





CHAPTER 3

EXISTING CONDITIONS

This chapter provides an overview of the study area's socio-demographic characteristics, land use and land ownership patterns, local destinations, and transportation and natural systems. Understanding the current conditions within the study area is critical to identifying challenges and opportunities related to the proposed Patroon Creek Greenway. The findings from this chapter, combined with public feedback, lay the foundation for the trail alignment alternatives and trail connections explored in the next phase of this study.

Specifically, this chapter characterizes the study area's:

- Socio-demographic characteristics
- Land use patterns
- Land ownership patterns
- Zoning districts
- Parks and trails
- Community resources
- Vehicular transportation network
- Rail transportation network
- Pedestrian and bicycle infrastructure
- Public transit network
- Utility infrastructure
- Natural resources

SOCIO-DEMOGRAPHIC PROFILE

This section provides a snapshot of the socio-demographic characteristics of the study area as well as adjacent geographies. Understanding who lives in the study area and the resources to which they have access is an important first step in ensuring the proposed Patroon Creek Greenway prioritizes equitable access.

Federal Environmental Justice Areas

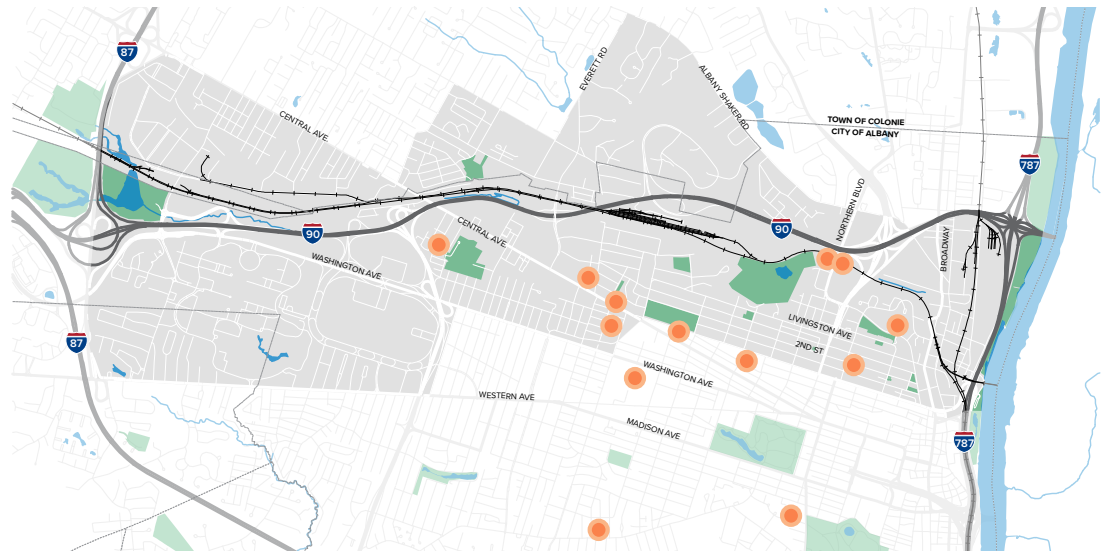
The Capital District Transportation Committee (CDTC) conducted an analysis to evaluate whether this project will impact Environmental Justice populations. The goal of the analysis is to ensure that both the positive and negative impacts of transportation planning are fairly distributed and that defined Environmental Justice populations do not bear disproportionately high and adverse effects (see Appendix A for the full analysis).

CDTC staff created demographic parameters for this analysis using data from the 2013-2017 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 identified 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. **A majority of the study area is comprised of Environmental Justice populations.**

ALBANY SCHOOLS SERVE A DIVERSE COMMUNITY

The City of Albany's public and charter schools serve diverse student populations, the majority of which meet the criteria used to define Federal Environmental Justice Areas. The map below highlights the schools (in orange) located in or near the Patroon Creek Greenway study area, and the list below summarizes the percentage of economically disadvantaged and minority students at each of these schools:

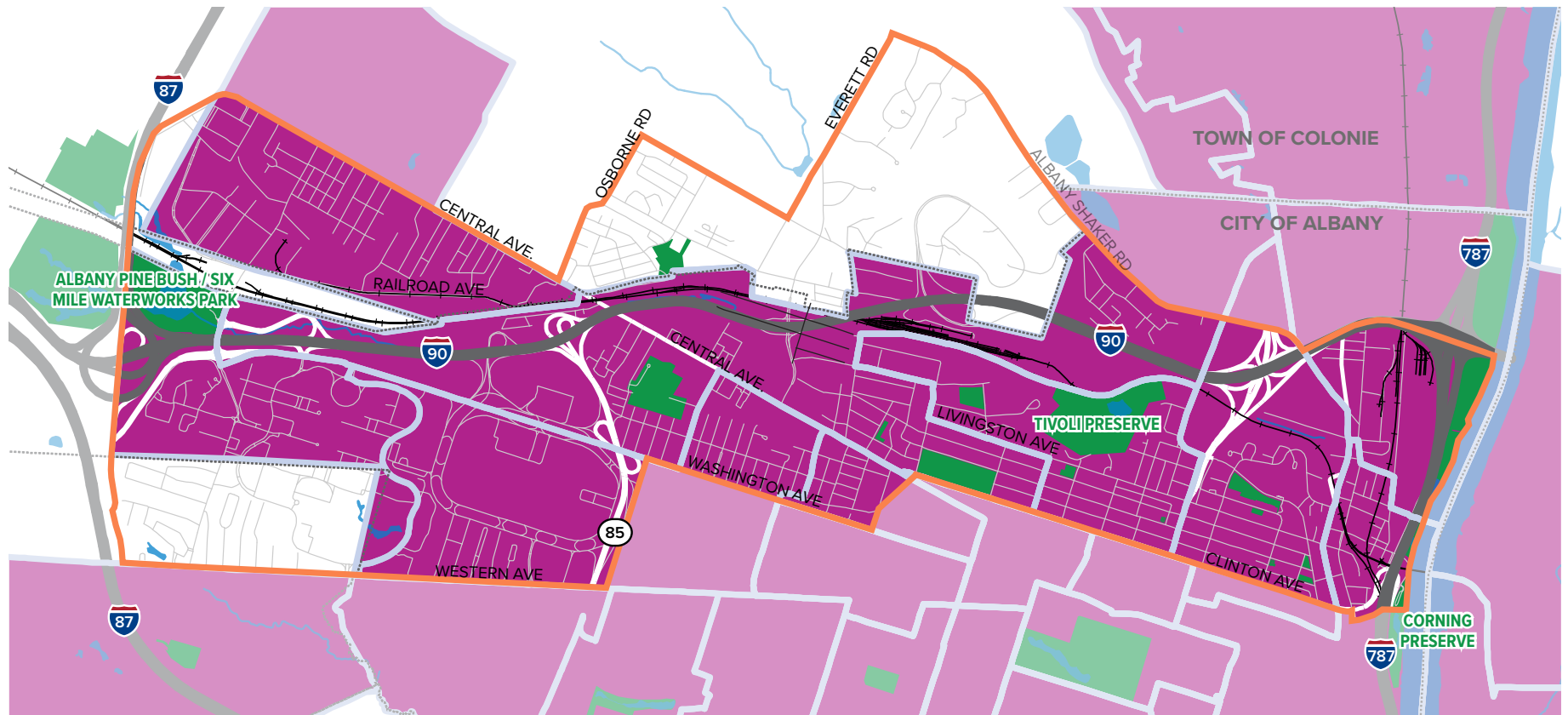
- **KIPP Tech Valley Charter School:** 99% minority, 73% economically disadvantaged
- **Henry Johnson Charter School:** 97% minority, 85% economically disadvantaged
- **Arbor Hill Elementary School:** 96% minority, 89% economically disadvantaged
- **Philip J. Schuyler Achievement Academy:** 91% minority, 91% economically disadvantaged
- **Albany International Center (formerly Edmund J. O'Neal Middle School of Excellence):** 90% minority, 91% economically disadvantaged
- **Albany High School:** 78% minority, 66% economically disadvantaged
- **Montessori Magnet School:** 50% minority, 34% economically disadvantaged



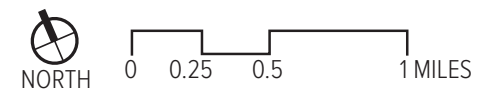
SOCIO-DEMOGRAPHIC PROFILE: FEDERAL ENVIRONMENTAL JUSTICE AREAS

- Federal Environmental Justice Areas in the study area
- Federal environmental justice areas outside study area

- parks
- study area
- municipal boundaries



Data Source: Capital District Transportation Committee (CDTC)



SOCIO-DEMOGRAPHIC PROFILE

New York State Potential Environmental Justice Areas

Potential Environmental Justice Areas (PEJAs), as defined by the New York State Department of Conservation (NYS DEC), are Census Block Groups characterized by low household incomes and/or high concentrations of minority communities. These areas often coincide with neighborhoods that have been disproportionately impacted by environmental hazards and historic disinvestment.

Approximately 30% of the study area meets NYS DEC's definition of a PEJA. PEJAs are concentrated in the eastern and south-central portions of the study area. In the City of Albany, PEJAs are generally bound to the west by Everett Road, to the north by the rail line, and to the south by Washington and Clinton Avenue. In the Town of Colonie, one Census Block Group is identified as a PEJA; it is bound to the west by Osborne Road, to the north by Exchange Street, and to the south by the First Prize site and the railroad.

The study area's PEJAs overlap with the following Albany neighborhoods:

- Warehouse District
- North Albany
- Sheridan Hollow
- Ten Broeck Triangle
- Arbor Hill
- West Hill
- West End

Several of the PEJAs in the study area far exceed the income and minority population thresholds established by the NYS DEC (see sidebar for additional information). In the following areas, over 40% of the population has household incomes below the poverty level and over 75% of the population are members of a minority group:

- Between Clinton Avenue and 2nd Street, from Broadway west to N. Lake Avenue;
- Between Clinton Avenue and Livingston Avenue, from Quail Street to N. Manning Boulevard; and,
- Between Livingston Avenue and the intersection of Van Rensselaer and Northern Boulevards, from Broadway and Loudonville Road west to Northern Boulevard.

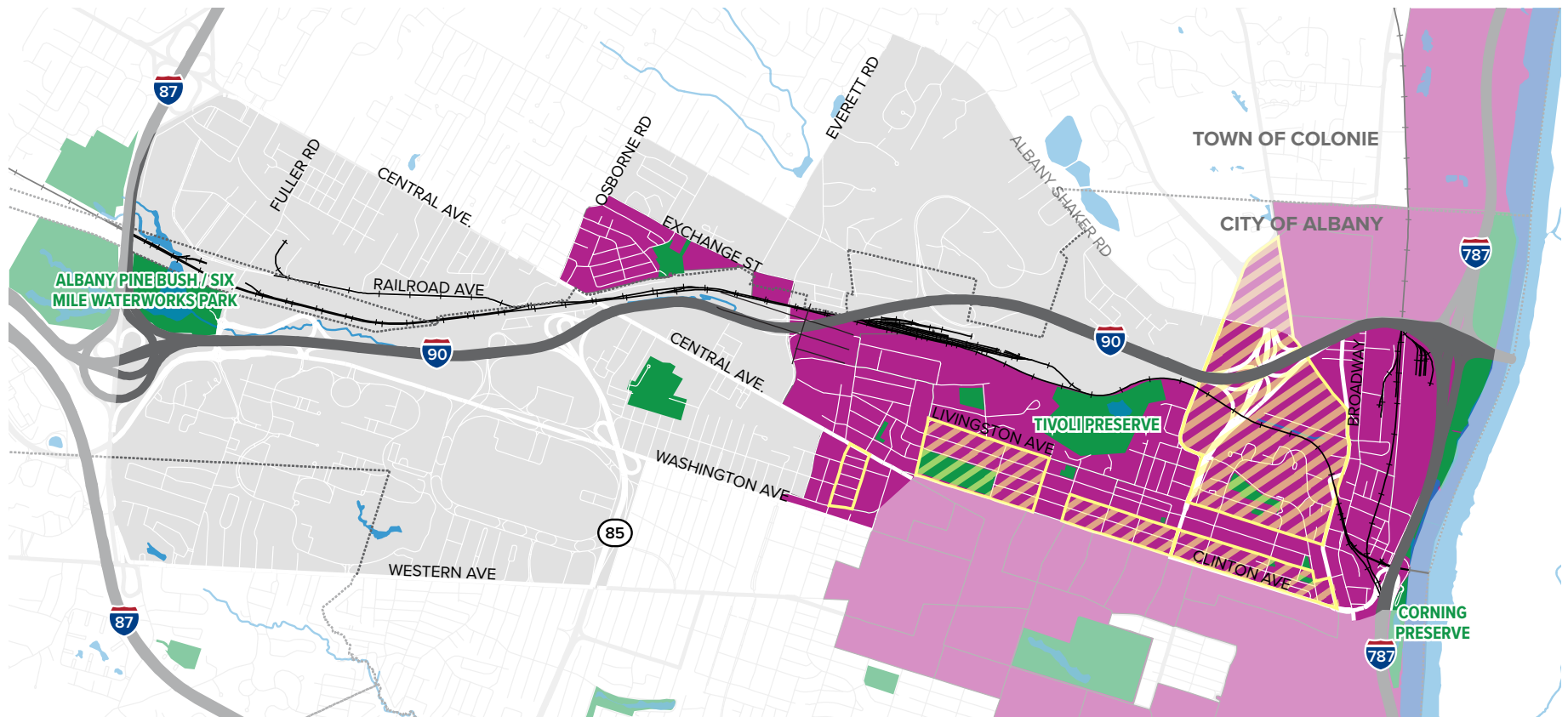
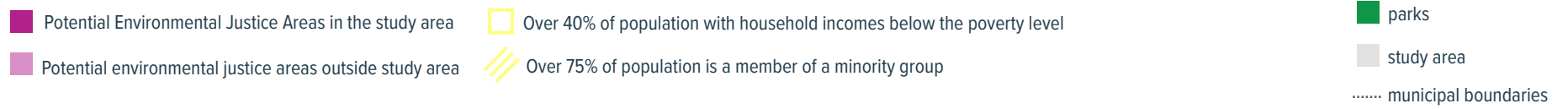
The entire study area is socially vulnerable; however, the PEJAs provide a helpful indicator for identifying the most vulnerable populations. Compared to the federal environmental justice areas described and shown on the previous pages, the PEJAs cover a smaller portion of the study area and identify areas of concentrated poverty and/or minority populations. Therefore, for the purposes of this project, PEJAs are used to identify under-served communities within the study area.

NEW YORK STATE POTENTIAL ENVIRONMENTAL JUSTICE AREAS

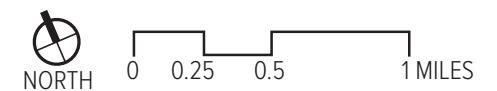
The New York State Department of Environmental Conservation defines an Potential Environmental Justice Area as a U.S. Census Block Group with a population that meets or exceeds **at least one** of the following statistical thresholds:

1. At least 52.42% of the population in an urban area reported themselves to be members of minority groups; or
2. At least 26.28% of the population in a rural area reported themselves to be members of minority groups; or
3. At least 22.82% of the population in an urban or rural area had household incomes below the federal poverty level.

SOCIO-DEMOGRAPHIC PROFILE: NEW YORK STATE POTENTIAL ENVIRONMENTAL JUSTICE AREAS (PEJAS)



Data Source: New York State Department of Environmental Conservation



SOCIO-DEMOGRAPHIC PROFILE (CONT.)

Socio-Demographic Study Areas

To understand the socio-demographic conditions within the study area relative to adjacent geographies, demographic indicators are summarized for three different areas:

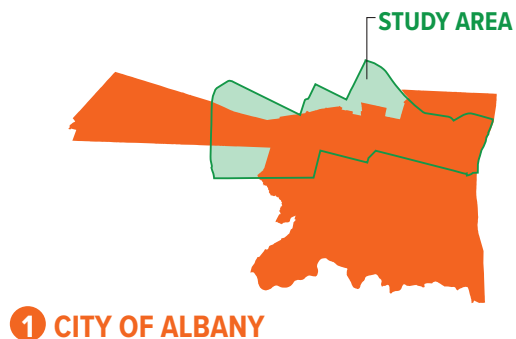
1. The City of Albany
2. The Patroon Greenway study area
3. PEJAs within the Patroon Greenway study area

For each geography, a variety of socio-demographic indicators are summarized, such as population characteristics, household size and income, and access to and use of different modes of transportation.

THE CITY OF ALBANY'S EQUITY AGENDA

In October 2019, the City of Albany's Common Council adopted the Equity Agenda. This local law focuses on, "...achieving equity across all communities and ending the injustices caused by institutional and systemic racism and discrimination." A key component of this law is equitable budgeting, which seeks to invest government resources in the neighborhoods with the greatest need.

Specifically, City investments in public infrastructure, such as streets, sidewalks, parks, lighting, trash and recycling receptacles, and other capital projects are prioritized based on a suite of indicators that are designed to address historic disinvestment and inequities. For example, street and sidewalk reconstructions/enhancements must prioritize neighborhoods where a disproportionate percentage of streets are in need of repairs or replacement.



TOTAL POPULATION

The study area's population is approximately 30,000 and is projected to grow by 0.2% over the next five years. The City of Albany is expected to grow more slowly, with a projected growth rate of 0.1%. Within the study area's PEJAs, the population is expected to slightly decline over the next five years.

CITY OF ALBANY

97,366 2021 population
98,527 2026 population
0.1% growth rate

STUDY AREA

30,003 2021 population
30,545 2026 population
0.2% growth rate

PEJAS

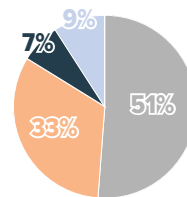
15,376 2021 population
15,339 2026 population
-0.05% growth rate

RACE

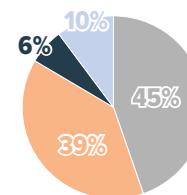
The study area's population is slightly more diverse than the City of Albany as a whole. The study area's population is 45% white, 39% Black, 10% Asian, and 6% of the population is another race(s). Within the study area's PEJAs, the population is predominantly Black (64%).

■ White ■ Black ■ Asian ■ Other

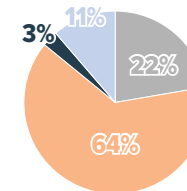
CITY OF ALBANY



STUDY AREA



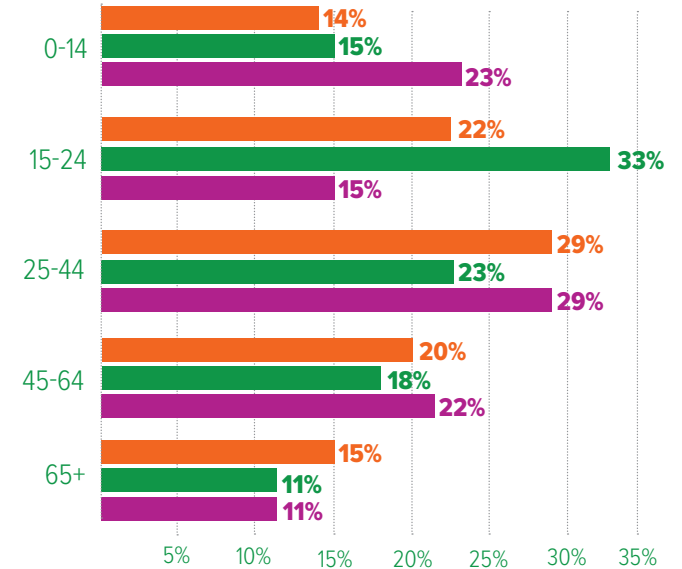
PEJAS



AGE DISTRIBUTION

The study area's population is young relative to the populations of the city and the study area's PEJAs, with one-third of the population falling into the 15 to 24 years age class. This trend is likely driven by the presence of SUNY Albany in the western portion of the study area and adjacent housing for students.

■ City of Albany median age = 32.6
 ■ Study area median age = 26.4
 ■ PEJAs median age = 31.9



Data Source: U.S. Census Bureau, Census 2021 Summary File and ESRI forecasts for 2026.

SOCIO-DEMOGRAPHIC PROFILE (CONT.)

HOUSEHOLD SIZE

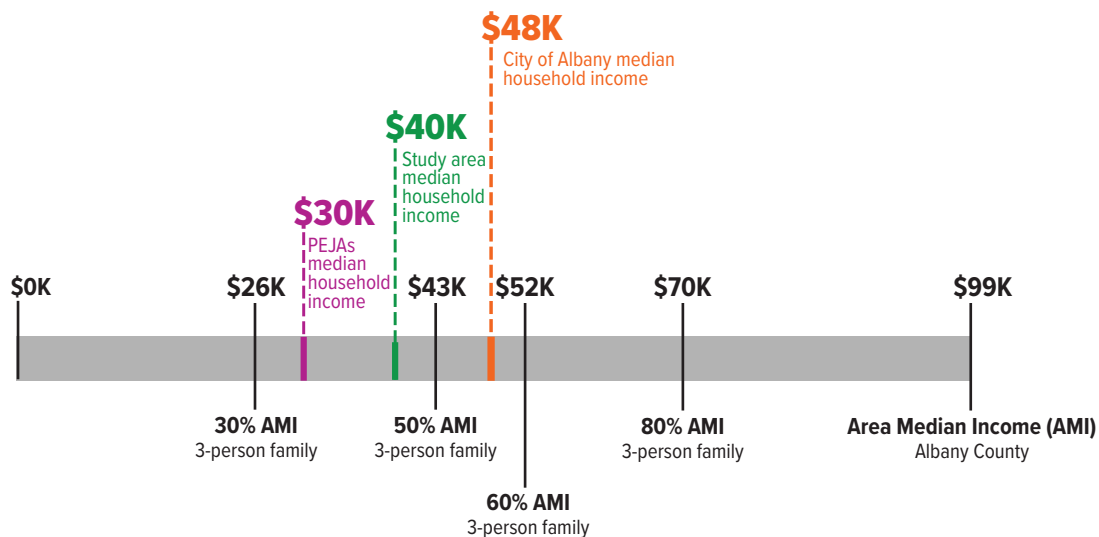
Average household size is relatively similar across all three geographies. The average household size in the study area is 2.34, which is slightly lower than the average household size in the study area's PEJAs (2.44) and slightly higher than the average household size in the City of Albany (2.12).

HOUSEHOLD INCOME

Median household income is highest in the City of Albany and lowest in the study area's PEJAs. The median household income in the PEJAs is \$30,394, while the median household income in the study area is \$40,627 and \$48,165 in the City of Albany. In the PEJAs, 32% of households are below the federal poverty level, which is quite a bit higher than the study area (23%) and the City of Albany (20%).

VEHICULAR ACCESS

Access to a car impacts an individual's mobility, employment, and the ability to acquire necessary goods and services. Within the study area, approximately 30% of households do not have access to a car. This rate is much higher in the study area's PEJAs, where 40% of households do not have access to a car. In the City of Albany, roughly one-quarter of households do not have access to a car.



26% of households in the City of Albany do not have access to a vehicle.



30% of households in the study area do not have access to a vehicle.








40% of households in the study area's PEJAs do not have access to a vehicle.

Data Source: U.S. Census Bureau, Census 2021 Summary File and ESRI forecasts for 2026.

TRANSPORTATION TO WORK

A majority of people drive alone to work in the study area (55%) and in the City of Albany (60%). In the study area's PEJAs, over one-quarter of the working population takes public transit to work, 20% carpool, and 48% drive alone. Of the three geographies studied, the lowest rates of active transportation for commuting (e.g., walking, biking) occur in the PEJAs.

	CITY OF ALBANY	STUDY AREA	PEJAS
 > drive alone	60%	55%	48%
 > public transit	14%	18%	27%
 > carpool	10%	15%	20%
 > walk to work	11%	8%	3%
 > bike to work	1%	0.5%	0.5%

Data Source: U.S. Census Bureau, Census 2021 Summary File

SOCIO-DEMOGRAPHIC PROFILE: KEY FINDINGS

- /// A large portion of the study area (30%) is identified as a Potential Environmental Justice Area by NYS DEC. These areas are characterized by high rates of poverty and a high concentration of minority communities.
- /// Households within the study area's Potential Environmental Justice Areas have limited access to motor vehicles (40% of households do not have access to a car), and instead, tend to rely on public transit and carpooling to commute to work. The future Patroon Creek Greenway could introduce an important new mode of transportation, especially if the Greenway connects to important community destinations, such as shopping and employment centers.
- /// The study area has a high proportion of young residents. Approximately one-third of the study area's population falls into the 15 - 24 years old age group, which is likely driven by the presence of SUNY Albany. This major research university has an undergraduate and graduate population of almost 20,000.
- /// Across all three geographies examined, driving alone is the most common form of transportation to work. Very few individuals bike to work and only about 10% of individuals walk to work in the study area and the City of Albany. Establishing a major east-west, off-road connection for cyclists and pedestrians is a major first step in reducing the City's reliance on motor vehicles, reducing emissions, improving air quality, and supporting healthy lifestyles.

LAND DEVELOPMENT PATTERNS

This section describes land use and ownership patterns in the study area, as well as defines the zoning districts that regulate the use and form of future development and redevelopment.

Land Use

The study area is comprised of a diverse mix of land uses, ranging from residential to commercial to public service uses, that are relatively evenly distributed across the study area. The land use statistics presented in this section and the map on the following page are derived from the New York State property classification codes assigned to each parcel by local tax assessors.

Commercial uses comprise a majority of the study area (33% of the total area) and are generally concentrated along major transportation corridors, including Central Avenue, Western Avenue, Fuller Road, the rail lines, and the Hudson River. Along the Hudson River, commercial uses tend to be associated with downtown Albany businesses and the Warehouse District. Along Central and Western Avenues, many of the commercial uses consist of shopping plazas, grocery stores, and car-oriented destinations. Several smaller commercial uses are distributed throughout urban neighborhoods between Clinton Avenue and Livingston Avenue in the eastern portion of the study area. In the Town of Colonie, most commercial uses are located along Everett Road and in Corporate Woods.

Community services comprise approximately 22% of the total land area in the study area. SUNY Albany and the Harriman State Campus, both located between

Western and Washington Avenues, dominate this land use. Several other smaller community services, such as schools, libraries, and government facilities, are distributed throughout the study area.

Residential uses comprise approximately 20% of the total land area in the study area. These uses tend to be concentrated on the southern and northern fringes of the study area, away from Interstate 90 and the rail lines. In the western portion of the study area, residential uses generally occur in homogeneous clusters, whereas in the eastern portion of the study area, residential uses are often interspersed with commercial, vacant, and community service uses.

Approximately 16% of the total land area in the study area is classified as vacant. These uses tend to occur along the interstate and rail corridors, as well as interspersed throughout dense, urban neighborhoods in the eastern portion of the study area. Notably, Six Mile Waterworks Park and Tivoli Preserve are classified as vacant land uses, despite their use as public parks.

The following land uses comprise 5% or less of the study area's total land area. Public service uses comprise 5% of the study area and are associated with electric, rail, and water infrastructure. Public services tend to parallel Interstate 90 and the Hudson River waterfront. Recreation, parks, and entertainment uses comprise approximately 3% of the study area and industrial uses comprise approximately 1% of the study area. Parks are generally well distributed throughout the study area, and industrial uses are concentrated along the rail corridor and Interstate 90.



▲ Industrial Uses along Industrial Park Road.

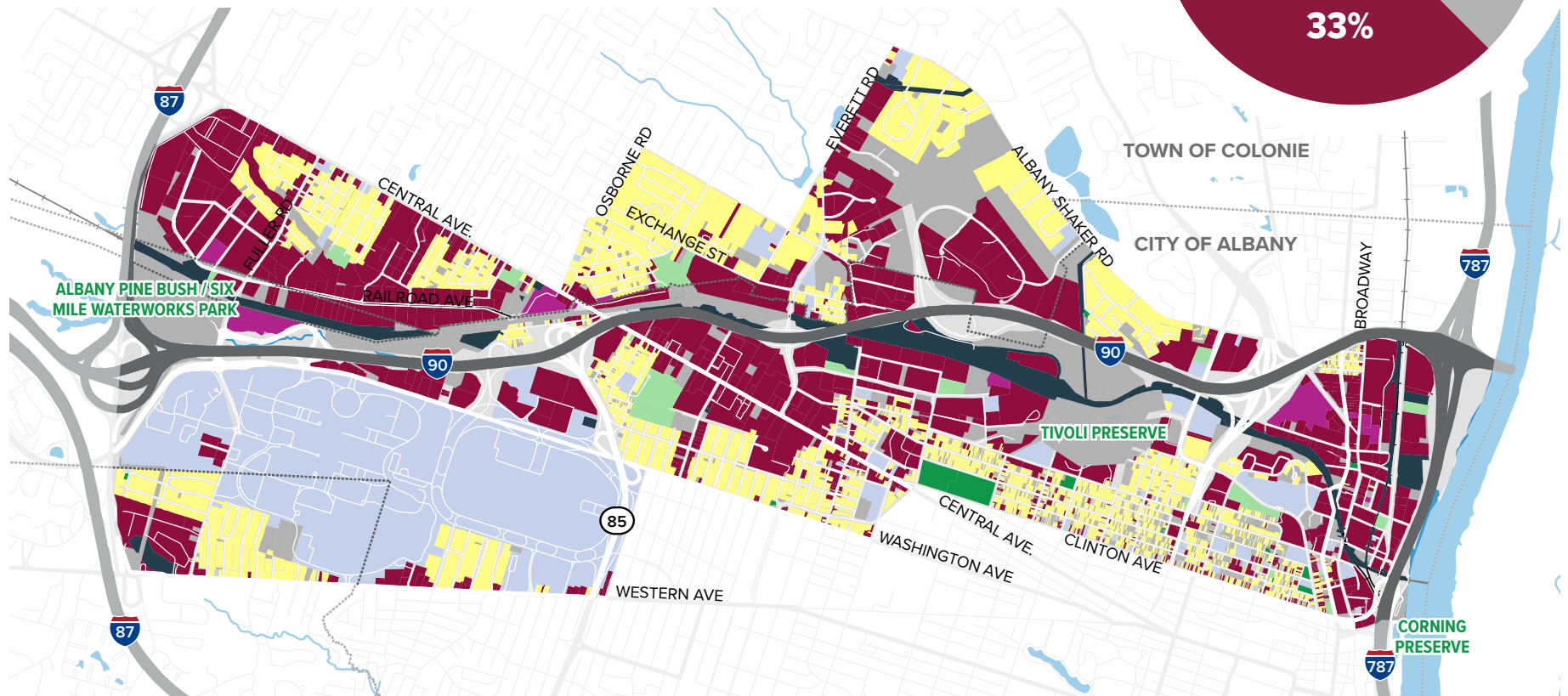
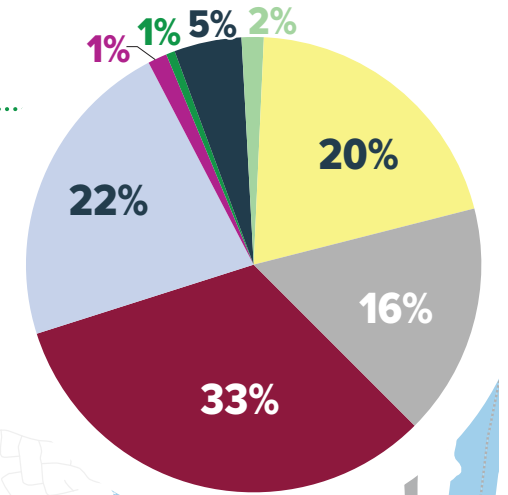
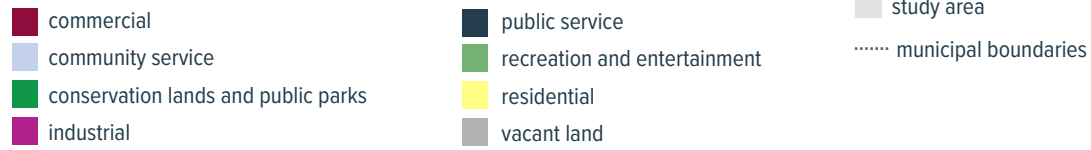


▲ Tivoli Lake Preserve.



▲ SUNY Albany Uptown Campus.
Image credit: American East Academic Consortium

LAND DEVELOPMENT PATTERNS: LAND USE



Data Source: Albany County



LAND DEVELOPMENT PATTERNS (CONT.)

Land Ownership

A majority of the land within the study area is privately owned (70%), largely by unique individuals or businesses. Approximately 30% of land in the study area is publicly-owned.

For the purposes of this Study, privately-owned land in the study area is classified into four groups:

- Land owned by individuals or businesses covers 63% of the study area. These privately-owned parcels are relatively evenly distributed throughout the study area.
- Land owned by railroad companies, including Consolidated Rail Group and CSX, covers 4% of the study area. Rail property generally parallels Interstate 90.
- Land owned by electric utilities, including National Grid and Niagara Mohawk, covers 2% of the study area. Similar to railroad-owned properties, property owned by electric utilities is concentrated along the Interstate 90 corridor, as well as in the northern portion of the study area between Everett Road and Albany Shaker Road.
- Land owned by community-based groups and non-profits, such as the Albany County Land Bank, Capital Roots, and the Arbor Hill Development Corporation, cover 1% of the study area. These properties are concentrated close to downtown Albany, east of Tivoli Preserve.

Publicly-owned land within the study area includes property owned by the federal government, New York State, Albany County, and municipalities.

- Federally-owned land comprises less than 1% of land in the study area. These properties include federal buildings in downtown Albany as well as a large vacant parcel on Central Avenue, near Osborne Road.
- Approximately 20% of the land in the study area is owned by New York State. State-owned land is concentrated in the western portion of the study area and includes SUNY Albany and the Harriman State Campus. The State (New York State Teachers' Retirement System) also owns a relatively large parcel adjacent to Corporate Woods.
- Less than 1% of the land in the study area is owned by Albany County.
- Approximately 8% of the land in the study area is owned by municipal governments and entities, including the City of Albany, the Town of Guilderland, and the Town of Colonie. Municipally-owned lands are distributed throughout the study area and are often associated with parks, public services (e.g., water supply, education, libraries), and government buildings.



▲ **National Grid** transmission lines and substation at the west end of Yardboro Avenue.



▲ **Ida Yarbrough Homes** owned by the Albany Housing Authority along Manning Boulevard.



▲ **Corporate Woods** is a privately-owned office park, serving as a major employer and providing a variety of professional services, including healthcare.
Image credit: Picotte Companies

LAND DEVELOPMENT PATTERNS: **LAND OWNERSHIP**

PRIVATE LAND OWNERSHIP

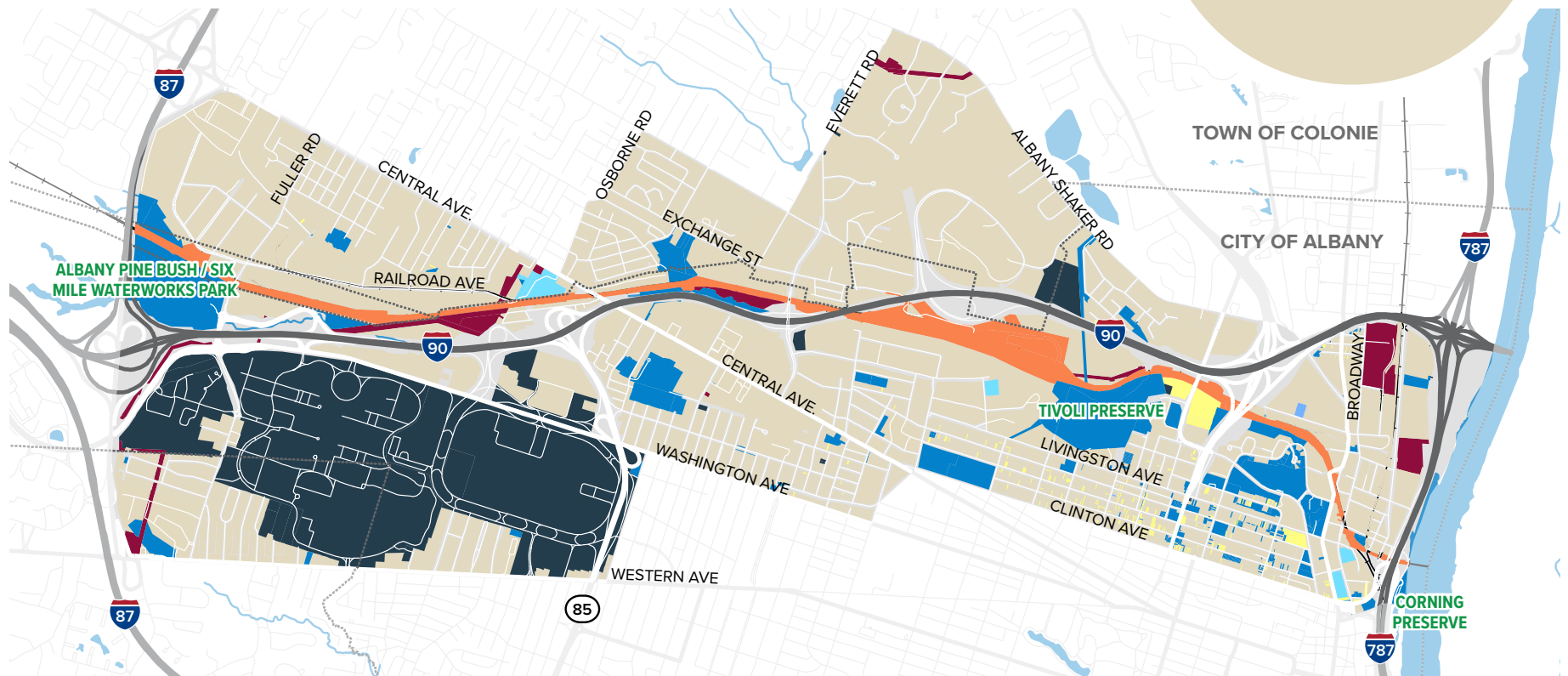
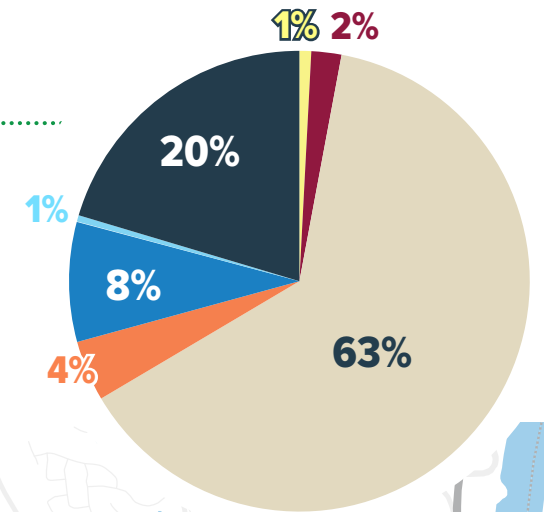
- Electric utility
- Railroad
- Community-based organizations
- Individuals/businesses

PUBLIC LAND OWNERSHIP

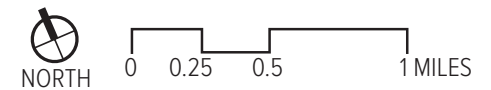
- Federal
- New York State
- Albany County
- Municipalities

study area

municipal boundaries



Data Source: Albany County



LAND DEVELOPMENT PATTERNS (CONT.)

City of Albany Zoning Districts

City of Albany's Unified Sustainable Development Ordinance is a modernized zoning ordinance that integrates the regulation of land use and built form with sustainable best practices to promote high quality development that protects the environment and advances community interests. The study area contains all of the zoning districts defined in the USDO, with the exception of two districts (Mixed-Use Form-Based South End and Mixed-Use Form-Based Midtown). The zoning districts fall into three broad categories: mixed-use, residential, and special purpose.

With the exception of areas in the historic resources overlay district or the Land Conservation zoning district, all new development must comply with streetscape design requirements, which are summarized in the table below.

Streetscape and Sidewalk Design Requirements (§ 375-407 of the USDO)

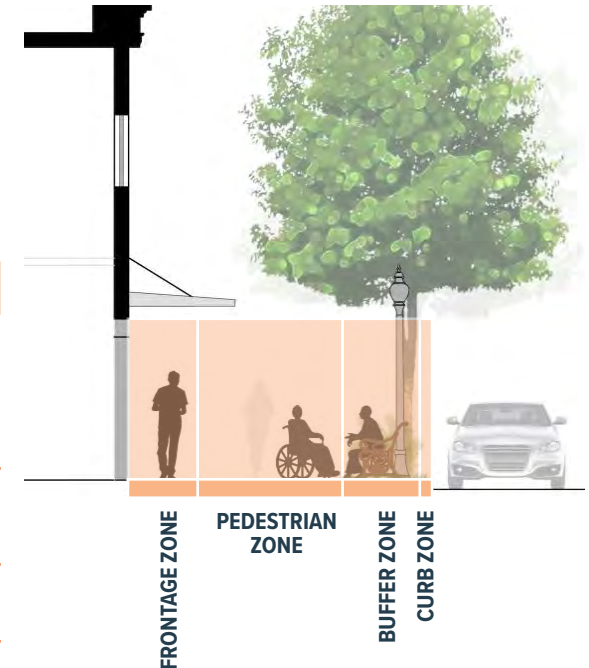
Street Types	Frontage Zone	Pedestrian Zone	Buffer Zone	Curb Zone
Downtown, Neighborhood Mixed-Use, Community Mixed-Use, Community Commercial,	2 feet wide	4 - 12 feet wide	5 - 6 feet wide	4 - 9 inches wide
Neighborhood Residential, Boulevard	N/A	4 - 7 feet wide	2 - 6 feet wide	4 - 9 inches wide
Industrial	N/A	4 - 7 feet wide	5 - 6 feet wide	4 - 9 inches wide

MIXED-USE DISTRICTS

Mixed-Use Zoning Districts are distributed evenly throughout the study area and encourage a mix of residential and retail uses that support walkable, vibrant neighborhoods. The predominant Mixed-Use Zoning Districts are summarized below:

- The Campus/Institutional District, which is intended to provide space for large institutional uses, dominates the southwestern portion of the study area and includes SUNY Albany, the Harriman State campus, and areas adjacent to these campuses.
- The Form-Based Warehouse District encourages building reuse and the transformation of this area into a walkable, urban center, while ensuring the continued viability of existing industrial uses. This district dominates the eastern portion of the study area, between the Hudson River, Broadway, and Henry Johnson Boulevard.

- The Community Highway District includes areas along Central Avenue, between Interstate 90 and Everett Road. This district accommodates a wide variety of retail, residential, and commercial uses that serve a large area and can be conveniently accessed by motor vehicle.
- The Form-Based Central Avenue District includes areas along the eastern end of Central Avenue in the study area and promotes the redevelopment of this area into a vibrant mixed-use neighborhood that leverages bus rapid transit service.



LAND DEVELOPMENT PATTERNS: ZONING DISTRICTS (CITY OF ALBANY)

MIXED-USE

- Campus / Institutions
- Community Highway
- Community Urban
- Downtown
- Form-Based Central Ave.
- Form-Based Warehouse District
- Neighborhood Center
- Neighborhood Edge

RESIDENTIAL

- Multi-Family
- Single-Family, Low Density
- Single-Family, Med. Density

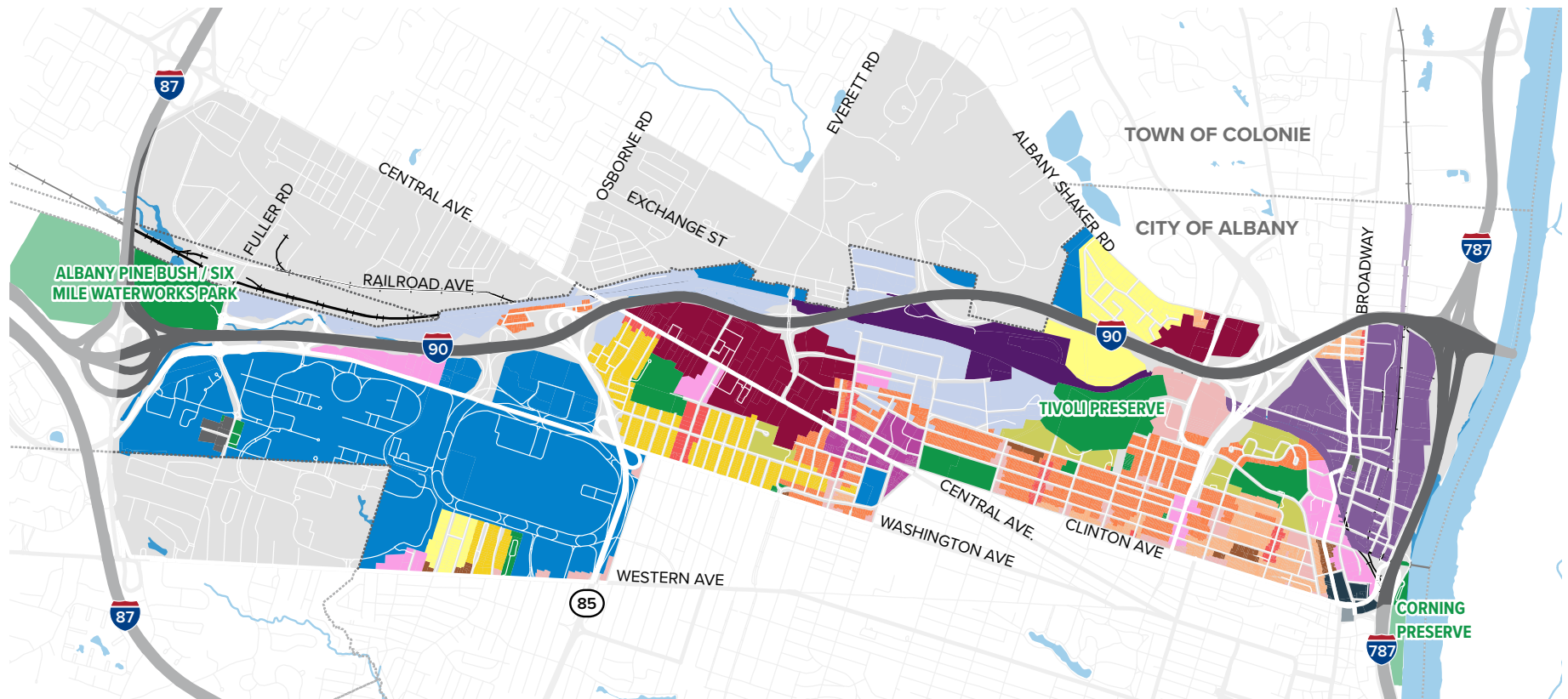
- Townhouse
- Two-Family
- Village

SPECIAL PURPOSE

- Conservation
- General Industrial
- Light Industrial

study area

municipal boundaries



Data Source: City of Albany



CHAPTER 3: EXISTING CONDITIONS

LAND DEVELOPMENT PATTERNS (CONT.)

RESIDENTIAL DISTRICTS

Residential zoning districts are concentrated along the southern portion of the study area, from NY-85 east to Ten Broeck Street, and generally encourage denser residential development. The eastern portion of the study area is dominated by Two-Family and Townhouse districts, while the western portion of the study area is largely comprised of the Single Family, Medium Density zoning district.

The presence of the Single Family, Low Density zoning district is limited within the study area. It occurs along Western Avenue, adjacent to the Harriman State Campus, and just north of Tivoli Park in the Bishop's Gate neighborhood.

SPECIAL PURPOSE DISTRICTS

Special Purpose Zoning Districts include General Industrial, Light Industrial, and Land Conservation. All three of these districts occur in the study area:

- The General Industrial District supports industrial uses associated with heavy traffic, noise, and glare impacts and keeps these uses separate from residential areas. In the study area, this district is confined to the CSX railyard along Anderson Drive.
- The Light Industrial District supports a range of commercial, civic, institutional, and light industrial uses that do not create nuisances for surrounding areas. In the study area, the Light Industrial district is distributed along the north and south sides of Interstate 90.

- The Land Conservation Districts provide for and protect publicly-owned parks, preserves, and open spaces. This district includes all parks located in the study area.

City of Albany Zoning Overlay Districts

The study area also overlaps with five zoning overlay districts, including the:

- **Albany-Colonie Intermunicipal Overlay District (AC):** This overlay applies to the First Prize parcel located in the City of Albany and the Town of Colonie and requires the integration of smart growth principles in the redevelopment of this site.
- **Combined Sewer Overflow Overlay District (CS):** In the study area, this overlay includes areas east of Tivoli Preserve and south of Clinton and Washington Avenues and establishes regulations to mitigate the impacts of development on the City's combined sanitary/storm sewer system.
- **Floodplain Overlay District (FP):** In the study area, this overlay includes the 100- and 500-year flood zones along the Hudson River and Patroon Creek and requires development to comply with all applicable Federal Emergency Management Agency (FEMA) regulations.
- **Historic Resources Overlay District (HR):** Within the study area, this overlay applies to the Clinton Avenue / N. Pearl Street / Clinton Square Historic District and prioritizes the preservation of places, sites, and structures with significant historic, cultural or architectural value.

- **Pine Bush Overlay District (PB):** In the study area, this overlay includes the area west of Fuller Road and promotes the preservation of the unique natural features of the Pine Bush Preserve.



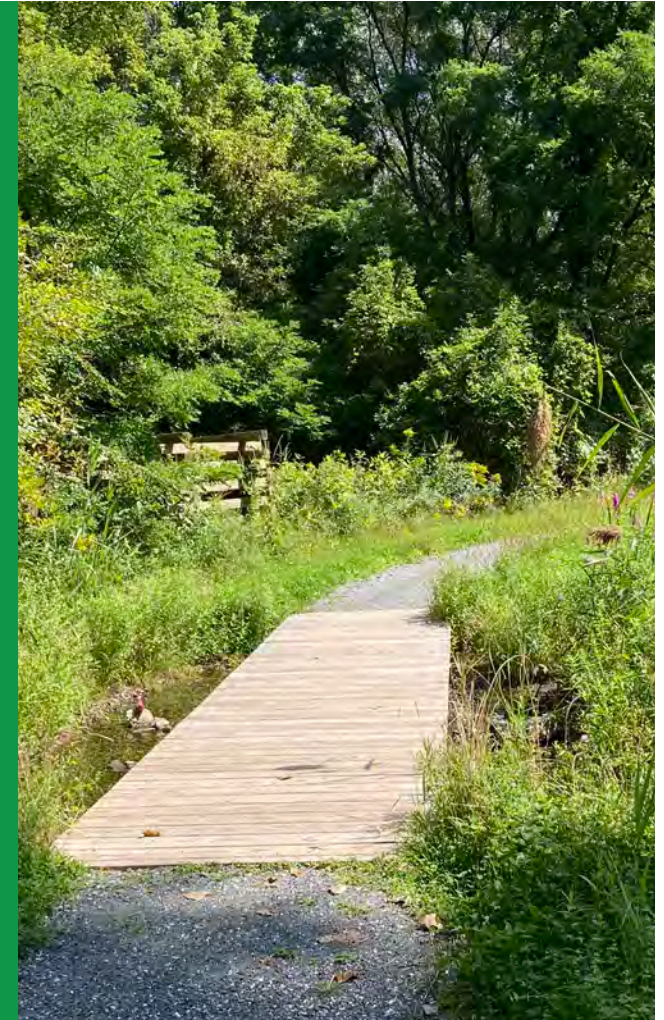
▲ **Six Mile Waterworks Park** is located in the Pine Bush Overlay District.



▲ **Tivoli Lake Preserve** overlaps with the Floodplain Overlay District.

LAND DEVELOPMENT PATTERNS: KEY FINDINGS

- /// The diverse mix and concentration of different land uses in the study area — particularly commercial, residential, and community service uses that have the ability to attract potential trail users — provides an opportunity to activate the future Patroon Creek Greenway as well as underscores the Greenway’s potential benefit in weaving these uses together.
- /// Property owned by railroad and electric utility companies bisect the study area, following the I-90 corridor. These properties, paired with I-90, create major barriers to north-south travel within the study area.
- /// The State of New York is the largest public land owner in the study area. SUNY Albany and the Harriman State Campus are both major destinations and employers in the Capital District and will be important connections for the future Greenway.
- /// The City of Albany’s recently updated zoning code requires new development to comply with the City’s Complete Streets Policy and Design Manual and encourages development that promotes a walkable, engaging public realm. The Unified Sustainable Development Ordinance’s (USDO) emphasis on multi-modal travel supports future pedestrian and bicycle connections to the Patroon Creek Greenway.
- /// The Albany-Colonie Intermunicipal Overlay District, which applies to the First Prize site, requires future redevelopment to utilize smart growth principles. Integrating the future Patroon Creek Greenway trail into this site would provide a much needed connection between the Town of Colonie and the City of Albany as well as expand the mobility and recreational options of future residents.
- /// The USDO concentrates dense residential development in the eastern portions of the study area, between N. Allen Street and Broadway. The integration of trail facilities into these dense residential neighborhoods could improve local mobility while also increasing access to regional destinations.



DESTINATIONS + SERVICES

This section provides an overview of destinations and services located within the study area. Understanding the distribution of recreational, employment, educational, retail, and community development resources in the study area is an important first step in identifying connections to the future Patroon Creek Greenway.

Parks

There are 16 public parks located in the study area. These parks range from small neighborhood parks to large nature preserves. The small neighborhood parks are concentrated in the eastern portion of the study area (Ten Broeck, Arbor Hill, and West Hill neighborhoods), while the larger parks are relatively evenly distributed across the study area. These larger parks are described in more detail below and shown on the map on the following page.

- **Corning Riverfront Park and Preserve** is a linear park bound to the west by I-787 and to the east by the Hudson River. It provides public access to the waterfront via a boat launch as well as panoramic views of the river from the 1,000 seat amphitheater at Jennings Landing. The Mohawk-Hudson Bike-Hike Trail traverses the park, connecting downtown Albany north to Watervliet and the Erie Canalway Trail and south to Bethlehem and Voorheesville via the South End Connector and Albany County Rail Trail. The park also features a playground and walking trails and hosts numerous annual events, including the Alive at Five summer concert series and the Albany Riverfront Jazz Festival.

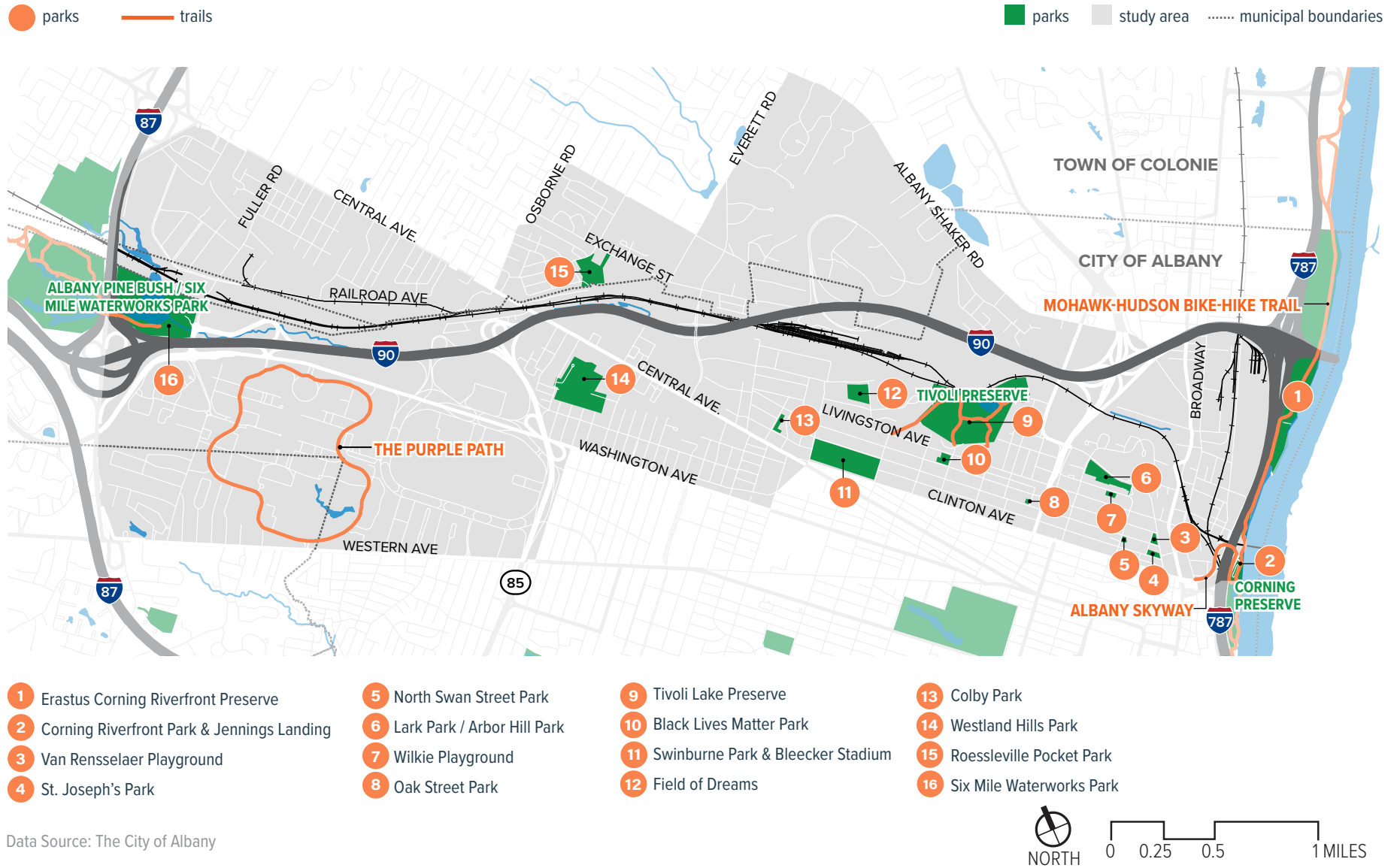
- **Tivoli Lake Preserve** is an 80 acre park located in the Arbor Hill and West Hill neighborhoods. It is the largest urban nature preserve in the Capital District and features a network of walking trails, including the recently completed Brother Yusef Burgess Trail, a daylit section of the Patroon Creek, and a diversity of ecosystems that support wildlife and bird watching activities. The Friends of Tivoli Lake Preserve and Farm, Inc. serve as the Preserve's steward and facilitate conservation, environmental education, and outdoor recreation activities.
- **Six Mile Waterworks Park** is a 57 acre park located in the eastern portion of the Albany Pine Bush Preserve. It offers diverse recreational opportunities, including a network of walking trails, a playground, and fishing and boating on Rensselaer Lake. This park also connects with the Rapp Barrens, which are also part of the Pine Bush Preserve.

Trails

Five trail systems traverse the study area and are associated with public parks, SUNY Albany, and the Hudson River waterfront. These trails are briefly described below and are shown on the map on the following page.

- **The Mohawk-Hudson Bike-Hike Trail** is a paved shared-use path connecting Albany and Schenectady Counties and is also part of the statewide Empire State Trail. Within the study area, this trail provides access to the Hudson River and is known as the Corning Riverfront Trail.

- **The Albany Skyway** transforms the underutilized Quay Street ramp into an elevated linear park and non-motorized trail connecting the Broadway and Clinton Avenue intersection to the Hudson River waterfront. This trail is currently under construction and is expected to be completed by December 2021.
- **Corning Riverfront Trail** is a north-south paved trail that follows the Hudson River and is located in the Corning Riverfront Park and Preserve. It is part of the Mohawk-Hudson Bike-Hike Trail and Empire State Trail systems and is accessible by the Albany Skyway, Maiden Lane/Pine Street pedestrian Bridge, and Quay Street.
- **Tivoli Lake Preserve** includes a network of natural surface walking trails that weave through the Preserve's diverse landscapes. These trails can be accessed via Livingston Avenue and Manning Boulevard North (near Kipp Tech Valley Middle School).
- **The Purple Path** is a paved shared-use path that loops around the entire SUNY Albany campus. This perimeter path provides an important off-road connection for cyclists and pedestrians between Western Avenue, Washington Avenue, and Fuller Road.
- **Six Mile Waterworks Park** includes a network of paved walking and biking trails. In addition to connecting users to the park's amenities, these trails also provide an important off-road connection for cyclists and pedestrians between Fuller Road and Rapp Road.

DESTINATIONS AND SERVICES: **PARKS AND TRAILS**

Local and Regional Destinations

Several destinations and community services are located throughout the study area that serve residents from the study area as well as attract residents from the larger Capitol Region.

Major regional destinations within the study area include SUNY Albany, the Harriman State Campus, and Corporate Woods. SUNY Albany and the Harriman State Campus are located in the western portion of the study area, south of Interstate 90. Both institutions are major employment centers and SUNY Albany serves approximately 17,000 students. Corporate Woods is centrally located within the study area, just north of Interstate 90. This complex of private office buildings also serves as a hub of employment and provides several community services, such as healthcare and childcare.

Local destinations, such as schools, libraries, shopping centers, and community services, are concentrated along Central Avenue, between Manning Boulevard and Colvin Avenue, and in the eastern portion of the study area in the Arbor Hill neighborhood. Notably, full-service grocery stores are limited to the areas along Central Avenue. Only small convenience stores and specialty food markets are located in the eastern portion of the study area, where Potential Environmental Justice Areas are concentrated.

A detailed list of destinations and services in the study area is shown to the right. These resources are also mapped on the following page.

DESTINATIONS AND COMMUNITY SERVICES

Public Libraries

1. Arbor Hill West Branch

Public and Charter Schools

1. Arbor Hill Elementary School
2. Edmund J. O'Neal Middle School of Excellence (now Albany International Center)
3. Kipp Tech Valley Charter School
4. Phillip J Schuyler Achievement Academy
5. Henry Johnson Charter School
6. Montessori Magnet School
7. Tech Valley High School

Private Schools

1. Blessed Sacrament School
2. St. Anne Institute

Universities

1. SUNY Albany

Government Services

1. Harriman State Campus

Community Services

Health Services:

1. Visiting Nurse Association of Albany
2. Professional Care Inc.
3. Whitney Young Jr. Health Center
4. Attentive Care of Albany Inc.

Housing Services:

5. St. Annes Institute
6. IDA Yarrowborough Center
7. 157 Buchanan Street IRA
8. 7 Rawson Street IRA

Rehabilitation Services:

9. Northern Blvd Community Residence
10. SPARC Alcoholism Clinic

Social Services:

11. St. Annes Institute Day Treatment
12. Equinox Manning Blvd
13. Project Hope
14. Albany County Opportunity Inc.
15. Heery Center for Young Families
16. Parsons Child and Family Center

Youth Services:

17. Albany Barn, Inc.

Senior Services:

18. University Heights Nursing Home
19. Albany Guardian Society
20. Westview Senior Center

Multiple Co-Located Services:

22. Corporate Woods

Convenience Store and Specialty Markets

1. Montana Food
2. Livingston Market
3. New York Supermarket
4. Boulevard Grocery
5. A&M Groceries
6. One Star Market
7. Mexican Market

Grocery Stores and Supermarkets

1. ShopRite of Albany
2. Honest Weight Food Co-op
3. Hannaford Supermarket
4. Price Chopper

DESTINATIONS AND SERVICES: LOCAL AND REGIONAL DESTINATIONS



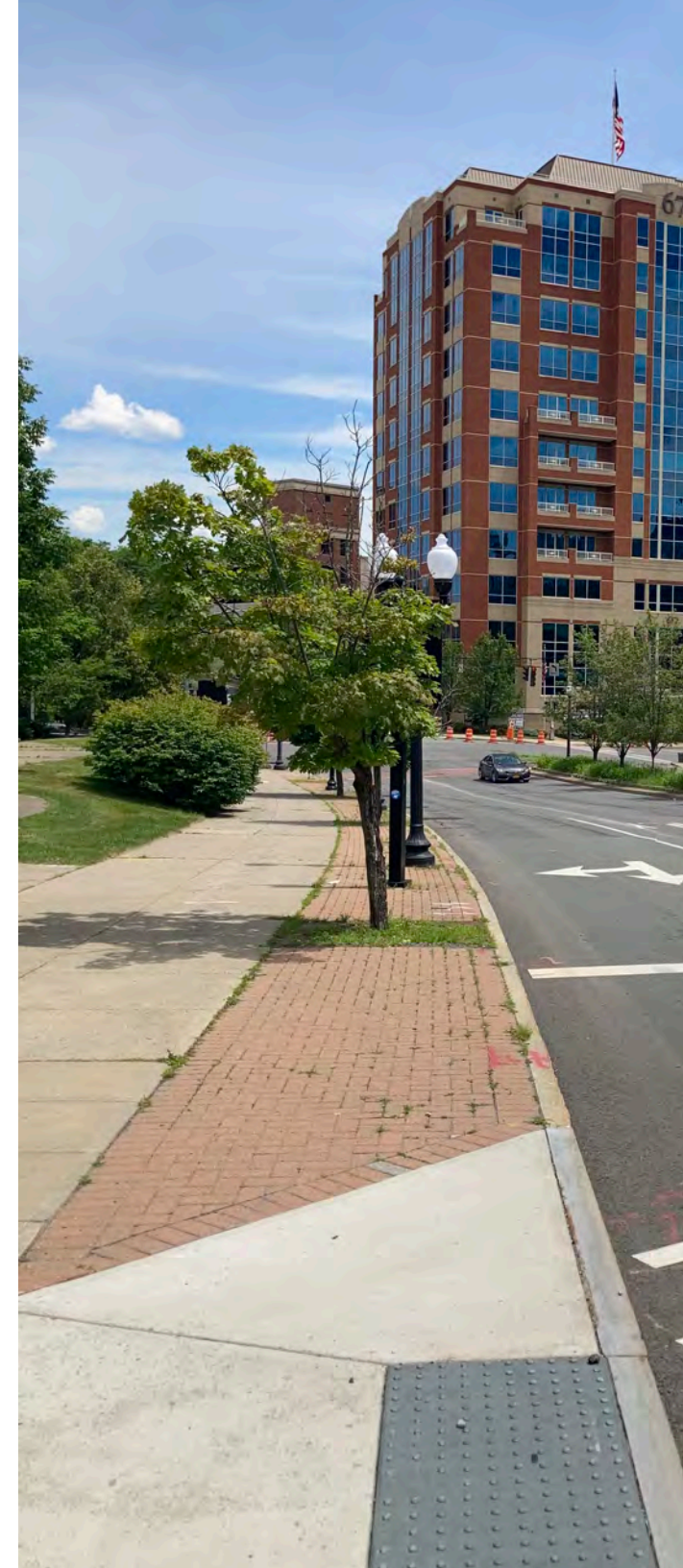
*See previous page for a corresponding list local destinations.

Data Source: The City of Albany



DESTINATIONS + SERVICES: KEY FINDINGS

- /// Parks are distributed throughout the study area and offer a diversity of amenities and experiences, from nature preserves to ice skating at Swinburne Park to sports fields at Westland Hills Park.
- /// Five major off-road trails are located in the study area. All of these trails are integrated into parks or public institutions. Connecting the future Greenway to these other trail systems will improve local and regional connectivity, as well as help to solidify biking and walking as viable modes of transportation.
- /// Two of the major trails provide important access under interstate highways. The new Albany Skyway provides an off-road connection between Broadway and the Hudson River waterfront and is one of the few opportunities for bicyclists and pedestrians to cross I-787. The trail system in Six Mile Waterworks provides bicycle and pedestrian access under I-87 and makes a critical multi-modal connection between the study area and western Albany.
- /// A diversity of destinations are clustered along Central Avenue between Main Avenue and Colvin Avenue. In particular, all of the study area's full-service grocery stores are located in this area. Given Central Avenue's importance as a community destination, connections between this area and the future Greenway will be critical.
- /// Smaller, community-oriented destinations tend to be concentrated in the eastern and central portions of the study area, near downtown Albany, in Arbor Hill, and along Central Avenue. These destinations include schools, health and social services, and retail.
- /// Larger, regional destinations are located in the northern and western portions of the study area. These destinations include Corporate Woods, SUNY Albany, and the Harriman State Campus. While these destinations serve the local community, they are also major employment and educational centers that draw visitors from the Capital District and beyond.





TRANSPORTATION SYSTEMS

This section describes the different transportation systems within the study area, including roadways, rail, public transportation, and bicycle and pedestrian infrastructure. Documenting the distribution, quality, and characteristics of these transportation systems will enable the identification of issues that the future Patroon Greenway may be able to improve as well as opportunities to connect the Greenway to other modes of transportation.

Roadways

The study area contains a diversity of road networks including interstates, U.S. and State highways, and local roads. These roadways provide important access to national, regional, and local destinations for study area residents and visitors.

INTERSTATES

Interstate 90 (I-90) bisects the study area from east to west. According to the New York State Department of Transportation (NYSDOT), this high speed roadway experiences annual average daily traffic (AADT) volumes ranging from 85,000 to 110,000 within the study area. This interstate represents a major barrier to mobility, dividing the study area in half and limiting connectivity between the City of Albany and the Town of Colonie. Within the study area, the following roadways either cross over or under I-90:

- Erie Boulevard (crosses under I-90)
- Broadway (crosses under I-90 with sidewalks on both sides of the street)

- N. Pearl Street (crosses under I-90 with sidewalks on both sides of the street)
- Loudonville Road (bridge over I-90 with sidewalks on both sides of the road)
- Northern Boulevard (bridge over I-90 with sidewalks and bike lanes on both sides)
- Everett Road (bridge over I-90 with a sidewalk on one side of the road)
- Central Avenue (crosses under I-90 with sidewalks on both sides of the street)
- Fuller Road (crosses under I-90 with a shared-use path on the west side of the road)

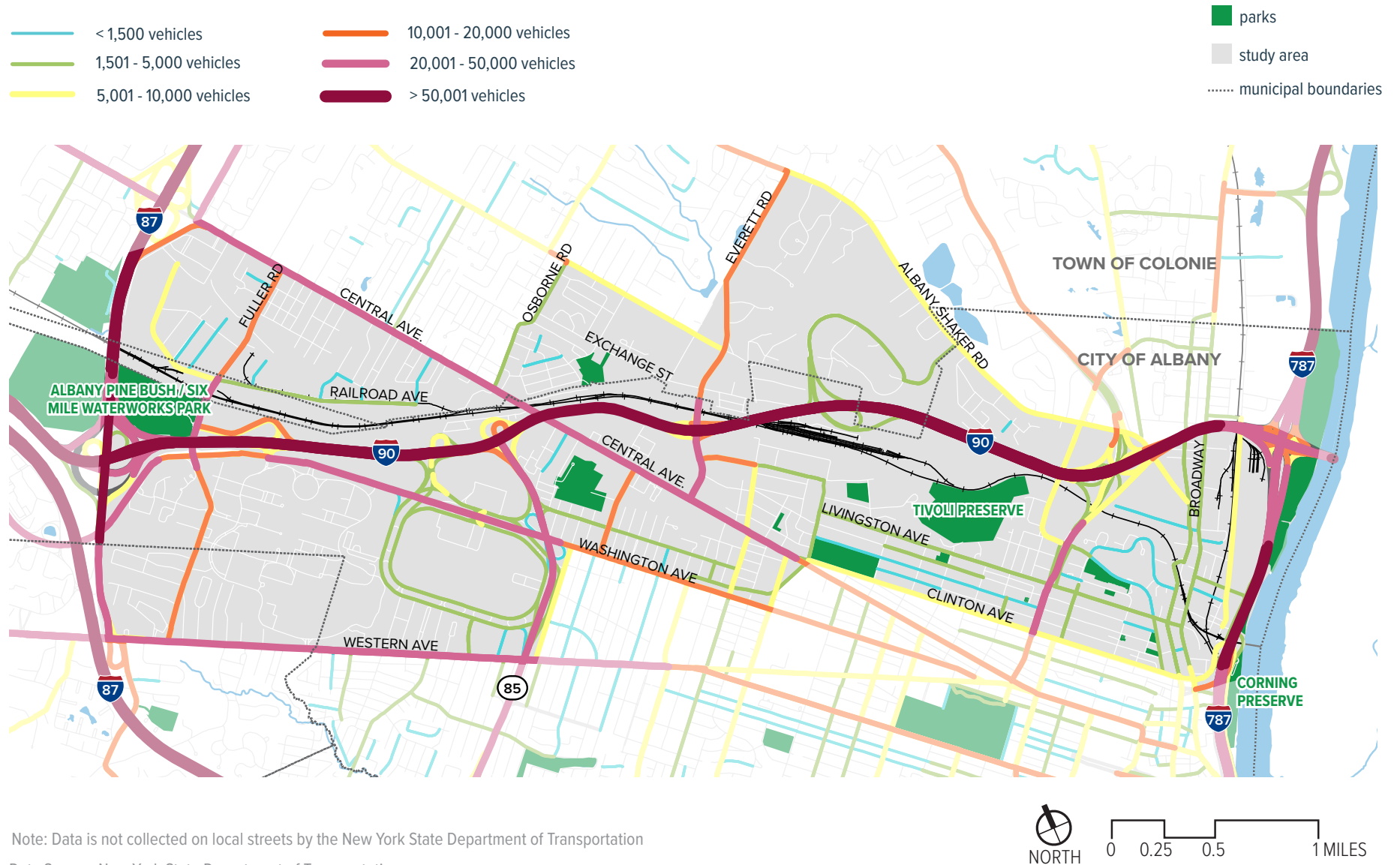
Interstate 87 (I-87) serves as the western boundary of the study area. North of the I-90 / I-87 interchange, traffic volumes exceed 100,000 AADT along I-87. Between Western Avenue and the I-90 / I-87 interchange, traffic volumes range from 40,000 - 60,000 AADT. Six Mile Waterworks Park provides an important off-road crossing under I-87, connecting the study area to western destinations.

Interstate 787 (I-787) parallels the eastern edge of the study area. Similar to I-90 and I-87, this high speed roadway experience high traffic volumes, ranging from 45,000 - 90,000 AADT. This interstate is a major barrier between downtown Albany and the Hudson River waterfront. Within the study area, the Hudson River can be reached via Colonie Street and the Albany Skyway, both of which cross under I-787.

HIGHWAYS

The following highways are located in the study area and provide access to regional and local destinations:

- **Henry Johnson Boulevard (U.S. 9):** Henry Johnson Boulevard coincides with U.S. Highway 9 from Clinton Avenue east to Livingston Avenue, which provides direct access to I-90. In the study area, Henry Johnson Boulevard experiences high traffic volumes (approximately 22,000 AADT).
- **Clinton Avenue (U.S. 9):** This mixed-use corridor and U.S. highway experiences relatively low traffic volumes, ranging from 5,000 - 7,000 AADT. It is an important connection between downtown Albany, Central Avenue, and the Arbor Hill, Sheridan Hollow, and West Hill neighborhoods.
- **Western Avenue (U.S. 20):** This U.S. highway connects downtown Albany to regional and national destinations. Within the study area, it provides important access to neighborhoods, commercial areas, the Harriman State Campus, SUNY Albany, and I-87 and experiences traffic volumes around 20,000 AADT.
- **Central Avenue (NY-5):** This state highway traverses the state, connecting the City of Albany to Schenectady and as far west as the Pennsylvania state line. Within the study area, this busy roadway experiences traffic volumes ranging from 15,000 - 35,000 AADT, with the highest volumes between Everett Road and Wolf Road.

TRANSPORTATION SYSTEMS: **ANNUAL AVERAGE DAILY TRAFFIC (AADT)**

- **NY-85:** The northern terminus of NY-85 is located in the study area and experiences traffic volumes between 35,000 and 45,000 AADT. This roadway connects the City of Albany west to the Towns of Bethlehem, New Scotland, Berne, Westerlo, and Rensselaerville.

OTHER ROADS

Other roadways in the study area generally experience lower traffic volumes, but still provide important connections between local destinations:

- **Everett Road:** This north-south road links the City of Albany and the Town of Colonie and provides one of the few opportunities to cross I-90 in the study area. From Everett Road Bridge to Central Avenue, traffic volumes exceed 20,000 AADT. North of the bridge, traffic volumes are relatively low (less than 5,000 AADT).
- **Washington Avenue:** This east-west corridor connects the study area to downtown Albany and residential neighborhoods to the east and to medical, office, and shopping complexes to the west. Within the study area, Washington Avenue provides access to the Harriman State campus, SUNY Albany, medical and office suites, apartments complexes, and hotels. Traffic volumes are relatively low along this roadway, with the exception of the section between Brevator Road and the Fuller Road access ramp, where traffic volumes exceed 20,000 AADT.
- **Fuller Road:** This north-south corridor connects Western Avenue to Central Avenue, providing direct access to shopping centers, SUNY Albany, Six Mile Waterworks Park, and several commercial and industrial uses between Railroad and Central Avenues. The highest traffic volumes occur adjacent to the I-90 access ramps and Six Mile Waterworks Park, where volumes exceed 20,000 AADT. Between Western and Washington Avenues traffic volumes are under 5,000 AADT and between Railroad and Central Avenues, traffic volumes are under 10,000 AADT.

Traffic Crashes in the City of Albany

The City of Albany Police Department provided crash data from January 1, 2016 to July 5, 2021 (this dataset does not include crashes in the Town of Colonie). During this time period, 6,702 crashes occurred within the study area. Traffic crashes are concentrated in the study area along Central Avenue, Washington Avenue, Western Avenue, Clinton Avenue, and Henry Johnson Boulevard. Crashes most frequently occur where cars are making turning movements (e.g. intersections and parking lots), and over 100 crashes occurred at the following locations:

- Central Avenue / Colvin Avenue intersection (265 crashes)
- Henry Johnson Boulevard / Livingston Avenue intersection (138 crashes)
- The Hannaford shopping plaza at 900 Central Avenue (123 crashes)

CRASHES INVOLVING PEDESTRIANS

Of the 6,702 traffic crashes recorded between 2016 and 2021, 188 crashes (3%) involved a pedestrian, with a high proportion occurring in the Arbor Hill and West Hill neighborhoods. The highest frequency of pedestrian-involved crashes occurred at the following locations:

- Washington Avenue / Colvin Avenue intersection (7 crashes)
- Lexington Avenue / Clinton Avenue (6 crashes)
- Henry Johnson Boulevard / Livingston Avenue intersection (6 crashes)
- Judson Street / Second Street (5 crashes)

CRASHES INVOLVING BICYCLISTS

Approximately 1% of all crashes recorded between 2016 and 2021 involved a bicyclist (53 crashes). Bicyclist-involved crashes also tend to be concentrated along Central Avenue and in the Arbor Hill and West Hill neighborhoods. The highest frequency of bicyclist-involved crashes occurred at the following locations:

- Lark Street / Livingston Avenue (2 crashes)
- Central Avenue / King Avenue (2 crashes)
- Central Avenue / Colvin Avenue (2 crashes)

TRANSPORTATION SYSTEMS: TRAFFIC CRASHES IN THE CITY OF ALBANY (2016 - 2021)

All Traffic Crashes:

• 1-5 crashes

• 6-10 crashes

• 11-50 crashes

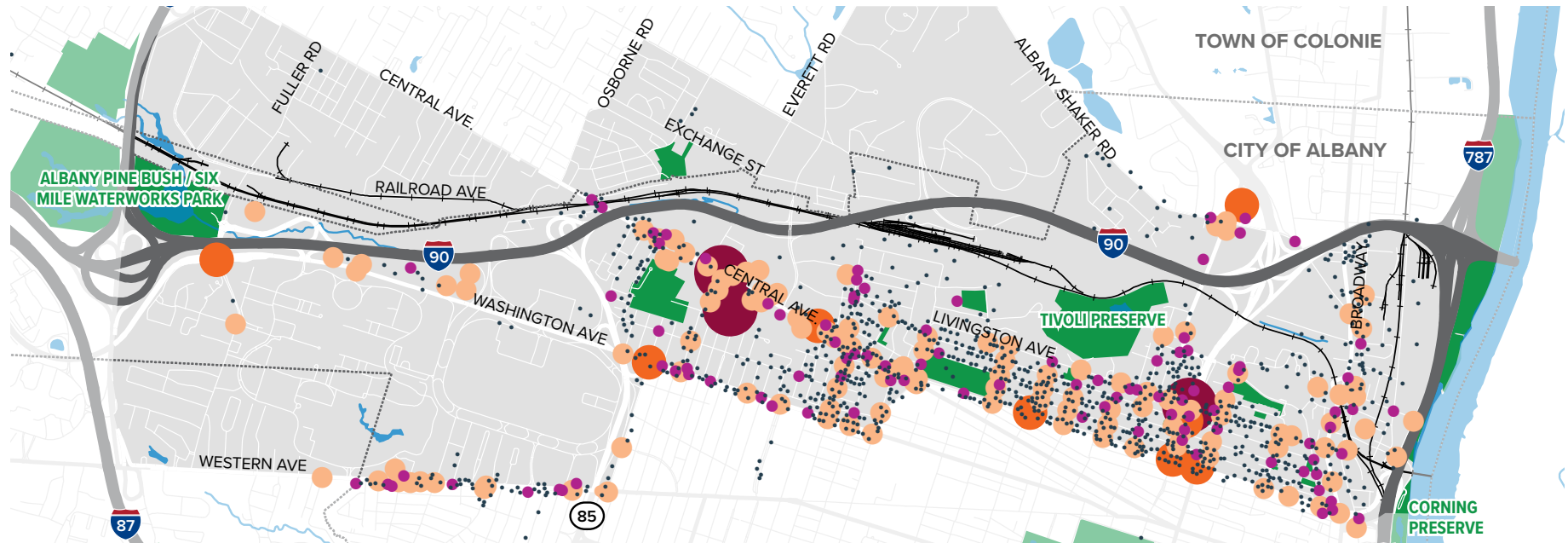
• 51-100 crashes

• 101-265 crashes

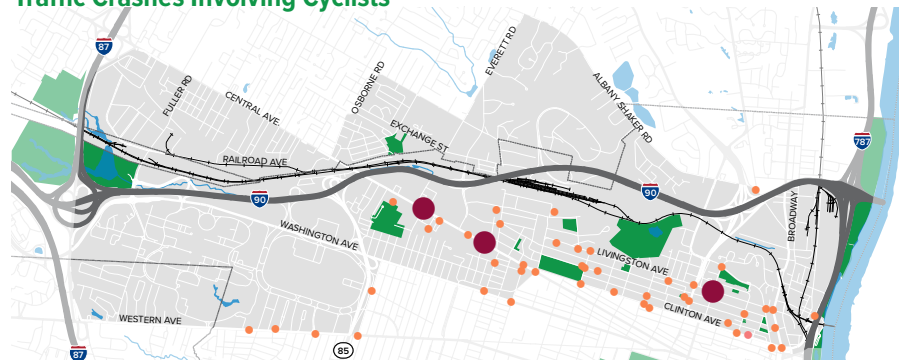
■ parks

■ study area

..... municipal boundaries



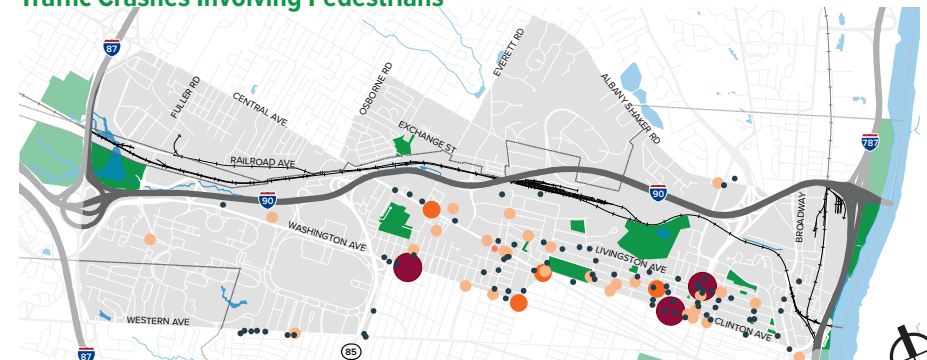
Traffic Crashes Involving Cyclists



• 1 crash

• 2 crashes

Traffic Crashes Involving Pedestrians



• 1 crash

• 2-3 crashes

• 4-5 crashes

• 6-7 crashes



Data Source: City of Albany Police Department (January 1, 2016 - July 5, 2021)

Railroad Corridors

Two existing railroad corridors are located within or adjacent to the study area. The Hudson Line (owned by CSXT Railroad and operated/maintained by Amtrak within the study area) is the mainline east-west corridor conveying both freight and transit, and the Kenwood Running Track (owned/operated by Canadian Pacific Railroad and also operated by CSXT) follows the I-787 corridor through the City of Albany primarily serving as a freight connection to the Port of Albany. In addition, the West Albany Yard (owned and operated by CSXT) located on Anderson Drive abuts the north side of the Hudson Line east of Everett Road Extension and south of Interstate 90.

Federal Railroad Administration (FRA) records indicate that up to 15 trains traverse the Hudson Line daily within the study area at maximum authorized speeds (MAS) of up to 90 mph (Amtrak). Freight trains on this segment of the Hudson Line operate at lower speeds, primarily serving local industries between Schenectady and Troy, including a bulk transfer facility located in West Albany Yard that is involved in the transloading of commodities between truck and railcar. There are no at-grade track crossings located on the Hudson Line within the study area.

FRA records indicate that Canadian Pacific operates an average of three (3) trains per day on the Kenwood Running Track at an MAS of 10 mph. These trains are primarily mixed freight manifest trains and originate or terminate at Kenwood Yard, located approximately 1.5 miles south of the study area. There are three at-grade

crossings located on the Kenwood Running Track within the study area, between Lawrence Street and I-90 roughly parallel to Erie Street.

RAILROAD CROSSING SAFETY

Over the last 25 years, the FRA database includes zero reports of incidents at railroad-roadway crossings (including at-, above-, and below-grade crossings) involving trains or other on-track railroad equipment and the public. For more detailed information regarding railroad crossing reports, please see Appendix B.

HAZARDOUS MATERIAL TRANSPORT


In addition to the voluntary actions of railroads to increase public knowledge and safety, all railroads in the United States are required to follow the Hazardous Materials Safety Administration requirements of the US Department of Transportation in accordance with Title 49 of the Code of Federal Regulations as covered in Part 174. These regulations include all classes of hazardous materials that a railroad may transport under the common carrier law of the United States in accordance with 49 U.S. Code Section 11101. As a common carrier, rail carriers shall provide transportation or service on reasonable requests and cannot outright refuse transportation of any commodity, and thus there is potential now or in the future for hazardous materials to be transported within the study area as may be authorized by the US Department of Transportation.

SPILL REPORTS

Twenty-nine (29) spills were reported to NYSDEC within the study area since 1978. Most of these spills occurred at the bulk transfer facility at West Albany Yard, were not located in public locations, and were satisfactorily handled per NYSDEC regulations. Spills commonly included equipment fueling, lubrication, and/or hydraulics, but did in some instances include commodities.

For more detailed information regarding spill incidents, please see Appendix B.

RAILROAD INDUSTRY GENERAL SAFETY STANDARDS



Railroads emphasize safety, especially in their interactions with the public, as a highest priority. All Class I freight railroads in the United States are contributing partners to Operation Lifesaver, a safety organization that is dedicated to educating the public and first responders regarding the dangers associated with railroads, and how to safely coexist. Operation Lifesaver provides training to first responders to assist them with reacting to emergencies such as a railroad derailment. This training is often tailored to the types of rail cars and materials that operate on the specific lines in a community.

TRANSPORTATION SYSTEMS: RAILROAD CROSSINGS

- over grade rail crossings
- under grade rail crossings
- at-grade rail crossings

- parks
- study area
- municipal boundaries



Data Source: U.S. Department of Transportation Federal Railroad Administration

Existing Pedestrian Infrastructure

Pedestrian infrastructure includes dedicated, accessible facilities for pedestrians that are separated from motor vehicle traffic, such as sidewalks and off-road, multi-use paths. In the City of Albany, most roadways in the study area have sidewalks on at least one side of the road. Conversely, in the Town of Colonie, only major roadways in the study area have sidewalks (e.g., Central Avenue, Northern Boulevard).

The following locations within the study area are lacking pedestrian infrastructure:

- Along Washington Avenue, adjacent to the Harriman State Campus and along Brevator Street;
- In the industrial area west of Tivoli Preserve, east of Everett Road, and north of Central Avenue; and,
- In the warehouse district between Broadway and the Hudson River waterfront.

Although pedestrian infrastructure is generally well distributed throughout the study area, the presence of frequent curb cuts and intersection crossings can make the use of and access to these facilities challenging. Central Avenue, for example, is a busy commercial corridor with several curb cuts providing access to parking areas and businesses. These curb cuts interrupt pedestrian infrastructure, creating accessibility challenges (e.g., grade changes) and increasing the potential for conflict between pedestrians and motor vehicles.

The City's Bicycle and Pedestrian Master Plan, which was finalized in 2021, also highlights roadways that are challenging to cross. In particular, Northern Boulevard (near Tivoli Preserve), Fuller Road, Washington Avenue (near the SUNY Albany and Harriman State Campuses), and Central Avenue west of Everett Road are very difficult to cross for pedestrians. The Master Plan also recommends several treatments and strategies to improve intersection crossings, including:

- ADA curb ramps, crosswalks, and pedestrian signals;
- Signalization modifications to prioritize pedestrians (e.g., no turn on red, pedestrian head starts);
- Curb extensions and parking restrictions to improve visibility at intersections.

Planned Pedestrian Infrastructure in the City of Albany

Recommendations in the City's Bicycle and Pedestrian Master Plan address several of the existing gaps in the City's pedestrian network within the study area. Specifically, new sidewalks are proposed in the following areas:

- Adjacent to the Harriman State Campus and along Brevator Street;
- In the industrial area between Tivoli Preserve, Central Avenue, Everett Road, and the railroad;
- Along Livingston Avenue and Manning Boulevard in Arbor Hill; and,
- In the warehouse district.

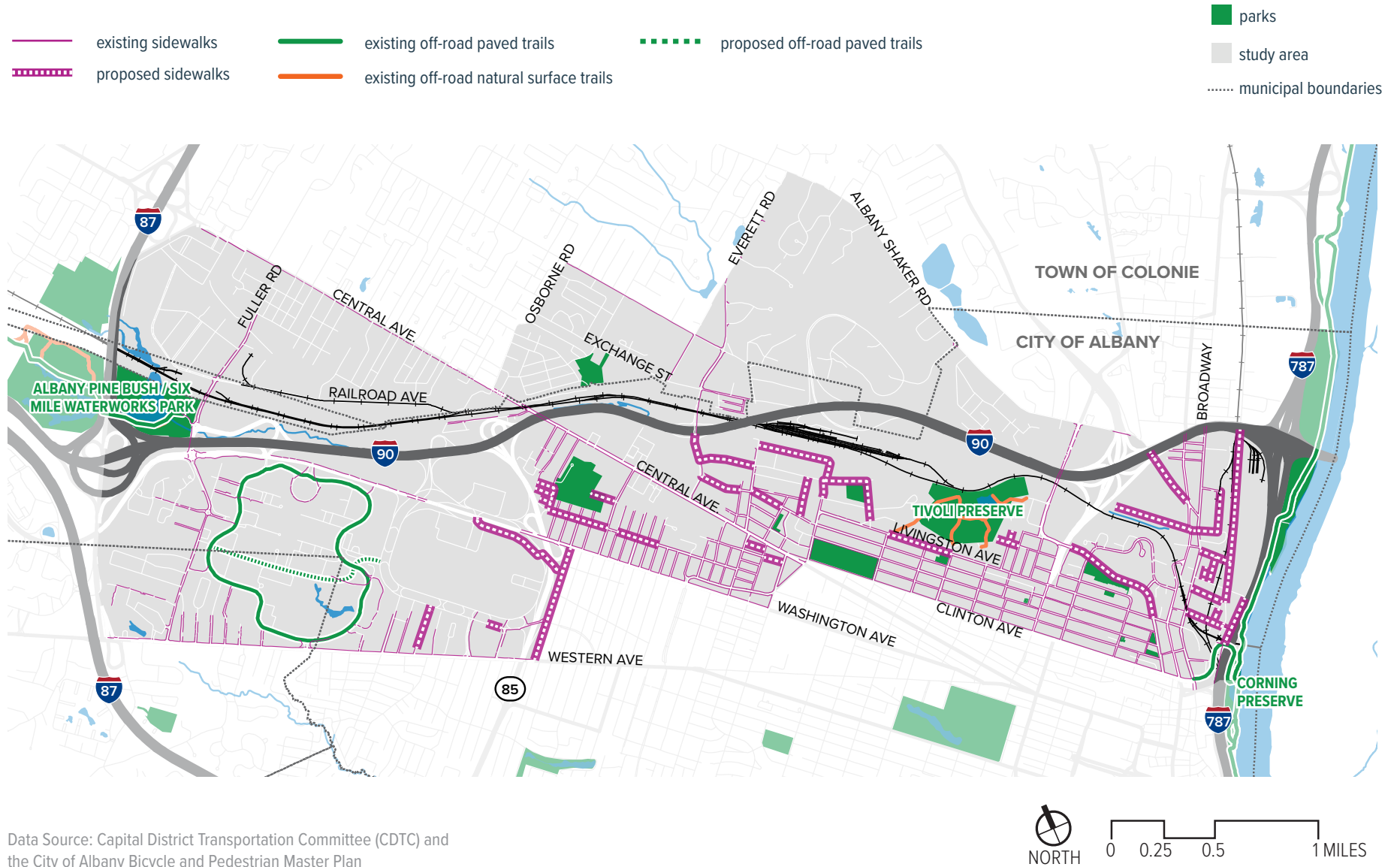


▲ Clinton Avenue.



▲ Pedestrian crossing infrastructure at Watervliet Avenue and Industrial Park Road.

TRANSPORTATION SYSTEMS: PEDESTRIAN INFRASTRUCTURE



TRANSPORTATION SYSTEMS (CONT.)

Existing Bicycle Infrastructure

Approximately 3.5 miles of dedicated bike facilities exist within the study area, excluding off-road multi-use paths. The following roadways in the study area have dedicated bicycle facilities:

- **Clinton Avenue:** Bike lanes (1.85 miles) from Pearl Street to N. Manning Boulevard
- **Colonie Street:** Separated bike lane (0.1 miles) connecting Erie Boulevard to the Mohawk-Hudson Bike-Hike Trail
- **Northern Boulevard:** Buffered and conventional bike lanes (0.5 miles) from the bridge over U.S. Highway 9 to the northern edge of the study area
- **Ten Broeck Street:** Bike lanes (0.25 miles) from Clinton Avenue to Livingston Avenue
- **Western Avenue:** Bike lanes (0.8 miles) from SUNY Albany to I-87

PAVED OFF-ROAD, MULTI-USE PATHS

Four paved, off-road multi-use path systems serve the study area: SUNY Albany's Purple Loop, Six Mile Waterworks Park, the Mohawk-Hudson Bike Hike Trail, and the Albany Skyway.

- The Purple Loop is approximately 2.8 miles long and provides access to the entire SUNY Albany campus perimeter.
- A short segment of Six Mile Waterworks trails (0.25 miles) is contained in the study area and connects west to over 20 miles of trails in the Pine Bush Preserve.

- Approximately 1.25 miles of the Mohawk-Hudson Bike-Hike Trail are located in the study area, which connects to statewide Erie Canalway and Empire State Trail system.
- The Albany Skyway is currently under construction, and once complete will provide an off-road connection between downtown Albany (at the Broadway and Clinton Avenue intersection) and the Mohawk-Hudson Bike-Hike Trail.

LEVEL OF TRAFFIC STRESS

According to the City of Albany's Bicycle and Pedestrian Master Plan, most of the major roadways within the study area currently operate at a high level of traffic stress (LTS) for cyclists (LTS 3), as they require cyclists to ride in mixed traffic conditions on two-lane roads with high traffic volumes and speeds exceeding 25 miles per hour. These roads include:

- Central Avenue
- Clinton Avenue
- Colvin Avenue
- Commerce Avenue
- Livingston Avenue (between N. Lake Avenue and Judson Street)
- Northern Boulevard
- Washington Avenue
- Western Avenue

BIKESHARE STATIONS

CDPHP Cycle! is the Capital Region's bikeshare program, and it is operated in partnership with the Capital District Transportation Authority and the Capital District Physicians' Health Plan, Inc. (CDPHP). There are three CDPHP Cycle! bikeshare stations in the study area at the following locations: the Corning Preserve, the Warehouse District, and the Clinton Avenue / Manning Boulevard intersection.









Planned Bicycle Infrastructure

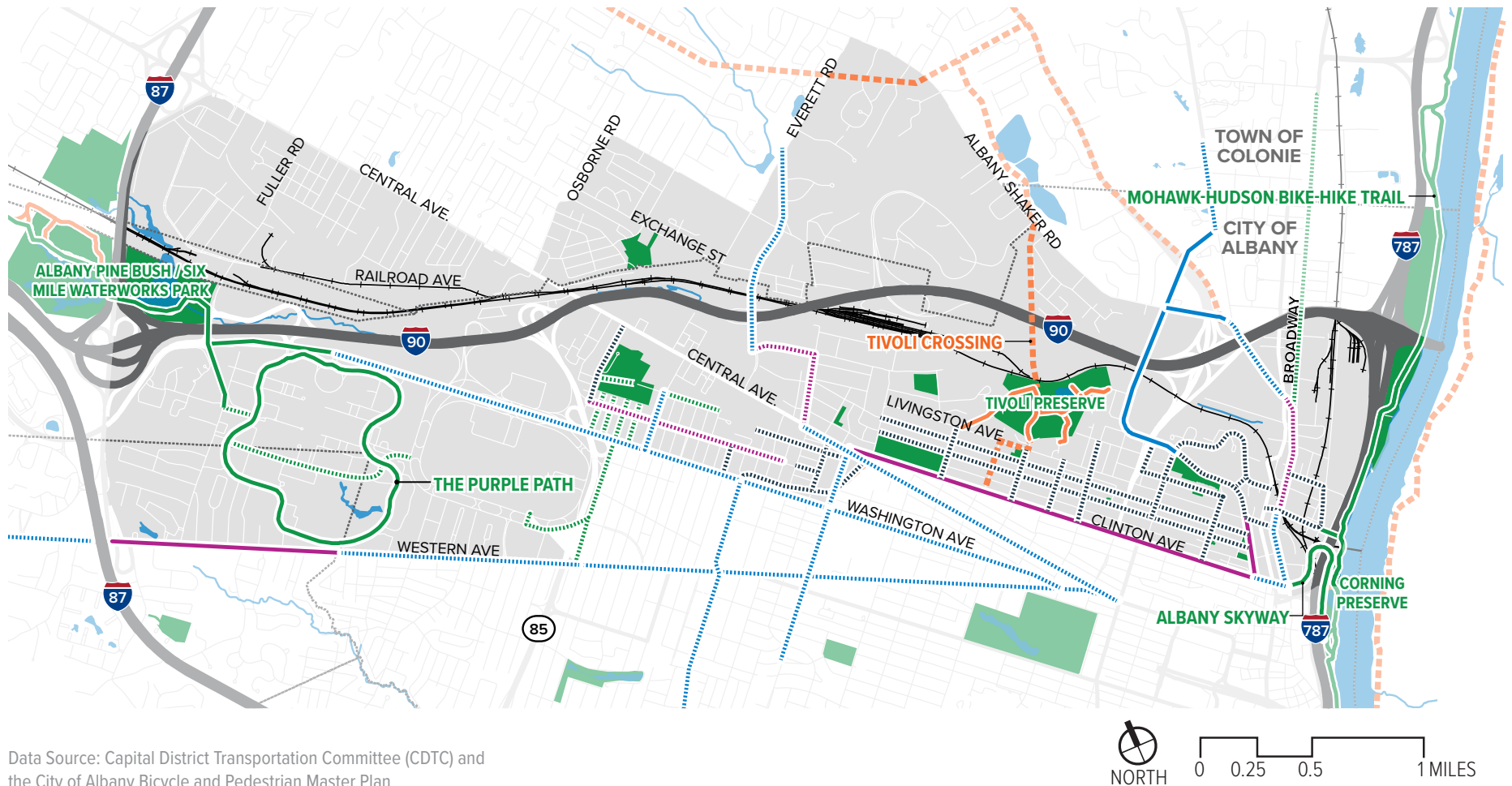
The City's Bicycle and Pedestrian Master Plan proposes several new bicycle facilities within the study area (see map on the next page).

- A dense network of bicycle boulevards are proposed in the eastern portion of the study area, around Tivoli Lake Preserve. Notably, bicycle facilities are not proposed on Livingston Avenue, which experiences a high level of traffic stress adjacent to Tivoli Preserve.
- New conventional bike lanes are proposed on Lincoln Avenue, Watervliet Avenue, and Broadway.
- Protected / buffered bike lanes are proposed on Clinton Avenue (between Pearl Street and Broadway), Broadway, Washington Avenue, Western Avenue, Main Avenue, Colvin Avenue, and Everett Road.

Additionally, the proposed Tivoli Crossing trail — a concept-level trail identified in the CDTC's Capital District Trails Plan — intersects the northern portion of the study area.

TRANSPORTATION SYSTEMS: **BICYCLE INFRASTRUCTURE**

- | | | | |
|--|--|--|--|
|  existing paved multi-use trail |  existing conventional bicycle lane |  existing off-road natural surface trails |  parks |
|  proposed paved multi-use trail |  proposed conventional bicycle lane |  proposed non-core regional trail connectors (from the CDTC Capital District Trails Plan) |  study area |
|  existing protected / buffered bicycle lane |  proposed bicycle boulevard | |  municipal boundaries |
|  proposed protected / buffered bicycle lane | | | |



Data Source: Capital District Transportation Committee (CDTC) and the City of Albany Bicycle and Pedestrian Master Plan

TRANSPORTATION SYSTEMS (CONT.)

Public Transit

The Capital District Transportation Authority (CDTA) provides extensive bus service within the study area, connecting communities to local and regional destinations. The different types of bus routes operating in the study area and their frequency of service are summarized below.

TRUNK ROUTES

Trunk routes provide frequent service (7 days a week) along major roadways and connect the study area to local destinations in the City of Albany, Town of Colonie, and surrounding municipalities. The following trunk routes operate in the study area:

- **Route 1, Central Avenue:** Connects downtown Albany to Colonie Center as well as major shopping destinations along Central Avenue.
- **Route 10, Western Avenue:** Connects downtown Albany to Stuyvesant Plaza and Crossgates Mall.
- **Route 11, SUNY Shuttle:** Connects SUNY Albany's downtown and main campuses via Western Avenue.
- **Route 12, Washington Avenue:** Connects downtown Albany, SUNY Albany, Crossgates Commons, and Crossgates Mall.
- **Route 22, Albany-Troy via Watervliet:** Connects downtown Albany, Menands, Watervliet, and Troy.

NEIGHBORHOOD ROUTES

Most neighborhood routes operate every day of the week and provide connectivity between neighborhoods and local destinations. In the study area, these routes

expand public transit to neighborhoods in the eastern portion of the study area and provide linkages to more bus routes providing more regional service (e.g., trunk routes). Neighborhood routes serving the study area include: the Mid-City Belt (100), Uptown Belt (106), Madison/Washington (114), Colonie Crosstown (117), Clinton / Sand Creek (125), Troy-Albany via Cohoes and Latham (182), and Fuller/Wolf (190).

REGIONAL CONNECTORS

Bus rapid transit (BRT) and the NX Express provide riders with efficient, limited-stop service to regional destinations. The NX Express operates on weekdays and targets commuters traveling between Saratoga and Albany. Three BRT lines serve the study area and operate every day of the week.

- **Route 905, BusPlus Red Line:** Connects downtown Albany and downtown Schenectady via Central Avenue (NY-5).
- **Route 922, BusPlus Blue Line, Cohoes to Delaware Station:** Connects the downtowns of Albany, Troy, and Cohoes along the Hudson River.
- **Route 923: BusPlus Blue Line, Waterford to Rail Trail Station:** Connects the Albany County Rail Trail on South Pearl Street to downtown Albany, Menands, Watervliet, Troy, and Waterford
- **BusPlus Purple Line (Planned):** Will connect downtown Albany, the Harriman State campus, SUNY Albany, Fuller Road, and Crossgates Mall via Washington, Madison, and Western Avenues.

LIMITED SERVICE ROUTES

Two commuter routes, which only operate on weekdays, serve the study area. Commuter Route 712 connects the West Hill neighborhood west to the Harriman State Campus, SUNY Albany, and Crossgates Mall. Commuter Route 737 connects downtown Albany to Corporate Woods and also provides limited service to the Albany International Airport.

Eight different shuttles serve the study area, providing limited connections to local and suburban destinations, such as City of Albany schools, North Greenbush, Crossgates Mall, and Stuyvesant Plaza. These shuttles only operate on weekdays and provide limited service.

CDTA'S NATURE BUS

Nature Bus is a free service offered by CDTA that connects Albany communities to nature preserves and open spaces. Nature Bus operated every Saturday from June 12, 2021 through September 25, 2021.

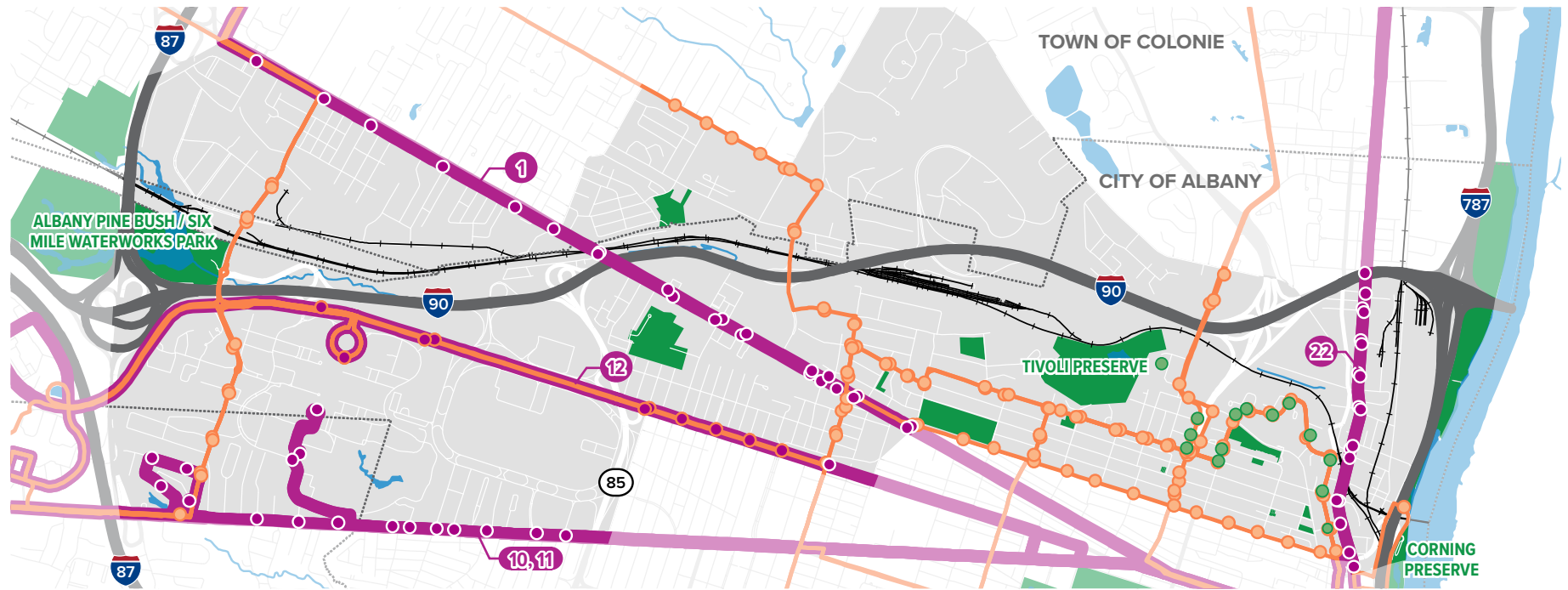
Nature Bus stopped at 13 locations in the Arbor Hill neighborhood within the study area and provided access to nine different outdoor destinations throughout Albany County, including: John Boyd Thacher State Park, Lawson Lake County Park, the Helderberg-Hudson Rail Trail, Five Rivers Environmental Education Center, and Pine Hollow Arboretum.

TRANSPORTATION SYSTEMS: PUBLIC TRANSIT

Trunk + Neighborhood Routes:

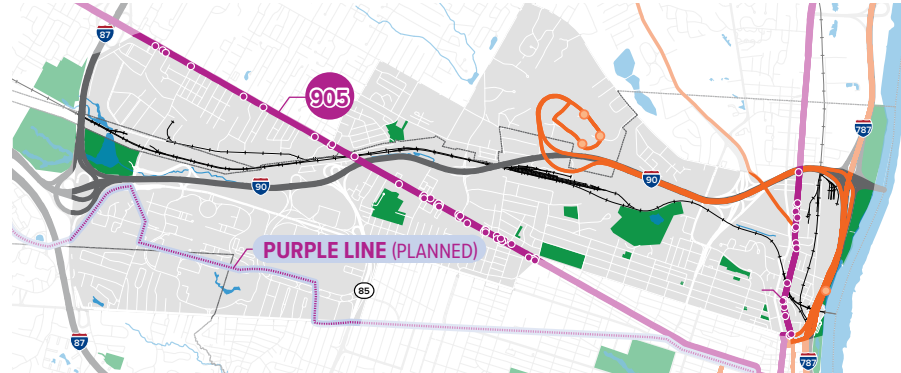
- trunk routes
- trunk stops
- trunk + neighborhood stops
- neighborhood routes
- neighborhood stops
- nature bus stops

- parks
- study area
- municipal boundaries



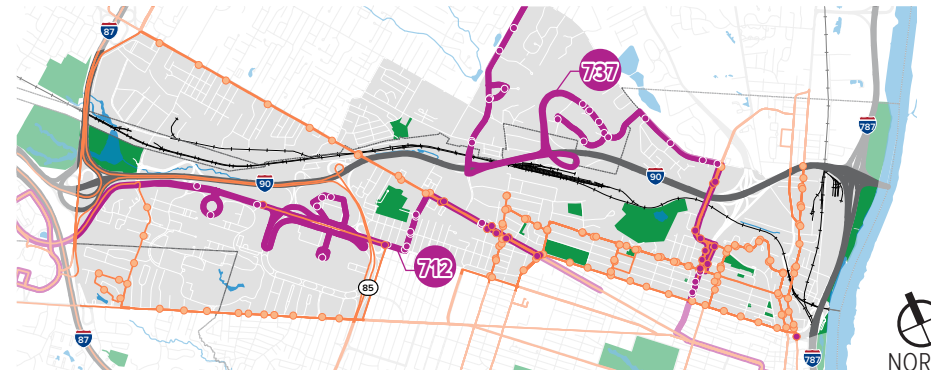
Regional Connectors:

- BRT
- NX express
- BRT stops
- NX Express stops



Limited Service Routes:

- commuter routes
- shuttle routes
- commuter stops
- shuttle stops



Data Source: Capital District Transportation Authority (CDTA)

TRANSPORTATION SYSTEMS: KEY FINDINGS

- /// The study area is bound and bisected by major interstates and highways. These roads are major obstacles to pedestrians and bicyclists; they carry high volumes of traffic traveling at high speeds with limited crossing opportunities.
- /// In the City of Albany, traffic crashes tend to be concentrated in the eastern portion of the study area and along major road corridors. The Central Avenue / Colvin Avenue intersection and Livingston Avenue at Lark Street and Henry Johnson Boulevard are particularly dangerous for all modes of transportation.
- /// The railroad operations within the study area, as evidenced by the historic lack of crashes between trains and public at existing crossings, pose a very low risk to the proposed Patroon Creek Greenway Trail. The development of proposed feasible trail alignment alternatives and details in accordance with FRA recommended best practices and railroad specific guidelines will help assure the continued safety of both railroad operations and public users of a future Patroon Creek Greenway.
- /// In the City of Albany, the study area has a relatively well-connected network of sidewalks. However, bicycle infrastructure is very limited. The City's Bicycle and Pedestrian Master Plan proposes several new bicycle facilities that could provide important connections to the future Patroon Greenway. In the Town of Colonie, sidewalks are sparse and there are no on-road bicycle facilities in the study area.
- /// The study area is well-served by public transportation. The major bus routes are concentrated along Central Avenue, Washington Avenue, and Western Avenue. Ensuring connectivity between bus stops and the future Patroon Creek Greenway will help expand access to and increase the use of the future Greenway. Additionally, improved bicycle and pedestrian crossing infrastructure across Central, Washington, and Western Avenues would benefit both future Greenway trail users and current public transit riders.





UTILITY INFRASTRUCTURE

This section provides an overview of the major water, sewer, and electrical utilities within the study area, which are generally concentrated along the I-90 and railroad corridors. These energy and water distribution systems are often associated with long narrow corridors with relatively low levels of activity (e.g., maintenance and repairs), creating an opportunity to layer other low-impact uses, such as multi-modal trails, into these corridors.

Electric

Lands owned by electric utilities are distributed throughout the study area, typically along the railroad corridors, and are comprised of transmission corridors, substations, and office buildings. Electric utility companies own approximately 90 acres in the study area and include National Grid, Niagara Mohawk, and Niagara Mohawk / National Grid.

Water Supply

The Albany Water Board and the Albany Water & Water Supply Department own approximately 20 acres in the study area. These lands, associated with the City's water supply, are located in Six Mile Waterworks Park, to the south and north of Tivoli Lake Preserve, and along the Kenwood Running Track railroad corridor.

Sewer

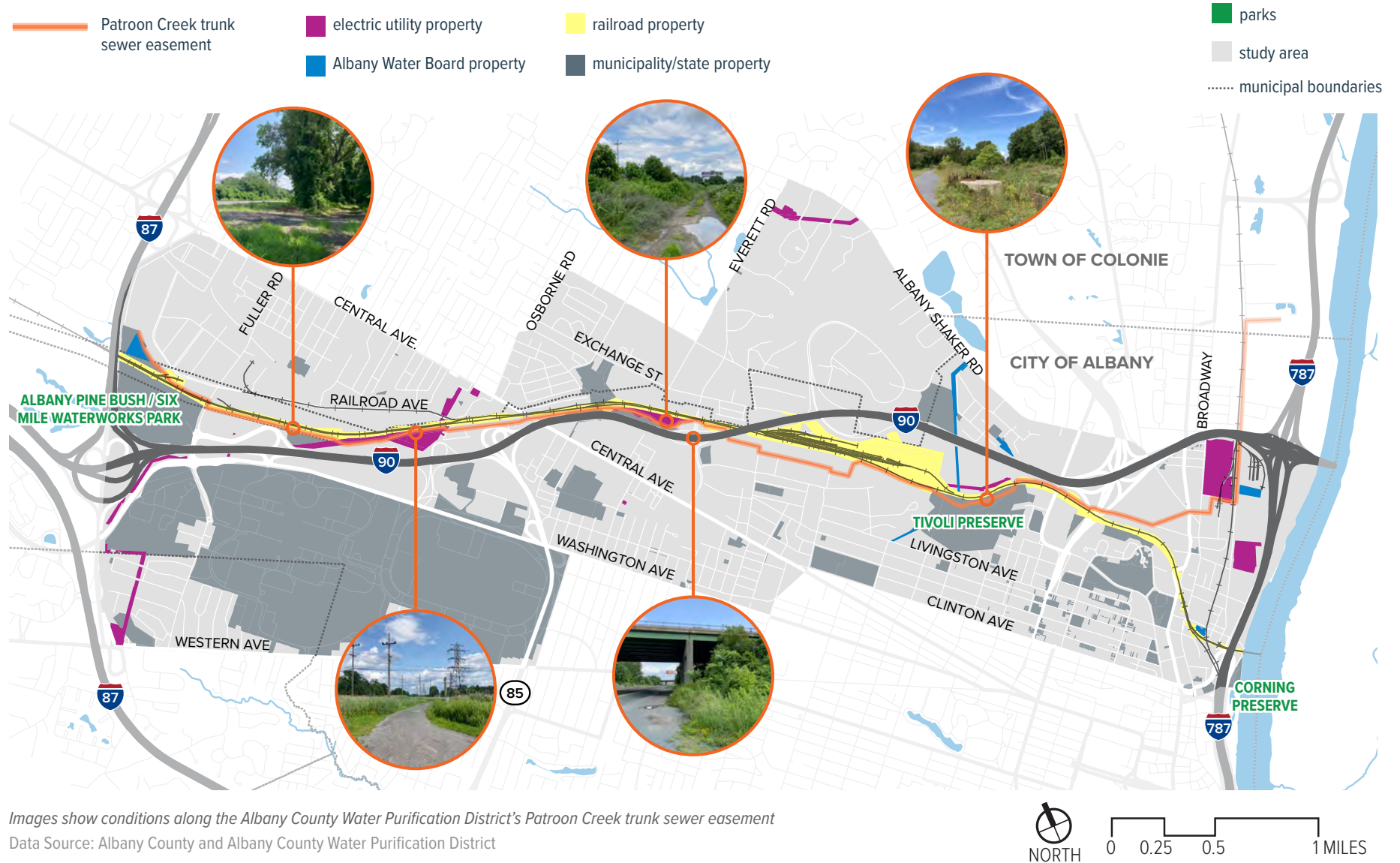
The Albany County Water Purification District provides waste removal and treatment services for eight member communities, including the Town of Colonie and the City of Albany. The County owns all trunk sewer lines that serve the District, as well as two 4A wastewater treatment plants that provide secondary treatment. The County-owned Patroon Creek Trunk Sewer bisects the study area, running along the I-90 and railroad corridors from Six Mile Waterworks Park east to the County Water Purification District's North Water Treatment Plant, located just north of the study area in the Village of Menands.

The Patroon Creek Trunk Sewer is located under several different publicly- and privately-owned parcels. Maintenance and metering access are preserved through an easement, which is approximately six miles long and 24 feet wide within the study area. From Six Mile Water Works Park to Everett Road, the County's Patroon Creek Trunk Sewer Easement is roughly defined by a compacted dirt trail or is co-located with existing roadways (e.g., Yardboro Avenue). From Everett Road to Tivoli Lake Preserve, the easement crosses under I-90, follows Industrial Park Road, and then follows the southern edge of the railroad to the northwestern corner of Tivoli Preserve. In the Preserve, the easement is defined by a gravel road, paralleling the daylight portion of Patroon Creek. The easement exits the northeast corner of Tivoli Preserve, crosses under the railroad, continues east on Tivoli Street, and then proceeds northeast to connect to Erie Boulevard, following this road north to the water treatment plant.

UTILITY INFRASTRUCTURE: KEY FINDINGS

- /// Electrical transmission corridors and the Albany County Patroon Creek Trunk Sewer easement provide long, linear east-west corridors along relatively level terrain. These corridors are intermittently used for infrastructure access and may provide an opportunity to co-locate multi-modal trail infrastructure.
- /// The Albany Water Board owns a narrow, north-south corridor connecting Tivoli Preserve to Albany Shaker Road. This corridor may be an opportunity to connect the Town of Colonie with the future Patroon Creek Greenway as well as introduce new I-90 crossing infrastructure for pedestrians and cyclists.
- /// The Albany County Patroon Creek Trunk Sewer easement often overlaps with railroad property and/or is located in close proximity to railroad tracks. If portions of the easement are utilized as a trail corridor, safety measures would have to be carefully explored and alternate routes identified in locations where the easement is adjacent to the railroad.

INFRASTRUCTURE: UTILITIES



CHAPTER 3: EXISTING CONDITIONS

NATURAL SYSTEMS

This section provides an overview of the natural systems and flood hazards within the study area. Despite the dense urban development that characterizes most of the study area, there are several nature preserves, wetlands, and waterways distributed throughout the study area, creating opportunities for the future Patroon Creek Greenway to improve access to these natural assets and connect local residents and visitors to restorative outdoor spaces.

Wetlands

Approximately 2% of the study area (114 acres) are covered by freshwater wetlands, most of which are classified by the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI)¹ as riverine, lake, or pond features (78 acres). Six Mile Waterworks contains a large portion of the study area's wetlands, including the headwaters of the Patroon Creek, which bisects the study area and flows into the Hudson River.

According to the USFWS NWI, there are approximately 14 acres of emergent wetlands in the study area and 22 acres of forested/shrub wetlands. Emergent and forested/shrub wetlands are located along the I-90 corridor, in Corporate Woods, and in Six Mile Waterworks Park and Tivoli Lake Preserve.

¹ The USFWS NWI provides publicly accessible data on the abundance, characteristics, and distribution of wetlands in the United States. This inventory is not regulatory and is intended to promote the understanding, conservation, and restoration of wetlands across the nation.

RIVERS

Within the study area, approximately 30 acres are classified by the USFWS NWI as riverine wetlands. In addition to the Patroon Creek, several small streams flow through the northern portion of the study area in the Town of Colonie. The Hudson River defines the eastern edge of the study area, and while not contained within the study area, this tidal river is a major destination and scenic resource.

NYS DEC REGULATED WETLANDS

The NYS Freshwater Wetlands Act protects large freshwater wetlands (12.4 acres or greater in size), as well as smaller wetlands deemed locally important. A 100 foot wide “adjacent area” is established around the perimeter of every protected wetland to ensure the benefits and function of the wetland are preserved.

Any activity that may adversely impact a protected wetland or its adjacent area is regulated by the NYS DEC and requires a permit. Typical trail-related activities that would require a permit if conducted in a wetland or its adjacent area include:

- Construction of roadways or shoreline stabilization structures
- Placement of fill, excavation, or grading
- Modification, expansion, or restoration of existing structures
- Drainage

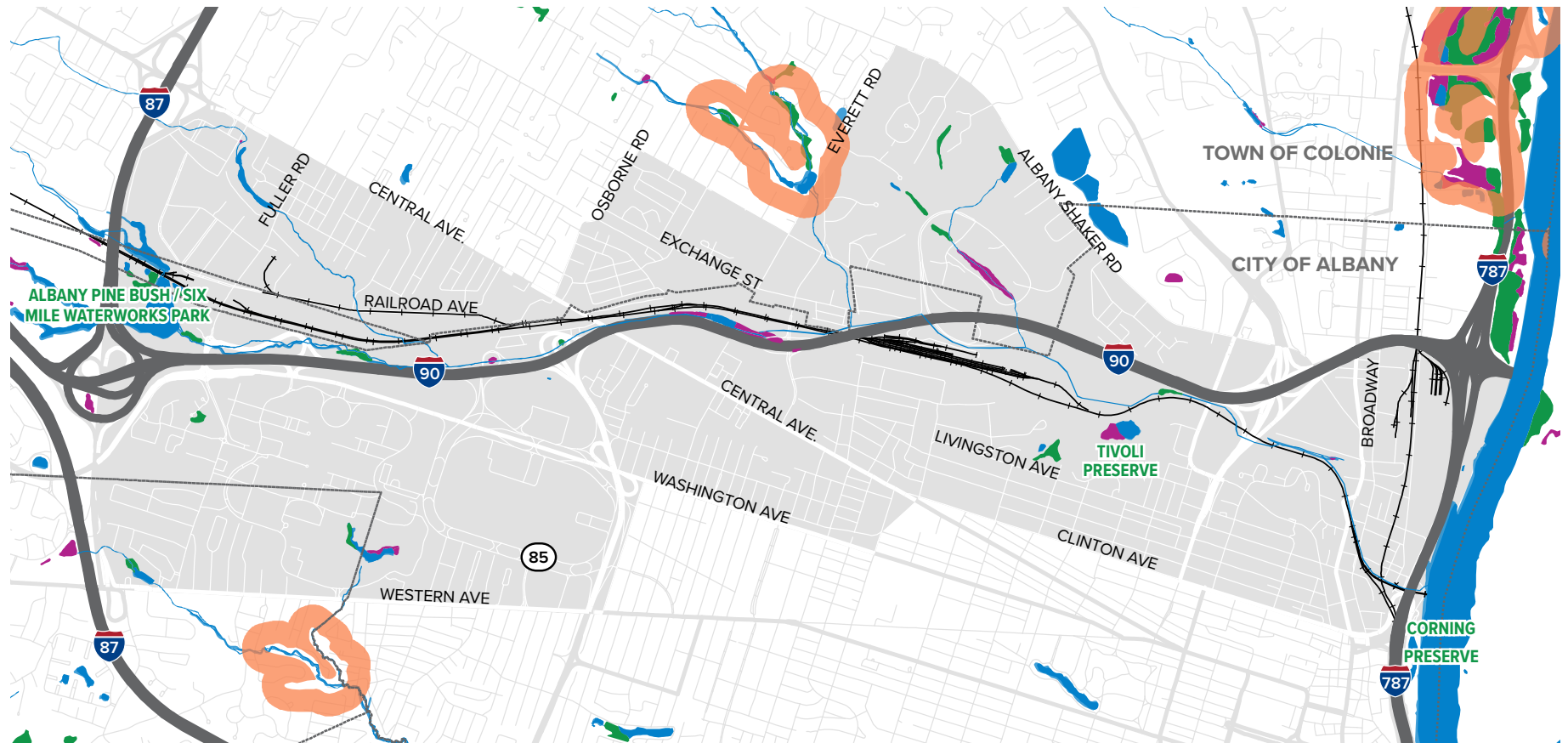
Within the study area, the only currently documented wetlands regulated by the NYS DEC are located along Everett Road, north of I-90.

PATROON CREEK DAYLIGHTING

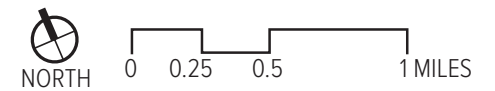
Patroon Creek — the namesake for the future Greenway — originates in the Pine Bush Preserve and flows east approximately 8 miles to its mouth at the Hudson River. Since the late 1800s, several portions of the creek have been culverted (confined to a large underground concrete pipes) to accommodate urbanization.

In 2019, a 1,500 foot portion of Patroon Creek was “daylit” in Tivoli Lake Preserve. The large concrete tile pipe containing Patroon Creek was removed and the creek was restored to an open water, naturalized condition. The newly established stream corridor provides habitat for aquatic and terrestrial species, native landscaping attracts a diversity of pollinator and bird species, and a new trail provides public access to this scenic natural refuge.



NATURAL SYSTEMS: **WETLANDS**

Data Source: New York State Department of Environmental Conservation; U.S. Fish and Wildlife Service National Wetland Inventory



CHAPTER 3: EXISTING CONDITIONS

NATURAL SYSTEMS (CONT.)

Flood Hazard Areas

Approximately 6% of the study area (332 acres) is located in the 100-year floodplain, which has a one percent annual chance of flooding, and approximately 1% of the study area (42 acres) is located in the 500-year floodplain, which has a 0.2% annual chance of flooding. The 100-year and 500-year floodplains are defined by the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps, which were updated in 2015 across Albany County.

Flood hazards are concentrated along the Hudson River, where all areas east of the Kenwood Running Track railroad are in the 100 year floodplain. Other flood-prone areas include:

- Tivoli Lake Preserve
- Six Mile Waterworks Park
- Between Everett Road and I-90
- Areas immediately north of I-90, between Everett Road and Six Mile Waterworks Park

Through the center of the study area, flood hazards generally align with Patroon Creek. Approximately 40% of the Creek is still confined to an underground pipe, and a majority of this condition occurs between Tivoli Lake Preserve and the Hudson River. Additionally, a significant portion of the Creek's watershed is paved, which results in large amounts of stormwater runoff and rapid changes in the stream's water level during storm events.



▲ **Patroon Creek Spillway in Tivoli Lake Preserve.** This area allows the creek to overflow during large storm events.

NATURAL SYSTEMS: KEY FINDINGS

- /// Wetlands and flood hazards are concentrated in the western and eastern portions of the study area and along Patroon Creek.
- /// If the future Greenway follows Patroon Creek, existing wetlands and other natural features provide opportunities to integrate ecological restoration, wildlife viewing, and educational and interpretive displays into the Greenway.
- /// Permeable trail surfacing and bioretention features should be considered along the future Greenway to reduce stormwater runoff in Patroon Creek's highly urbanized watershed.
- /// If sections of the future Greenway are located in the 100-year floodplain, floodable features and/or elevated structures should be integrated to ensure the resilience of the built trail and the safety of its users.

NATURAL SYSTEMS: FLOOD HAZARD AREAS



Data Source: Federal Emergency Management Agency (FEMA)