

Alpharetta Walkability & Pedestrian Safety Study

City of Alpharetta, Georgia





ACKNOWLEDGEMENTS

City of Alpharetta

The Honorable Mayor Jim Gilvin

Alpharetta City Council

Donald Mitchell, Mayor Pro Tem, Post 1
Ben Burnett, Post 2
Karen Richard, Post 3
John Hipes, Post 4
Jason Binder, Post 5
Dan Merkel, Post 6

Citizens Walkabout

Gariel Burchet
Shawn Doughtie
Kitty Fryman
Sandy Hofmann
John Maloney
Meredith Moore
Holly Palmer

City Administration

Robert J. Regus, City Administrator
James Drinkard, Assistant City Administrator

Public Works

John Maloney, Traffic Operations Manager
Geoffrey Sarra, PE, Senior Engineer
Pete Sewczwicz, PE, Director
Arash Roshandeh, PE, Traffic Engineer

Community Development

Kathi Cook, Director
Eric Graves, PE, Senior Transportation
Engineer/Planner



CONTENTS

01. Introduction

01	Context & Study Area	5-11
02	Process	12
03	Need & Purpose	13
04	What is Walkability.....	14-15
05	Overview of Recommendations	16-30

02. Downtown Overview

06	Project Limits.....	32
07	Pedestrian Counts	33-34
08	Building & Pedestrian Activity Growth	35
09	Downtown Project Zones	36

03. Downtown Central

10	Pedestrian Infrastructure Inventory	39
11	Observations & Recommendations	40
12	Recommendation Concepts.....	41-48

04. Downtown West

13	Inventory	51
14	Observations & Recommendations.....	52

05. Downtown East

15	Inventory	55
16	Observations & Recommendations.....	56

06. Downtown North

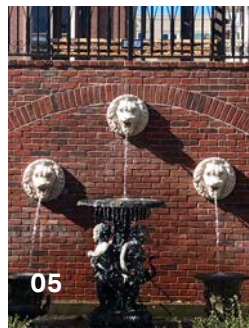
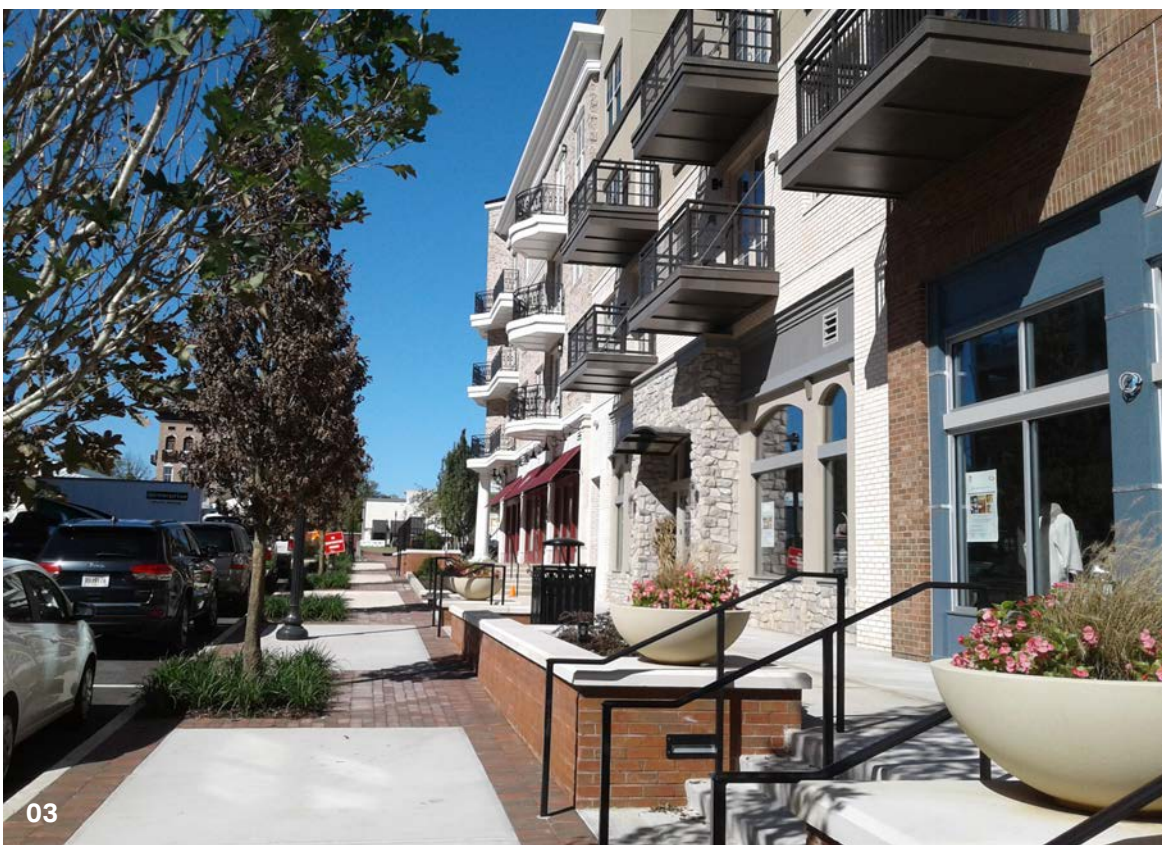
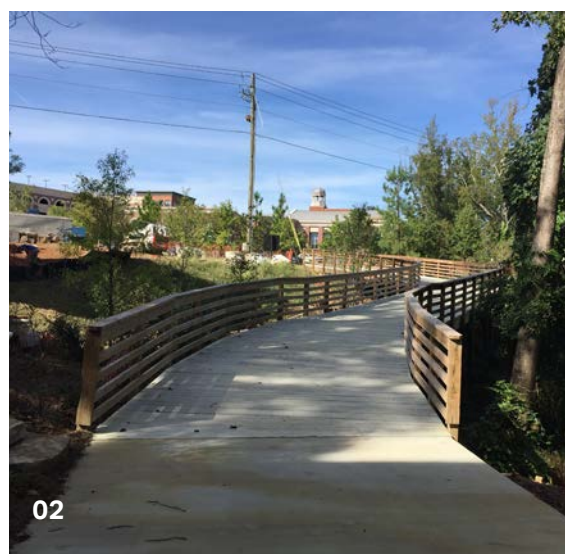
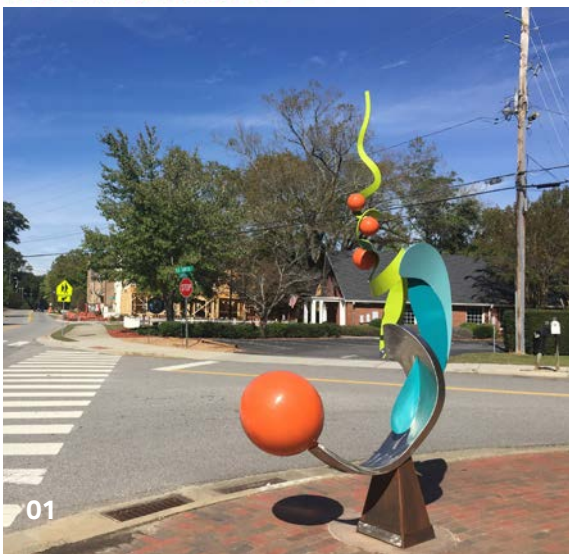
17	Inventory	59
18	Observations & Recommendations.....	60
19	Recommendation Concepts.....	61-63

07. North Point

20	Project Limits	65-66
21	Pedestrian Infrastructure Inventory Maps.....	67-76
22	Recommendation Concepts.....	77
23	Proposed Measures	78-79

Introduction

01



CONTEXT

The City of Alpharetta, Georgia

The City of Alpharetta has experienced tremendous growth in the last four decades. It has developed from a small agrarian town of 3,000 in 1980 to the bustling city of over 65,000 residents that it is today.

According to the Census Bureau, Alpharetta's population grew 3.1 percent between July 1, 2015 and July 1, 2016, the most among Georgia's cities. The City has achieved this success through an abundance of employment opportunities offered by the 900 technology companies that call Alpharetta home, earning it the nickname, "Technology City of the South". Additionally, a great education system and recent developments within the last decade such as the City Center Project and Avalon have improved the quality of life for the citizens by providing more live, work and play opportunities. These developments have created unique public urban spaces that provide venues for Alpharetta's many cultural events, which are essential to

the success of the downtown. These events provide vital social benefits by fostering shared identity, civic pride, and interaction among the attendees. Some of the many annual cultural events the City programs include the Alpharetta Farmers Market, the Alpharetta Brew Moon Fest, the Scarecrow Harvest, the Taste of Alpharetta, Alpharetta Food Truck Alley, and The Wire and Wood Alpharetta Songwriters Festival, all of which are held in Downtown Alpharetta. With its unique public open spaces, additional housing, cultural events, inspiring architectural detailing, and generally attractive streetscape, Downtown Alpharetta is a highly desirable place to live and visit. This is particularly evident in the ever-increasing pedestrian activity in Downtown.

01 Street Art

A variety of art installations enhance the urban aesthetic.

03 Commerce Street

Example of a Mixed Used development working cohesively with the adjacent streetscape.

05 Downtown Fountain

Intricate detailing and ornate fountains beautify downtown and reward the pedestrian eye.

02 Alpha Loop Spur

Shared use path that will circle the City, offering a more diverse pedestrian experience.

04 Berkshire Hathaway Building

Building detailing such as that found on the new Berkshire Hathaway building cannot be found anywhere else.

06 New City Hall

The neo-traditional City Hall acts as a focal point for the future of Alpharetta.



01

STUDY AREA: DOWNTOWN

Downtown Alpharetta is well on its way to providing a rich pedestrian experience. With the development of the new City Hall, a variety of public green spaces, many mixed use developments, and an attractive sidewalk streetscape, Alpharetta is a highly desirable place to live, work, and play. Cultural events such as the Brew Moon Fest and the Taste of Alpharetta are activating downtown spaces and infusing residents with a sense of community and kinship.

Prior to this renaissance, Alpharetta, like many of America's cities, was car centric. Wide travel lanes and high speed thoroughfares cut through the center of downtown, greatly decreasing pedestrian and economic activity. This transition has occurred so quickly that Alpharetta is caught between these two worlds - it has an attractive and pedestrian friendly downtown area but drivers still tend to behave as though they are driving through an auto-oriented thoroughfare.

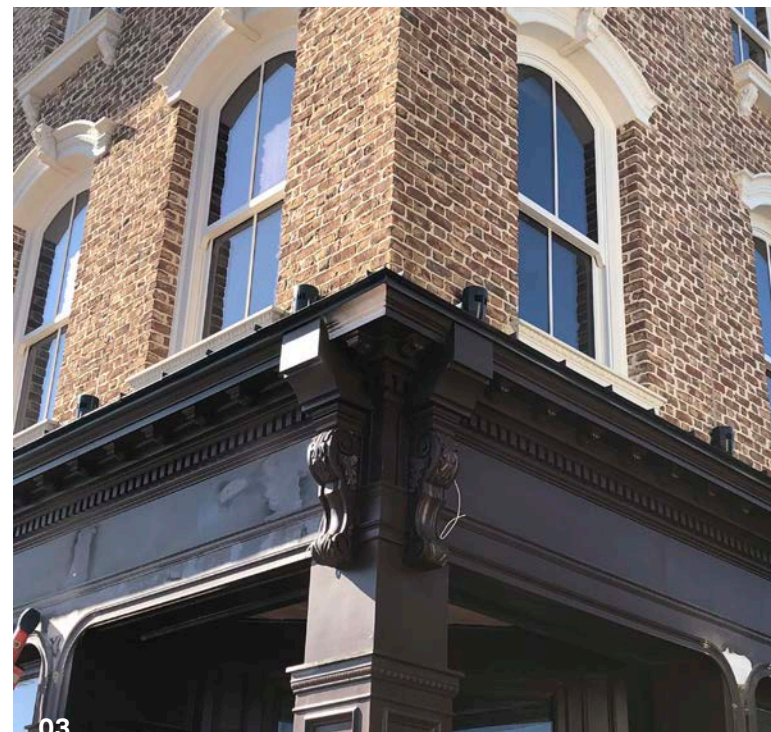
Therefore the main strategy to improve walkability in downtown Alpharetta is to implement traffic calming measures and streetscape improvements that implicitly signal to drivers that they have arrived in a place where they should expect pedestrian activity. Downtown Alpharetta is a place to drive *to*, not a place to drive *through*.



02

01 Main St (SR 9) Streetscape

Landscape elements enhance the downtown streetscape, making businesses more attractive to passersby.



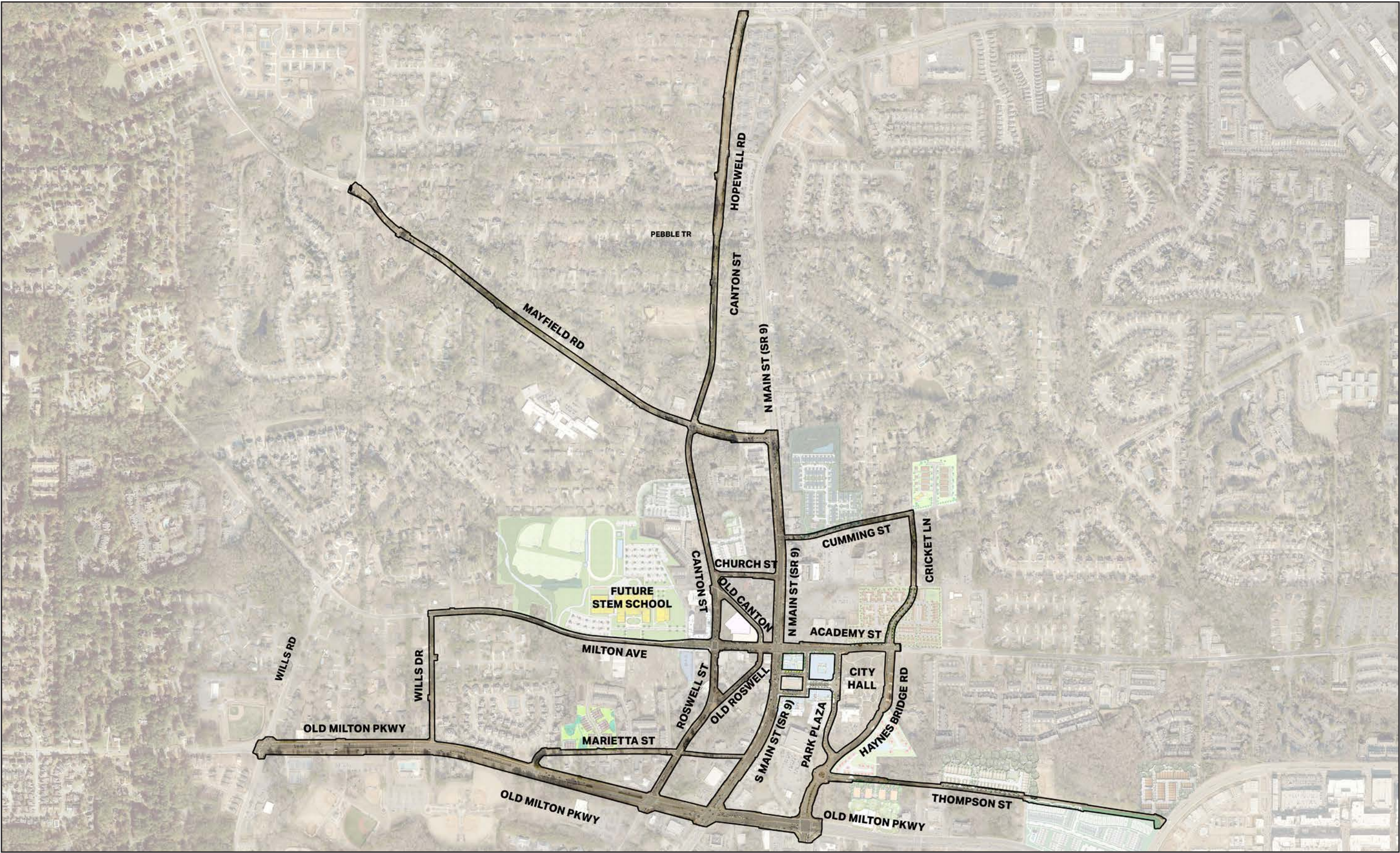
03

02 Main St (SR 9) Crossing

Pedestrians utilizing a crossing with a Pedestrian Hybrid Beacon (PHB).

03 Downtown Detailing

New downtown architecture offers a particular attention to detail. Well designed aesthetics attract residents and visitors alike.





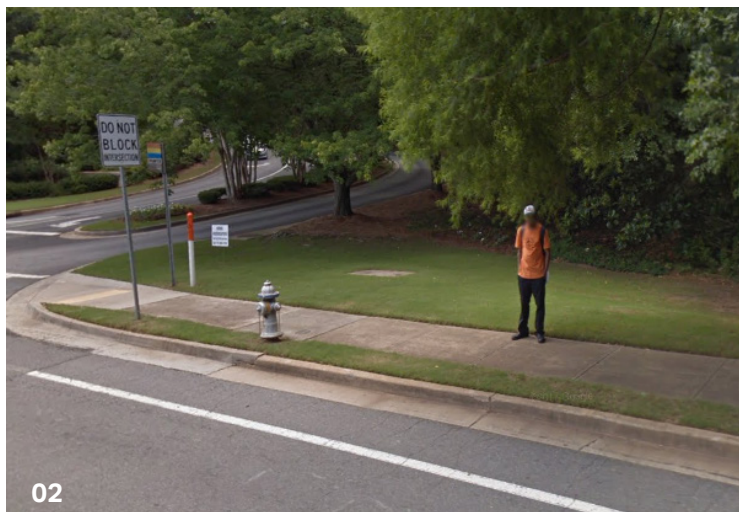


STUDY AREA: NORTH POINT PARKWAY

North Point Parkway

The other area of Alpharetta our team evaluated was North Point Parkway, a major roadway thoroughfare that is the main access route to the North Point Mall. When constructed in 1993, the North Point Mall, like other shopping malls across the country, was primarily developed for access and convenience for the automobile. Although sidewalks were constructed as part of the development, pedestrian activity is very low due to the scale and design of the roadways that promotes an urban form with excessive distances between destinations, intersections, and pedestrian crossings. North Point Parkway is oriented around “superblocks,” where the distance between intersections along ranges from 770’ to 1200’ apart. This leads to large surface parking areas adjacent to the sidewalk and buildings set back up to 500’ from the road with little to no pedestrian infrastructure in between. The lack of pedestrians along North Point Parkway also contributes to aggressive driver behavior. Out of sight out of mind is an appropriate saying for this environment. Driver’s do not expect to encounter pedestrians, and as a result they drive faster, which decreases the likelihood of pedestrian activity even more. The North Point Mall is currently conducting a Livable Centers Initiative with support from Atlanta Regional Commission (ARC) to re-evaluate the development form, land use patterns and transportation systems.

Most of the existing pedestrian activity along North Point Parkway arrives to the area by bus, and so the main strategy for improving walkability along North Point Parkway is to enhance the experience for people that utilize bus transit.



01 Buses bring pedestrians

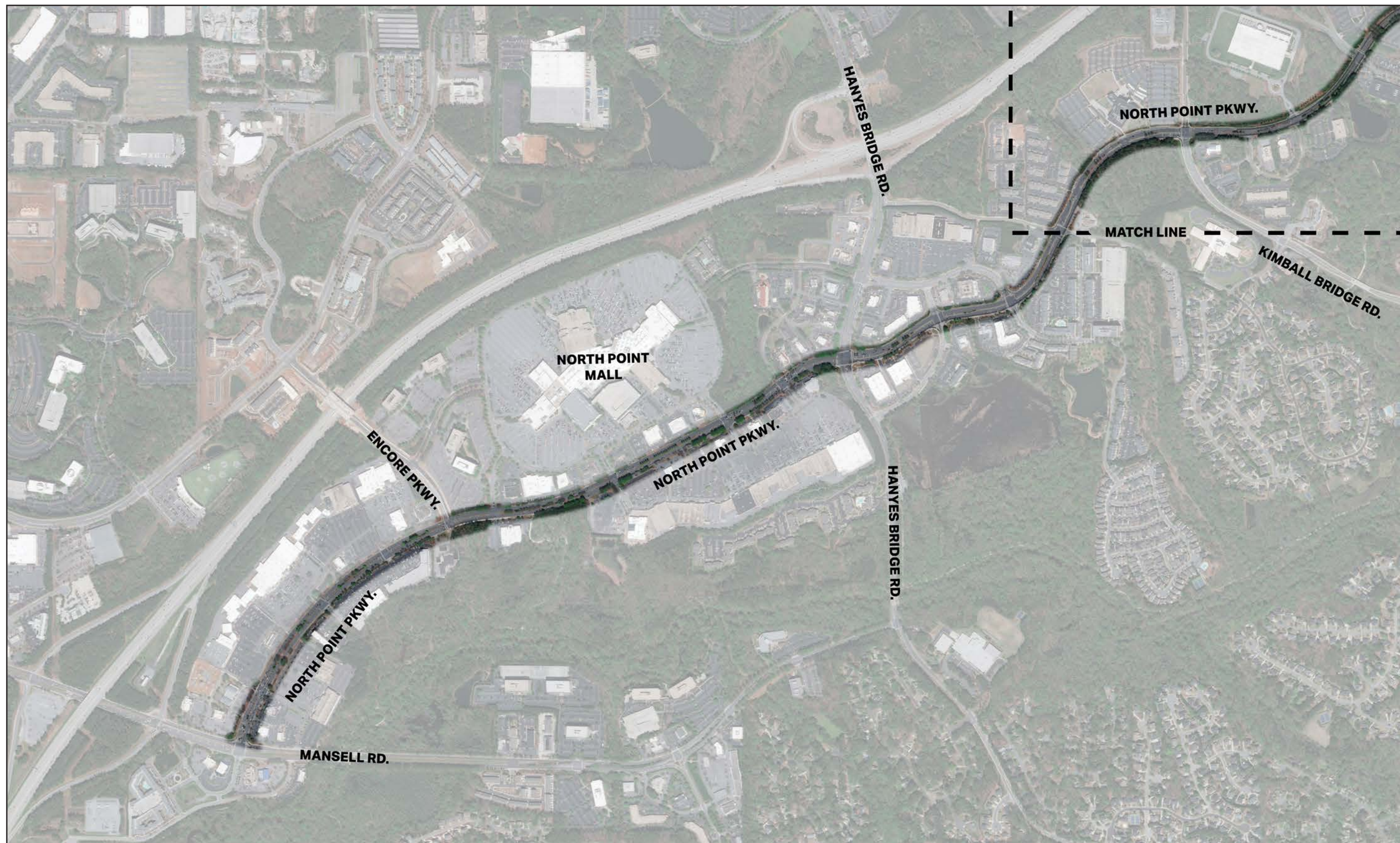
Bus transit drives most of the pedestrian activity in the study area.

02 Bus stop

Bus stops are stationed regularly along North Point Parkway.

03 Car oriented roadway

Developed for cars, North Point has wide lanes and long sight distances.







PROCESS

Listen

- Understand the Client's goals
- Conduct walkabout with Alpharetta residents to hear concerns
- Assess growth patterns
- Visit Alpharetta to see pedestrian and driver behavior

Inventory

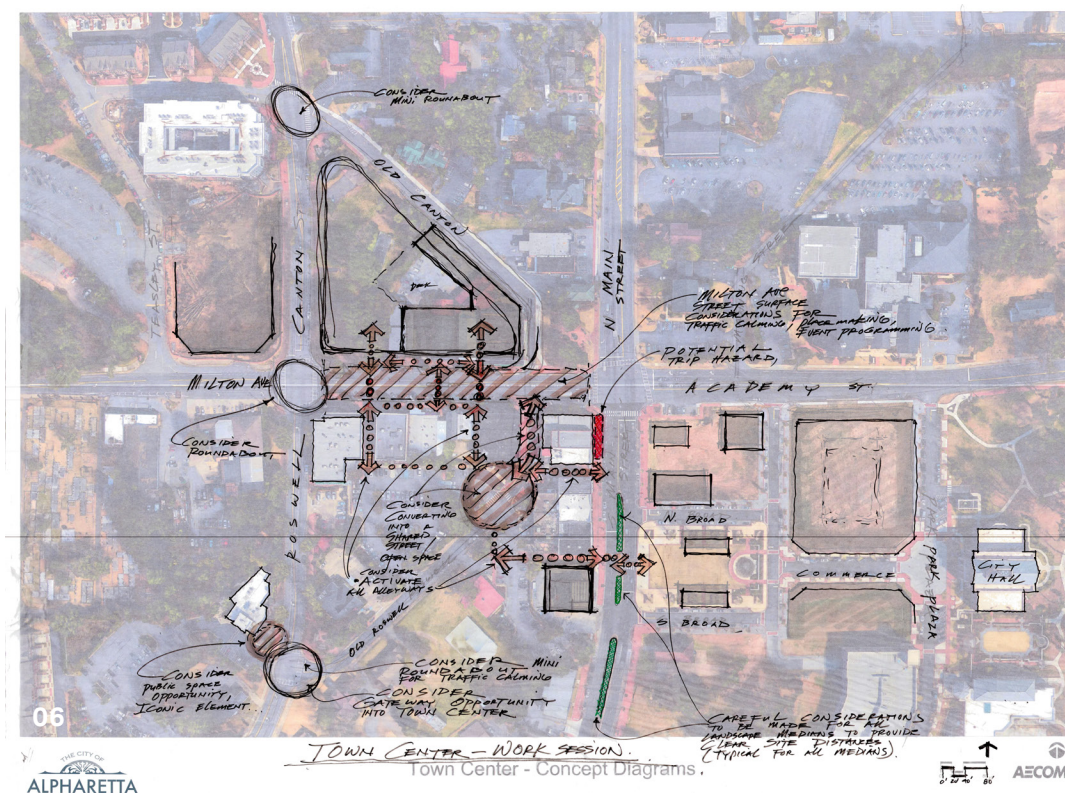
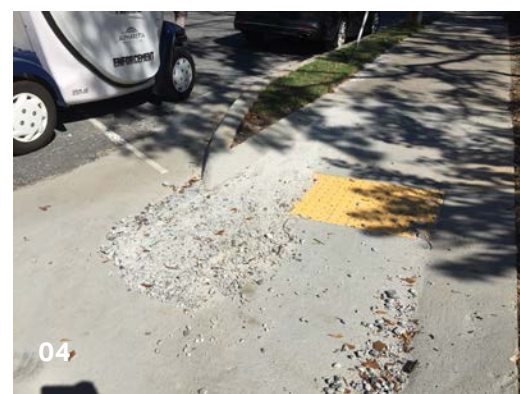
- Mobilize team of qualified professionals to identify infrastructure issues in the field
- Create basemaps depicting existing pedestrian infrastructure and issues
- Place cameras at crossings and count the number of pedestrians that use each crossing

Analysis

- Analyze pedestrian infrastructure issues and inventory
- Identify critical issues and key problem areas
- Forecast pedestrian growth from near future building growth

Recommendations

- Derive planning level recommendations from the experience of a diverse team of transportation professionals
- Prepare conceptual maps and graphics depicting recommended improvements



01 Walkabout Route Map

Map of the route chosen to walkabout with citizens and take comments.

02 North Point Site Visit

AECOM professionals visited North Point Parkway to assess existing conditions.

03 Downtown Site Visit

AECOM professionals visited Downtown Alpharetta to assess existing conditions.

04 Infrastructure Issue

A team of professionals documented existing issues with pedestrian infrastructure.

05 Scarecrow Harvest

The first site visit took place shortly after the annual Scarecrow Harvest.

06 Town Center Work Session

Hand rendering depicting a brainstorming session for Downtown.



NEED AND PURPOSE

As Alpharetta continues to attract new citizens and visitors, it is critical that the City stay ahead of this growth by implementing planning principals that avoid traffic congestion by encouraging people to walk and enjoy Downtown.

The purpose of this planning study is to provide the City of Alpharetta with a toolbox. This includes a picture of the current state of walkability in Downtown and North Point Parkway, a set of pedestrian safety countermeasures that can be implemented to improve walkability, and a series of planning level conceptual recommendations that will act as a roadmap as the City continues creating a walkable Alpharetta.

A Toolbox Approach

- 1 The first tool is an understanding of walkability. A solid grasp of these ideas is critical to the proper application of the tools that follow.
- 2 The second tool is an inventory of existing pedestrian infrastructure - the pieces in place, the pieces missing, and the pieces in disrepair.
- 3 The third tool is a set of planning level recommendations that will guide the City's efforts to fund, engineer, and build a walkable Alpharetta.



01 Canton St and Milton Ave

Downtown crosswalks are used by a variety of pedestrians.



02 Town Center Mix Use Development

Mixed Use Development patterns encourage pedestrian activity and activate commercial spaces.



WHAT IS WALKABILITY?

Walkability is a nuanced concept with many definitions. However it is defined, it is obvious when you see a walkable place. People are the indicator species. In that respect Alpharetta has undergone a renaissance in walkability - people are out and about in Downtown, socializing in the many outdoor greenspaces, sampling the local cuisine, and enjoying the beautiful streetscape.

Walkability

So what is walkability? As defined by the Victoria Transport Policy Institute; "Walkability reflects overall walking conditions in an area. Walkability considers the quality of pedestrian facilities, roadway conditions, land use patterns, community support, security and comfort for walking.

Walkability can be evaluated at various scales. At a site scale, walkability is affected by the quality of pathways, building accessways and related facilities. At a street or neighborhood level, it is affected by the existence of sidewalks and crosswalks, and roadway conditions (road widths, traffic volumes and speeds). At the community level it is also affected by land use accessibility such as the relative location of common destinations and the quality of connections between them."

Victoria Transport Policy Institute's Online Transportation Demand Management Encyclopedia, <http://www.vtpi.org/tdm/>

Key Indicators

Obviously many factors contribute to whether a place is considered walkable. The following are some key indicators that influence walkability:

- The number of destinations within a 5 to 10 minute walking distance
- The urban context and land-use patterns
- Condition and aesthetics of the existing pedestrian infrastructure
- Street vs. Road: Streets and roads are not created equal. "Streets" are designed for people, prioritizing being in a place, whereas "roads" are designed for the automobile, prioritizing moving through a place. They must be designed distinctly and separately to promote overall walkability.



01 City Hall Town Green

Four Steps

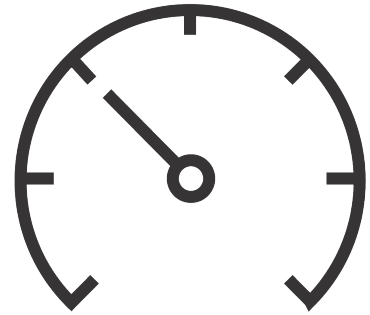
Jeff Speck, author of "A Walkable City" states that to promote walking you need the following:

- A safe walk
- A reason to walk
- A comfortable walk
- An interesting walk

Walkable City Rules: 101 Steps to Making Better Places
by Jeff Speck



20
MPH

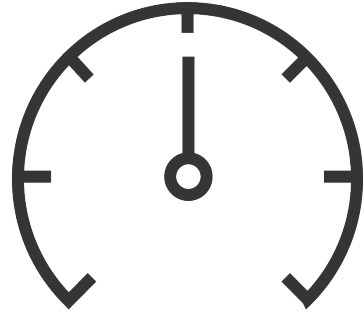


13% Likelihood
of fatality or
severe injury

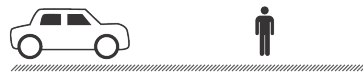


63
feet Stopping
distance for a
vehicle travelling
at 20 mph

30
MPH

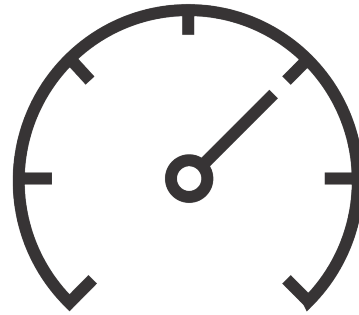


40% Likelihood
of fatality or
severe injury



109
feet Stopping
distance for a
vehicle travelling
at 30 mph

40
MPH



73% Likelihood
of fatality or
severe injury



164
feet Stopping
distance for a
vehicle travelling
at 40 mph

Sources: Tefft, Brian C. Impact speed and a pedestrian's risk of severe injury or death. Accident Analysis & Prevention. 50. 2013

University of Pennsylvania School of Engineering. "Vehicle Stopping Distance and Time."

Note: Stopping distances include breaking deceleration distance and perception reaction distance.

SAFETY VS. DRIVER BEHAVIOR

Vehicle Speed as Related to Pedestrian Injuries or Fatalities

The faster vehicles are traveling, the more stressful walking is for pedestrians and the more likely a pedestrian-vehicle collision will result in a pedestrian fatality. The ability of a driver to stop in time for a pedestrian crossing the street significantly decreases as the vehicle speed increases.

The relationships among vehicle speeds, braking distances, and the likelihood of pedestrian fatalities are shown to the left.



01 Looking East Towards Town Green & City Hall
Pedestrian Hybrid Beacon at Main Street (SR 9)



OVERVIEW OF RECOMMENDATIONS

What follows is a set of recommendations that will act as a roadmap for the City to follow in its efforts to fund, design, and implement projects that will provide a rich pedestrian experience for residents and visitors alike.

First is a set of design guidelines for pedestrian safety countermeasures selected from the Georgia Department of Transportation Pedestrian Streetscape guide that are based on tried and true best practices. Next is a selected set of signage that should be installed in appropriate places throughout the City to enhance driver compliance and pedestrian safety. The set of signage is pulled from the Manual for Uniform Traffic Control Devices with guidance from our team of traffic professionals. Finally we will present our recommendations in a series of tables that are categorized accordingly:

- Maintenance Items
- Quick Response Countermeasures
- Near-Term Projects
- Long-Term Projects
- Projects When Redevelopment Occurs
- Transit Stop Improvements

These categories are based on the timeframe that the recommendations ought to be implemented. Maintenance items are the projects that should be regularly bundled into the City's schedule. Quick response items are low-cost, high-yield projects that can be implemented in the immediate future. Short- and long-term projects are measures that will require more of an undertaking. They will typically require engineering analyses of their impact on traffic flows and the geometry of the roadway. Opportunities during redevelopment are items that the City should encourage developers to include in their projects. Transit stop improvements are projects that will make bus stops accessible and comfortable, which will encourage fewer trips to the study areas by car.

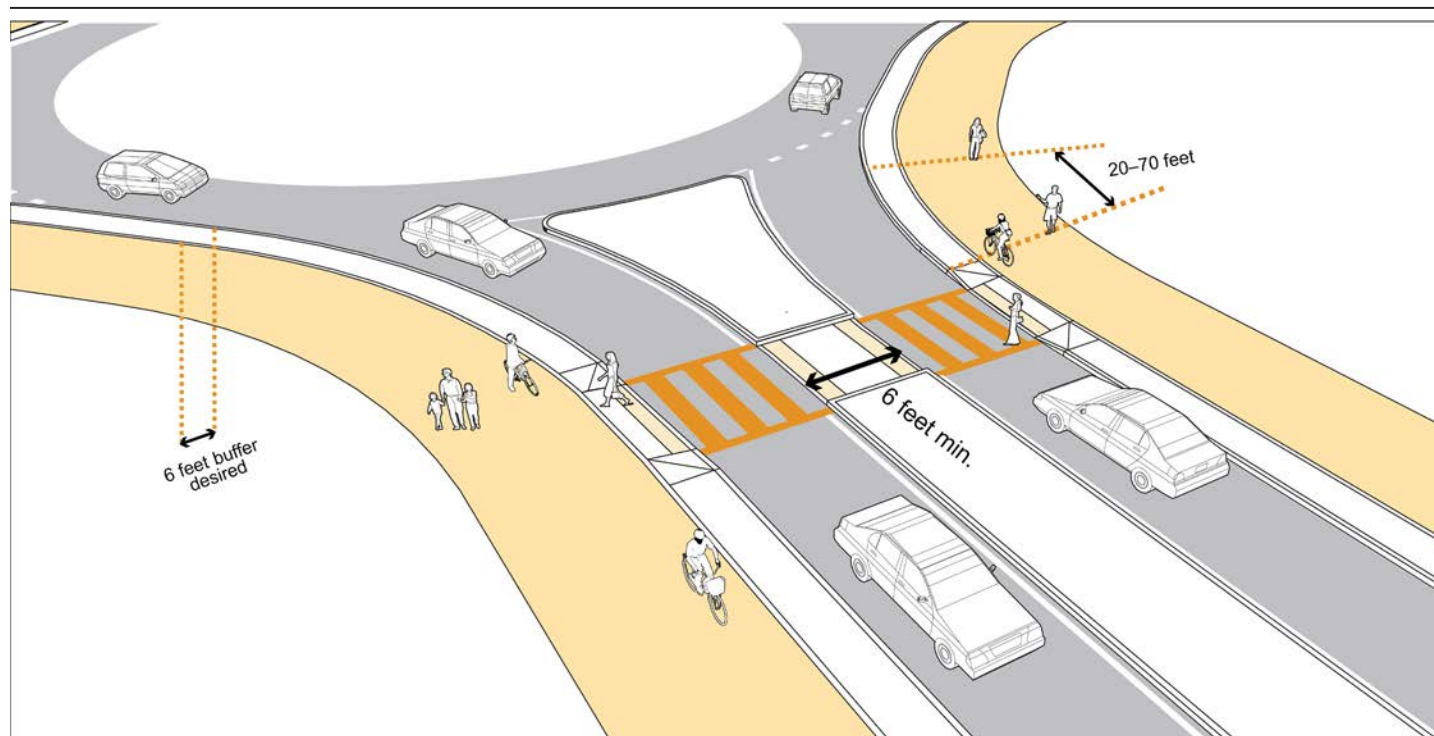
NOTE: The recommendations set forth solely reflect improvements intended for pedestrian accessibility and safety. Impacts of these recommendations on vehicular flow were not evaluated as part of this study. Further engineering analysis is recommended prior to implementation of any of the recommendations that follow.



01 Haynes Bridge Road Streetscape

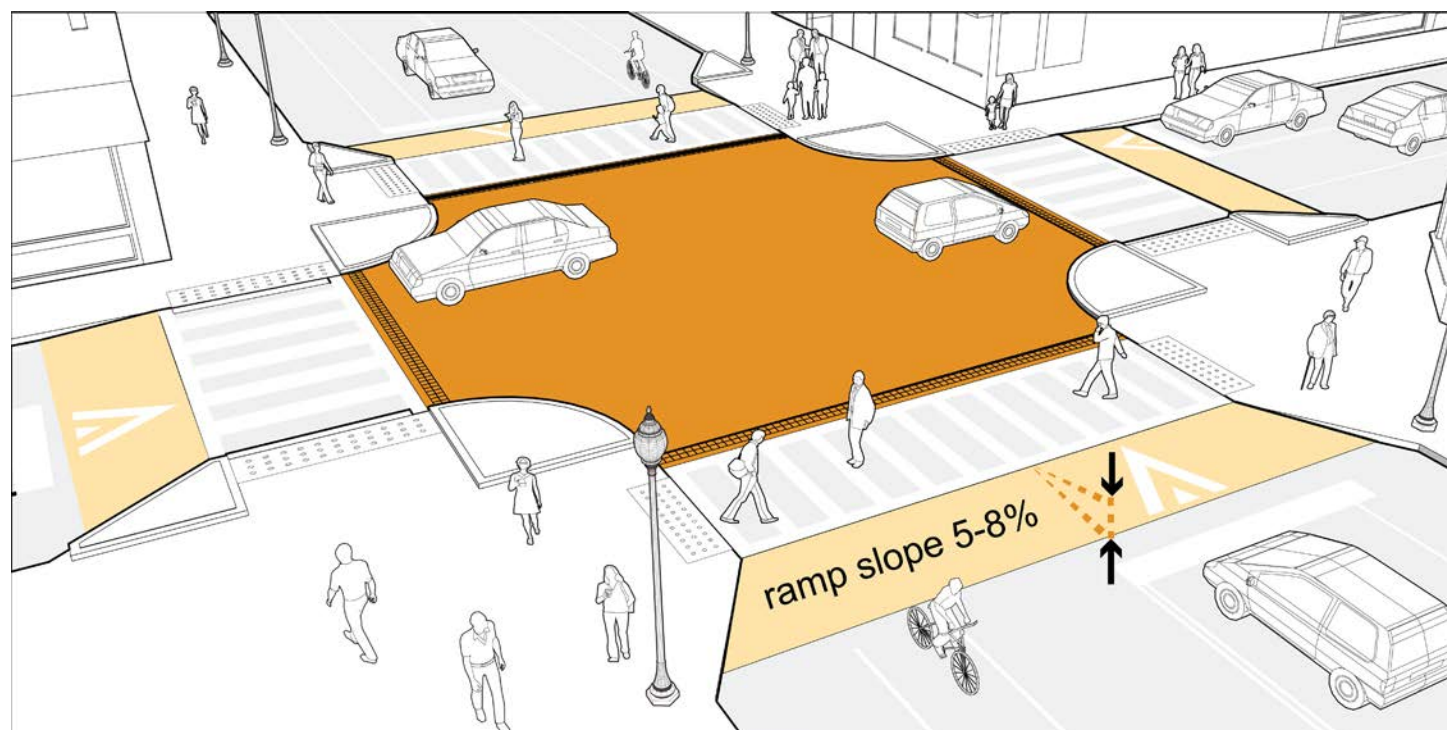


PEDESTRIAN SAFETY COUNTERMEASURES: INTERSECTIONS



Roundabout

A roundabout is a circular unsignalized intersection with a raised circular island in the center. There are many types of roundabouts, such as mini roundabouts, single lane roundabouts, and multi-lane roundabouts. Roundabouts are particularly effective in reducing vehicle speeds and in minimizing high-speed crashes that can result in pedestrian injury. The decrease in vehicle speeds and shorter crossing distance makes pedestrians feel more comfortable walking in and around a place.

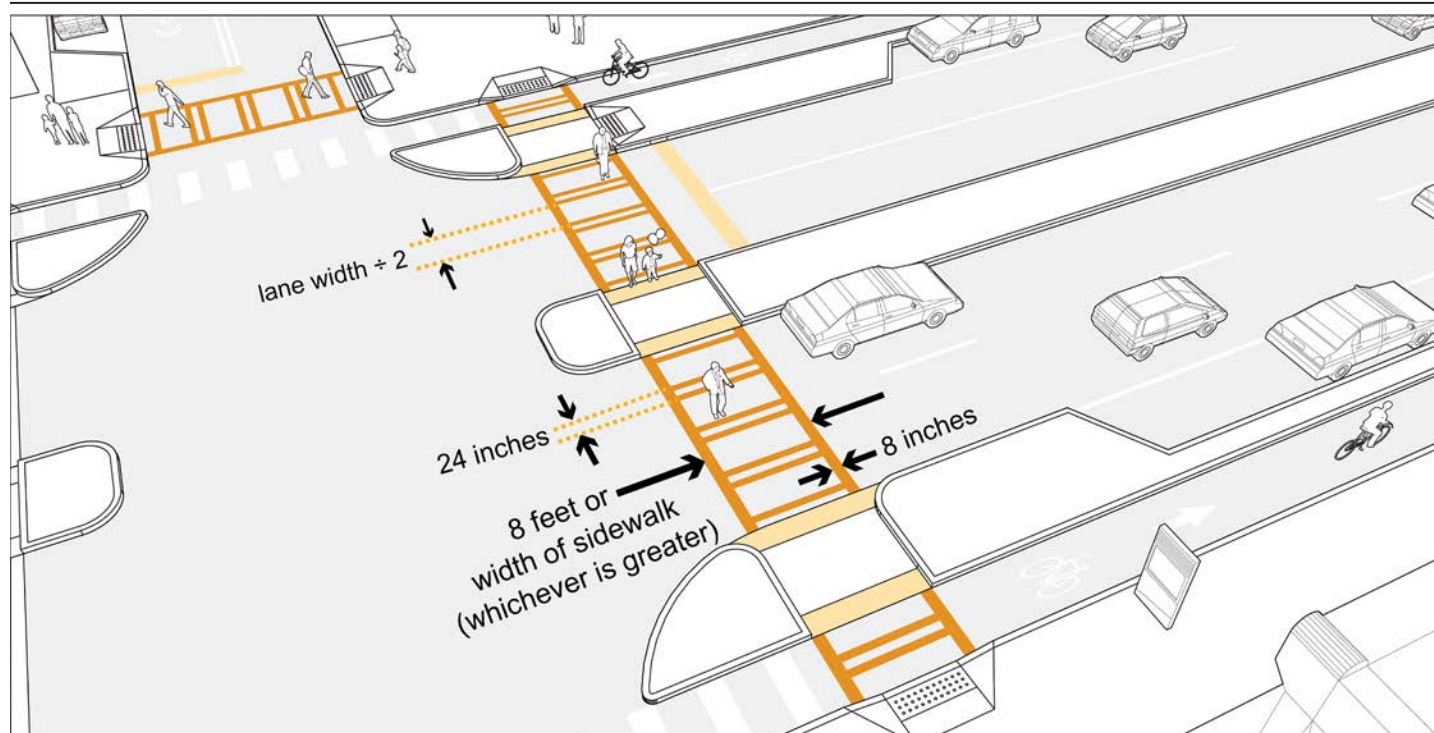


Raised Intersection

A raised intersection is a flat, raised area covering an intersection with ramps on all vehicle approaches. Similar to speed tables, raised intersections are effective in reducing vehicle speed to a range of 25 to 35 mph when crossing the intersection. Raised intersections may serve as a gateway treatment on main streets and more urban areas.

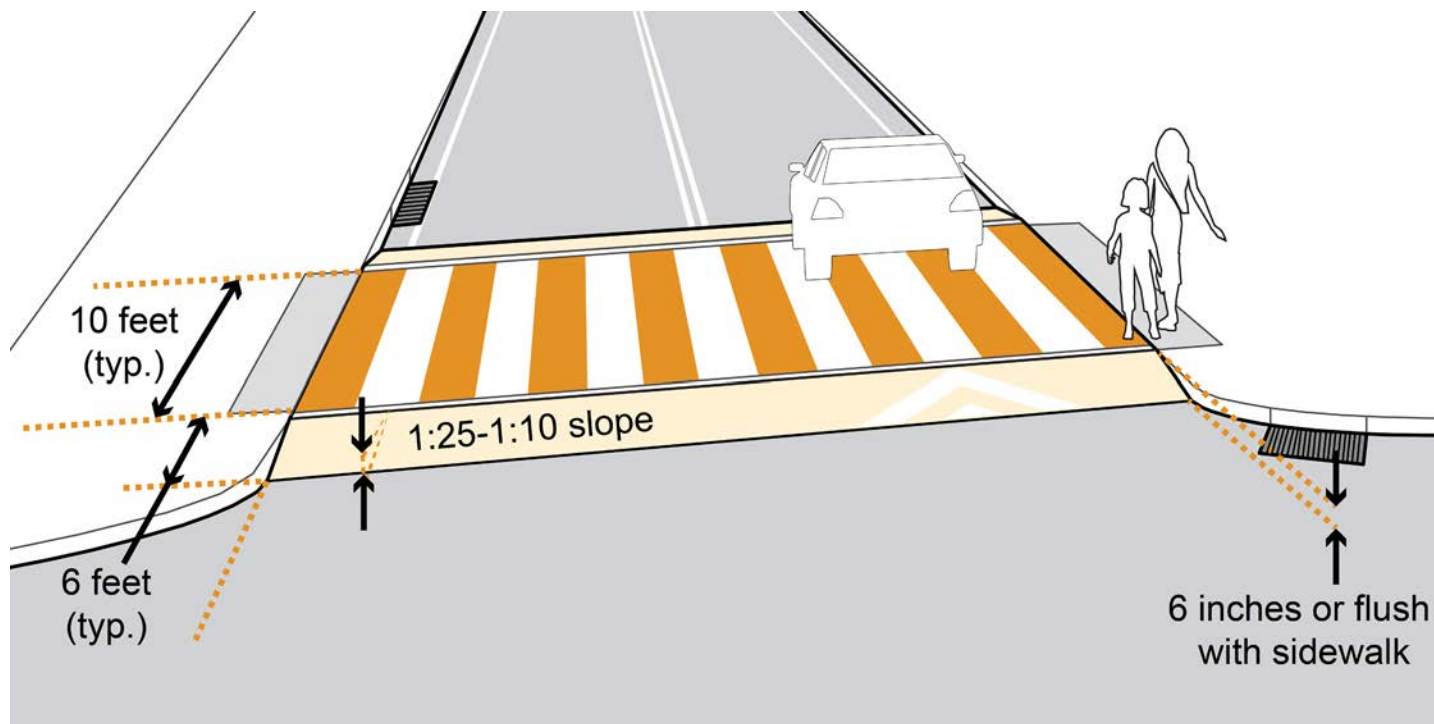


PEDESTRIAN SAFETY COUNTERMEASURES: CROSSINGS



Marked Crosswalk with Refuge Island & Bulb Outs

Marked crosswalks and refuge islands are designated locations for pedestrians to cross the street. They provide a clear indication to pedestrians as to where they should cross the street and to motorists as to where pedestrians are likely to be crossing the street. Bulb Outs, also known as Curb Extensions, extend the sidewalk into the parking lane to narrow the roadway and enhance pedestrian safety by providing increased visibility and shortened crossing distances.

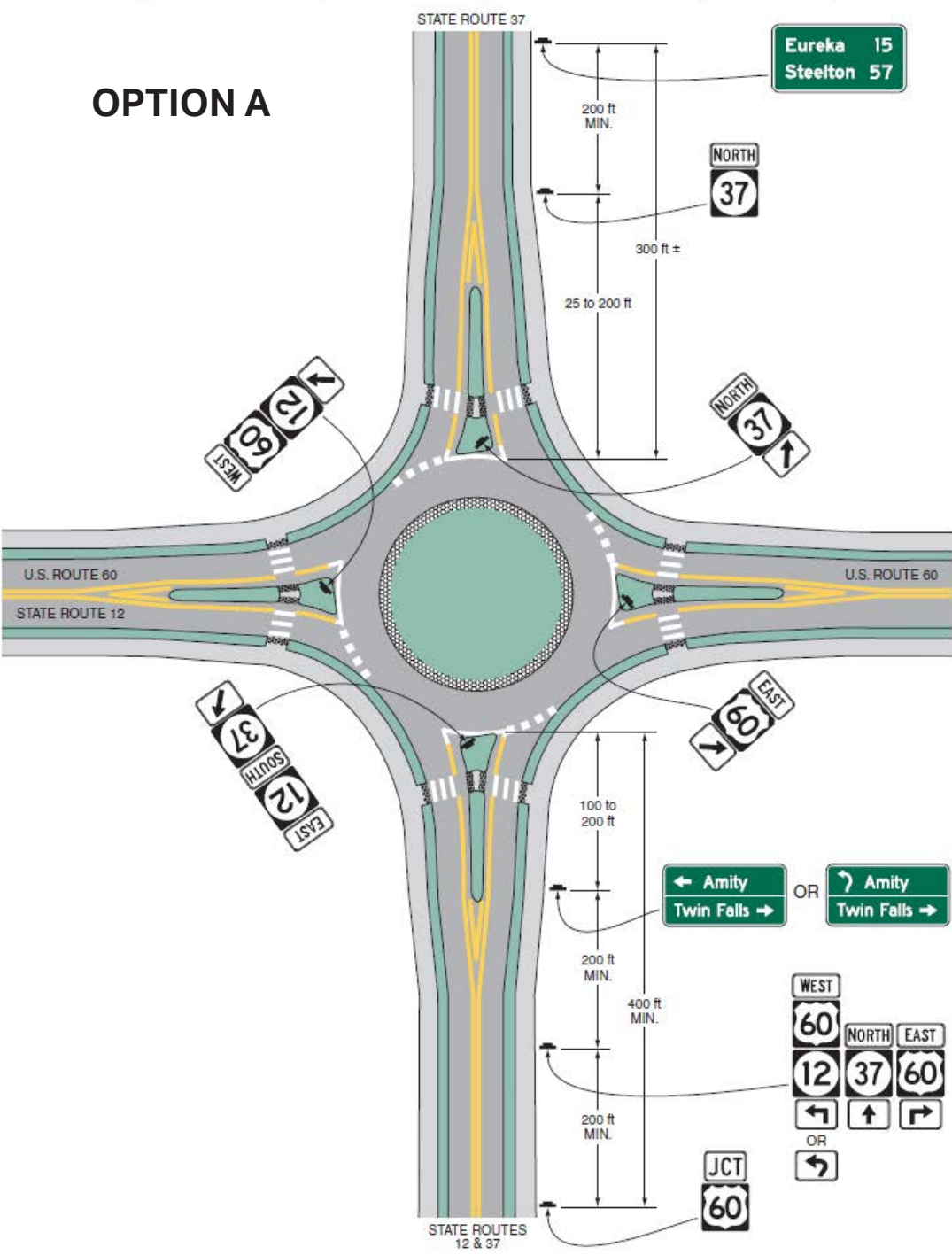


Raised Crosswalk

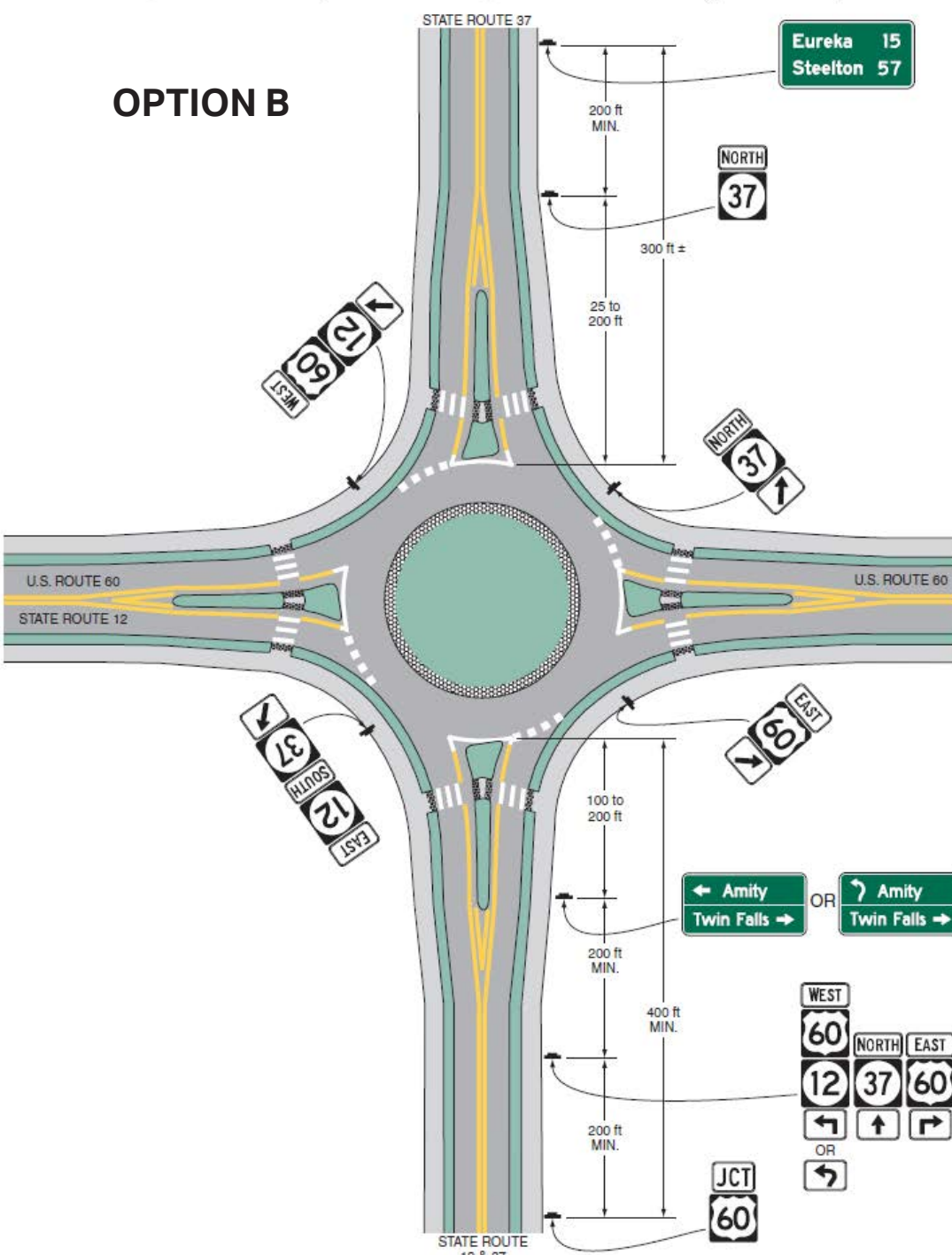
Raised crosswalks have similar design standards to speed tables and speed humps and are marked and signed as designated crossings. Raised crosswalks are effective for reducing vehicle speeds and drawing attention to the pedestrian crossing. Raised crosswalks provide significant benefits to the pedestrian environment by improving awareness of crossing pedestrians.



SIGNAGE FOR ROUNDABOUTS



Taken from Manual for Uniform Traffic Control Devices (MUTCD).



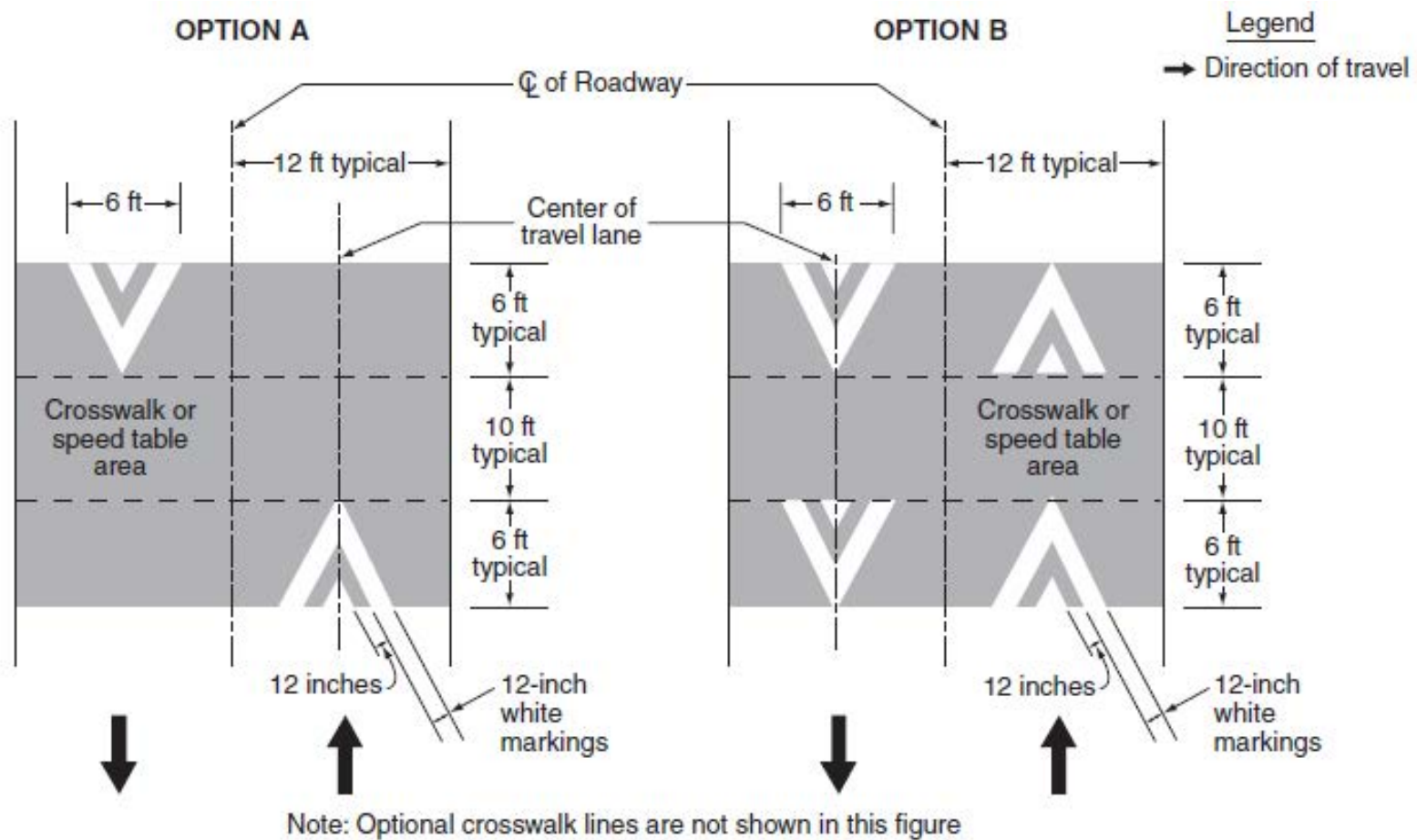
Taken from Manual for Uniform Traffic Control Devices (MUTCD).



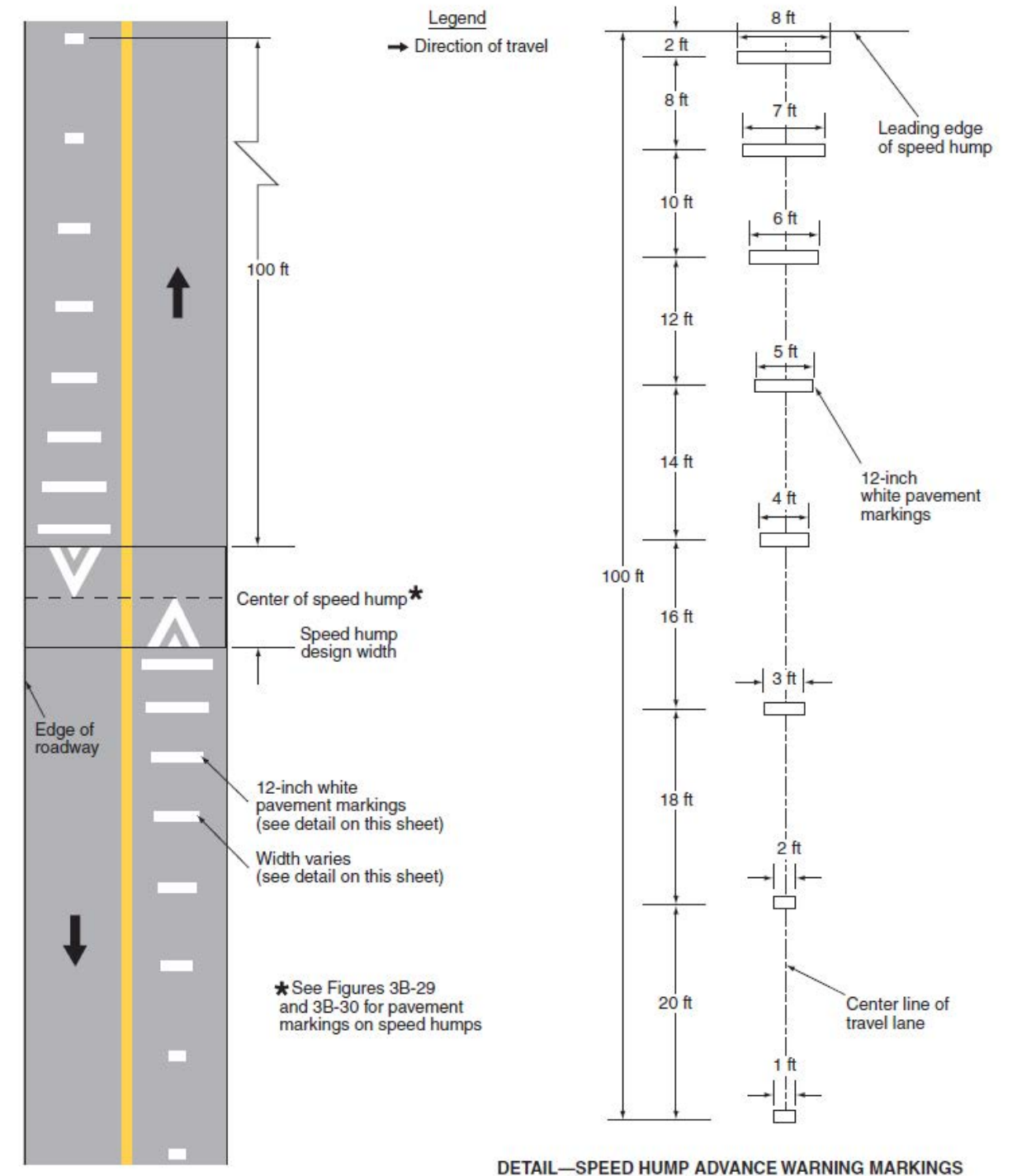
PAVEMENT MARKINGS FOR RAISED COUNTERMEASURES

Raised Intersections, Crosswalks, and Speed Humps

Pavement markings for all raised countermeasures should follow the guidelines set forth in the Manual for Uniform Traffic Control Devices (MUTCD). The only mandatory pavement markings are depicted in option A in the graphic below. Option B and pavement markings for the approach to the raised applications are optional, but the approach markings are recommended, especially for raised crosswalks.



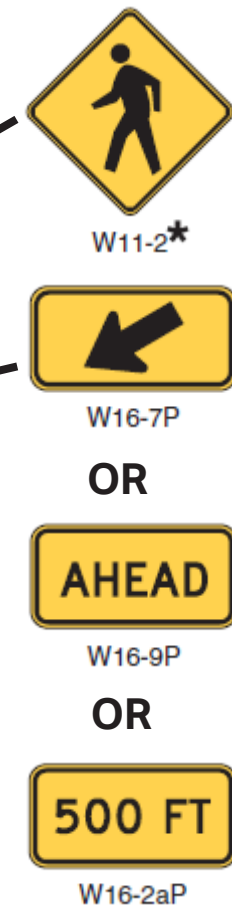
Taken from Manual for Uniform Traffic Control Devices (MUTCD).



Taken from Manual for Uniform Traffic Control Devices (MUTCD).



SIGNAGE FOR MID-BLOCK CROSSINGS



Typical Mid-Block Crossing

All mid-block crossings should have the signage depicted above. The arrow sign (R16-7p) may be changed out for either of the following signs depending on the location of the pedestrian sign (W11-2). Wherever possible, mid-block crossings should have median refuge islands.

Signage from Manual for Uniform Traffic Control Devices (MUTCD).



PEDESTRIAN HYBRID BEACON SIGNAGE



From City of Neenah, WI website.

+



R1-5c

OR

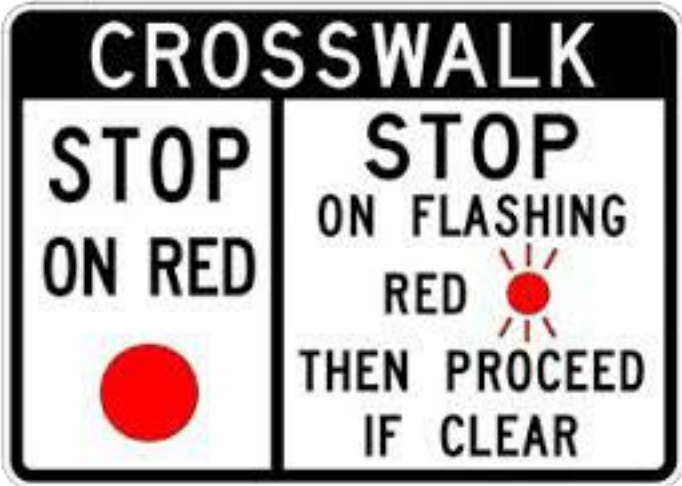


R1-5b



R10-23

CHANGE TO



Example of custom regulatory signage from FHWA website.

CONSIDER



R1-9a

Pedestrian Hybrid Beacon Signage Improvements

Signage should be added to all Pedestrian Hybrid Beacons indicating that vehicles can proceed through the crosswalk when it is clear. This will require custom regulatory signage (see example at right). Stop Here on Red signs (R10-6a) should be changed to one of the two options for Stop Here for Pedestrians signs R1-5b (preferred) or R1-5c.

All other signage from Manual for Uniform Traffic Control Devices (MUTCD).



MAINTENANCE ITEMS

\$: 0-50k
\$\$: 50k-200k
\$\$\$: 200k-500k
\$\$\$\$: 500k-1M
\$\$\$\$\$: 1M-2M
\$\$\$\$\$\$: 2M+

Recommendation	Locations	Potential Benefits	Cost	Priority
Selectively prune vegetation	Areas where vegetation is obstructing sight visibility, especially at crosswalks	Safety, Visibility	\$	High
Perform sidewalk repairs	See Pedestrian Infrastructure Inventory maps	Safety, Comfort, Accessibility	\$	High
Remove items that narrow the effective sidewalk width to under 5'	See Pedestrian Infrastructure Inventory maps	Safety, Comfort, Community	\$	High
Replace faded crosswalk markings	See Pedestrian Infrastructure Inventory maps	Safety, Comfort, Visibility	\$	High
Remove debris and sweep	Sidewalks, Streets	Safety, Comfort, Accessibility	\$	Med



QUICK RESPONSE COUNTERMEASURES

\$: 0-50k
\$: 50k-200k
\$: 200k-500k
\$: 500k-1M
\$: 1M-2M
\$: 2M+

Recommendation	Locations	Potential Benefits	Cost	Priority	
Prohibit vehicles from turning right on red in Downtown Core	Signalized Intersections in Downtown Core (see page 8)	Safety, Comfort, Traffic Calming	\$	High	*
Evaluate sight distances & visibility	Existing and proposed crosswalks	Safety, Comfort, Visibility	\$	High	*
Eliminate on-street parking that is less than 25 feet from a crosswalk or intersection	Crosswalks near on-street parking	Safety, Comfort, Visibility	\$	High	*
Fill in missing crosswalk(s) at signalized intersections	Signalized intersections	Safety, Comfort, Connectivity, Visibility	\$	High	
Add leading pedestrian interval and flashing yellow arrow permissive left turn signals	Signalized intersections	Safety, Comfort, Visibility	\$	High	*
Add reflector strips	Sign posts in school zones	Safety, Visibility	\$	High	*
Evaluate crosswalk signage for enhancement opportunities	Crosswalks	Safety, Visibility	\$	High	*
Implement recall for pedestrian phases, eliminating push buttons	Signalized intersections	Comfort, Accessibility, Operations	S	High	*
Add signage indicating that drivers may proceed on flashing red	Pedestrian Hybrid Beacons	Safety, Traffic Operations	\$	Med	*
Reduce traffic signal cycle length	Signalized intersections	Comfort, Traffic Operations	\$	Med	*
Install crosswalk ramps and detectable edges	Where missing at crossings	Safety, Comfort, Accessibility	\$	Med	
Add crosswalk markings across commercial driveways	Qualifying commercial driveways	Safety, Comfort, Visibility	\$	Med	
Add street name signs where missing	Intersections	Comfort, Wayfinding	\$	Low	*

* Recommendations to be addressed by City staff.



NEAR-TERM PROJECTS

\$: 0-50k
\$\$: 50k-200k
\$\$\$: 200k-500k
\$\$\$\$: 500k-1M
\$\$\$\$\$: 1M-2M
\$\$\$\$\$\$: 2M+

Recommendation	Locations	Potential Benefits	Cost	Priority
Install raised crosswalks	Crosswalks in Downtown Core except along SR 9	Safety, Comfort, Community, Visibility, Traffic Calming, Beautification	\$\$	Med
Add sidewalk where missing	See Pedestrian Infrastructure Inventory maps	Safety, Comfort, Accessibility, Connectivity	\$\$-\$\$\$	High
Install speed table	Streets where vehicle speed reduction is desired	Safety, Comfort, Traffic Calming	\$\$	Med
Update design guidelines for streetscapes	North Point Parkway	Community, Beautification	\$	Med *
Add median refuge areas	Mid-block crosswalks (See recommendations maps)	Safety, Comfort, Visibility	\$\$	High
Add or improve pedestrian lighting	Gaps in pedestrian light network	Safety, Comfort, Community, Visibility	\$\$-\$\$\$\$	High
Install mid-block crossing (with median refuge islands)	Long lengths of road without intersections	Safety, Comfort, Connectivity, Visibility, Accessibility	\$\$	Med
Implement audible pedestrian signals	Signalized intersections	Safety, Comfort, Accessibility	\$\$	Med *
Evaluate pedestrian hybrid beacons for operational improvements	Pedestrian Hybrid Beacons	Safety, Comfort, Connectivity, Visibility, Accessibility	\$	Med *
Shared street conversion	Low-speed / Low-volume streets, especially Old Roswell St.	Safety, Community, Comfort, Traffic Calming	\$\$-\$\$\$	Med
Add traffic signals and crosswalks	Unsignalized Intersections, where warranted	Safety, Connectivity, Visibility	\$\$	High
Narrow travel lanes to 10 feet	Where feasible, especially throughout North Point Parkway	Safety, Comfort, Traffic Calming	\$\$	Med
Install raised intersections	Milton Ave. @ Canton St./Roswell St. Academy St. @ Park Plaza Academy St. @ Haynes Bridge Rd. Marietta St. @ Roswell St.	Safety, Comfort, Community, Traffic Calming, Beautification	\$\$\$	Med

* Recommendations to be addressed by City staff.



LONG-TERM PROJECTS

\$: 0-50k
\$\$: 50k-200k
\$\$\$: 200k-500k
\$\$\$\$: 500k-1M
\$\$\$\$\$: 1M-2M
\$\$\$\$\$\$: 2M+

Recommendation	Locations	Potential Benefits	Cost	Priority
Evaluate opportunities to improve intersection geometry	Academy St. @ Park Plaza Canton St. @ Old Canton St. Roswell St. @ Old Roswell St.	Safety, Comfort, Traffic Operations, Visibility	\$\$-\$\$\$\$	Med *
Complete entirety of Alpha-Loop	Alpha-Loop	Safety, Comfort, Connectivity, Community, Accessibility	\$\$\$\$\$\$	Med
Strengthen pedestrian corridors connecting major activity centers with residential areas	Pedestrian corridors that connect Avalon, Wills Park, Mayfield Rd., Hopewell Rd., and Cumming St. to the Downtown Core	Safety, Comfort, Connectivity, Community, Accessibility	\$-\$\$\$	Med
Install shared-use paths	See Sidewalk Width Recommendations Map	Safety, Comfort, Connectivity	\$\$\$-\$\$\$\$\$	Med
Replace asphalt with pavers	Low-speed / Low-volume Streets	Safety, Community, Traffic Calming	\$\$-\$\$\$	Med
Roundabout conversions	Roswell St. @ Old Roswell St. Mayfield Rd. @ Canton St.	Safety, Comfort, Traffic Operations	\$\$\$\$\$	High

* Recommendations to be addressed by City staff.



PROJECTS WHEN REDEVELOPMENT OCCURS

\$: 0-50k
\$\$: 50k-200k
\$\$\$: 200k-500k
\$\$\$\$: 500k-1M
\$\$\$\$\$: 1M-2M
\$\$\$\$\$\$: 2M+

Recommendation	Locations	Potential Benefits	Cost	Priority
Roundabout conversions when redevelopment occurs	Canton St. @ Old Canton St. Hopewell Rd @ Vaughn Dr.	Safety, Comfort, Traffic Operations	\$\$\$\$\$	High
Provide pedestrian detours and signage	Construction sites	Safety, Comfort, Connectivity, Accessibility, Wayfinding	\$	High
Install contrasting pavement crosswalk delineation	Crosswalks and driveway approaches	Visibility, Comfort, Visibility	\$\$	Med
Widen sidewalk	Sidewalks	Safety, Comfort, Community, Accessibility	\$-\$\$	Med
Close median openings to the extent practical	Unsignalized intersections with median openings	Safety, Comfort, Visibility	\$\$	Med
Encourage sidewalk connections to private facilities	Private Facilities	Safety, Comfort, Connectivity, Community, Accessibility	\$-\$\$	Low
Provide gateway treatments and signage for major destinations	Major activity centers	Safety, Community, Beautification	\$-\$\$	Low
Evaluate potential opportunities to implement median U-turn treatments	Streets with medians	Safety, Comfort, Traffic Operations	\$\$\$	Low *

* Recommendations to be addressed by City staff.



TRANSIT STOP IMPROVEMENTS

\$: 0-50k
\$\$: 50k-200k
\$\$\$: 200k-500k
\$\$\$\$: 500k-1M
\$\$\$\$\$: 1M-2M
\$\$\$\$\$\$: 2M+

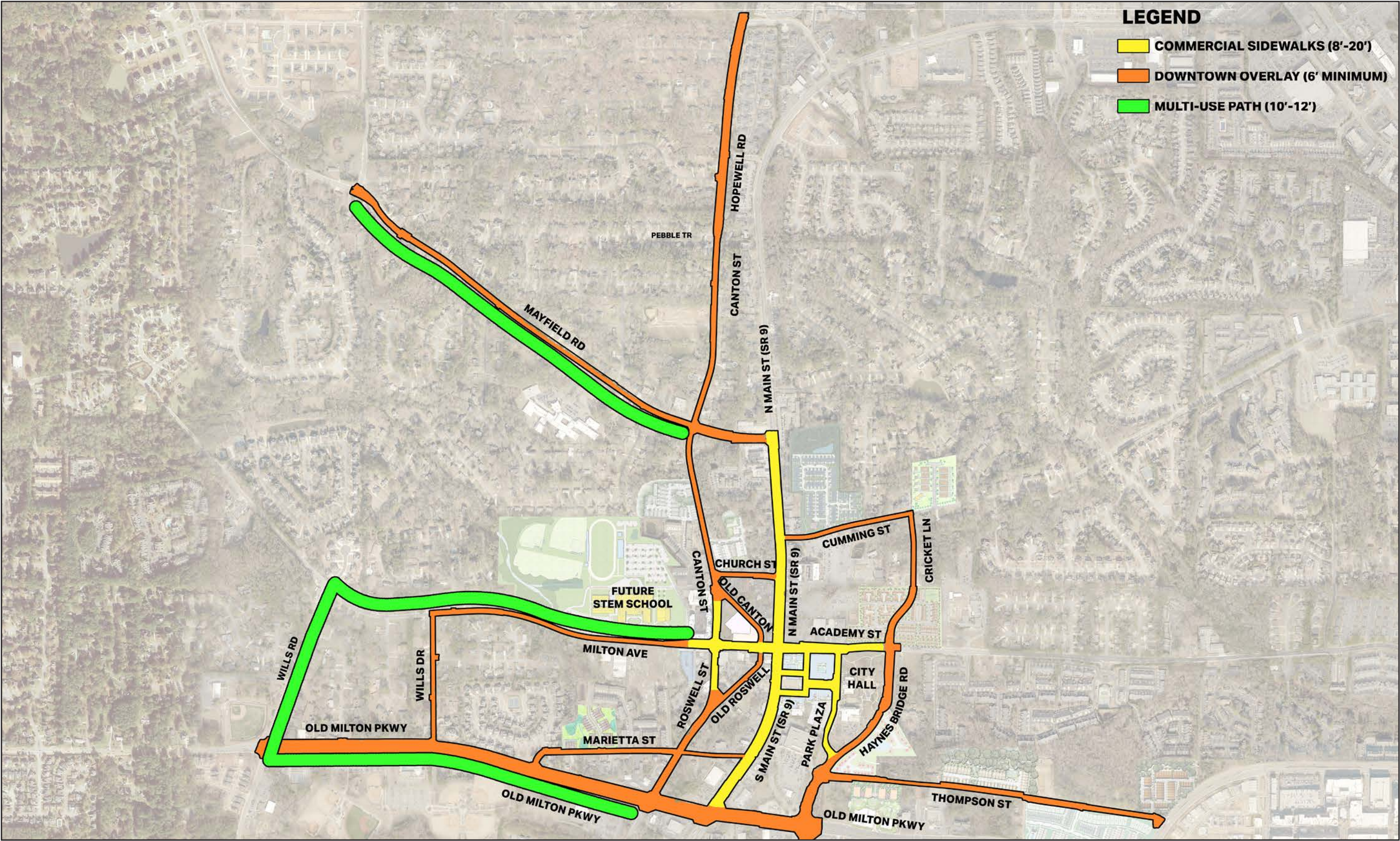
Recommendation	Locations	Potential Benefits	Cost	Priority
Relocate bus stops to reduce the distance to the nearest crosswalk	Bus stops near signalized intersections	Safety, Comfort, Connectivity, Accessibility	\$	Med
Evaluate bus stops near unsignalized intersections for enhancement opportunities	Bus stops near unsignalized intersections	Safety, Comfort, Connectivity, Accessibility	\$-\$\$	Med
Evaluate bus stops at mid-block locations for enhancement opportunities	Bus stops at mid-block locations	Safety, Comfort, Connectivity, Accessibility	\$-\$\$	Med
Fill in pavement gap between sidewalk and curb	Bus stops	Comfort, Accessibility, Safety	\$	High
Repurpose curb lane as right turn and bus only lane	Sections with 3 through lanes	Safety, Comfort	\$\$	Low
Install shelters at bus stops	Bus stops without shelters	Comfort, Visibility	\$\$	Low
Evaluate potential opportunities for automated shuttle service	Transit-supportive areas	Connectivity, Community	\$\$\$	Low
Evaluate potential opportunities for a transit center in the Downtown Core	Transit-supportive areas	Connectivity, Community	\$\$\$\$	Low
Designate transportation network company (Uber / Lyft) zones	Shared transportation service areas	Comfort, Traffic Operations	\$	Low

NOTE: Transit stop improvements will require that the City coordinate with the Metro Atlanta Rapid Transit Authority (MARTA).



RECOMMENDATIONS FOR DOWNTOWN CORE INTERSECTIONS

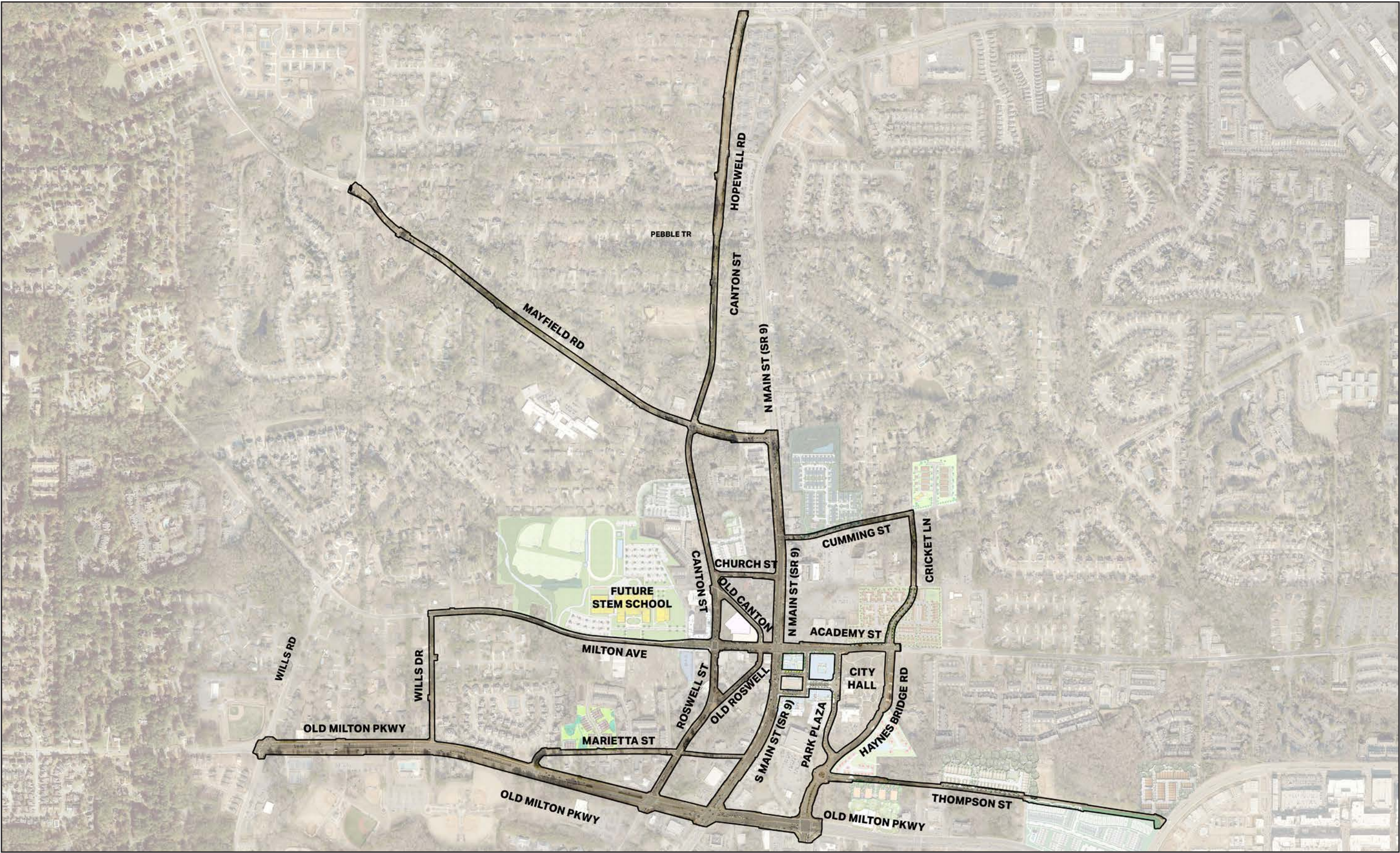
Downtown Intersection	Near-Term Recommendation	Long-Term Recommendation
Main St. @ Milton Ave. / Academy St. (Will require coordination with Georgia Department of Transportation)	<ul style="list-style-type: none"> - Remove parking space that obstructs visibility (see page 47) - Prohibit right turn on red - Add leading pedestrian interval phase - Add flashing yellow left-turn permissive phase - Add pedestrian phase to every signal cycle - Reduce signal cycle length - Prevent installation of second right-turn lane on Academy St. 	Flexible street conversion See page 41
Milton Ave. @ Canton St. / Roswell St.	<ul style="list-style-type: none"> - Prohibit right turn on red - Add leading pedestrian interval phase - Add flashing yellow left-turn permissive phase - Add pedestrian phase to every signal cycle - Reduce signal cycle length 	Flexible street conversion See page 41
Academy St. @ Haynes Bridge Rd.	<ul style="list-style-type: none"> - Prohibit right turn on red - Add leading pedestrian interval phase - Add flashing yellow left-turn permissive phase - Add pedestrian phase to every signal cycle - Reduce signal cycle length 	Raised intersection conversion See page 43
Academy St. @ Park Plaza	<ul style="list-style-type: none"> - Prohibit right turn on red - Add leading pedestrian interval phase - Add flashing yellow left-turn permissive phase - Add pedestrian phase to every signal cycle - Reduce signal cycle length 	Raised intersection conversion See page 43
Canton St. @ Old Canton St.	<ul style="list-style-type: none"> - Remove parking space that obstructs visibility (see page 47) - See page 43 for the following recommendations - Reorient existing northern crosswalk to mid-block position - Add median refuge islands - Install concrete bulb-outs 	Roundabout conversion when redevelopment occurs
Roswell St. @ Old Roswell St.	<ul style="list-style-type: none"> - Remove parking space that obstructs visibility (see page 47) - Install centerline "Yield to Pedestrians" signs on approach 	Roundabout conversion See page 45
Marietta St. @ Roswell St.	<ul style="list-style-type: none"> - Install flashing pedestrian signage - Install centerline "Yield to Pedestrians" signs on approach 	Raised intersection conversion See page 46

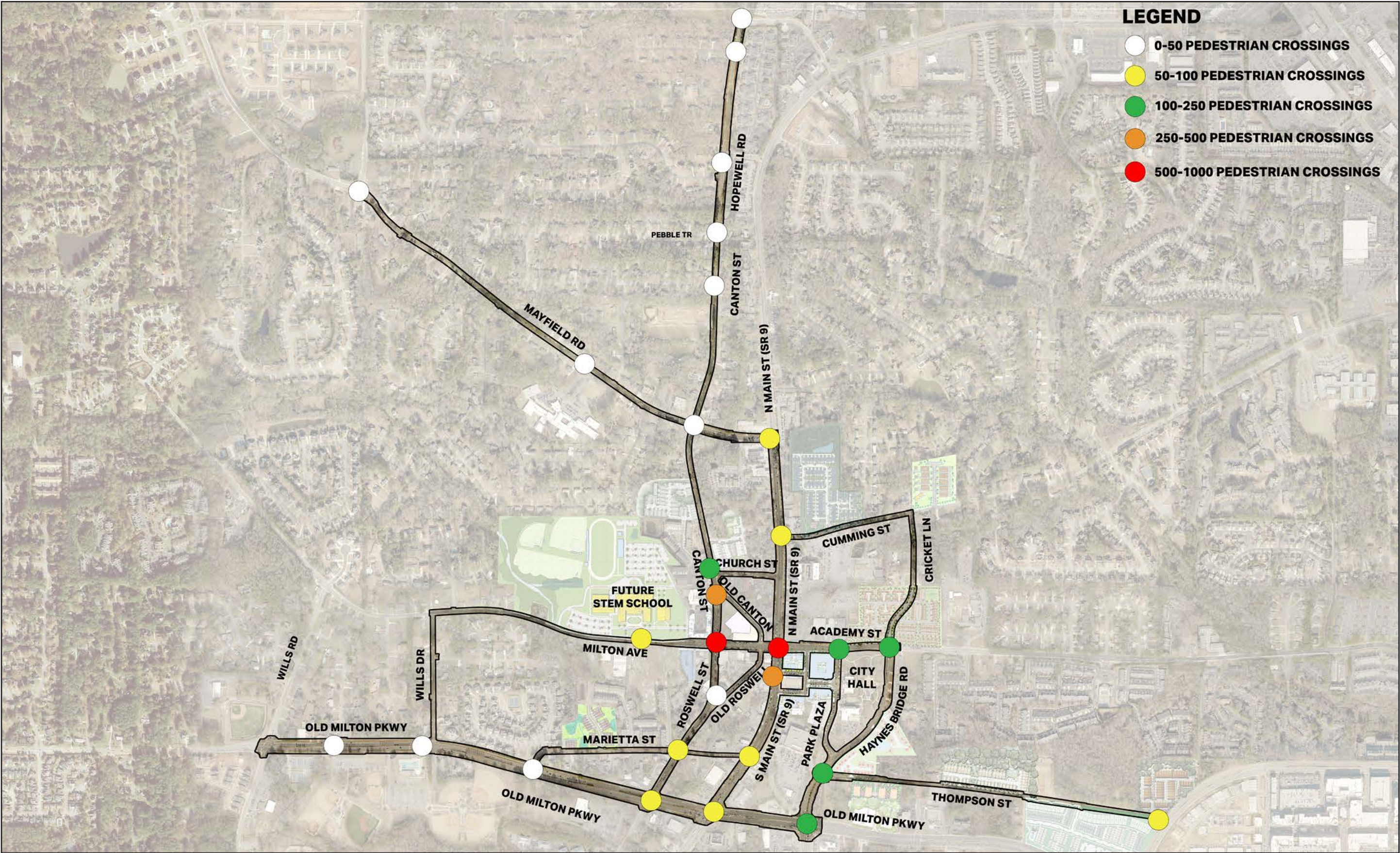


**DOWNTOWN ALPHARETTA
RECOMMENDED SIDEWALK WIDTHS**
CITY OF ALPHARETTA, GEORGIA

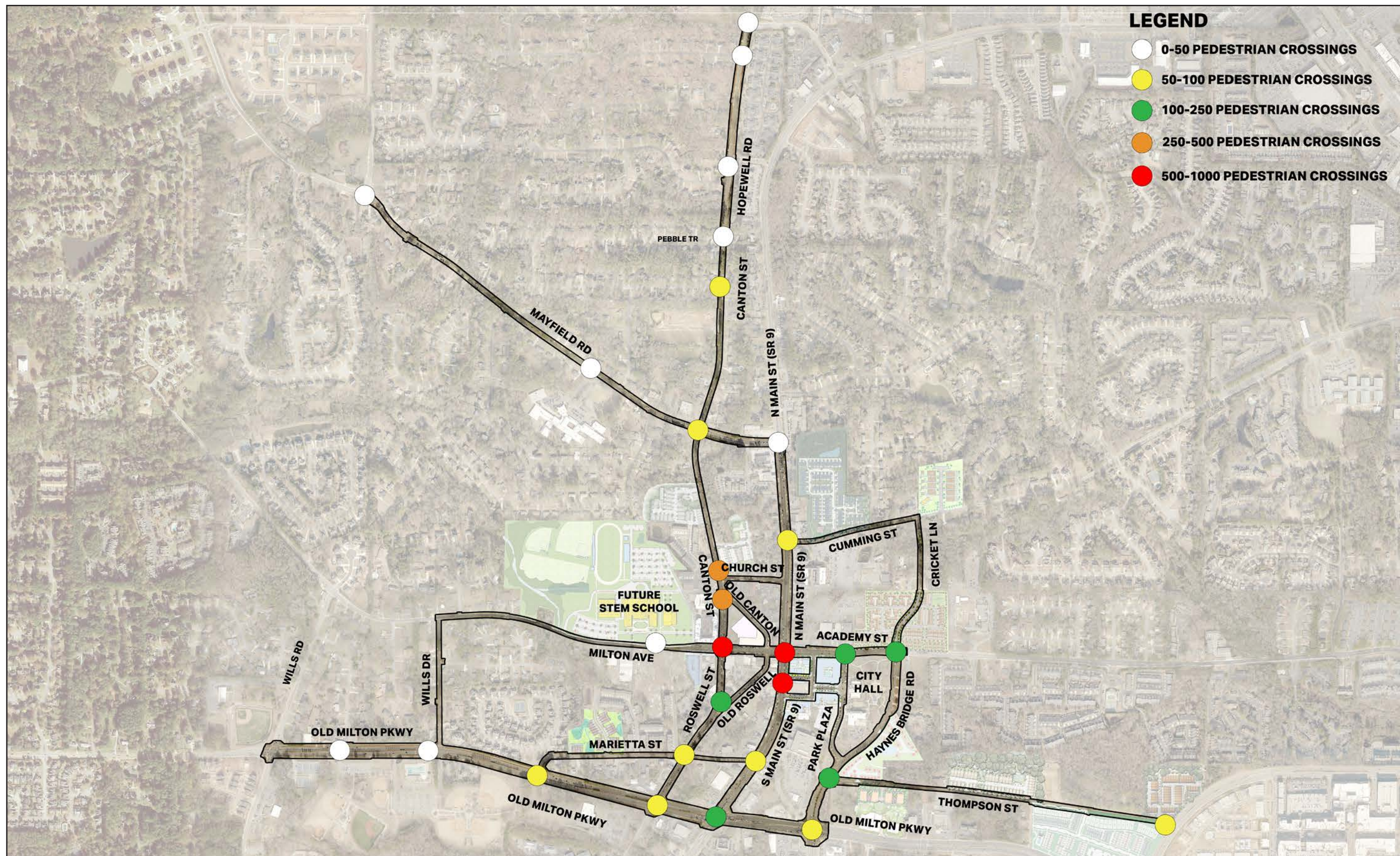
Downtown Overview

02

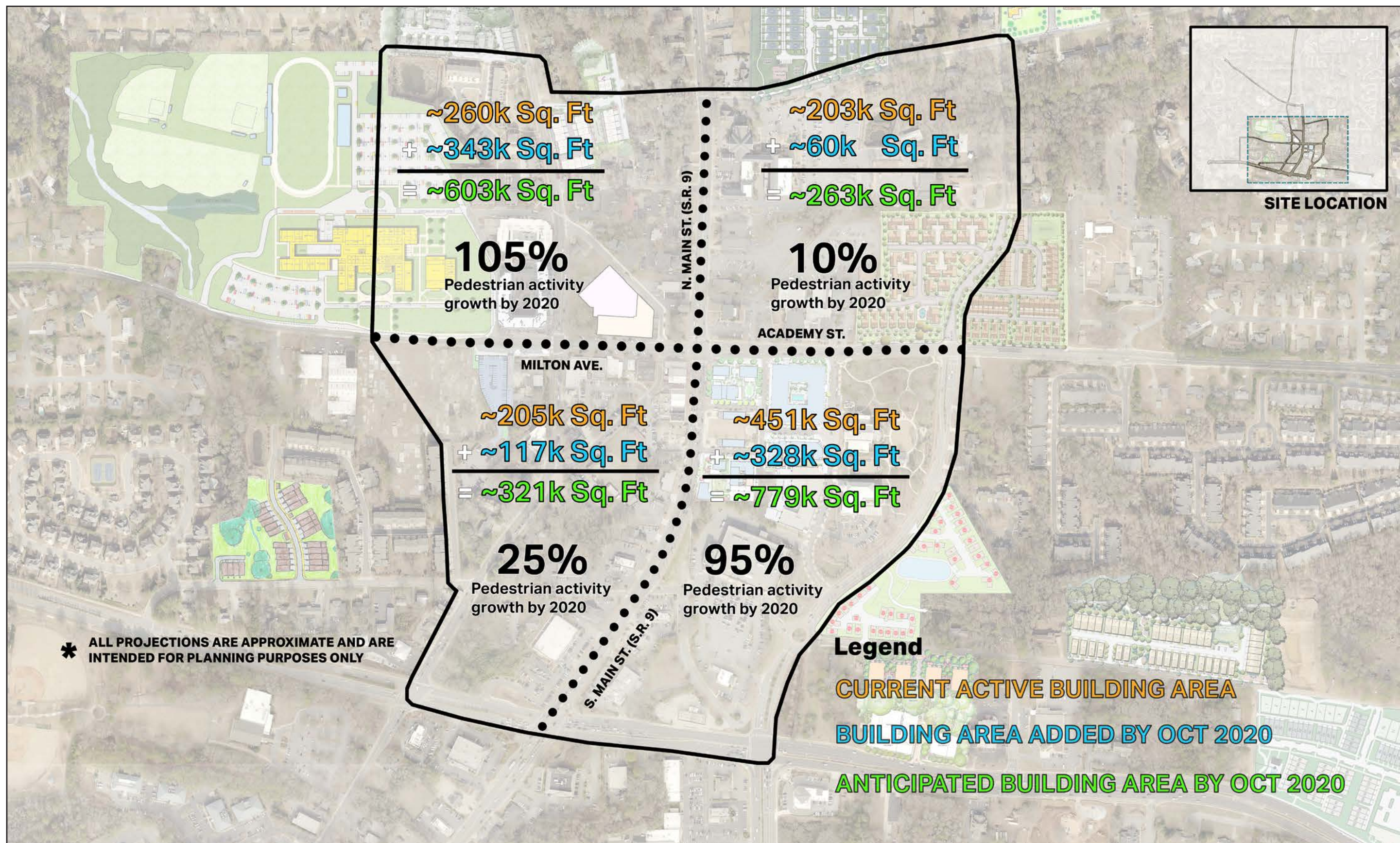


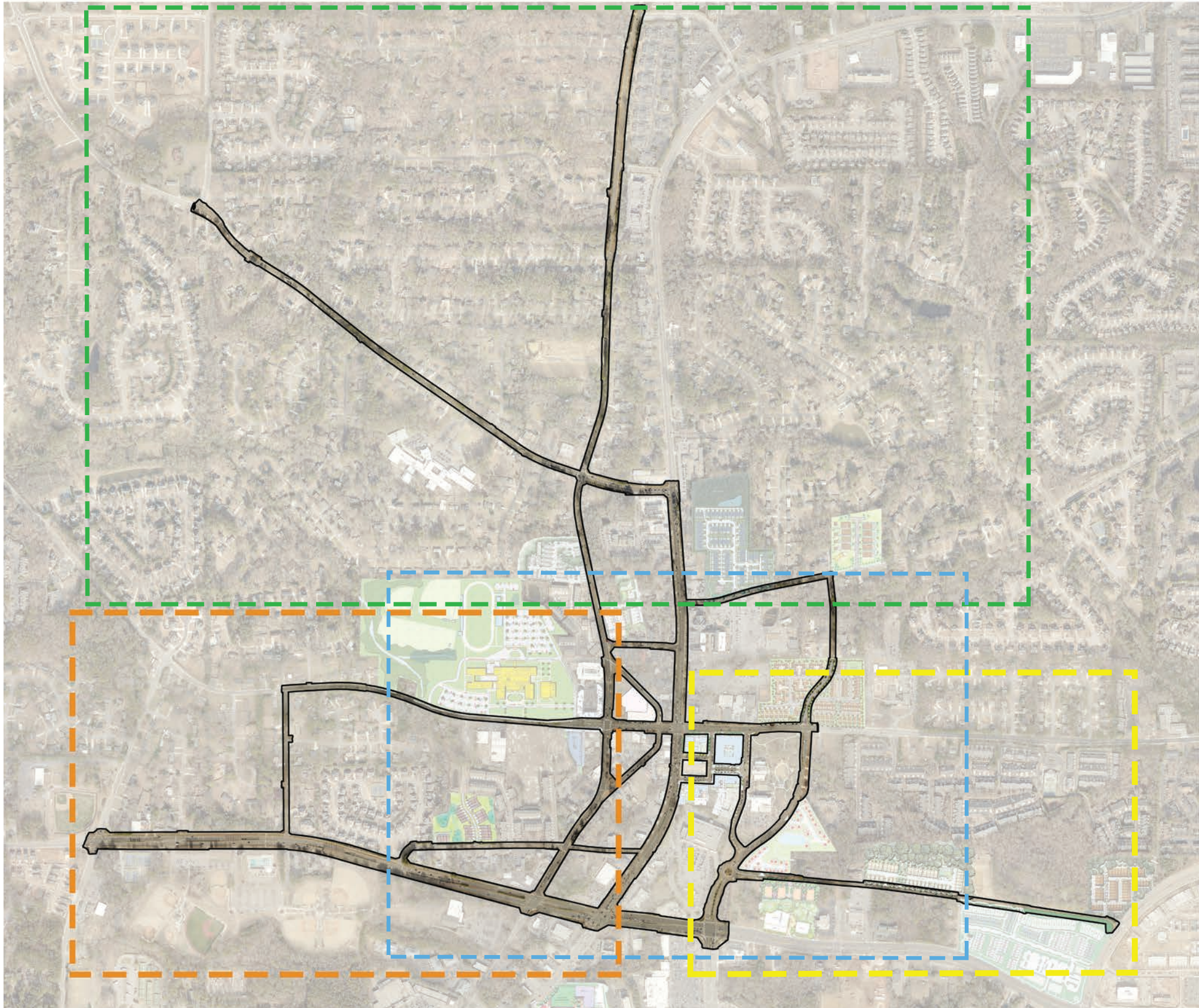


DOWNTOWN AREA
WEEKDAY PEDESTRIAN COUNTS 7AM - 7PM
CITY OF ALPHARETTA, GEORGIA



- LEGEND**
- 0-50 PEDESTRIAN CROSSINGS
 - 50-100 PEDESTRIAN CROSSINGS
 - 100-250 PEDESTRIAN CROSSINGS
 - 250-500 PEDESTRIAN CROSSINGS
 - 500-1000 PEDESTRIAN CROSSINGS





DOWNTOWN CENTRAL

Pedestrian Infrastructure Inventory..... 39
Observations & Recommendations..... 40
Recommendation Specifics..... 41-48

DOWNTOWN WEST

Pedestrian Infrastructure Inventory..... 51
Observations & Recommendations..... 52

DOWNTOWN EAST

Pedestrian Infrastructure Inventory..... 55
Observations & Recommendations..... 56

DOWNTOWN NORTH

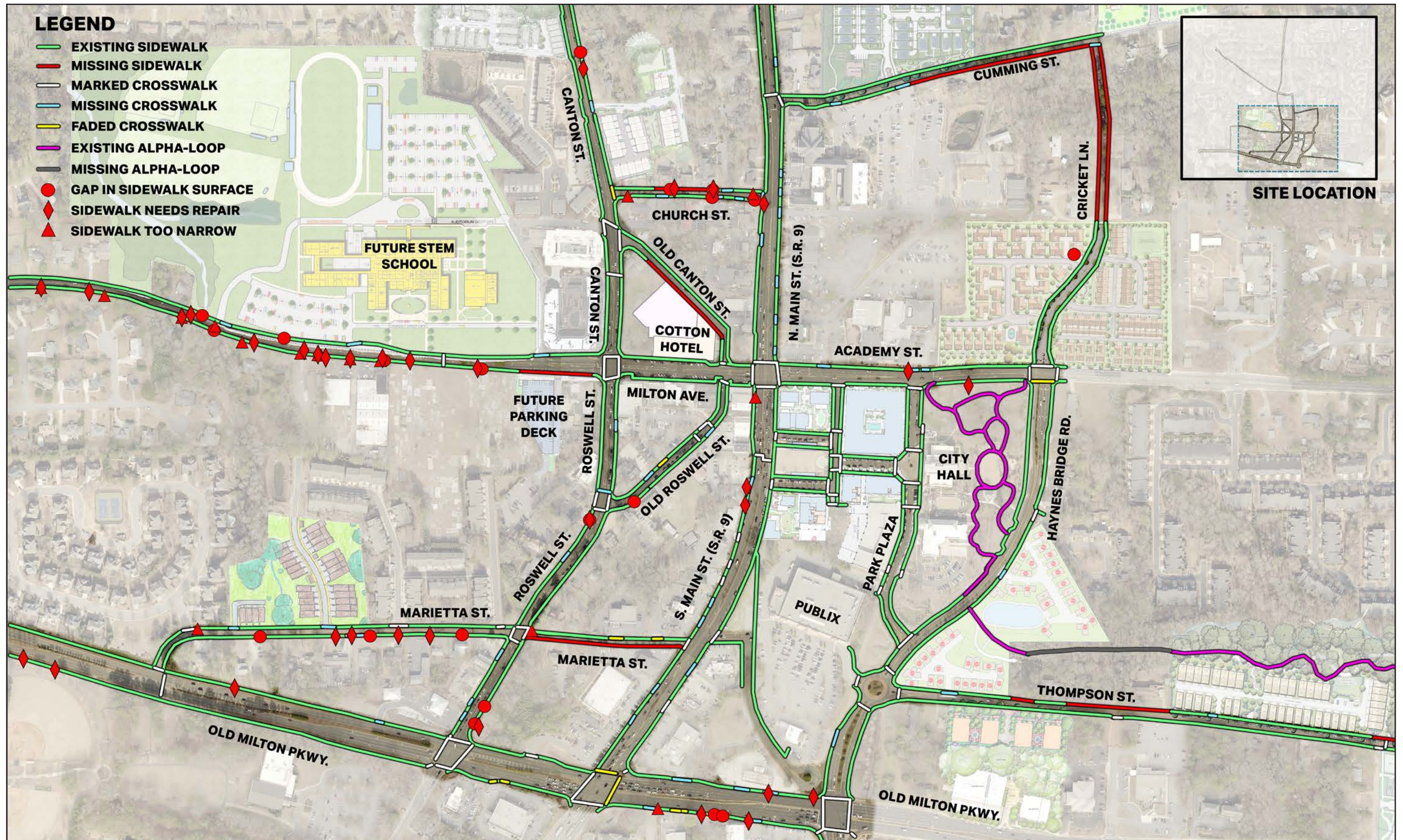
Pedestrian Infrastructure Inventory..... 59
Observations & Recommendations..... 60
Specific Recommendations..... 61-63

Downtown Central

03

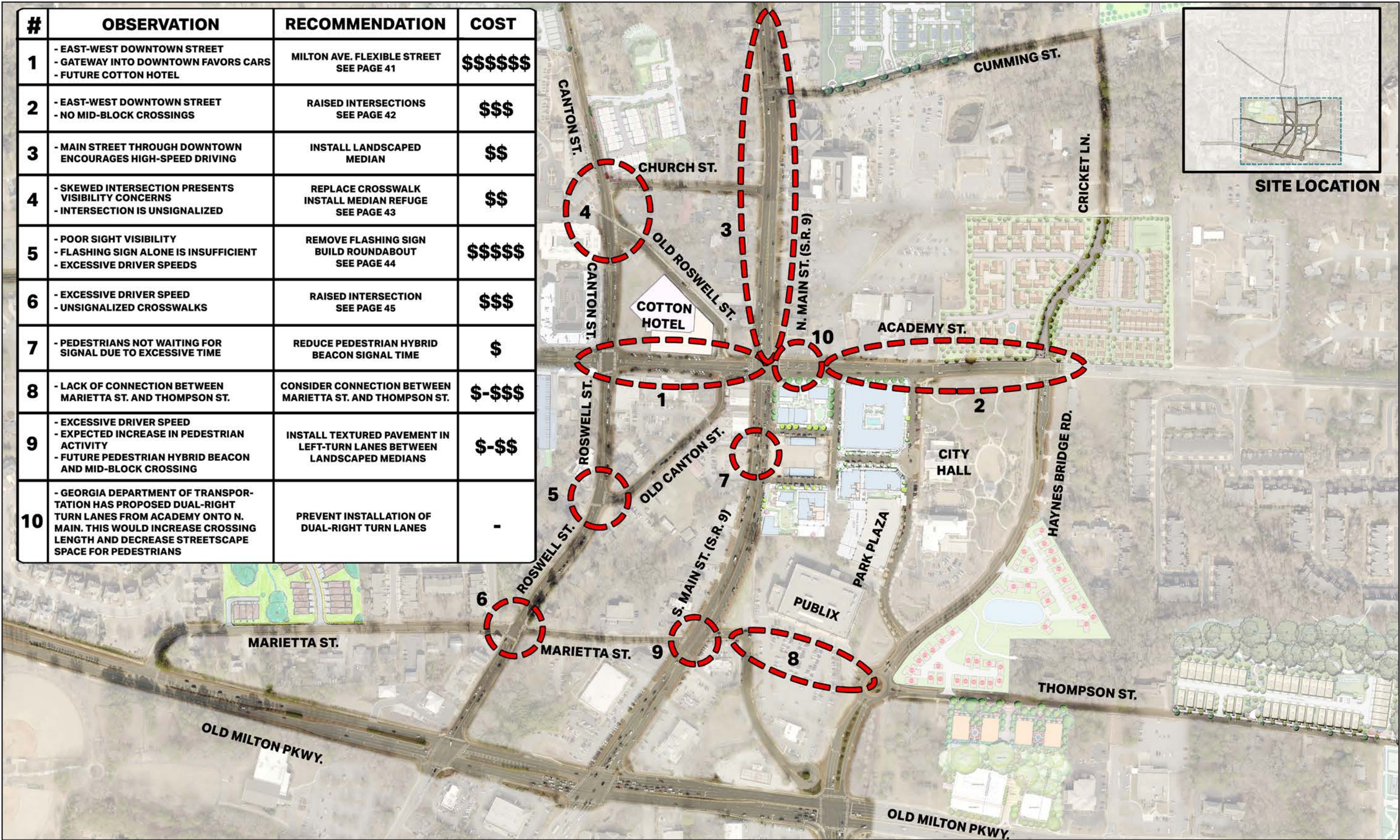


Downtown Central Study Area

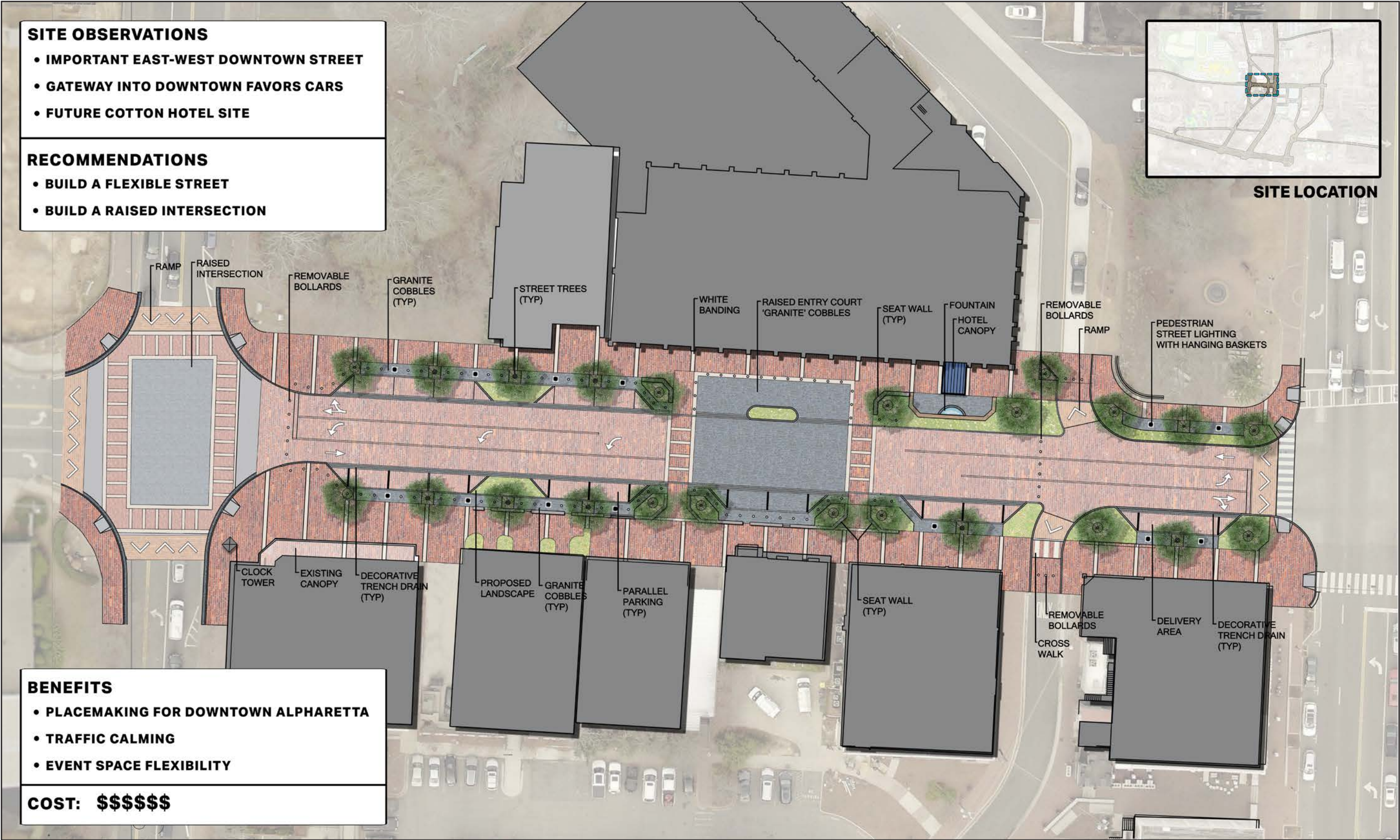


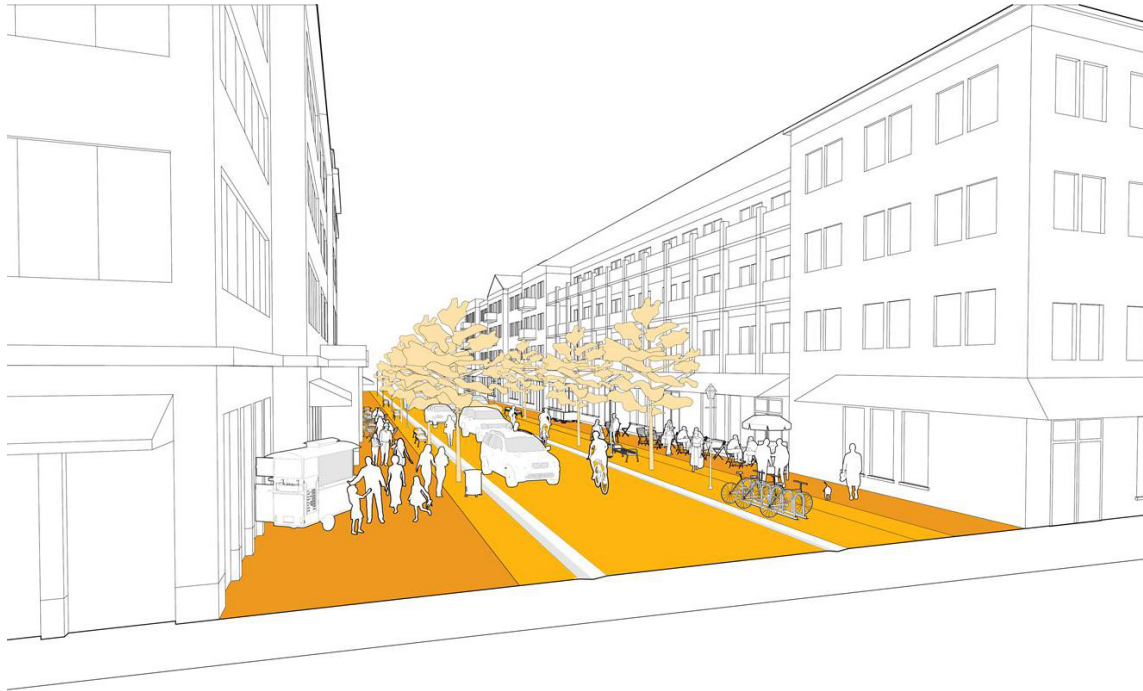


#	OBSERVATION	RECOMMENDATION	COST
1	- EAST-WEST DOWNTOWN STREET - GATEWAY INTO DOWNTOWN FAVORS CARS - FUTURE COTTON HOTEL	MILTON AVE. FLEXIBLE STREET SEE PAGE 41	\$\$\$\$\$\$
2	- EAST-WEST DOWNTOWN STREET - NO MID-BLOCK CROSSINGS	RAISED INTERSECTIONS SEE PAGE 42	\$\$\$
3	- MAIN STREET THROUGH DOWNTOWN ENCOURAGES HIGH-SPEED DRIVING	INSTALL LANDSCAPED MEDIAN	\$
4	- SKEWED INTERSECTION PRESENTS VISIBILITY CONCERNS - INTERSECTION IS UNSIGNALIZED	REPLACE CROSSWALK INSTALL MEDIAN REFUGE SEE PAGE 43	\$
5	- POOR SIGHT VISIBILITY - FLASHING SIGN ALONE IS INSUFFICIENT - EXCESSIVE DRIVER SPEEDS	REMOVE FLASHING SIGN BUILD ROUNDABOUT SEE PAGE 44	\$\$\$\$\$
6	- EXCESSIVE DRIVER SPEED - UNSIGNALIZED CROSSWALKS	RAISED INTERSECTION SEE PAGE 45	\$\$\$
7	- PEDESTRIANS NOT WAITING FOR SIGNAL DUE TO EXCESSIVE TIME	REDUCE PEDESTRIAN HYBRID BEACON SIGNAL TIME	\$
8	- LACK OF CONNECTION BETWEEN MARIETTA ST. AND THOMPSON ST.	CONSIDER CONNECTION BETWEEN MARIETTA ST. AND THOMPSON ST.	\$-\$\$\$
9	- EXCESSIVE DRIVER SPEED - EXPECTED INCREASE IN PEDESTRIAN ACTIVITY - FUTURE PEDESTRIAN HYBRID BEACON AND MID-BLOCK CROSSING	INSTALL TEXTURED PAVEMENT IN LEFT-TURN LANES BETWEEN LANDSCAPED MEDIANS	\$-\$\$
10	- GEORGIA DEPARTMENT OF TRANSPOR- TATION HAS PROPOSED DUAL-RIGHT TURN LANES FROM ACADEMY ONTO N. MAIN. THIS WOULD INCREASE CROSSING LENGTH AND DECREASE STREETSCAPE SPACE FOR PEDESTRIANS	PREVENT INSTALLATION OF DUAL-RIGHT TURN LANES	-



DOWNTOWN CENTRAL
OBSERVATIONS & RECOMMENDATIONS
CITY OF ALPHARETTA, GEORGIA

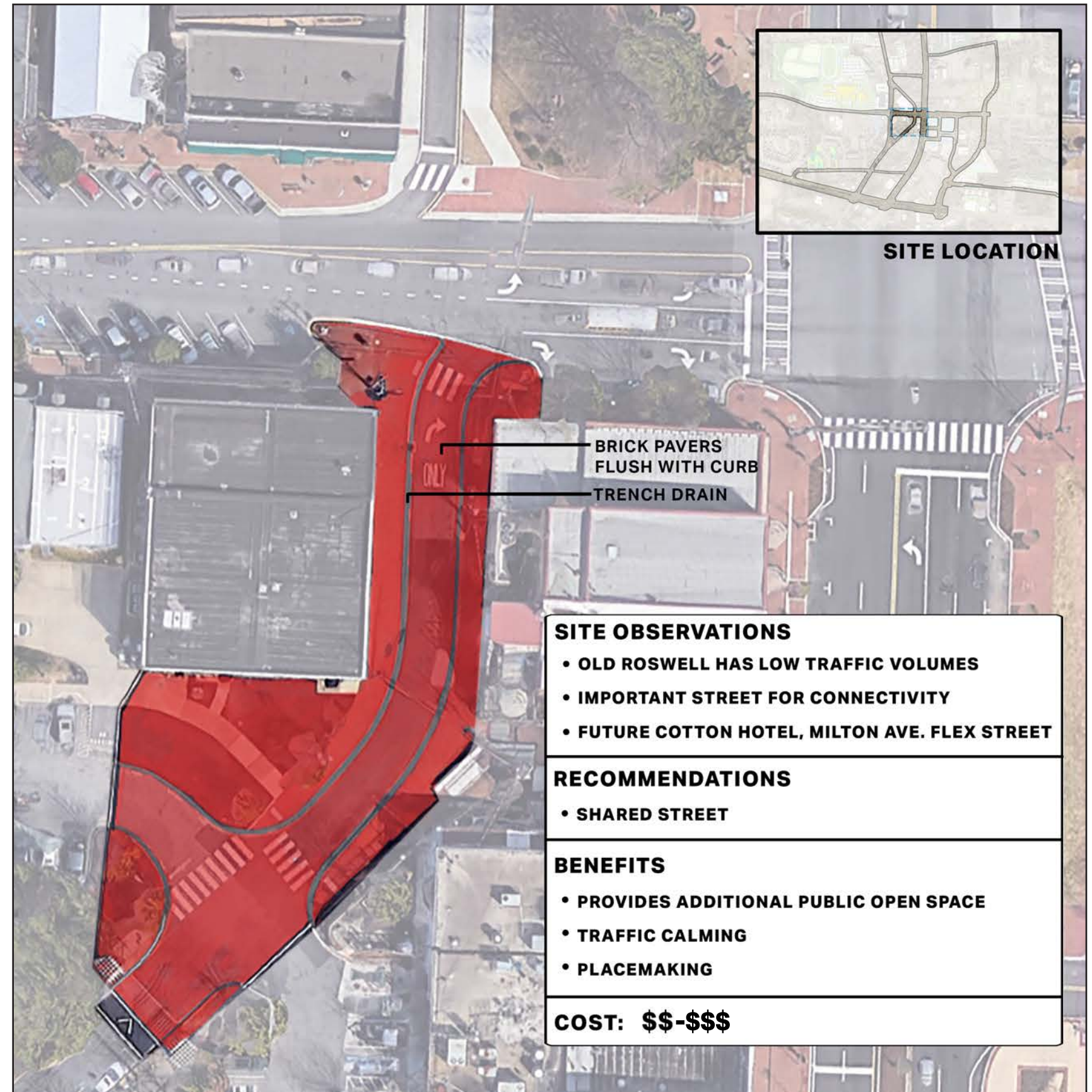




Shared Street

Shared streets are streets where pedestrians, cyclists, transit, and vehicles function without conflicts and are primarily characterized by no expressly designated areas for the movement of any one mode of transportation. On shared streets, all modes of traffic are generally expected to travel at the pace of a pedestrian, the slowest user.

- Shared streets are suitable in areas where pedestrian activity is high and vehicle volumes are low or discouraged.
- Shared streets are not appropriate on high vehicle volume streets (greater than 3,500 vehicles per day).
- Shared streets should only be considered on "off system" roads/streets.
- Shared streets typically have a speed limit of 15 mph or less. By state law, a posted speed limit of 15mph is only permissible on an off system roadway.



OLD ROSWELL SHARED ST. CONCEPT CITY OF ALPHARETTA, GEORGIA



SITE OBSERVATIONS

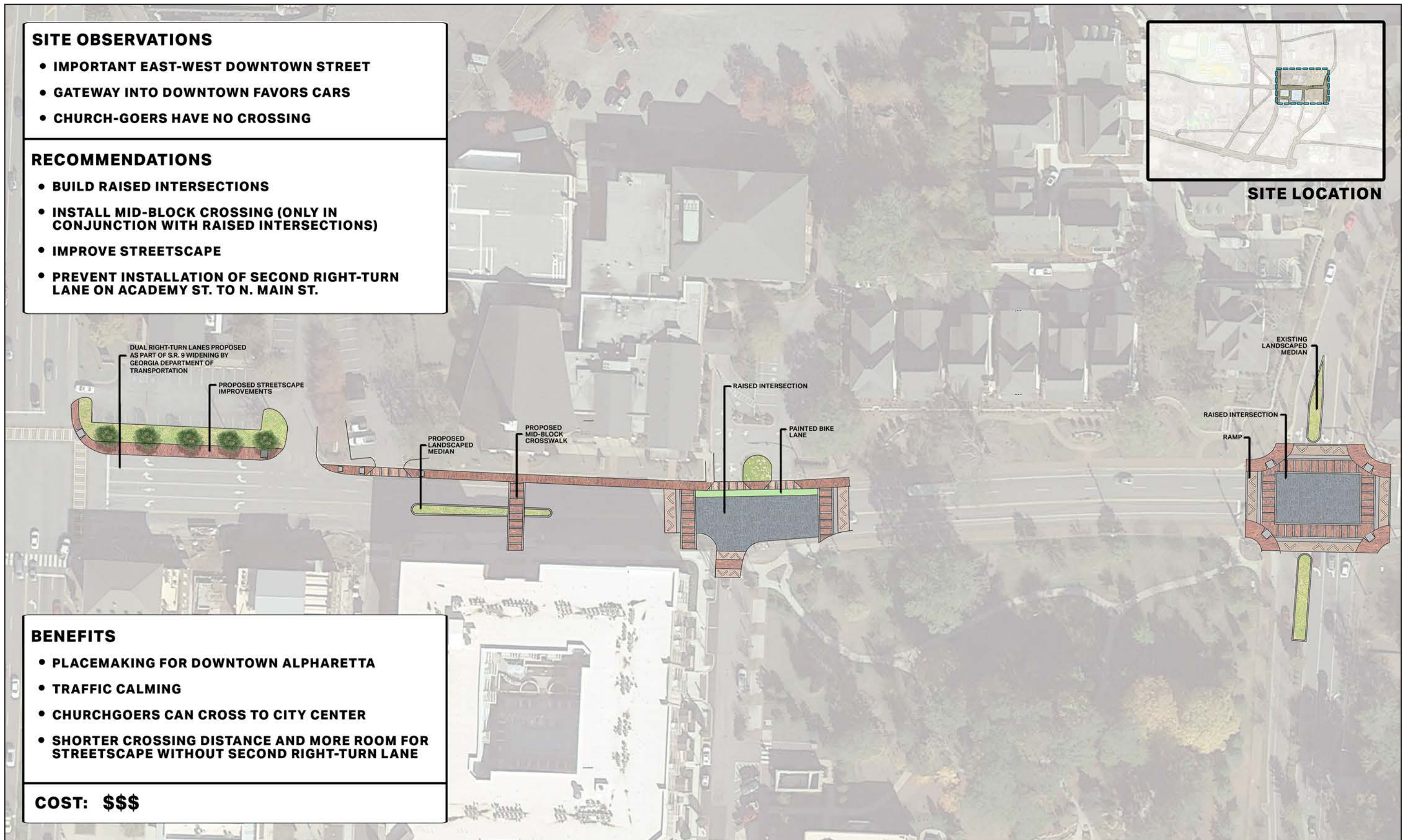
- IMPORTANT EAST-WEST DOWNTOWN STREET
- GATEWAY INTO DOWNTOWN FAVORS CARS
- CHURCH-GOERS HAVE NO CROSSING

RECOMMENDATIONS

- BUILD RAISED INTERSECTIONS
- INSTALL MID-BLOCK CROSSING (ONLY IN CONJUNCTION WITH RAISED INTERSECTIONS)
- IMPROVE STREETScape
- PREVENT INSTALLATION OF SECOND RIGHT-TURN LANE ON ACADEMY ST. TO N. MAIN ST.



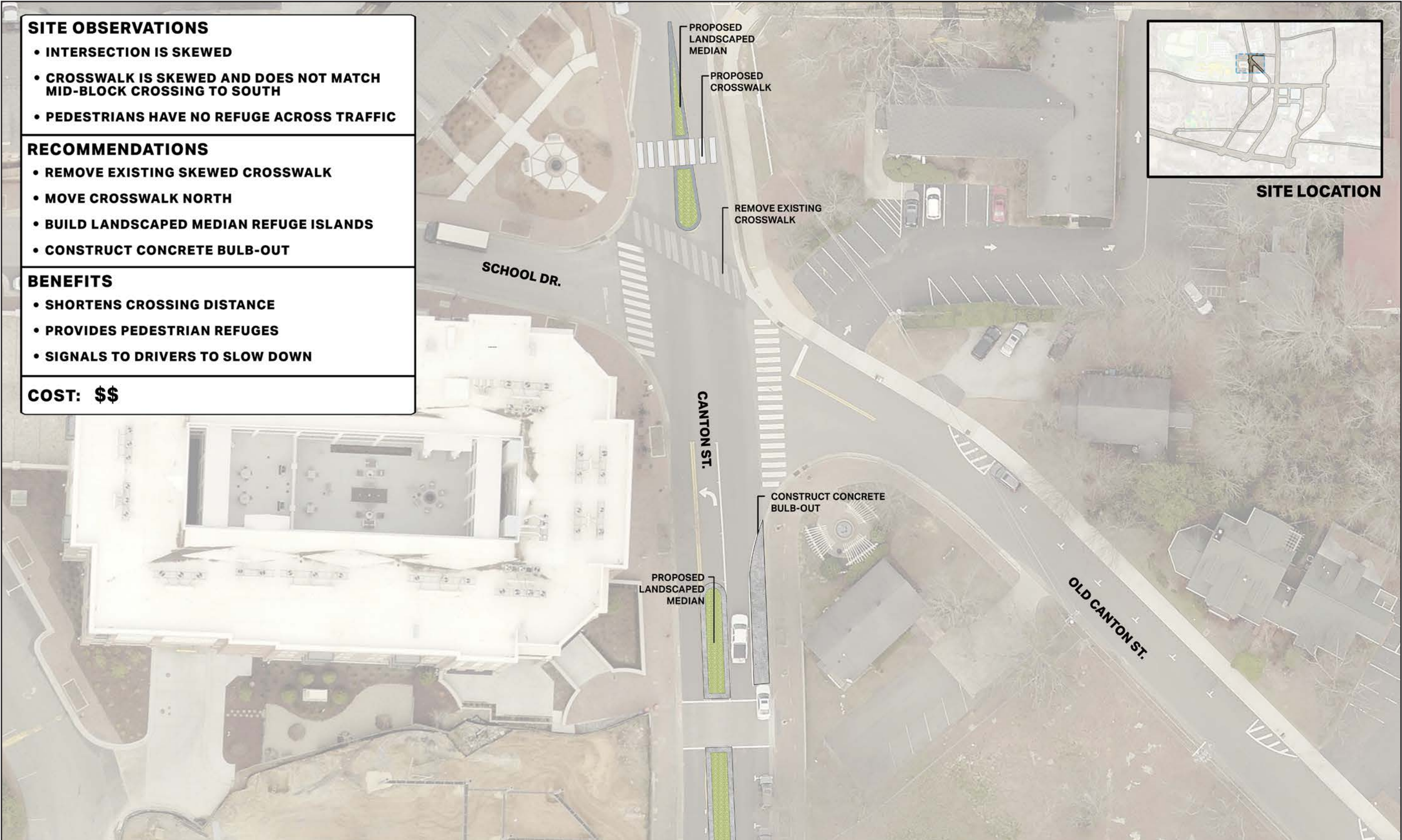
SITE LOCATION

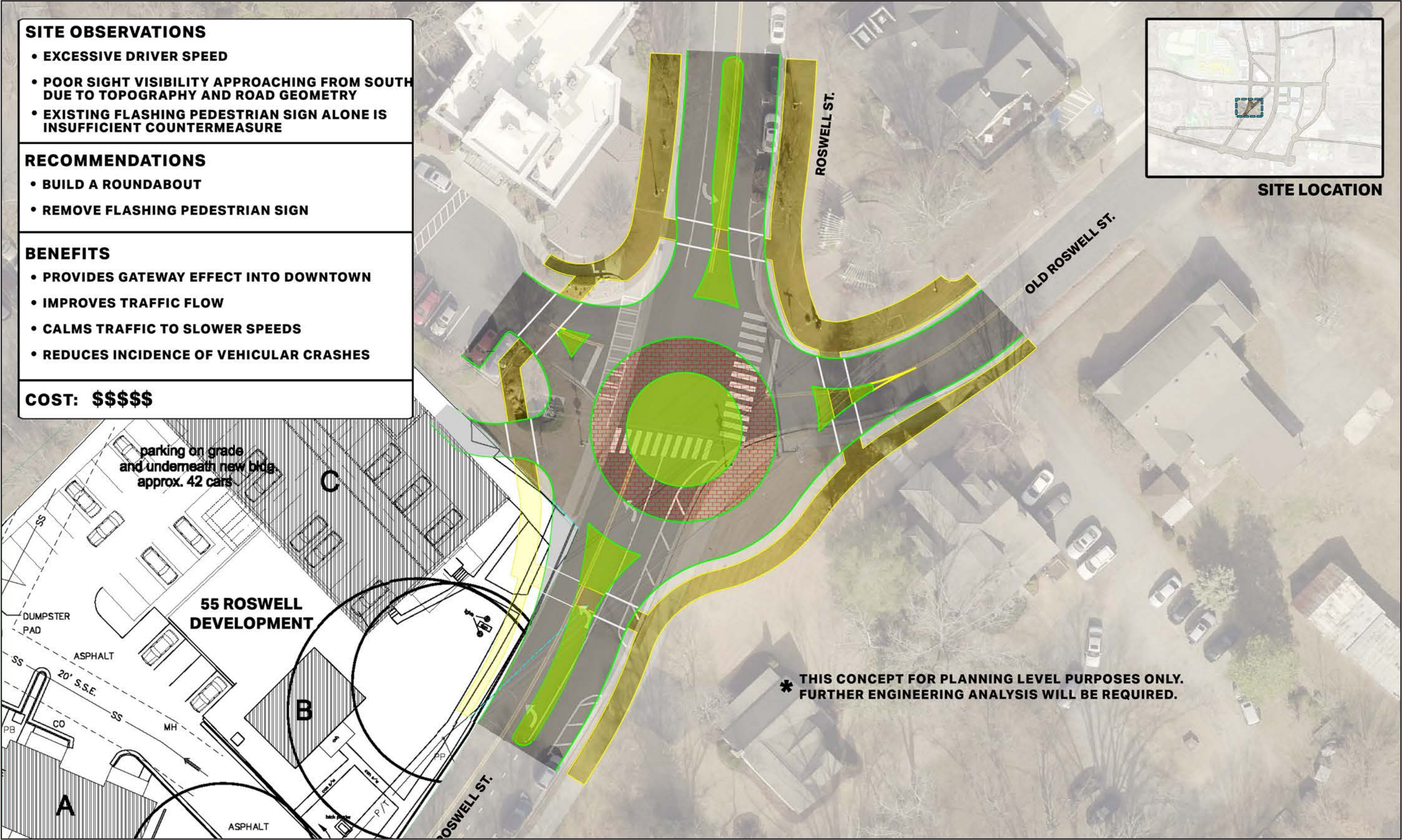


BENEFITS

- PLACEMAKING FOR DOWNTOWN ALPHARETTA
- TRAFFIC CALMING
- CHURCHGOERS CAN CROSS TO CITY CENTER
- SHORTER CROSSING DISTANCE AND MORE ROOM FOR STREETScape WITHOUT SECOND RIGHT-TURN LANE

COST: \$\$\$





**SITE OBSERVATIONS**

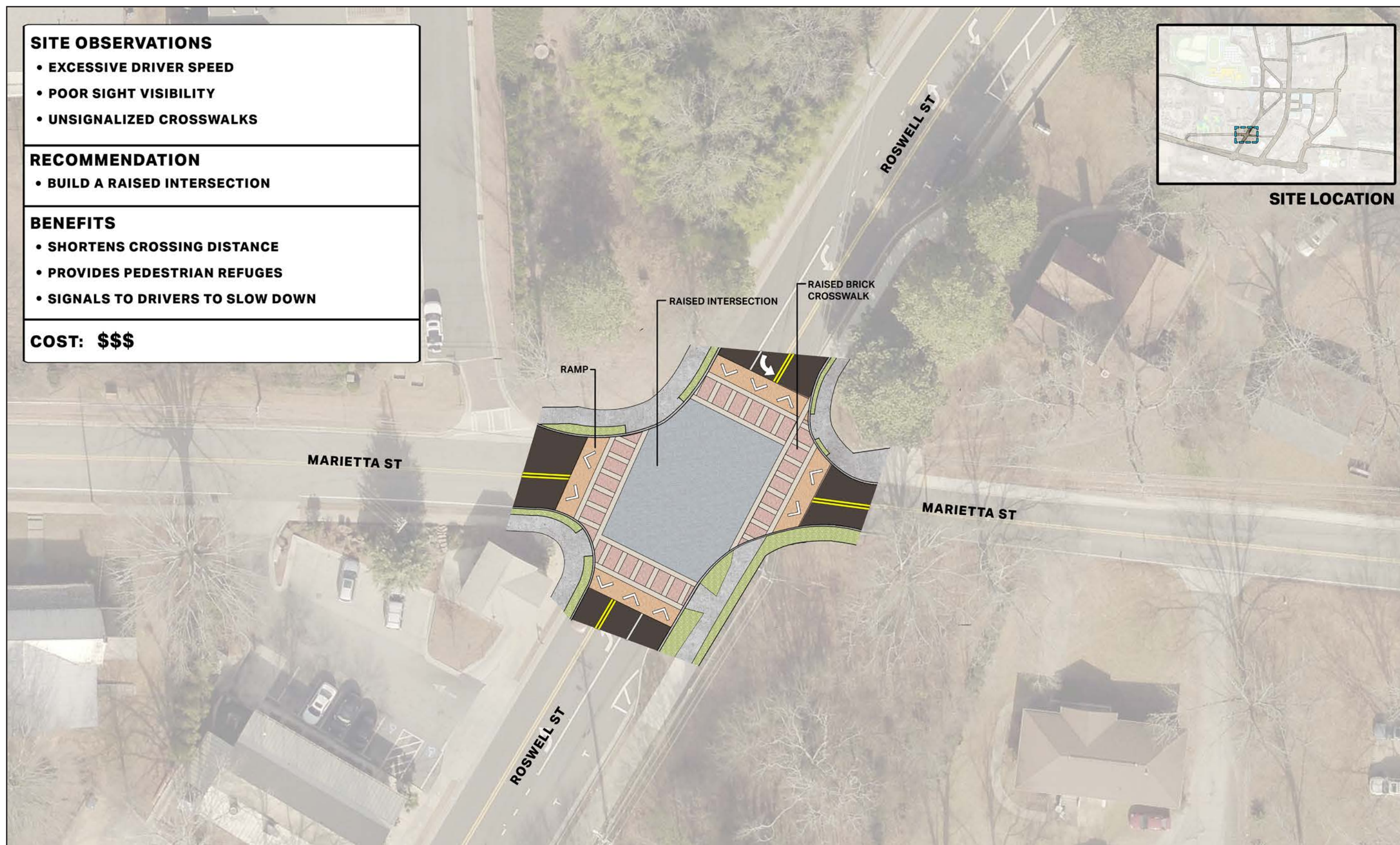
- EXCESSIVE DRIVER SPEED
- POOR SIGHT VISIBILITY
- UNSIGNALIZED CROSSWALKS

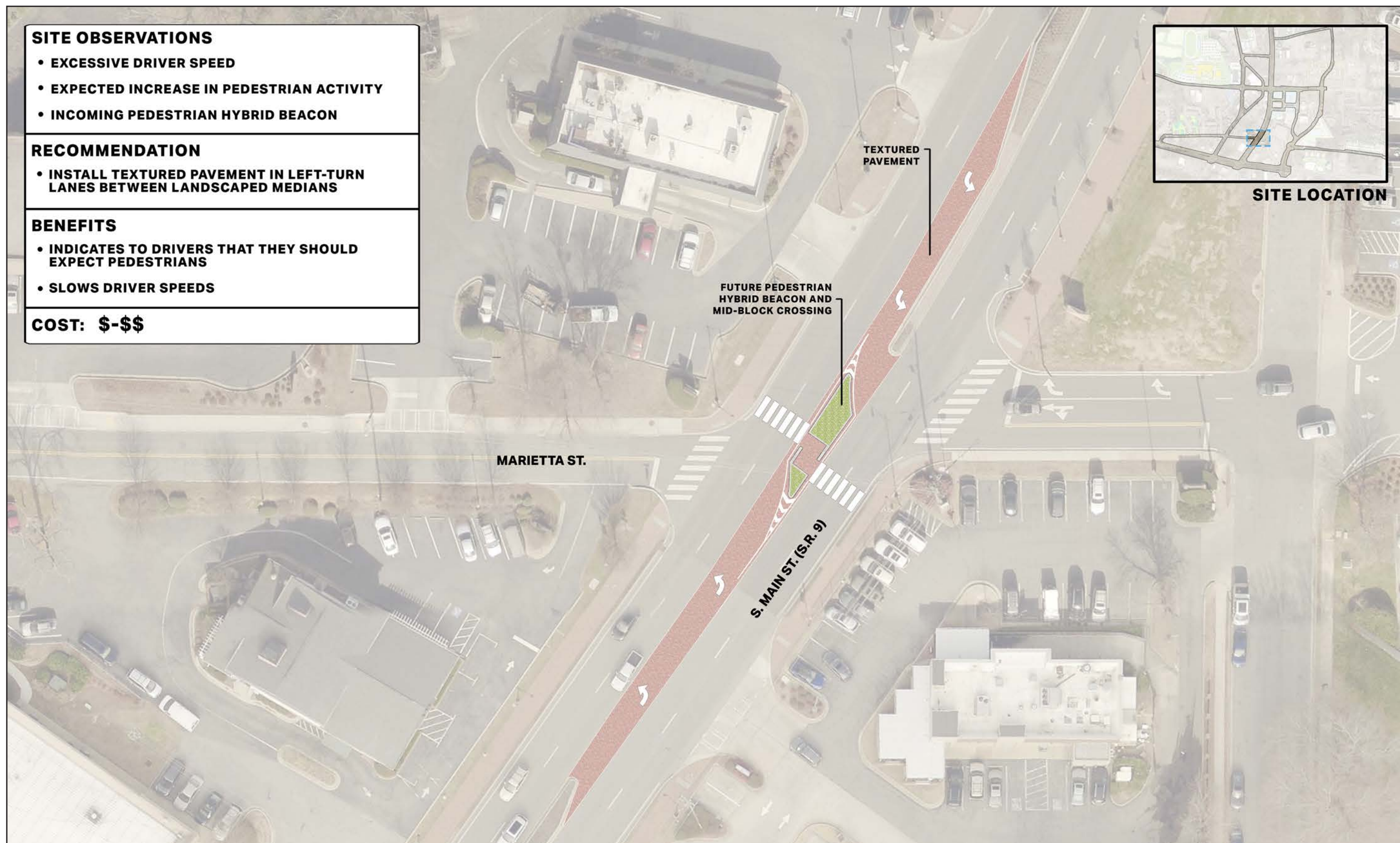
RECOMMENDATION

- BUILD A RAISED INTERSECTION

BENEFITS

- SHORTENS CROSSING DISTANCE
- PROVIDES PEDESTRIAN REFUGES
- SIGNALS TO DRIVERS TO SLOW DOWN

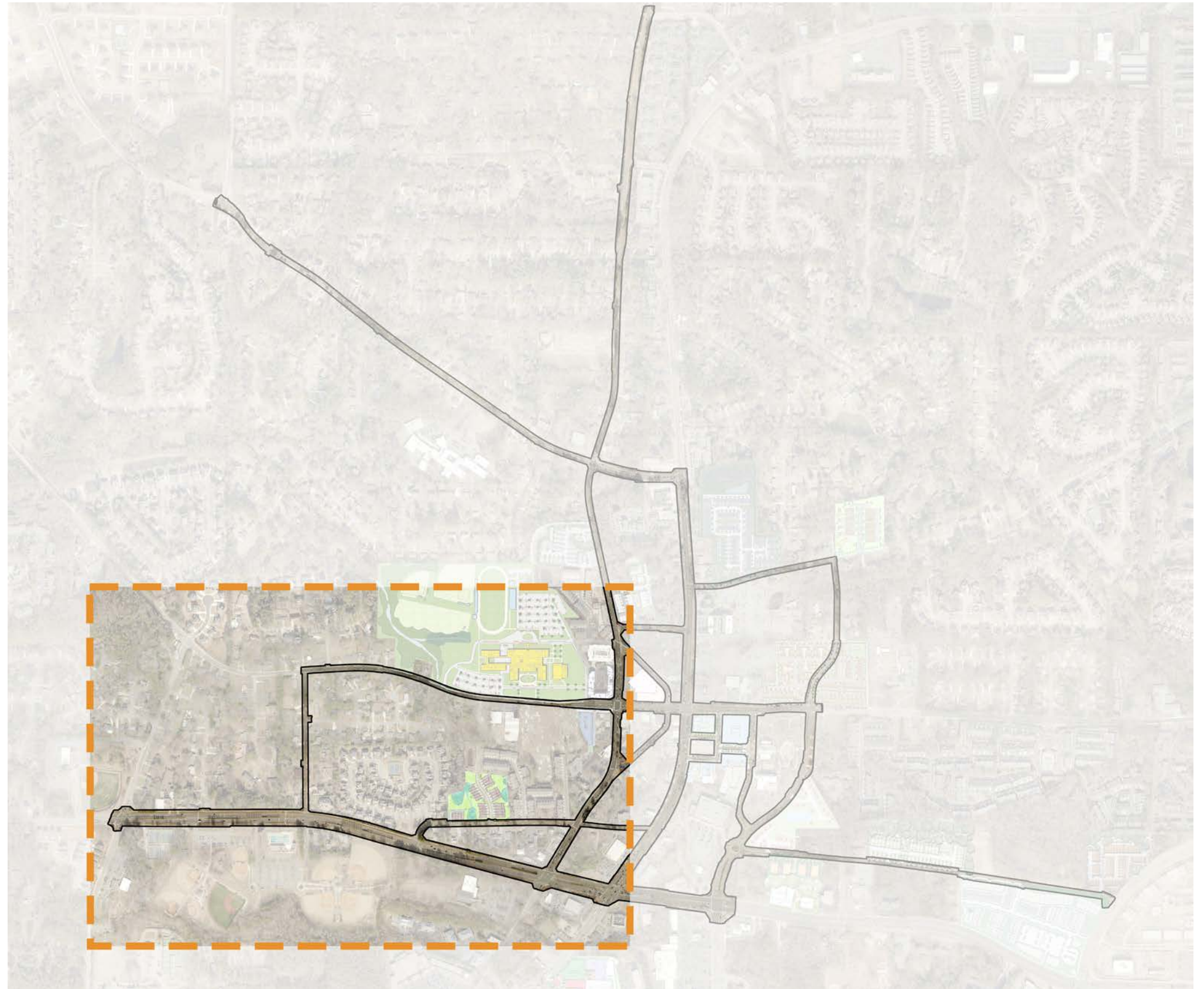
COST: \$\$\$**SITE LOCATION**



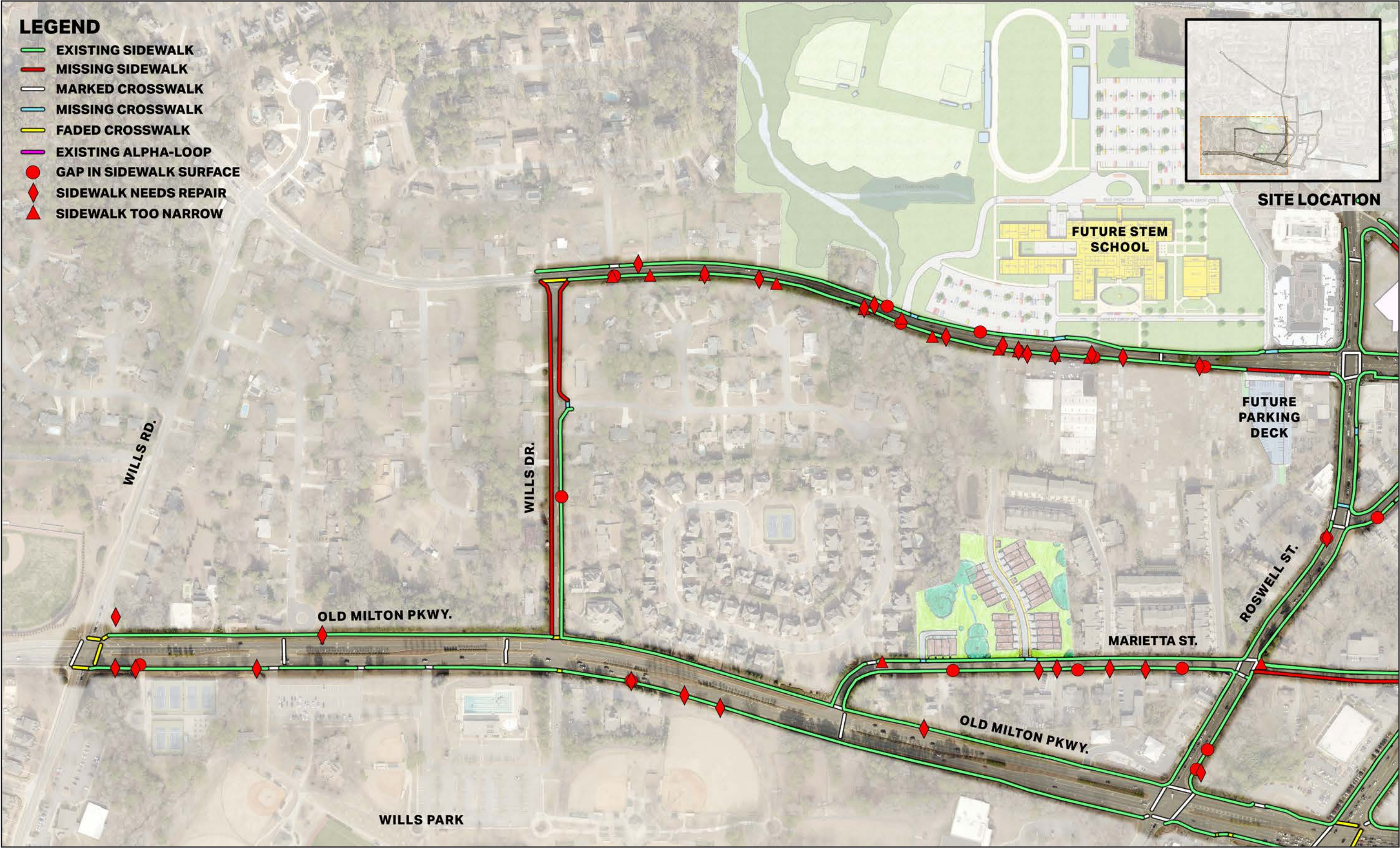


Downtown West

04



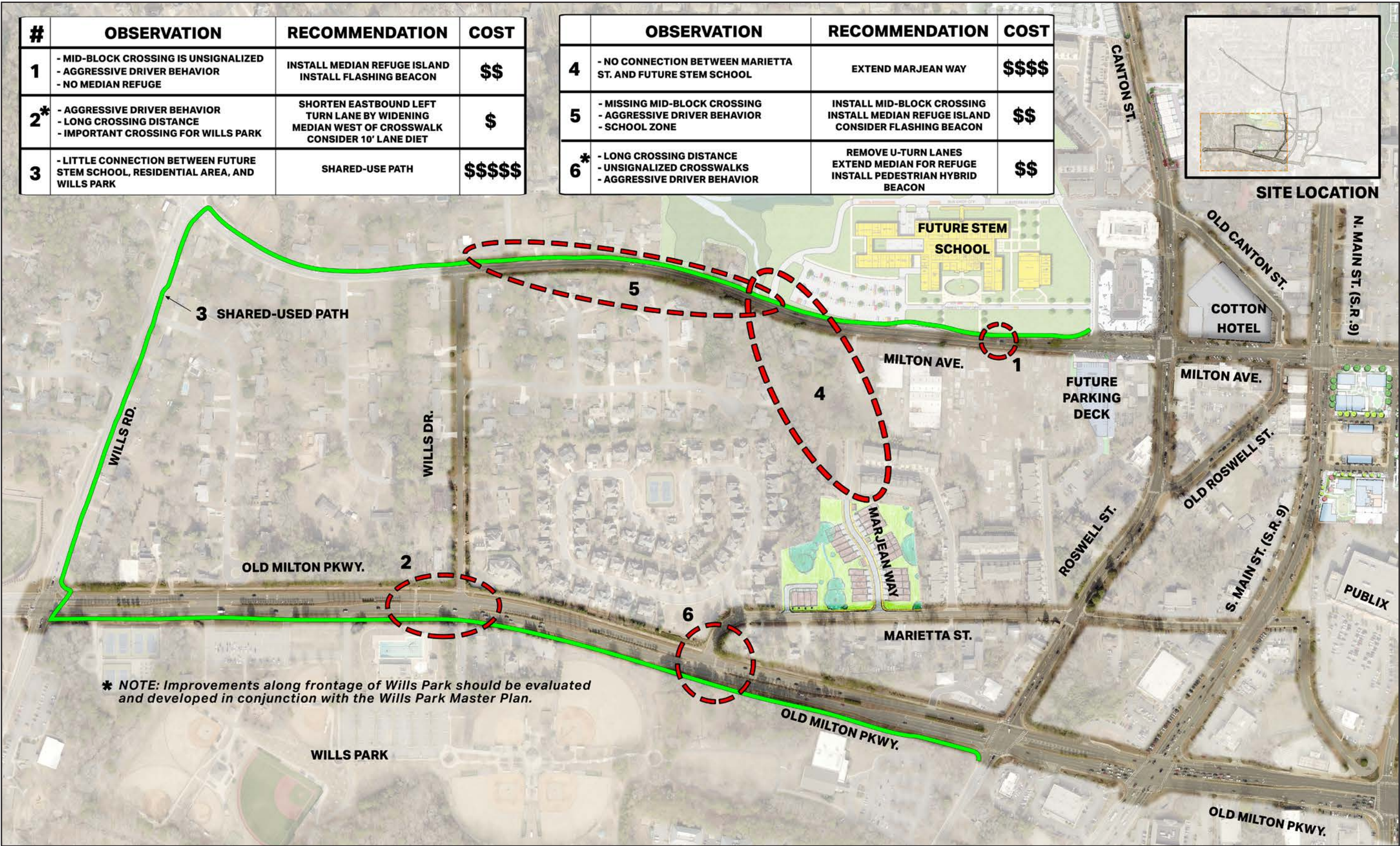
Downtown West Study Area





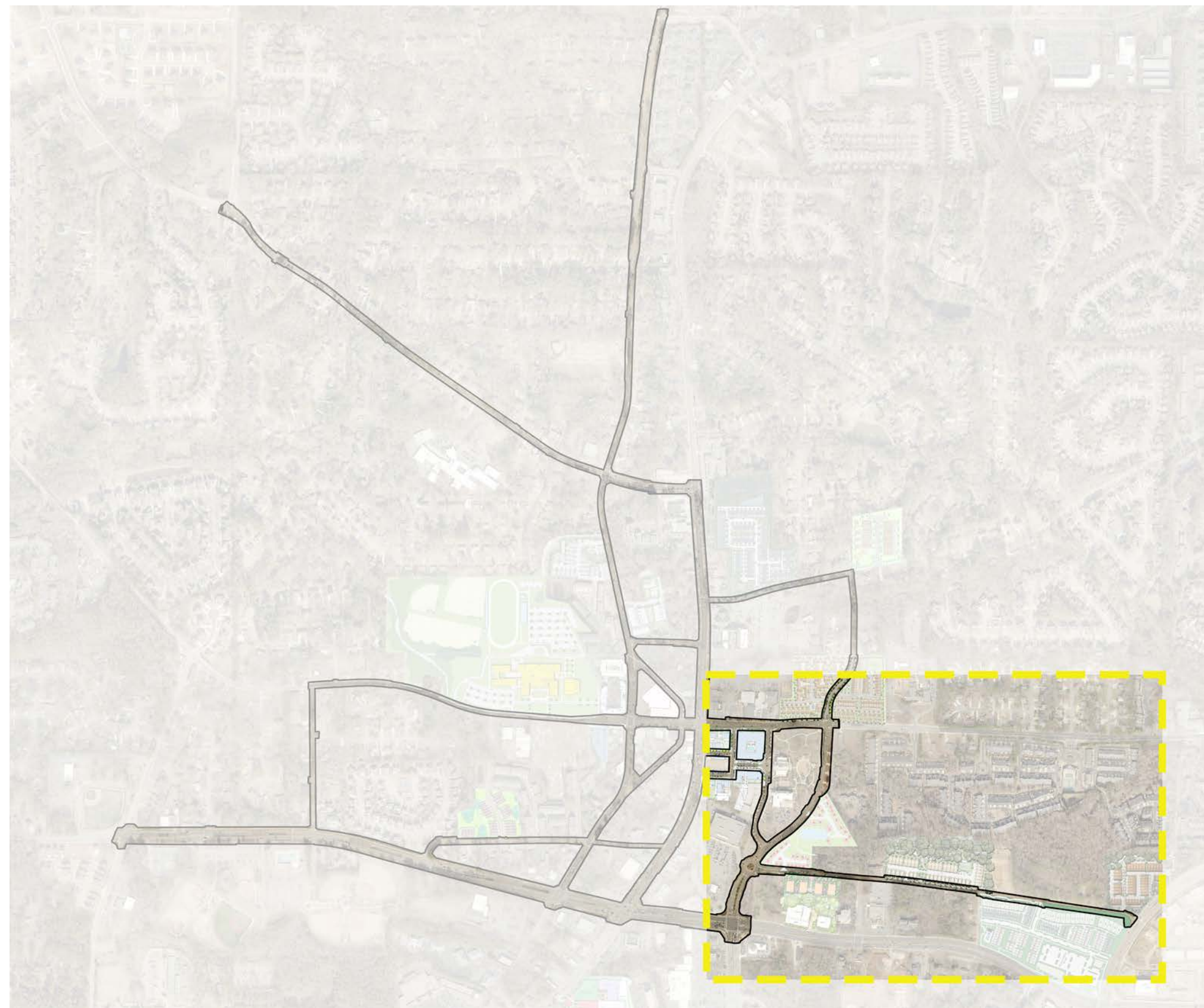
#	OBSERVATION	RECOMMENDATION	COST
1	<div><div>- MID-BLOCK CROSSING IS UNSIGNALIZED</div><div>- AGGRESSIVE DRIVER BEHAVIOR</div><div>- NO MEDIAN REFUGE</div></div>	<div>INSTALL MEDIAN REFUGE ISLAND</div> <div>INSTALL FLASHING BEACON</div>	\$\$
2*	<div><div>- AGGRESSIVE DRIVER BEHAVIOR</div><div>- LONG CROSSING DISTANCE</div><div>- IMPORTANT CROSSING FOR WILLS PARK</div></div>	<div>SHORTEN EASTBOUND LEFT TURN LANE BY WIDENING MEDIAN WEST OF CROSSWALK</div> <div>CONSIDER 10' LANE DIET</div>	\$
3	<div>- LITTLE CONNECTION BETWEEN FUTURE STEM SCHOOL, RESIDENTIAL AREA, AND WILLS PARK</div>	SHARED-USE PATH	\$\$\$\$\$

	OBSERVATION	RECOMMENDATION	COST
4	<div>- NO CONNECTION BETWEEN MARIETTA ST. AND FUTURE STEM SCHOOL</div>	EXTEND MARJEAN WAY	\$\$\$\$
5	<div><div>- MISSING MID-BLOCK CROSSING</div><div>- AGGRESSIVE DRIVER BEHAVIOR</div><div>- SCHOOL ZONE</div></div>	<div>INSTALL MID-BLOCK CROSSING</div> <div>INSTALL MEDIAN REFUGE ISLAND</div> <div>CONSIDER FLASHING BEACON</div>	\$\$
6*	<div><div>- LONG CROSSING DISTANCE</div><div>- UNSIGNALIZED CROSSWALKS</div><div>- AGGRESSIVE DRIVER BEHAVIOR</div></div>	<div>REMOVE U-TURN LANES</div> <div>EXTEND MEDIAN FOR REFUGE</div> <div>INSTALL PEDESTRIAN HYBRID BEACON</div>	\$\$

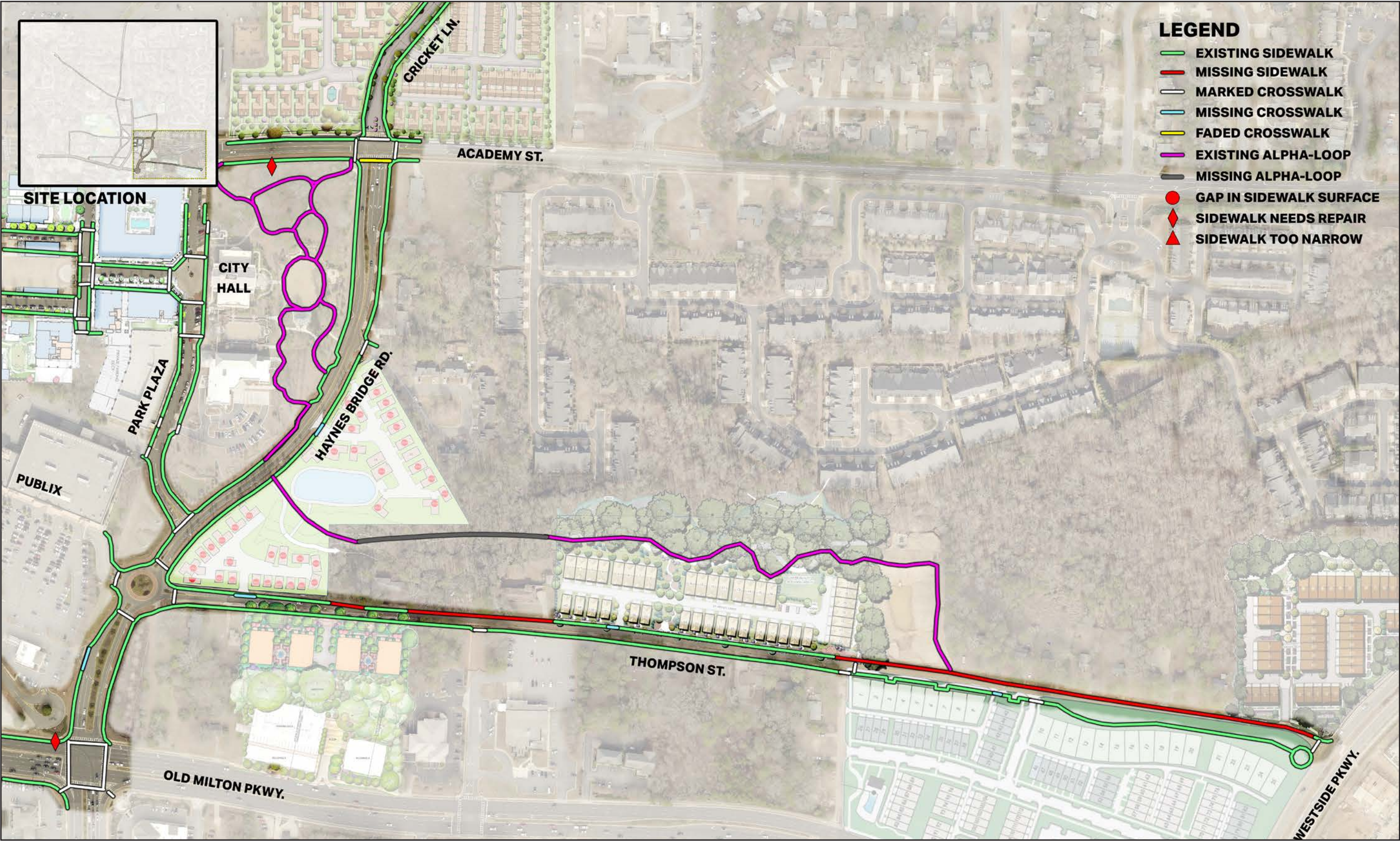


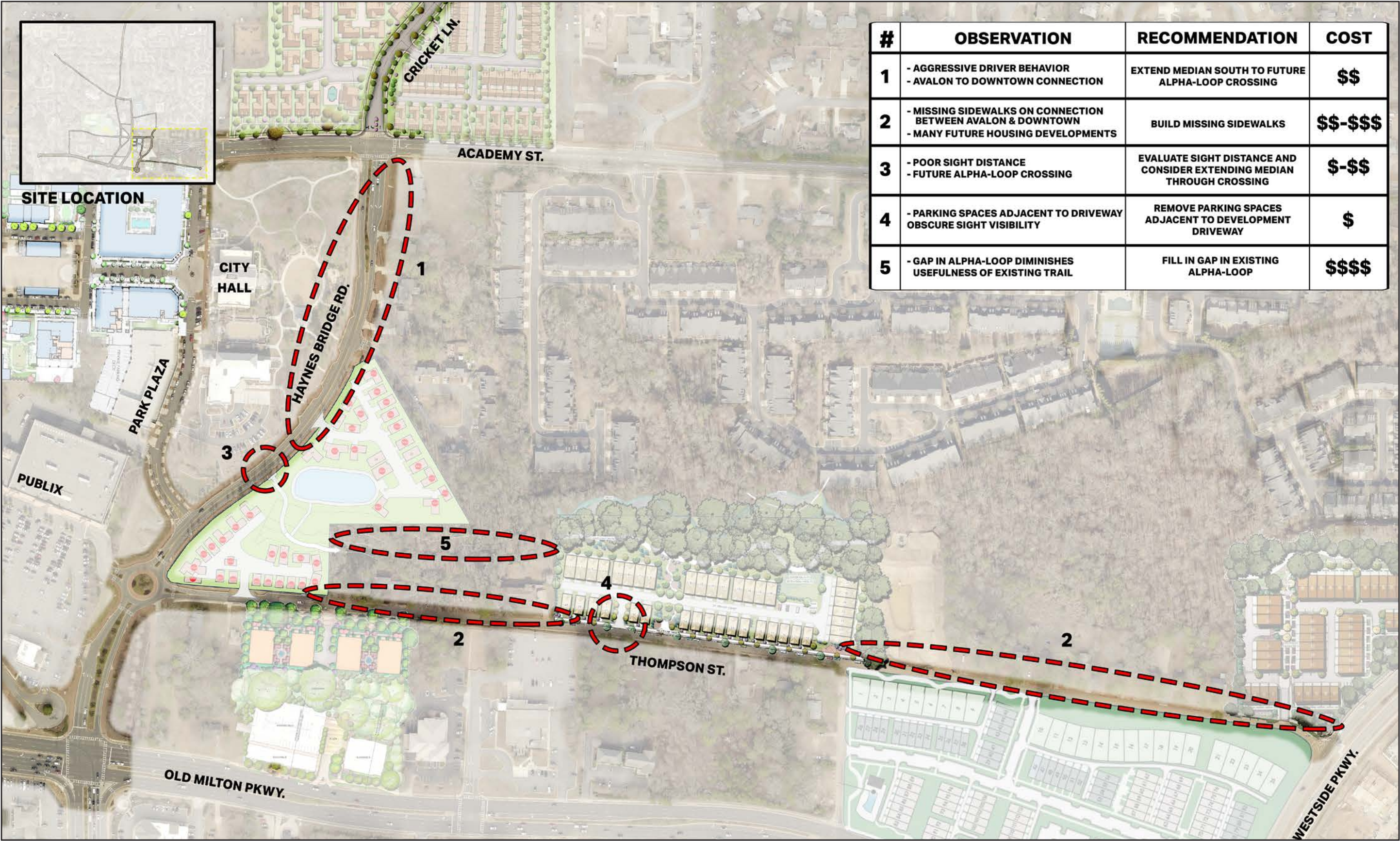
Downtown East

05



Downtown East Study Area

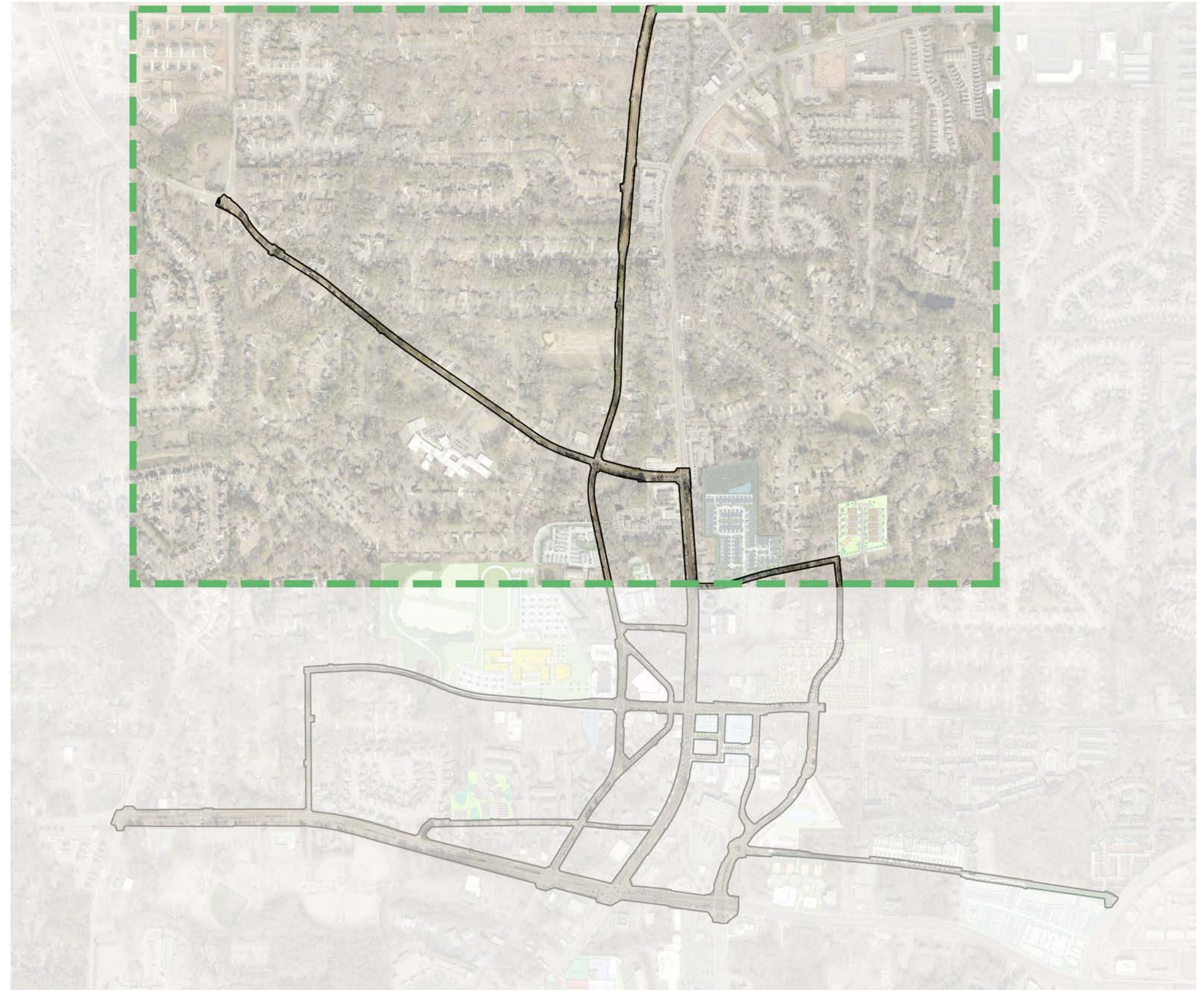




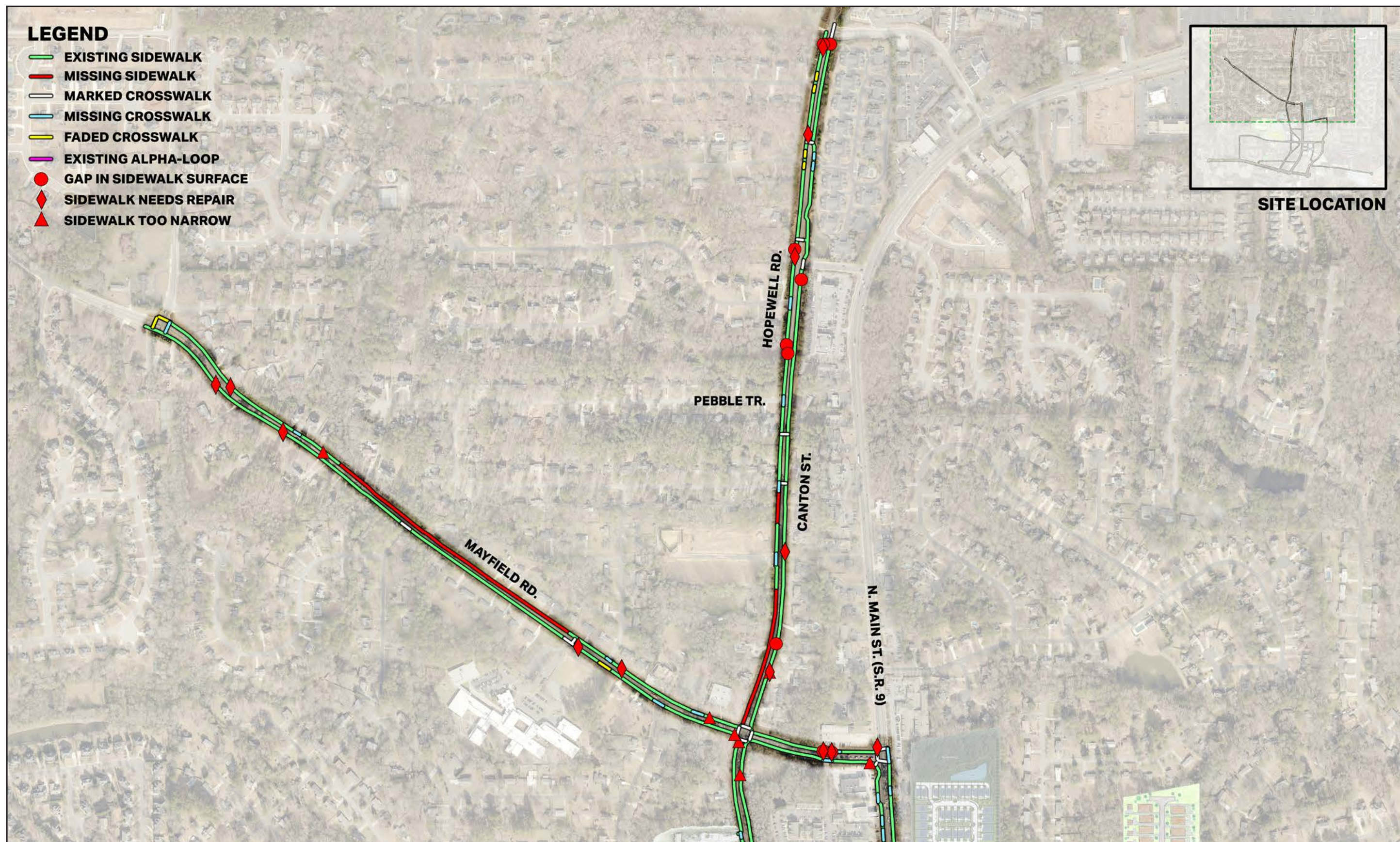
#	OBSERVATION	RECOMMENDATION	COST
1	- AGGRESSIVE DRIVER BEHAVIOR - AVALON TO DOWNTOWN CONNECTION	EXTEND MEDIAN SOUTH TO FUTURE ALPHA-LOOP CROSSING	\$\$
2	- MISSING SIDEWALKS ON CONNECTION BETWEEN AVALON & DOWNTOWN - MANY FUTURE HOUSING DEVELOPMENTS	BUILD MISSING SIDEWALKS	\$\$-\$\$\$
3	- POOR SIGHT DISTANCE - FUTURE ALPHA-LOOP CROSSING	EVALUATE SIGHT DISTANCE AND CONSIDER EXTENDING MEDIAN THROUGH CROSSING	\$-\$\$
4	- PARKING SPACES ADJACENT TO DRIVEWAY OBSCURE SIGHT VISIBILITY	REMOVE PARKING SPACES ADJACENT TO DEVELOPMENT DRIVEWAY	\$
5	- GAP IN ALPHA-LOOP DIMINISHES USEFULNESS OF EXISTING TRAIL	FILL IN GAP IN EXISTING ALPHA-LOOP	\$\$\$\$

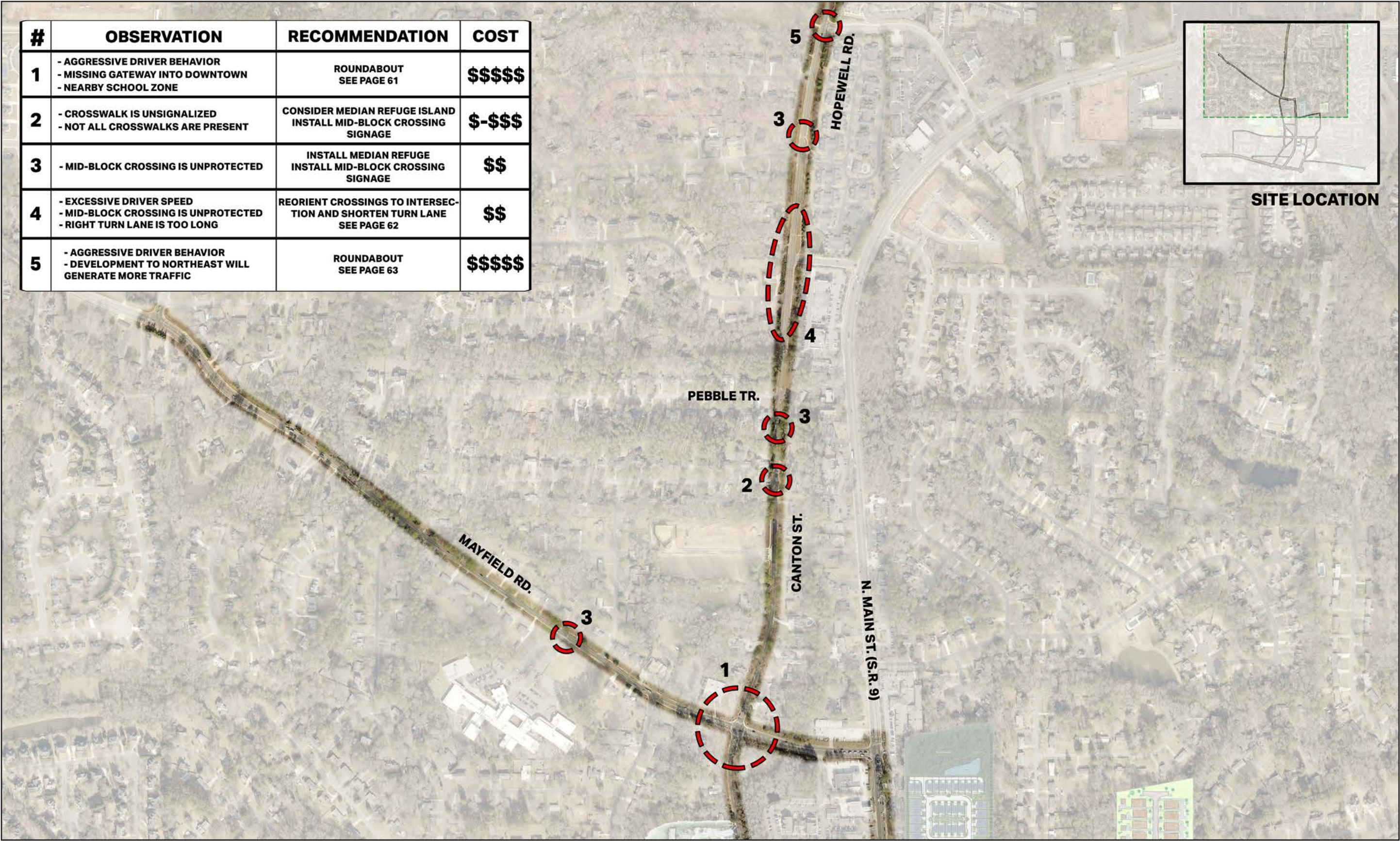
Downtown North

06

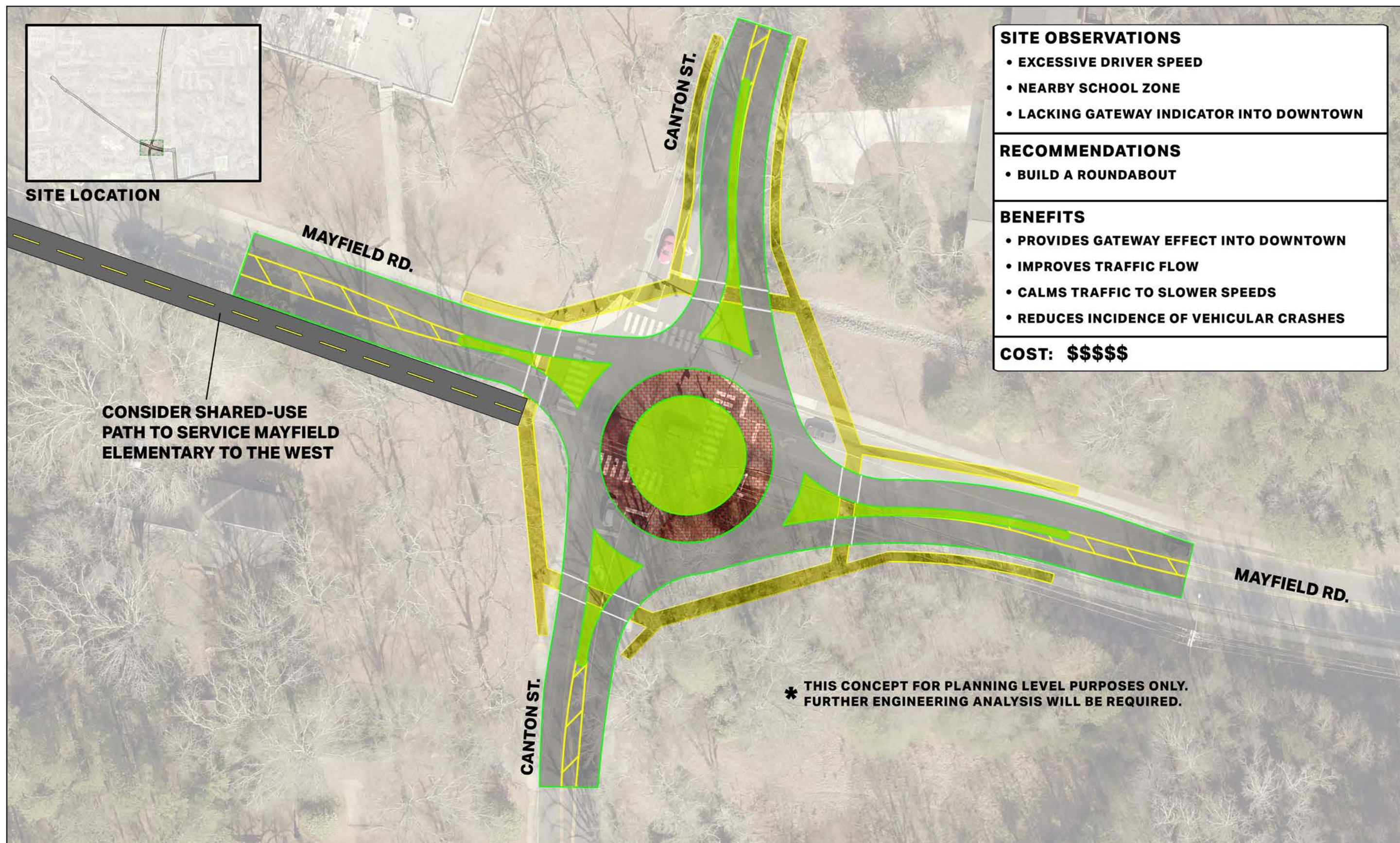


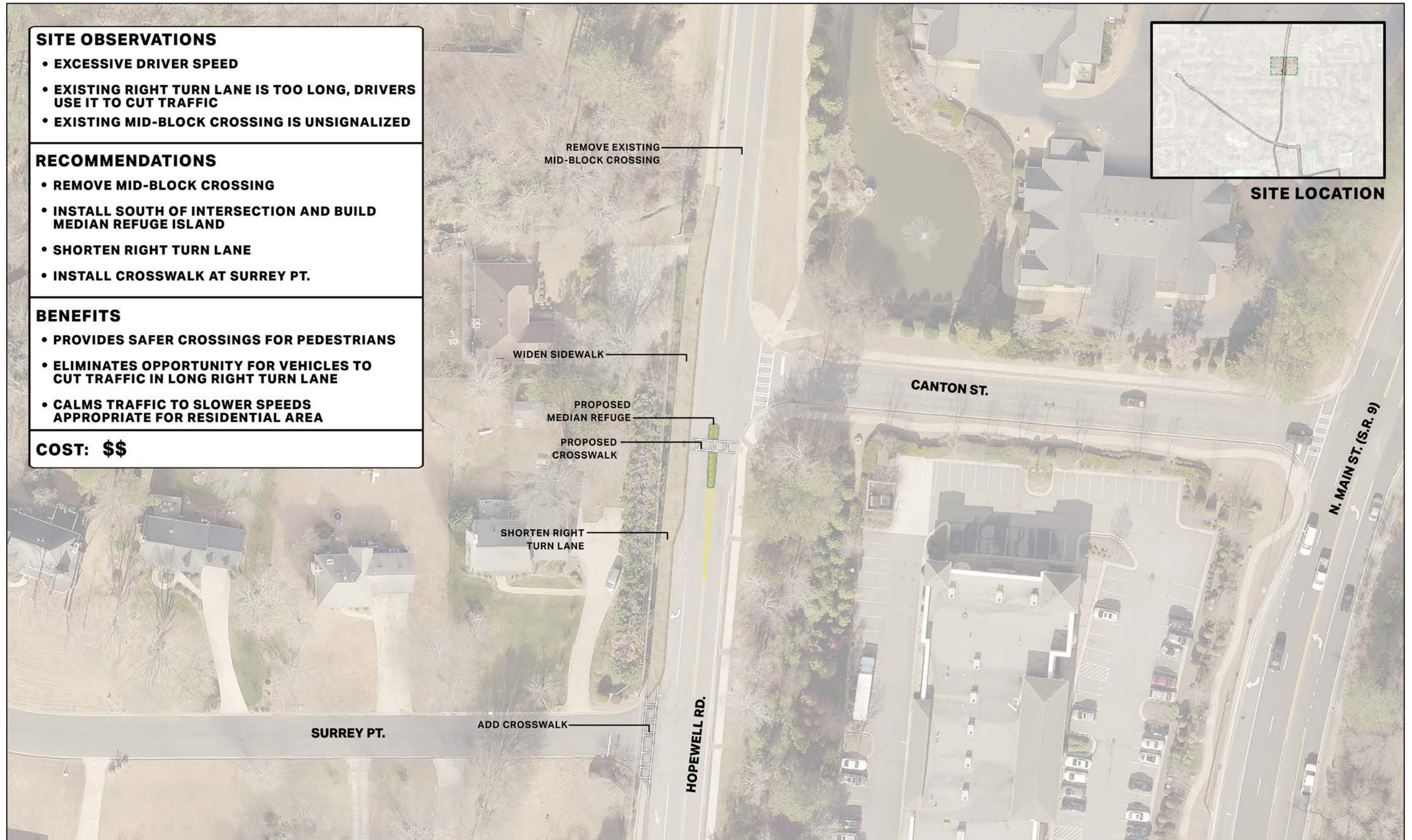
Downtown North Study Area





#	OBSERVATION	RECOMMENDATION	COST
1	<ul style="list-style-type: none">- AGGRESSIVE DRIVER BEHAVIOR- MISSING GATEWAY INTO DOWNTOWN- NEARBY SCHOOL ZONE	ROUNDBABOUT SEE PAGE 61	\$\$\$\$\$
2	<ul style="list-style-type: none">- CROSSWALK IS UNSIGNALIZED- NOT ALL CROSSWALKS ARE PRESENT	CONSIDER MEDIAN REFUGE ISLAND INSTALL MID-BLOCK CROSSING SIGNAGE	\$-\$\$\$
3	<ul style="list-style-type: none">- MID-BLOCK CROSSING IS UNPROTECTED	INSTALL MEDIAN REFUGE INSTALL MID-BLOCK CROSSING SIGNAGE	\$\$
4	<ul style="list-style-type: none">- EXCESSIVE DRIVER SPEED- MID-BLOCK CROSSING IS UNPROTECTED- RIGHT TURN LANE IS TOO LONG	REORIENT CROSSINGS TO INTERSEC- TION AND SHORTEN TURN LANE SEE PAGE 62	\$\$
5	<ul style="list-style-type: none">- AGGRESSIVE DRIVER BEHAVIOR- DEVELOPMENT TO NORTHEAST WILL GENERATE MORE TRAFFIC	ROUNDBABOUT SEE PAGE 63	\$\$\$\$\$



**SITE OBSERVATIONS**

- EXCESSIVE DRIVER SPEED
- EXISTING RIGHT TURN LANE IS TOO LONG, DRIVERS USE IT TO CUT TRAFFIC
- EXISTING MID-BLOCK CROSSING IS UNSIGNALIZED

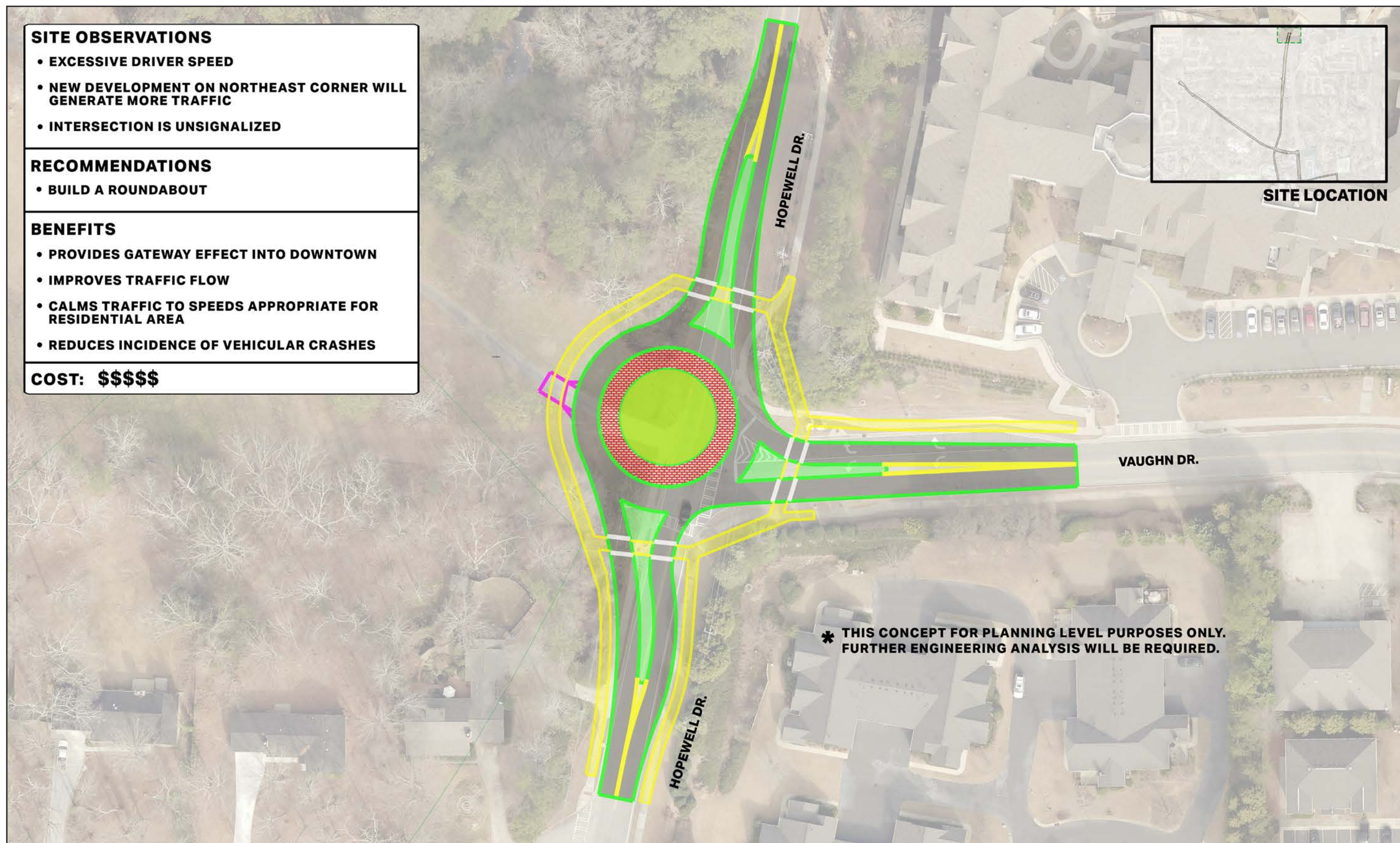
RECOMMENDATIONS

- REMOVE MID-BLOCK CROSSING
- INSTALL SOUTH OF INTERSECTION AND BUILD MEDIAN REFUGE ISLAND
- SHORTEN RIGHT TURN LANE
- INSTALL CROSSWALK AT SURREY PT.

BENEFITS

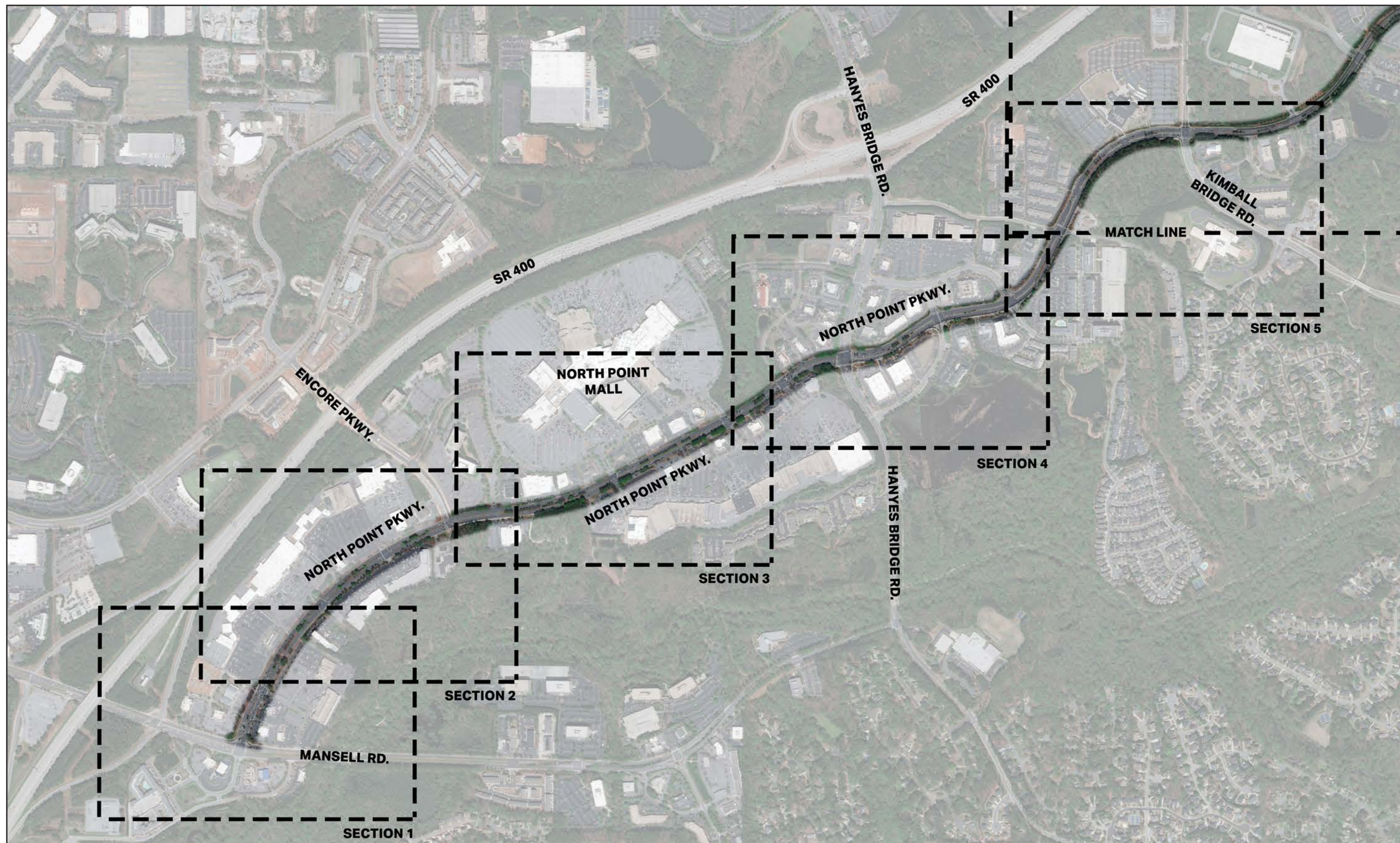
- PROVIDES SAFER CROSSINGS FOR PEDESTRIANS
- ELIMINATES OPPORTUNITY FOR VEHICLES TO CUT TRAFFIC IN LONG RIGHT TURN LANE
- CALMS TRAFFIC TO SLOWER SPEEDS APPROPRIATE FOR RESIDENTIAL AREA

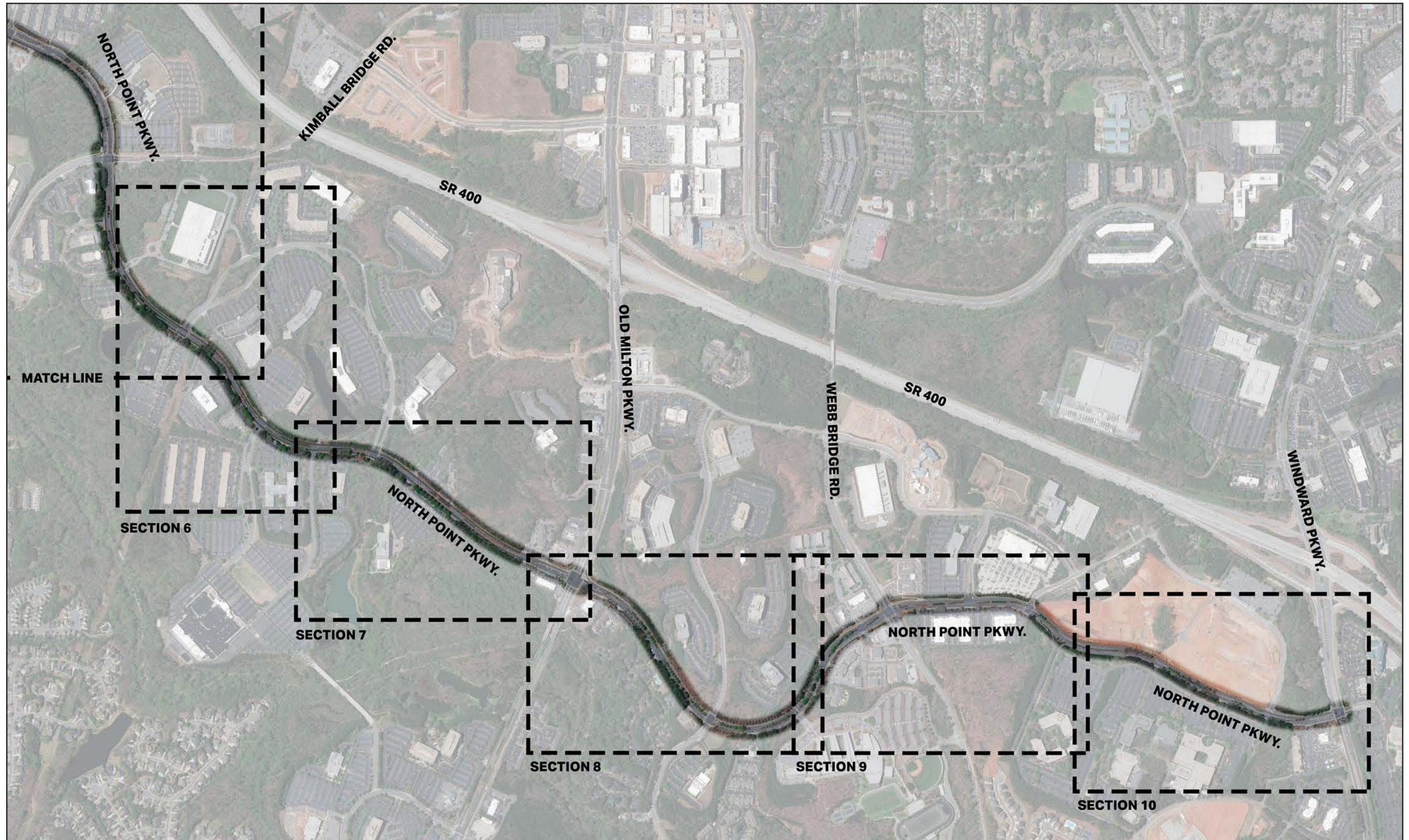
COST: \$\$

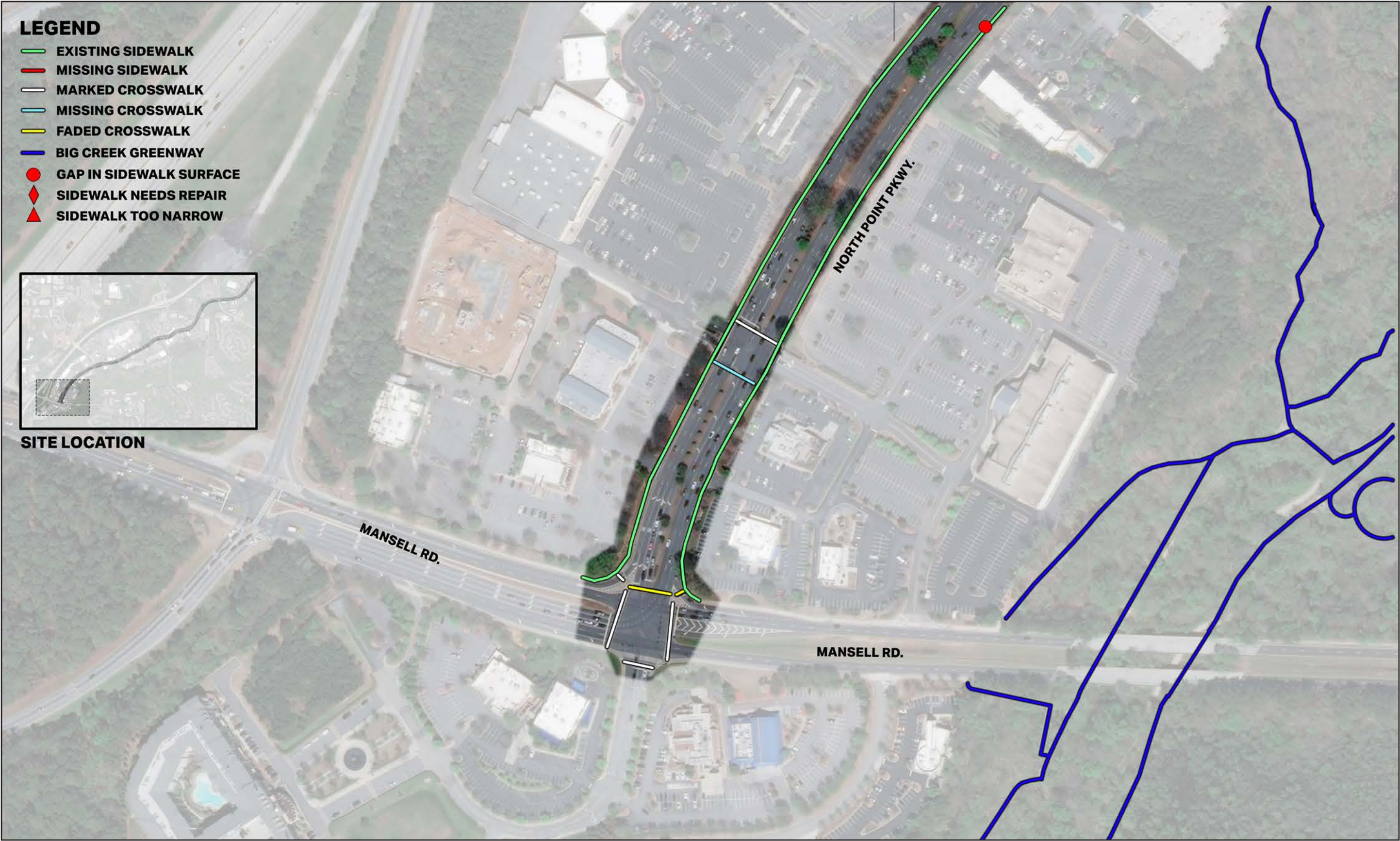


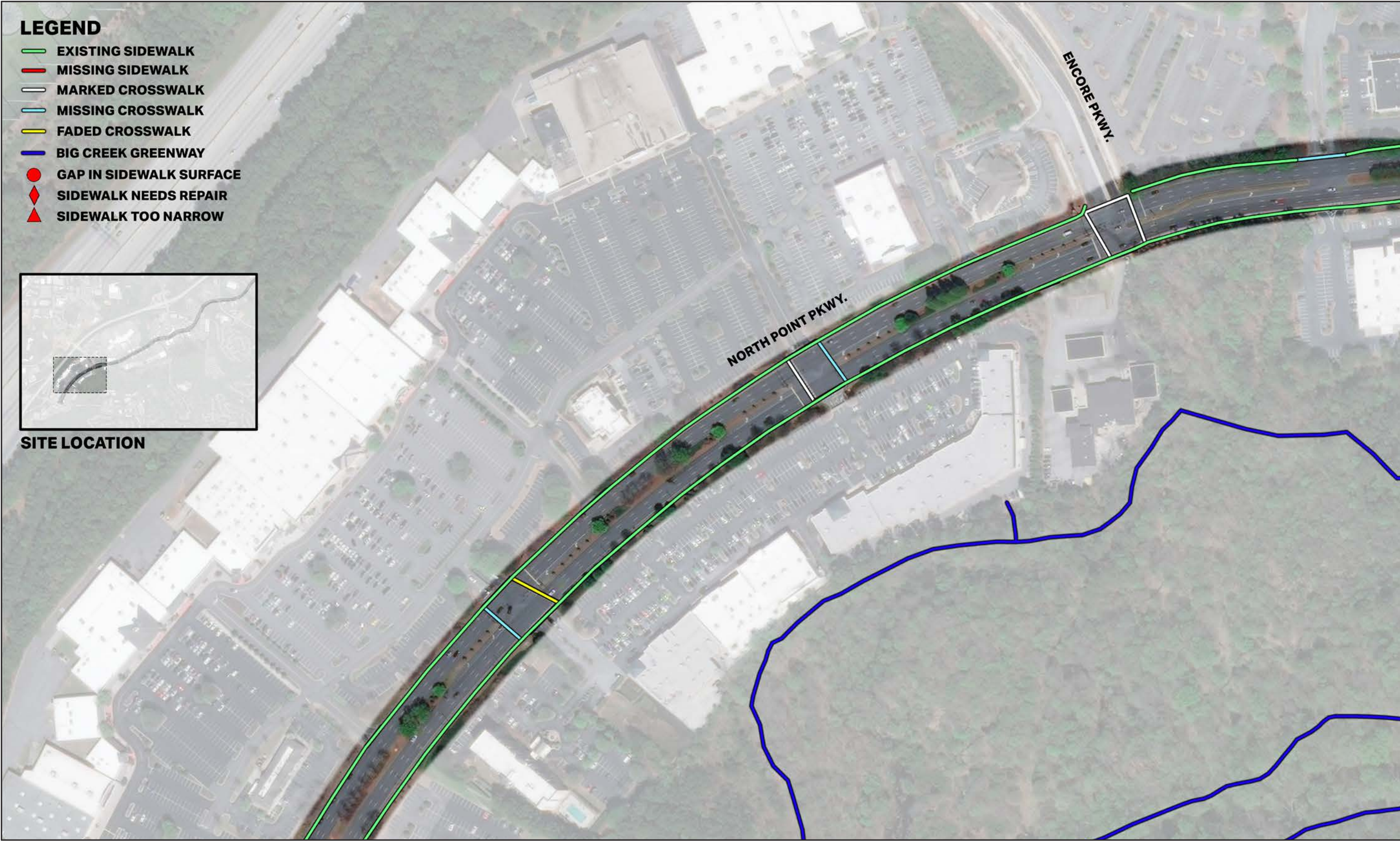
North Point Parkway

07









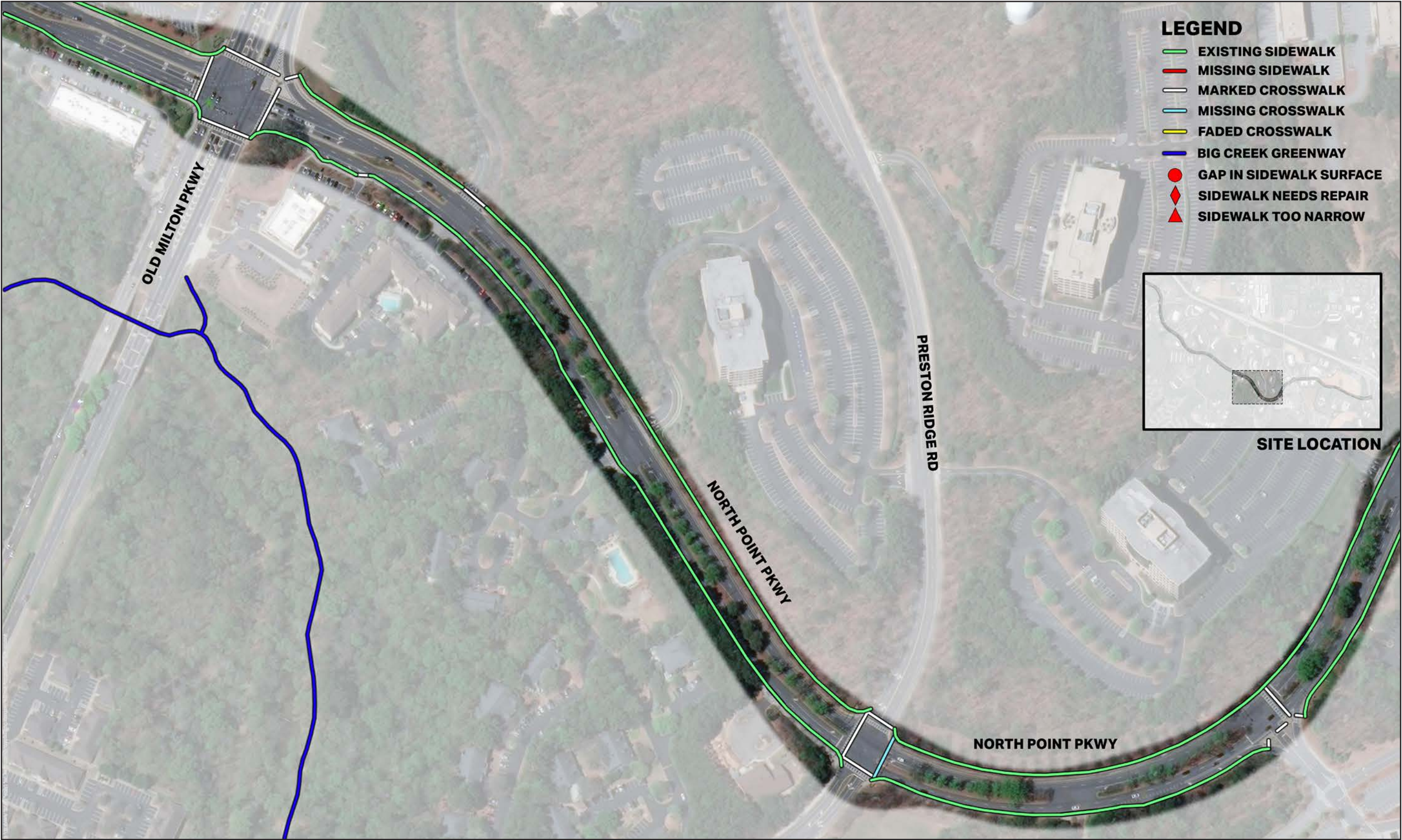




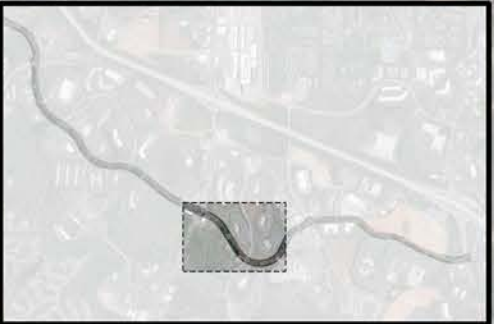








- LEGEND**
- EXISTING SIDEWALK
 - MISSING SIDEWALK
 - MARKED CROSSWALK
 - MISSING CROSSWALK
 - FADED CROSSWALK
 - BIG CREEK GREENWAY
 - GAP IN SIDEWALK SURFACE
 - SIDEWALK NEEDS REPAIR
 - SIDEWALK TOO NARROW

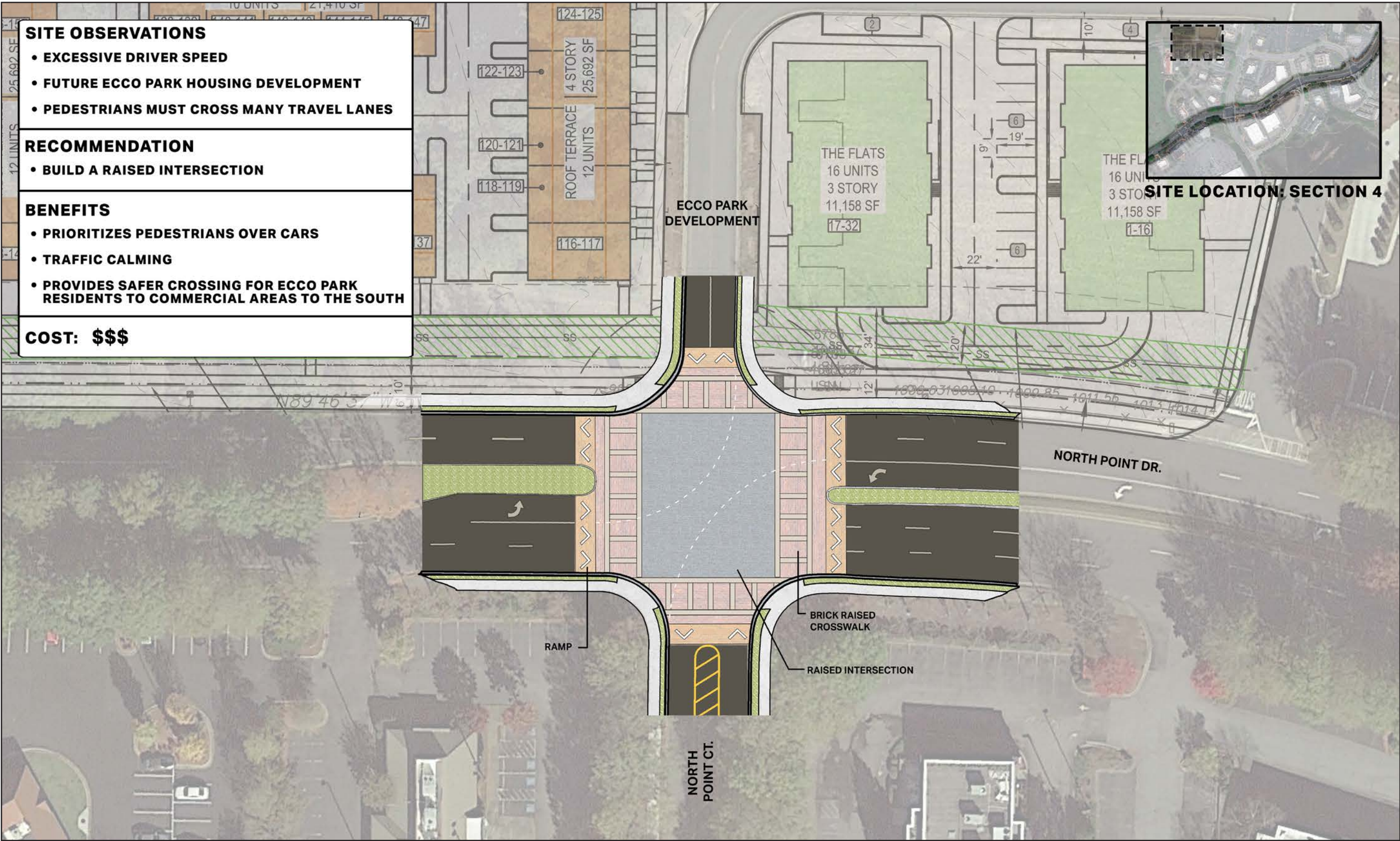


SITE LOCATION









SITE OBSERVATIONS

- EXCESSIVE DRIVER SPEED
- FUTURE ECCO PARK HOUSING DEVELOPMENT
- PEDESTRIANS MUST CROSS MANY TRAVEL LANES

RECOMMENDATION

- BUILD A RAISED INTERSECTION

BENEFITS

- PRIORITIZES PEDESTRIANS OVER CARS
- TRAFFIC CALMING
- PROVIDES SAFER CROSSING FOR ECCO PARK RESIDENTS TO COMMERCIAL AREAS TO THE SOUTH

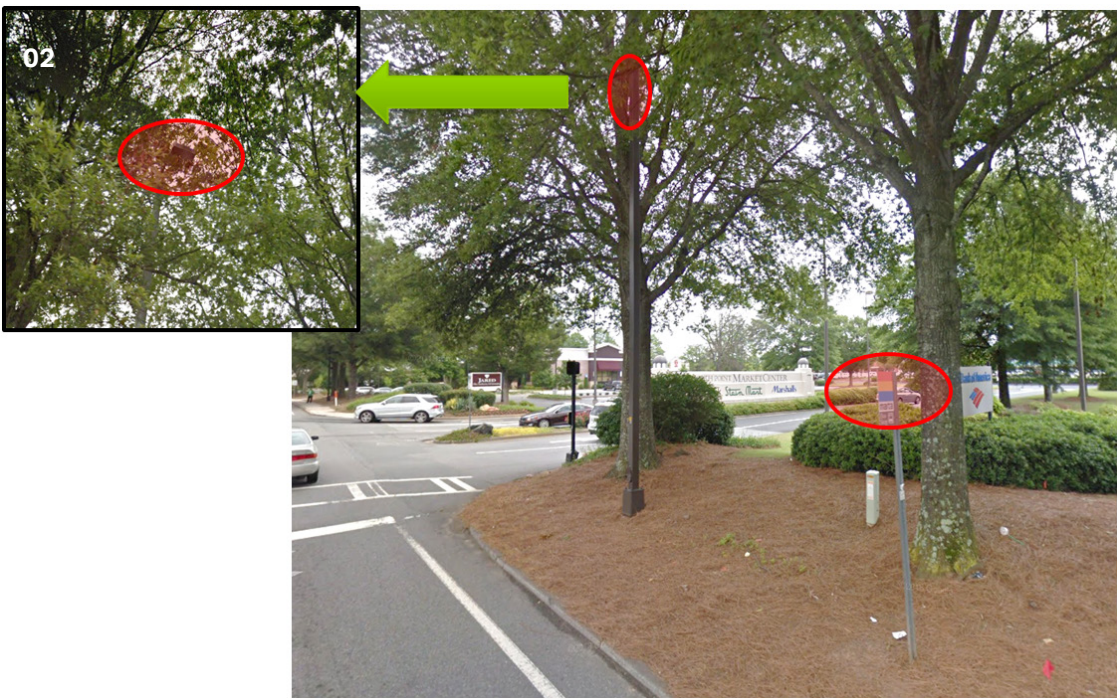
COST: \$\$\$

NORTH POINT CT. & NORTH POINT DR.
RAISED INTERSECTION CONCEPT
CITY OF ALPHARETTA, GEORGIA



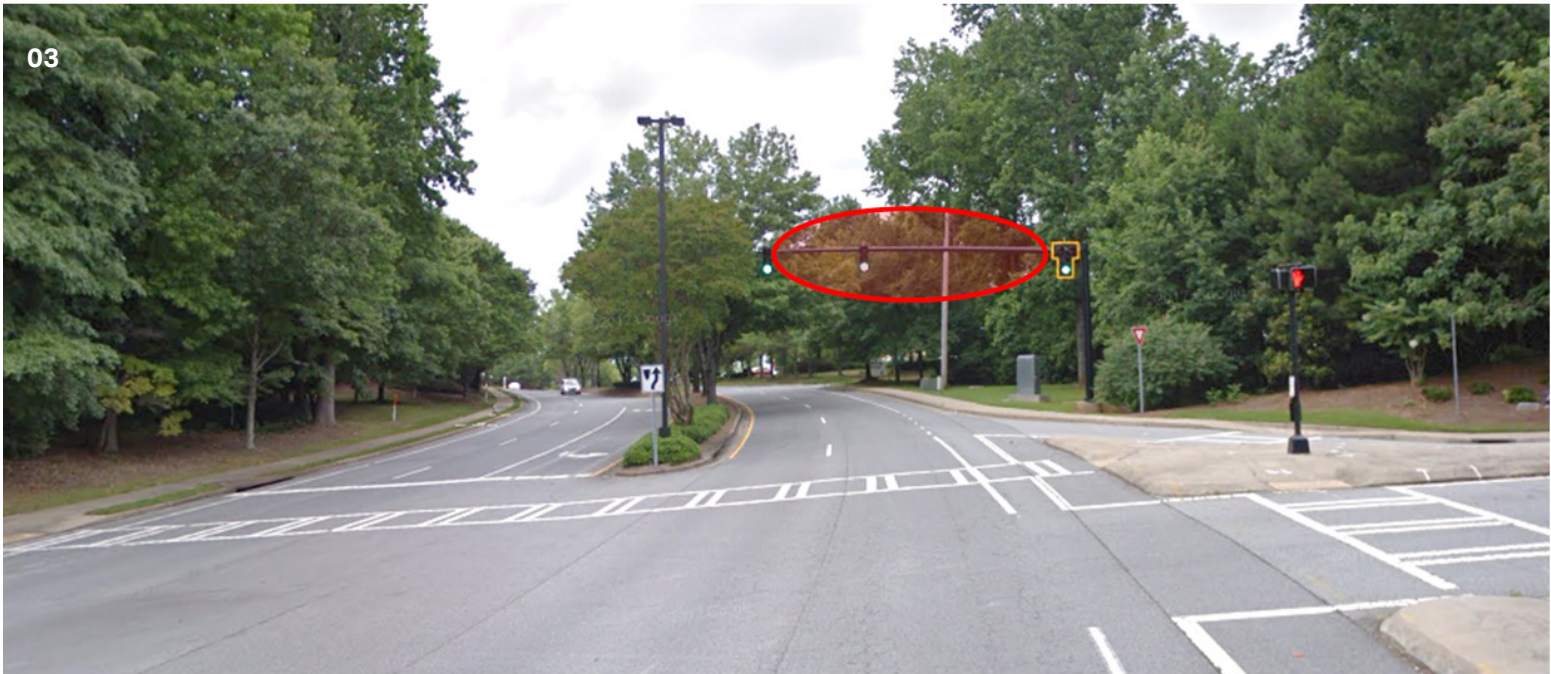
01 Narrow travel lanes

Wide travel lanes encourage excessive speeds. Reduce travel lanes to 10 feet to discourage aggressive drive behaviour.



02 Vegetation obscures visibility

Vegetation obscures lighting. Selectively prune vegetation that obscures sight visibility.



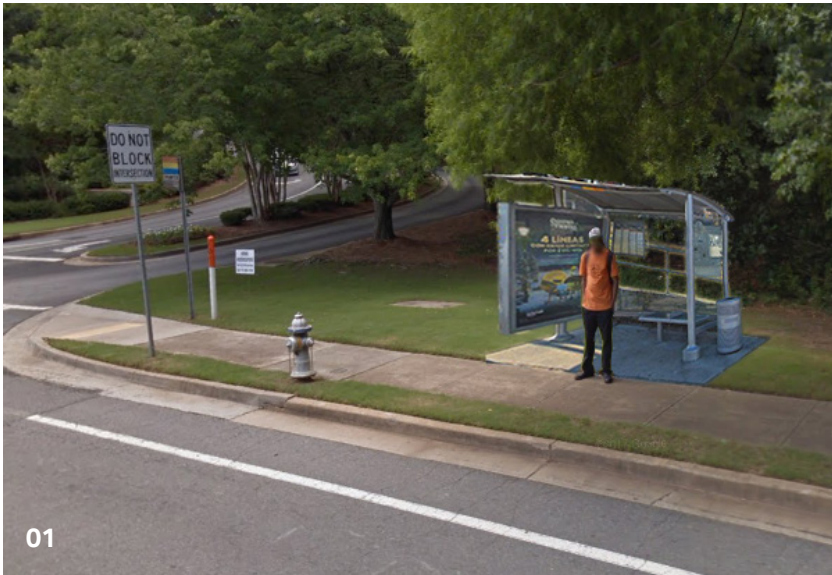
03 Missing street signs

Many street signs are missing. Add street signs to all intersections for pedestrian way-finding.



04 Crosswalks

There are missing crosswalks at many commercial driveways. Ensure that all qualifying commercial driveways have crosswalk markings and detectable edges.



01 Bus Stop Shelters

Shelters make bus stops inviting for pedestrians.



02 Bus Stop Buffers

Fill in Bus Stop Buffers. Disabled persons have difficulty navigating their mobility device over the landscaped buffer when boarding the bus.

NOTE: City to coordinate with Metro Atlanta Transit Authority (MARTA).



03 Repurpose turn lane as bus lane

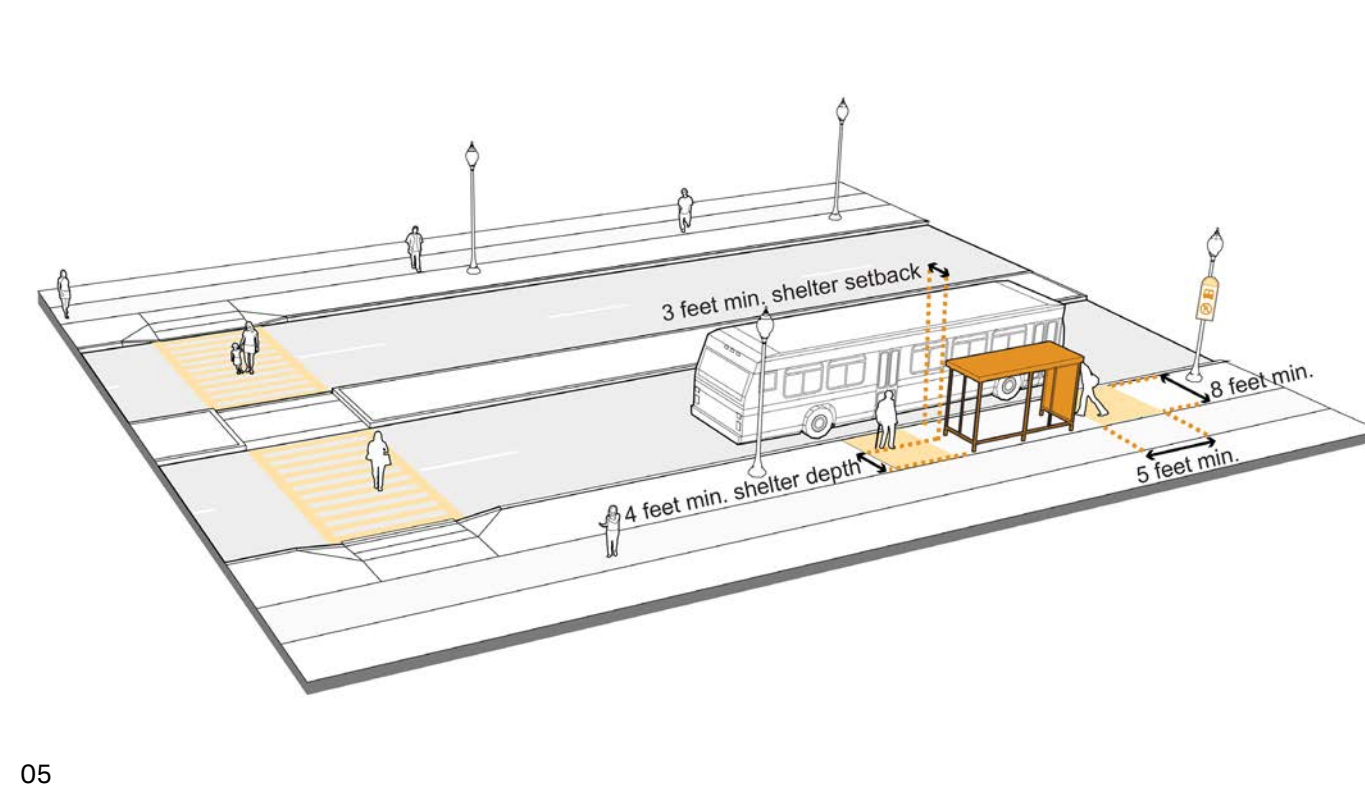
Many right turn lanes are longer than necessary. Consider repurposing such lanes as bus only lanes to remove buses from traffic flow when stopping.

NOTE: City to coordinate with Metro Atlanta Transit Authority (MARTA).



04 Private Sidewalks

Encourage private sidewalks and work with developers to install sidewalks off of the right of way that link to private facilities.



05 Bus Stop Design Guidelines

Bus stops should be built in accordance with Georgia Department of Transportation Guidelines (image taken from GDOT Pedestrian Streetscape Guide).

NOTE: City to coordinate with Metro Atlanta Transit Authority (MARTA).



06 Height of bus signs

The gap between the bus stop sign in the sidewalk shoulder should be greater than 80".

NOTE: City to coordinate with Metro Atlanta Transit Authority (MARTA).

