



FINAL REPORT

Westmere Corridor Study



Prepared for the Town of Guilderland and the Capital District Transportation Committee
by IBI Group
With River Street Planning and Development | T. R. Johnson Engineering, PLLC
December 2nd, 2016

Disclaimer

This report was funded in part through a grant from the Federal Highway Administration, U.S. Department of Transportation. The views and opinions of the authors [or agency] expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation. This report was prepared in cooperation with the Town of Guilderland, the Capital District Transportation Committee, the Capital District Regional Planning Commission, the Capital District Transportation Authority, Albany County and the New York State Department of Transportation. The contents do not necessarily reflect the official views or policies of these government agencies. The recommendations are conceptual in nature and are presented to characterize the types of improvements that are desirable, and that may be implemented as part of future land use and transportation improvement projects. All transportation concepts will require further engineering evaluation and review. Undertaking additional engineering or other follow up work will be based upon funding availability. The Westmere Corridor Study will have a positive impact on the affected Environmental Justice populations, as documented in the Appendix.

Acknowledgments

This study was conducted by IBI Group and subcontractors River Street Planning & Development and T. R. Johnson Engineering on behalf of the Town of Guilderland and the Capital District Transportation Committee, and funded by CDTC's Linkage Program. It owes gratitude and thanks to the following contributors:

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And, of course, the members of the public who gave thoughtful comment and feedback throughout the process.

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1 Introduction

1.1 Study Area Definition and Context

The study corridor is defined as the extent of Western Avenue between the Adirondack Northway entrance (Reference Route 910F) on the east and Route 155/New Karner Rd on the west. The study area is therefore demarcated based on the parcel boundaries of the lots immediately abutting Western Avenue. The study area also includes the Crossgates Mall Ring Road, due to its importance to the commercial and traffic characteristics of the area. A quarter-mile (typical walking distance) buffer is considered as the influence area for the study.

Map 1-1 shows an aerial view of the study area, marked with study area and buffer boundaries. For general reference the Westmere census designated place (CDP) boundary definition as per US census geographic definitions is shown in a dashed yellow line. This Westmere CDP

boundary encompasses the area up to Velina Drive and Friar Truck Road to the north; State Farm Road/New Karner Road to the west; Dr. Shaw Road, Veeder Road, and Church Road to the south; and I-87 and Church Road to the east.

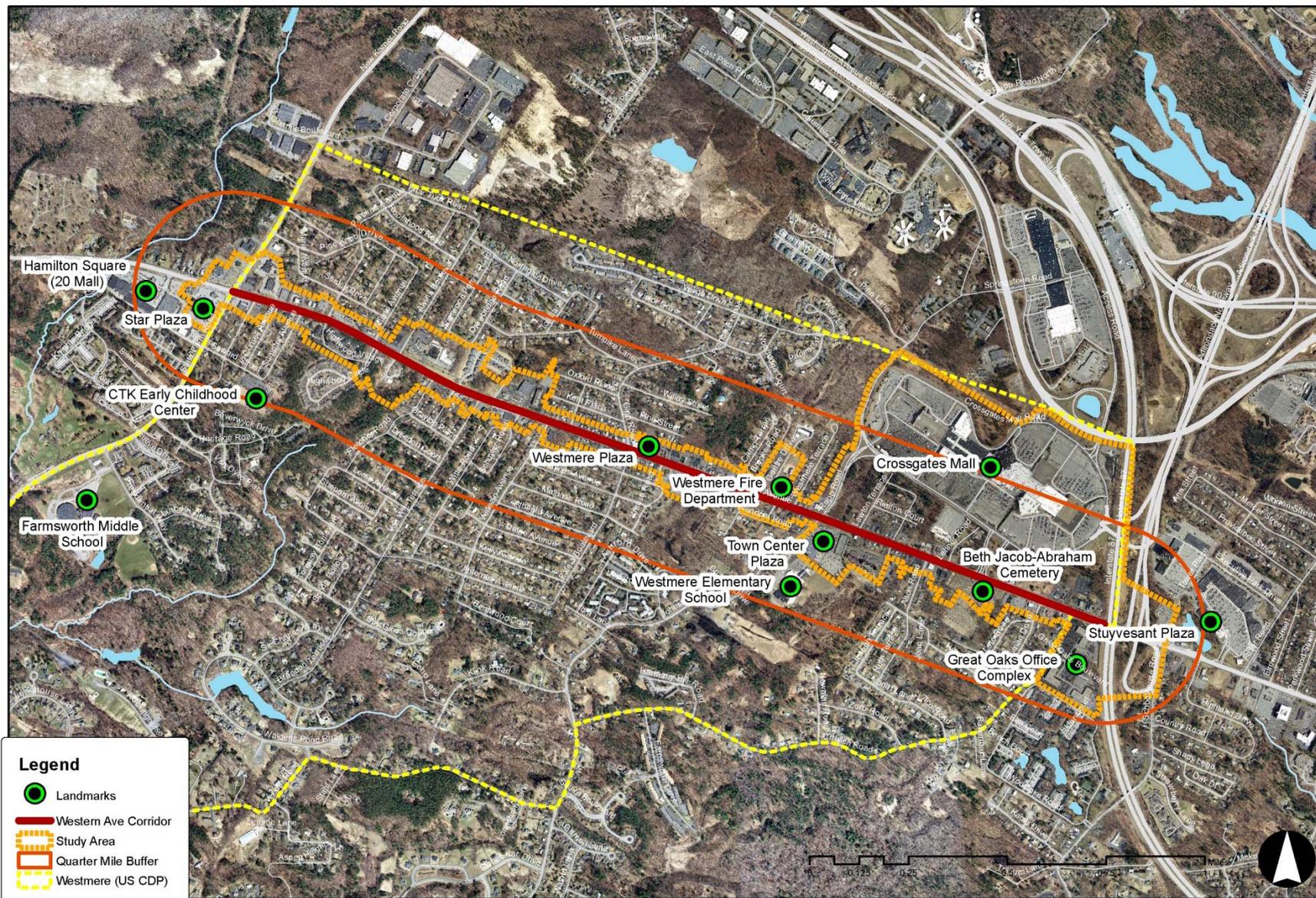
The study corridor can be divided into three distinct character segments, which are shown in Map 1-2.

- A) auto strip retail between Church Street and Johnston Road/Rapp Road,
- B) a combination of smaller scale retail and professional uses in converted houses and residential between Johnston Road/Rapp Road and York Road (see Figure 1.1), and
- C) a mix of larger-scale retail, residential, and office between York Road and State Farm Road/New Karner Road.

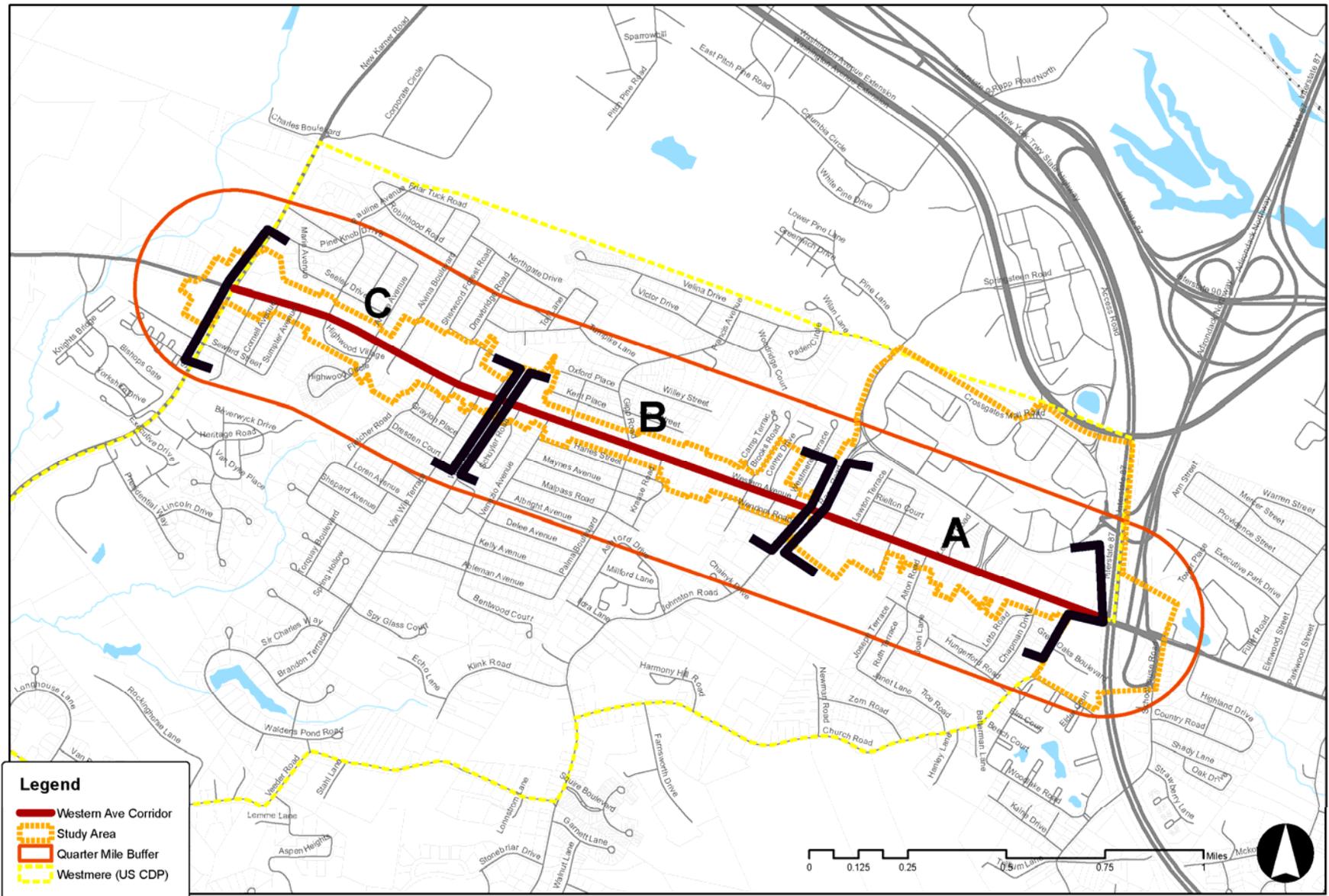


Figure 1-1: Western Avenue Corridor near Ardsley Road

Map 1-1: Westmere Corridor Study Area (Source: IBI Group)



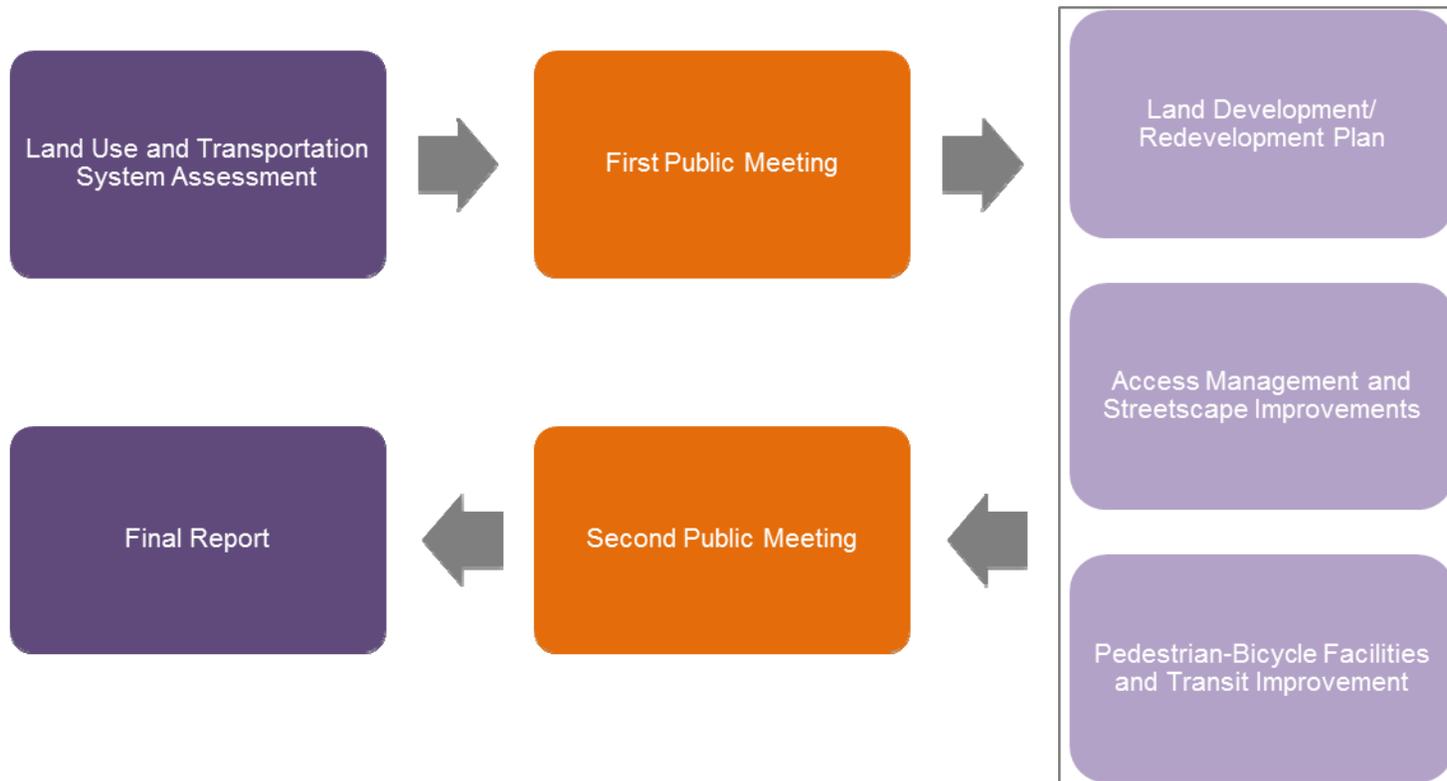
Map 1-2: Corridor Segments Key Map



1.2 Purpose of the Study

The Westmere Corridor Study was intended to develop a neighborhood plan for the area along Western Avenue between Church Street on the east and State Farm Road and New Karner Road on the west, building on the recommendations included in the 2000 Guilderland Comprehensive Plan. Western Avenue, or US Route 20, is an urban principal arterial that is intended to enable mobility among major centers of activity in the region

and carry high traffic volume. Improvements to transportation are a central element of the study, which also makes recommendations for land use, access management and streetscape improvements, pedestrian-bicycle facilities, and transit improvements. The study was completed through seven (7) tasks, including significant public involvement. An overview of the study process is shown below.



2 Study Goals and Objectives

The Westmere corridor is part of a broader local and regional context. As such, part of the mission of this study is to identify stated local and regional priorities for the corridor and analyze their relationship to this study's recommendations. In the case of the Westmere corridor, the guiding documents are the Town of Guilderland's Comprehensive Plan, published in 2001, and the Capital District Transportation Committee's New Visions 2040 Plan, approved in September 2015. The recommendations contained in this study incorporate, and in many places build upon, the work of these two documents.

The Guilderland Comprehensive Plan identifies the following as some of the priorities for the Westmere area:

- ❖ "Encourage reinvestment and redevelopment of vacant/underutilized buildings and sites...accompanied by repairs and upgrades to the existing infrastructure." (p. IV-16)
- ❖ "Concentrate higher density development within densely populated areas such as the Westmere/McKownville area. The higher density development is most suitable where public transportation is available, where both essential and non-essential services/products are available, and where pedestrian linkages to shopping, recreation, and cultural resources are well developed. Westmere and McKownville provide the most services

and the best access to public transportation but are lacking in recreational facilities and a pedestrian environment." (p. IV-16)

- ❖ "Consider the use of incentive zoning (bonuses) and financial incentives to help facilitate reinvestment and redevelopment of vacant/underutilized frontage properties along Route 20." (p. IV-20)
- ❖ "Prepare an access management study/plan to develop guidelines for shared access, shared parking, and the development of access roads. Priority should be given to more creative solutions that provide common parking and shared access for multiple owners." (p. IV-20)
- ❖ "Develop a pedestrian access plan for the Route 20 corridor that provides for continuous sidewalks and the development of appropriately located linkages to adjoining neighborhoods." (p. IV-20)
- ❖ Consider using the Crossgates Ring Road as a bypass around congestion on Route 20/Western Avenue, perhaps with a physical linkage over the Northway to Stuyvesant Plaza.
- ❖ Coordinate traffic signals along Route 20/Western Avenue.

The Westmere Corridor Study is funded, in part, by CDTC's Linkage Program, "an integrated land use and transportation planning program created to implement the land use principles" of CDTC's New Visions plan. (CDTC New Visions 2040 Plan, p. 33) Some of the CDTC New Visions 2040 Plan's core recommendations that are relevant to the Westmere corridor include:

- ❖ New Visions 2040 "encourages development that incorporates bicycle and pedestrian accommodations into highway and bridge construction and city, village, and town plans. It also provides for recreational opportunities through creation of bike/hike trails." (p. 2) New Visions particularly supports the creation of separate and dedicated pedestrian and bicycle infrastructure. Bicycle and pedestrian transportation is one of New Visions' "Planning and Investment Principles."
- ❖ "Transportation investments are made based on a complete streets framework which supports the convenient and safe travel of all people — of all ages and abilities as appropriate to a facility's community context." (p. 7) Complete Streets are also one of New Visions "Planning and Investment Principles."
- ❖ Right-sizing roadways instead of expanding road capacity for automobiles (p. 5). This approach recognizes the slowing or reversing growth of Vehicle Miles Traveled (VMT) in the 21st century, and recommends prioritizing cost-effective maintenance non-auto-based transportation alternatives.
- ❖ Recognizing the fiscally constrained nature of transportation funding in the current decade, demanding a low-capital, high-impact approach to investment. (Ch. 10)
- ❖ New Visions identifies Western Avenue/Route 20 from the City of Albany line to New Karner Road/State Farm Road as a part of the Bicycle and Pedestrian Priority Linear Network. It also classifies the areas around Crossgates and near the intersection of Western Avenue and New Karner Road/State Farm Road as Tier 1 Pedestrian Districts. (p. 60)

The Westmere Corridor Study incorporates these recommendations in several topic areas including access management, traffic calming, pedestrian and bicycle facilities, and landscaping.

The study objectives were as follows:

- ❖ Articulate a long term vision for the corridor but also propose specific shorter term improvements.
- ❖ Protect adjoining neighborhoods from incompatible land uses and project the continued use and redevelopment of small frontage lots for professional uses.
- ❖ Connect residential neighborhoods with commercial areas through improved sidewalks, crosswalks, and paths to promote a more pedestrian friendly environment.
- ❖ Improve facilities for bicyclists including bike lanes, multi-use paths, and parking.
- ❖ Develop a concept for a Town of Guilderland gateway near the eastern end of the corridor.
- ❖ Evaluate the potential of using the Crossgates Mall Ring Road as a bypass for traffic traveling between US Route 20/Western Avenue and the Northway.
- ❖ Evaluate the potential for access management along Western Avenue.
- ❖ Provide guidance on the location of future BRT stations if the Washington/Western BRT line were to be extended up to Route 155.

3 Current Planning Initiatives

The Guilderland Comprehensive Plan (2000) has formed a solid foundation for the development of neighborhood and corridor plans for specific parts of the Town. Related studies that are relevant to the Westmere Corridor Study include the Guilderland Hamlet Neighborhood Plan (2007), the McKownville Corridor Study (2003, covering part of the Westmere Corridor), the US Route 20/Western Avenue Land Use and Transportation Study (2008), and the Pine Bush Transportation Study (2004, also covering the Westmere Corridor). Another important initiative is the New York State Department of Transportation (NYSDOT)'s 2015 completion of sidewalks on each side of US Route 20/Western Avenue through the entire study area.

3.1 The Guilderland Comprehensive Plan (2000)

This plan provides a 20-year scope and articulates a vision of the Town of Guilderland as a distinctive suburban and rural community within the Capital District whose employment, education, recreation, and cultural opportunities are accessible through a transportation system that enables the mobility and safety of all residents. The plan was developed through extensive public outreach including 3,000 written surveys and 100 phone surveys, in addition to input gathered through focus groups, community work sessions and interviews with key organizations. The plan's goals and objectives address growth management, transportation and mobility, public utilities, business, employment, and fiscal resources, housing, town character, agriculture, natural resources, open space, cultural resources, recreation, governance, and implementation.

Recommendations for Westmere Commercial Corridor:

- Establish a committee to review and update zoning code (adopted in 1987) and subdivision regulations (adopted in 1989).
- Avoid zoning changes that would permit additional large-scale retail development, and promote the continued use and redevelopment of small lots as professional offices.
- Address poorly functioning southbound access ramp to Crossgates from the Northway
- Improve Crossgates Ring Road prior to future development of this area. Focus on circulation, access management, and potential linkage to Stuyvesant Plaza, to allow for more efficient use of the road as a bypass for US Route 20/Western Avenue.
- Develop an access management plan for US Route 20/Western Avenue, including a potential service road or alley parallel to the south side west of Johnston Rd, providing access to current/future development and eliminating curb cuts on Western.
- Open space set aside as part of the Crossgates Mall should be maintained.
- Provide buffers to reduce conflicts between residential and commercial/office uses, except within well-designed mixed-use developments.
- Gateways to distinguish corridor segments, including a Town-wide "Welcome" gateway at the intersection of Fuller Road Alternate (Adirondack Northway extension) and US Route 20/Western Avenue.
- Create pedestrian linkages to integrate corridor shopping and recreation with surrounding neighborhoods.

3.2 Guilderland Hamlet Neighborhood Plan (January 2007)

This plan covers the US Route 20/Western Avenue corridor just west of Westmere Linkage Study Area: from Route 155 to Route 146 to the West, shown in Figure 3-1 below from the plan. Relative to the Guilderland Hamlet, the Westmere Linkage Study Area contains larger-scale development, including strip malls, offices, and large retail complexes. This area is envisioned as an “Eastern Gateway” that steps down from large-scale development toward the smaller-scale Central and Historic sections of the Hamlet.

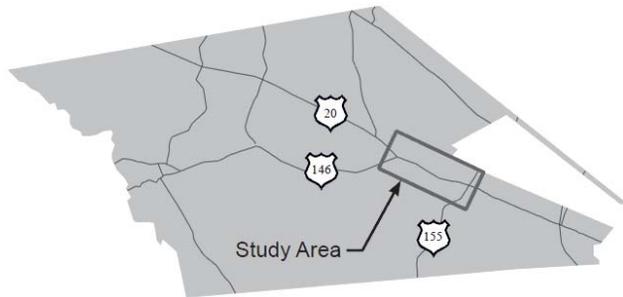


Figure 3-1: Guilderland Hamlet Neighborhood Plan Study Area

A Green Infrastructure Network of waterways, parks, agricultural areas, and preserves extends into the Westmere Linkage Study Area along streams extending from Nott Road Park and Guilderland Middle School.

Transportation Plan Recommendations:

- Sidewalks on both sides of the corridor are the highest priority for accommodating pedestrians.
- Footpaths (6 miles) and multi-use paths (1.5 miles) for bicyclists and other “wheeled” uses are proposed along public golf course, and connecting Tawasentha Park to Nott Road Park.
- Concentrate access to US Route 20/Western Avenue at primary intersections, rather than driveways for each business.

- US Route 20/Western Avenue is a designated bike route, but this designation is only for way-finding. Roadway widths are sufficient to accommodate bicyclists for most of the corridor, except between Hunger Kill Ravine and Willow St.
- Roundabout with landscaping proposed at intersection of US Route 20/Western Avenue and RT 146 at the suggestion of residents and committee members.

3.3 McKownville Corridor Study (2003)

Pedestrian & Bicycle Facilities and Environments Key Issues:

This report outlines a vision for increased travel opportunities for pedestrians and bicyclists within the McKownville neighborhood, which lies just east of the Westmere Linkage Study Area. The neighborhood is bounded by Interstate 87 and Fuller Road Alternate to the west, the town of Bethlehem to the South, and the City of Albany to the East and North, as shown in the area highlighted green in Figure 3-2. The Recommendations section provides specific sites and cost estimations for pedestrian and bicycle facilities, trails & recreational Areas, transit services and facilities.

Western Avenue carries 25,000-38,000 vehicles per day through the McKownville neighborhood, and regional destinations such as a shopping mall, major university, and State employment site generate large amounts of traffic. However, the US Route 20/Western Avenue corridor is serviced by several transit lines, is a designated bike route, and is surrounded by fairly compact residential development, which creates significant opportunities for alternative transportation modes.

Recommendations:

- Enhance walking/bicycling routes through sidewalk improvements, development of an off-road system of paths and trails, bike route designations, intersection improvements, and ordinances that provide bike parking and accommodating street/site design.
- Trail-blazing and way-finding signage to raise awareness of potential destinations to bicyclists and pedestrians.
- Enhance transit service/facilities with shelters, electric signboards with route and vehicle information. Target UAlbany students to promote transit instead of driving.

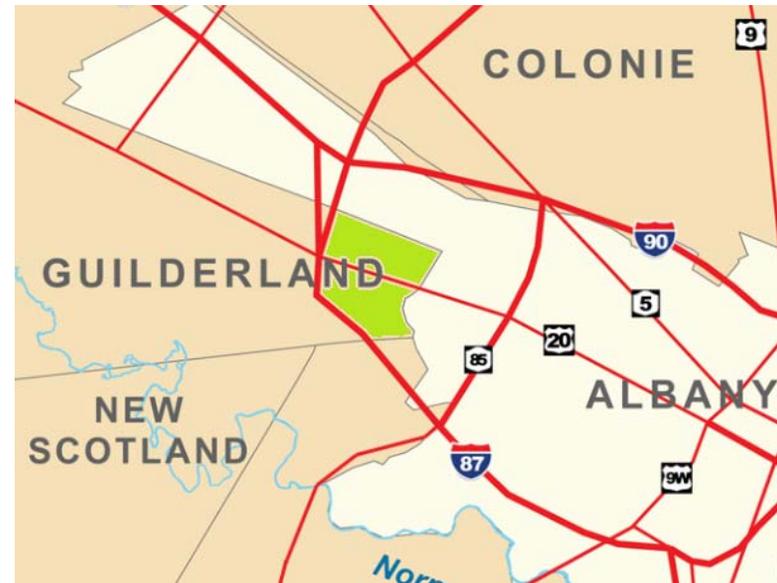


Figure 3-2: McKownville Corridor Study Area

- Enhance intermodal connections in terms of pedestrian and bicycle access to transit, and year-round transit stop accessibility. Prioritize improvements to, maintenance of, and snow removal on pedestrian and bicycle facilities on transit routes.
- Manage interactions between motorists and pedestrians/bicyclists through cautionary signage along routes to main destinations, and through prohibition of right turns at key intersections (from Church Road at Western/Church, and pedestrian button-initiated signals at Western/Fuller and Western/McKown/Norwood).
- Access Management improvements, including reduced driveway access for corner parcels, promote shared driveway use and rear access from side streets, and join together parking lots, with one lot having signalized driving access.
- Traffic calming through bulbouts at CDTA bus stops, reclaiming wide shoulder space to reduce pavement

width, and provision of visual “sanctions” for pedestrians and bicyclists on roadways through pavement markings and signage

- Enhance residential character of corridor by introducing street trees closer to right-of-way, ornamental street lighting, uniform right-of-way cross sections for more green space, road medians, and roadway narrowing.
- Distinguish high-speed access roads (I-90, Northway, State Campus ring roads) from area roads through Gateways: install planted median islands at intersections where the character of the area changes, or use plantings/treatments outside curb lines. Define the neighborhood with “Welcome to McKownville” sign.
- Improve off-road environment for bicyclists and pedestrians through bike parking ordinance, design standards for internal roads that accommodate transit, enforcement of laws to keep right-of-way clear for travel, and site design guidelines that enhance pedestrian safety and reduce walking distances (parking behind buildings, development closer to roads).

3.4 Route 20 Land Use and Transportation Plan (November 2008)

This plan covers a 4-mile section of US Route 20/Western Avenue just west of the Westmere Linkage Study Area, from Route 158 in Guilderland to Route 406 in Gifford Hamlet in Princetown, shown in Figure 3-3 from the plan.



Figure 3-3: Route 20 Land Use and Transportation Plan Project Area

This corridor has one lane travel lane in each direction, and is travelled mostly by commuters to Albany and Schenectady, with primarily eastbound traffic in the morning and westbound traffic in the evening. Three main intersections were identified for short-term and long-term improvements: Giffords Church (RT 20 & RT 406), Dunsville Road (RT 20 & RT 397), and Guilderland Avenue (RT 20 & RT 158). Public workshop participants identified the following priorities: preservation of the area’s rural and agricultural character; slowing down traffic; and improving aesthetics along the corridor, especially in commercial areas.

Each side of US Route 20/Western Avenue has 3-5 foot paved shoulders that could potentially accommodate bicyclists, though high traffic speeds and uneven terrain pose safety risks. This section of US Route 20/Western Avenue is a part of the CDTC’s ‘Bicycle and Pedestrian Priority Network,’ which is intended to provide a backbone for regional bicycle and pedestrian travel

The plan identified a significant level of conflict between traffic and residential use between NY Route 158 and NY Route 397, while other parts of the US Route 20/Western Avenue segment were on the margin.

Recommendations:

- Proposed general roadway improvements include: 4-5 foot roadway shoulders, increased speed enforcement, reduced speed limit (45 mph), widened NYS Thruway toll booths at exit 25A to divert traffic of modular home trailers away from US Route 20/Western Avenue, and improvements at the corridor’s three key intersections (better sidewalks, crosswalks, raised medians, signage, traffic lanes narrowed from 12 to 11 feet).
- The plan recommends supporting development of a new mixed-use country hamlet or hamlet expansion near Dunnsville Hamlet, which would be allowed under the Town of Guilderland’s current zoning law.
- Maintain commercial “nodes” and prevent sprawl: Enhance existing commercial development on US Route 20/Western Avenue, and encourage diverse neighborhood-scaled commercial services, and “country retail.” Limit commercial expansion to areas surrounding existing local business zoning in Guilderland, to prevent further sprawled “strip” style development.
- Consolidate parking and driveways; create access roads where appropriate to improve access management. Use Access Management Guidelines outlined in Appendix F of plan.
- Explore potential for conservation easements and other open space / farmland protection measures.
- Gateway and signage improvements for aesthetics as well as traffic calming.

3.5 Pine Bush Transportation Study Update (2004)

The study area is adjacent to the Westmere Corridor, extending from the north side of Western Avenue to Central Avenue between Fuller Road to the east and the Albany City boundary to the West, as shown in Figure 3-4. The study examines changes in traffic patterns from 1985 to 2001.

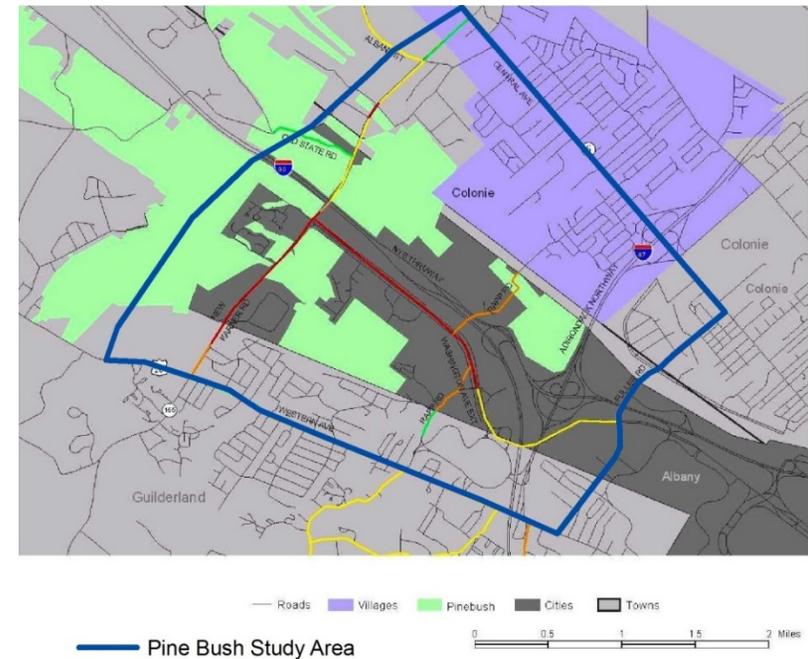


Figure 3-4: Pine Bush Transportation Study Update Project Area

Traffic growth was lower than anticipated, especially given the intensive level of development. Explanations for this include peak spreading, and Crossgates Ring Road being used as a major highway connector. Also, the CDTA transit shuttle service expanded to include New Karner Road businesses, linking up with Crossgates Mall and offices along Washington Avenue extension.

Changes in LOS/speed from speed delay runs conducted on Western Avenue in 1985 and 2001:

- Overall travel speed decreased, most noticeably in the eastbound direction
- LOS decreased from C to D in eastbound direction, and remained at D in the westbound direction.
- Average travel speed between Rapp Road and Gipp Road in the westbound direction increased from 17.8 mph in 1985 to 28.8 mph in 2001, and is likely the result of aligning the Rapp Road / Johnston Road intersections.

Recommendations:

- Consolidate driveways along Western Avenue.
- Signal coordination along Western Avenue and New Karner Road. Almost all of the delay detected was due to traffic signals.
- Redesign Crossgates Ring Road and ramps between Fuller road if Crossgates Mall expands, or significant traffic is added.
- Bicycle and pedestrian facilities for travelling between Crossgates Mall and Crossgates Commons.
- Facilities such as “Bicycle stop lines” at intersections to increase visibility, “bicycle safe zones” for non-turning cyclists in areas with vehicular right turn lanes, removed circulation barriers from sidewalks (signs, poles, etc.), and striped cross-walks.

3.6 Western Avenue Sidewalks University at Albany to Route 155

The NYSDOT Transportation Project for ‘ADA Compliance: Signals, Signs, and Sidewalks’ was a collaboration between NYSDOT, the CDTC,

and the Town of Guilderland, and has improved pedestrian safety and ADA compliance along Guilderland’s primary corridor, shown in Figure 3-5. This project includes the following elements:

- Sidewalk ramps and detectable warnings
- Bus Stop improvements
- Sidewalk installation / replacement along both sides of Western Avenue (in most locations)
- Intersection improvements (at select locations) including addition of crosswalks, traffic signals and pedestrian push buttons.

Uniform five (5) foot sidewalks were constructed on US Route 20/Western Avenue between SUNY Albany and Route 155.

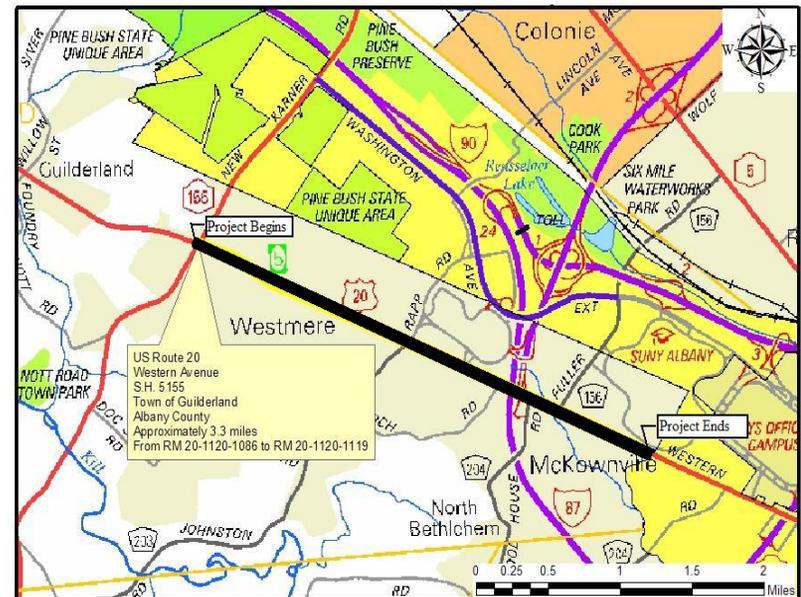


Figure 3-5: NYSDOT Transportation ADA Project site definition

4 Existing Conditions

4.1 Introduction

This section describes existing conditions in the study corridor including the following sections or maps:

1. Physical resources
2. Landmarks and destinations
3. Land use and vacant and underutilized parcels
4. Proposed and recently approved development
5. Zoning
6. Urban form and streetscape
7. Road network and traffic characteristics
8. Pedestrian and bicycle accommodations
9. Public transit
10. Population density

4.2 Physical Resources

The study corridor is largely flat terrain. Minor streams run outside of the study area to the west and south, including Kaikout Creek and Blockhouse Creek. Almost all the area along Western Avenue comprises of impervious surfaces, as seen in the maps below. Crossgates Mall and Star Plaza include large areas of impervious surfaces. This could potentially lead to environmental issues related to storm water drainage and groundwater recharge. Environmentally friendly landscape measures should be considered to mitigate the impact of impervious land cover. See Map 4-1 for forest cover, open water, and ground elevation, and Map 4-2 for locations of impervious surfaces.

4.3 Landmarks and Destinations

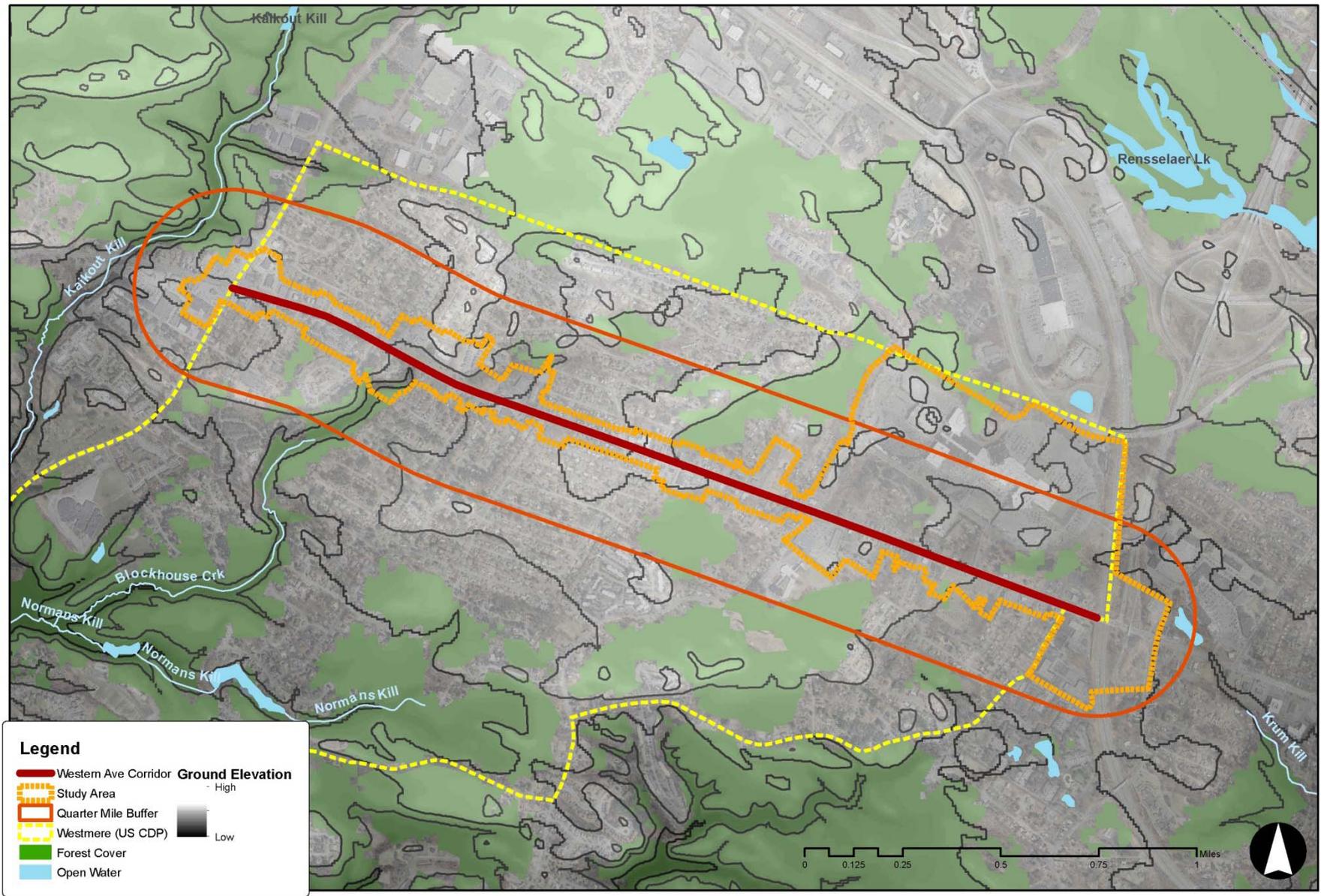
Most landmarks and destinations within the study area are commercial retail and mixed use establishments, including:

- Crossgates Mall
- Westmere Plaza
- Town Plaza
- Star Plaza

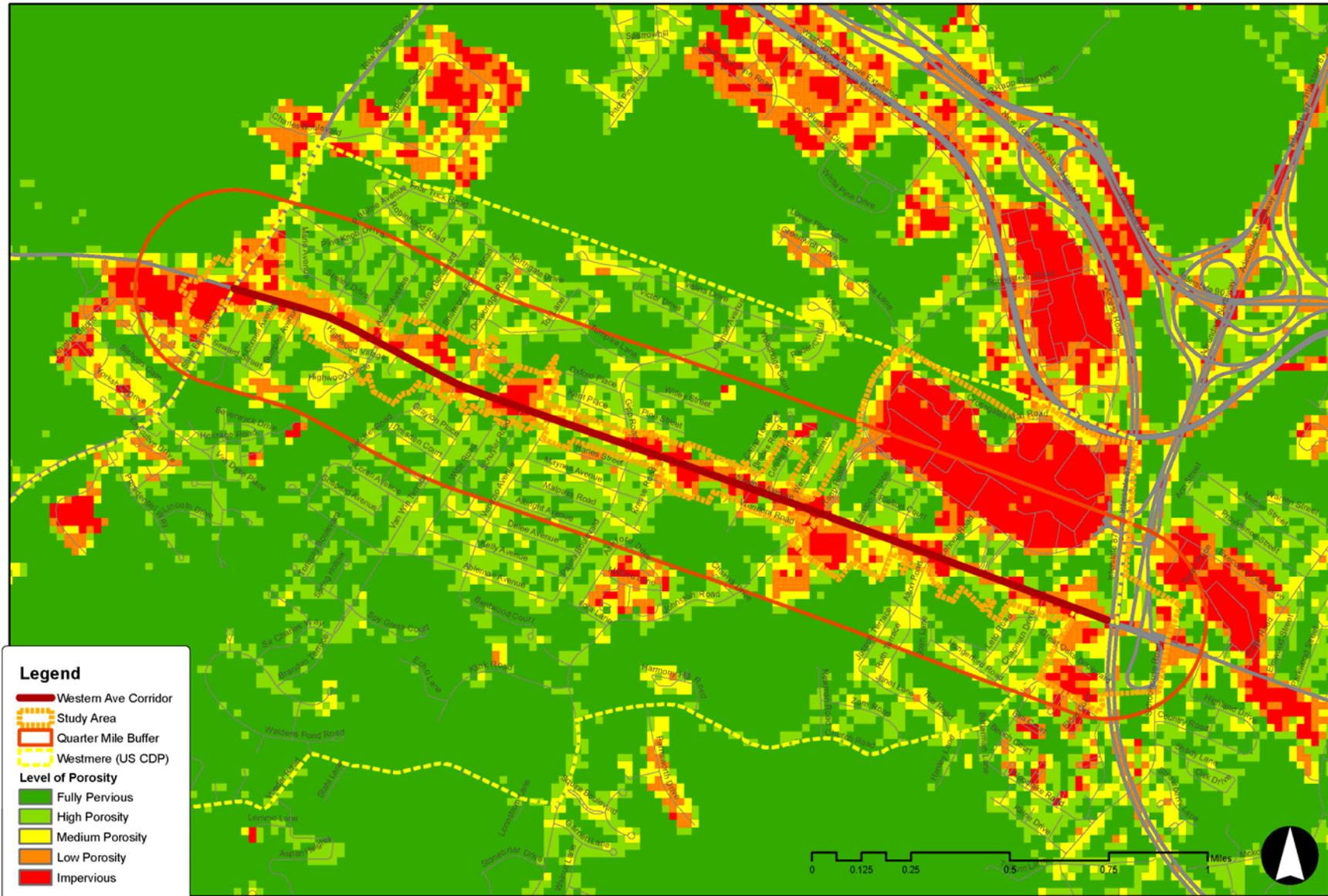
The Westmere Fire Department and the Beth Jacob – Abraham Cemetery are other destinations of importance in the study area.

There are also several destinations just outside the study area in interior Westmere including the Westmere Elementary School and Christ the King Church, as well as in the McKownville neighborhood, such as Stuyvesant Plaza. Map 4-3 shows the location of these landmarks and destinations while Figure 4-1 provides photo documentation of the streetscape at these locations.

Map 4-1: Topography and Natural Features (Sources: NYSGIS LIDAR Data, USGS Land Cover Data)



Map 4-2: Impervious Surfaces (Source: USGS Land Cover Data)



Map 4-3: Landmarks and Destinations (Source: IBI Group)

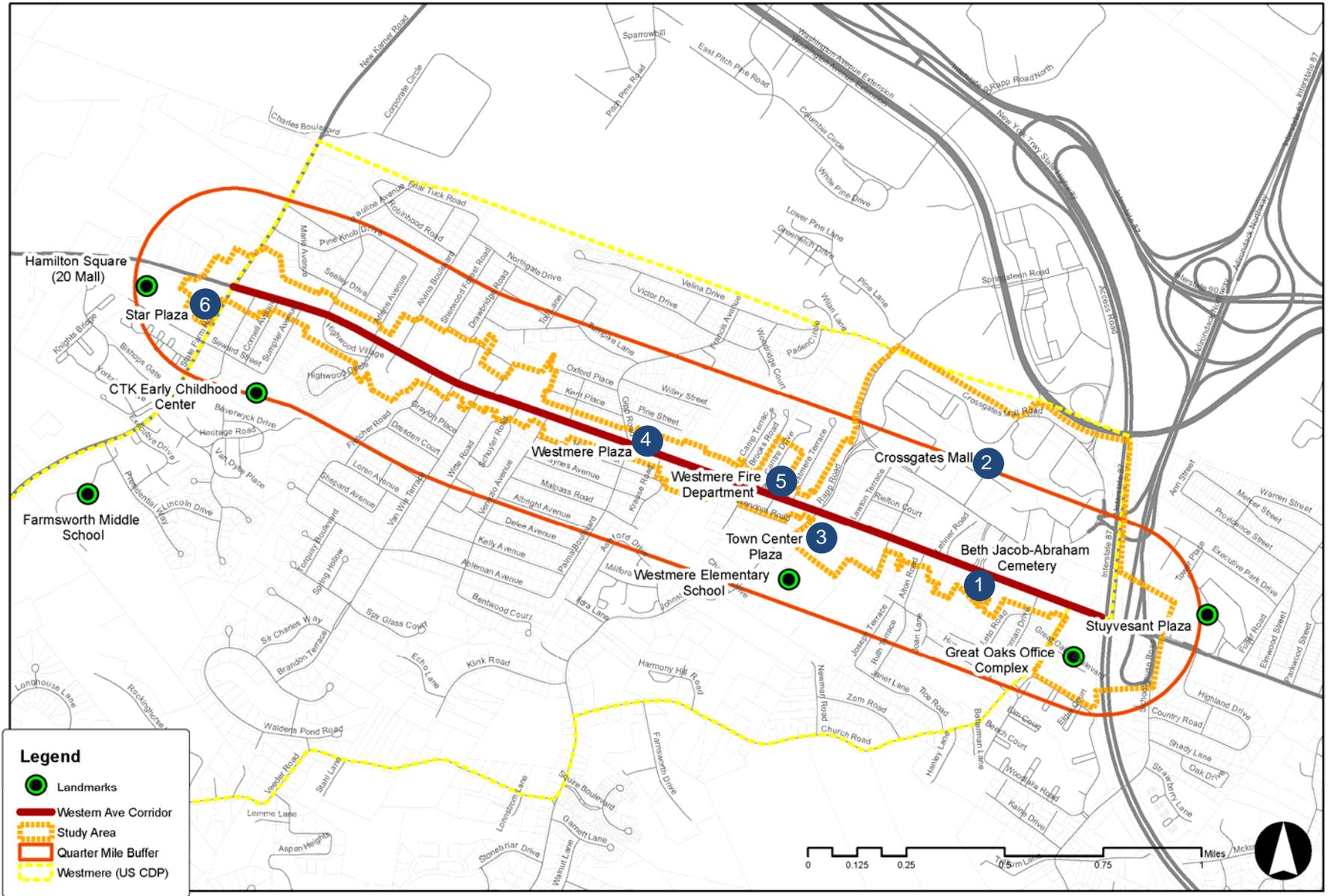


Figure 4-1: Landmarks and Destinations



BETH ABRAHAM CEMETERY



TOWN CENTER



WESTMERE FIRE DEPARTMENT



CROSSGATES MALL



WESTMERE PLAZA



STAR PLAZA

4.4 Land Use including Vacant and Underutilized Parcels

The existing land use along the Western Avenue corridor is represented in Map 4-4. It is largely commercial on Western Avenue, with residential and mixed uses behind. Two shopping destinations, Crossgates Mall and Star Plaza, anchor the commerce along this corridor. Commercial uses comprise of a mix of offices, retail, eateries, and auto-oriented services. Residential uses are mostly single family, with only a few locations of multi-family residences although multi-family is more prevalent just beyond the study area, especially to the south.

As discussed above, in terms of land uses, the corridor can be divided into three distinct segments. The segment to the east with Crossgates Mall is characterized by auto-strip retail. It also has a number of vacant/underutilized lots, where there is high potential for infill development. The Wolanin development, a mixed-use 22 acre development to the south of Western Avenue has been approved and is ready to start construction. It can potentially become a major catalyst for redevelopment of this area.

The central segment has small-scale retail and offices flanking single-family residential neighborhoods. The segment is characterized by small lot sizes, smaller block sizes, and an interconnected street network. Many of the commercial establishments in this segment exist on converted residences.

The commercial character continues and expands into the western segment. This segment has larger lot sizes and a higher density of multi-family residential lots. The upcoming 58 acre mixed use development at Winding Brook Drive to the west of the study area will catalyze high density residential development in the area.

4.4.1 Vacant and underutilized lots and building descriptions

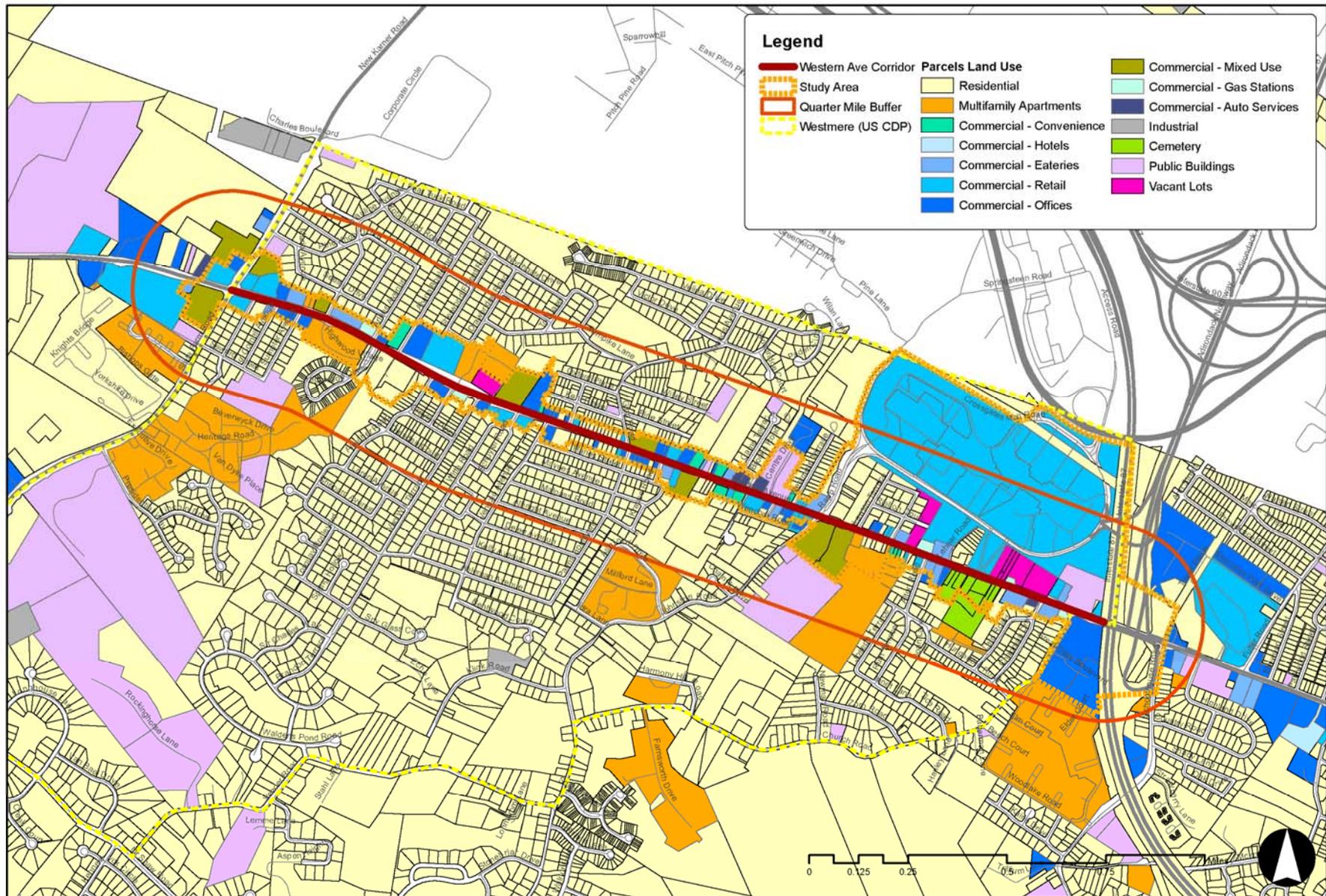
Vacancies and underutilization of parcels were mapped along the study corridor. Vacant property is defined in the New York State Office of Real Property Services uniform classification system as land that is not in use,

is in temporary use, or lacks improvement. Underutilized property is not defined in state or local property tax systems. However, the START-UP NY program regulations, which apply to the study area as it is in SUNY Albany's Tax Free Zone, define underutilized property as "vacant or abandoned land or space in an existing industrial park, manufacturing facility, a brownfield site...or a distressed or abandoned property, which shall be determined by factors including poverty, identified by the county or the town, village or city."

The following vacant/underutilized buildings and lots have been mapped on Map 4-5 and photographed in Figure 4-2.

1. There is undeveloped land between Crossgates Mall Road and Western Avenue, east of the main entrance to Crossgates and west of small businesses on the North side of Western and across from the cemetery. It is a relatively inactive section of the corridor. There is a small body of water north of this land, surrounded by denser tree cover.
2. This former gas station structure is adjacent to the vacant land shown in image #1, and is just east of the main entrance to Crossgates Mall on Western Avenue. It is bordered by dense tree cover to the north and west.
3. This underutilized parking lot is off of Crossgates Mall Road to the south, and just west of the main entrance off of Western Avenue. Its perimeter is surrounded by 10-20 feet of grass, then dense tree cover. It is used by Albany County Police for traffic training and demonstrations.
4. This vacant lot is just southwest of the parking lot shown in image #3 to the south; they are separated by about 20 feet of tree cover. The lot appears to be the site of a recently demolished structure, with a driveway from Western Avenue extending into the center.
5. This lot is located in the western section of the corridor, between a new development of multifamily homes and a commercial plaza with offices. There is a driveway on its east side that extends northwards to connect the multi-family homes with Western Avenue.

Map 4-4: Existing Land Use



Map 4-5: Vacant and Underutilized Lots and Buildings

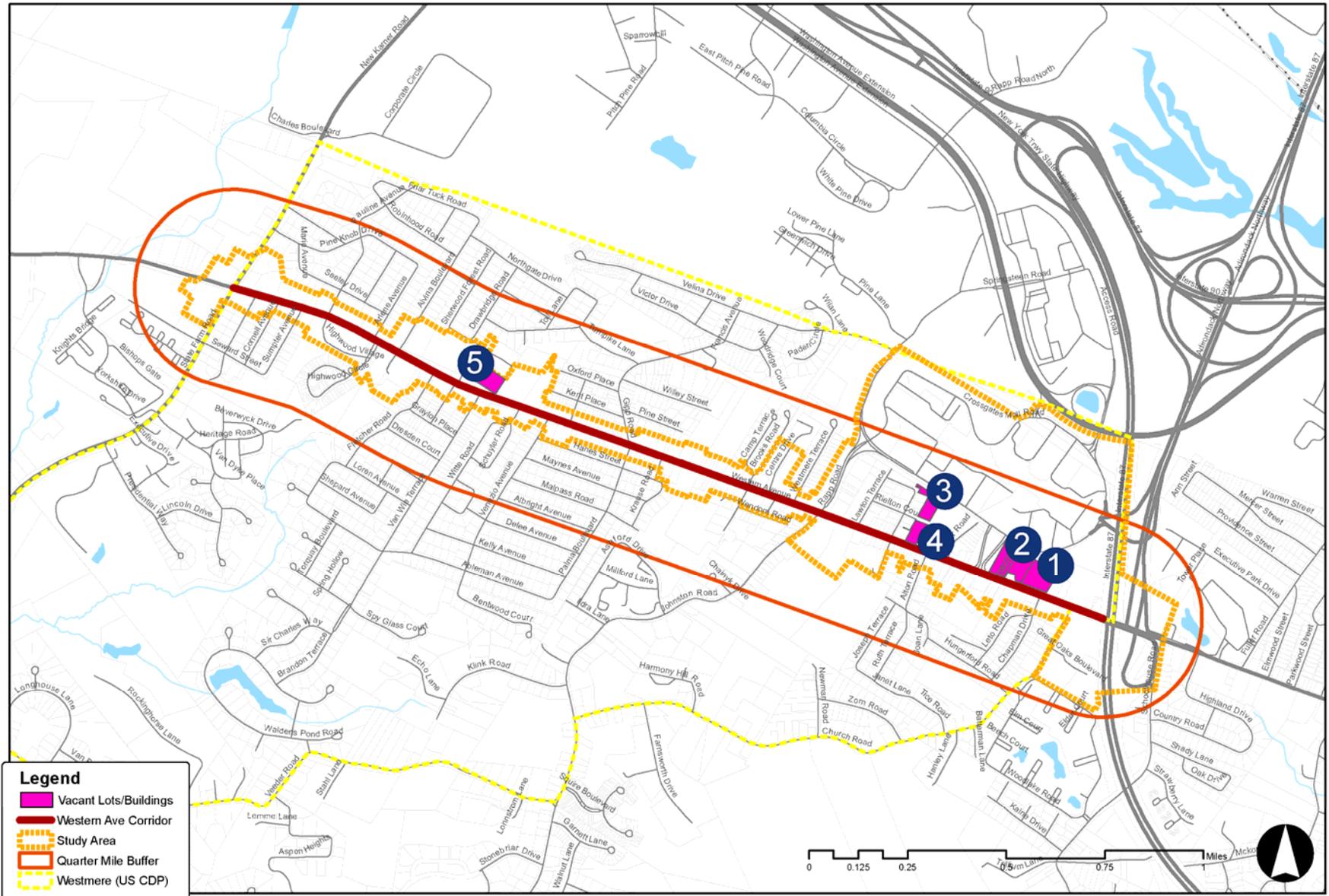


Figure 4-2: Vacant and Underutilized Lots and Buildings



1
LAND EAST OF CROSSGATES ENTRANCE



2
FORMER GAS STATION



3
UNDERUTILIZED PARKING LOT AND LAND
ON CROSSGATES MALL ROAD



4
LAND BETWEEN WESTERN AND CROSSGATES



5
LAND ADJACENT TO MULTI-FAMILY HOMES
AND MIXED-USE LOTS

4.5 Proposed and Recently Approved Development

4.5.1 Glass Works Village PUD draft environmental impact statement (2006)

Glass Works Village is a proposed mixed-use development just west of the Westmere Study Area on 58 acres at Winding Brook Drive and US Route 20 in Guilderland, as shown in Figure 3-4. It includes over 300 residential units, 180,000 sf of commercial space, and a 10,000 sf daycare.

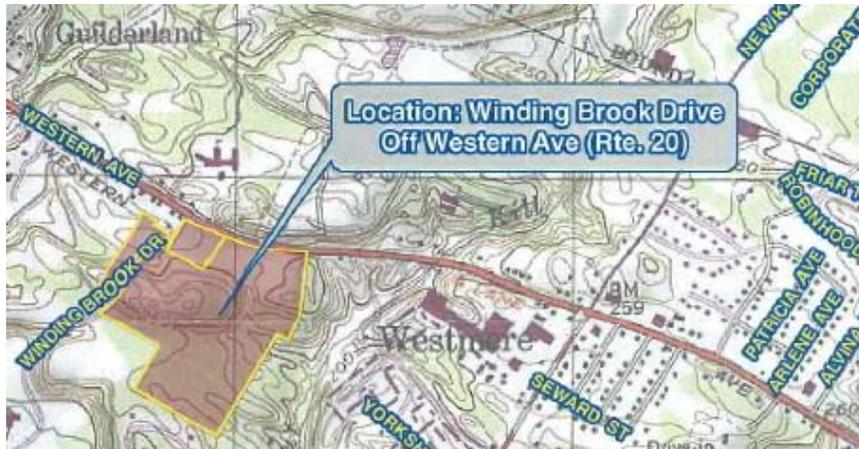


Figure 4-3 Glass Words Village PUD Site Location

Impacts:

- Impacts on Level of Service at key intersections are considered acceptable, and no improvements are proposed except for widening of US Route 20/Western Avenue to provide center lane for entering-left turns.

Recommendations:

- Proposed multi-use path extending into Westmere study area, connecting Guilderland Middle School and Nott Road Park.

- Nature preserve and parks connected by pedestrian and bicycle paths, and roads, as well as sidewalk network between residences and businesses. CDTA transit stop and shelter.

4.5.2 Wolanin Development Proposal traffic impact analysis (2011)

Wolanin is a mixed-use development (248 apartments and 13,000 sf offices) approved and ready for construction on 22 acres at 1700 Western Avenue, across from Crossgates Mall and just east of Johnston road, shown on Figure 4-4.

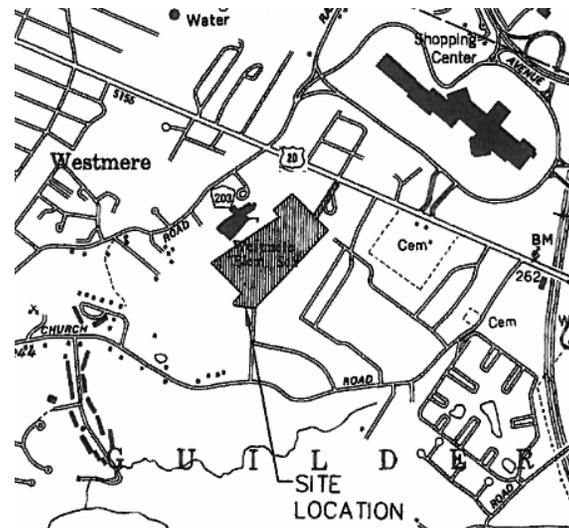


Figure 4-4: Wolanin Development Site Location

Impacts:

- Total trip generation (in+out) estimated as 147 during AM peak hours and 174 during PM peak hours
- No significant impacts on level of service to adjacent intersections, site access driveways, and US Route 20/Western Avenue.

Recommendations

- In addition to entrance on Western Avenue, additional site access provided by extending entrance from Johnston road, behind grocery store. Both entrance points will be unsignalized.
- Proposed internal connection to adjacent Town Center shopping development, which provides additional access to US Route 20/Western Avenue and Johnston Road.

4.6 Zoning

Current zoning within the Westmere Corridor is shown in Map 4-6 and zoning district regulations are summarized in Table 4.2. The majority of parcels along Western Avenue are zoned as Local Business, followed by Business Non-retail Professional. Both zones are intended to attract pedestrian customers from surrounding residential development. The major shopping destinations anchoring the east and west ends of the corridor, Crossgates Mall and Star Plaza, are zoned as General Business. These zones all permit single family homes and a limited number of commercial uses, while many other commercial uses, including mixed-use buildings, require a site plan or special use permit.

There are a few multi-dwelling developments zoned as Multiple Residence, as well as Single Family Residential (R-10 and R-15) parcels dispersed through the study area. Multiple Residence Districts require a special use permit, and may include churches, recreational areas, and day-care homes. Single Family zones permit these uses outright. These residential zones do not permit mixed-use development.

The zoning code specifies minimum spacing requirements for access points on Route 155 and on Western Avenue west of Route 155 (250 feet for residential uses, 400 feet for commercial). These access management controls do not apply to Western Avenue within the study area.

In 2010 and 2016, updates were made to the zoning code to allow for more flexible development siting and design. Shopping centers are defined as “two or more retail businesses or service uses in a single structure or as a group of buildings with common access and common parking facilities.” In local shopping centers, the combined floor area of all businesses and uses does not exceed 45,000 square feet. A regional shopping center’s gross floor area is between 45,000-250,000 square feet, and a super-regional shopping center’s gross floor area is above

250,000 square feet. A supplementary regulation for mixed-use buildings was also added to facilitate development that supports economic and social vitality, trip linking, and travel by public transit, bicycle, and pedestrian travel. This regulation limits the density and percent floor area of residential uses within mixed-use buildings, requires off-street parking to be placed in the rear, and requires adequate provision of pedestrian circulation facilities.

All uses in the corridor are governed by the Town’s off-street parking and loading requirements. Multilevel parking facilities are prohibited, but may be allowed by variance if an applicant demonstrates the primary purpose is to provide additional green space at least equal to the above-ground floor area of the facility. The off-street parking requirements may be satisfied by areas used jointly by two or more parcels, structures, or uses if it can be demonstrated that their parking needs do not overlap in point of time. For mixed-use parcels, total off-street parking requirements are equal to the sum of requirements for each use, unless staggered hours between uses would justify fewer spaces. Except for residential uses, the provision of parking is capped at 125% of the minimum required number of off-street spaces. Subject to review and various requirements, up to

Table 4-1 Off-Street Parking Requirements by Use

USE	OFF-STREET PARKING REQUIREMENT
Single-family homes and duplexes	2 spaces per dwelling unit
Multifamily homes	1.5 spaces per dwelling unit
Grocery, pharmacy, and convenient food store	4 spaces per 1000 square feet of gross floor area
Retail stores	4 spaces per 1000 sf gross floor area
Retail/outlets selling bulky goods	3 spaces per 1000 square feet of gross floor area
General Office	4 spaces per 1000 square feet of gross floor area
Medical Office	7 spaces per 1000 square feet of gross floor area
Restaurants	Varies by type: 1 space per 2-3 seats + 5-20 spaces per 1000 sf gross floor area
Shopping Centers (Local/Neighborhood)	4 spaces per 1000 sf gross floor area
Shopping Centers (Regional)	4.25 spaces per 1000 sf gross floor area

25% of required parking area may be landbanked as green space.

An overview of minimum parking requirements for uses found in the Westmere corridor is presented in Table 4-1.

At the time of the writing of this report, the Town of Guilderland zoning code has just finished an update process. The updated code is available at http://www.townofguilderland.org/sites/guilderlandny/files/uploads/zoning_and_land_use_law_final_1.pdf.

Map 4-6 Zoning Map (Source: Guiderland Cadastral Data)

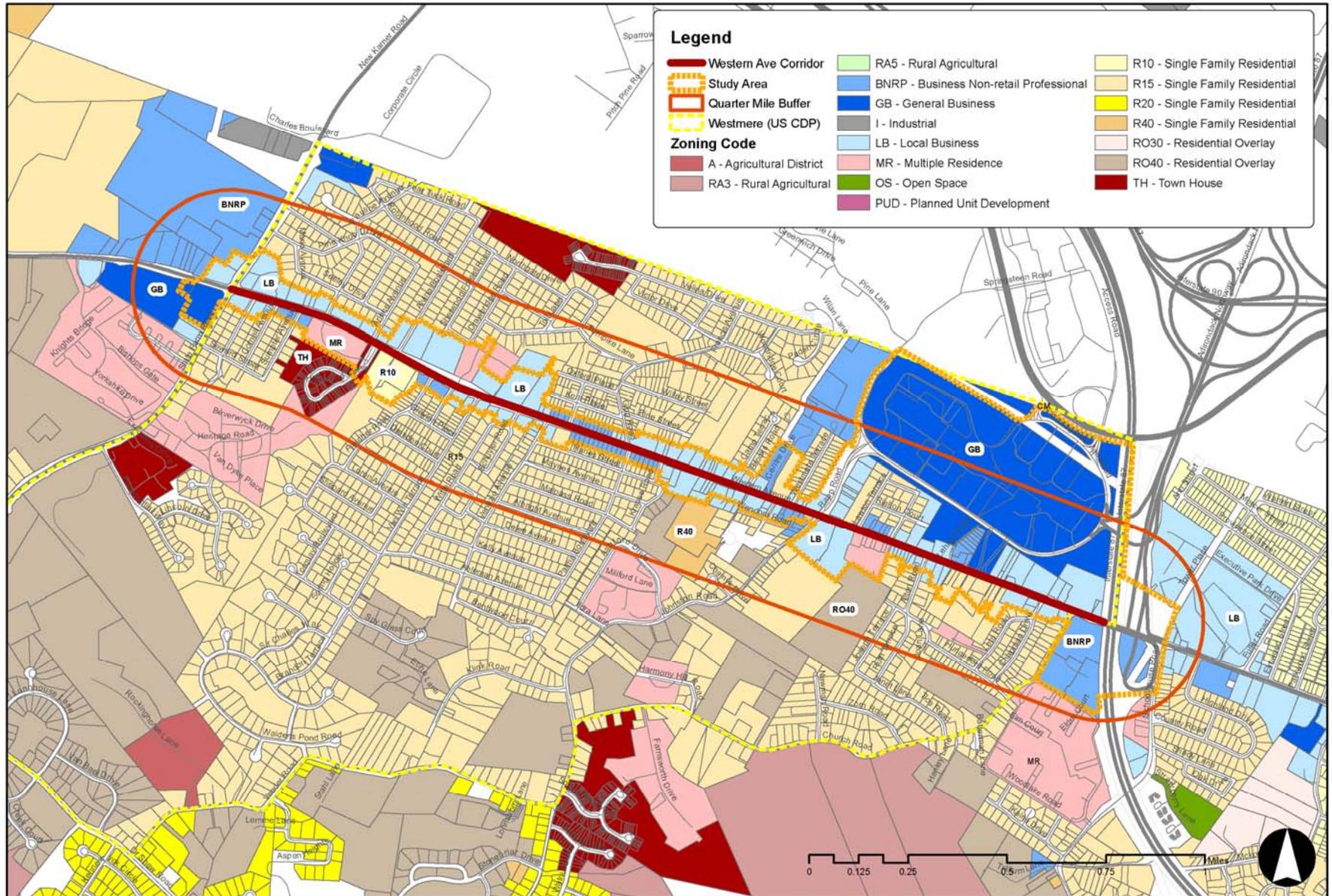


Table 4-2 Summary of Zoning District Regulations in the Westmere Corridor

Zone name	Description	Primary uses allowed	Uses allowed with site plan	Uses allowed with special use permit	Dimensional Requirements		Other
					Min lot size	Max Height	
Single-Family Homes (R-10, R-15)	Maintain and promote suitable residential living environments and protect their residential character	Single family homes, 2-family homes (if fronting on state highways, with certain provisions), family apartments, public building, public parks and recreation, minor home occupations and day-care homes.	Bed and breakfasts, cemeteries, home occupations, public utilities	Churches, day-care centers, private schools, independent and assisted living facilities and nursing homes, golf courses, community centers, one accessory apartment.	R-10: 10,000 sf R-15: 15,000 sf	35 feet or 2.5 stories	
Multiple Residence (MR)	Medium-density residential	None. Site plan approval required for all uses.	Apartments, single family and multifamily structures, churches, recreation areas, day-care homes.	Home occupation, religious institutions, residential and care facilities	Ranges from 10,000 sf (1 unit) to 18,750 sf (4 units)	35 feet or 2.5 stories	Maximum density of 12 units per acre and no more than 8 units may be attached by common or party walls.
Business Non-Retail Professional (BNRP)	Non-retail services, Mixed-use, transition from residential to commercial	Single family homes, family apartment, family or group family daycare, minor home occupation, 2-family home	Barber or beauty shop, offices not exceeding 2,500 sf, most public buildings	Professional offices, public facilities, mixed-use buildings, private schools, religious institutions	7,500 sf	35 feet or 2.5 stories	
Local Business (LB)	Smaller-scale commercial, predominantly retail. Provides additional alternative housing opportunities within mixed-use buildings.	Any Permitted Use listed in BNRP district	Any use listed in BNRP district as permitted with site plan or SUP, bed and breakfast, offices of not more than 20,000 sf, recreation	Various retail, home occupation, lodging, mixed use, offices of more than 20,000 sf, restaurant, local shopping center	20,000 sf	35 feet or 2.5 stories	

Zone name	Description	Primary uses allowed	Uses allowed with site plan	Uses allowed with special use permit	Dimensional Requirements		Other
					Min lot size	Max Height	
General Business (GB)	Larger-scale commercial	Any use listed as a Permitted Use in the BNRP District	(1) A use listed as a Site Plan Use or Special Use Permit in the BNRP District. (2) A use listed as a Site Plan Use in the LB District.	Retail outlets, department stores, regional and super-regional shopping centers, various other intensive retail, and all uses permitted under an SUP in LB.	20,000 sf	35 feet or 3 stories	Office buildings are allowed to exceed height limit with additional setbacks of 6 feet per story.
Supplementary Regulations and Definitions			Definition		Gross Floor Area Requirements		
Shopping Center Definition			Two or more retail businesses or service uses in a single structure or as a group of buildings with common access and common parking facilities.		Local: < 45,000 square feet Regional: 45,000-250,000 250,000 square feet Super-Regional: > 250,000 square feet		
Mixed-Use Buildings			Both residential and non-residential uses co-located in appropriate buildings.		Residential uses must be less than 25% of ground floor area and less than 40% of building's floor area		

4.7 Urban Form and Streetscape

The urban form along the corridor is generally auto-oriented with frequent driveways, set back building frontages, and a limited number of crosswalks. Figure 4-5 presents a typical street section on Western Avenue. New sidewalks make walking along the corridor significantly better. Block sizes range from 300 feet to 1,650 feet, and the longest blocks are located on the eastern and western ends of the corridor, where land is less intensively developed. Over a thousand residential parcels are within a quarter mile, or a typical walking distance, from the Western Avenue study corridor.

Map 4-7 of building footprints shows that the buildings fronting Western Avenue are placed within larger parcels and have a smaller ground

coverage compared to the residential lots behind. Map 4-8 of building ages suggests that the residential neighborhoods off Western Avenue are comparatively stable, with most developments built between 1950 and 1990s. The potential redevelopment of older and underutilized buildings must be used as opportunity to influence the urban form of the corridor in the future.

Figure 4-5 to 4-7 present aerial and street-level photography of the corridor's three streetscape segments described in Section 2.1 and depicted in Map 1-2. The eastern and western ends of the corridor are anchored by regional shopping centers on large lots: Crossgates Mall and Star Plaza. Car-oriented development dominates the streetscapes surrounding these gateways, which are characterized by large front setbacks and parking lots, few crosswalks and pedestrian amenities, as well as long distances between destinations. The Western Avenue streetscape directly across from Crossgates Mall is particularly inactive

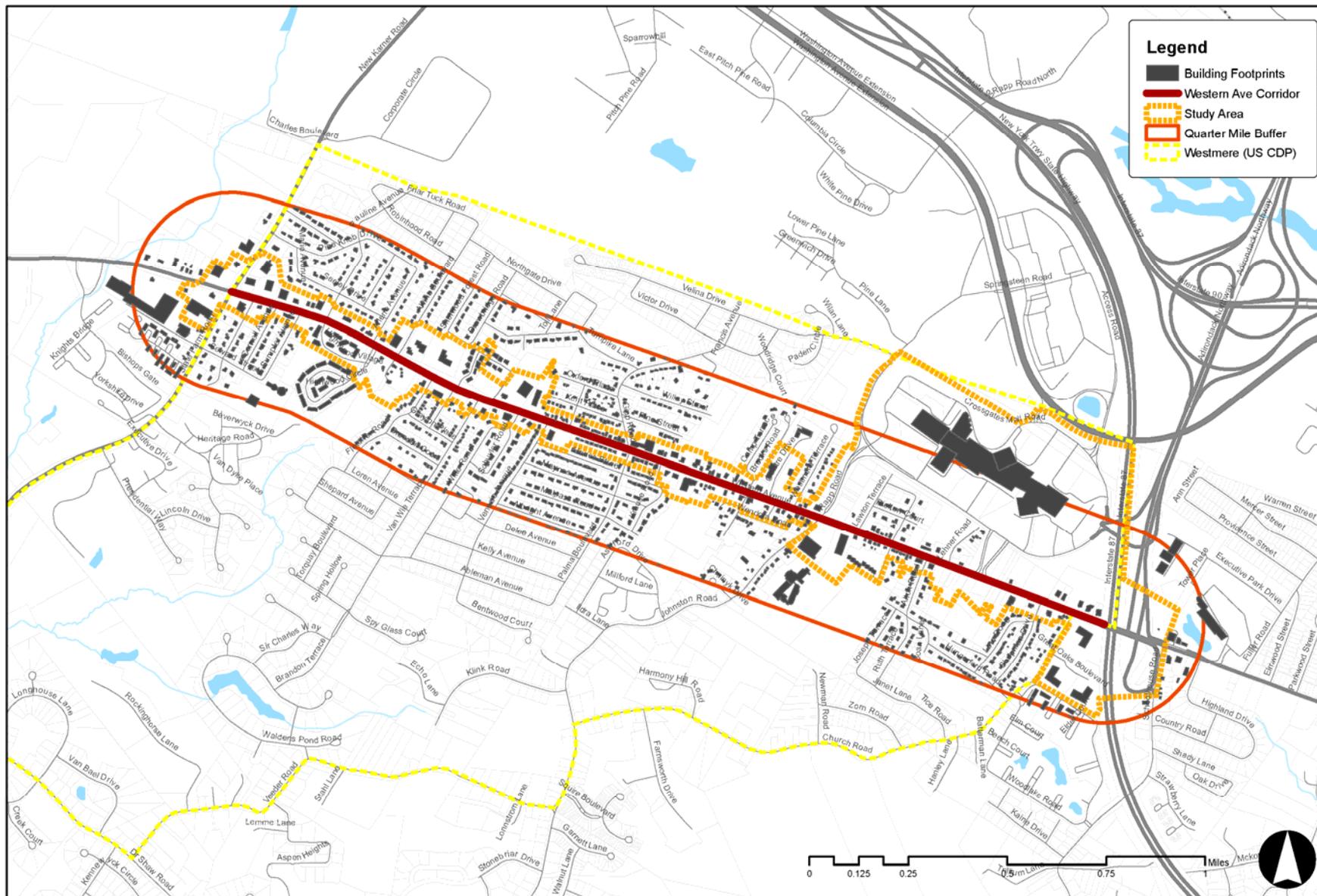
because of undeveloped land surrounding the Mall on the north side, along with the Beth Abraham-Jacob Cemetery on the south side.

The streetscape in the central part of the corridor is more accommodating to pedestrians. There are several neighborhood-scale shopping and service centers, such as Town Center and Westmere Plaza. Westmere Plaza is a good example of pedestrian-oriented development, because most of the parking is located behind the building. Between Johnston road and Witte road, there are many older homes on small lots that are used

as residences or businesses. Along with new multi-family developments just off of Western, this area of small homes provides a relatively high-density mixture of uses which are well connected with the residential street grids extending north and south of the corridor.

The streetscape characteristics are documented in the street sections in Figure 4-8. The following section describes the traffic characteristics of the street in more detail.

Map 4-7: Figure Ground (Source: Prepared from NYSGIS LiDAR Data)



Map 4-8: Age of Developments (Source: Guilderland Cadastral Data)

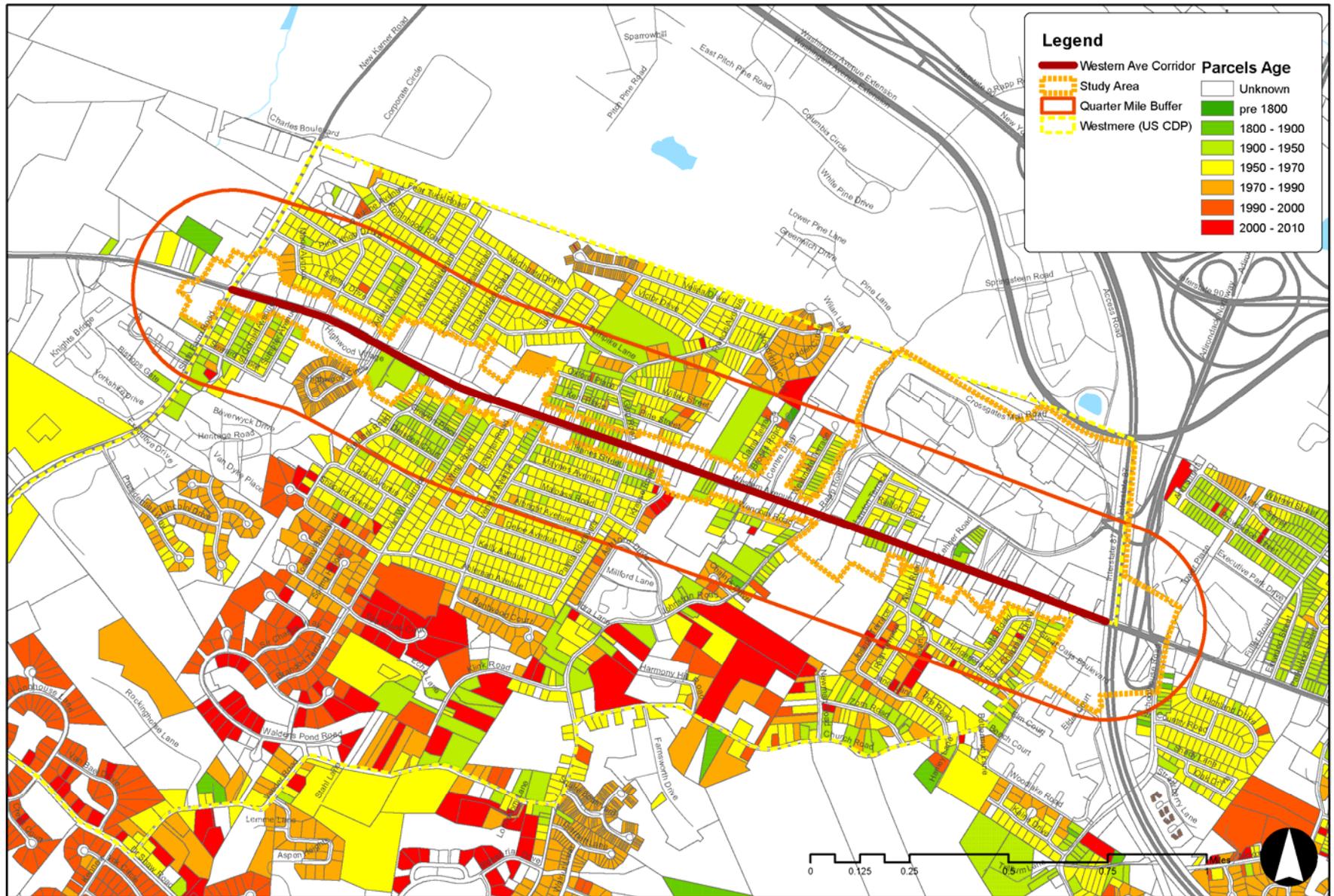


Figure 4-5 Streetscape Segment A – Auto-oriented Development

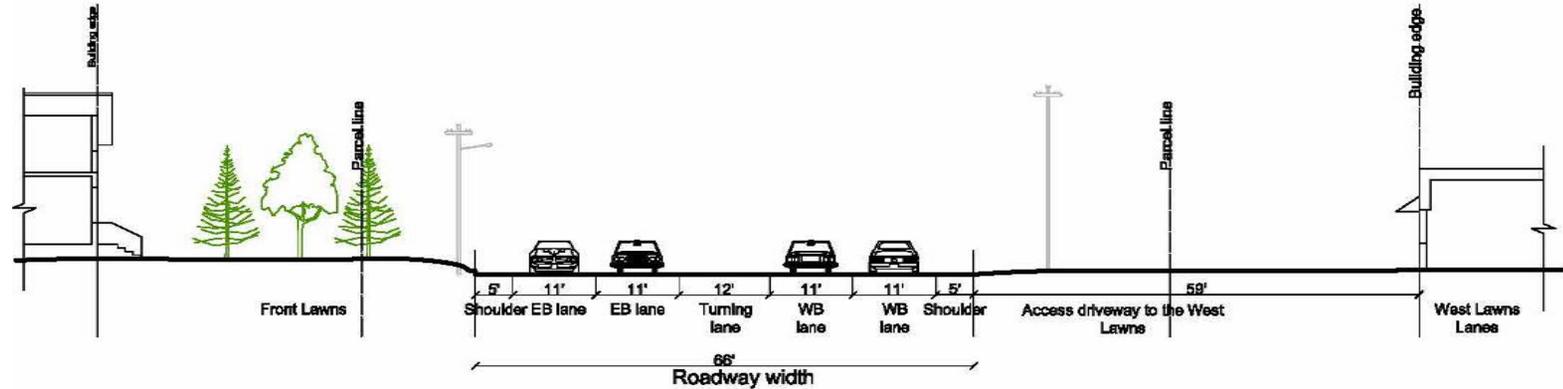


Figure 4-6: Streetscape Segment B – Small Scale Mixed Use and Residential

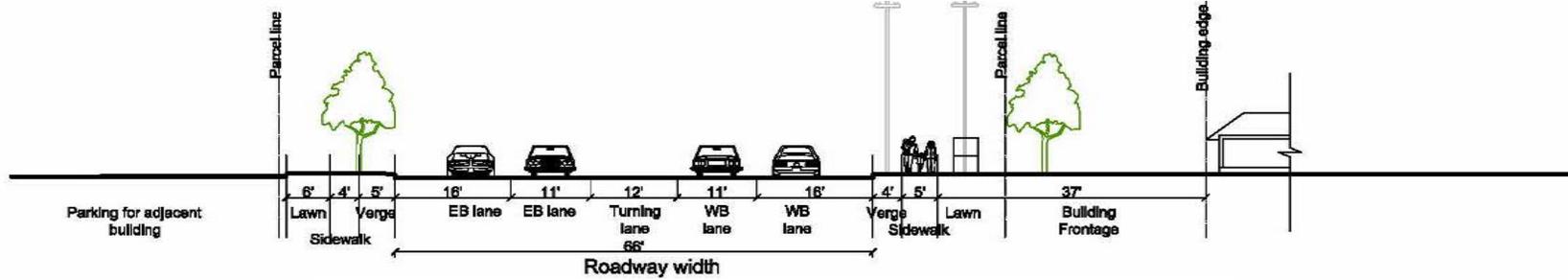


Figure 4-7: Streetscape Segment C - Large Scale Mixed Use

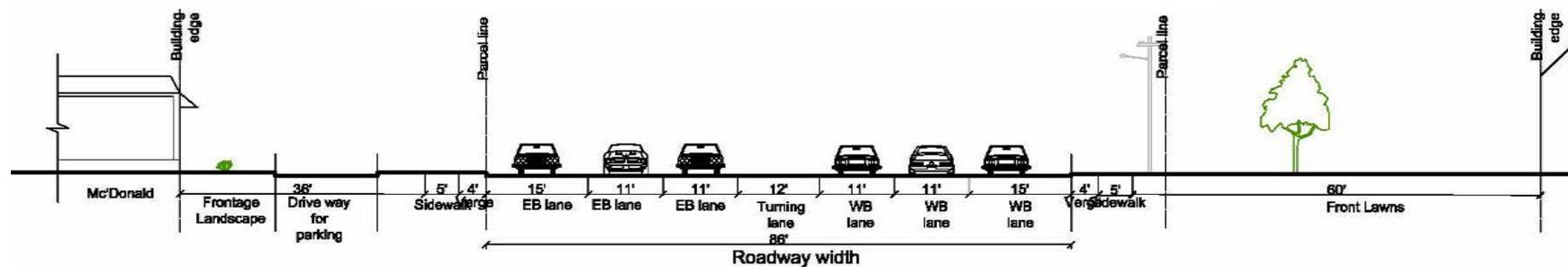




Section A: Western Avenue, Western Segment – E of Arlene Avenue looking W



Section B: Western Avenue, Central Segment – W of Camp Terrace looking W



Section C: Western Avenue, Eastern Segment – E of Chapman Drive looking W

Figure 4-8: Typical cross sections in each of the three corridor segments.

4.8 Road Network and Traffic Characteristics

Western Avenue is a five-lane arterial through most of the study corridor. Crossgates Mall Road is a 4-lane road. All other roads in the study area are 2-lane roads. Near the eastern end, Western Avenue becomes 6 lanes before crossing I-87. As seen from the AADT numbers in Map 4-9, traffic volumes on Western Avenue between Route 155 and Johnston Road/Rapp Road are lower, roughly two-thirds or three-quarters of those at either end of the study corridor. Western Avenue has a speed limit of 40 mph throughout the study area. NYS DOT's 2010 speed count average weekday report for Western Avenue between New Karner Road and Crossgates Mall Access Road shows average speeds of 25 mph in the eastbound direction and 30.4 mph in the westbound direction. 85th percentile speeds at the same spot are 45.2 mph eastbound and 46.5 mph westbound.

Annual average daily traffic (AADT) counts on Western Avenue indicate that traffic growth from 2000-2010 has been uneven across the corridor, as shown in Figure 4-9. Traffic volumes between the Adirondack Northway and Crossgates Mall have grown over 20%, while counts between NY 155 and Crossgates Mall have declined by 15%. To the west of the study area, there was over 33% growth in traffic volume from 2000-2004 between NY 155 and NY 146.

Traffic Signals are located at intersections of State Farm Road/New Karner Road (Route 155), Witte Road, Gipp Road, Ardsley Road,

Johnston Road/Rapp Road and at the entrance to the Adirondack Northway (Reference Route 910F).

Traffic incidents on Western Avenue between 2011 and 2013 were concentrated in the eastern section of the corridor, and at intersections rather than along links. Map 4-10 shows that over half of all accidents occurred in the 1/3-mile section between intersections with I-87 and Crossgates Mall Road, while another 10% occurred at the intersection with New Karner Road on the Western end of the corridor. As per data from the 2011-2013 period rear-end collisions were most common. Other prominent collision types include overtaking and left-hand turns against other cars. Map 4-11 shows locations where there were pedestrian and cyclist accidents. Analysis carried out by New York State Department of Transportation (NYSDOT) as part of the recent sidewalk project did not reveal any pattern in contributing factors or any notable accident pattern that would suggest actionable engineering solutions, and neither crash map reveals a notable accident pattern. More enforcement by the Town and State Police as well as more education about safety may be beneficial.

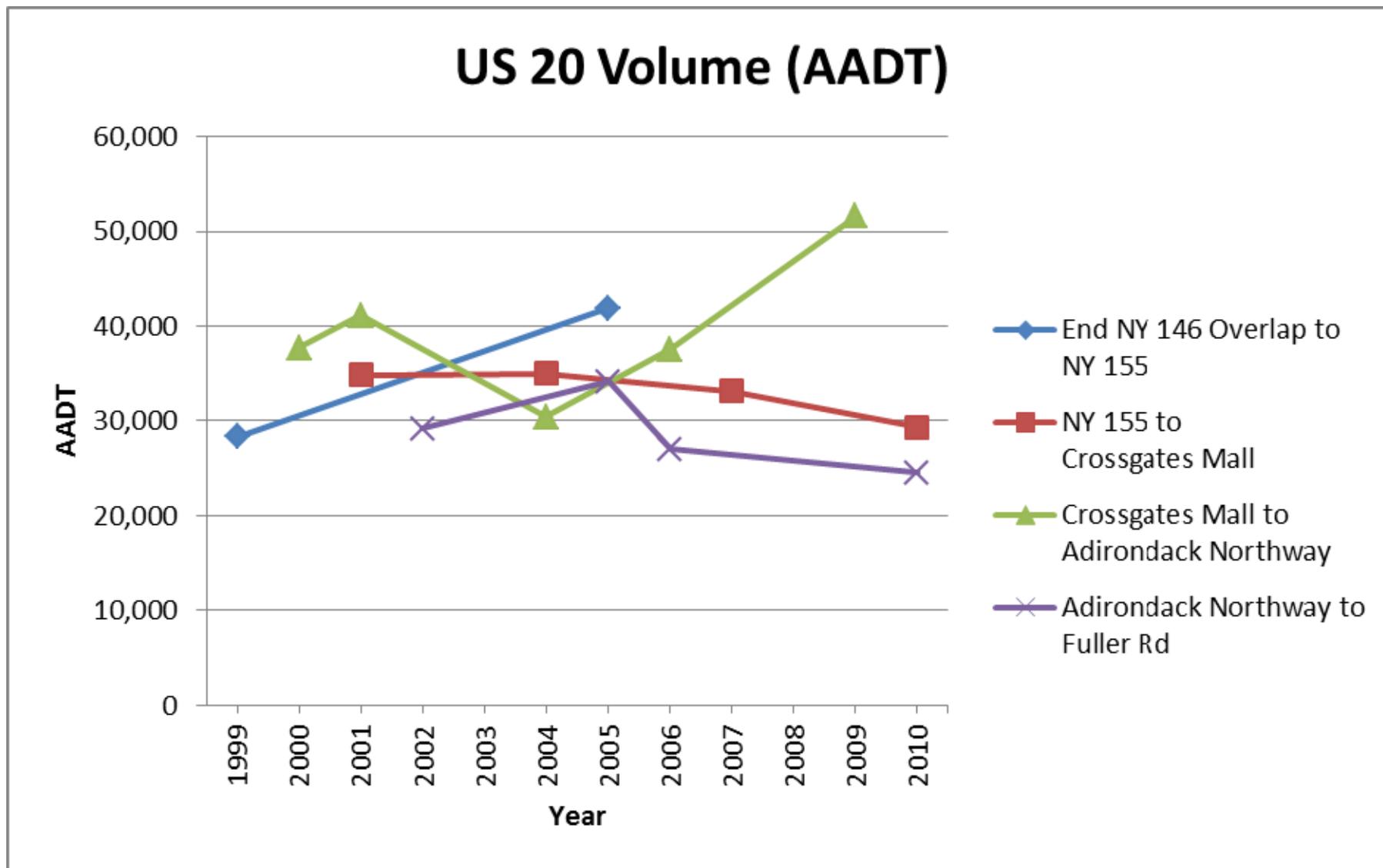
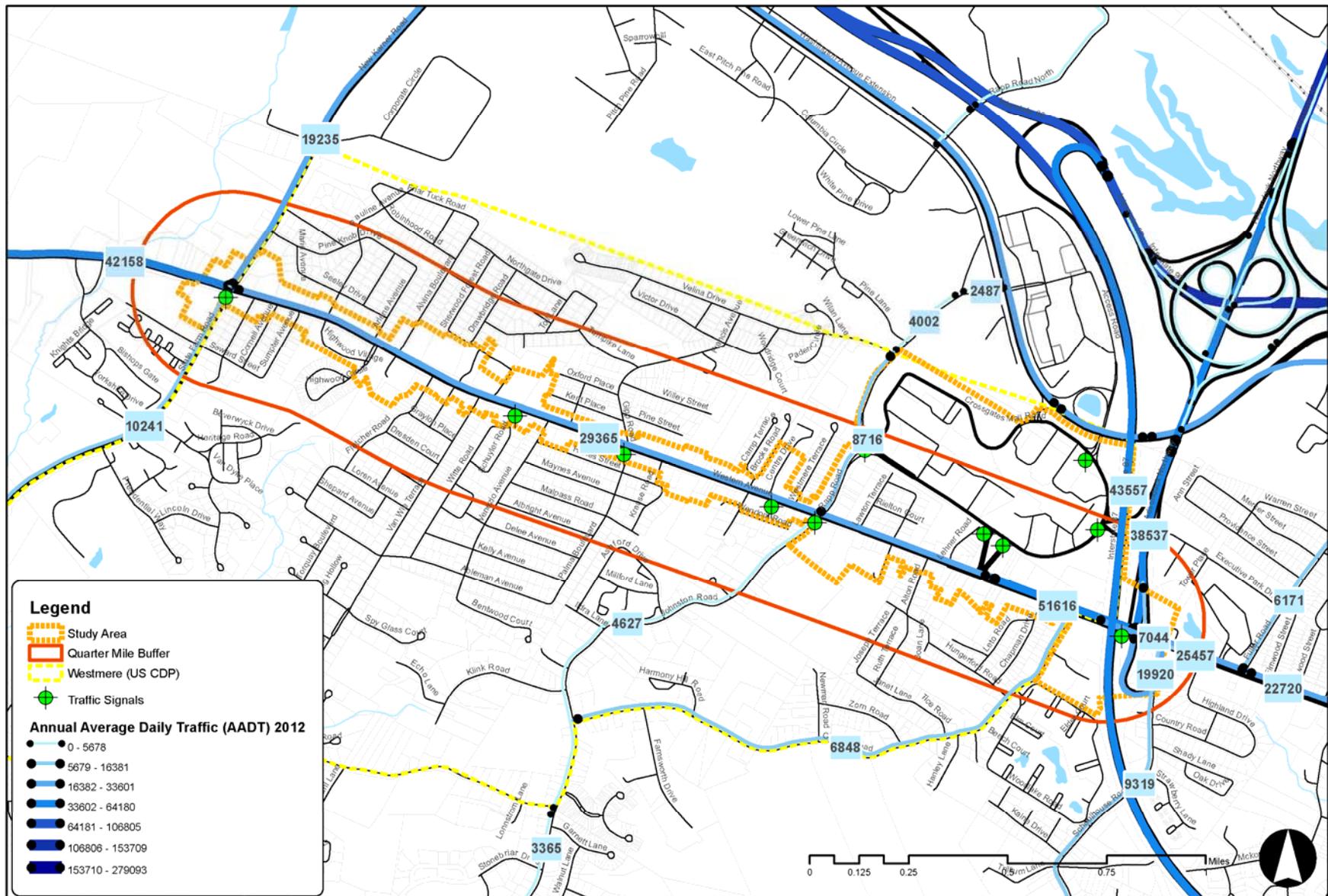
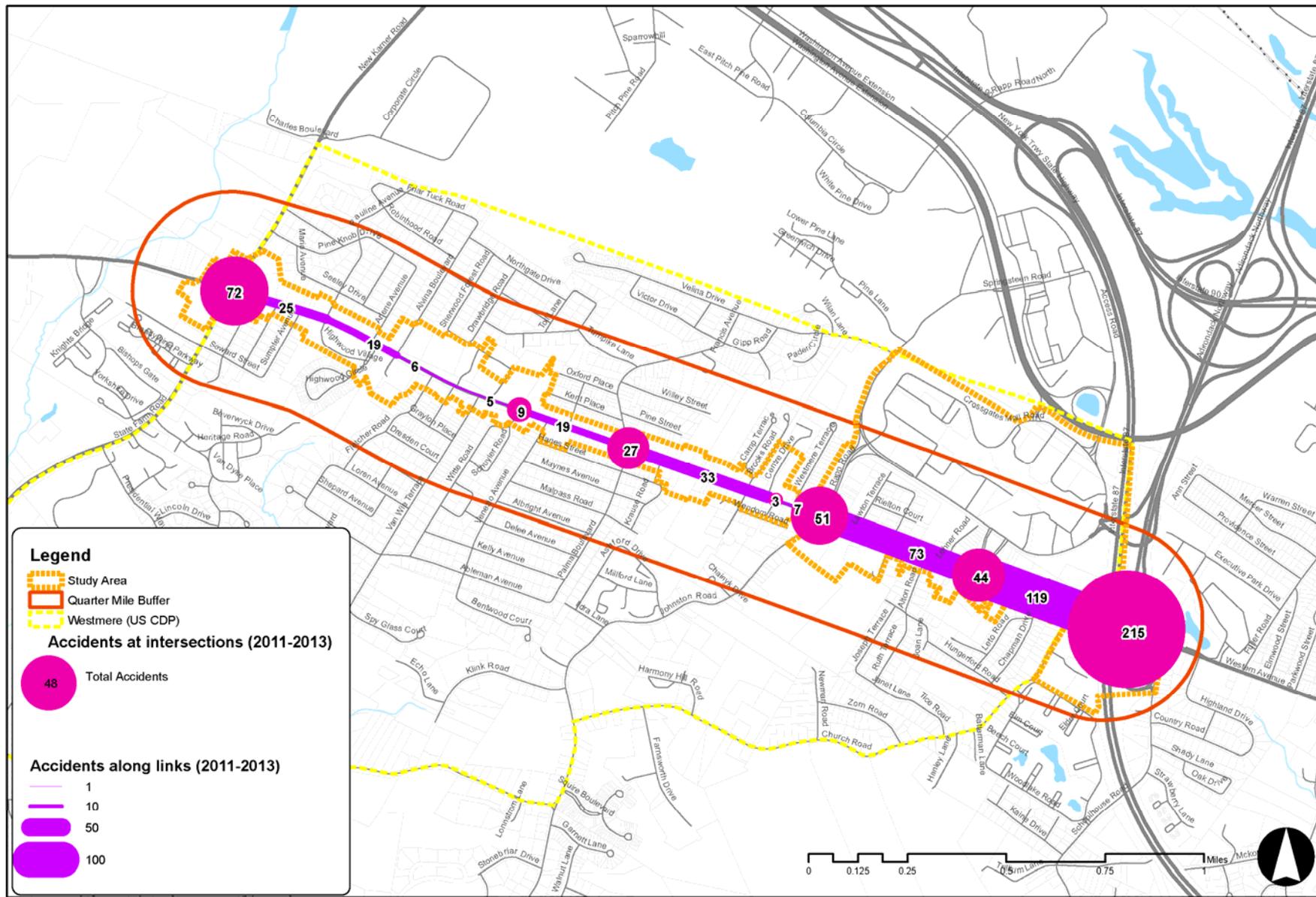


Figure 4-9: Annual Average Daily Traffic on US Route 20, 1999-2010 (Source: NYSDOT)

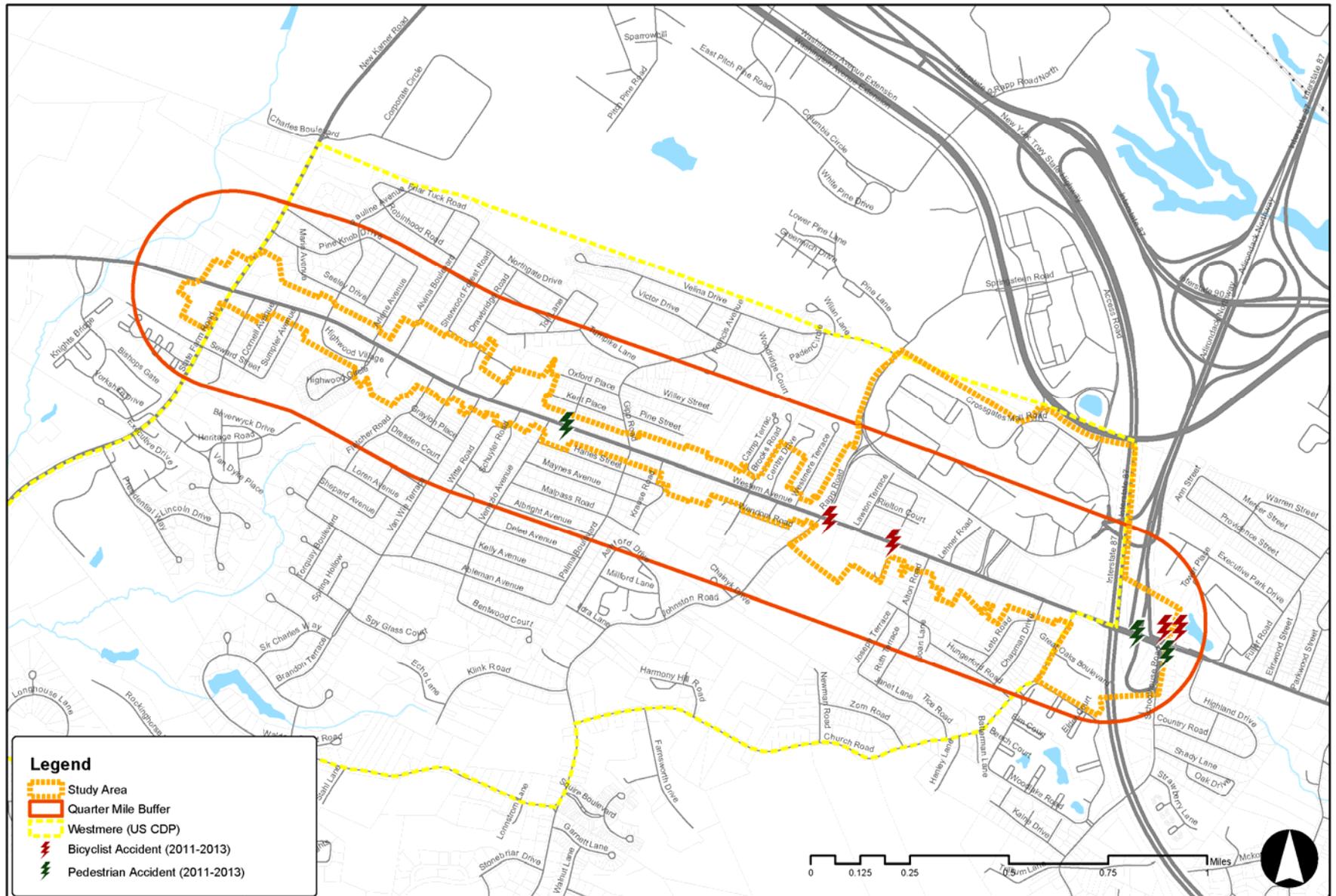
Map 4-9 Traffic Characteristics (Source: NYSDOT AADT 2012)



Map 4-10: Accident Locations (2011-2013) (Source: NYSDOT)



Map 4-11: Bicyclist and Pedestrian Accidents (Source: NYSDOT)



4.9 Pedestrian and Bicycle Accommodations

Western Avenue has been designated as State Bike Route 5 (Map 4-12). The portion of Western Avenue to the east of I-87 has bike lanes. However, bike lanes are not present on Western Avenue within the study corridor. Bicycle and pedestrian facility improvements have been implemented as part of the DOT's sidewalk project. This study will consider bike facilities and improvements to pedestrian crosswalks. Sidewalks are present on both sides of Western Avenue. However, there are few side streets with sidewalks (Map 4-13).

From among the access roads, Route 155 and Rapp Road have been identified for pedestrian and bicycle priority. Rapp Road also provides connectivity to the Rensselaer Lake Trail within the Pine Bush preserve to the north of I-90. While there are several bike racks near Western Avenue within Albany city limits, there are no bike racks in the study corridor.

4.10 Public Transit

A number of CDTA bus routes, as shown in Map 4-14, provide service to Western Avenue within the study corridor. These routes are:

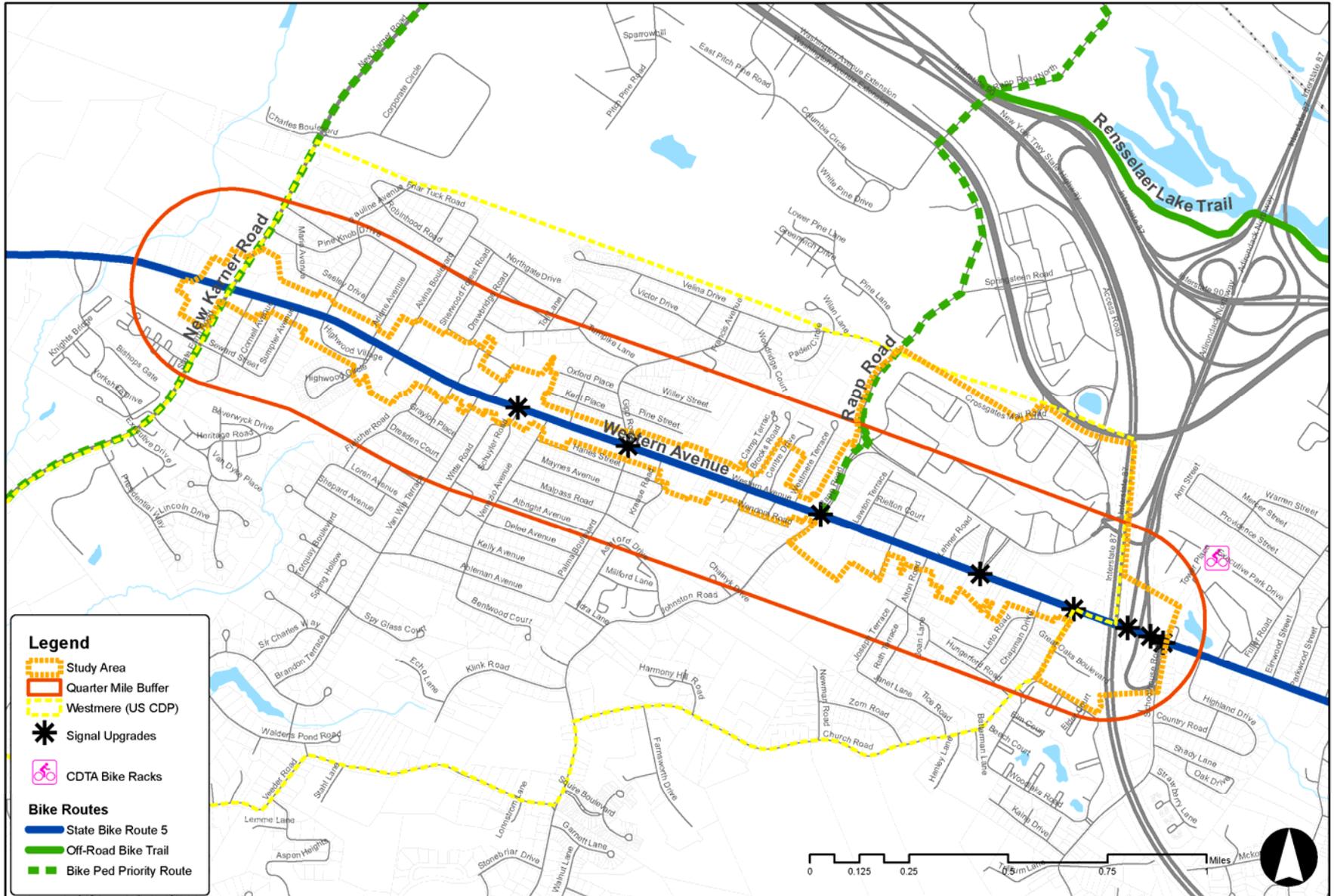
- 117 – Guilderland/Colonie Crosstown,
- 719 – Altamont/Voorheesville and
- 763 – Albany/Schenectady via US Route 20/Western Avenue.

These routes provide transit connectivity to downtown Albany, Crossgates Mall, the State University of New York at Albany, the College of Nanoscale Science and Engineering and downtown Schenectady. Map 4-15 shows that transit usage is highest at the Crossgates Mall and Twenty Mall stops.

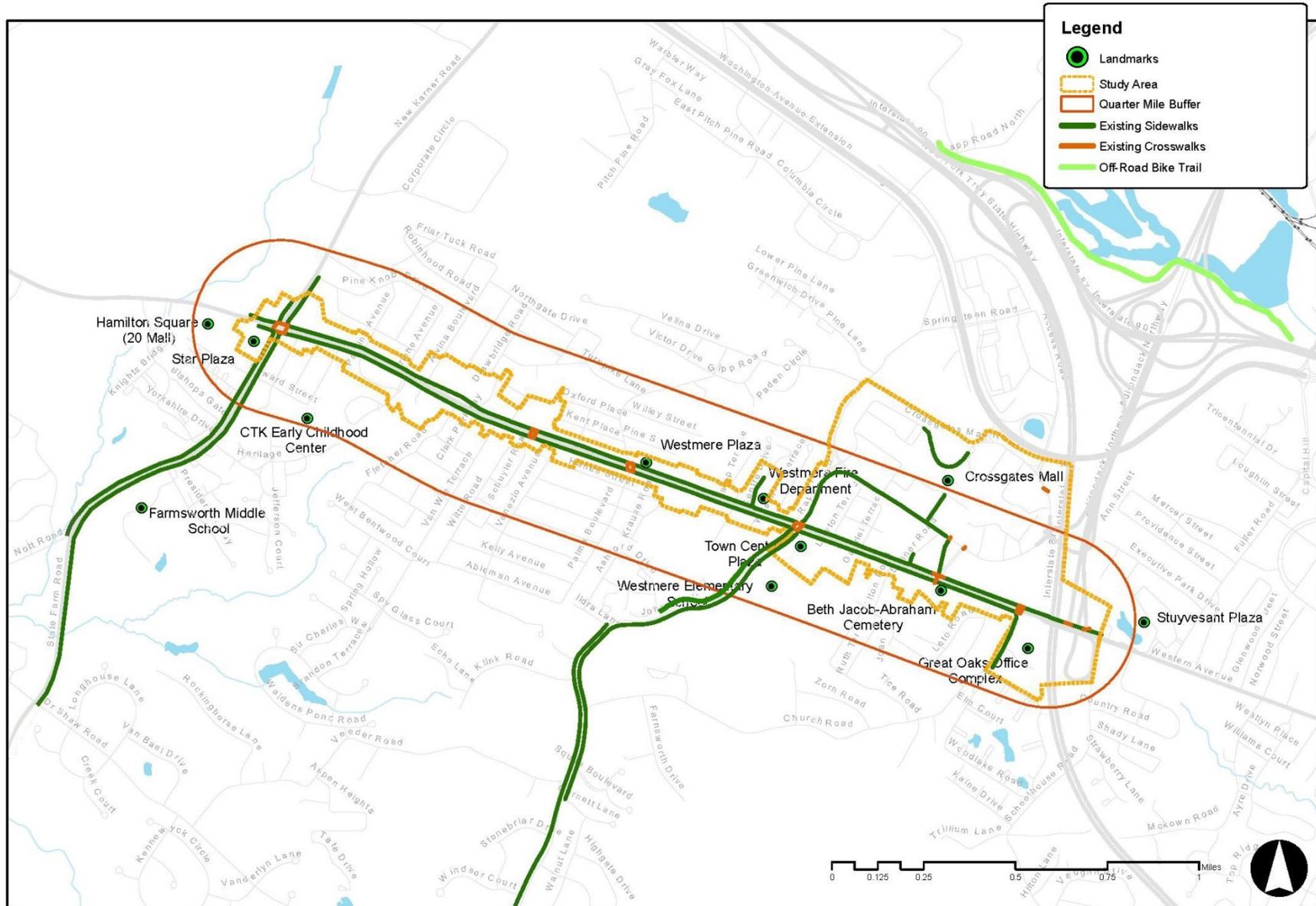
Transit ridership along this corridor is boosted by CDTA's universal access arrangements with the universities and colleges.

CDTA is planning an expansion of the BusPlus BRT system to include a route connecting Crossgates and downtown Albany.

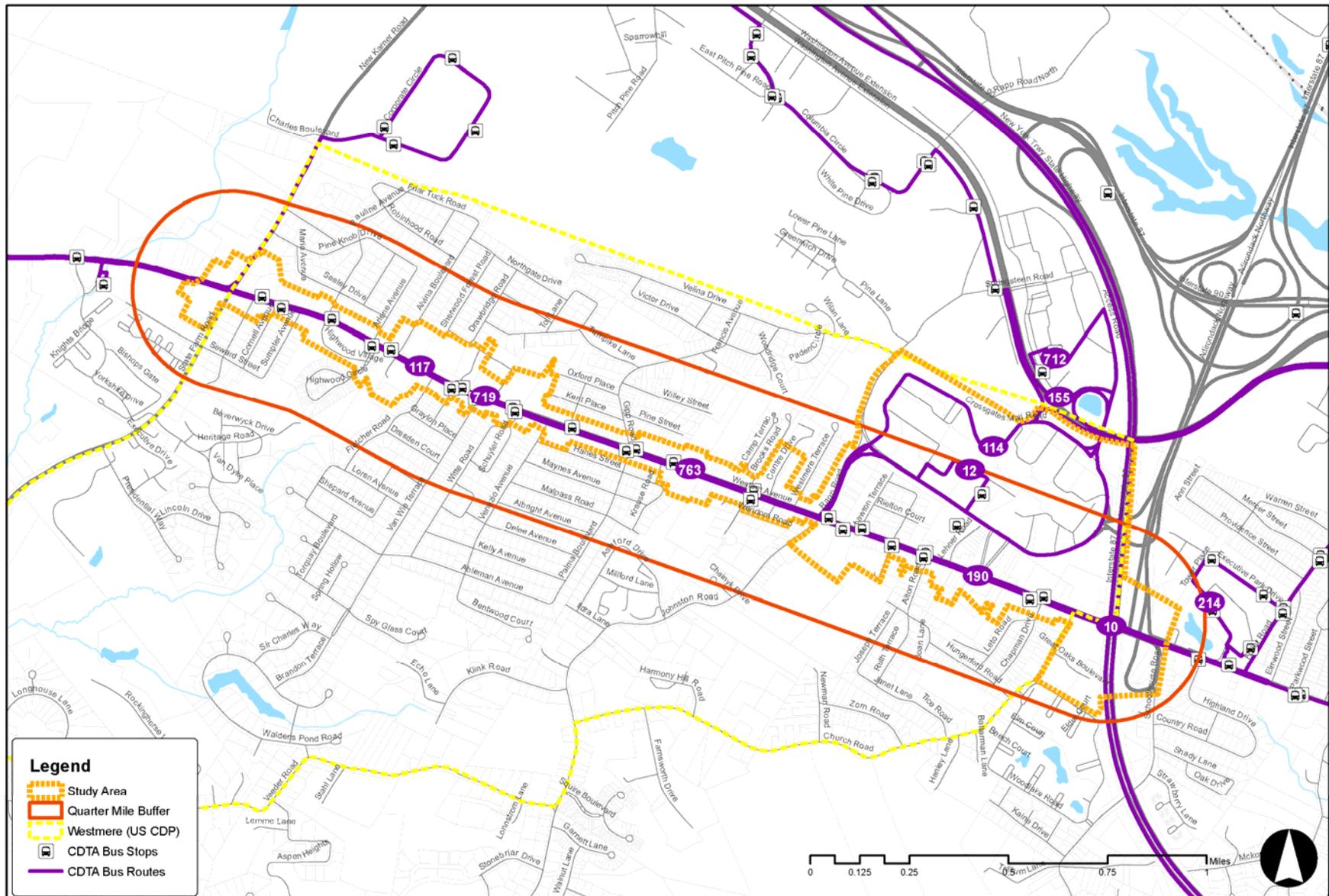
Map 4-12: Crosswalk and Signal Improvements included in the NYSDOT Sidewalk Project and Other Bicycle Facilities



Map 4-13: Pedestrian Facilities including Crosswalk and Sidewalk Improvements included in the NYSDOT Project (Source: IBI Group 2015)



Map 4-14: Transit Connectivity (Source: CDTA Bus Route and Bus Stop Data)

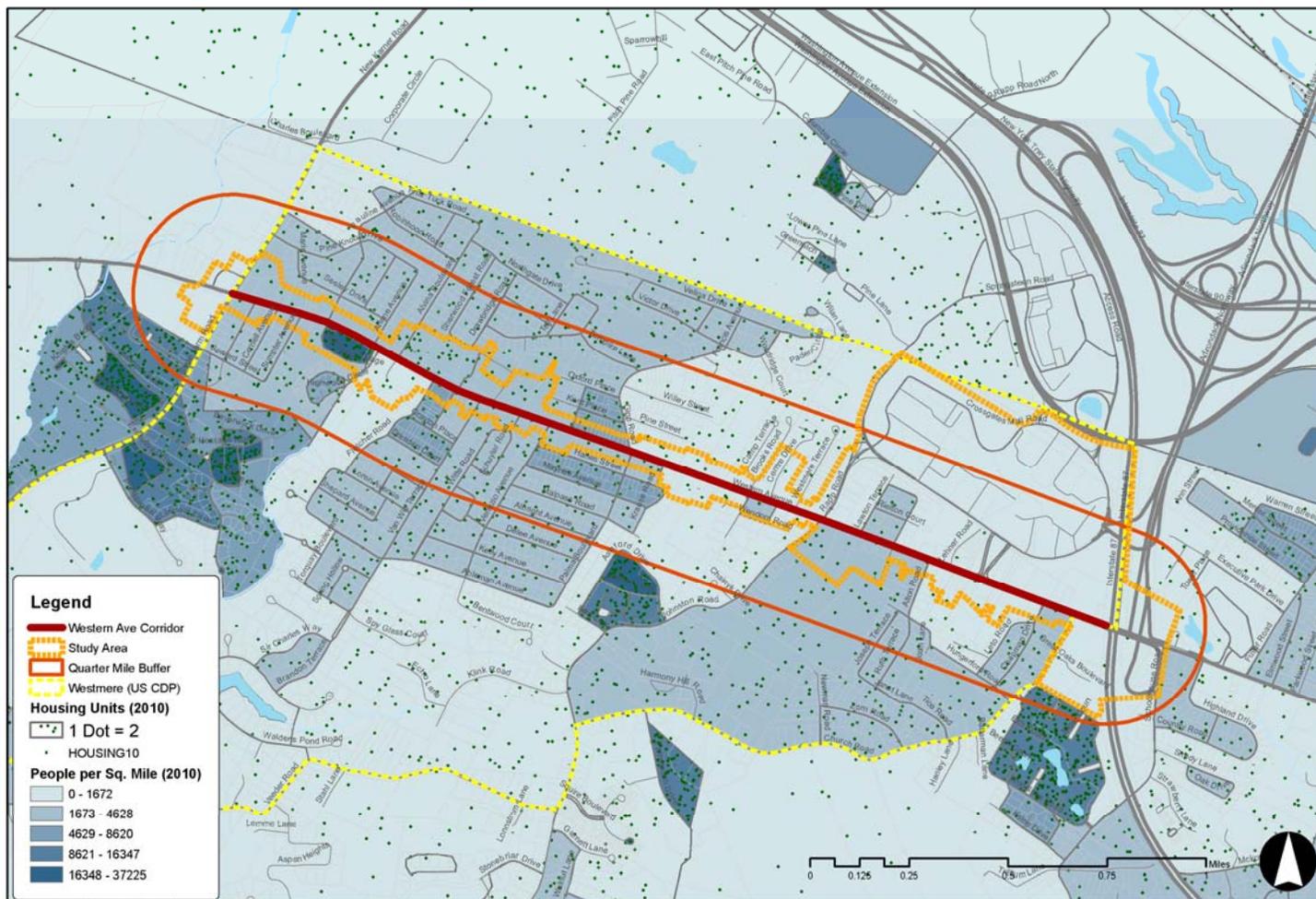


4.11 Population Density

Map 4-16 presents 2010 population and housing density by census block. In general, the population density is higher on the southwestern side of the corridor. A look at vacancy rates in the region shows that the

neighborhoods are flourishing and have high demand for multifamily residences. There are a number of low density pockets that can be densified in a strategic manner, such that they can take advantage of future transportation improvements.

Map 4-16: Population Density (Source: 2010 Census)



4.12 Summary of Land Use and Transportation Existing Conditions

The US Route 20/Western Avenue corridor through the eastern portion of the Town of Guilderland has an outward appearance of a typical suburban commercial arterial that has transitioned over the years from a rural highway to a suburban commercial and residential corridor. However, the environment along US Route 20/Western Avenue in Westmere is more varied than a quick drive through the corridor might indicate. The street includes a number of large retail

stores such as Price Chopper at Johnston Road and another Price Chopper, a CVS, and a RiteAid at NY Route 155/New Karner Road. Crossgates Mall is just off the corridor on the eastern end. A large number of small retail businesses, often in older-style, parking-in-front strip buildings that are compatible with walking and transit. There are a number of low rise office buildings. Older single family houses line parts of the US Route 20/Western Avenue and many of the side streets just off of it. Significantly, a large number of apartment complexes have been built in recent years along the corridor raising the average density of housing, although generally using auto-oriented set back from the street site plans.

5 Recommendations

Based on an analysis of the existing conditions information found in the previous sections, discussions with the Study Advisory Committee (SAC) and comments received from the public at the project open house, the following recommendations are made.

5.1 Land Use

The urban form along the corridor is generally auto-oriented, with frequent driveways and setback frontages which often have parking in the front of the buildings. The new sidewalks along the length of the corridor functionally improve pedestrian access, but it will take some time before the sidewalks look integrated into the corridor. Block sizes range from 300 feet to 1,650 feet, and the longest blocks are located on the eastern and western ends of the corridor, where the scale of structures is larger and land is less compactly developed.

5.1.1 Eastern Segment

The eastern segment of the Westmere Corridor is characterized by a wide ranging mix of uses including regional shopping destinations such as Crossgates and local, small scale business establishments, single family homes and community services. It also has a number of vacant/underutilized lots with a high potential for infill development. The

Wolanin development, a residential development with some retail on a 22 acre site, just south of Western Avenue, has been approved and is ready to start construction. It can potentially become a catalyst for redevelopment of this area.

The new zoning in this segment includes several different zones: “General Business” for businesses serving the broader region (such as Crossgates Mall); Business Non-retail Professional, which supports professional offices, research and development and other like uses; and “Local Business” for shops and services serving the local community more than the region. Most of the residential properties are single family homes and are zoned “single family” to protect this use and maintain the stability of these small neighborhoods. However, many of these homes are being acquired by commercial developers, including Crossgates Mall and its subsidiaries, without regard for their zoning classification.

Figure 5-1: Crossgates Mall



5.1.1.1 Create a Transit Oriented Development Neighborhood

Transit Oriented Development (TOD) focuses on creating neighborhoods or areas that are pedestrian friendly, supportive of transit and emphasize alternate modes of transportation. The TOD model provides a mix of housing, shopping, entertainment and employment within walking distance (½ mile) of transit which, in Guilderland’s case, is bus and bus rapid transit service (BRT) with a BRT stop planned for this area within the next three years. A TOD neighborhood is expected to be fairly dense to keep walking distances shorter and maximize the number of people living in, working and visiting the area.

While several elements of TOD are recommended throughout the Westmere Corridor with regard to access management, traffic calming, pedestrian, bicycle and transit improvements, this particular part of the corridor has critical features that would be necessary for a successful TOD neighborhood. These features include the availability of underutilized or vacant land adjacent to major destinations that attract high volumes of people (such as shopping, entertainment and employment centers) and could support high ridership transit stops. The missing elements, mixed-use structures and compact, walkable more “urban” form can be created when land exists to integrate and transition uses into a more connected area with short street blocks, mixed use buildings, public spaces and a strong pedestrian, bicycle and transit presence.

This recommendation is discussed in detail in Section 5.2.

5.1.2 Central Segment

The central segment of this corridor is unique. It has small-scale retail and offices flanking single family residential neighborhoods, characterized by small lot sizes, smaller block sizes, and an interconnected street network. Many of the commercial establishments are in converted single family homes, the physical character of which has been maintained. The zoning for this segment is generally “Local Business,” reflecting the small scale commercial strips and converted single family homes.



Figure 5-2: Small scale retail frontages in the central segment

5.1.2.1 *Maintain existing scale and character*

The character of this part of the corridor is more traditional, resulting from the conversion of many single family homes to office and service related businesses. The traditional street grid with a more walkable compact form from the days of being a residential neighborhood is maintained. The local retail and services in more traditional commercial spaces reflect the same scale. As a result, this section of the corridor represents the most cohesive scale and architecture. As such any infill development, expansion or alteration projects should be required to maintain the existing character by capping the size of individual structures and massing at a compatible scale. The Town's Zoning Ordinance, as modified in 2016, includes general design standards that require maintenance of existing character. This will be an important tool for protecting the character of this neighborhood, as well as supporting strong local businesses and an overall resilient town economy that relies on the appeal of the area. Additional more specific standards that could be employed for this area through the use of an overlay include:

- Capping the size of structures at 15,000 SF
- Capping the length of an individual building facades at 30-50 linear feet
- Requiring architectural elements that are compatible with the residential architecture and neighborhoods. For example, pitched roofs, siding and large window coverage on the first floor should be required while flat roofed, plain concrete-walled structures with few windows should be prohibited.



Figure 5-3: Example of compatible infill architecture and scale: pitched roofs, residential architecture and scale, landscaping, low profile signage.



Figure 5-4: Example of incompatible infill architecture: flat roofed, unattractive windows, large setback, parking in front, and minimal landscaping. (Google Street View, Western Ave., Albany)

5.1.2.2 Access Management Opportunities

The compact form and more traditional neighborhood street grid with parking lots located in the rear of lots creates opportunities for improved access management for development projects. The Town requires that access management improvements be a part of a development project when practicable – this includes projects related to expansions and site alterations to existing developed sites. There are potential locations for diverting cars and non-motorized traffic to side streets or creating shared access alleyways or driveways that would avoid accessing properties from Western Avenue. Consideration of these side connections and shared driveways should be integrated as part of a new development site planning. See Section 5.3.1, Cross Access and Driveway Consolidation for more recommendations.

5.1.2.3 Enhance Pedestrian Connectivity and Amenities

The compact form of development and traditional neighborhood uses and scale, with buildings closer to the road and parking in the rear, naturally created a more walkable environment than the rest of the study area. The arterial, in essence feels narrower and more walkable. As with access management considerations, Town Planners should work with developers and property owners to enhance the walkability of the area through rear lot connections and connections to the new sidewalks, bus stops, street trees and other landscaping and pedestrian amenities.

5.1.2.4 Increase use of green infrastructure and landscaping

All infill development, redevelopment, and expansion projects should include the use of green infrastructure, which will improve storm water management and increase aesthetic appeal, wherever possible. Green infrastructure elements can include sustainable (such as pervious) paving, green roofs, rain gardens, and increased landscaping and green space. Parking lots should be broken up with landscaped areas wide enough for proper plant, shrub and tree growth and water absorption. Existing trees should be preserved to the extent possible.

Landscaping in front yards would improve the aesthetic feel and walkability of the corridor. Landscaping options could include trees, shrubs, plants and green space on the perimeter of parking lots, within

parking lots, along road frontage, adjacent to transit stops, corners or other gathering locations. The 2016 updates to the Guilderland zoning code include provisions for encouraging green infrastructure and landscaping around and on surface parking lots.



Figure 5-5: Example of a green roof on a hotel in Lake Placid, NY

5.1.3 Western Segment

The more conventional commercial corridor returns at the western end of the study area, but at a lower density than elsewhere, with larger lot sizes that allow for some large commercial structures (although the floor to area ratio—the total area of a building divided by the total area of the lot it sits on—remains low). The area features Star Plaza and some higher density multifamily residential properties. State Farm/New Karner Road, a major north-south connector, forms the other major intersection within the corridor and the boundary of the Study Area. The potential 58 acre mixed use development at Winding Brook Drive to the west of the study area could catalyze high-density residential development in the area.

5.1.3.1 Integrate Winding Brook Drive Development

Just west of the Study Area is the proposed Winding Brook Drive Development project, which proposes 350 residential units and some

retail. If the project advances, it should be a priority to create pedestrian and bicycle connections between this property, bus stops, and local “destinations” such as Hamilton Square and Star Plaza, as well as the other commercial development at the intersection of New Karner Road and Western Avenue.

5.1.3.2 Reduce Impervious Surface Impacts

The study area existing conditions profile identifies the large spans of impervious surface associated with Star Plaza, just outside the study area, which can potentially lead to environmental issues related to storm water drainage and ground water recharge. Therefore as expansion projects or site redevelopment is considered on or adjacent to these parcels, the use of green infrastructure is recommended.



Figure 5-6: Star Plaza

5.2 Transit Oriented Development

As described in the general land use section, there are several characteristics of the “eastern segment” of the Study Area Corridor that make it an appropriate location for Transit Oriented Development (TOD.)

TOD focuses on creating neighborhoods or areas that are pedestrian friendly, supportive of transit specifically and emphasize other alternate modes of transportation. Many characteristics of TOD are the same as other model neighborhood design frameworks, such as the U.S. Green Building Council’s LEED® (Leadership in Energy and Environmental Design) Neighborhood Design (ND), and Traditional Neighborhood Design. The TOD model provides a mix of housing, shopping, entertainment and employment within walking distance (½ mile) of transit which, in Guilderland’s case, is bus and bus rapid transit service (BRT) with a BRT station planned for Crossgates within the next three to five years (see Map 5-1 for reference). A TOD neighborhood is expected to be fairly dense to keep walking distances shorter and maximize the number of people living, working and visiting the area.

While several elements of TOD are recommended throughout the Westmere Corridor with regard to access management, traffic calming, and pedestrian, bicycle and transit improvements, this particular part of the corridor has critical features that would be necessary for a successful TOD neighborhood. These include high ridership transit stops and a future BRT station, a regional shopping and entertainment center, some higher density commercial, residential and employment uses within close proximity to one another and several large underutilized/vacant parcels and smaller infill lots for future development.

Crossgates Mall, the focal point of this area, provides regional shopping, eating and entertainment. Town Center Plaza on the south side of Western Avenue provides local goods and services including a large grocery store and personal service establishments. On the periphery of the proposed TOD area are employment centers such as Executive Park and Great Oaks Office Park, with additional regional shopping and eating establishments at Stuyvesant Plaza. The SUNY Albany Campus is a short bike ride or transit stop away.

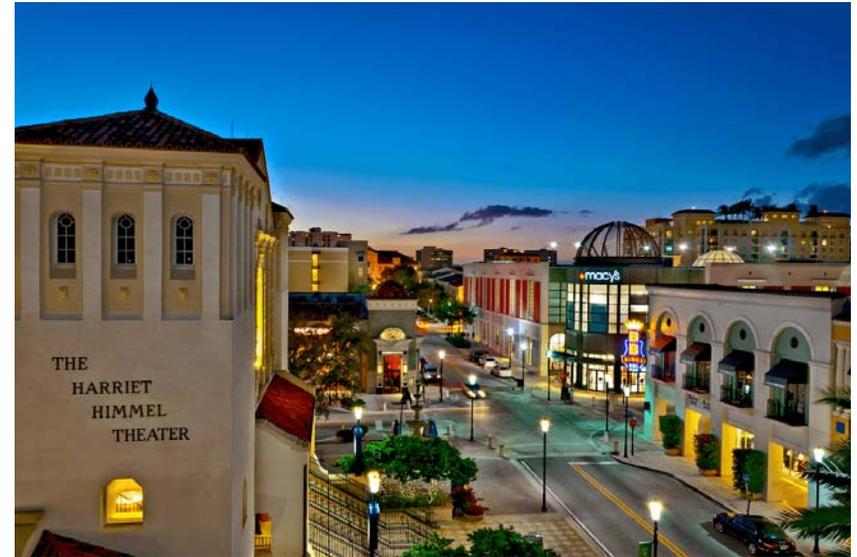


Figure 5-7: City Place, West Palm Beach, FL

Example of large scale shopping and entertainment integrated with upper floor office space and residential units. Streetscape is pedestrian scale with amenities, corner public spaces, pedestrian-scale lighting, and comfortable sidewalks.

The present housing options in the eastern segment of the study corridor include single family homes which were traditionally owner occupied on residential streets. Some of those immediately adjacent to Western Avenue and Crossgates Mall are transitioning to rental properties, many of which have been purchased by commercial developers, including Crossgates and its related companies. On the periphery of the area, single family neighborhoods remain intact. The impact of potential increase in density, traffic and activity should be carefully evaluated. Focusing density in the proposed TOD area will help protect viable residential areas and neighborhoods from commercial and higher density residential development pressure. A new apartment complex (Wolanin) is being developed on the south side of Western Avenue just outside of the study area and proposed TOD area directly adjacent to the Town Plaza. Due to its proximity, residents of the complex are expected to benefit from the shops and services provided by the potential TOD.

Map 5-1: Destinations within a 1/2 mile radius of the center of the proposed TOD location



Traffic volumes and access complexities associated with the I-87 Ramp to Crossgates, the Crossgates Ring Road, and the intersection of Fuller Road Alternate and Western Avenue create challenges to making this corridor more pedestrian-, bicycle- and transit-friendly. Future land use and site development should consider the broader context of the area rather than individual pieces if the desire is to create a state of the art transportation system on the corridor that is highly functional, safe and multi-modal. A TOD strategy inherently requires a focus on improving access to non-auto oriented modes of transportation and integrated street networks.

The most effective way for the Town to support and incentivize TOD is to establish development criteria for a defined geographic area within the Town's zoning framework. Several important guidelines or standards compatible with TOD already exist for general development within the revised and proposed Town Zoning Code, such as access management expectations, support for mixed-use structures and pedestrian linkages. Some additional features of a TOD would need to be incorporated into a possible overlay district to achieve the appropriate density and mix of uses.

5.2.1 TOD Overlay District Land Use and Density

The use of a zoning "overlay" district is the recommended land development tool to support and incentivize TOD for this area. The district is overlaid onto the existing or proposed zoning framework and encourages a more compact form, appropriate density pedestrian oriented development, and provides more direction to developers. Several elements of this form and function may also be useful elsewhere in the corridor but at a smaller scale where transit is not necessarily the focal point of a mix of commercial, residential and institutional uses.

The overlay district should cover an area incorporating a ½ mile radius of the proposed Crossgates Mall BRT Station with accommodation for natural boundaries and intact residential areas as appropriate. The TOD Overlay Zoning District could use roads for boundary delineation as a matter of practicality. For example it could include the area west of Crossgates presently zoned Business Non-Retail Professional (BNRP); all of the Crossgates Mall properties within the access road to the west side of the I-87 ramp; and all of the parcels south of the Crossgates access

road between Rapp Road, the I-87 ramp and Western Avenue. These parcels are presently zoned a mixture of Light Business (LB), General Business (GB), and some single family residential districts from the I-87 Ramp to Rapp Road.



Figure 8: Proposed TOD District Boundary

5.2.1.1 Support a Wide Variety of Non-Auto Dependent Land Uses

The proposed TOD area has at least four different zoning districts on the existing and proposed zoning map as summarized in Section 5.1.1. Within the overlay, the permitted uses should include a wide range of residential, institutional, retail, service, entertainment and employment uses found in the "General Business" (GB) District. However, several auto-dependent uses are also permitted that should be discouraged on the interior of the overlay district area, such as car dealerships, car

rentals, car washes, service garages, drive through windows and other like uses.

5.2.1.2 Support Higher density development

TOD assumes compact development at a density that will better support walkability and transit. This kind of density has numerous beneficial effects—that can largely be achieved without increased traffic, since TOD residents tend to use non-automotive modes of travel—for the surrounding area and the entire town, including broadening of the tax base, provision of a wider array of living options to accommodate the growing diversity in types of households, and more efficient use of existing, under-capacity infrastructure such as the Crossgates Ring Road. In order to achieve this in the proposed Westmere TOD, it is recommended that certain lot development standards be increased beyond the immediate area’s present zoning standards with regard to lot coverage, building height and residential density. These lot development elements could be adjusted upward as a matter of course or incentivized when other desired development practices are included such as mixed-use standards, redevelopment of brownfields (previously used and possibly polluted sites), green infrastructure and green buildings using the U.S. Green Building Council LEED® standards as guidance, and higher quality pedestrian and bicycle amenities and streetscape elements. Zoning elements that would increase density include:

- Increasing maximum lot coverage to at least 80%;
- Increasing building heights to at least 45 feet or three stories with a minimum building height of 2 stories to discourage one-story, single use structures;
- Reducing setbacks and establishing “build-to” lines; and
- Increasing the number of dwelling units permitted per acre with a mixed-use structure.

5.2.1.3 Support and Incentivize mixed use structures

As discussed in action 5.2.1, the density desired for a TOD would require a zoning modification which could be incorporated in the recommended TOD Overlay. The Town’s current draft zoning permits up to 8 units per acre with a building height cap of 35 feet or 2 ½ stories. These parameters are a lower density than what is typically characteristic of

TOD and likely won’t bring enough “feet to the streets” to create a walkable, viable mixed use community. It is recommended that the permitted number of residential units in mixed-use structures be increased to at least 12 dwelling units per acre and the height of a mixed-use structure increase to at least 45 feet to allow three stories. An additional bonus of 4-6 units could be permitted with LEED Building, LEED Neighborhood development or other elements that the Town feels can enhance marketability and desirability of the area.



Figure 5-9: Clarendon, VA, Credit: Steve Ruark for the New York Times

Example of integration of residential, public common areas and retail.

5.2.1.4 Require Ground floor commercial for mixed use structures

First-floor commercial uses create more interactive and aesthetically inviting buildings and streetscapes. They embrace the kind of design guidelines recommended in this section and reinforce an attractive walking environment for local residents and visitors. It is assumed that this development will be less niche retail oriented and more immediately focused on serving residents of the area. A transition from this type of

commercial development to the retail center at Crossgates Mall can be achieved by development of outer land parcels of a lesser scale or even “ringing” the mall with smaller businesses creating more of a streetwall effect with community scaled street connections and view corridors. This softening of the Mall edge has been employed in other shopping centers, including in Burlington, Vermont and elsewhere. The Town’s present and proposed zoning allows 25% of ground floor to be residential in a mixed use structure. The TOD Overlay should require that mixed-use structures permit *only* commercial uses on the ground floor.



Figure 5-10: Burlington, VT, Source: www.Hotelroomsearch.net

Example of mixed-use development: large scale retail mixed with second floor office and residential integrated into a pedestrian streetscape.

5.2.1.5 Reduce Surface Parking Lots

A cornerstone element of TOD is to support transit and reduced emphasis on the automobile through walkable, compact design. An abundance of surface parking directly conflicts with this concept in both form and function. As such, TOD typically reduces the number of required off-street parking spaces by at least 25%, caps the off-street parking permitted at the minimum required elsewhere, and supports shared parking arrangements and structure parking. The Town’s zoning, as modified in 2016, has reasonable, low to average off-street parking requirements with

a cap on the number of spaces permitted at 125% of the minimum number of spaces. There is also support for shared parking lots. For the TOD, it is recommended that these standards be taken a step further to reduce the amount surface parking. This could be achieved by making the maximum number of off-street parking spaces equal to the minimum; reducing the minimum number of spaces by 25%; and incentivizing shared parking lots.

5.2.1.6 Promote Landscaped Buffers

Landscape buffers mitigate any of a number of undesirable impacts to a residential community, including: development, noise, weather impacts, etc. In order to gain the support for transit-oriented development by Westmere residents, a significant landscape buffer would have to remain in place between neighborhoods and any new development that is proposed. Landscaped buffers would preserve neighborhood character and property values by improving undesirable impacts between potentially incompatible uses.

5.2.2 TOD Connectivity and Street Design

Within the area identified for a potential TOD there are currently a number of existing streets, including dead end neighborhood streets running north and south off Western Avenue and service roads such as Rapp Road and the Crossgates Access Road (ring road). There are opportunities for future connections to be made across undeveloped or underutilized parcels that could create an integrated street network and pedestrian connections. The establishment of desired street connections in either a plan or within zoning should be part of the TOD Overlay District. Future development should integrate buildings and streets into a pedestrian and transit environment using build-to lines, maximum setbacks and other site developments techniques.

5.2.2.1 Future Street Connections

It is recommended that future street extensions or connections be identified now and reflected in the zoning, so that as properties are considered for development, the Town can seek extensions, and negotiate ownership and maintenance responsibilities. Examples include:

- Extension of Lawton Terrace south;
- Extension of Rielton Court east;
- New street connections on underutilized “outparcels” associated with Crossgates Mall;
- New streets running east and west of Rapp Road; and
- New street connections or improved access to key destination sites within, and adjacent to the TOD area including all transit stops, Town Center Plaza, Great Oaks Office Park, and the Wolanin apartment complex.

5.2.2.2 Compact Development Form

The design of new streets in the proposed TOD area should consider shorter blocks, sidewalks and bicycle travel lanes. The following standards could be incorporated:

- Small blocks, generally 300 feet long or less, with 400 feet as the maximum length of any block or single building.
- Sidewalks of sufficient width on both sides of all streets for bus stops, for pedestrians to comfortably walk, for outdoor commercial signage, and for activity to take place with separation between the pedestrian realm and vehicular traffic.
- Accommodations for shelters/transit amenities where appropriate.
- Bike lanes and bicycle facilities, including convenient bicycle parking facilities both in new developments, along public street frontages and at transit stops.
- Avoiding high vehicular volume streets in favor of complete streets designed to accommodate all roadway users at low travel speeds.
- Pedestrian and bicycle connections made to adjacent neighborhoods to provide connectivity to and within the TOD.

5.2.2.3 Maintain Emphasis on Access Management

Access management is already recognized as a critically important element of any site design in the Town of Guilderland. The existing zoning encourages shared driveways, rear access, pedestrian connection integration and more.

5.2.2.4 Improve Gateways

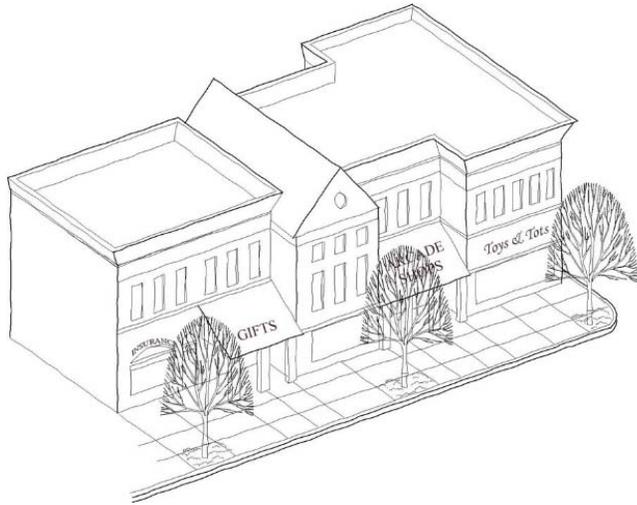
Enhancing gateways can be achieved by accentuating elements in the public right-of-way, adjacent buildings or structures, or a combination of both. Other components, such as signs, lighting systems, marquees, public art, or landscaping could be used to further emphasize gateway locations. This approach is consistent with other recommendations in the Westmere Corridor to include gateway treatments and the character and design of the elements elsewhere on the corridor should be reasonably consistent.

5.2.3 Building Design

All new buildings within a TOD should consider scale and massing, use ground level building elements and building architectural treatments to enhance the pedestrian experience.

5.2.3.1 Scale and Massing

Buildings should be similar in height and size or articulated and subdivided into massing that is more or less proportional to adjacent structures and maintains the existing architectural rhythm. Non-residential and mixed use buildings should have at least a 3- to 5-foot break in depth in all street façades for every 50 feet of continuous façade, although 30 feet or less is preferred. Use of bay windows, porches, porticos, building extensions, towers, recessed doorways, and other architectural treatments will help establish and reinforce the character of the area.



5.2.3.2 Buildings and Pedestrian Connections

The design of buildings should be heavily focused on the ground floor or public realm in terms of architecture, scale, entrances and amenities. Buildings and the adjacent public realm should include the following elements:

- Orienting buildings to the street with a consistent build-to line with maximum setbacks of no more than 15 feet.
- Incorporating large ground floor windows facing the sidewalk.
- Expanding the "sidewalk level" of the building and providing pedestrian access and commercial activity at points closest to transit routes.
- Emphasizing the visual connection of the pedestrian to the building and enhancing the quality of the pedestrian experience at the ground/street level.

5.2.3.3 Orientation and Entrances

Buildings should be parallel to the street frontage property line with primary building entrances, architectural elements and detailing oriented toward the primary public street or right-of-way with respect to architecture and detailing. A building's relationship within the block should

be considered and entrances to buildings should be incorporated midblock when possible. All entrances should be illuminated for safety and accentuated using architectural elements such as a recessed or protruding doorways, and/or inclusion of a canopy, portico or overhang should be used whenever possible to provide continuity and weather sheltering.

Where rear parking is provided, a secondary rear entrance is encouraged. The design of the rear entrance and façade should not compete with the main entrance but should complement the main entrance and be appropriately signed and marked to indicate a rear entrance.

5.2.3.4 Windows

Street level primary facades should have a minimum of 60% window coverage and a transparent door area, with views into the businesses. Street level windows should be a maximum of 24 inches above the sidewalk. All floors other than the street level of the primary façade facing a street, right-of-way, parking lot or walkway should have a minimum of 30% window coverage

5.2.3.5 Integrate Encroachments

Encroachments are elements of a development that are either inserted within the public right-of-way or project beyond the property line into the right-of-way. Examples include art installations, balconies, bay windows, marquees and canopies, among others. Many of these contribute to the development of a successful pedestrian environment, and need to be integrated with the building's design and the affected right(s)-of way. Generally, encroachments should be incorporated where they do not detract from the pedestrian environment or important public views. Integrating works of art can be an example of an encroachment. Encroachments in the Westmere corridor would be strictly limited to Town or private rights-of-way, and would not conflict with state road ROW.

5.2.3.6 Ecological and Sustainability Concepts



There are many ecological or sustainable design principles that can be integrated into TOD development and redevelopment. The integration of these principles with a building's other functions needs special (and early) consideration during the design process. The U.S. Green Building Council LEED® green building rating program and neighborhood design standards are excellent guidelines for incorporating these design principles. Below are many different ways to incorporate ecological or sustainable principles at the neighborhood, site design level and building level. (LEED and LEED ND information is available on the web at <http://leed.usgbc.org>.)

- Adaptively reusing buildings or building materials, where appropriate.
- Redeveloping previously utilized or infill sites—particularly brownfield sites
- Reducing automobile dependence through promotion of public transit, bicycle and pedestrian amenities
- Using land efficiently through higher density development
- Developing multifunctional storm water management systems and incorporating low impact development techniques for storm water management.
- Integrating eco-roofs/green roofs or similar permeable building roofing systems.
- Incorporating storm water management systems into surface parking areas.
- Capturing rainwater for irrigation use.

- Incorporating the use of pervious paving systems in areas intended primarily for pedestrian and/or low volume vehicular use.
- Including the use of alternate energy sources

5.2.4 Pedestrian Environment

A walkable neighborhood, downtown or corridor is only successful if pedestrians feel comfortable and safe while walking in it. Many elements and factors create a walkable environment: physical access including sidewalks, walkways and crosswalks, scale including buildings, streetscapes and distances to destinations, and amenities to add comfort.

Integrating pedestrian-oriented spaces as part of building design, streetscapes and other public spaces is a key element of TOD. Designers and developers of new buildings can recognize and add to the value of important public amenities by orienting semipublic spaces of the building and other building components to the amenity. The orientation of main entries, lobbies, windows, private balconies and/or terraces toward a public amenity highlights the amenity's value and offers views to the residents and/or tenants of the building. The orientation of the aforementioned spaces works both ways--not only do the buildings get views of the amenity, but people outside get views from the amenity of the buildings.

5.2.4.1 Pedestrian Safety and Accessibility

Street and internal access drive/road design should promote a sense of neighborhood intimacy, provide for safe pedestrian crossings and slow automobile travel speeds. This can be accomplished through a variety of ways including:

- Frequent opportunities for pedestrian crossing of streets and internal access drives/roadways.
- Safe pedestrian crossings that are well marked and well lit.
- The use of pedestrian actuated signalized crossings, medians, or pedestrian refuge areas, curb extensions, raised and/or textured crosswalks, and other traffic calming features where appropriate.
- Landscaping and street trees as a barrier (generally at least 3 feet wide) between pedestrians and vehicles traveling alongside pedestrians.

- Pedestrian benches and other amenities to improve the pedestrian environment.
- Pedestrian scaled lighting to safely light pedestrian facilities.



Figure 5-11: Example of high quality pedestrian environment: benches, pedestrian scale lighting, street trees.

Photo: Saturday Evening Post.

5.2.4.2 Street Corners

The design of buildings located at street corners should emphasize the higher visibility of the corner location and the natural congregation of pedestrians at intersections through building orientation, windows, doorways and other architectural features. Corners should incorporate pedestrian amenities such as high-visibility crosswalks, sidewalks and traffic calming along with high quality architectural elements at gateway locations.

5.2.4.3 Open Spaces

Open spaces, including parks or plazas, are critically important to any urbanized area, as they offer necessary visual and physical relief from the

built environment. Incorporate building designs with adjacent open spaces may be accomplished by:

- Orienting entrances of buildings to face adjacent parks or open spaces that might be developed.
- Considering the open space's purpose in the design and functions of proposed adjacent buildings.
- Developing small plazas and pocket parks along pedestrian routes.
- Integrating elements within pocket parks to serve adjacent uses.
- Developing new buildings that are oriented to adjacent open spaces without dominating them.
- Developing privately owned open spaces that are supportive of adjacent uses, streets and buildings.

5.2.5 Parking Areas

Surface parking areas are land intensive, do not provide street enclosure, and have the potential to create heat islands. Obviously the vast expanse of parking surrounding the Crossgates Mall contributes to parking appearing to be the dominant component of the landscape. As discussed previously, off-street parking expectations are generally managed by Towns in zoning and other codes with regard to requiring as well as controlling the amount of off-street parking and surface parking areas, aesthetic considerations such as screening and landscaping and storm water management. Section 5.1.3.2 recommends reducing the amount of permitted off-street parking spaces and surface lots as a land use consideration. The following actions address the design of surface and structured parking appropriate for TOD.

5.2.5.1 Surface Parking Design

Surface parking areas should be designed in smaller configurations with lighted walkways integrated into the design. Light-colored paving, such as concrete or block pavers, will help reduce the heat island affect as will tree planting and/or permanent shade structures near pedestrian access. Storm drainage systems should attempt to recharge the ground water and reduce the load on the public storm drain system. Porous surfaces and directing drainage to planting areas can reduce the impact on the public system.

5.2.5.2 *Parking lot location*

It is almost always preferable to locate parking behind or to the side of a structure. Where it is unavoidable that parking be located near a sidewalk, it should be screened with a combination of landscape plantings and built structures to create a build-to line and frame the pedestrian realm. The 2016 zoning code update highly encourages placement of surface parking in the rear of structures, away from the street and pedestrians.

5.2.5.3 *Structured parking*

The design of the parking should complement the area by responding to the uses, orientations, street functions, and materials of the surrounding

context. Views of parked cars should be screened from the pedestrian environment with elements such as artwork or landscape plantings. Wherever possible, parking areas should be wrapped with spaces habitable by people, ideally, retail, commercial or institutional uses. Below-grade structured parking is preferable to above-grade structured parking. However, planning for underground structured parking in the area around Crossgates Mall will have to take into consideration the presence of wetlands and a high water table, which may complicate construction.

5.3 Access Management

Access management seeks to balance the two main functions of roadways: enabling various land uses and development while maintaining safety and mobility for all users. These two functions can conflict with one another if not carefully managed, producing negative outcomes such as increased collisions, congestion and reduced roadway efficiency, spillover cut-through traffic on residential streets, reduced viability of commercial development, and increased risk to vulnerable pedestrians and cyclists at each crossing of an access point.

Along the 2.4 miles of Western Avenue within the study area, there are 145 driveway access points (an average of 60 per mile) and 7 signalized intersections (2.9 per mile). The posted speed limit is 40 mph throughout.

Access Siting Standards

As per the Town of Guilderland zoning code, residentially zoned properties, with the exception of multi-family, require at least 250 feet between access points. Multi-family and non-residential require at least 400 feet. Mutual access easement agreements will be required for adjacent property owners, and access points must be at least 100 feet from intersections. If the land is undeveloped the first developer will be required to provide the above access requirement. Partially developed land should be in compliance whenever possible and is at the discretion of the planning or zoning board. The Town should also consider requiring, through the zoning code, individual driveways to be brought up to current standards whenever a substantial renovation or change of use occurs.

The NYSDOT's *Driveway Spacing Policy* requires that access point spacing be at least twice the width of the driveway plus 15 feet from the nearest intersection. Adjacent two-way driveways must be 75 feet apart,

and one-way driveways must be 30 feet apart. The NYSDOT's *Arterial Access Management Initiative* suggests driveway spacing of 300-500 feet (20 to 36 per mile) as best practice to reduce collisions and maintain traffic flow.

5.3.1 Cross Access and Driveway Consolidation

Higher driveway densities for multifamily or commercial development generally tend to correlate with increased potential for incidents, and therefore reduced traffic safety. The driveway density on Western Avenue is approximately 60 per mile, on the high side for a major arterial. The rate of collisions observed between 2010 and 2013 is, however, relatively low despite the high density of driveways. Many properties already have front or rear parking lots that are adjacent to each other, and could be joined to provide cross-access that could reduce the number of driveways on Western and allow some traffic to avoid traveling on Western at all. An example of such an arrangement exists along Western Avenue to the west of Palma Boulevard (Figure 5-133). Cross access and alleys would also enable bicyclists to access businesses along Western without having to travel in busy traffic.

Creation of alleys may be challenging to implement due to probable opposition from current property owners. It is therefore recommended that a long term strategy, which would be supported by the Town of Guilderland zoning code, be defined that facilitates creation of alleys as and when redevelopment occurs. The 2016 modifications to the zoning code strongly support such provisions for cross-access. An example of how such alleys would be defined is shown in the illustrations that follow, especially Figure 5-12.



Figure 5-12: Example of potential alleyway between Gipp Road and Camp Terrace

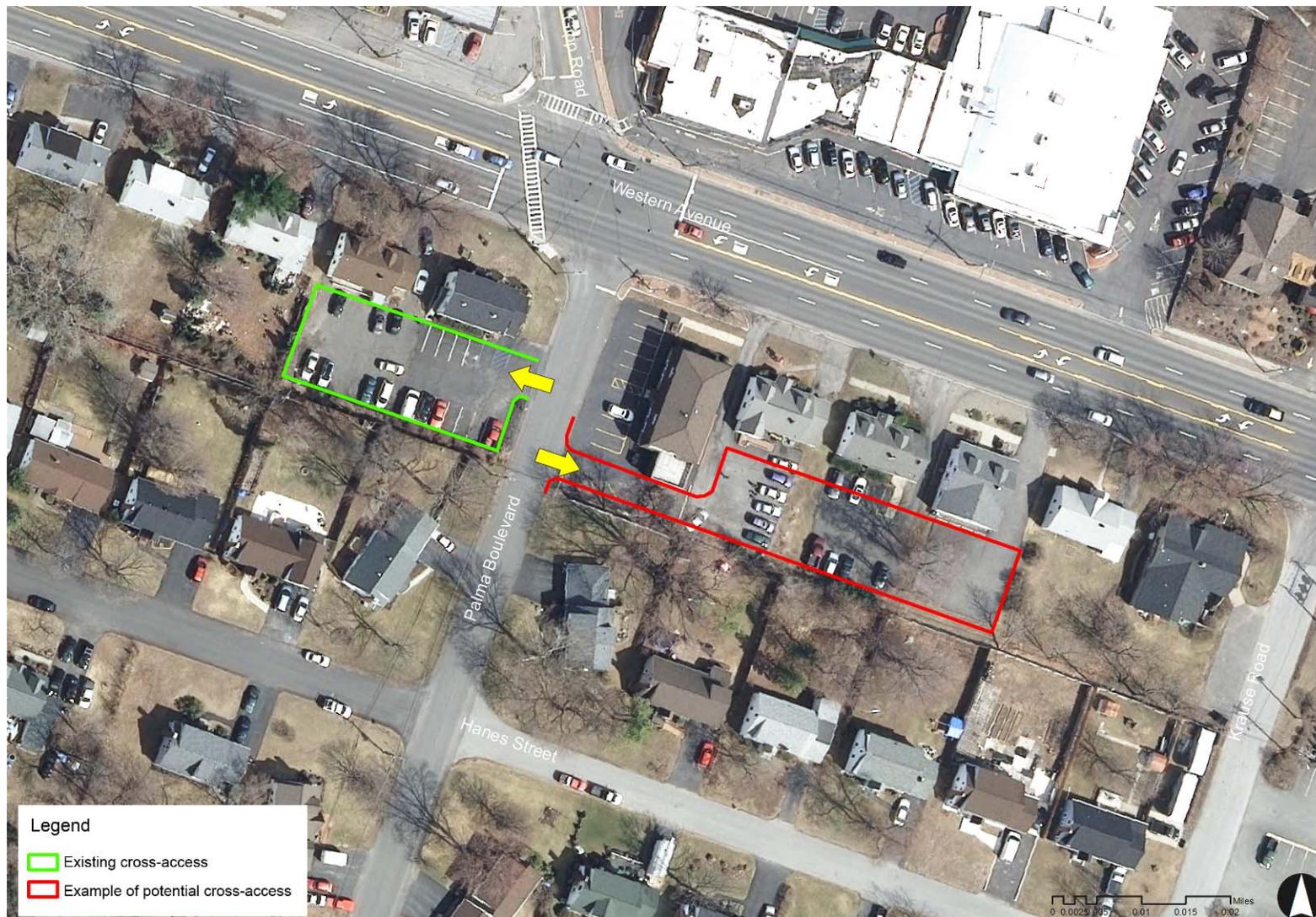


Figure 5-13: Existing cross-access connection between adjacent parking lots on southwest corner of Palma Boulevard and Western Avenue with potential opportunity identified for a similar arrangement across Palma Boulevard.

On commercial corner lots with driveways on Western Avenue, access points could be diverted to the side street and access extended into adjacent lots as a service alley. This idea could be applied at Alton Road or Chapman Drive in the eastern section of corridor in Segment A, as well as at Palma Boulevard, Gipp Road, and York Road in Segment B. Several of these sites already have access points from side streets, which could be connected via adjacent parking lots to create cross-access or service alleys.

Other opportunities for driveway consolidation and cross-access include between New Karner Road and Arlene Avenue on the north side of Western in Segment C and between Homes Terrace and Kraus Road on the south side in Segment B.



Figure 5-14: Existing parking lot cross connections just east of Gipp Road

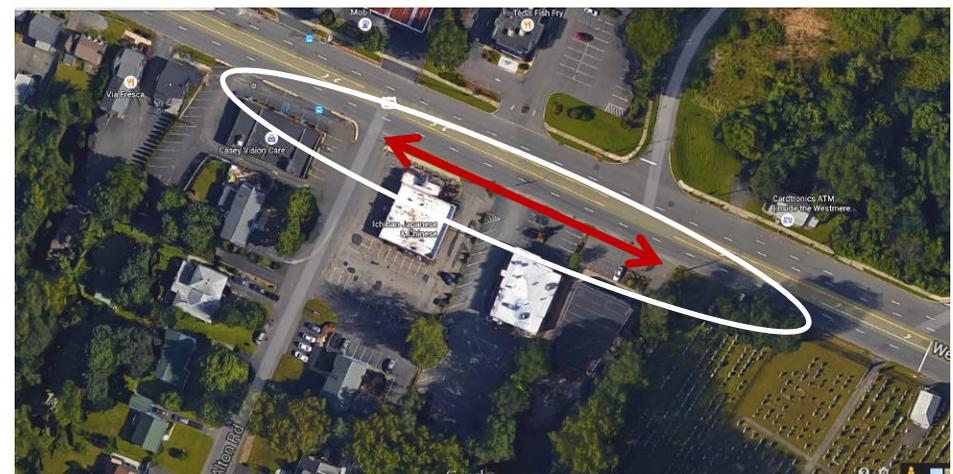


Figure 5-15: Access control and driveway consolidation opportunity between adjacent parking lots near Chapman Drive (above) and Alton Road (below).

5.4 Introduction to Streetscape, Traffic Calming, and Transportation Sections and Further Review

In the following sections that cover physical improvements to the corridor, recommendations are divided into near term improvements and proposals for further consideration. **Near term improvements** can be implemented in the next few years, are relatively low cost, and do not require modifications to any existing standards. **Proposals for further consideration** are longer term ideas that require more funding than is currently available or additional review and research to demonstrate their practicality, operational efficiency or safety effects in the Western Avenue context.

Interest in and demand for walking and bicycling infrastructure for recreation, commuting and accessing public transit and local development has increased significantly in the United States over the past decade. In the study corridor a number of large apartment complexes have raised the overall development density over time and increased the number of residents within walking distance of amenities along the corridor. Attendees at the first public meeting expressed support for walking and bicycling improvements. NYSDOT recently completed construction of

sidewalks on both sides of Western Avenue. Complimentary active transportation improvements that leverage DOT's investment, such as bike lanes, other enhanced bike accommodations, and additional crosswalks, may be warranted in the future as the trend toward greater public support continues.

At the same time, Western Avenue/Route 20 is a 40 mph suburban arterial—a road serving high levels both of immediate access and regional mobility—and has an important vehicular transportation role in the broader region. Therefore, these improvements will require more detailed study to determine their costs and benefits and to make definitive recommendations on their implementation. They are listed here because they support proposed land use changes and a multimodal network approach to transportation in the corridor.

All of the recommendations respond to the stated goals of the Town of Guilderland in the Comprehensive Plan and of the Capital Region in the CDTC New Visions 2040 Plan.

5.5 Streetscape Improvements and Traffic Calming

Both the Guilderland Comprehensive Plan and the CDTC New Visions 2040 plan call for emphasizing a future for the Western Avenue corridor that is safe and comfortable for pedestrians and bicyclists as well as drivers. With its mix of commercial and residential uses, and its proximity to quiet and walkable side streets, the Westmere corridor is a prime candidate for the kinds of improvements that can enhance its nascent walkability and bikeability. These improvements involve both streetscape design elements intended to promote biking and walking and traffic calming measures intended to make those everyday activities safer.

Many of the common traffic calming design treatments recommended by the FHWA and Institute of Transportation Engineers are not appropriate for the corridor's high annual average daily traffic volumes, ranging from 30,000 – 50,000 vehicles per day. NYSDOT's Traffic Calming guidelines included in the *Highway Design Manual* suggests primarily warning or regulatory signs to alert motorists of crossing points for pedestrians and cyclists, as well as pedestrian refuge islands, some streetscaping devices, route modification (such as on- and off- street bike facilities, arterial improvements, and channelization) and traffic control devices. Overall, horizontal deflections rather than vertical are suggested. Vertical deflections, including speed humps, bumps, tables, raised crosswalks,

and raised intersections, are considered too disruptive to traffic flow, including emergency services and transit, on arterial roads. Implementation of calming devices in this corridor should be conscious of its role as a major arterial and commercial thoroughfare.

5.5.1 Neighborhood Signage and Gateway Elements

It is recommended that a gateway feature be constructed at the intersection of the Adirondack Northway terminus (Route 910F) and Western Avenue to indicate to motorists that they are entering Guilderland.

The intersection of the Adirondack Northway terminus (Route 910F) and Western/Route 20 is an opportunity for creating a highly visible corridor gateway. A modest sign ("Welcome to Guilderland") supported with improved landscaping, and a pedestrian island on the crosswalk of the Adirondack Northway terminus (Route 910F) are proposed to create the gateway. A conceptual plan of proposed treatments is shown in Figure 5-16. Crossgates Mall management has offered to maintain landscaping on the stretch of Western that fronts their property as well as the proposed improvements along the Northway terminus (Route 910F).

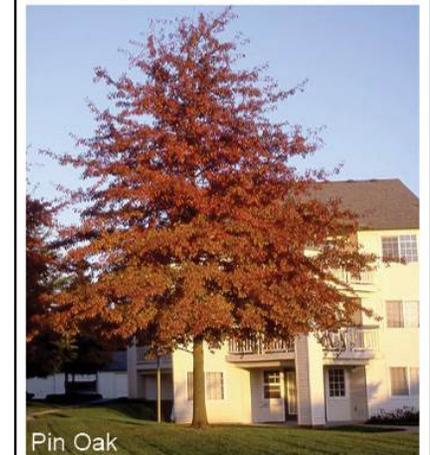
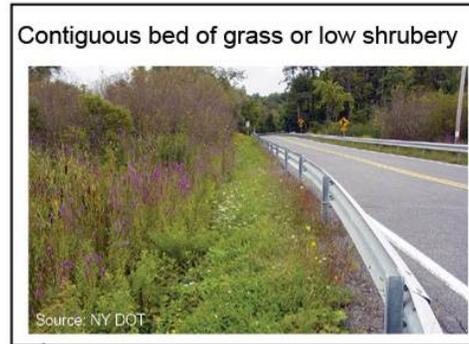


Figure 5-16: Conceptual sketch of gateway treatments at the intersection of Western Avenue and the Adirondack Northway entrance.

5.5.2 Street Trees

It is recommended that a tree planting program be initiated along Western Avenue to improve the visual appeal of the road, provide shade for pedestrians and bicyclists and provide a traffic calming feature. Planting of street trees, which create a sense of enclosure and induce drivers to reduce speed, is recognized to calm traffic and has been included in a number of design manuals, including those used by the FHWA¹, Michigan DOT² and the City of Tucson, AZ.³

Some locations for street trees have been proposed in Map 5-2 through 5-4. Curb-side trees that would fit in the landscaped buffer between sidewalk and curb would be beneficial in slowing traffic and enhancing the pedestrian realm and neighborhood feel of the corridor. Curb-side trees have been proposed at locations where a minimum width of 5 feet is available to ensure that trees have access to an appropriately sized soil pit. These trees would ideally be part of a streetscaping project that is implemented by the Town or the DOT.

Parcel-side trees would grow between the sidewalk and the property boundary, but should be placed carefully so as not to obscure business signage or entrances. Planting trees at such locations is highly encouraged by the Town's zoning code. All trees planted within public ROW would need to be evaluated and have a permit issued if work is performed by an outside party.



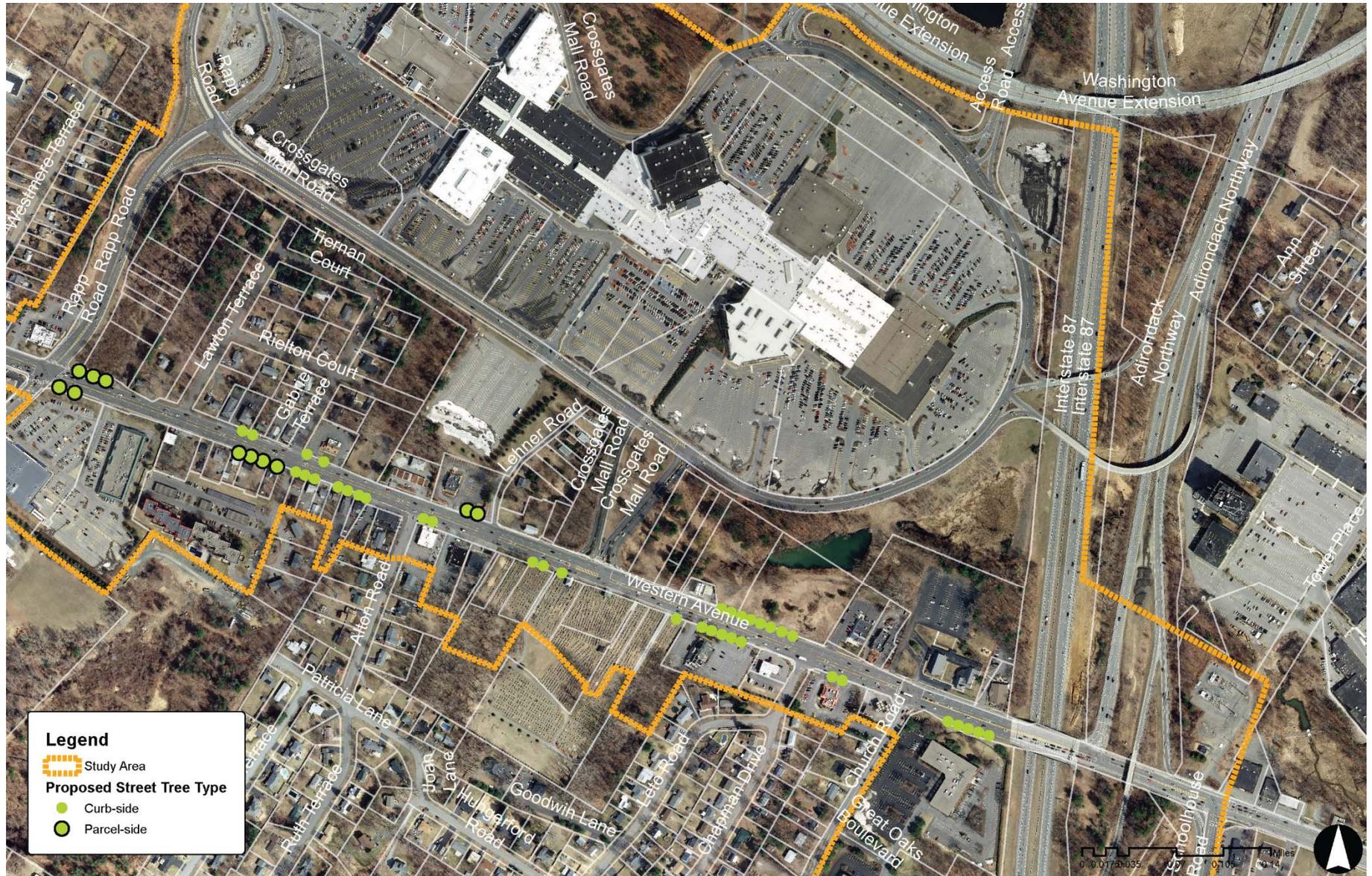
Figure 5-17: Large, open lots could benefit from vertical streetscaping elements to calm traffic and create a greater sense of place.

¹https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalk2/sidewalks209.cfm

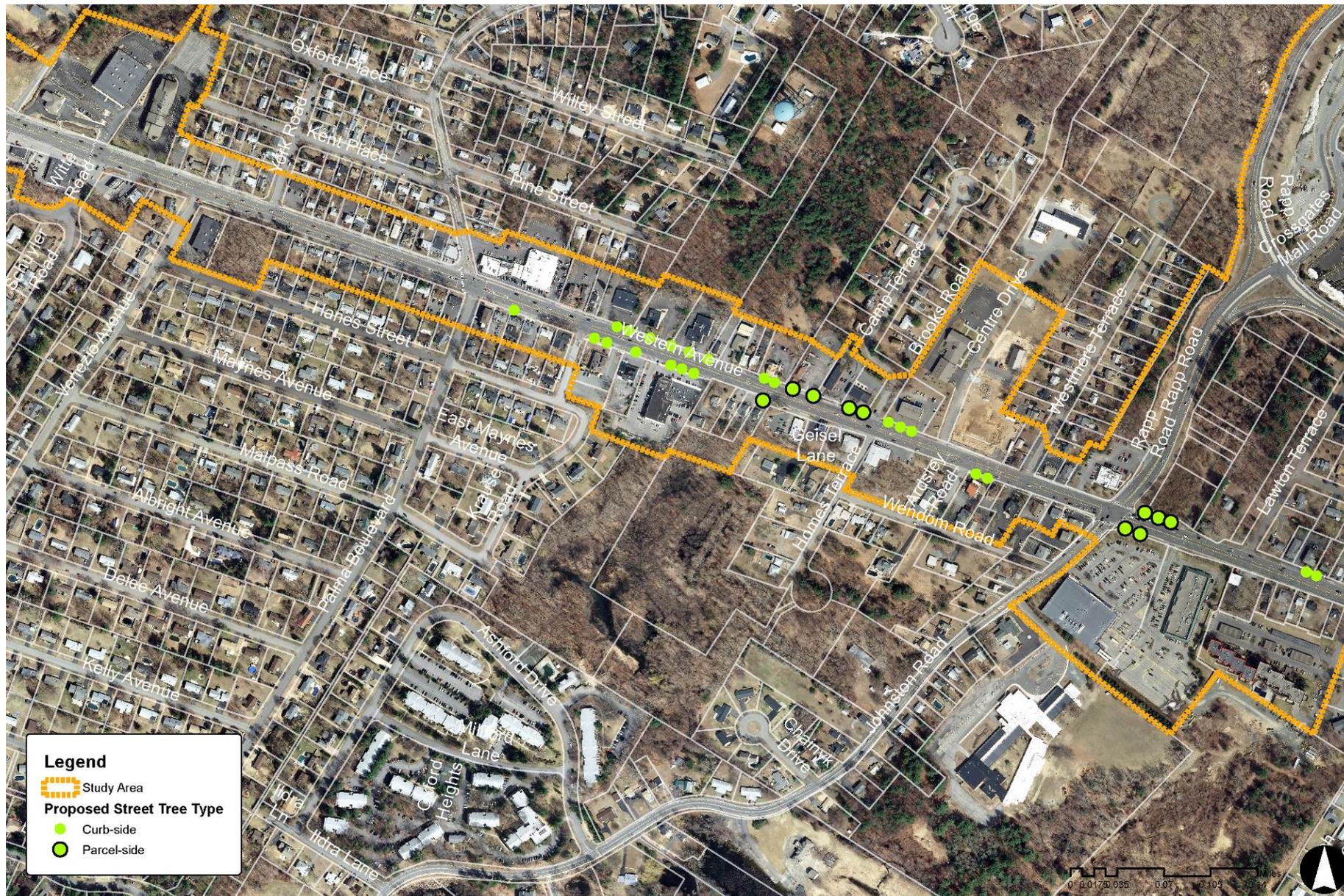
²http://www.michigan.gov/documents/dnr/22_benefits_208084_7.pdf

³https://www.tucsonaz.gov/files/pdsd/Downtown_Street_Tree_Plan.pdf

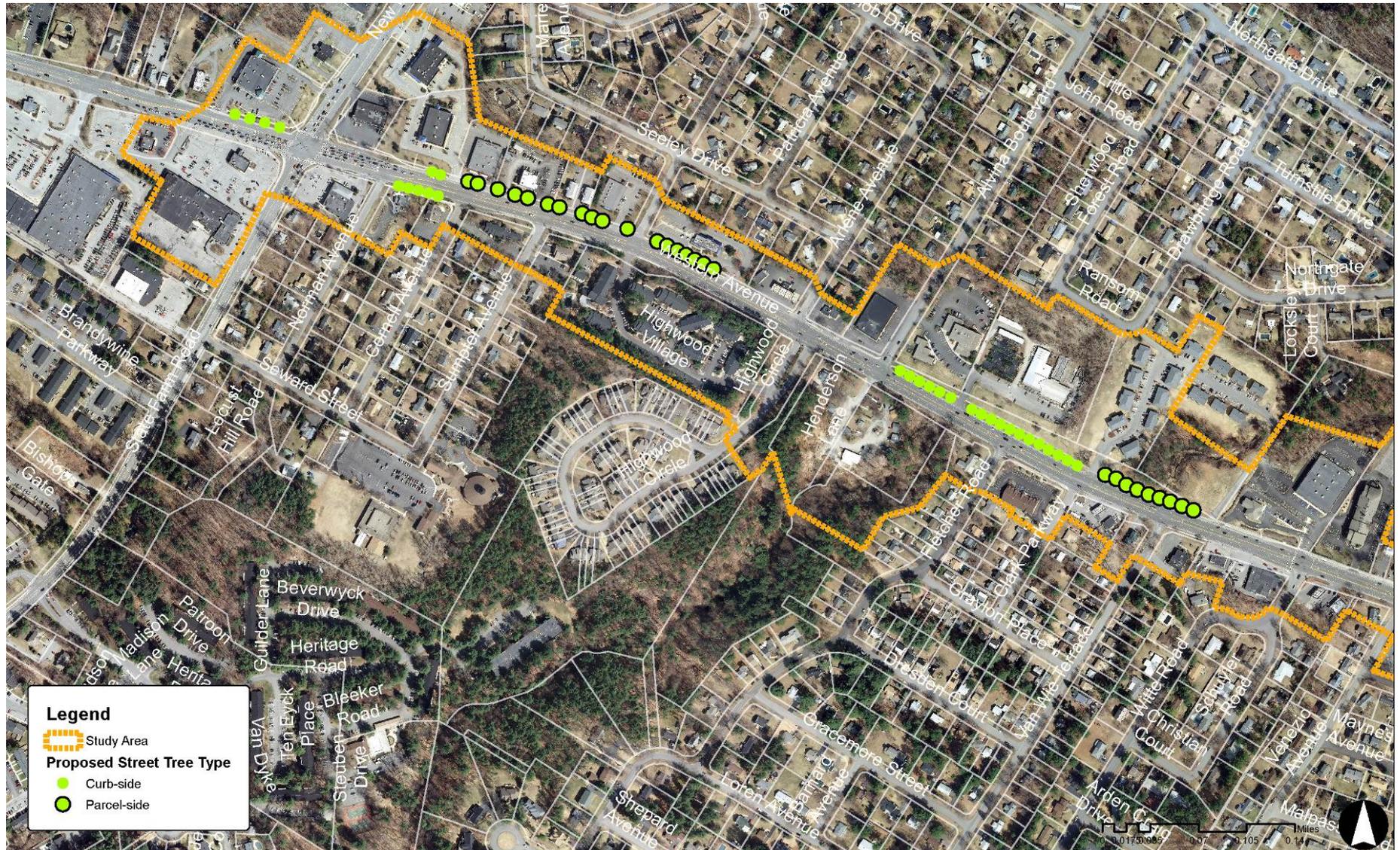
Map 5-2: Proposed locations for street trees in Western Avenue Eastern Segment (Segment A)



Map 5-3: Proposed locations for street trees in Western Avenue Central Segment (Segment B)



Map 5-4: Proposed locations for street trees in Western Avenue Western Segment (Segment C)



5.5.3 Pocket Plazas

It is recommended that small pedestrian-oriented pocket plazas be constructed at appropriate locations along the Western Avenue corridor to create places where residents can meet, rest while shopping, walking or bicycling, have lunch, or simply spend some time outdoors.

These nodes of green space could be created at important bus stops and activity centers. These spaces would include pedestrian amenities such as benches, trash cans, bus or sun/weather shelters, and pedestrian-oriented lights. The pedestrian realm could be enhanced through landscaping, aesthetic paving, and low fencing to create a sense of place and physical buffer from traffic. While smaller (10-20 feet wide) pedestrian plazas can be developed on public property, larger interventions are only possible through the participation of private property owners. Possible locations include:

- Western Avenue and Johnston/Rapp Road eastbound bus stop, using right-of-way between Western Avenue and the Town Centre Parking lot. On the northeast corner of the intersection, a large tract of undeveloped and forested land offers more land area for a potential pocket plaza.
- Western Avenue and Alvina Boulevard in the northeast quadrant of the intersection in front of First Niagara Bank provides an opportunity for a pedestrian plaza incorporating the sidewalk. Property would need to be acquired for this large-sized plaza. Landscaped plaza treatments could offer the plaza some privacy, while offering a place for rest for pedestrians.
- Other possible locations for future consideration include the park and ride Lot at Devonshire, just outside the Western end of the study area, and one corner of the intersection with New Karner Road.



Figure 5-18: Possible location for pocket plaza at Johnston Road.



Figure 5-19: Proposed pocket plaza locations and precedents.

5.6 Pedestrian, Bicycle, and Transit Improvements

5.6.1 Transit Improvements

The Western Avenue corridor is directly served by CDTA bus lines 10, 117, 719, and 763, and indirectly by numerous other lines that serve Crossgates Mall. Proposed bus stop improvements are concentrated at intersections with key activity centers within the corridor. They coincide with the location of crosswalks and other improvements to the pedestrian environment, in order to enhance the overall mobility of transit users as they walk to, wait for, board, and alight buses, and as they continue on to access the corridor's amenities as pedestrians or cyclists. Bus stop access and connectivity to sidewalks and crosswalks has been identified as one of the most persistent and significant accessibility issues for people with disabilities in the U.S, according to a recent Transportation Update published by the National Council for Disabilities (see Maps 5-5 to 5-7).

5.6.1.1 CDTA's BusPlus BRT expansion

One of the most transformative elements of the Westmere corridor's future will be the opening of the Capital District Transportation Authority (CDTA)'s new Purple Line Bus Rapid Transit (BRT) from downtown Albany to Crossgates, terminating at a major new transit terminal on the south side of the mall. Opening as soon as 2020, this new rapid bus line will provide a strong multimodal anchor at the eastern end of the corridor, fostering transit ridership and transit-oriented development (TOD). As part of the Purple Line, CDTA will construct a busway, complete with pedestrian and bicycle paths, through the UAlbany and Harriman campuses, speeding buses and extending the reach of a potential Westmere corridor bicycle network several miles further east. The new BRT line, and the expanded Crossgates transit terminal, will make it easier for travelers to reach the Westmere corridor by transit.

5.6.1.2 Bus Shelters

The intersection of Western Avenue and Johnston Road has the highest levels of transit usage on Western Avenue in the study area, with 120

average daily combined boardings and alightings. The eastbound stop is located on the property of Town Centre Plaza and has just received a new bus shelter. Transit users in this popular location would also benefit from the town or another stakeholder installing pedestrian-oriented street lights on both sides of Western (see Figure 5-20).

The westbound bus stop at Norman Avenue and eastbound bus stop at Cornell Avenue (stops for New Karner Road) also have relatively high usage and would benefit from bus shelters. Similarly, the bus stops at Lawton Terrace and Gabriel Terrace have moderate to high usage and may benefit from benches and bus shelters.



Figure 5-20: Eastbound bus stop with new shelter at Western Avenue and Rapp Road (IBI Group)



Figure 5-21: Eastbound bus stop at Western Avenue and Chapman Drive, an example of simple bus stop improvements that could be implemented elsewhere in the corridor

5.6.1.3 Bus Stop Siting

It is important to bring high-quality crosswalks and bus stops as close together as possible to provide proper access to transit, minimize walking distances and encourage crosswalk usage. With the inauguration of CDTA BRT service to Crossgates Mall, transit ridership in the area—and thus potential for pedestrian-traffic conflict—is expected to increase (see Figure 5-22). Bus stop siting will need to be coordinated between the town of Guilderland, CDTA, and NYSDOT. It is recommended to re-locate bus stops closer to crosswalks at the following intersections:

Church Road

Currently, CDTA bus stops are 500 feet west of the intersection between Western Avenue and Church Road. The stops should be moved east to



Figure 5-22: Existing bus stop at Crossgates Mall and site of the future BRT station

the Church Road intersection and crosswalks, so that transit users are closer to commercial amenities and are able to safely move between the eastbound and westbound stops.

Alton Road

The westbound bus stop at Alton Road shows higher usage than the eastbound Alton Road bus stop. Moving the stops eastward, closer to the Crossgates Mall Road intersection, and providing a crosswalk at the location could improve the connection between the bus stops and surrounding destinations and attract higher transit use.

Highwood Village Road / Arlene Avenue

Eastbound and westbound bus stops at the western intersection of Highwood Village Road / Arlene Avenue and Western Avenue could be

brought closer together. Currently, the eastbound bus stop is 700 feet away from the westbound stop. Moving the westbound stop across from the eastbound stop and adding a signalized crosswalk between them would create a node for Highwood Village residents and nearby residential areas to more easily access transit service to the east and west. It would also create a north-south pedestrian connection 1,250 feet east of the New Karner Road crosswalk and 2,000 feet west of the crosswalk at Witte Road. This stop is near the proposed pocket plaza at Arlene Avenue.

New Karner Road

Bus stops are located 320 feet west and 620 feet east of the New Karner Road intersection. Moving the eastbound bus stop closer to Norman

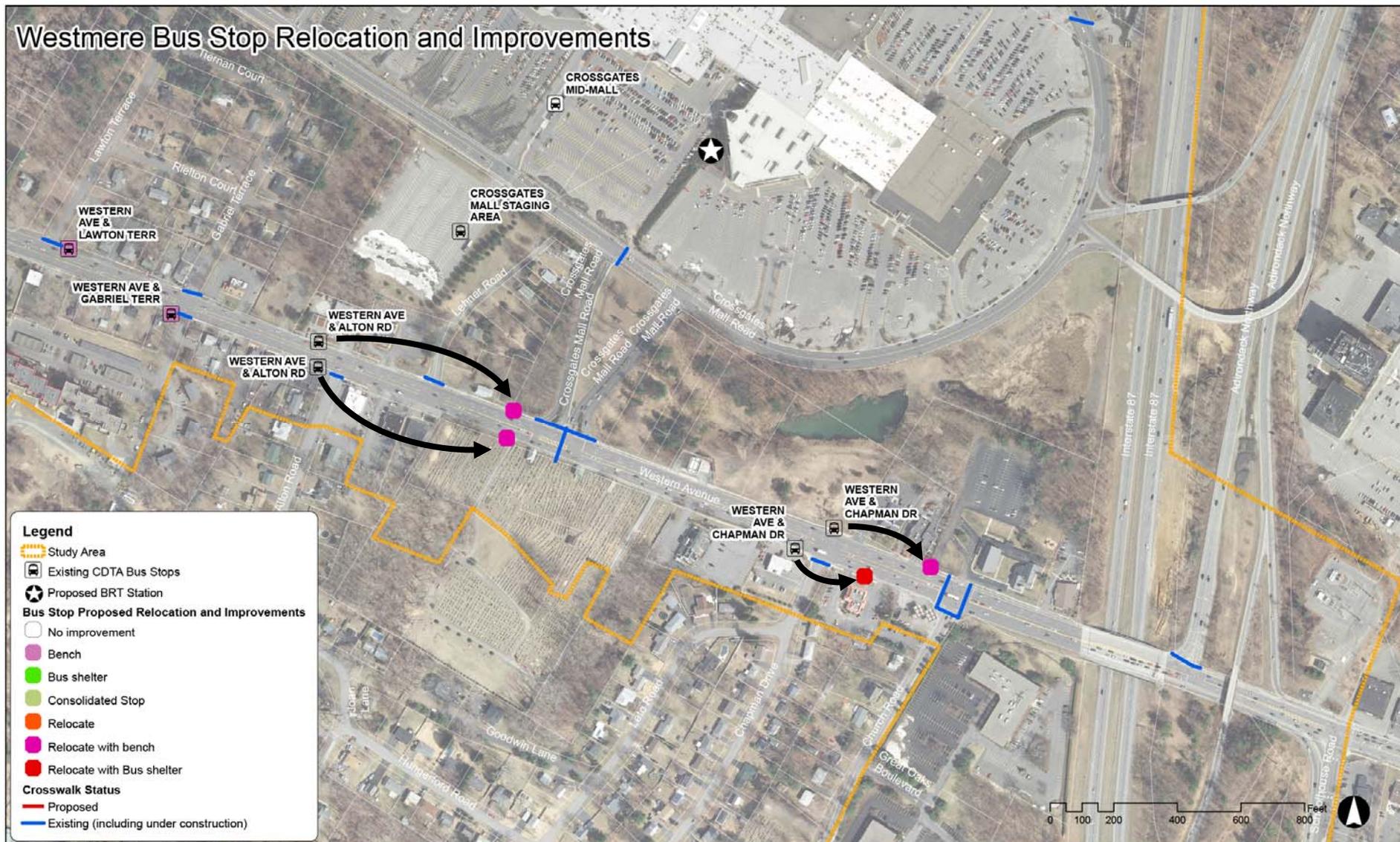
Avenue, bringing it closer to the crosswalk at New Karner Road, should be considered.

All the Transit Improvements discussed above are illustrated in segment maps below.

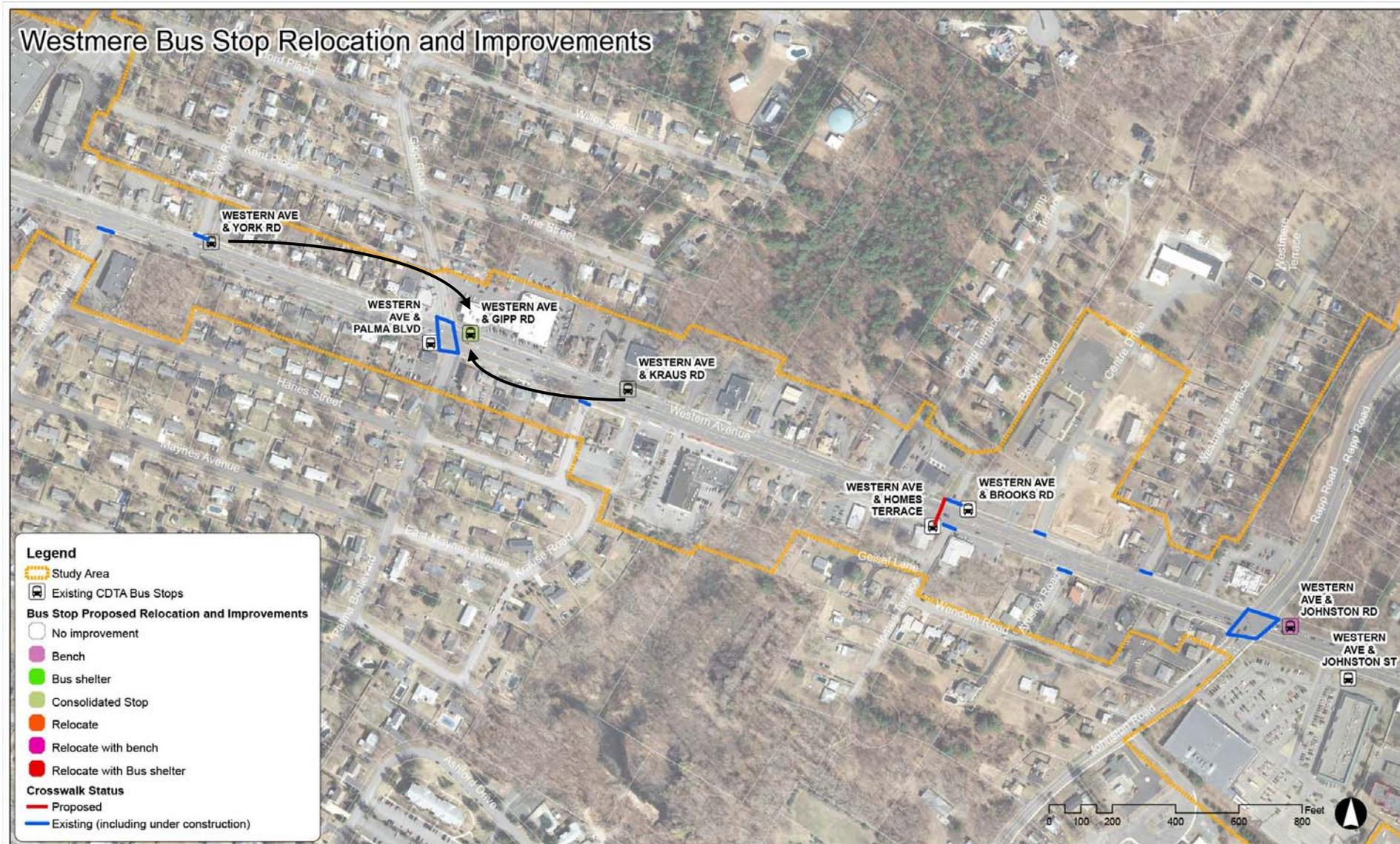
Stop Consolidation

Another improvement that could be studied further is consolidating extremely low-usage bus stops (averaging 0 to 3 riders per day) with the nearest bus stop located closer to a cross walk. For example, the stops at Clark Parkway, Serafini Village, and Van Wie Terrace could be consolidated with the bus stop at Witte Road. Similarly, the York and Kraus Road bus stops could be consolidated with the Gipp Road stop.

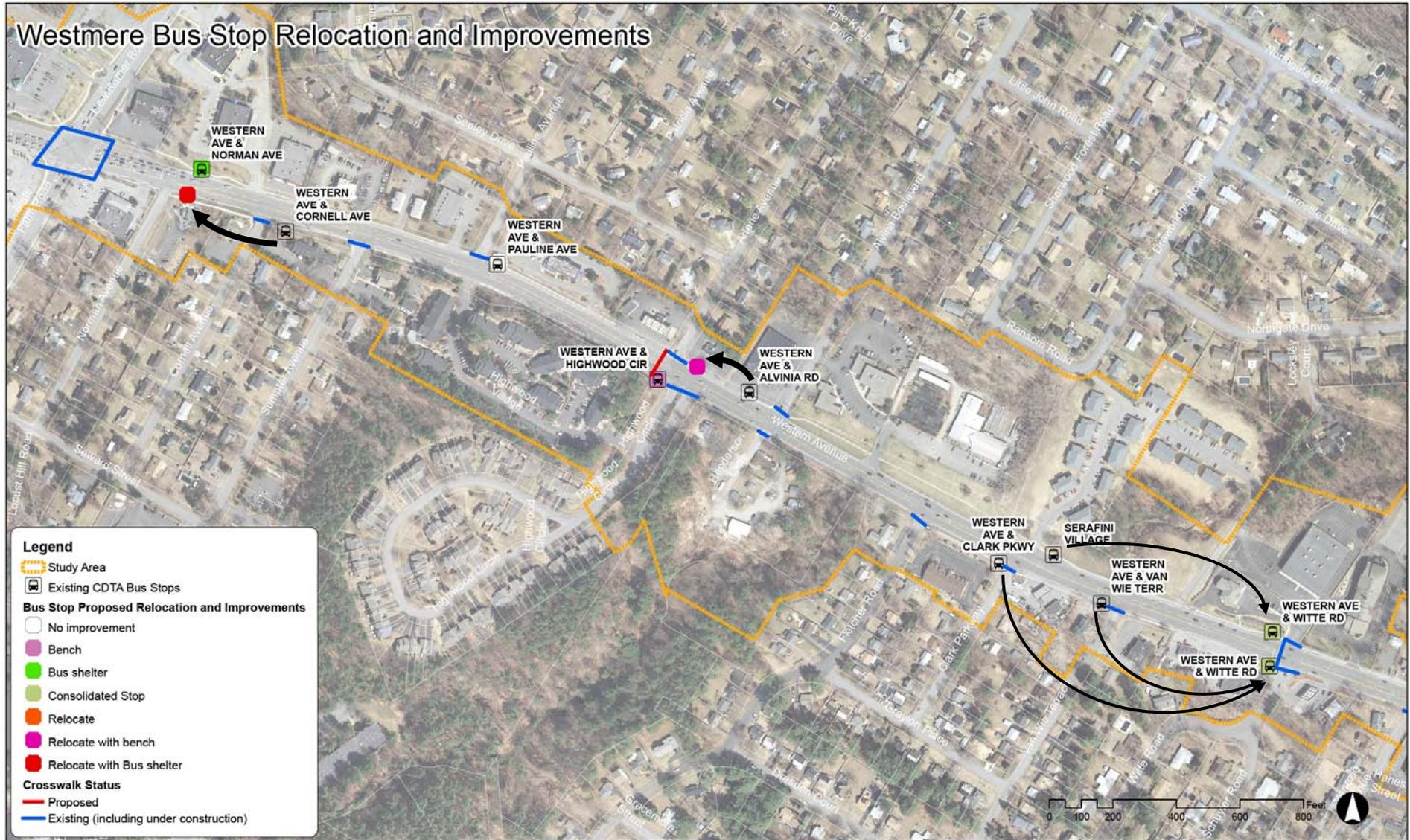
Map 5-5: Proposed Bus Stop Improvements Eastern Segment (Segment A)



Map 5-6: Proposed Bus Stop Improvements Central Segment (Segment B)



Map 5-7: Proposed Bus Stop Improvements Western Segment (Segment C)



5.6.2 Pedestrian and Bicycle Improvements

5.6.2.1 Western Avenue Sidewalk Improvement Project

The New York State Department of Transportation recently completed a federal-aid transportation project that provides continuous sidewalks, as well as pedestrian signals and amenities, on both sides of Western Avenue throughout the Westmere Study area, and extending through McKownville to the City of Albany border. The Sidewalk Improvement Project represents both a significant improvement to pedestrian access along the corridor and a major achievement of planning and cooperation, especially given the limited federal-aid funds that are available for transportation improvements. The project is a particularly strong example of collaboration, involving the Town of Guilderland, the New York State Department of Transportation, and CDTC.



Figure 5-23: New sidewalks continue across driveways and other access points along Western Avenue

5.6.2.2 Driveway Crosswalks

It is recommended that over time driveway crosswalks be added to the sidewalks on Western Avenue where they do not already exist.

Chapter 18 of the New York State Highway Design Manual requires continuing sidewalks or adding colored crosswalks across driveways and curb cuts along Western Avenue, to provide visual reminder to motorists turning in and out of access points to yield to pedestrians. In addition, signs reminding motorists that state law requires yielding to pedestrians may be appropriate at high-volume crosswalks. These improvements should be prioritized on driveways at intersections with bus stops and/or high pedestrian and vehicle volumes.

5.6.2.3 Bicycle Parking

This study promotes increased bicycle usage along the Westmere Corridor. Not only are additional bicycle trails and paths recommended (more information on this recommendation in the following section), but adequate bicycle parking is required, especially at key activity centers along the corridor. These activity centers would include, but are not limited to:

- Crossgates Mall
- Star Plaza
- Town Center shopping center

Bicycle parking is a critical component in promoting bicycling as a means of transportation, and even for recreational purposes. Convenient, easily used, and secure bicycle parking encourages people to replace some of their car trips with bicycle trips and helps legitimize cycling as a transportation mode by providing parking opportunities equal to motorized modes. Property owners, tenants and community residents would work together to determine the most suitable locations for bicycle parking infrastructure, as well as the type of bicycle parking infrastructure. Depending on the location, different types of bicycle parking can be implemented, including:

- Bicycle Racks
 - U-Racks/Mounts
 - Waves
 - Bollards
 - Grids
- Bicycle Parking Stations

- Bicycle Lockers

Examples of each type of bicycle parking infrastructure can be found on the following page:

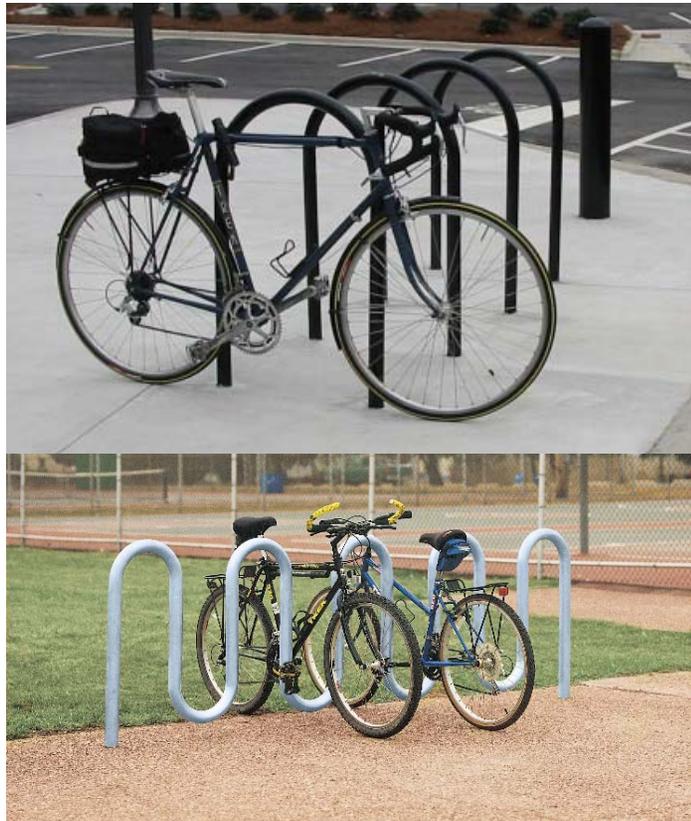


Figure 5-17: Types of Bicycle Racks

(From Top Left to Bottom Right – U-Rack/Mount, Wave, Bollard, and Grid)



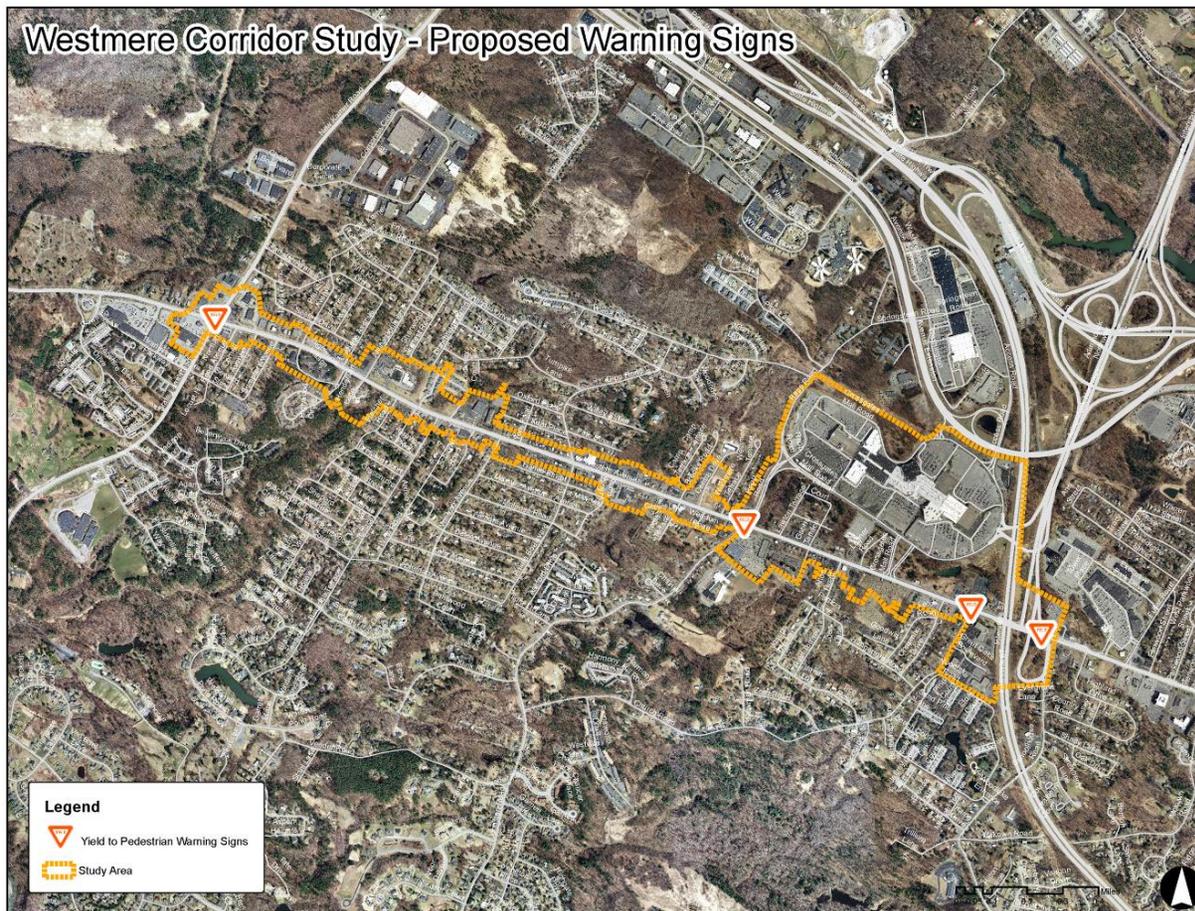
Figure 5-18: Bicycle Parking Stations

Figure 5-19: Bicycle Lockers

5.6.2.4 “Turning Vehicles yield to pedestrians” signage

It is recommended that warning signage be evaluated for inclusion in association with traffic signals at major signalized intersections (especially those with right turn lanes or channelized right turns), such as New Karner Road, Johnston Road (westbound on Western), Church Road (eastbound on Western), and the Northway/Reference Route 910F (southbound on

the Northway). This will help alert motorists to pedestrians crossing the street. All of these locations have significant right turning traffic volumes and are near bus stops or other pedestrian generators; the end of 910F at Western does have a “No Turn on Red” sign that illuminates when pedestrians activate the relevant crossing signal.



Map 5-8: Proposed “Yield to Pedestrians” warning signs and locations

5.6.3 Pedestrian and Bicycle Links

Both the Guilderland Comprehensive Plan and CDTC's New Visions 2040 plan state that Western Avenue should evolve into a fully multi-modal corridor over time. As such, it should be accessible to people who walk, take transit, or drive. However, some people currently feel uncomfortable or unsafe walking or cycling in a high-traffic corridor. Paths through the neighborhoods north and south of the corridor would provide a less direct, but more comfortable, route for walking and biking to destinations along Western Avenue. Currently, the street networks on either side of Western Avenue are discontinuous and do not allow people to walk or bike parallel to the main arterial. The addition of a number of path connections between the different independent street grids would provide safe, pleasant, and convenient paths for walkers and cyclists from their homes to shopping, transit, errands and for recreations.

5.6.3.1 Off-Road Pedestrian and Bicycle Connections (Multi-use Trails)

It is recommended that the following off-road bicycle and pedestrian connections be considered as long term solutions to close gaps in the corridor's residential street network to the north and south of Western Avenue, allowing pedestrians and cyclists to travel through the corridor, access amenities, and minimize interaction with arterial vehicle traffic. In conjunction with improved on-street pedestrian and bicycle facilities, these

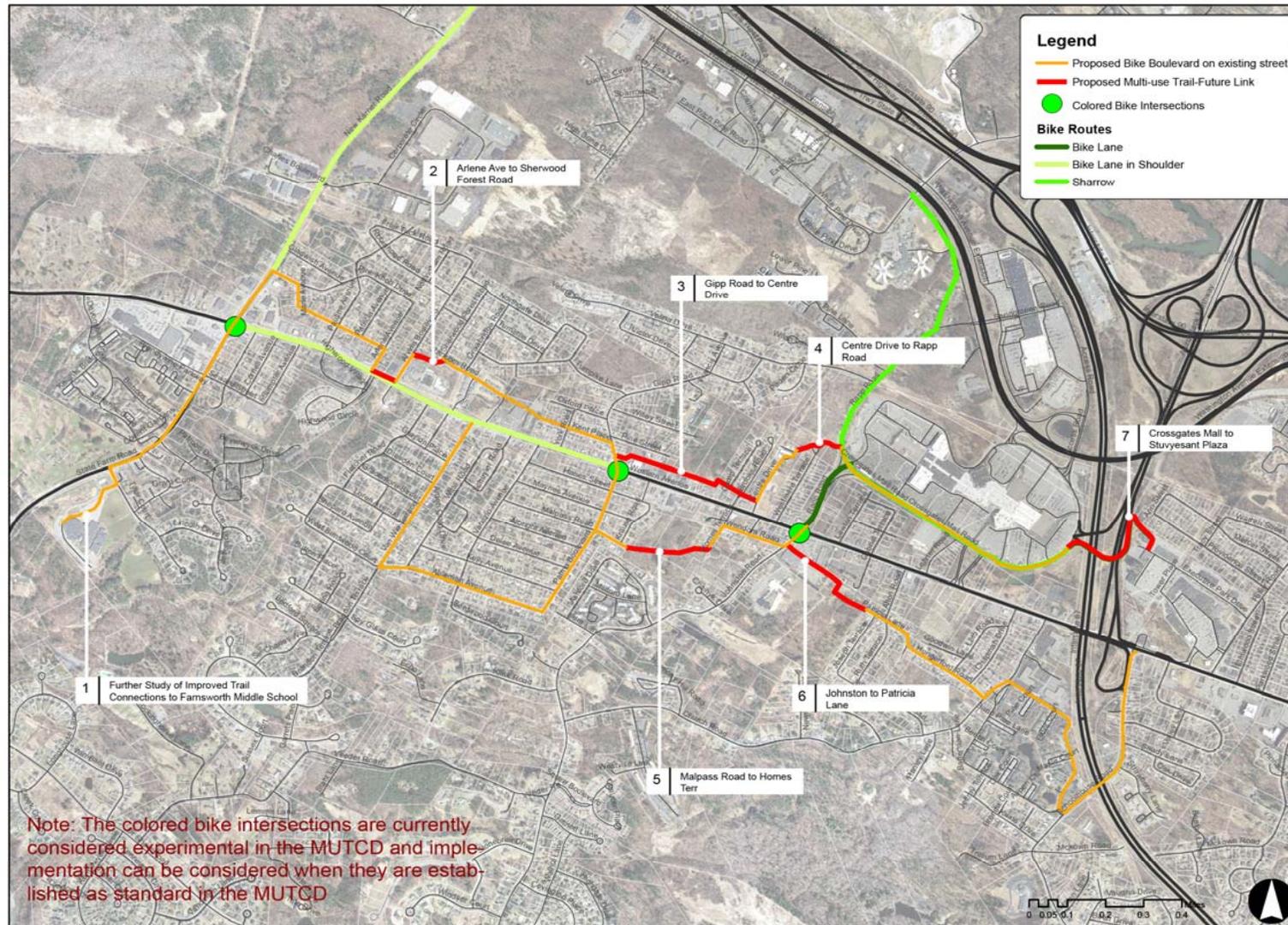
off-road connections would create continuous east-west "green corridors," or neighborhood greenways. Off-road connections could be considered in the following locations.

The suggested off-road connections are seen in Map 13 and listed below:

1. Farnsworth Middle School connections
2. Arlene Avenue to Sherwood Forest Road
3. Gipp Road to Center Drive
4. Centre Drive to Rapp Road
5. Malpass Road to Homes Terrace
6. Johnston Road to Patricia Lane
7. Crossgates Mall to Stuyvesant Plaza

Bullet points beneath the description of each map represent potential concerns or opportunities relevant to that map.

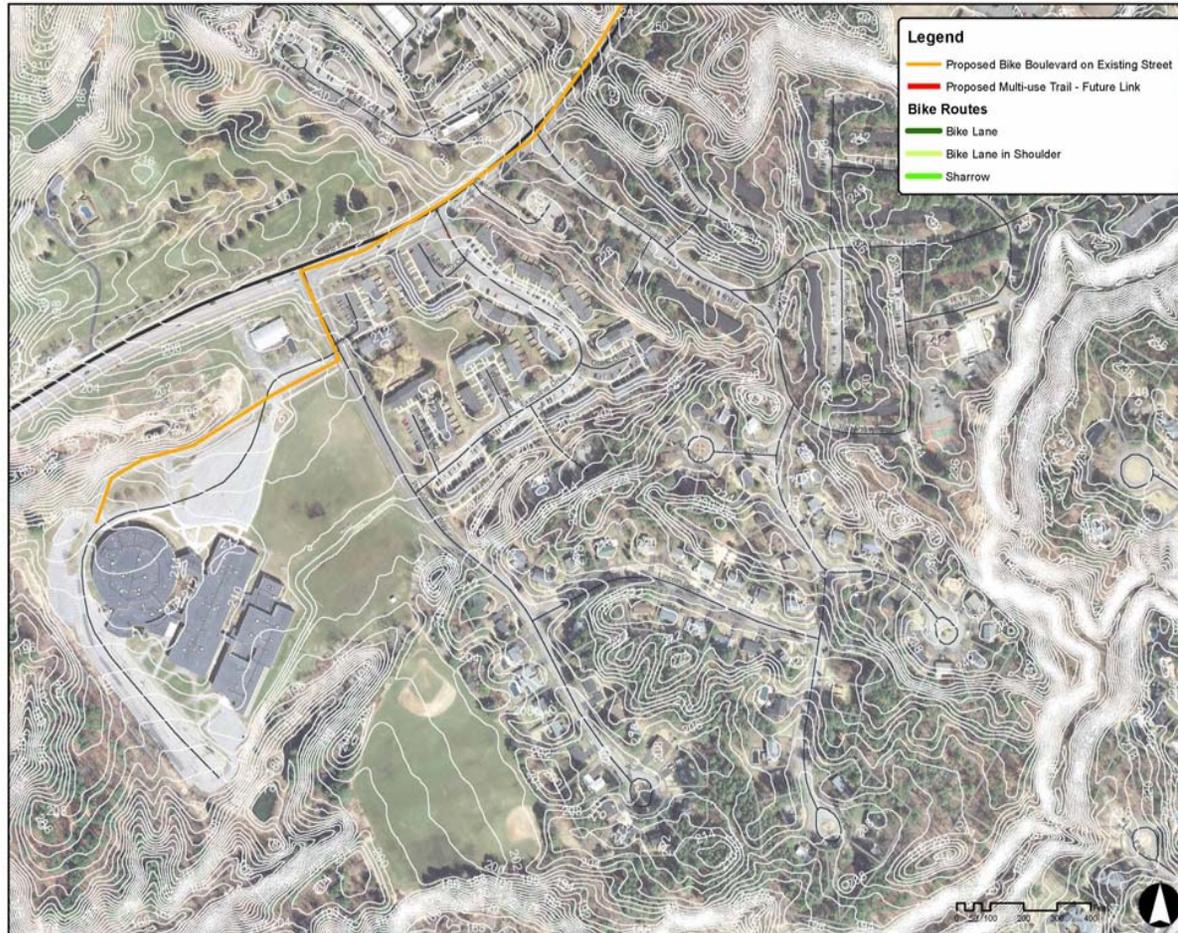
Map 5-9: Existing and future bicycle and pedestrian links



1. Farnsworth Middle School Connections

Alignment

Characteristics

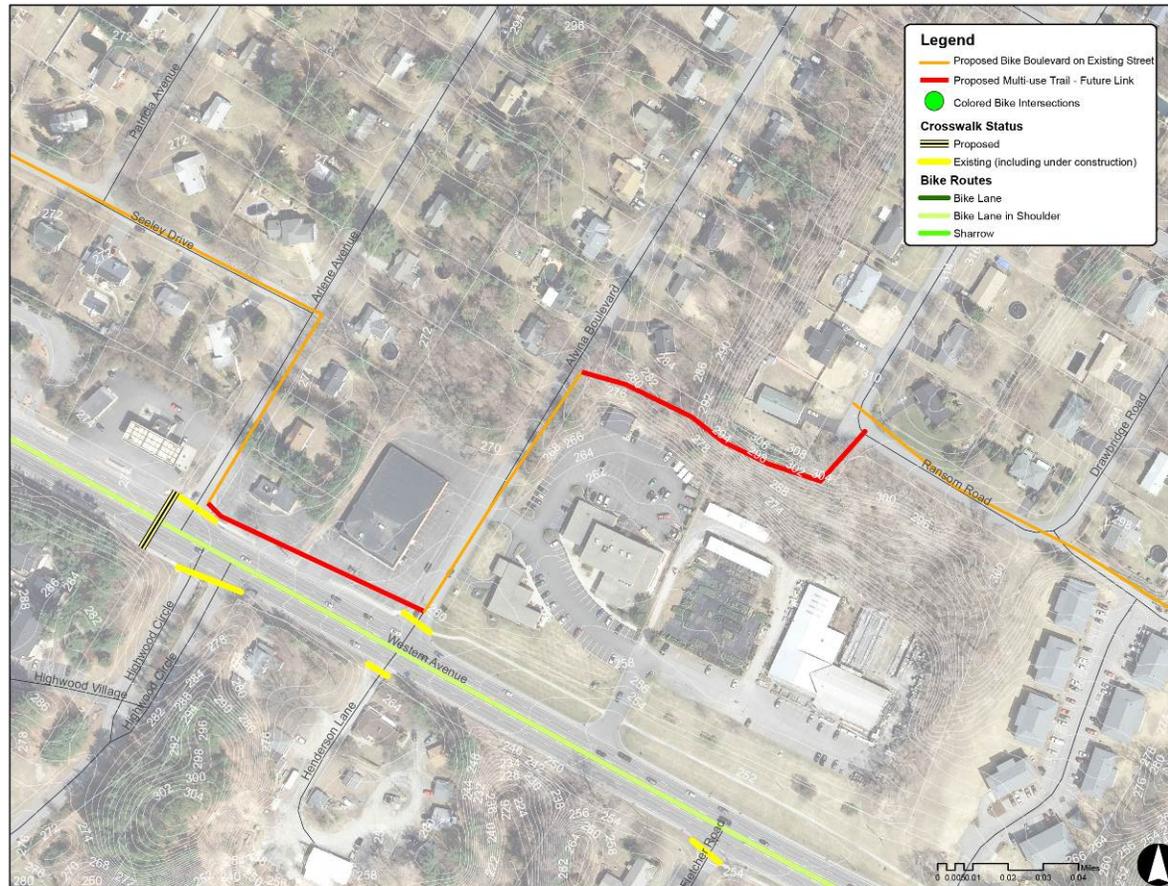


This proposal would study new bicycle boulevard and multiuse trail links between Farnsworth Middle School and the neighborhoods and apartment complexes surrounding it. These improvements would provide safe routes to school for students, as well as making it easier for residents to walk or bike to shops, services, and transit stops.

- Change in Elevation – Varies by location with some steep slopes.
- Ownership Issues – Generally public rights of way with some private property.
- Zoning – The area’s zoning includes MR (Multiple Residence), R15 (Single Family), TH (Town House), and RO40 (Residential Overlay).

2. Arlene Avenue to Sherwood Forest Road

Alignment



Characteristics

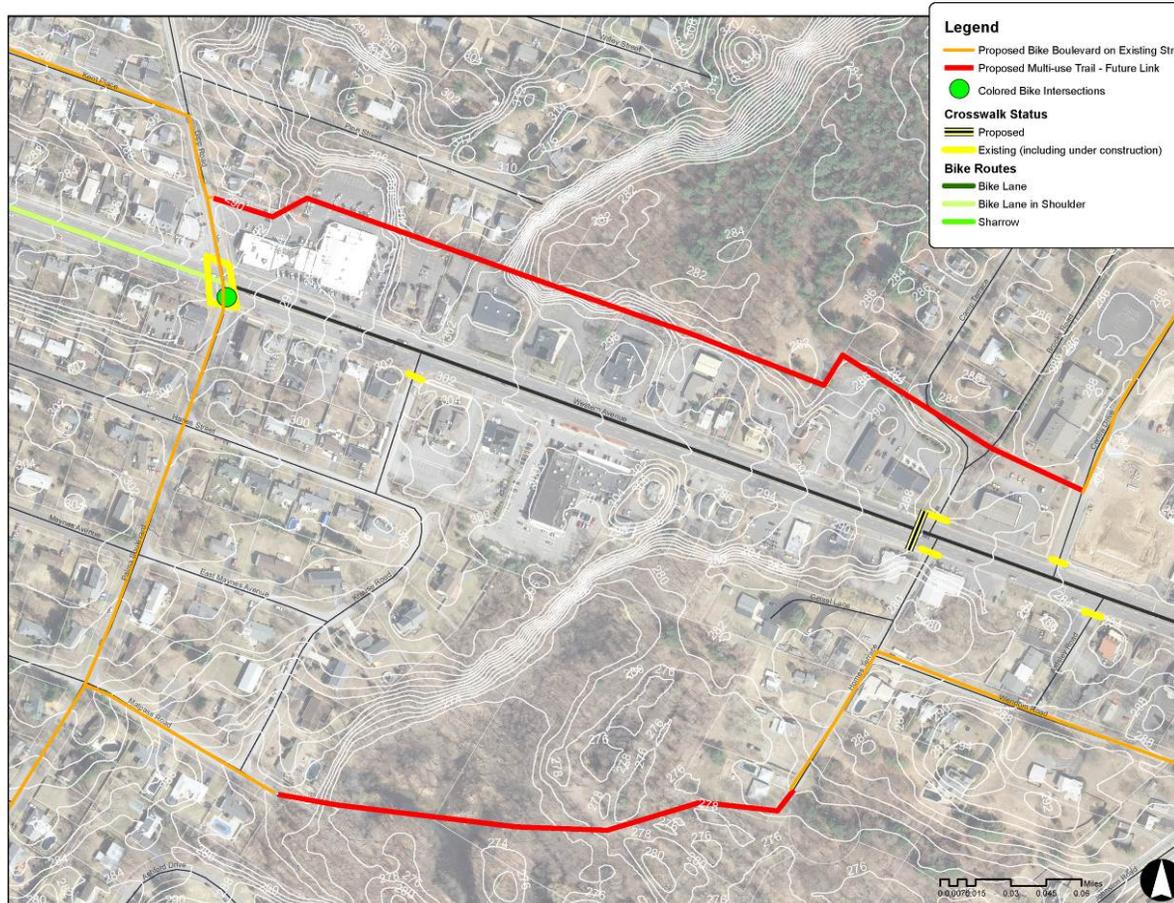
This link would provide a connection from New Karner Road, the neighborhood just to the east of New Karner, and the proposed trail and greenway system running parallel and just north of Western. It would serve all of the commercial uses along the north side of Western as far as Crossgates Mall and possibly to Stuyvesant Plaza and UAlbany if the bridge across the Thruway is eventually added.

- Runs along existing streets for the most part
- Change in elevation- Flat until behind the parking lot near Sherwood Forest drive then sloping up to Ransom Road.
- Ownership issues- Westlawn Lanes LLC
- Zoning- LB (Local Business) and R15

3. Gipp Road to Center Drive

Alignment

Characteristics



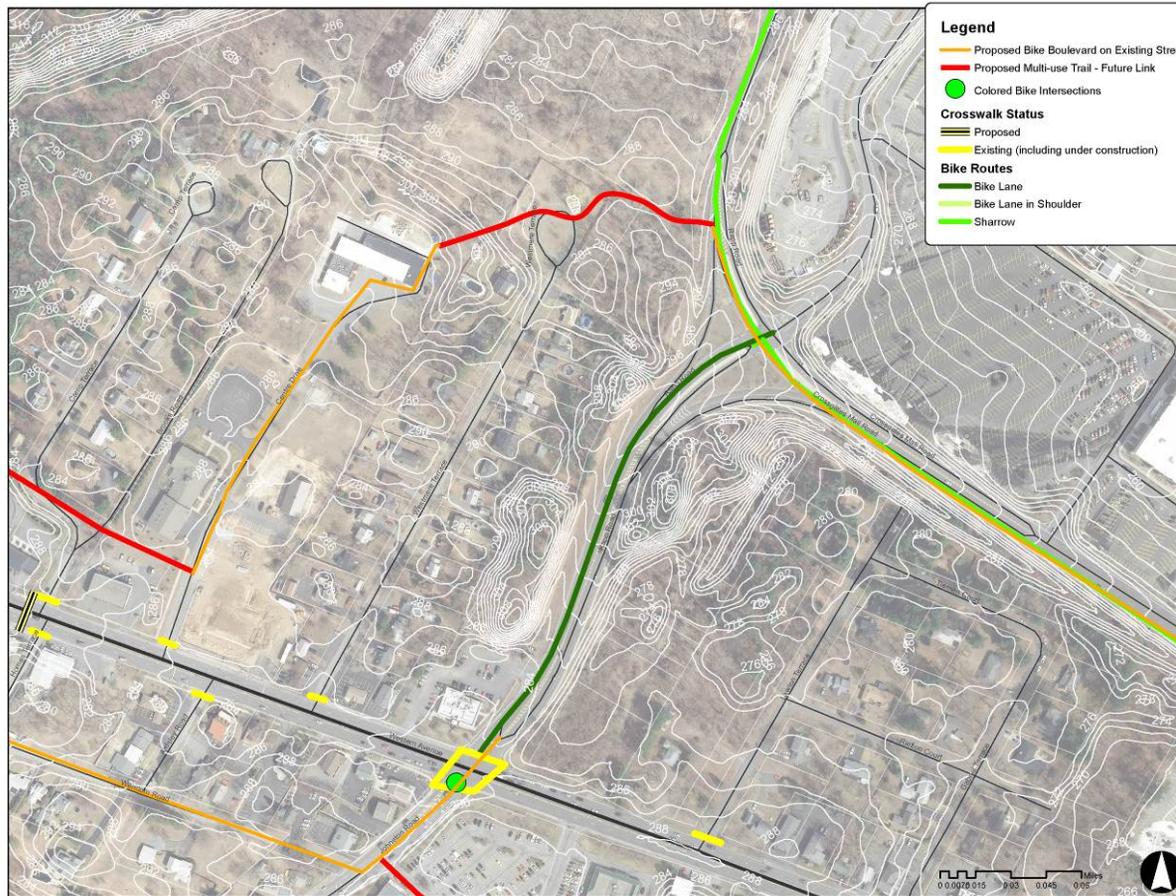
This link would provide bicycle and pedestrian access from the neighborhoods north of Western to the commercial uses between Gipp and Centre Dr. without having to use Western. It would also form part of a continuous trail system from New Karner Road to Crossgates Mall and beyond if the link across the Thruway is constructed.

- Part of this trail may run along the alleyway proposed in the Access Management section.
- Change in elevation - No significant change
- Ownership issues – Goes through the back parking lots of 15 Western Avenue business parcels
- Zoning- LB

4. Center Drive to Rapp Road

Alignment

Characteristics



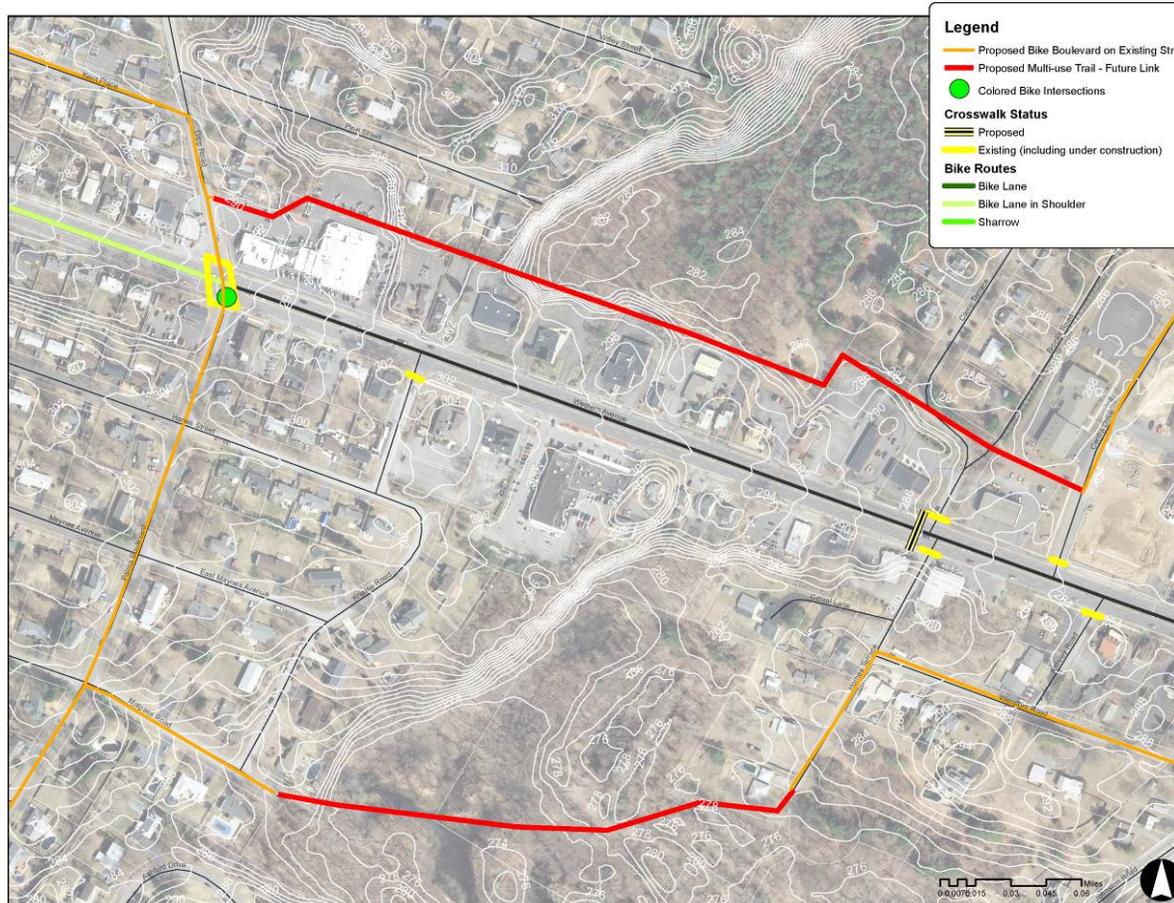
This trail provides a critical link between the street system north of Western in the central segment and Crossgates Mall.

- Change in elevation - 6 foot drop over a distance of 650 feet
- Ownership issues – BAC Building Corporation and Crossgates Mall
- Zoning- BNRP – Business Non-retail Professional

5. Malpass Road to Homes Terrace

Alignment

Characteristics



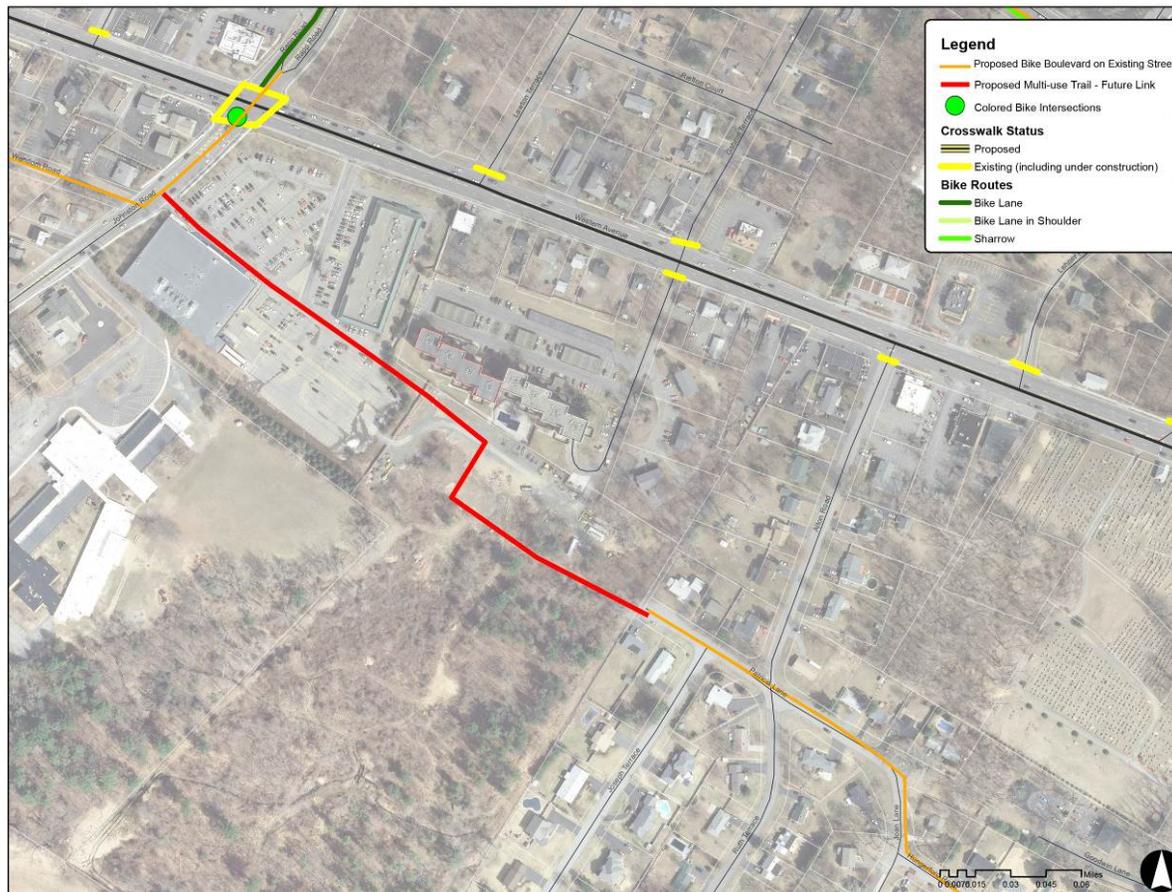
This multi-use trail between Malpass Road to the west, and Homes Terrace to the east would connect the local street network of single-family homes and apartment buildings (Oxford Heights Apartments) in the southwest section of the corridor with key destinations in the central/south corridor such as Westmere Elementary School and Town Center Plaza and provide direct access to the bus stop at Johnston Road/Rapp Road. This path traverses a forested area.

- Change in elevation- No Significant grade changes along route
- Challenges to the ROW- Trees
- Ownership issues - Minimal
- Zoning – TH (Townhouse Dwelling) and R40 (Single Family)

6. Johnston Road to Patricia Lane

Alignment

Characteristics

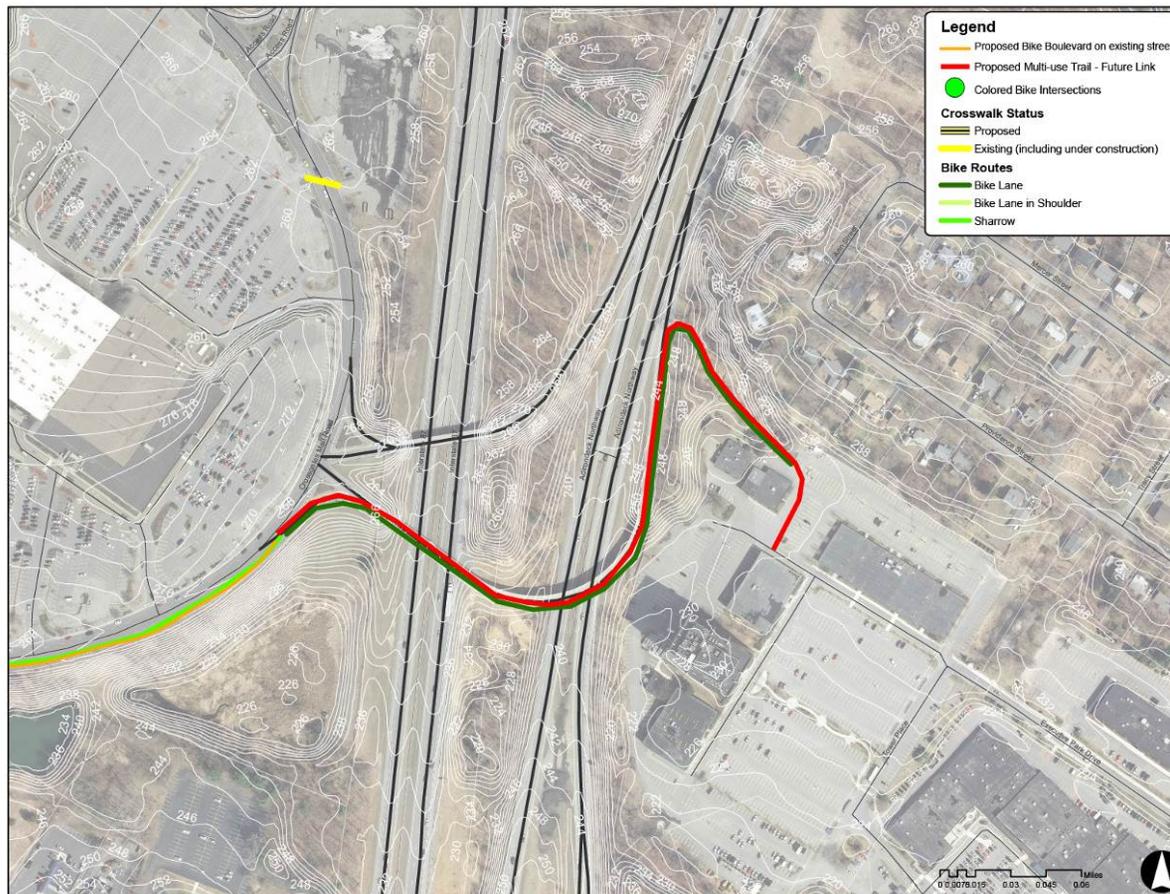


This link travels through the Wolanin development from Town Center Plaza to Patricia Lane. It links the major retail node at Johnston Road with the neighborhood and apartment complexes along Patricia, Hungerford, and Church.

- Change in elevation- Starts at an elevation of 288' and ends at 276'. This is a very gradual elevation change.
- Ownership issues- Guilderland Central and Crosstree Corp are parcel owners
- Zoning- R15 and RO40 (Residential Overlay)

7. Crossgates Mall to Stuyvesant Plaza

Alignment



Characteristics

This concept uses the existing Northway entrance ramp from Crossgates Mall Ring Road to create a multimodal connection to Stuyvesant plaza, including a protected multi-use trail for cyclists and pedestrians, as shown in the figure to the left. This facility would enable bicycle and pedestrian travel between Crossgates Mall and Stuyvesant Plaza / Executive Park, as well as other eastern destinations like the UAlbany campus.

- Change in elevation- Loop road is flat, but grade to bridge over Northway would be steep.
- Challenges to the ROW- Structural and safety issues of attaching a multiuse trail to the existing structure would have to be determined and resolved. A safe way to cross the Ring Road would need to be provided.
- Ownership issues – Ramp structure is owned by NYSDOT
- Zoning- GB for Crossgates Mall and LB for Stuyvesant Plaza
- A physical connection from the Crossgates Ring Road to Stuyvesant Plaza is called for in Guilderland Comprehensive Plan (p. IV-21); multimodal viaduct could integrate cars and bike and pedestrian trail.

5.6.3.2 On-street Bicycle Facilities

It is recommended that the following on street bicycle facilities be implemented:

- Bicycle sharrows are proposed on Gipp Road and Crossgates Mall Road to increase the visibility of cyclists.
- The portion of Rapp Road between Western Avenue and Crossgates Mall Road marked in dark green in Map 5-10 is proposed to be redesigned to accommodate bike lanes on each side.
- Use of colored paint (a popular experimental treatment) at major intersections and other potential conflict areas with motorists will increase visibility of cyclists, as shown in Figure 5-26. Proposed locations are shown in Map 5-10. These intersections are potential heavy conflict points or important parts of a future protected bicycling corridor. This treatment is considered experimental in the MUTCD and implementation can be considered when it is established as standard.



Figure 5-24: Protected bike/pedestrian path along arterial ramp



Figure 5-25: On-street bicycle sharrows on Delaware Avenue in Albany

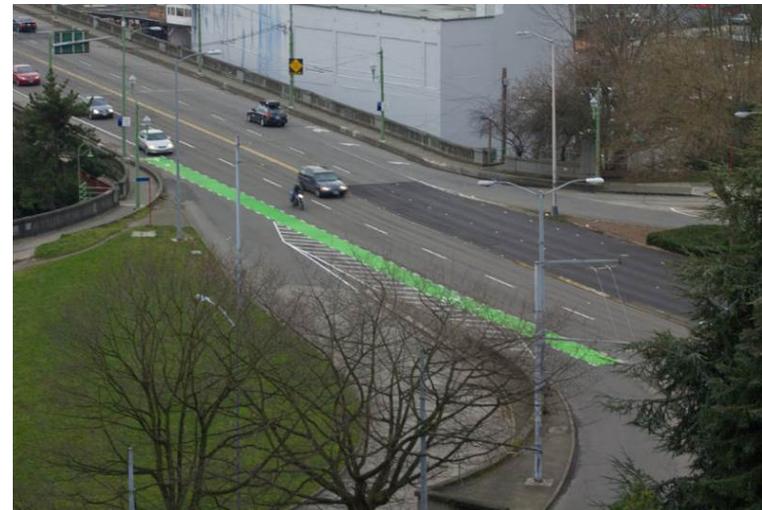
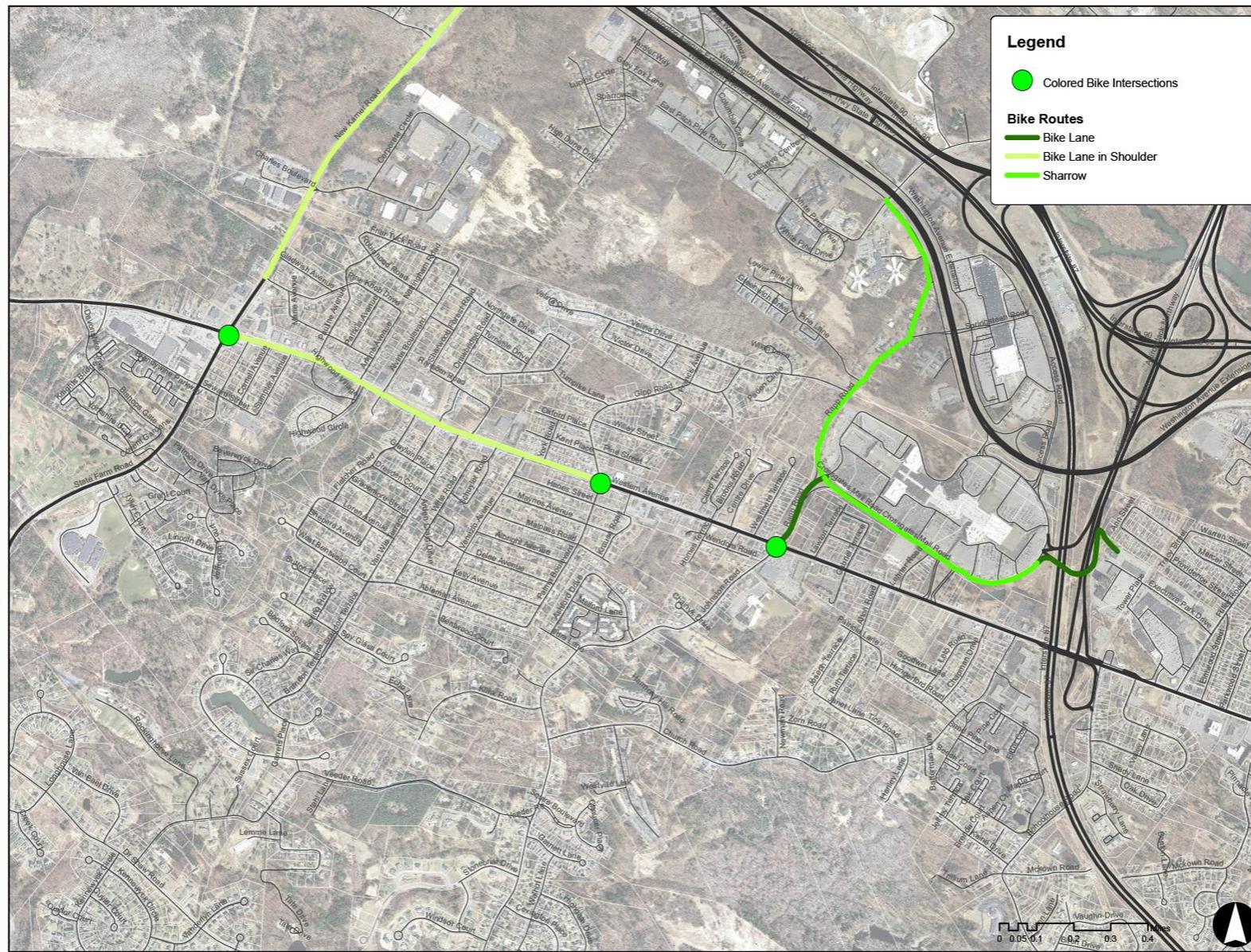


Figure 5-26: On-street bicycle lane is painted green at a potential motorist-conflict-point to increase cyclist visibility in Seattle, WA

Source: NACTO

Map 5-10: Proposed On-Street Bike Facilities



It is proposed that the following on street bicycle facilities be considered for future implementation.

- Dedicated bicycle lanes on Western Avenue would provide a direct route along the corridor for existing cyclists and improve comfort for some people who are afraid to cycle in traffic. Some sections of the road, particularly between New Karner Road and Palma Boulevard, have 5-foot shoulders, which could be used as on-street bike lanes (Figure 5-27). The cross section of Western Avenue in the western segment generally includes a 5 foot shoulder, which is wide enough to accommodate a bike lane. In areas where the shoulder could be used as a bike lane, it should be painted in MUTCD-compliant fashion. In the center segment the roadway varies from 64 to 66 feet, including a 12 foot turn lane, two 11 foot lanes and two lanes from 15 to 16 feet in width. It may be possible to re-stripe this area to include bike lanes if the other lanes are narrowed slightly. Complicated traffic patterns, heavy traffic with frequent turning movements, and general lack of adequate roadway width make bike lanes inappropriate in the eastern segment.
- Bike lanes in shoulders may also be provided on New Karner Road north of Pine Knob Drive, where 5 foot shoulders exist.

5.6.3.3 Signalized Crosswalk Improvements

It is proposed that new signalized crosswalks be considered for future implementation at the following locations:

- Across Western Avenue at Arlene Avenue with the addition of a traffic signal, in order to break up a 0.8 mile stretch between New Karner Road and Witte Road where there are no crosswalks across Western despite several bus stops, multi-family developments, and neighborhood amenities.
- At the intersection of Western Avenue with Homes Terrace/Camp Terrace. This intersection features small businesses and bus stops on each side of Western

Avenue, but is currently 1,000 feet from the nearest crosswalk.

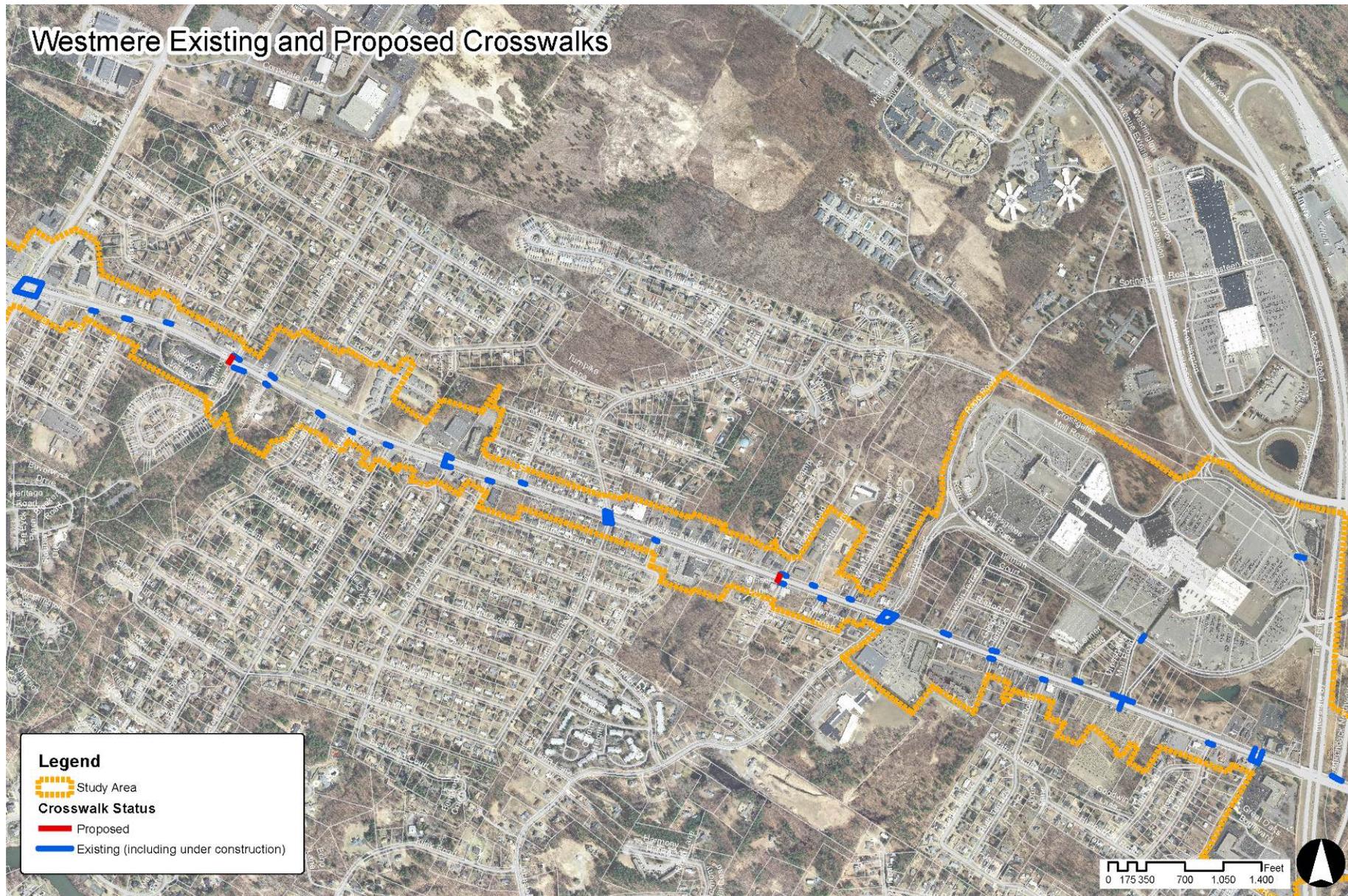
- At the intersection of Western and Johnston Road, on the south side. Many attendees of the open house suggested that this is a highly-utilized intersection by pedestrians, where pedestrian buttons should be considered.
- After construction of these crosswalks, including existing signalized intersections and proposed median refuge islands with crosswalks, the spacing of crossings would be 1000-2000 feet, much more conducive to pedestrian access for people who walk to amenities along the corridor.

These locations do not meet warrants today but may as Western Avenue continues to grow, the nature of development and travel patterns change, and warrants are updated over time.



Figure 5-27: Bike lane in shoulder. Example from Tampa Bay, FL

Map 5-11: Existing and Proposed Crosswalks



5.6.4 Pedestrian refuge islands

It is proposed that refuge islands be considered in concert with new and existing crosswalks at Arlene Avenue, Holmes Terrance, Johnston Road, and the Adirondack Northway terminus (Reference Route 910F). Further research on the need for crosswalks and the desirability of refuge islands is needed before a final determination can be made.

Pedestrian refuge islands are localized interventions that cause motorists to slow due to horizontal deflection and lane narrowing.⁴ They provide a refuge so that pedestrians can cross one direction of traffic at a time. Because they are more localized than continuous medians used for access management, these traffic calming interventions are lower-cost and do not constrain left-turning vehicles. Refuge islands could be implemented in concert with new or existing signalized crosswalks at key locations such as Johnston Road/Rapp Road, the gateway intersection at the Northway or at the heavily used bus stop/crosswalk locations proposed in Section 5.6.3.3.



Figure 5-28: Pedestrian Refuge Island on NY State Route 7 in Latham NY.
Source: Google Street View



Figure 5-29: Pedestrian Refuge Island. Example from Maryland Parkway, Las Vegas. Source: <http://safety.fhwa.dot.gov/>

⁴ http://safety.fhwa.dot.gov/ped_bike/tools_solve/medians_brochure/medians_brochure.pdf



Figure 5-30: Potential location for signalized crosswalks and median refuge near Homes Terrace (exact location to be determined by traffic study)



Figure 5-31: Potential location for signalized crosswalks and median refuge near Arlene Avenue (exact location to be determined by traffic study)

Appendix A: Environmental Justice

Introduction

Per federal requirements, the Capital District Transportation Committee (CDTC) undertakes an analysis of Environmental Justice in all Community and Transportation Linkage Planning Program (Linkage Program) initiatives to evaluate if transportation concepts and recommendations impact Environmental Justice populations. Impacts may be defined as those that are positive, negative and neutral as described in CDTC's Environmental Justice Analysis document, published March 2014 (available at <http://www.cdtcmpto.org/ej/ej.htm>). The goal of this analysis is to ensure that both the positive and negative impacts of transportation planning conducted by CDTC and its member agencies are fairly distributed and that defined Environmental Justice populations do not bear disproportionately high and adverse effects.

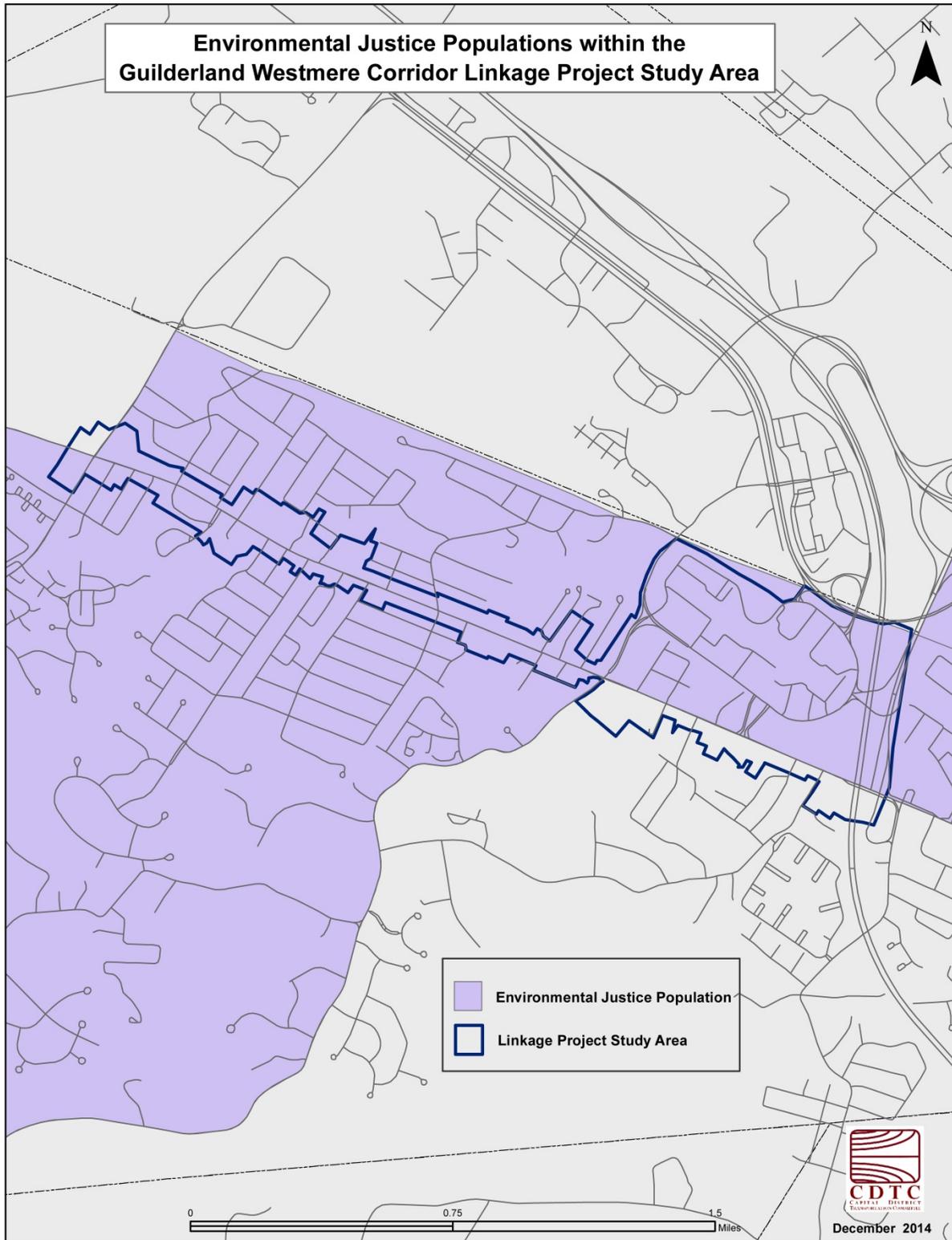
This goal has been set to:

- Ensure CDTC's compliance with Title VI of the Civil Rights Act of 1964, which states that "no person in the United States shall, on the basis of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance,"
- Assist the United State Department of Transportation's agencies in complying with Executive Order 12898 stating, "Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."
- Address FTA C 4702.1B TITLE VI REQUIREMENTS AND GUIDELINES FOR FEDERAL TRANSIT ADMINISTRATION RECIPIENTS, which includes requirements for MPOs that are some form of a recipient of FTA, which CDTC is not.

Data and Analysis

In developing a methodology for analysis, CDTC staff created demographic parameters using Summary File 1 data from the 2010 United States Census as well as data from the 2007-2011 American Community Survey (ACS). Threshold values were assigned at the census tract level to identify geographic areas with significant populations of minority or low-income persons. Tracts with higher than the regional average percentage of low-income or minority residents are included on Map 1 as Environmental Justice populations. Minority residents are defined as those who identify themselves as anything but white only, not Hispanic or Latino. Low-income residents are defined as those whose household income falls below the poverty line.

Map 1



The transportation patterns of low-income and minority populations in CDTC’s planning area are depicted in Table 1, using the commute to work as a proxy for all travel. The greatest absolute difference between the defined minority and non-minority population is in the Drive Alone and Transit categories: The non-minority population is 17.5% more likely to drive alone, slightly more likely to work at home, 10.1% less likely to take transit, and is also less likely to carpool, walk, or use some other method to commute. The greatest absolute difference between the defined low-income population and the non-low-income population follows the same trend, with the non-low-income population 20.9% more likely to drive alone and 11.7% less likely to commute via transit.

Table 1. Commute Mode 4-County NY Capital Region						
By Race	Drive Alone	Carpool	Transit	Other	Walk	Work at Home
All Workers (16+)	80.0%	8.3%	3.2%	1.2%	3.6%	3.7%
White Alone Not Hispanic or Latino	82.5%	7.8%	1.8%	1.0%	2.9%	3.9%
Minority	65.0%	11.0%	11.9%	2.1%	7.4%	2.6%
By Income	Drive Alone	Carpool	Transit	Other	Walk	Work at Home
All Workers (16+) for whom poverty status is determined	80.7%	8.3%	3.2%	1.2%	3.0%	3.6%
At/Above 100% Poverty Level	81.7%	8.2%	2.6%	1.1%	2.8%	3.6%
Below 100% Poverty Level	60.8%	10.2%	14.3%	3.1%	7.7%	3.9%

Data: American Community Survey 2011 5-year estimates, tables B08105H + B08122. Other incl. taxi, motorcycle, bicycle.

The Westmere Corridor Study area is included in the Environmental Justice area based on the study area Census Tracts having a higher than regional average percentage of minority residents. Consideration for including these populations in the planning process was given in the following ways:

- The Internet was used to display and advertise information about the study.
- Social media was used to provide information and input opportunities.
- Two formal public participation opportunities were provided, with meetings held in the evening in transit accessible locations to neighborhood residents.
- Public comment was accepted throughout the study process.
- Final products will be posted to CDTC’s website, the Town of Guilderland’s website and on social media.

Conclusion

CDTC defines plans and projects with a primary or significant focus on transit, bicycling, walking, or carpool as being “positive”. As the primary purpose of the Westmere Corridor Study is to develop a neighborhood plan including transportation improvements for the area along Western Avenue between Church Street on the east and State Farm Road and New Karner Road on the west, which includes neighborhoods with Environmental Justice populations, it has been determined that the Westmere Corridor Study will have a positive impact on the effected populations. The Study makes recommendations for land use, access management and streetscape improvements, and pedestrian-bicycle facilities and transit improvements which, if implemented, will provide positive benefits for Environmental Justice populations in the study area.

Environmental Features Scan

CDTC's New Visions 2040 regional transportation plan encourages smart growth as well as investment and development in urban areas as a method to protect natural resources. Smart growth policies also help to protect rural character and open space, and protect quality of life in the Capital Region. CDTC has undertaken review of natural and cultural resource mapping, and for the development of the Regional Transportation Plan consulted with federal, state and local agencies on environmental issues as an important part of the environmental mitigation process. Along with evaluating the impacts to environmental systems of candidate transportation projects for federal funds, CDTC documents the environmental systems present in the study areas for Linkage Program planning initiatives. Map 2 provides an overview of the environmental systems present in the Westmere Corridor Study area. CDTC uses GIS mapping of the below environmental systems to screen for potential project impacts. Features within 0.25 miles of the study area are included in Map 2. The Westmere Corridor Study recommendations are not expected to impact any identified features since the study area is already developed.

Environment features include:

- **SOLE SOURCE AQUIFERS**
 - **AQUIFERS**
 - **RESERVOIRS**
- **WATER FEATURES (STREAMS, LAKES, RIVERS)**
 - **WETLANDS**
 - **WATERSHEDS**
- **100 YEAR FLOOD PLAINS**
- **RARE ANIMAL POPULATIONS**
- **RARE PLANT POPULATIONS**
- **SIGNIFICANT ECOLOGICAL SITES**
 - **SIGNIFICANT ECOLOGICAL COMMUNITIES**
 - **STATE HISTORIC SITES**
 - **NATIONAL HISTORIC SITES**
- **NATIONAL HISTORIC REGISTER DISTRICTS**
- **FEDERAL PARKS AND LANDS**
- **STATE PARKS AND FORESTS**
 - **STATE UNIQUE AREAS**
- **STATE WILDLIFE MANAGEMENT AREAS**
- **COUNTY FORESTS AND PRESERVES**
 - **MUNICIPAL PARKS AND LANDS**
 - **LAND TRUST SITES**
 - **NYS DEC LANDS**
 - **ADIRONDACK PARK**
- **AGRICULTURAL DISTRICTS**
- **AGRICULTURE PARCELS TAXED AS FARMLAND**
- **AGRICULTURE PARCELS IN FARM USE**
 - **CLASS I & II SOILS**

MAP 2

