drive serve as important connectors to the Carthage waterfront, linking several recreational and civic assets such as Long Falls Park, the Carthage Farmers Market to the north, and Turning Point Park to the south. This corridor plays a significant role in supporting both local circulation and access to the Village's waterfront amenities and downtown areas. Enhancing pedestrian and bicycle connectivity along Water Street and Riverside Drive would strengthen linkages between residential neighborhoods, commercial uses, and waterfront destinations—promoting safe, multimodal access and reinforcing the Village's connection to its riverfront identity.

Project Area Issues & Needs

- No pedestrian or bicycle connectivity between Long Falls Park in the north and Turning Point Park in the south.
- No sidewalk along Riverside Drive from Spring Street to the railroad crossing. Asphalt along Riverside Drive and at the intersection of State Street is deteriorated, cracking, and not ADA compliant.

CONCEPT PLAN



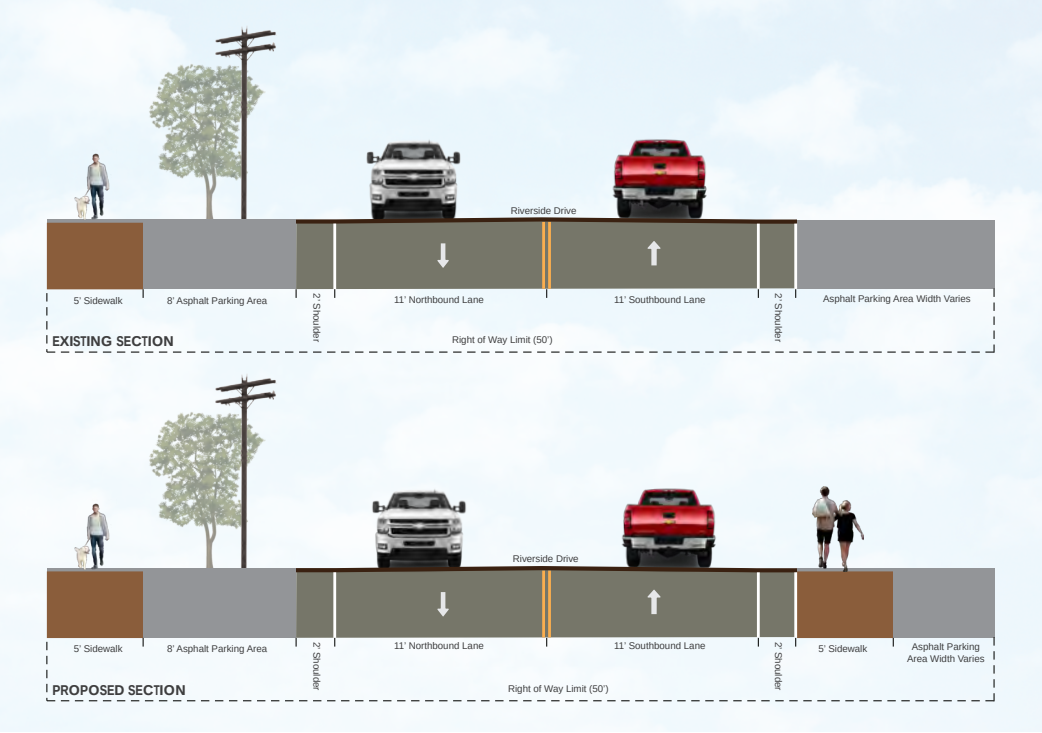

Riverside Drive Looking South

Priority Area

Project Area Needs and Recommendations

- Construct new 5-foot sidewalks on both sides from the intersection of Riverside Drive and Spring Street. Connect the New Sidewalk to the existing sidewalk network.
- Intersection improvements at Riverside Drive and Spring Street including new crosswalk, curb ramps, pedestrian crossing beacons, lighting and signage.
- Construct new 5-foot sidewalk along the west of the Riverside Drive and connect it to State Street.
- Consider implementing intersection improvements at Riverside Drive, Water Street, and State Street, including new crosswalks, ADA-compliant curb ramps, pedestrian crossing beacons, lighting, and signage.
- Construct a new waterfront trail linking the Riverside Drive sidewalk to Long Falls Park, incorporating an overlook area to enhance public access and riverfront experience.
- Extend the existing sidewalk along Water Street to provide a continuous pedestrian connection to Turning Point Park.

CROSS SECTION IMPROVEMENTS



Planning Phase Cost Estimate

Item No.	Description	Unit	Estimated Quantity	Cost/Unit	Total Cost
1.	Sidewalk Improvements (including excavation, sidewalk, and adjacent lawn areas)	LF	1430	$100.00	$143,000.00
2.	Stone Dust Trail Improvements (includes excavation, stone dust trail, and adjacent lawn areas)	LF	430	$50.00	$21,500.00
3.	Overlook Area	LS	1	$50,000.00	$50,000.00
4.	Pedestrian Signals (includes curb ramps, crosswalks, and pedestrian beacons)	LS	1	$20,900.00	$20,900.00
5.	Basic Work Zone Traffic Control	LS	1	$14,100.00	$14,100.00
6.	Survey Operations	LS	1	$47,00.00	$4,700.00
7.	Field Change Payment	DC	11800	$1.0	$11,800.00
8.	Mobilization	LS	1	$9,400.00	$9,400.00
				Construction Cost	$275,400.00
				20% Contingency	$55,100.00
				Total Project Cost Estimate	**$330,500.00**

GENERAL BROWN HIGH SCHOOL

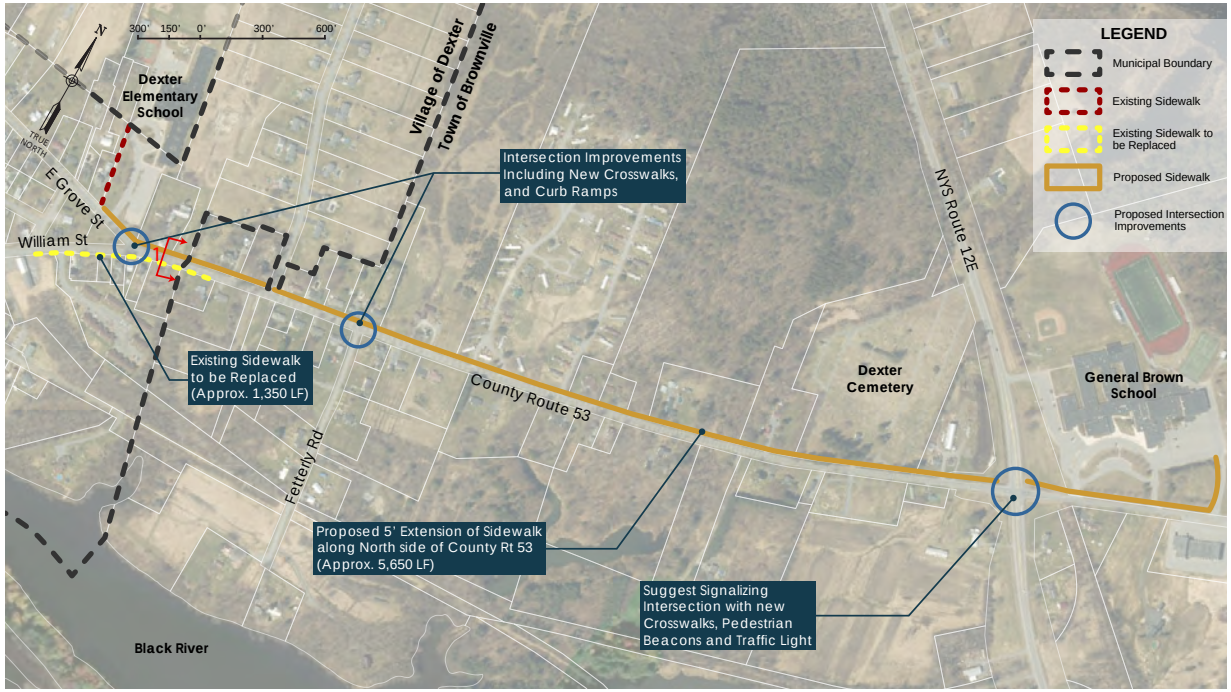
Project Area Overview

County Route 53 (William Street) functions as a vital local corridor within the Village of Dexter, providing direct connectivity between Dexter Elementary School and the General Brown Central School District campus. The route plays a key role in local mobility, facilitating safe access for students, staff, and families while linking surrounding residential areas to educational facilities. Proximity to the schools generates consistent pedestrian activity, highlighting the importance of targeted safety and mobility improvements along the corridor. Furthermore, William Street serves as a strategic link to the Village's downtown core and the Black River waterfront, presenting opportunities to enhance multimodal connectivity, support active transportation, and strengthen the corridor's function as a key community spine.

Project Area Issues & Needs

- Existing sidewalk along the north side of William Street is deteriorating, cracking, and does not meet ADA standards.
- Intersection of County Route 53 (William Street) and State Route 12E lacks pedestrian infrastructure, including marked crosswalks, curb ramps, pedestrian beacons, and school signage.

CONCEPT PLAN

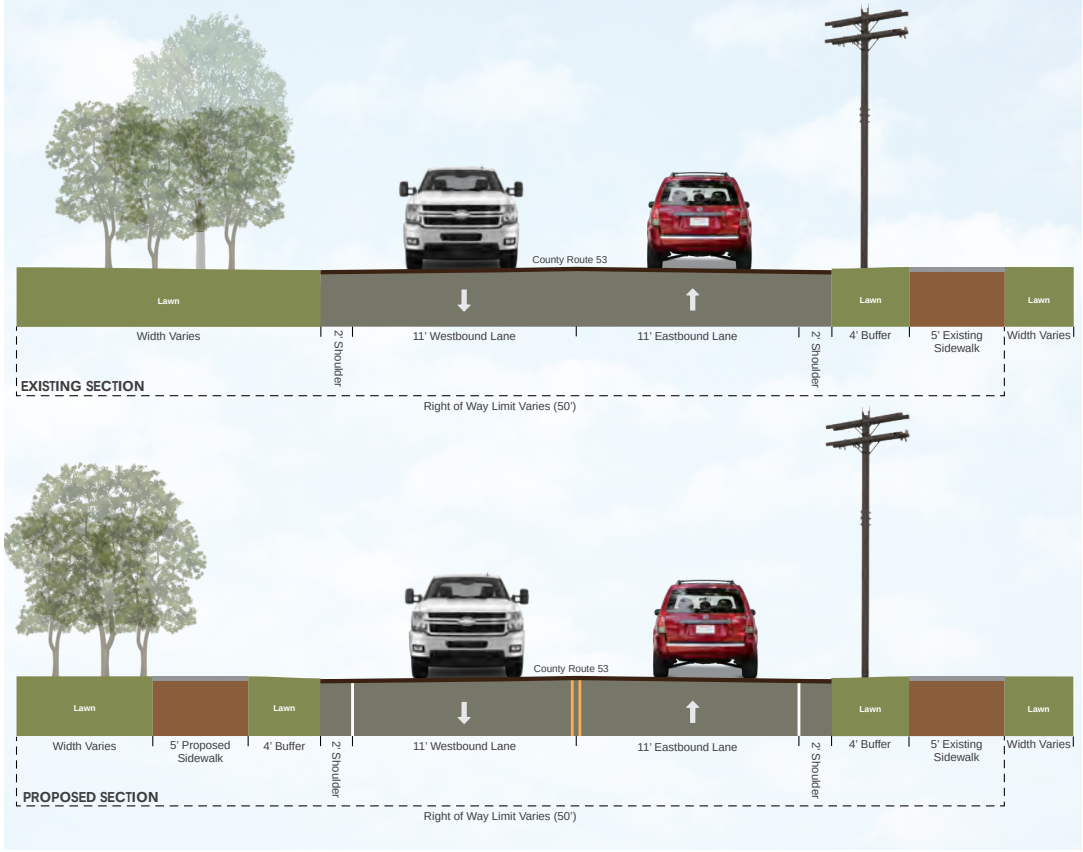



County Route 53 Looking East

Project Area Needs and Recommendations

- Construct new 5-foot ADA-compliant sidewalk along the north side of William Street (County Route 53), providing a continuous accessible pedestrian connection between Dexter Elementary School and General Brown High School.
- Reconstruct deteriorated sidewalk along William Street within the Village of Dexter, extending eastward to Canal Street, ensuring all improvements meet current ADA standards and enhance pedestrian safety and walkability.
- Consider implementing intersection improvements at County Route 53 and State Route 12E, including high-visibility crosswalks, ADA-compliant curb ramps, pedestrian signal beacons, and school zone signage to enhance safety and accessibility.

CROSS SECTION IMPROVEMENTS



Planning Phase Cost Estimate

Item No.	Description	Unit	Estimated Quantity	Cost/Unit	Total Cost
1.	Clearing and Grubbing	LS	NEC	$7,700.00	$7,700.00
2.	Sidewalk Improvements (including excavation, sidewalk, and adjacent lawn areas)	LF	6600	$120.00	$792,000.00
3.	Pedestrian Signals (including curb ramps, crosswalks, and signage)	LS	1	$70,000.00	$70,000.00
4.	Basic Work Zone Traffic Control	LS	1	$52,200.00	$52,200.00
5.	Survey Operations	LS	1	$17,400.00	$17,400.00
6.	Field Change Payment	DC	43500	$1.00	$43,500.00
7.	Mobilization	LS	1	$34,800.00	$34,800.00
				Construction Cost	$1,009,900.00
				20% Contingency	$202,000.00
				Total Project Cost Estimate	**$1,211,900.00**

BLACK RIVER ELEMENTARY SCHOOL

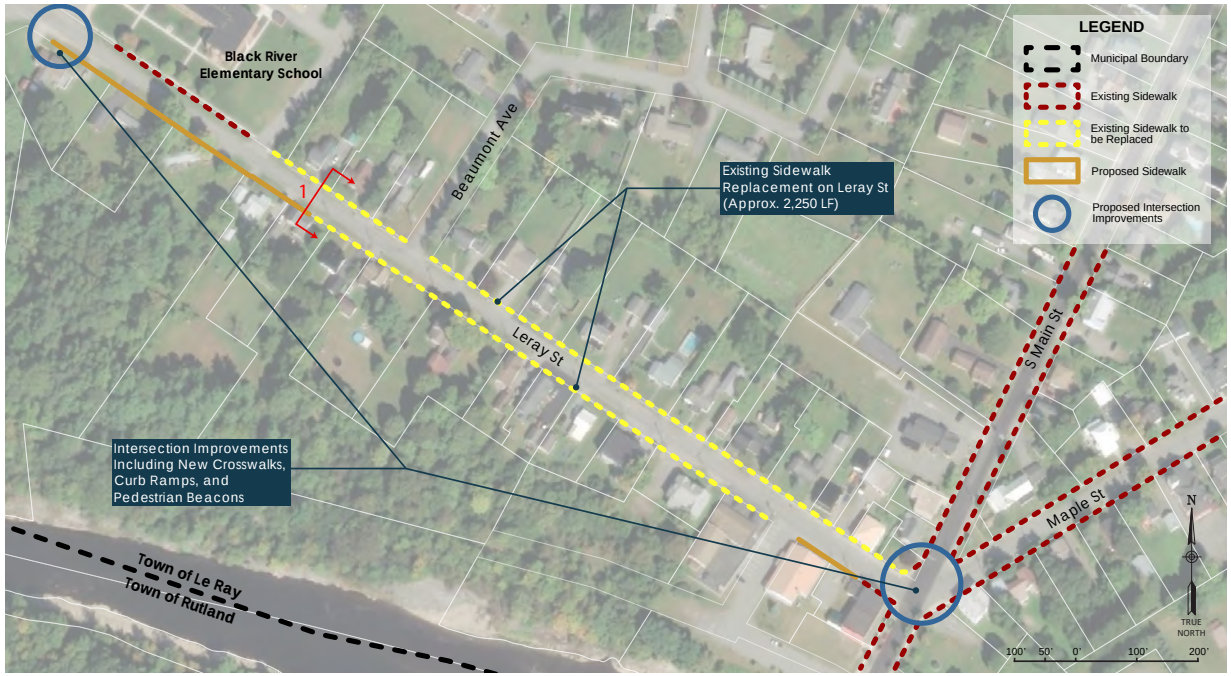
Project Area Overview

Leray Street is a key local road within the Village of Black River that provides an important connection to the Black River Elementary School. Serving as a primary route for school-related traffic, it experiences increased pedestrian activity—especially during school hours. Its close proximity to the Village Square and residential neighborhoods further reinforces its role as a vital corridor for both vehicular and pedestrian movement.

Project Area Issues & Needs

- Existing sidewalk along Leray Street is deteriorating, cracking, and does not meet ADA standards.
- Intersection of Leray Street, North Main Street, and Maple Street lacks essential pedestrian infrastructure, including marked crosswalks, curb ramps, and pedestrian beacons, creating unsafe conditions for crossings, especially during peak school hours.

CONCEPT PLAN

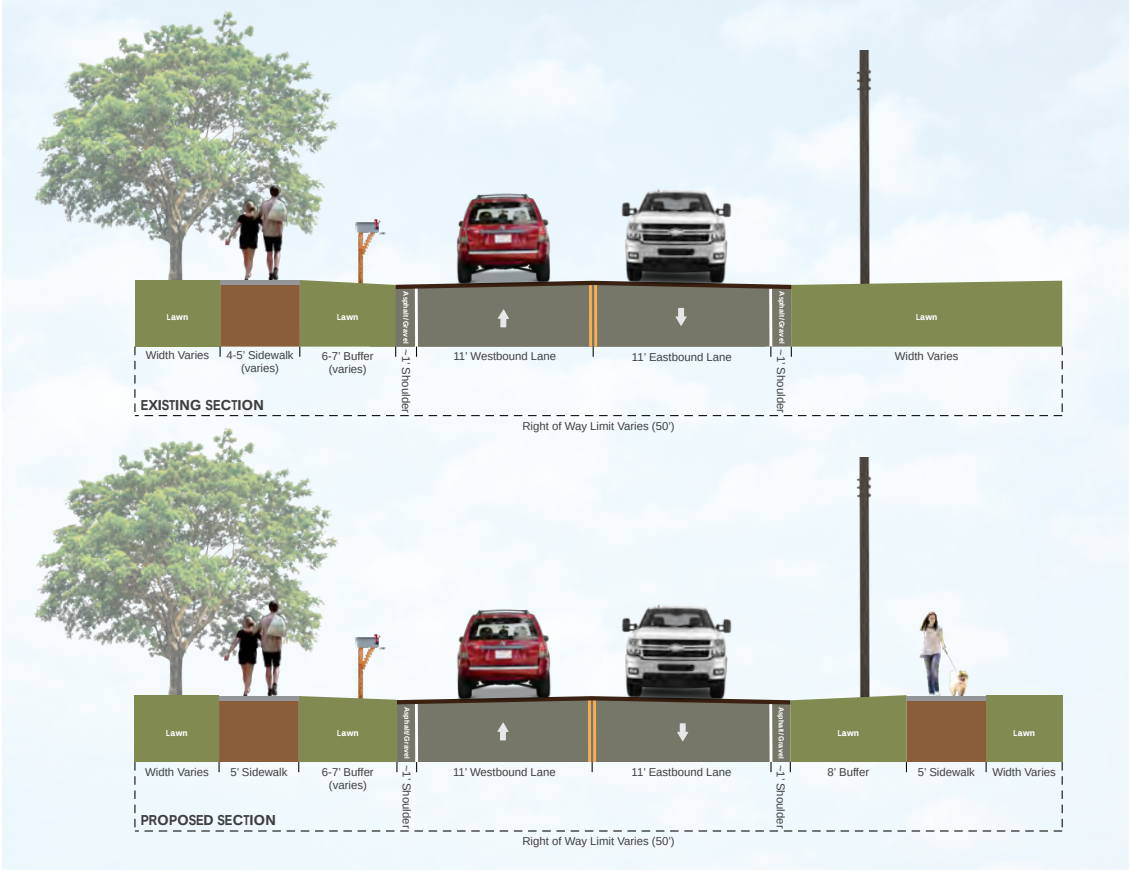



Le ray Street Looking East

Project Area Needs and Recommendations

- Reconstruct and install 5-foot ADA-compliant sidewalks along the north side of Leray Street, extending from the school area to the intersection of Leray Street, Maple Street, and North Main Street.
- Consider implementing intersection improvements at Leray Street/Maple Street/North Main Street, including high-visibility crosswalks, ADA-compliant curb ramps, pedestrian beacons, appropriate signage, and enhanced lighting to improve safety and accessibility.

CROSS SECTION IMPROVEMENTS



Planning Phase Cost Estimate

Item No.	Description	Unit	Estimated Quantity	Cost/Unit	Total Cost
1.	Sidewalk Improvements (including excavation, sidewalk, and adjacent lawn areas)	LF	3130	$ 120.00	$375,600.00
2.	Pedestrian Signals (including curb ramps, crosswalks, signage, and pedestrian beacons)	LS	1	$24,000.00	$24,000.00
3.	Basic Work Zone Traffic Control	LS	1	$24,000.00	$24,000.00
4.	Survey Operations	LS	1	$8,000.00	$8,000.00
5.	Field Change Payment	DC	20000	$1.0	$20,000.00
6.	Mobilization	LS	1	$16,000.00	$16,000.00
				Construction Cost	$467,600.00
				20% Contingency	$93,600.00
				Total Project Cost Estimate	**$561,200.00**

Intersection of Le ray Street, South Main Street and Maple Street Looking North

SHERMAN ELEMENTARY SCHOOL

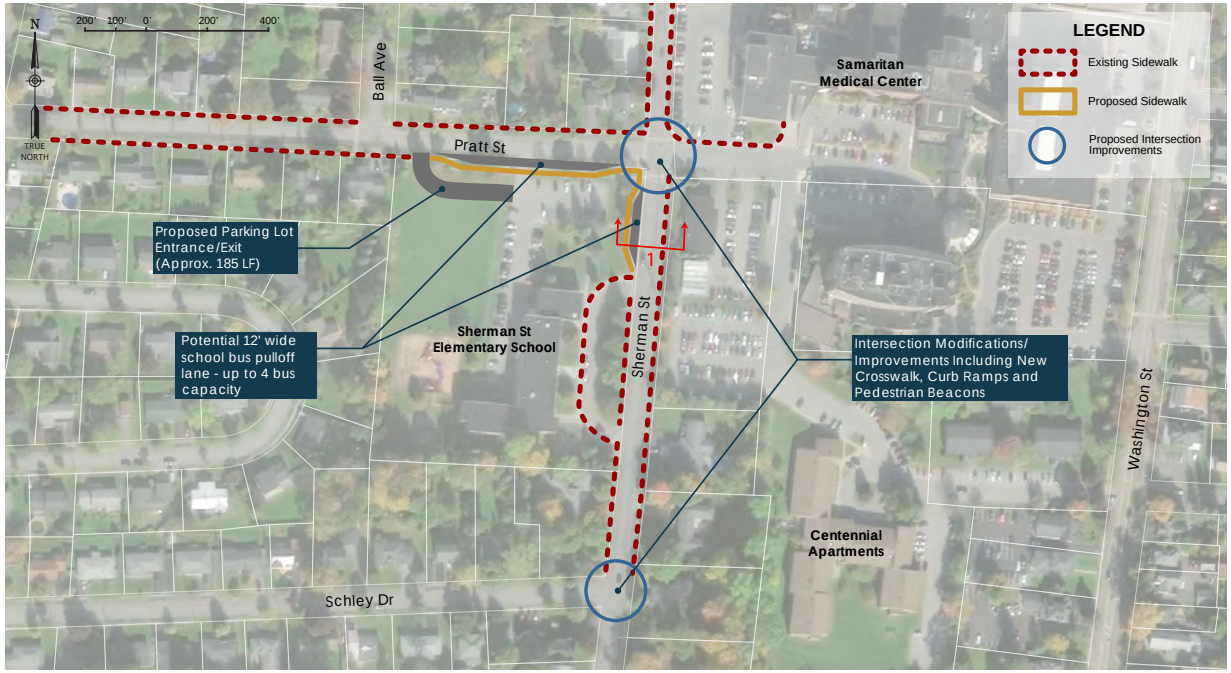
Project Area Overview

Sherman Street functions as a key local roadway within the City of Watertown, providing direct access to Sherman Street Elementary School. The corridor experiences elevated vehicular volumes during morning and afternoon school arrival and dismissal periods, reflecting its role as a primary local route for school-related traffic. Additional nearby destinations, including Samaritan Medical Center and Centennial Apartments, contribute to consistent daily traffic along the corridor. Given the mix of vehicular and pedestrian activity, consider implementing targeted safety and mobility improvements—such as continuous sidewalks, enhanced crosswalks, and traffic calming measures—would improve multimodal accessibility, support safe student travel, and strengthen Sherman Street's function as a vital local connector within the City's transportation network.

Project Area Issues & Needs

- Sherman Street Elementary School generates significant vehicular traffic during school drop-off and pick-up hours.
- Insufficient roadway width along Sherman Street and Pratt Street for school buses and passenger vehicles during school drop-off and pick-up raise safety concerns for children, especially along the school frontages.

CONCEPT PLAN

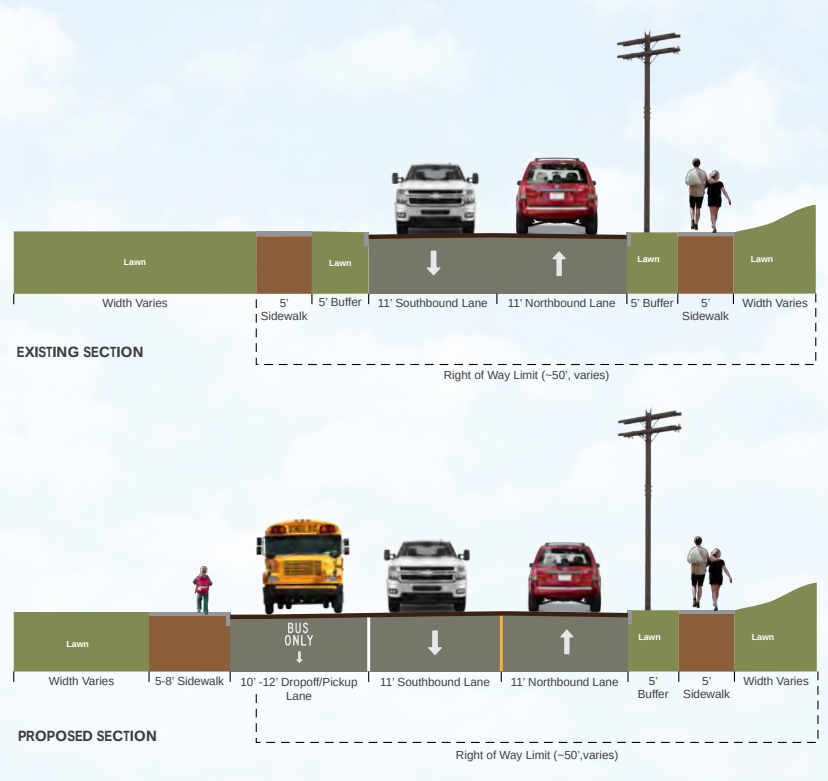


Intersection of Sherman and Pratt Street Looking South

Project Area Needs and Recommendations

- Evaluate the feasibility of installing additional pull-off or designated pick-up/drop-off lanes along the Sherman Street and Pratt Street school frontages to improve traffic flow and enhance student safety during peak hours.
- Ensure that new pull-off zones maintain direct pedestrian connectivity by utilizing the existing sidewalk network, which is already plentiful in the area.
- If implemented, reconstruction of the existing sidewalks behind the new pull-off lanes would be necessary to ensure ADA compliance and safe pedestrian circulation.

CROSS SECTION IMPROVEMENTS



Planning Phase Cost Estimate

Item No.	Description	Unit	Estimated Quantity	Cost/Unit	Total Cost
1.	Sidewalk Improvements (including excavation, sidewalk, and adjacent lawn areas)	LF	76	$ 130.00	$9,880.00
2.	Parking Improvements (includes, excavation, asphalt areas, and curbing)	SF	8885	$9.0	$80,000.00
3.	Pedestrian Signals (including curb ramps, crosswalks, signage, and pedestrian beacons)	LS	1	$9,200.00	$9,200.00
4.	Basic Work Zone Traffic Control	LS	1	$5,900.00	$5,900.00
5.	Survey Operations	LS	1	$2,000.00	$2,000.00
6.	Field Change Payment	DC	5000	$1.0	$5,000.00
7.	Mobilization	LS	1	$4,000.00	$4,000.00
				Construction Cost	$115,980.00
				20% Contingency	$23,200.00
				Total Project Cost Estimate	**$139,180.00**


Sherman Street Looking North

DEFERIET WATERFRONT

Project Area Overview

Riverside Drive functions as a local connector roadway within the Village of Deferiet, providing access from State Route 3 northward to the Deferiet Fire Department and Anderson Avenue. The corridor serves as a key link to several community destinations, including Deferiet Village Hall, the Village Fire Department, and Millich Village Park, supporting both vehicular and pedestrian circulation throughout the Village. Enhancing multimodal connectivity along Riverside Drive—through improvements such as continuous sidewalks, pedestrian crossings, and streetscape enhancements—would strengthen its role as a safe and accessible community corridor, linking civic, recreational, and residential areas.

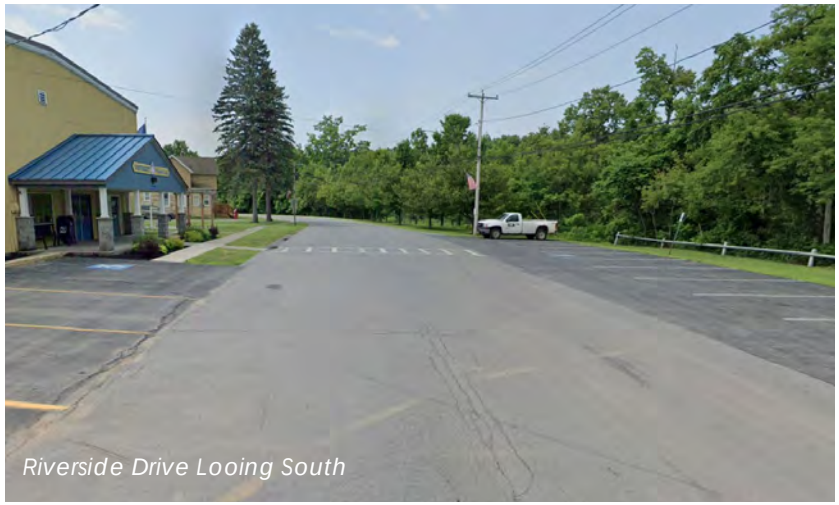
Project Area Issues & Needs

- No pedestrian connectivity, from the Village Hall to Millich Village Park.
- A gap in the sidewalk system on Riverside Drive along the west side of the road due to utility conflicts.
- Future improvements should consider existing waterfront resources and views for potential overlook areas.

CONCEPT PLAN

Project Area Needs and Recommendations

- Construct new 5-foot sidewalk along the west of the Riverside Drive, extension of the existing sidewalk.
- Construct a overlook trail that connects the proposed sidewalk and further to Village Park.

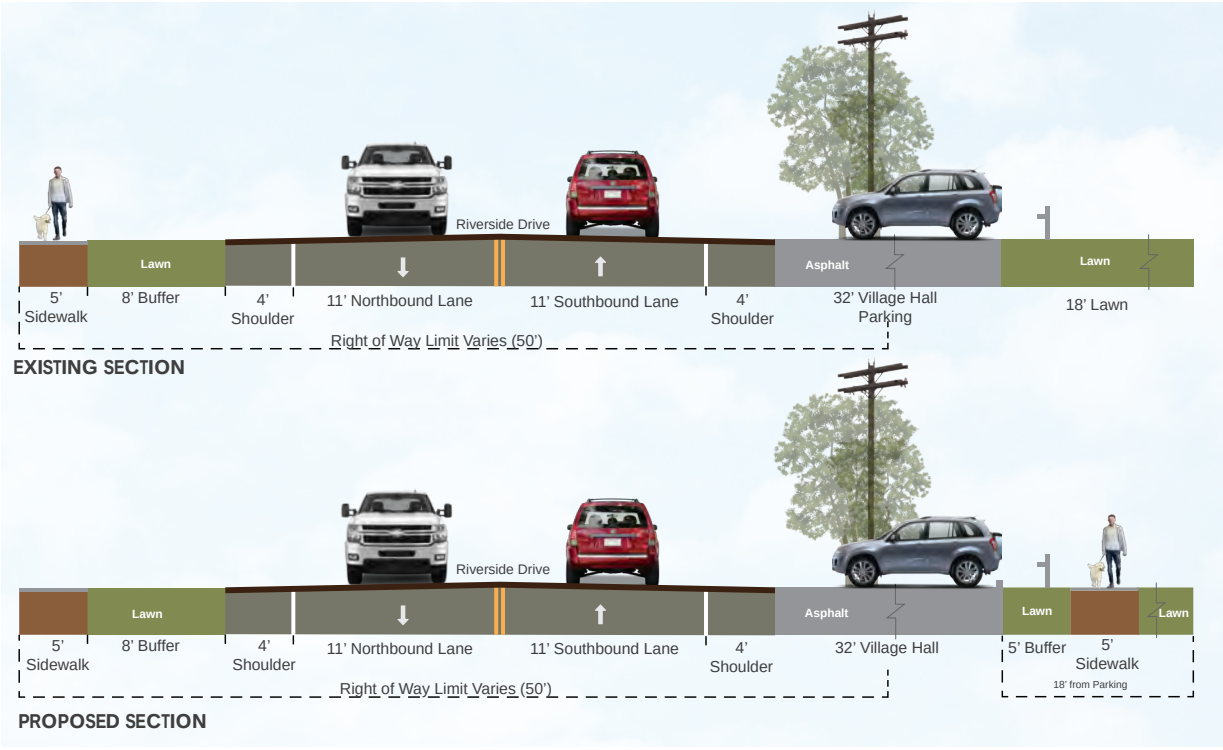


Riverside Drive Looing South

Planning Phase Cost Estimate

Item No.	Description	Unit	Estimated Quantity	Cost/Unit	Total Cost
1.	Sidewalk Improvements (including excavation, sidewalk, and adjacent lawn areas)	LF	2575	$110.00	$283,30.00
2.	Stone Dust Trail Improvements (includes excavation, stone dust trail, and adjacent lawn areas)	LF	260	$50.00	$13,000.00
3.	Basic Work Zone Traffic Control	LS	1	$17,800.00	$17,800.00
4.	Survey Operations	LS	1	$5,900.00	$5,900.00
5.	Field Change Payment	DC	14800	$1.0	$14,800.00
6.	Mobilization	LS	1	$11,900.00	$11,900.00
				Construction Cost	$346,700.00
				20% Contingency	$69,400.00
				Total Project Cost Estimate	**$416,100.00**

CROSS SECTION IMPROVEMENTS



Riverside Drive Looking North

VANDUZEE STREET AND MAIN STREET WEST

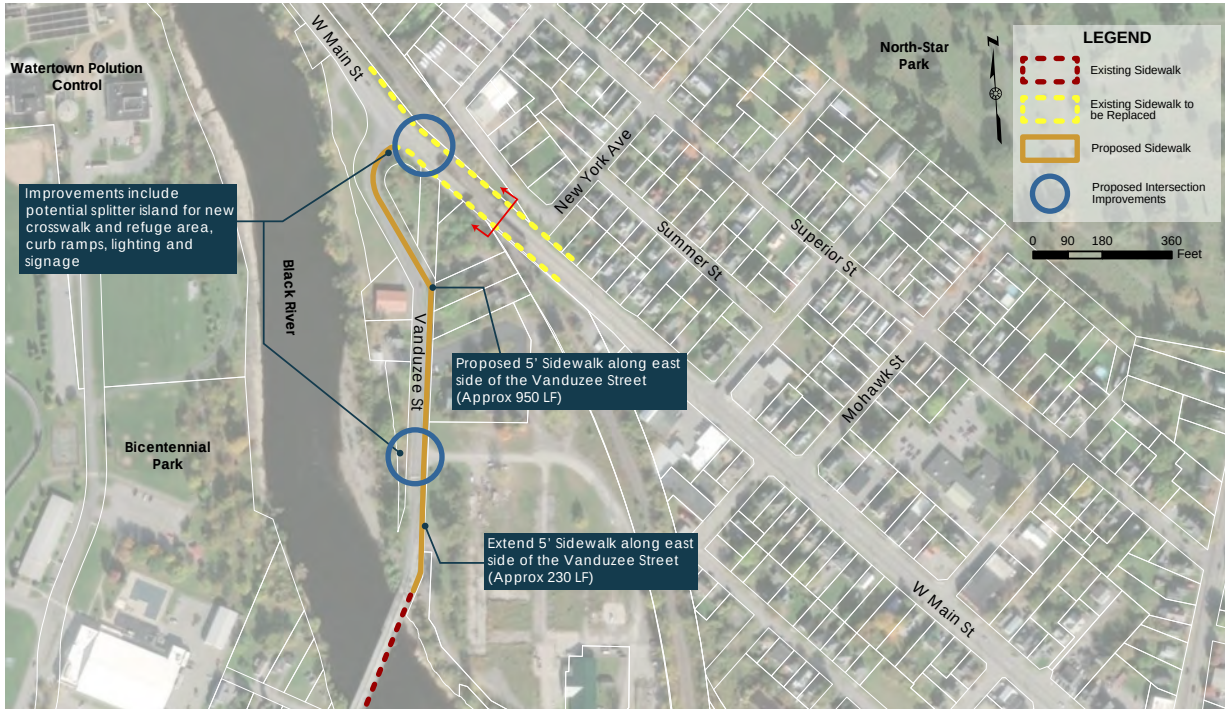
Project Area Overview

Vanduzee Street functions as a major collector roadway connecting to West Main Street, a minor arterial that transitions into State Route 12E beyond the City boundary. Together, these corridors play an important role in facilitating local mobility and providing access to adjacent residential and commercial areas. Vanduzee Street extends across the Black River via the Vanduzee Street Bridge, serving as a key north–south connection within the community. Additionally, the Watertown CSX rail line crosses over West Main Street, forming an underpass just east of the intersection with Vanduzee Street—an important structural feature influencing multimodal circulation and safety. West Main Street currently accommodates bike lanes and sidewalks, supporting multimodal travel along the corridor. Enhancing multimodal connectivity through targeted improvements—such as continuous sidewalks, defined pedestrian crossings, and coordinated streetscape enhancements—would further strengthen safe, accessible, and interconnected community corridors linking residential neighborhoods, parks and other recreational assets.

Project Area Issues & Needs

- Existing sidewalk along West Main Street is deteriorating, cracking, and does not meet ADA standards.
- No sidewalk along Vanduzee Street connecting to the Vanduzee Street Bridge.

CONCEPT PLAN

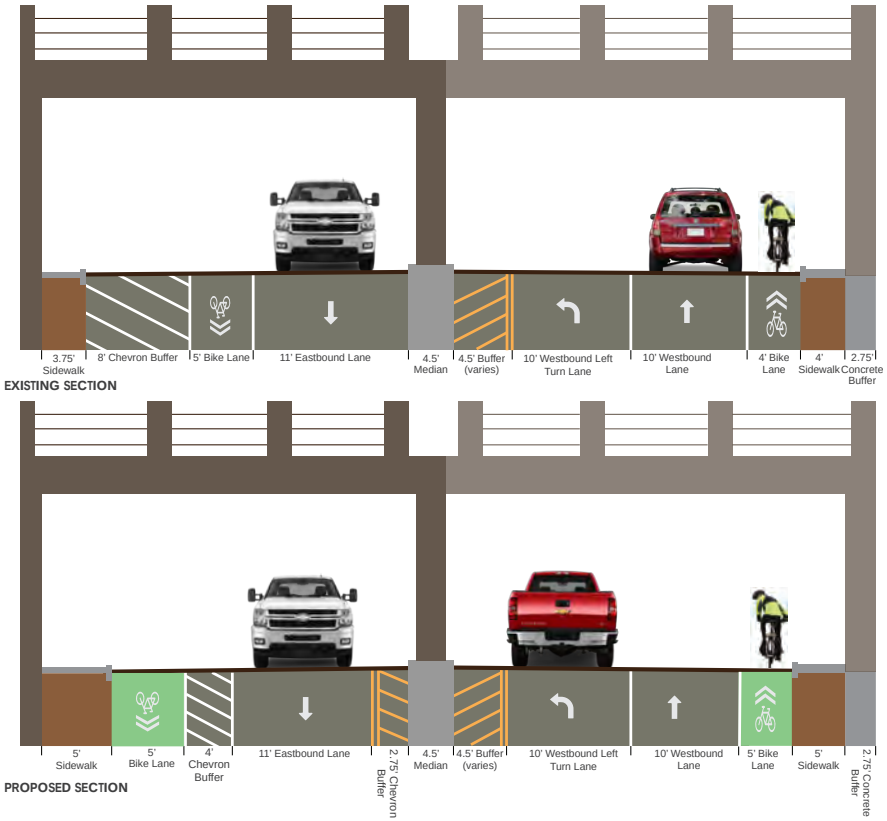


- Lack of crosswalks and pedestrian signage near the Vanduzee Street Bridge to support safe connections to internal roads.
- Site distance issues at the Vanduzee and W. Main Street intersection creates a safey concern for both motorists and non-motorists at that location.

Project Area Needs and Recommendations

- Reconstruct deteriorated sidewalks along approaches to the rail bridge on both sides of West Main Street to provide a continuous and accessible pedestrian connection.
- Construct new 5-foot ADA-compliant sidewalk along the back of the existing curb on Vanduzee Street.
- Consider implementing intersection improvements at West Main Street and Vanduzee Street, including a potential splitter island for new crosswalk and refuge area, with ADA-compliant curb ramps, pedestrian beacons, signage, and enhanced lighting to improve pedestrian safety and visibility.

CROSS SECTION IMPROVEMENTS



Planning Phase Cost Estimate

Item No.	Description	Unit	Estimated Quantity	Cost/Unit	Total Cost
1.	Sidewalk & Curbing Improvements (includes excavation, sidewalk, gutter, curbing, and adjacent lawn areas)	LF	1180	$360.00	$424,800.00
2.	Striping Improvements (includes new striping for travel lanes and bike lanes)	LS	1	$172,900.00	$172,900.00
3.	Pedestrian Signals	LS	1	$ 23,800.00	$ 23,800.00
4.	Basic Work Zone Traffic Control	LS	1	$37,300.00	$37,300.00
5.	Survey Operations	LS	1	$12,400.00	$12,400.00
6.	Field Change Payment	DC	31100	$1.00	$31,100.00
7.	Mobilization	LS	1	$ 24,900.00	$ 24,900.00
				Construction Cost	$727,200.00
				20% Contingency	$ 145,500.00
				Total Project Cost Estimate	**$872,700.00**


West Main Looking West

5

General Recommendations & Multimodel Design Toolkit

5.1 PUBLIC SQUARE

Public Square is a historic civic space at the center of Watertown, originally laid out in the early 1800s and now listed as a historic district. Framed by 58 surrounding buildings and a central oval park, it has long served as the city's commercial and social hub, featuring shops, eateries, offices, and community gathering spaces.

Today, however, the Square faces significant challenges that limit its safety, accessibility, and overall vibrancy.

Traffic Congestion & Heavy Truck Presence

- The convergence of several major routes—including U.S. Route 11 and NY State Routes 3, 12, and 283—channels large volumes of vehicles and commercial trucks through the Square, creating congestion and safety conflicts with pedestrians. Diagonal on-street parking, while convenient for businesses, along with the geomtric design of vehicular turning movements, exacerbates the traffic congestion issue.

Walkability & Pedestrian Safety

- The wide traffic lanes encourage higher driving speeds and make pedestrian crossings feel unsafe. Complicated multi-leg intersections and slip lanes generate conflict points where motorists often run red lights and disregard crosswalks, putting walkers at risk.

Watertown Public Square, end of 19th Century

Watertown Public Square, Now

5.1.1 Tactical Urbanism as a Strategy

To address these issues, Tactical Urbanism can serve as an effective short-term, low-cost strategy to test improvements and demonstrate the potential for long-term transformation. This approach uses quick-build, temporary installations to reclaim space for people and demonstrate potential safety and accessibility improvements, while maintaining traffic and parking.

Several studies and plans have already been completed for Public Square, with Panama Camina serving as a key precedent in tactical placemaking. While not a priority area, it provides valuable insight into the concept. Panama Camina was a pilot initiative in Panama City's downtown, temporarily transforming Avenida España and Avenida Central. The project introduced pedestrian-focused improvements and cultural programming to enhance public space. Its primary goals were to prioritize pedestrians, create inclusive and accessible areas, and propose design strategies that support safe coexistence between different modes of transportation.

During and after COVID-19, cities across the country adopted tactical measures to respond to challenges such as narrow sidewalks, rising vehicular speeds, limited bike and transit access, and reduced access to public space.

Key characteristics of Tactical Urbanism include:

- A phased approach that builds change incrementally.
- Local solutions tailored to community needs.
- Short-term actions with realistic expectations.
- Low-risk projects with potential for high community benefits.
- The creation of social capital by fostering collaboration among citizens, public agencies, non-profits, and private partners.

Shared Street Tactic Before, Panama Camina

Shared Street Tactic After, Panama Camina

Through these methods, Watertown can begin to test interventions—such as expanded sidewalks, temporary curb extensions, protected bike lanes, and pedestrian-focused public space improvements—that not only improve safety and walkability but also set the stage for a more vibrant, people-centered downtown.

5.2 MULTIMODAL DESIGN TOOLKIT

There are many potential strategies that the WJCTC can utilize to help increase pedestrian and bicycle mobility. This section provides the WJCTC with a "toolkit" of widely used transportation tactics to address pedestrian and bicycle needs. This toolkit was used to consider potential design, program, and policy solutions for the MPO region, and ultimately create the set of facility recommendations in the following section.

Each of the strategies addressed in the deisgn toolkit presented on the following pages varies in terms of intensity of implementation and thus cost. It is important to consider the capital resources required to implement each of the recommended solutions.

In addition, each strategy has varying impacts on different user groups in the WJCTC region. Each user group will have different expectations, and each strategy will benefit some user groups, while potentially being detrimental to others. It is important to consider these trade-offs when selecting the appropriate solutions.

It is also crucial to consider the environmental impacts of each active transportation solution presented. Given the potential impact of variable weather patterns in the Watertown area, it is more important than ever to analyze how any new facility, program, or policy will affect the sustainability and resiliency of the community. The toolkit contains information on the potential negative or positive sustainability and resiliency consequences of implementing each strategy.

It is important to carefully consider all of these attributes before selecting the appropriate solution for the WJCTC region's active transportation challenges. The toolkit presents this information in tabular format, which makes it easy to compare the varying impacts each strategy may have on the built environment and the many user groups it may influence. The following subsections describe the potential cost, user group, and sustainability impacts presented in the alternative's toolkit developed for the region.

5.2.1 Cost Impacts

Impact to the bottom line is a key consideration for selecting an active transportation alternative for implementation. The cost of implementing alternatives can range depending on the cost of material, labor, and design. The alternatives toolkit provides a cost estimate range for each alternative consconsidered. Cost estimates are grouped in the following three subcategories:

$	Low Cost	<$ 10,000
$$	Medium Cost	$10,000-$50,000
$$$	High Cost	>$50,000

5.2.2 User Impacts

As mentioned previously, the main user groups in the WJCTC area will have varying needs and preferences for transportation facilities. A positive change for one user group may translate into a detrimental result for another. For instance, a refuge island may improve safety

for pedestrians or motorists but may have a negative impact on bicyclists. The different user groups considered for each alternative include pedestrians, bicyclists, motorists, neighbors, emergency vehicles, and municipal departments of public works. The different user preferences for active transportation alternative are listed below:

Pedestrian Preferences

- Buffering from moving vehicles
- Aesthetically pleasing surroundings and amenities
- Safe environment
- Shorter walking distances
- Access to community facilities and destinations

Bicyclist Preferences

- Well-connected network of bicycling facilities
- Safe travel routes
- Direct routes
- Access to community facilities
- Access to bicycle parking facilities

Motorist Preferences

- Minimal traffic delay and conflicts
- Parking and access to businesses and community facilities
- Consistently designed facilities

Neighbor Preferences

- Neighborhood connectivity
- Neighborhood character
- To feel safe and secure
- Access to property, businesses, and community facilities

Note: Neighbors are individuals who live in close proximity to the transportation features and may benefit from or be impacted by the feature.

Emergency Vehicle Operator Preferences

- Space to operate and maneuver the vehicle
- Minimal conflicts and delays
- Safe travel routes
- Unobstructed access

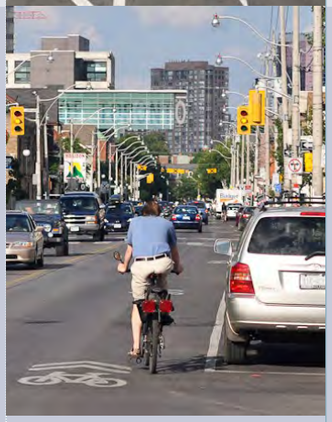
Department of Public Works Preferences

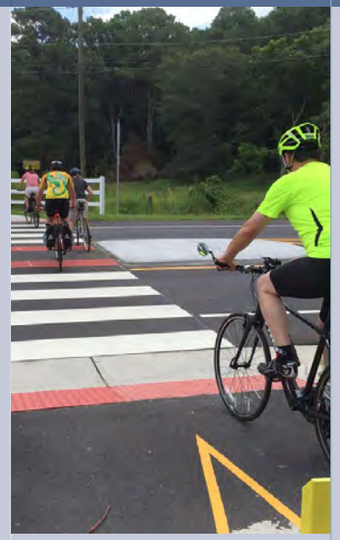
Municipal departments of public works typically are responsible for the care, control, supervision, alterations,maintenance, repairs, and regulations of all matters related to:

- Public streets, including patching, paving, sweeping, concrete and curb installation, surface treatment, and snow removal; and
- Public utilities, including sewer main maintenance, repairs, residential sewer lateral inspections, and maintenance of manholes and catch basins; and
- Traffic signal and sign maintenance on public streets, including traffic and street signage, roadway markings, parking and recreation lighting, and electrical repairs and pedestrian signals.

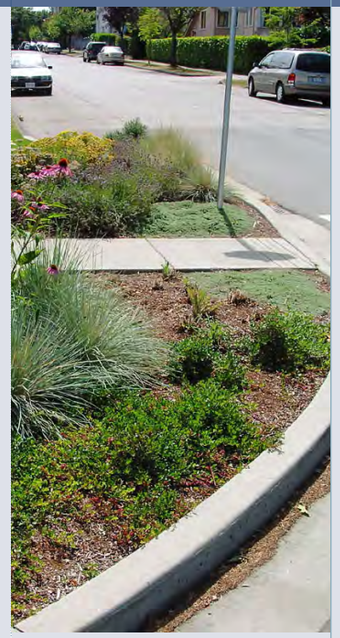
+	Positive Impact
-	Negative Impact
+/-	Mixed Impact
N	No Impact

Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
On Street Facilities													
Bicycle Boulevards	• Streets with low vehicle speeds and volumes • Typically residential roads with little through-traffic • Use of signage, markings, and speed management measures to create safe bicycle crossings • Give priority to bicyclists as through-going traffic		$	+	+	+	+	N	+/-	+	+	+	+
Bicycle Lanes	• Provides designated right-of-way for bicyclists on vehicular roads • Reduces confusion of motorists in sharing space with bicyclists • Can be created by reducing vehicular lane widths • Typically uses striping/painting to identify designated bicyclist lane • Should be provided on a smooth roadway surface • Should include appropriate MUTCD signage		$-$$$	+/-	+/-	+/-	+/-	+	+/-	+	+	+	+
Buffered Bicycle Lanes	• Bike lanes that are separated from vehicles by an additional buffer, such as additional striping or bollards • Creates more comfort and a greater perception of safety for both motorists and bicyclists • Provides greater space for bicyclists without making the actual bike lane wider, avoiding motorists using the lane for a vehicle parking or travel lane		$-$$$	+/-	+	+/-	+/-	+	-	+	+	+	+

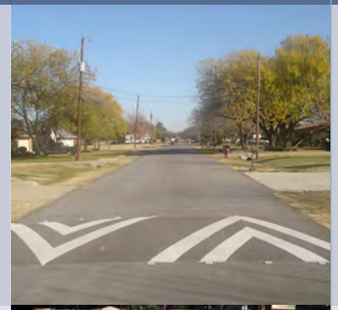
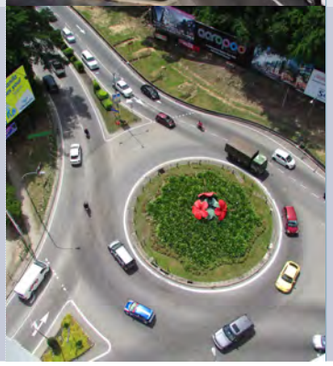
Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
Cycle Tracks	• An exclusive bike facility that provides the on-street infrastructure of a typical bike lane with an off-street user experience • Physically separated from vehicular traffic, often by on-street parking or a median • Increases perception of safety and comfort for bicyclists • May be one-way or two-way in design		$$-$$$	+/-	+	+/-	+/-	+/-	-	+	+/-	+/-	+
Shared Lane Markings ("Sharrows")	• Markings that indicate that the roadway is intended to be shared by motor vehicles and bicycles • Most appropriate when there is bicycle activity along a roadway but insufficient shoulder/lane widths to accommodate a bicycle lane • Enforces the legitimacy of bicycle traffic on the street • MUTCD guidelines for sharrow markings are found in section 9C.07 • To only be used on narrow, slow streets where more complete measures are not possible		$	+	+/-	N	N	+/-	+/-	+	+	+	+
Signage	• Signage and pavement marking used to guide bicyclists along preferred routes and alert motorists of the presence of bicycles on a roadway • Include signage such as confirmation a designated bike route, information regarding distance and time, turning indicators, and "share the road" signage • Helps to passively market the local bicycle network		$-$$	+	+	N	N	N	+/-	+	+	+	+

Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
High-Visibility Crosswalks	• Should be designed to offer maximum comfort and protection to pedestrians • Crossing distances should be kept as compact as possible, facilitating eye contact by placing pedestrians directly in the field of vision of motorists • High-visibility ladder, zebra, and continental crosswalk markings are preferable to standard parallel or dashed pavement markings • Street lighting should be provided at all crossings • Signage indicating motorists of the crossing should be placed in the street as well as at least 8 feet ahead of the crosswalk • Can include different paving materials and raised crosswalks to increase visibility of pedestrian crossings		$	+	+/-	+/-	+	+	+/-	+	+/-	N	+
Raised Intersections	• Encourages reduced motor vehicle operating speeds • Should be flush with the adjacent sidewalks and keep the pedestrian crossing areas level • Should include bollards along each corner to prevent motorists from entering the pedestrian space • Can include different paving materials and be paired with a high visibility crosswalk to increase the visibility of pedestrian crossings • Due to cost, should be reserved for key, important or dangerous locations/crossings • Coordination with local fire, police, and ambulance services is recommended		$$-$$$	+	+/-	+/-	+/-	-	-	+/-	+/-	+/-	+

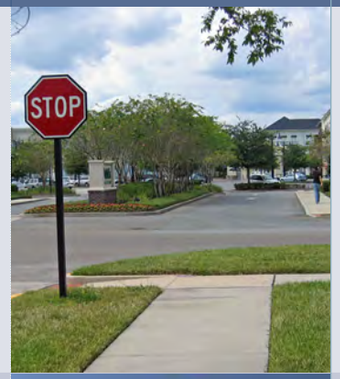
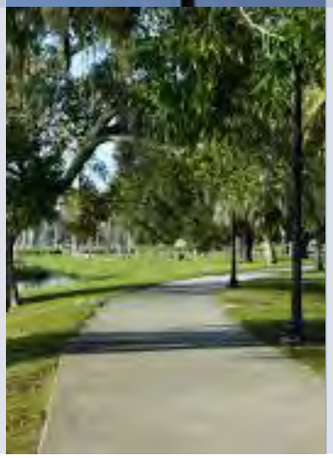
Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
Pedestrian Bridge/ Tunnel	• Provides an alternative route for pedestrians, and possibly bicyclists as well, to cross an roadway without interfering with traffic • Bridge and bridge access (ramps) should be ADA-compliant • To the extend possible, bridge design (fencing, lighting, materials, etc.) should be consistent with community design guidelines with respect to safety and aesthetics • If pedestrian crossings are properly designed at grade, bridges or tunnels should not be required		$$$	+/-	+/-	+	+/-	+	+/-	+	-	+/-	+/-
Signalization	• Can help indicate crossings of roadways by bicyclists and pedestrians • Helps to clarify when bicyclists and pedestrians should enter an intersection, and restricts conflicting vehicle movements • Examples include rapid flash beacons, pedestrian crossing countdowns, leading pedestrian, user-actuated flashing warning lights and bicycle signal heads used in conjunction with traditional traffic signals • Helps to create a more predictable crossing environment		$-$$$	+	+	+/-	+	+/-	+/-	+	N	N	+

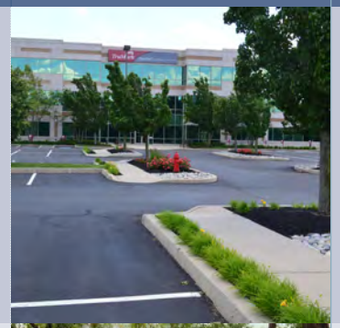
Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
Curb Extensions	• Involves narrowing the roadway by extending curbing into the roadway • Creates shorter crossing distances for pedestrians • Increases the available space for street furnitures/amenities on the sidewalk • Can include treatments such as midblock curb extensions, chicanes, bus bulbs, and neckdowns • Help tighten curb radii, encouraging slower turning speeds • Can be implemented using low-cost, interim materials such as planters, bollards, or traffic cones for trial periods • Design and engineering must ensure that buses, trucks, and emergency vehicles can navigate the corner without driving on the curb and support ease of plowing and cleaning • Respect and design drainage patterns to ensure positive drainage towards drainage inlet structures		$$	+	+/-	+/-	+	+/-	-	+	+	+/-	N
Refuge Islands/ Medians	• Reduces the exposure time experienced by a pedestrian in an intersection • Provides for an enhanced sense of safety for pedestrians • Typically implemented in locations where speeds and volumes make crossings prohibitive, or where there are several lanes that make pedestrians feel exposed or unsafe • Should be at least 6 feet wide preferably • It is preferable to have the crosswalk "cut-through" the median		$$	+	+/-	+	+/-	+/-	-	+	+/-	+/-	+

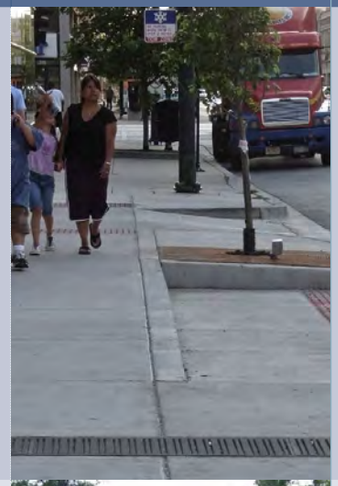
Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
On Street Parking	• Provides parking along the roadway • Can shield pedestrians from moving traffic • Can pose potential hazard for bicyclists while passengers are opening doors • Reverse angle parking puts bicyclist in driver's sight line, but requires more space and buffering than parallel parking		$$-$$$	+	-	+/-	+	-	-	-	+/-	+/-	+/-
Raised Medians	• Curbed sections that occupy the center of a roadway • Can facilitate pedestrian crossing using a "cut-through" • Can help reduce motor vehicle speeds • Enhances streetscape design and community character • Must consider cross-streets to help facilitate turning movements		$$	+	+/-	+/-	+/-	+/-	-	+	+/-	+/-	+
Small Turning Radii	• The measure of the curve at a street corner • Smaller radii result in more careful and slower turns by vehicles • Can help increase pedestrian visibility and reduce potential for conflicts • Must consider emergency vehicle access when determining curb radii		$$	+	+/-	+/-	+	-	-	+/-	+/-	+/-	+

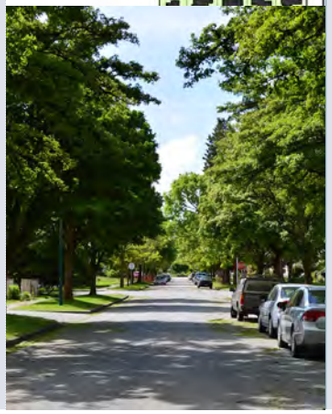
Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
Speed Humps	• Parabolic vertical traffic calming devices • Intended to slow traffic speeds on low volume, low speed roads • Typically 3-4 inches high and 12-14 feet wide with a ramp length of 3-6 feet • Reduce speeds to 15-20 MPH • Should not be placed in front of driveways or significant access areas		$$	+	+/-	+/-	+/-	-	-	+/-	+/-	+/-	+
Turn Lanes	• Reduces conflicts between vehicles by allowing through traffic to continue along the roadway, particularly for left turns • Often used in conjunction with a road diet (also known as a lane reduction) • Using separate turning phases for turn lanes at signalized intersections can help reduce delays		$-$$	-	+/-	+/-	+/-	+	+/-	+/-	-	N	+/-
Roundabouts	• A circular intersection in which road traffic move in one direction around a central island • There are no stop signs or signals • Priority is given to the vehicle already in the roundabout, and entering drivers yield • Reduce the likelihood and severity of collisions at intersection • Increase efficiency of flow and reduces confusion at four way stops		$$-$$$	+/-	+/-	+	+	+/-	+/-	+	+/-	+	+

Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
Off Street Facilities													
Bicycle Parking	• Bicycle users are more willing to ride when they know there is a safe and secure place to store their bicycle • Secure infrastructure that allows bicyclists to safely store their bicycles at key destinations • Needs to be accessible to surrounding land uses and located in key locations • Bike lockers are appropriate for long-term storage, whereas bike racks are suitable for short-term parking • Covered bicycle parking prevents bicycles from damage due to precipitation, and can be attractive street furniture that enhances the streetscape		$-$$	+	+	+	+/-	N	+/-	+	+	+	+
Benches and Resting Points	• Provide locations for pedestrians to rest along walkable corridors • Should be placed at regular intervals • Promote walking for less-mobile populations, including those with disabilities and the elderly • Should be an adequate distance from the roadway to increase perception of safety		$	+	N	N	+	N	+/-	+	+/-	+	+

Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
Buffer Areas	• Provides a space between pedestrian accommodations and vehicular lanes • Provides a space for street trees, bioswales, permeable pavers, and other facilities that reduce stormwater runoff • Helps provide a sense of comfort/safety • Provides a more attractive streetscape • Preferably 6'-8' in width for a planting strip or tree well to be implemented • Can reduce motorist speed		$-$$	+	+	+	+	N	+	+	+	+	+
Street Lighting	• Provides increased visibility for both pedestrians and motorists • Reduces potential conflicts for all transportation users • Should be implemented at a pedestrian scale, where appropriate/feasible		$$	+	+	+	+/-	+	+/-	-	-	+/-	+/-
New/Improved Sidewalks	• Provides a separate pedestrian space away from vehicular travel lanes • Preferable implemented in conjunction with a buffer area • Should be at least 5 feet wide for two people to pass comfortably • Should be designed to comply with ADA requirements • There should be no obstructions in the sidewalk such as utility poles or street furniture • Sidewalk grade should be less than 5% to help facilitate ease of movement		$$	+	N	N	+	N	N	+	+/-	-	+

Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
Pedestrian accommodations in off-street parking areas	• Large off-street parking areas should provide distinguished pedestrian avenues • Helps to reduce vehicular and pedestrian conflicts • Pedestrian accommodations can include sidewalks and pavement markings • Should lead directly to building entrances and connect to on-street pedestrian accommodations		$-$$	+	N	+	N	N	-	N	+/-	+/-	+
Sidewalk amenity zones	• Use where there are high pedestrian volumes • Help create an attractive streetscape • The pedestrian area between the sidewalk and roadway is recommended to be 8' in width • Appropriate amenities include street trees, street lights, benches, fountains, kiosks, and trash receptacles • Use pedestrian-scale lighting where possible		$-$$	+	N	+	+	N	-	+	+/-	+/-	+

Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
ADA Compliant Curb Ramps	• Allow wheelchair, walker, and motorized scooter users to make use of sidewalk facilities by allowing them to access such facilities from the curb • ADA compliant curb ramps must have a minimum width of 3 feet • The maximum rise is thirty inches per ramp • The slope of the ramp can be no more than 8.33%, and must be uniform • Landings are required at the top of the curb ramp, and should be at least five feet long • Detectable warning systems are preferred to help indicate the location of curb ramps for visually impaired users		$$	+	+	N	+	+	+/-	N	+/-	N	+
Shared Use Paths	• Shared right-of-way for pedestrian and bicyclists away from the vehicular roadway • Use where high pedestrian volumes are likely and bicycle lanes are not possible • Should be 10' in width at minimum (in specific areas where space is limited, a minimum of 8' can be used) • Signage should be implemented to alert both pedestrian and bicyclists of the presence of both user groups		$$	+	+	+	+	-	+/-	+	-	+	+

Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
Trail signage	• Helps to inform active transportation users of the location of trail heads • Can help market the existence of local trails • Should be created as part of a unified design scheme • Can be implemented along trails to help with wayfinding and alert users of distances/ travel times/slopes		$	+	+	+	+	N	+/-	+	-	N	+
Shared Access Driveways	• Property owners share one access point to parking area • Reduces the amount of driveway crossings that pedestrians encounter • Reduces amount of built environment dedicated to vehicle storage		$$	+	+	+	+/-	N	N	+	+	+	+
Street Trees	• Help to cool the environment and reduce urban heat islands • Help to provide shade for pedestrians • Can slow traffic by providing visual distractions from upcoming road • Create an attractive streetscape and enhance community character • Help reduce stormwater runoff • Provide habitat for birds and other wildlife • Help cool adjacent buildings, reducing cooling needs		$	+/-	+	+/-	+	-	-	+	N	+	+

Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
Programming & Policies													
Zoning	• Adjust zoning code, site plan review, and subdivision language, standards, and guidance • Enhance accessibility and safety for bicyclists and pedestrians		$	+	+	+/-	+	N	+	+	+	+	+
Education & Outreach Campaign	• Develop educational programs for pedestrians, bicyclists, and motorists • Design programs to cater to different age groups		$-$$	+	+	+	+	+	+	+	N	N	+
Bicycle- and Walk -Friendly Community Designations	• Offers the opportunity to be recognized for achievements in supporting walking and biking for transportation and recreation • Also serves as a benchmark to identify improvements yet to be made in the community	WALK FRIENDLY COMMUNITIES	$	+	+	+/-	+	N	+	+	+	+	+
Complete Streets Policy	• Part of the Complete Streets Act passed in 2011 by New York State • Commits the municipality to considering pedestrian and bicycle accommodations in new street construction and reconstruction • Shows support of active transportation from local officials • Advocates for better access to safe streets for all, improved individual health, improved overall air quality, equal opportunities, and decreased accidents		$	+	+	+	+	+/-	+/-	+	N	+	+

Feature	Description	Image/Example	Estimated Costs	User Group Impacts						Environmental Impacts			
				Pedestrians	Bicyclists	Motorists	Neighbors	Emergency Vehicles	Department of Public Works	Reduces Energy Consumption	Reduces Consumption of Material Resources	Reduces Impacts to Environmental Resources	Supports Healthy Communities
Maintenance Programs	• Monitor and maintain accessibility and safety features • Plow and sweep streets regularly • Engage residents and businesses to participate in clean-up days • Neighborhood plantings or gardens		$-$$	+	+	+	+	+	+/-	+	+	+	+
Enforcement Policies	• Increase police enforcement for dangerous motorist and bicyclist actions (e.g. speeding, traffic violations) • Utilize service style policing to educate community members on pedestrian and bicycle etiquette • Respond to special needs (such as seniors or school areas)		$-$$	+	+	+	+	+	+	N	N	N	+

06

Next Steps

6 .1 TAKING ACTION

This Study serves as a comprehensive framework for guiding the implementation of Safe Routes to School (SRTS) improvements across the identified priority areas. By assessing existing conditions, addressing community concerns, and developing context-sensitive recommendations, the Study positions the Watertown Jefferson County Transportation Council (WJCTC) and its partner communities to advance projects that enhance safety, accessibility, and mobility for students and residents alike.

As funding opportunities become available, the recommended improvements should be evaluated for near-term implementation, with a focus on areas demonstrating the greatest need and potential impact. The integration of Complete Streets and Safe Routes to School design principles should be carefully considered throughout design and construction to ensure that each project provides safe, comfortable, and connected facilities for all users—including children, parents, and community members.

Securing funding will be critical to advancing these initiatives. Strategic investments can support a wide range of improvements such as new or upgraded sidewalks, enhanced crosswalks and curb ramps, traffic calming measures, pedestrian beacons, improved bicycle facilities, and safe intersection treatments near schools. Collectively, these enhancements will promote safer routes, encourage active transportation, and strengthen community connectivity.

Detailed information on potential funding sources is provided in the following section, along with a set of recommended next steps to move projects toward implementation. It is important to note that this Study represents an essential first step in creating a safer, more walkable, and bike-friendly environment for students. Continued collaboration among municipal departments, local schools, advocacy groups, and regional agencies will be vital to sustain momentum, pursue grants, coordinate outreach and education efforts, and ensure that the vision of Safe Routes to School is realized across the region.

6.2 FUNDING SOURCES

A variety of federal and state programs are available to support the implementation of Safe Routes to School (SRTS) and related active transportation improvements. These programs provide opportunities for planning, design, and construction funding to advance projects that enhance safety, mobility, and sustainability in local communities.

6.2.1 New York Main Street Program

The New York Main Street Program provides financial assistance and technical guidance to municipalities and nonprofit organizations seeking to revitalize traditional downtowns, mixed-use neighborhoods, and village centers. Funding can support building renovations, streetscape improvements, and other investments that strengthen the economic and social vitality of New York's historic Main Streets.

6.2.2 Climate Smart Communities Program

The Climate Smart Communities Program assists local governments in reducing greenhouse gas emissions and adapting to the impacts of climate change. The program offers competitive grants, electric vehicle rebates, and technical assistance to advance sustainability goals. Projects that promote walking, biking, and other low-carbon transportation modes are eligible for consideration.

6.2.3 Transportation Alternatives Program (TAP), Congestion Mitigation and Air Quality Improvement Program (CMAQ) and Carbon Reduction Program (CRP)

These federal-aid programs expand transportation options while supporting environmental and safety objectives.

Transportation Alternatives Program (TAP): Funds smaller-scale projects such as pedestrian and bicycle facilities, recreational trails, and Safe Routes to School initiatives that improve safety, accessibility, and public health.

Congestion Mitigation and Air Quality Improvement Program (CMAQ): Targets regions not meeting air quality standards by supporting projects that reduce congestion and vehicle emissions, including transit enhancements, high-occupancy vehicle (HOV) lanes, and alternative fuel infrastructure.

Carbon Reduction Program (CRP): Established under the Bipartisan Infrastructure Law, this program funds projects that reduce greenhouse gas emissions from surface transportation systems, including electric vehicle (EV) charging infrastructure, active transportation facilities, and freight efficiency initiatives.

6.2.4 Transportation Improvements Program (TIP)

The Transportation Improvement Program (TIP) identifies and programs federal funding for transportation projects that strengthen and enhance local and regional mobility. Eligible projects include roadways, bridge, transit, bicycle, and pedestrian improvements, among others. Projects included in the TIP are prioritized for federal funding and implementation.

6.2.5 Safe Streets and Roads for All (SS4A)

The Safe Streets and Roads for All (SS4A) program provides $5 billion in funding (2022–2026) to assist local and regional governments in reducing roadway fatalities and serious injuries. The program offers grants for both developing comprehensive safety action plans and implementing high-impact safety projects identified through these plans.

6.3 NEXT STEPS

Phase 1: Preparatory Work & Planning - Performed by a Municipality Contracted Design Consultant

Step 1: Initial Assessment and Development of Corridor Planning Study - Completed in this Complete Streets Study

- Assessment of Current Conditions: Evaluate existing infrastructure, traffic patterns, and community needs.
- Conceptual Design: Develop conceptual plans based on gathered data and community feedback, incorporating streetscape recommendations, including: sidewalks, lighting, signage, trees, art, and furnishings.

Step 2: Apply for Funding Sources

- Apply for funding through State or Federal Funding

Programs for Streetscape Improvements.

Step 3: Design and Approval

- Secure Contract: Secure contract with design consultant to develop construction documents for detailed design.
- Detailed Design: Refine the conceptual plans into detailed engineering and design documents.
- Regulatory Compliance: Obtain necessary permits, clearances, and approvals from local authorities.
- Right-of-Way Acquisition: Identify areas where additional property rights are required; obtain easements or acquire property.
- Budgeting and Funding: Finalize the budget and secure construction funding from relevant sources.
- Bidding: Prepare final bid documents. Advertise bid and review any bids received by Contractors.
- Secure Contract: Secure contract with awarded Contractor.

Phase 2: Infrastructure Preparation & Construction - Performed by General Contractor

Step 1: Utility Assessment and Relocation

- Initiate coordination with Region 7 DOT, Jefferson County, or the local municipality for approval and collaboration on all Corridor streetscape improvements within the Study Corridor right-of-way.
- Utility Coordination: Assess and relocate any utilities that might interfere with the planned improvements.
- Underground Work: Begin necessary underground work for utilities, drainage, and other infrastructure.

Step 2: Sidewalks

Sidewalk Construction: Start installation of new sidewalks based on the design plans.

Phase 3: Project enhancement - Performed by General Contractor

Step 1: Wayfinding Signage and Public Art

- Wayfinding Signage: Begin installation of wayfinding signage according to the approved design.
- Public Art Installation: Coordinate the placement/ installation of selected public art pieces in designated locations.

Step 2: Street Trees and Site Furnishings

- Tree Planting and Planted Areas: Plant and establish street trees, flowering trees, shrubs, and in specified areas to enhance aesthetics and provide shade.
- Site Furnishings: Install benches, trash receptacles, bike racks, and other planned site furnishings as per the design.

Step 3: Crosswalk Improvements

- Crosswalk Improvements: Install enhanced crosswalks at all intersections within the Study Corridor as per the design.

Phase 4: Finalization and Review - Performed by Contracted Design Consultant or Construction Administrator

Step 1: Quality Checks and Adjustments

- Quality Assurance: Conduct inspections and quality checks on all installed components.