



Market Analysis

Capital District Transportation Authority Transit Development Plan

September 2023

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Market Analysis

Density is the primary factor determining the effectiveness and efficiency of public transportation. Higher concentrations of people and/or jobs tend to have higher transit ridership. At the same time, most transit agencies are mandated to provide comprehensive service to the communities they serve and to provide mobility for residents with no other means of transportation. This Market Analysis aims to identify the strongest transit corridors in the CDTA service area and highlight areas with relatively high transit need. Thus, the Market Analysis consists of two key components: Transit Potential and Transit Need. Both analyses were conducted using population data from the U.S. Census American Community Survey (ACS) 2017-2021 5-Year Estimates and data for 2020 from the U.S. Census' Longitudinal Employer-Household Dynamics (LEHD) program.

Transit Potential is an analysis of population and employment density, identifying areas where high concentrations of people and jobs suggest a higher likelihood of transit use. Transit Need focuses on socio-economic characteristics such as income, household automobile availability, age, and disability status that are indicative of a higher propensity to use transit. Additionally, certain land uses—such as supermarkets/major retail, civic/community centers, multifamily housing, educational institutions, and medical facilities—tend to generate more transit trips than other land uses.

The results of these analyses, detailed in the sections below, show that transit potential and transit need follow similar patterns. Areas throughout Albany, Troy, and Schenectady have both moderate to high transit potential and moderate to high transit need. However, Saratoga Springs, Glens Falls, and Amsterdam have moderate transit potential, but lower transit need in comparison. Additionally, there is moderate transit potential surrounding Colonie and extending up I-87, but low transit need in these areas.

Ultimately, the analysis reveals that high-potential and high-need areas in the Capital Region are generally well-served by CDTA's existing service. However, there are areas with *low* transit potential that are also well-served by transit. For instance, Saratoga Springs, Amsterdam, and Glens Falls have large subareas with fewer than five jobs and people per acre, which may not justify the current level of fixed-route service. As CDTA updates the Transit Development Plan (TDP) and considers network restructuring, there is an opportunity to streamline service by reducing low-ridership routes in areas with low transit potential and enhancing high-ridership routes in areas with high transit potential.

The Microtransit Suitability analysis suggests that areas with low transit potential, but high transit need may be better served by FLEX service. These areas are most notable in Amsterdam, Saratoga Springs, and Bethlehem.

Moving forward, CDTA should consider how to balance its service offerings to create the most efficient use of resources while continuing to meet rider's needs. This may include adjusting or

expanding CDTA's current DRIVE and CDPHP Cycle! offerings. Current automobile travel patterns among typical transit-commuters suggests there may be an opportunity to add DRIVE locations to areas such as Colonie, East Greenbush, and Clifton Park. Furthermore, there are a large number of typical transit-commuters starting bicycle trips in Delmar, Latham, and Clifton Park. These areas should be considered as locations for CDPHP Cycle! stations as the program looks to grow. Each service offering has a role to play in meeting the region's travel demand, and the market analysis detailed in this report can help provide the context for where these services will be most successful.

Transit Potential

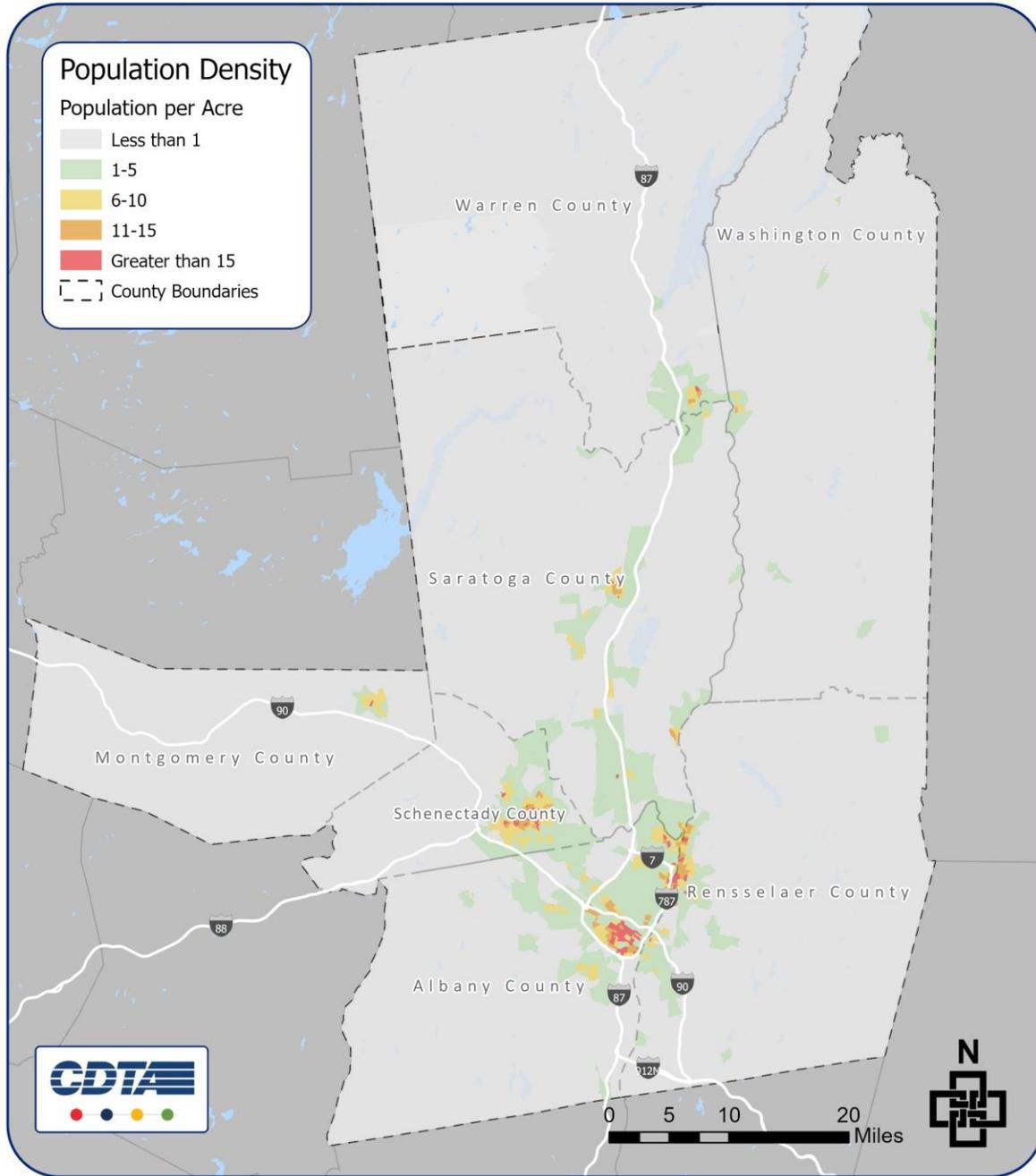
Transit service is generally most effective in areas with high concentrations of residents and/or jobs.

POPULATION DENSITY

Public transportation is most efficient when it connects population and employment centers where people can easily walk to and from bus stops. Transit's reach is generally limited to within one-quarter mile to one-half mile of the transit line, or a 10-minute walk. For this reason, the size of a transit travel market is directly related to an area's population density. Typically, a density greater than five people per acre is needed to support base-level (hourly) fixed-route transit service.¹ In the map below, yellow areas indicate places where fixed-route service could be feasible; areas that are orange or red have the potential to support more frequent service. Within the Capital Region, the areas of greatest population densities are concentrated around the cities of Albany, Troy, and Schenectady, with smaller pockets of greater density around the cities of Saratoga Springs, Glens Falls, and Amsterdam (**Figure 1**).

¹ TCRP, *Transit Capacity and Quality of Service Manual Second Edition*,
<https://onlinepubs.trb.org/onlinepubs/tcrp/docs/tcrp100/Part3.pdf>

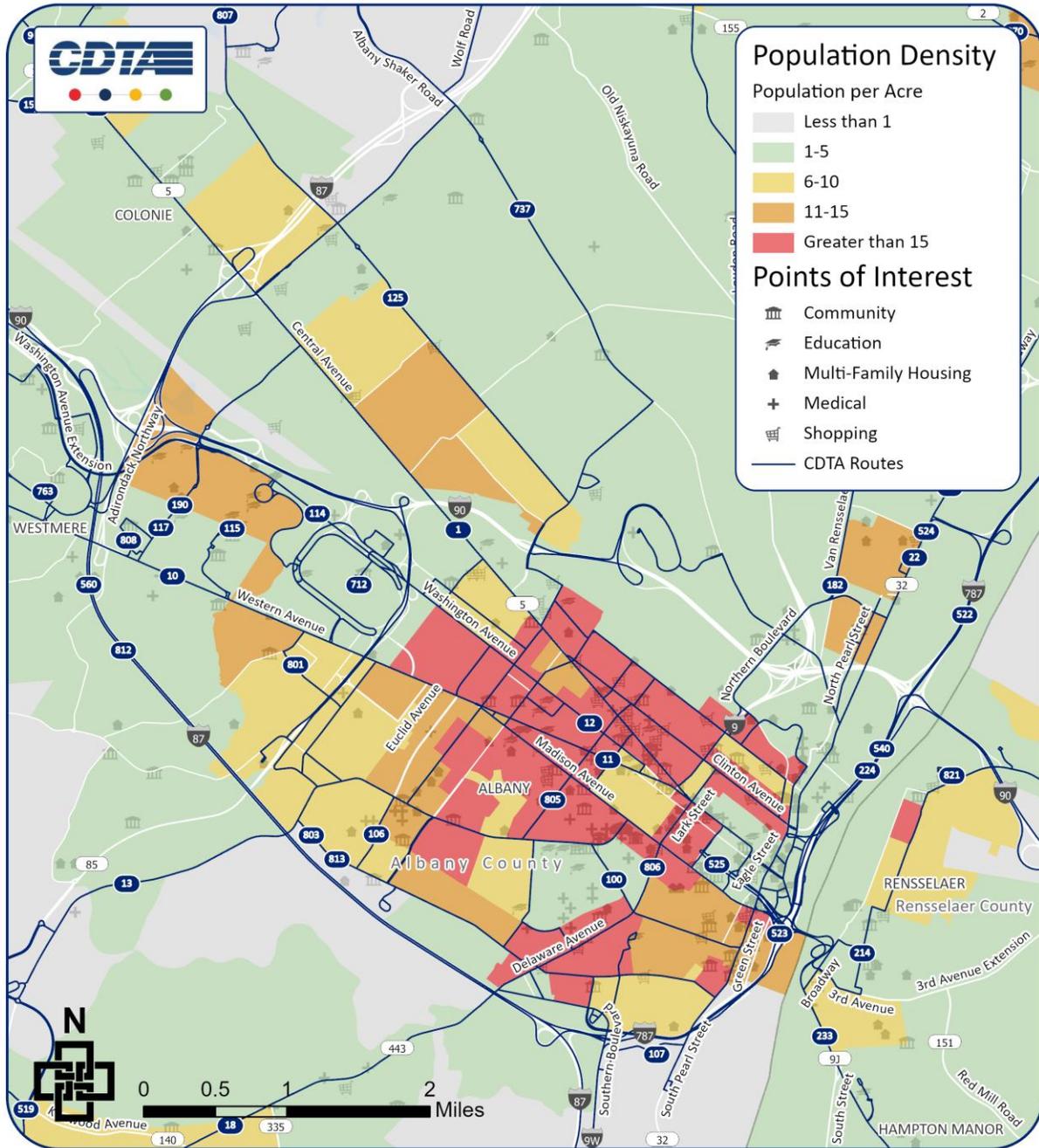
Figure 1: Population Density, Capital Region²



² Population density may represent an underestimate due to difficulty counting college students.

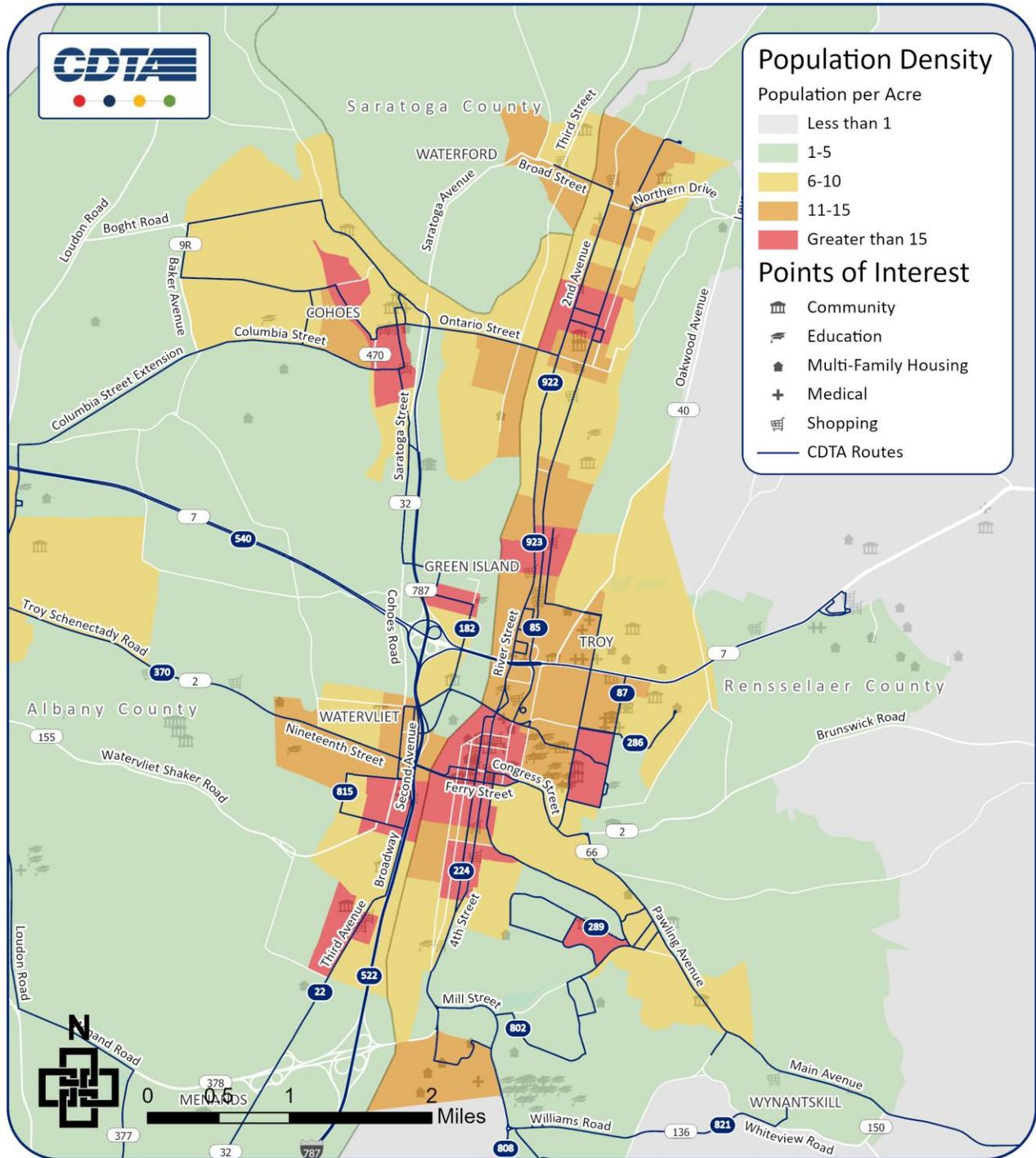
In Albany, the areas of highest population density are concentrated throughout the downtown area with pockets of medium to high density extending outwards towards Colonie, Menands, and Rensselaer (Figure 2). These areas are all well-served by existing bus service.

Figure 2: Population Density, Albany



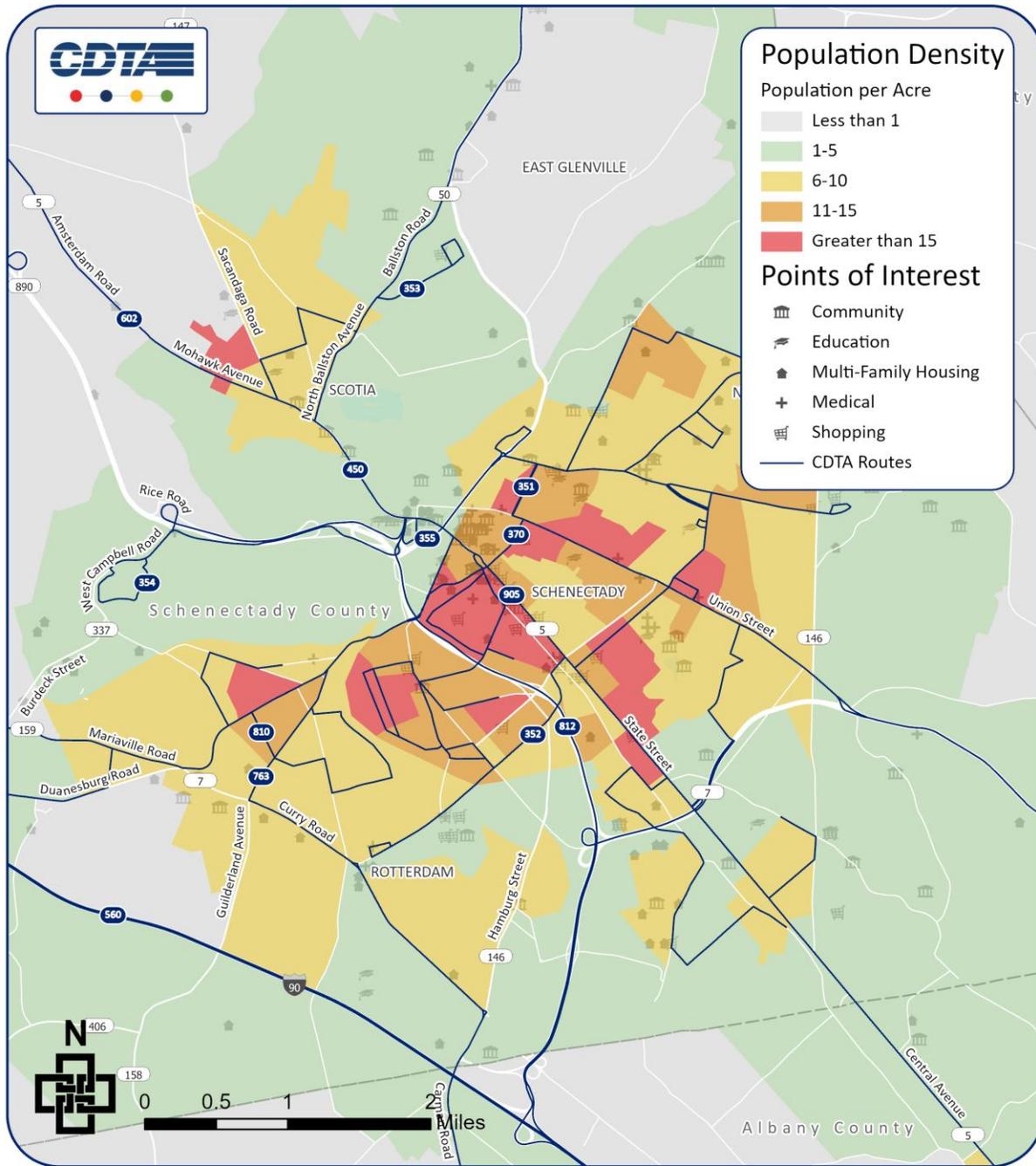
In Troy, the areas of highest density are also those best-served by existing bus service, including Downtown Troy, Watervliet, and corridors extending north to Cohoes and Waterford (Figure 3).

Figure 3: Population Density, Troy



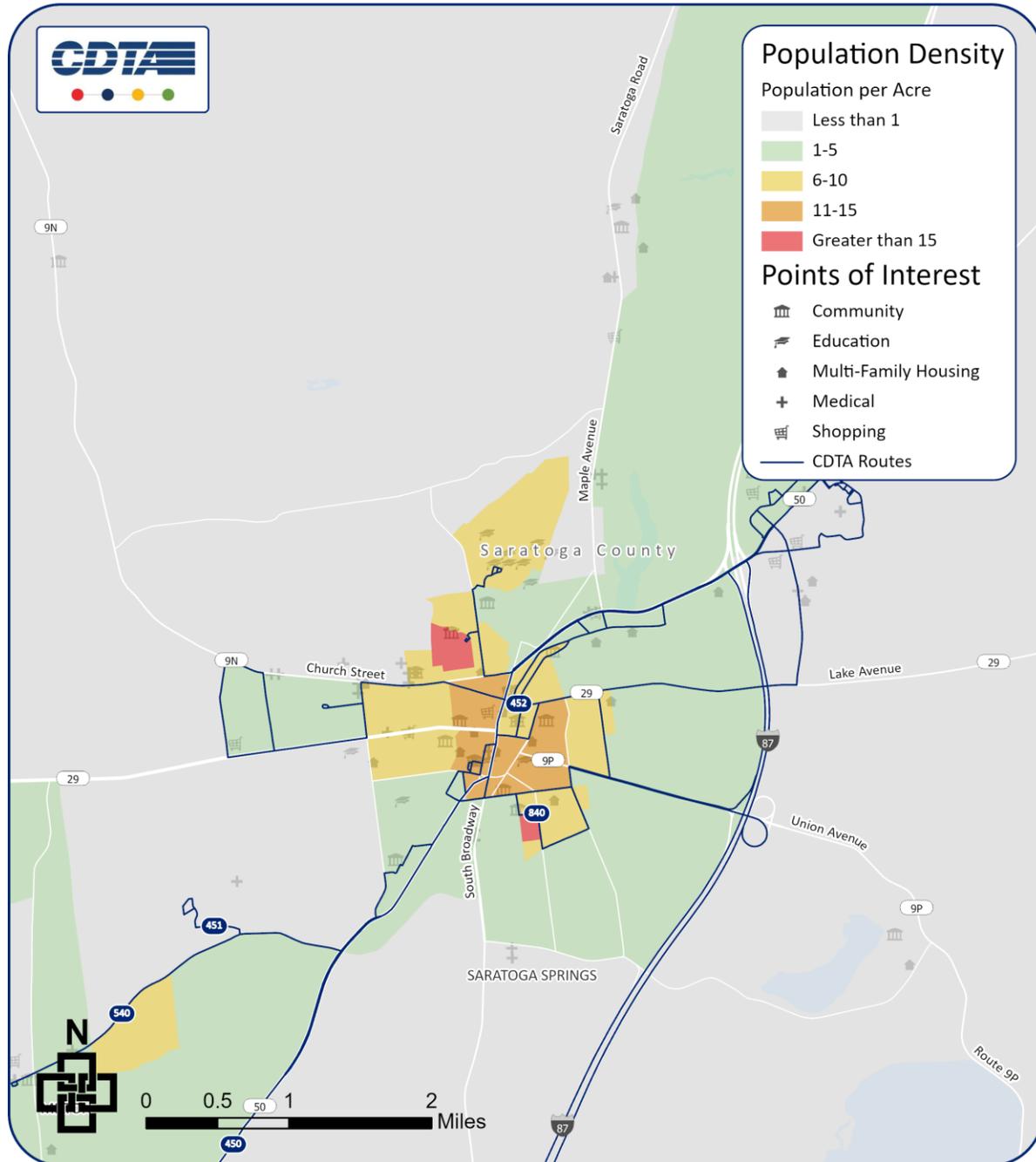
In Schenectady County, areas of high population density are concentrated throughout the City of Schenectady, with medium to high density extending towards Rotterdam to the southwest, Niskayuna to the east, and Scotia to the north (**Figure 4**).

Figure 4: Population Density, Schenectady



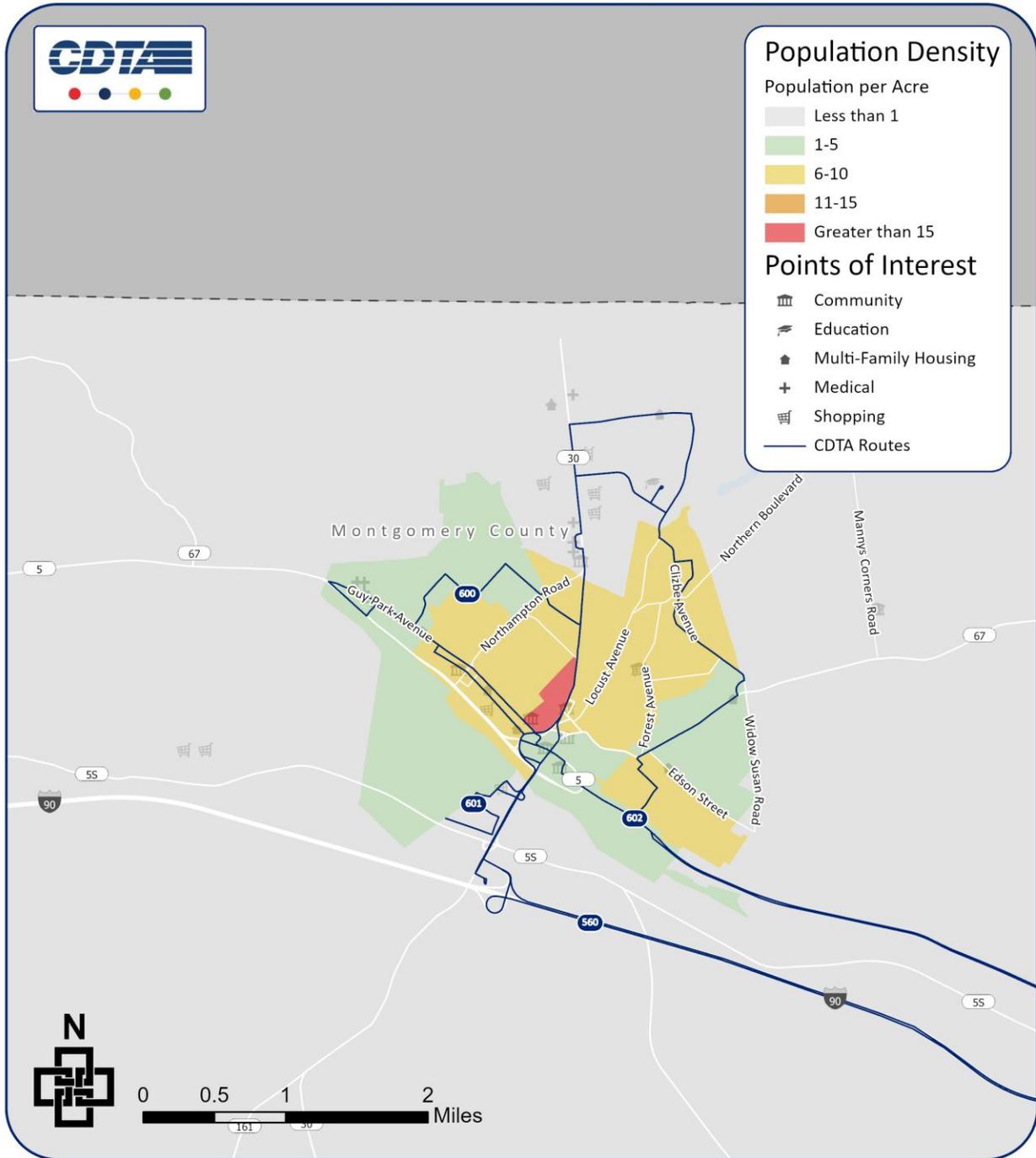
In Saratoga County, areas of high population density are concentrated in Saratoga Springs (Figure 5). Further from the downtown area, density drops to levels that are generally seen as unsupportive of fixed-route service.

Figure 5: Population Density, Saratoga Springs



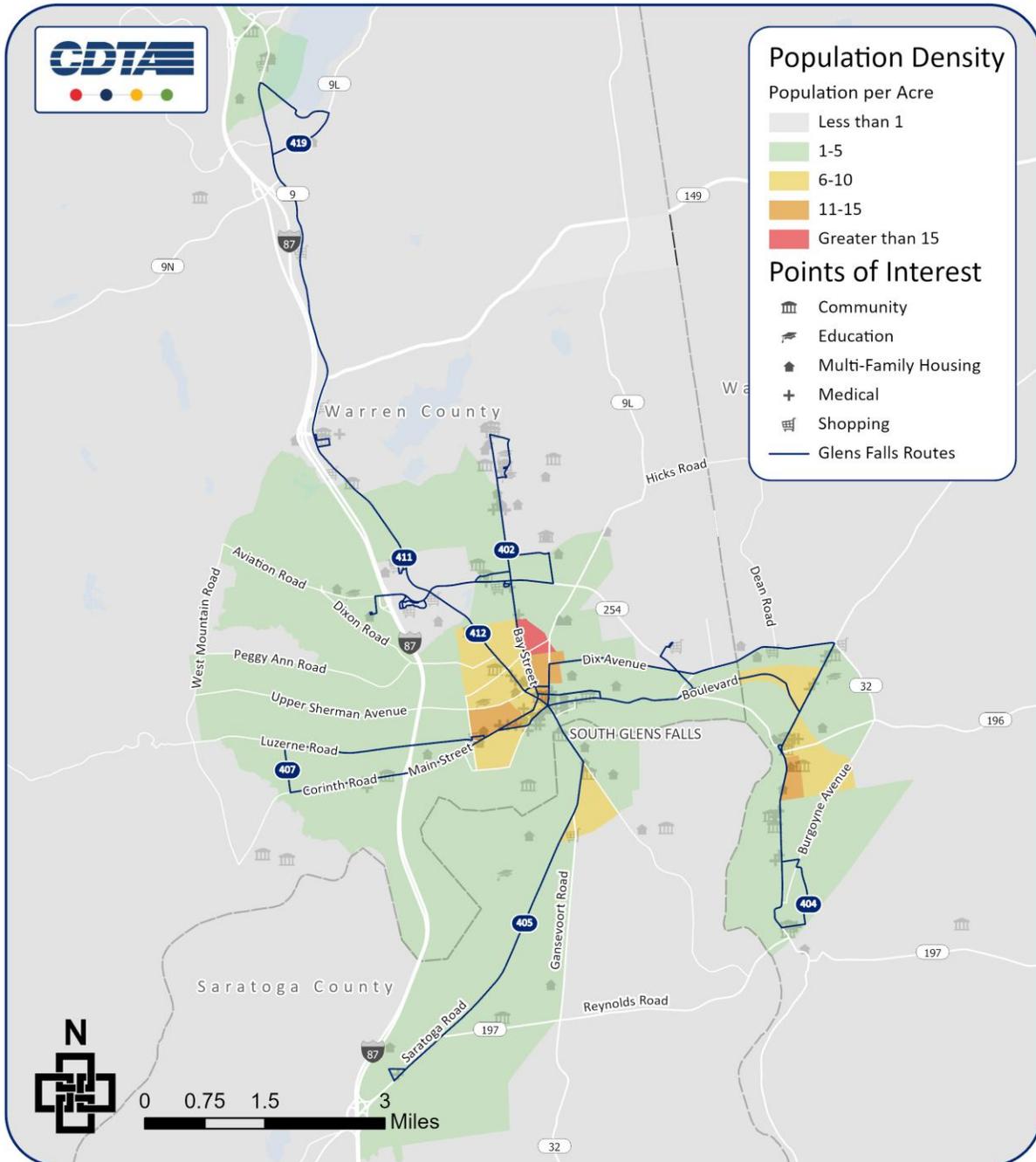
In Montgomery County, population density is concentrated in Amsterdam, which is currently well-served by bus service (**Figure 6**). Density becomes very low outside of the downtown area.

Figure 6: Population Density, Amsterdam



In Warren and Washington counties, moderate to high population density is concentrated in downtown Glens Falls and Hudson Falls, two areas that were previously served by Greater Glens Falls Transit. CDTA took over these services starting in January 2024. Outside of these two areas, density drops to levels that are generally unsupportive of fixed-route service.

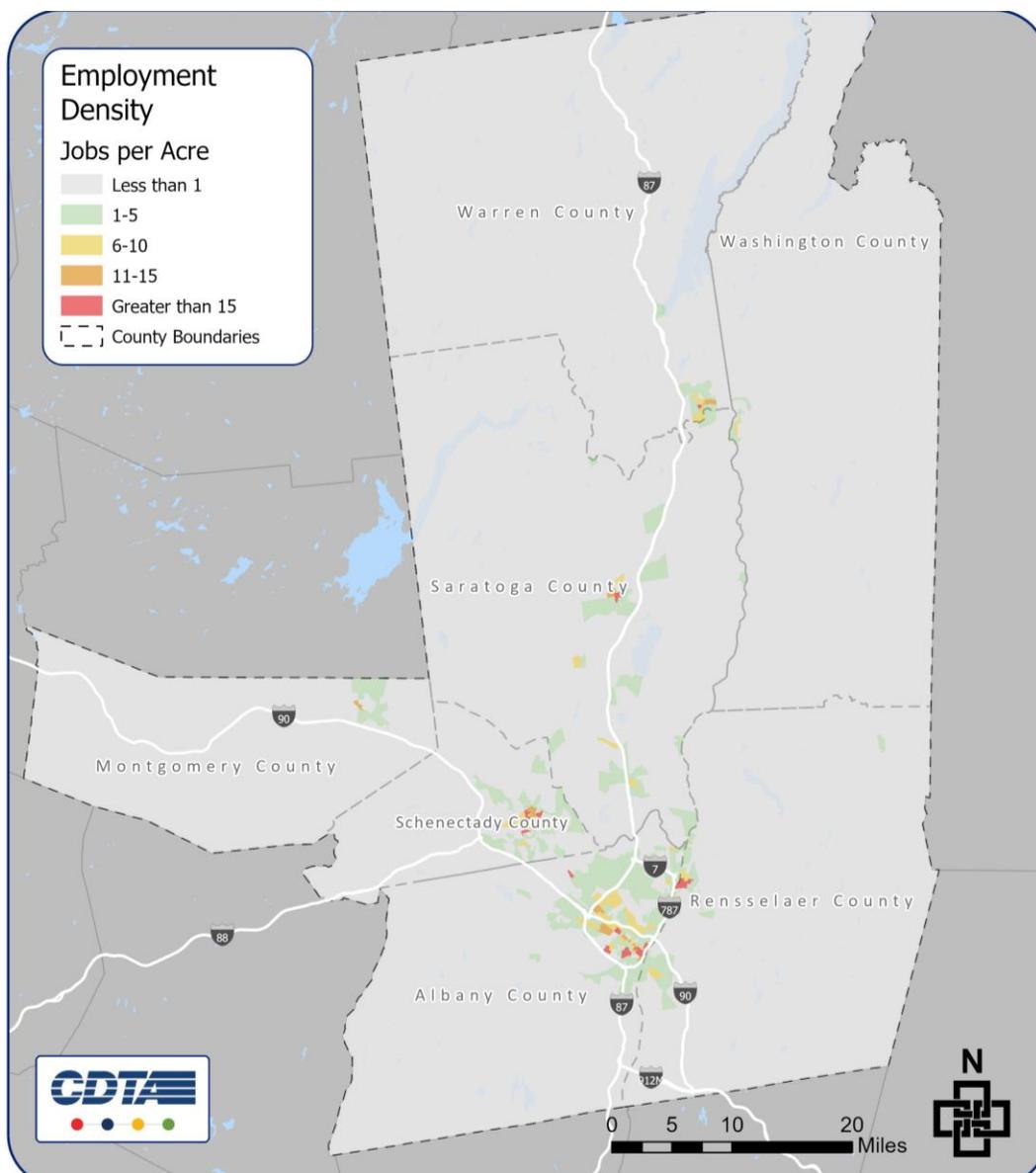
Figure 7: Population Density, Glens Falls



EMPLOYMENT DENSITY

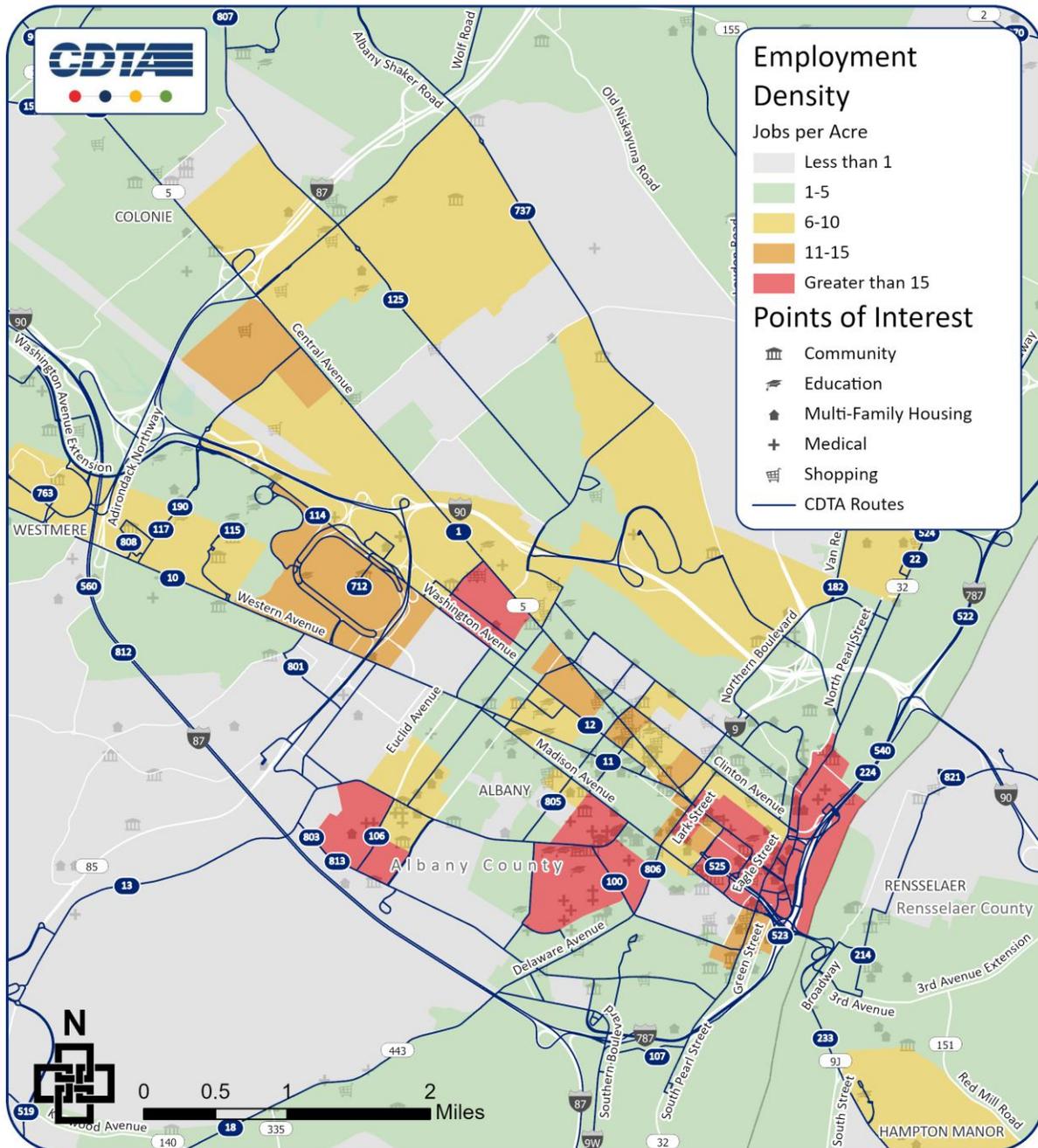
Given that traveling to and from work accounts for the largest single segment of transit trips in most markets, the location and number of jobs in a region are also strong indicators of transit demand. The results from the Phase I outreach survey support this claim, with 57 percent of respondents citing work as their most common reason for taking transit. Transit service that operates in areas of high employment density also provides key connections to job opportunities. Like population density, an employment density greater than five jobs per acre can typically support base-level fixed-route service. This density corresponds with the yellow, orange, and red areas in **Figure 8**, which illustrates that there are pockets of high job density in Albany, Troy, Schenectady, Saratoga Springs, Glens Falls, and Amsterdam.

Figure 8: Employment Density, Capital Region



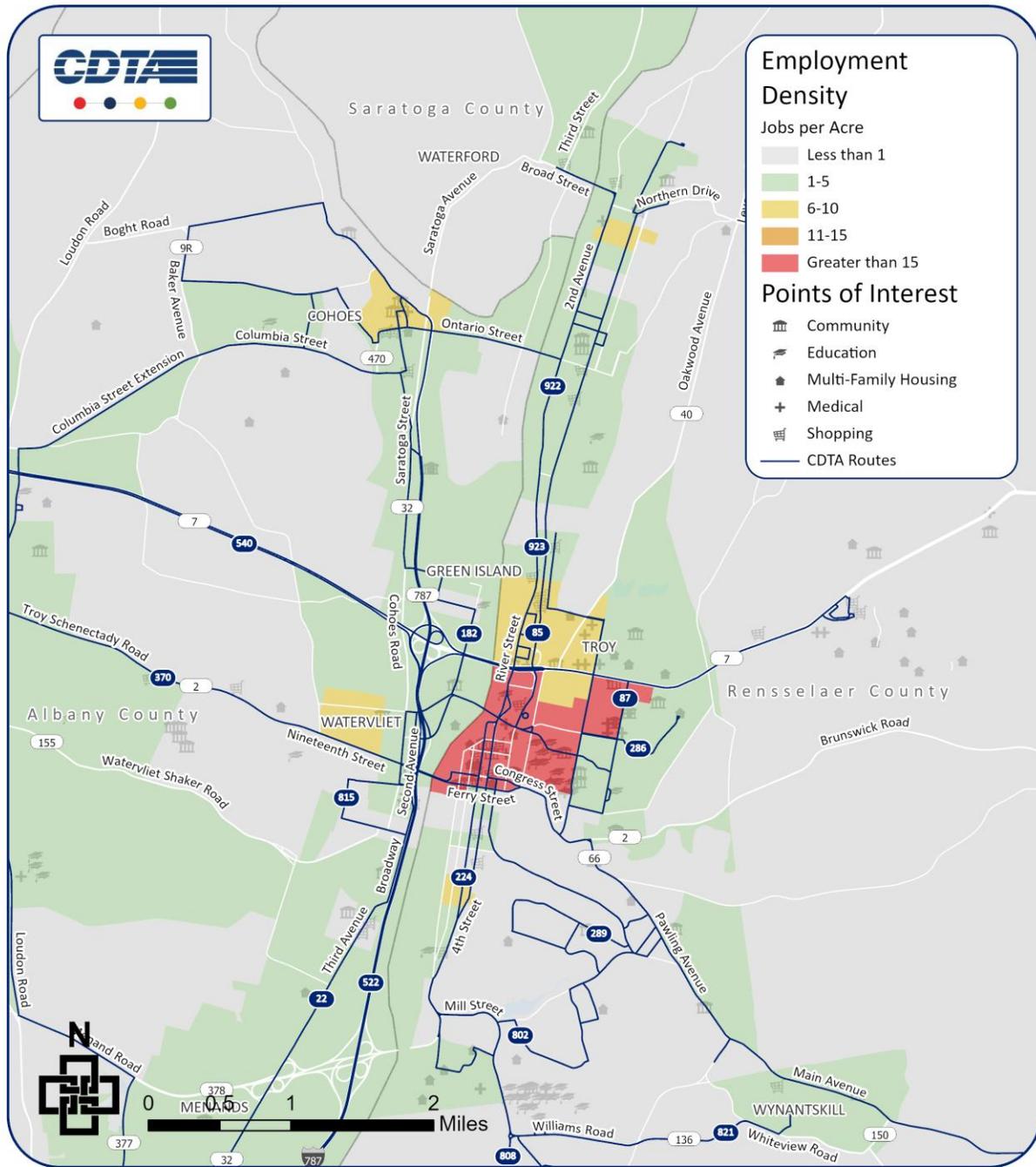
In Albany, employment density is the greatest in the downtown area along Pearl Street, near Albany Medical Center and Russell Sage College, around the Harriman State Office Campus, and along the Central Avenue corridor (**Figure 9**). Additional pockets of medium to high density are concentrated along Western Avenue and Albany Shaker Road.

Figure 9: Employment Density, Albany



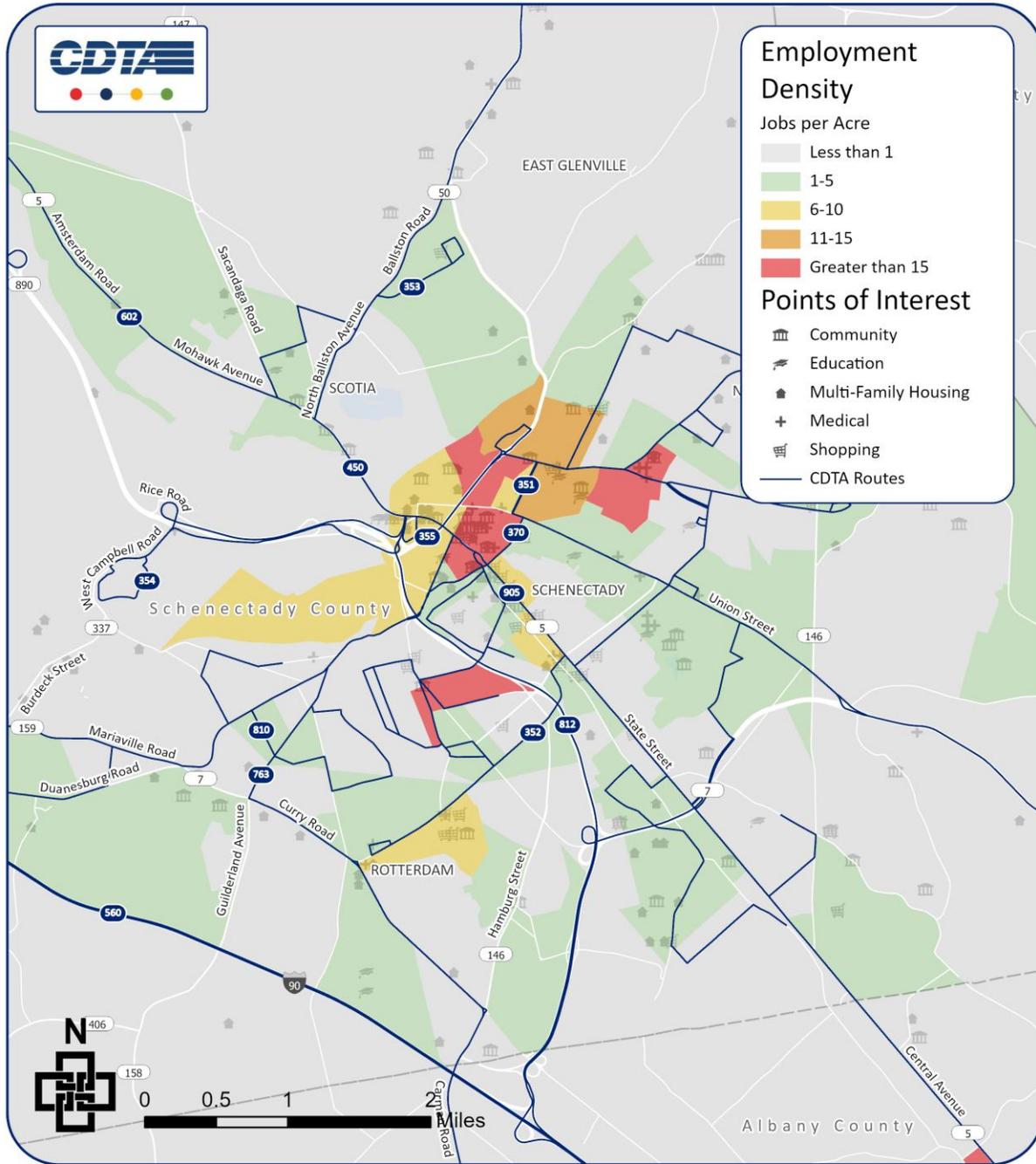
In Troy, employment density is largely contained within the downtown area and around Rensselaer Polytechnic Institute (**Figure 10**). There are small pockets of medium density off 2nd Avenue near Waterford, along Mohawk Street in Cohoes, and off 19th Street in Watervliet.

Figure 10: Employment Density, Troy



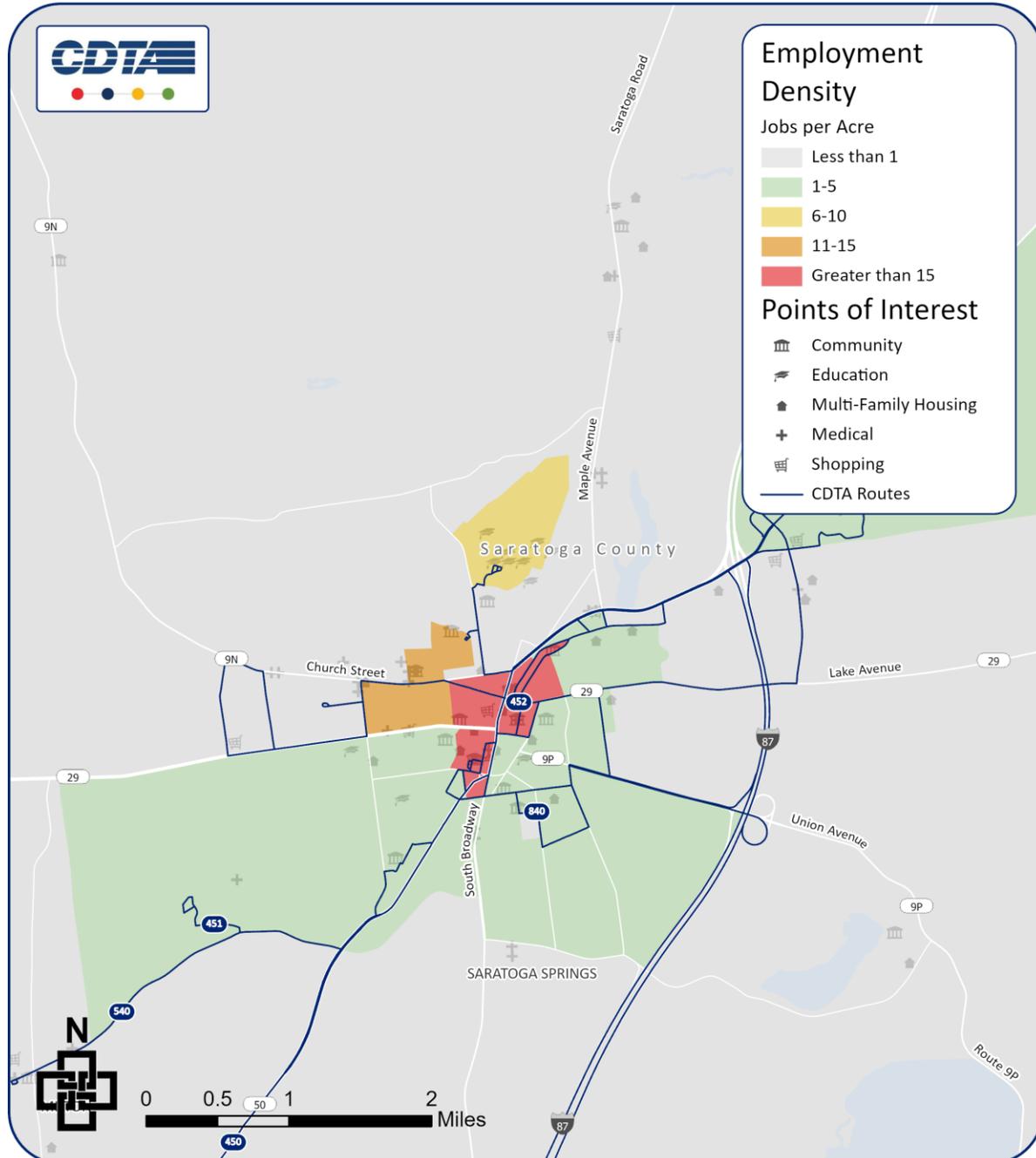
In Schenectady County, employment density is the greatest throughout the downtown area and near Union College, particularly around Erie Boulevard and Nott Street (**Figure 11**). Additional pockets of high to medium density are in Mount Pleasant and Rotterdam.

Figure 11: Employment Density, Schenectady



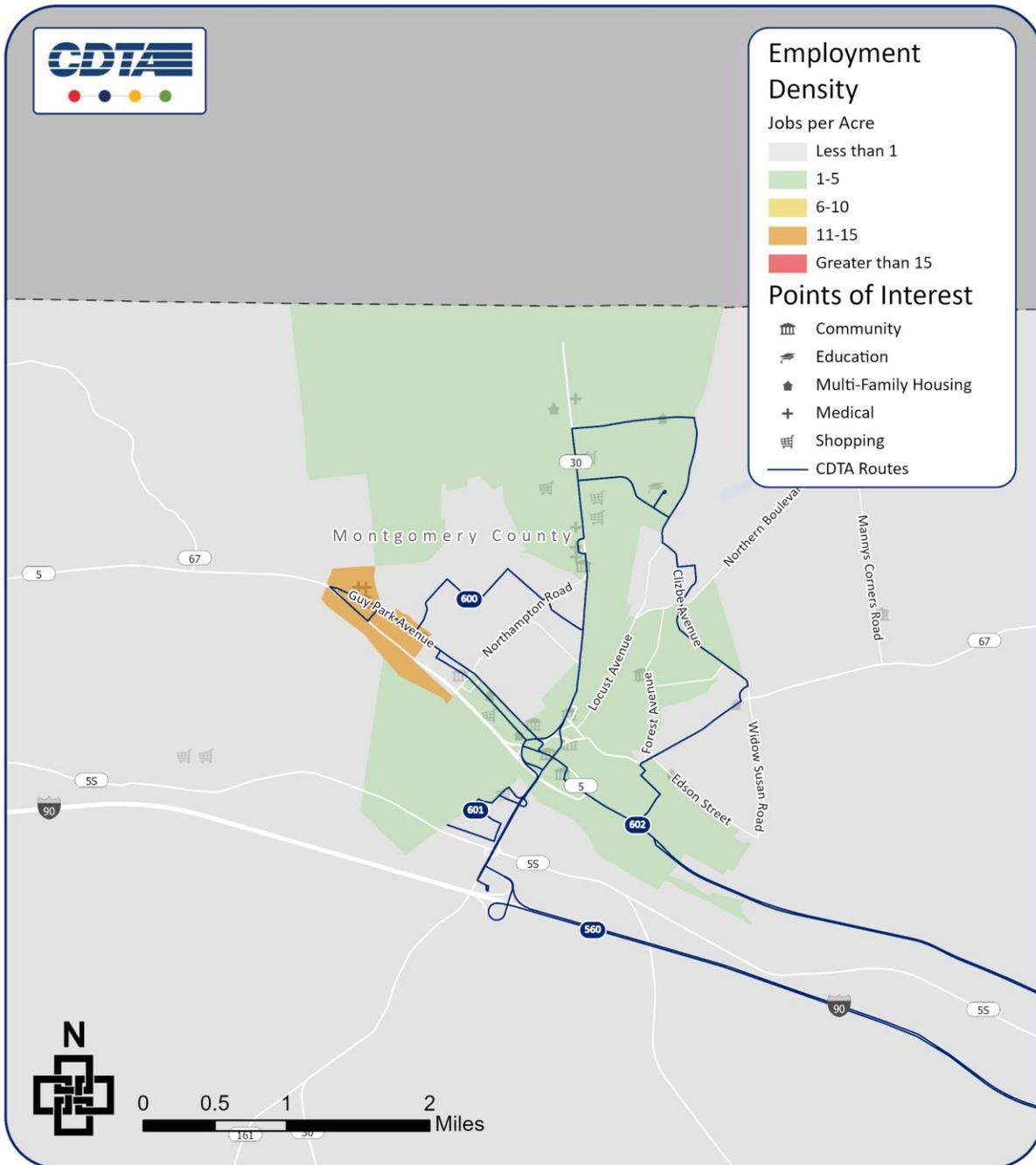
In Saratoga County, the areas with the greatest density are concentrated in downtown Saratoga Springs, with medium density located around Skidmore College (**Figure 12**).

Figure 12: Employment Density, Saratoga Springs



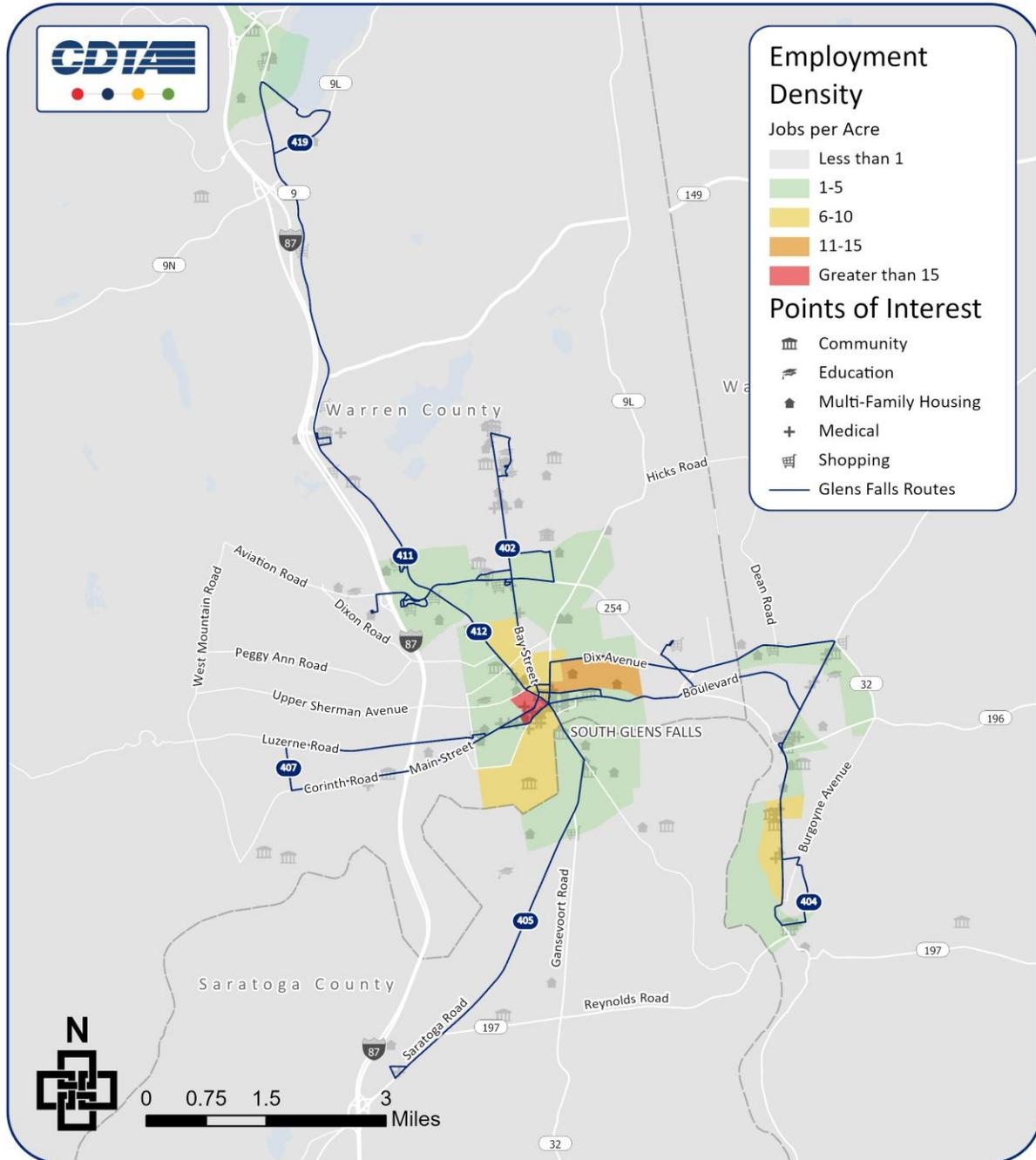
In Montgomery County, a pocket of high job density is located along W Main Street in Amsterdam near St Mary’s Healthcare and the Amtrak station (**Figure 13**). The remaining areas have low employment density.

Figure 13: Employment Density, Amsterdam



In Warren and Washington Counties, the areas with the highest employment density are located throughout Glens Falls and South Glens Falls, with additional pockets of medium density near Glens Falls North and along Broadway in Fort Edward (Figure 14).

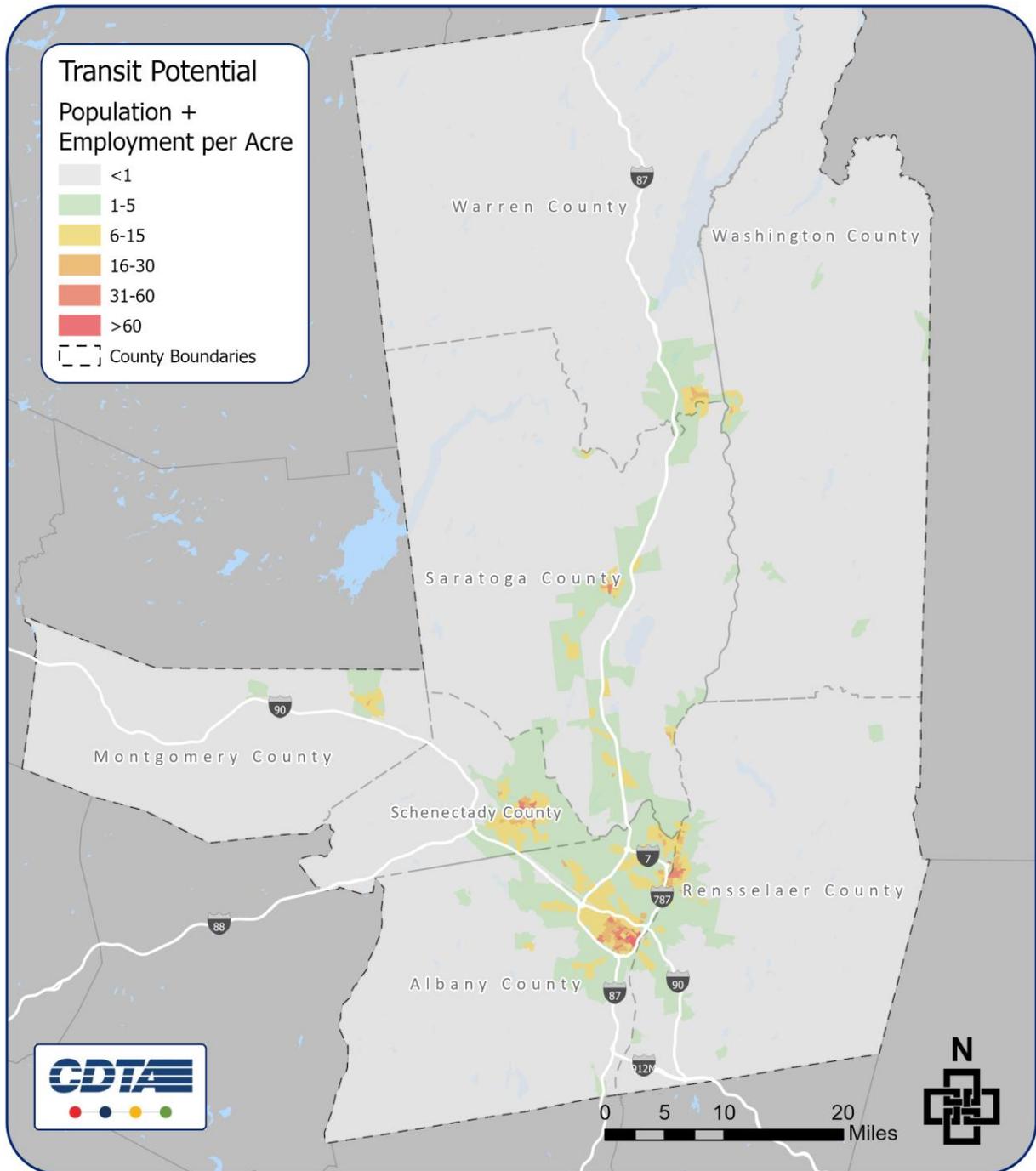
Figure 14: Employment Density, Glens Falls



TRANSIT POTENTIAL

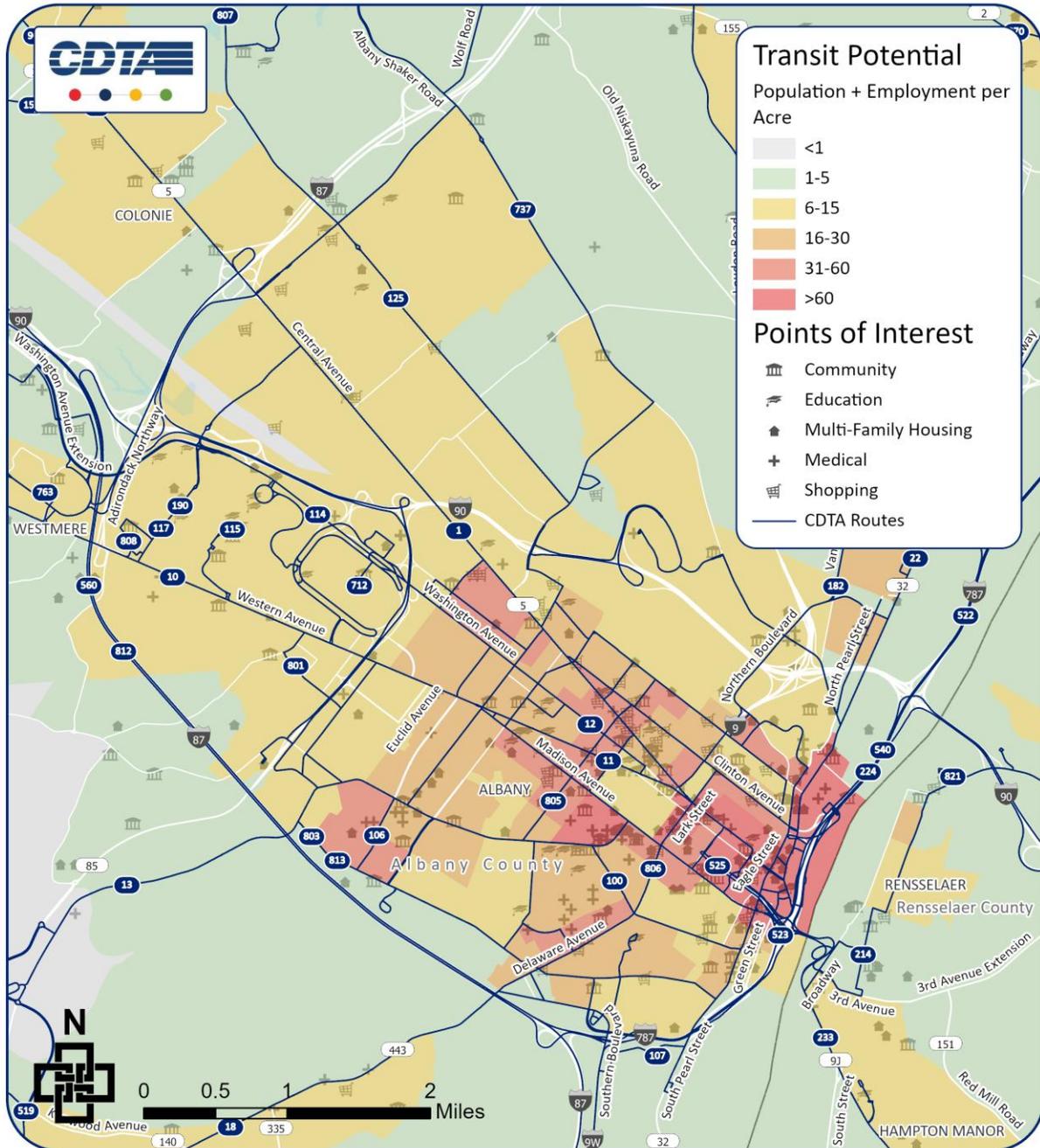
Transit Potential, depicted in **Figure 15**, combines the population and employment densities for each block group to indicate fixed-route service viability in the study area. Like population and employment densities, the areas with the greatest transit potential are concentrated in Albany, Troy, and Schenectady, with moderate potential in Saratoga Springs, Glens Falls, and Amsterdam.

Figure 15: Transit Potential, Capital Region



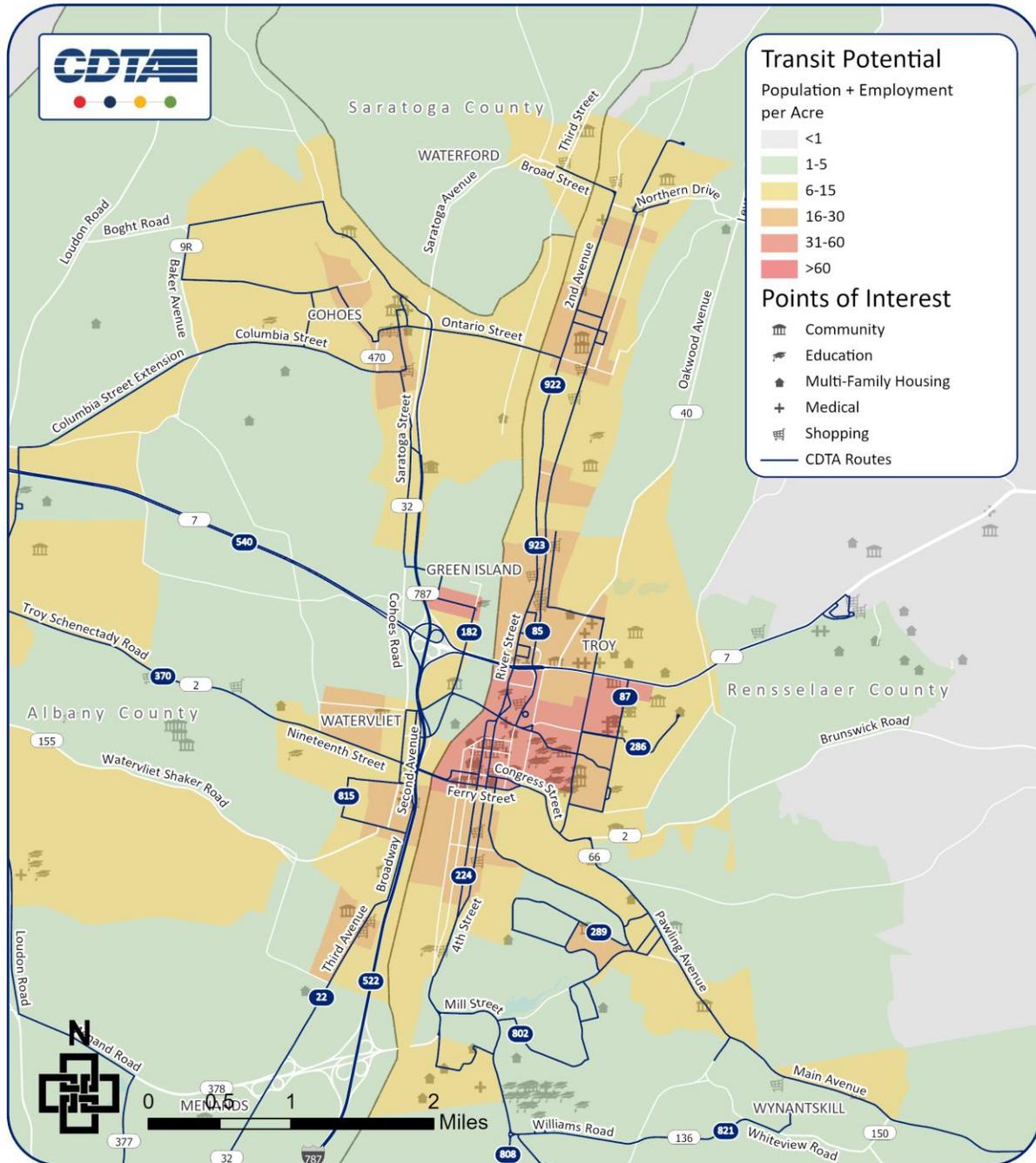
In Albany, transit potential is greatest in the downtown area, with moderate potential extending outwards towards Colonie and Menands, all of which are currently well-served by fixed-route bus service (**Figure 16**).

Figure 16: Transit Potential, Albany



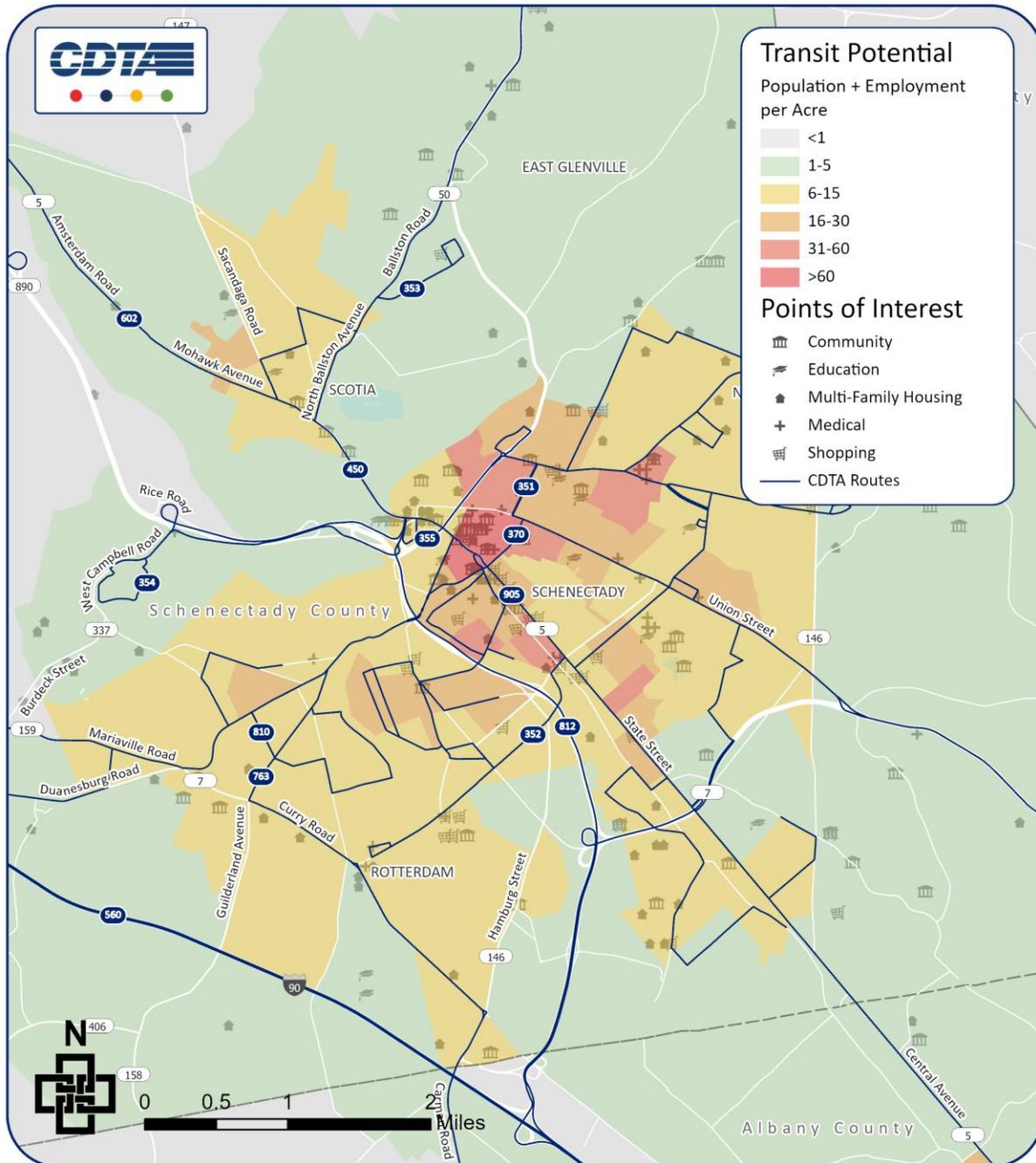
In Troy, the areas with the greatest transit potential are concentrated in downtown Troy, Watervliet, Cohoes, and along 2nd Avenue in Lansingburgh. These areas are also those best served by current bus service (**Figure 17**). One area of medium density along Watervliet Shaker Road is currently unserved.

Figure 17: Transit Potential, Troy



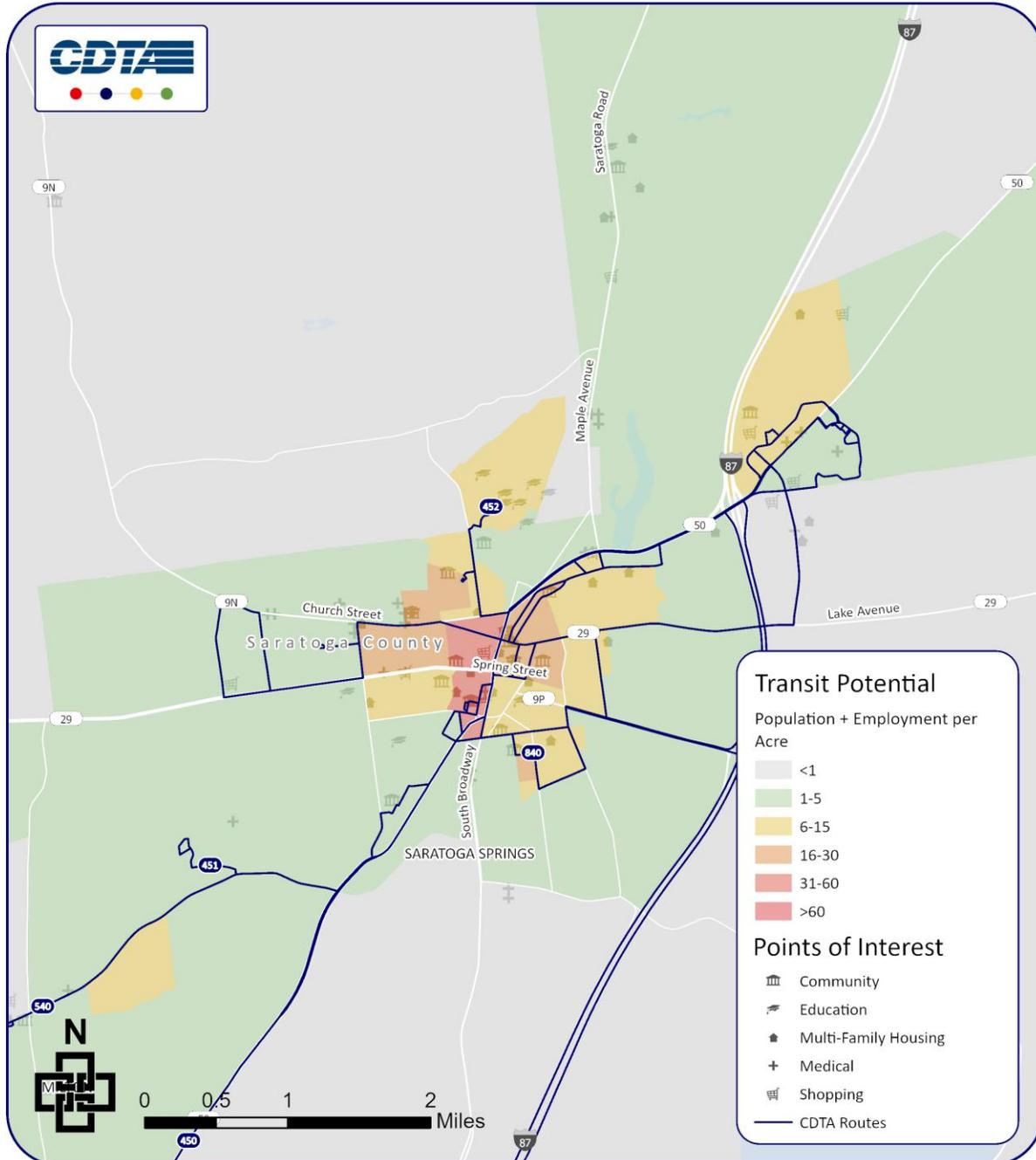
In Schenectady County, the greatest transit potential is located throughout downtown Schenectady, with moderate potential extending outwards towards Rotterdam, Niskayuna, and Scotia. These areas are currently well-served by current bus routes, but there is potential for bus service to extend further past Balltown Road in Niskayuna (**Figure 18**).

Figure 18: Transit Potential, Schenectady



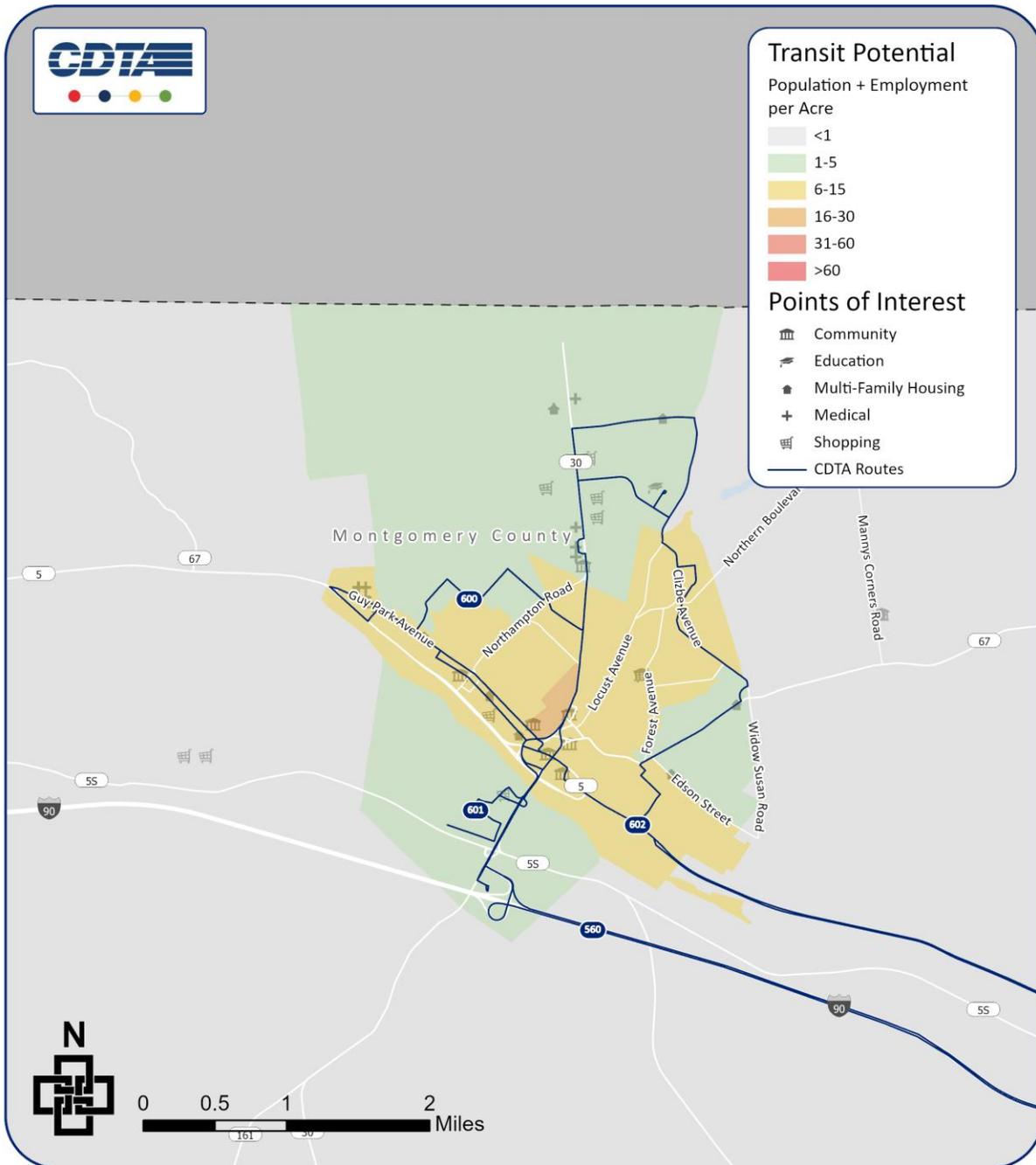
In Saratoga County, transit potential is concentrated in downtown Saratoga Springs. Further from the downtown area, transit potential is generally too low to support fixed-route transit (**Figure 19**). Most areas with the greatest potential are well-served by current bus service, but there is one area of medium potential up Saratoga Road that is currently unserved.

Figure 19: Transit Potential, Saratoga Springs



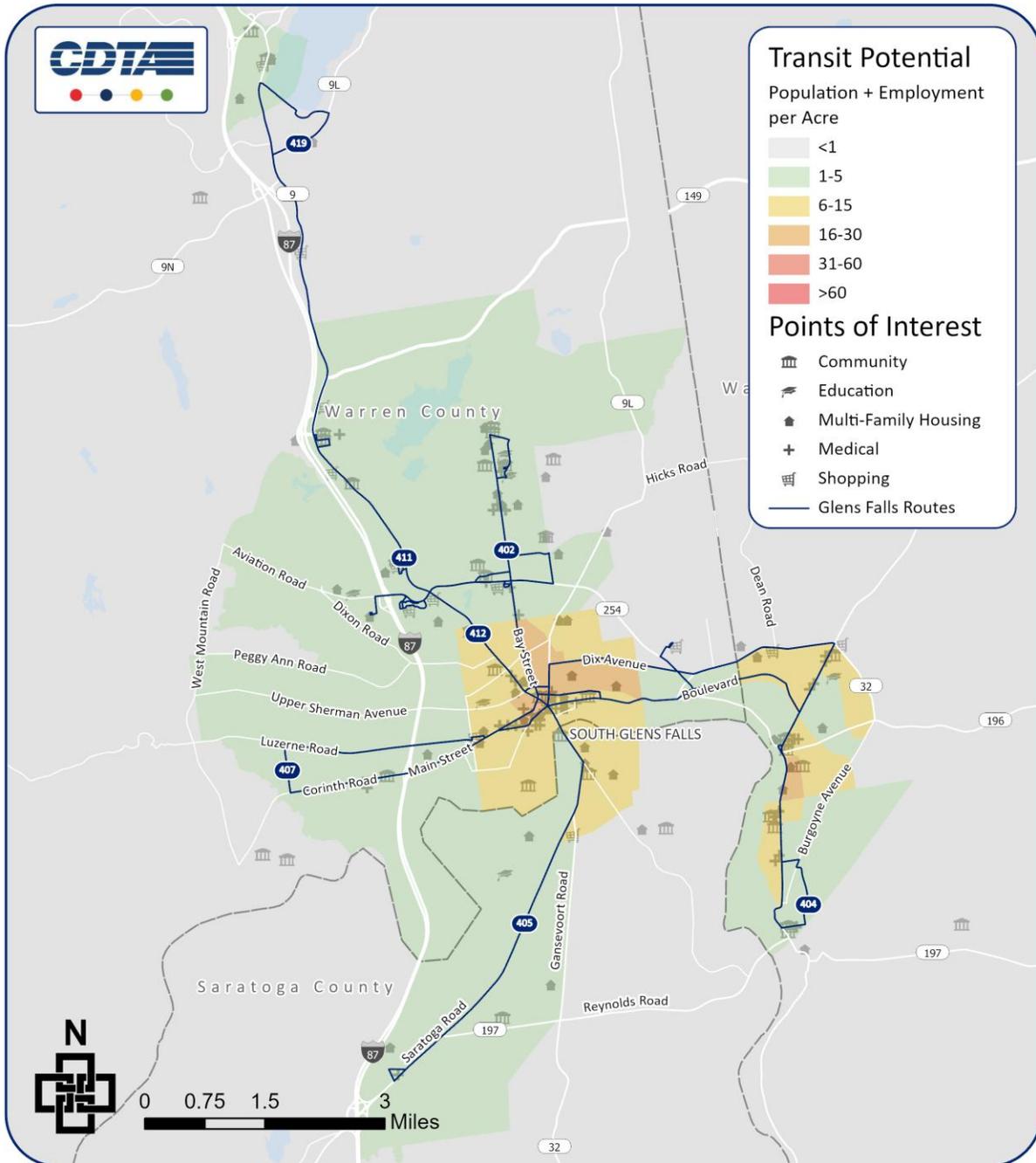
In Montgomery County, transit potential is the greatest in the Amsterdam area, which is currently well-served by bus service. Transit potential outside of downtown Amsterdam is generally too low to support fixed-route transit (**Figure 20**).

Figure 20: Transit Potential, Amsterdam



In Warren and Washington counties, transit potential is the greatest in Glens Falls, Hudson Falls, and Fort Edward, all of which are currently served by existing bus service (**Figure 21**). Transit potential outside of these areas is generally not transit supportive.

Figure 21: Transit Potential, Glens Falls



Transit Need

Above all, public transportation is a mobility tool. Certain population subgroups have a relatively higher propensity to use transit as their primary means of local and regional transportation. These groups include:

- People without access to an automobile-- whether it be by choice or due to financial or legal reasons-- often have no other transportation options besides using transit.
- People with disabilities, many of whom cannot drive and/or have difficulty driving.
- Low-income individuals, typically because transit is less expensive than owning and operating a car.
- Young people, who have in recent years shown a greater interest in transit, walking, and biking than in driving.
- Older adults, who often become less comfortable or less able to operate a vehicle as they age.

The maps in this section show the relative densities of each of these five high-transit-propensity population subgroups by Census block groups in the Capital Region to help determine where the need for transit service is greatest.

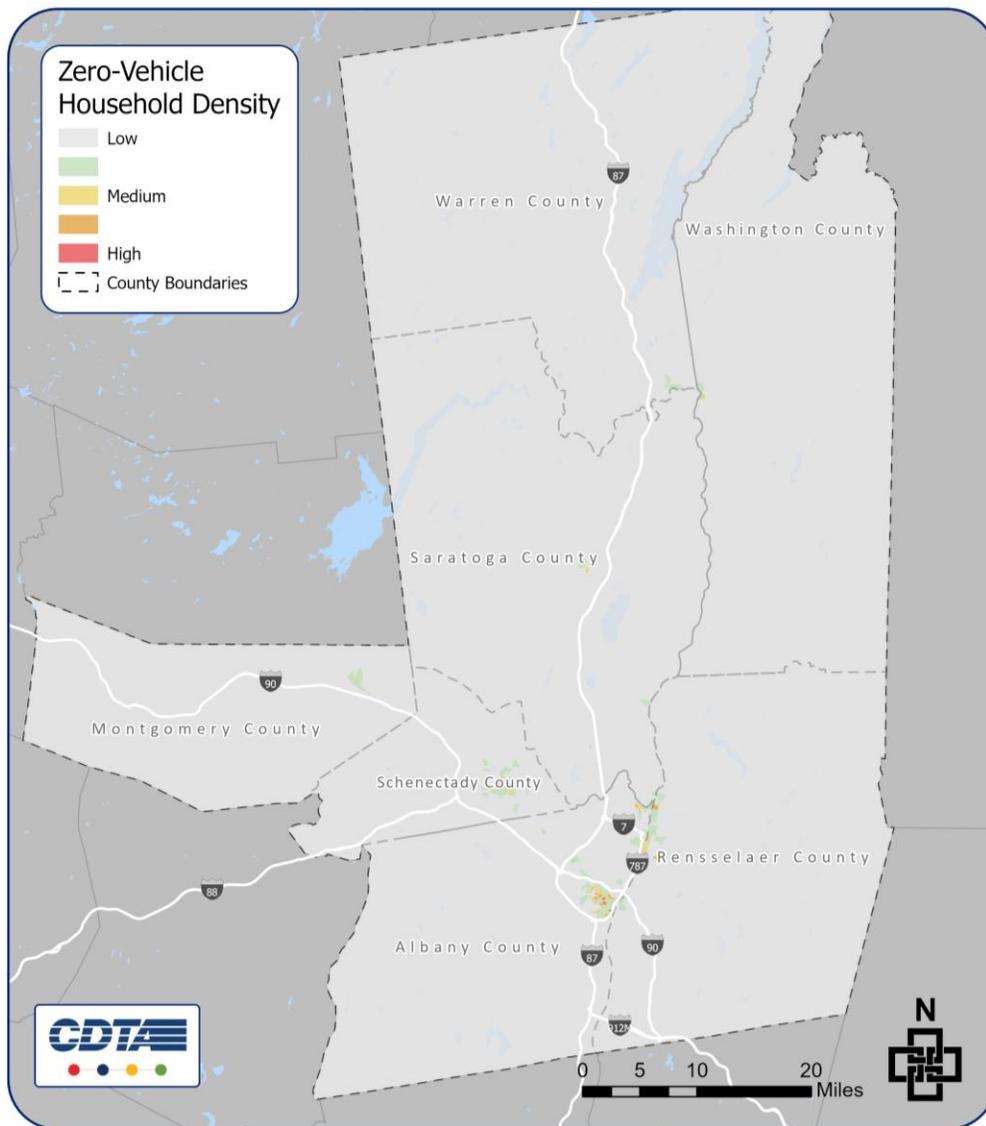
To determine Transit Need, the above metrics were combined with total population into a transit-oriented population propensity index, which highlights areas with residents who are more likely to use transit. Each metric is weighted based on its relevance to transit ridership in order to generate the final score. The metrics with the highest weights are total population, low-income population, and zero-car households. This is followed by people with disabilities with a moderate weight and senior and youth populations with the lowest weights.

While the Transit Potential analysis highlights areas throughout the Capital Region with actual densities to support fixed-route service, Transit Need is a relative measure that estimates the need for transit compared to other block groups. There is not, however, a specific Transit Need Index score or value that represents a threshold for supporting fixed-route service. Instead, Transit Need should be considered alongside Transit Potential. If two areas have similar and sufficient Transit Potential, the area with higher Transit Need should be prioritized for service. Conversely, in some locations, while the density of transit-dependent population groups may be relatively high, if transit potential is still quite low, the opportunity to generate substantial fixed-route transit ridership will also remain low.

ZERO-VEHICLE HOUSEHOLD DENSITY

People without access to an automobile are generally more dependent on public transportation for their mobility needs. **Figure 22** shows the relative density of households with no vehicles.³ Areas with low density have between 0 and 0.6 zero-vehicle households per acre. Areas with low to medium density, depicted in green, have between 0.6 and 2.2 zero-vehicle households per acre. Areas with medium density, depicted in yellow, have between 2.2 and 4.9 zero-vehicle households per acre. Areas with medium to high density, depicted in orange, have between 4.9 and 8.9 zero-vehicle households per acre. Lastly, areas with high density, depicted in red, have between 8.9 and 17.7 zero-vehicle households per acre. High density areas are concentrated in Albany, Troy, and Schenectady.

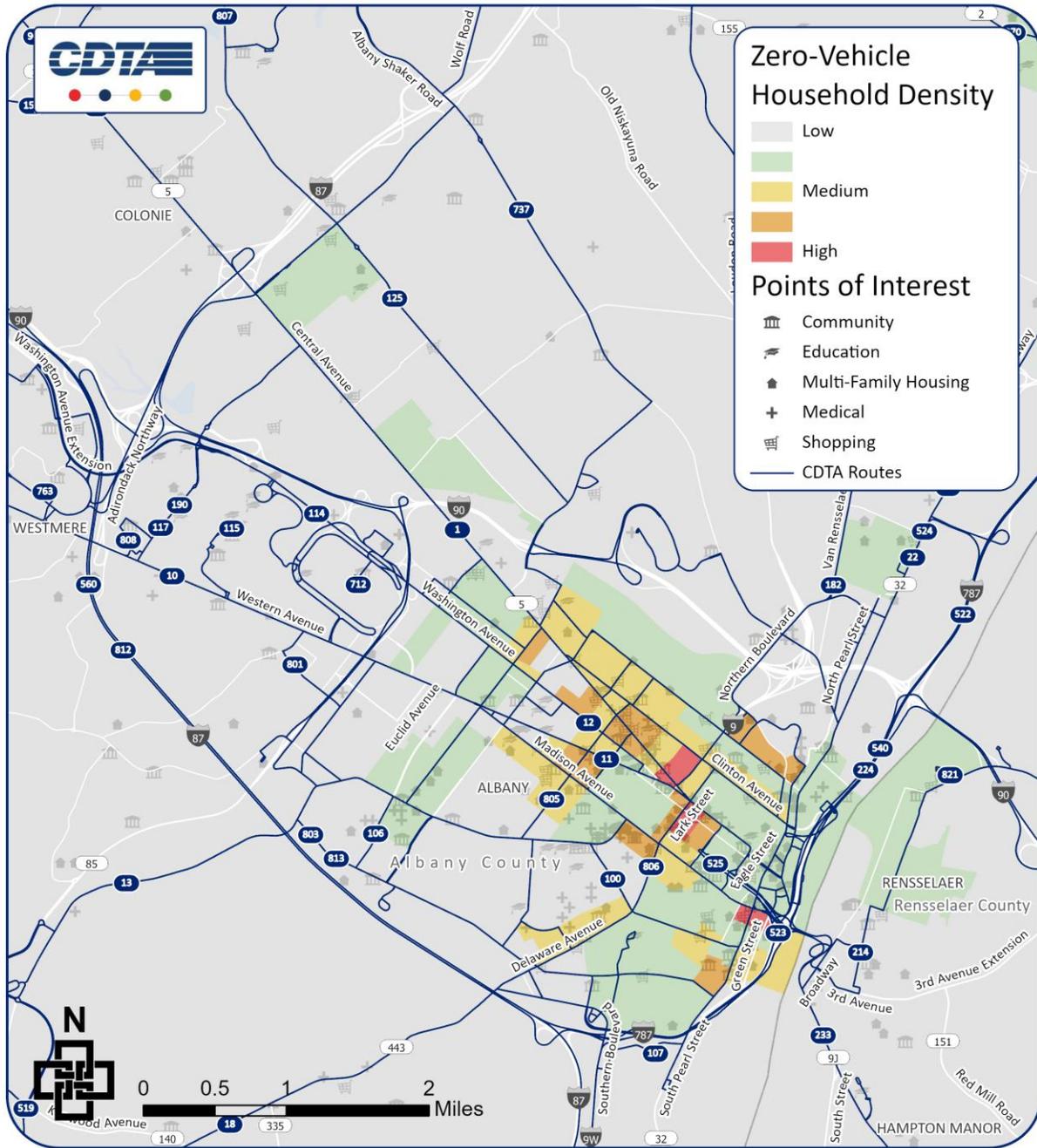
Figure 22: Zero-Vehicle Household Density, Capital Region



³ Census data may exclude students in the region due to temporary residency. Therefore, the actual number of zero-vehicle households is likely greater than what is displayed.

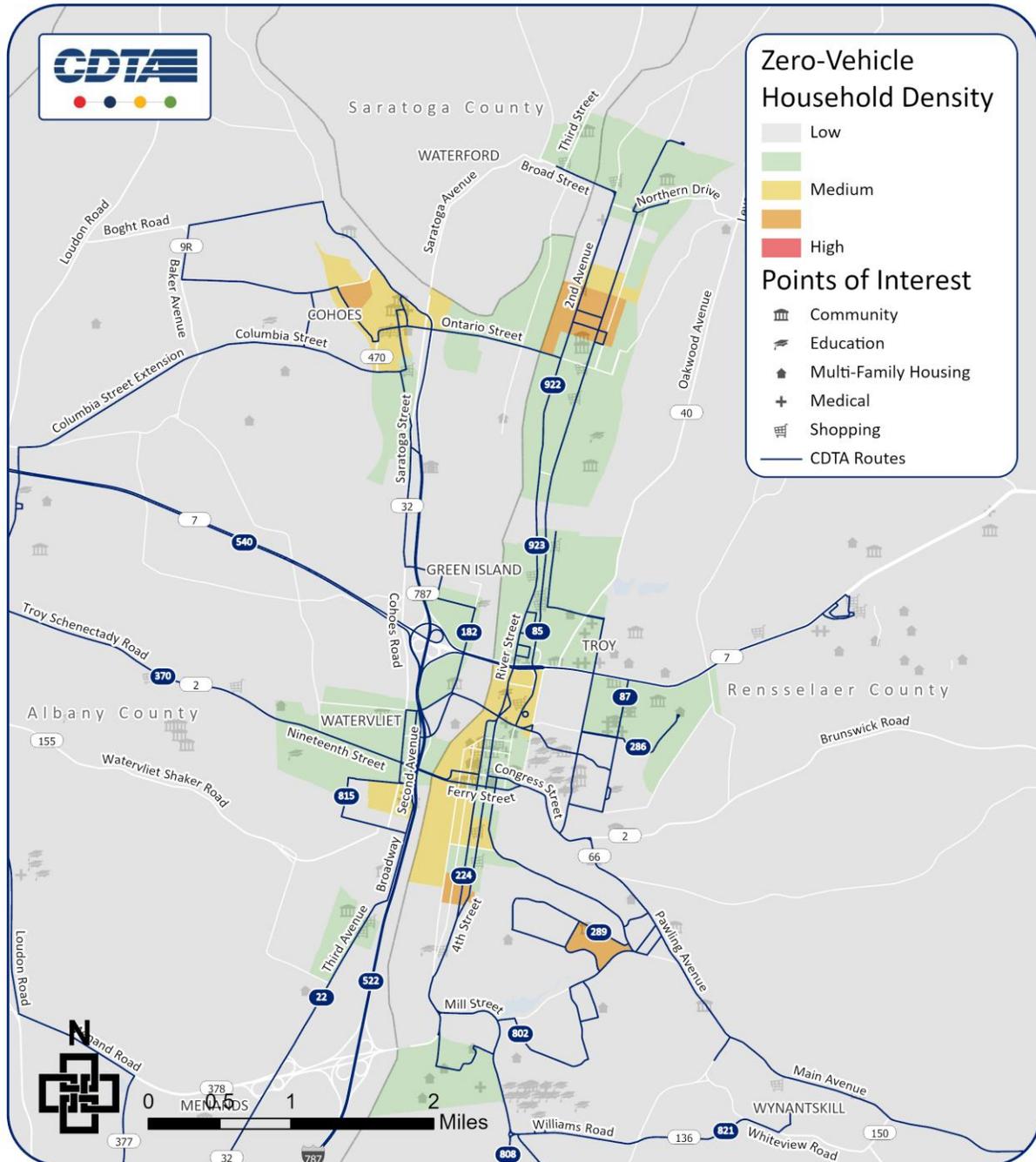
In Albany, the density of zero-vehicle households is greatest in the city's central neighborhoods, with several pockets of medium to high density along Clinton Avenue, State Street, and Western Avenue (Figure 23).

Figure 23: Zero-Vehicle Household Density, Albany



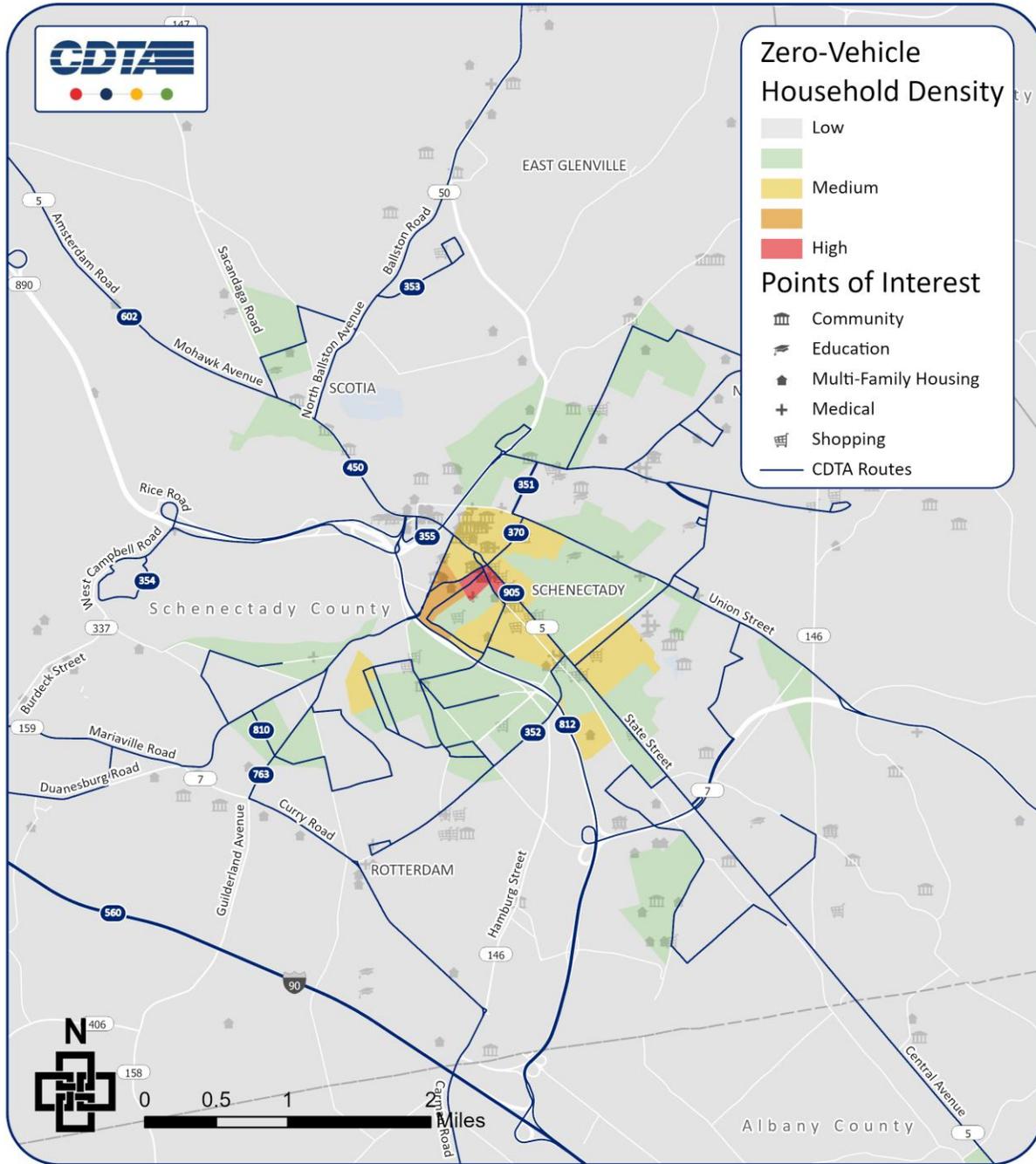
In Troy, zero-vehicle household density is greatest throughout the downtown area along 1st Street and near RPI. Other areas of medium to high density are in Cohoes and to the north in Lansingburgh (Figure 24). These areas are all well-served by current bus service.

Figure 24: Zero-Vehicle Household Density, Troy



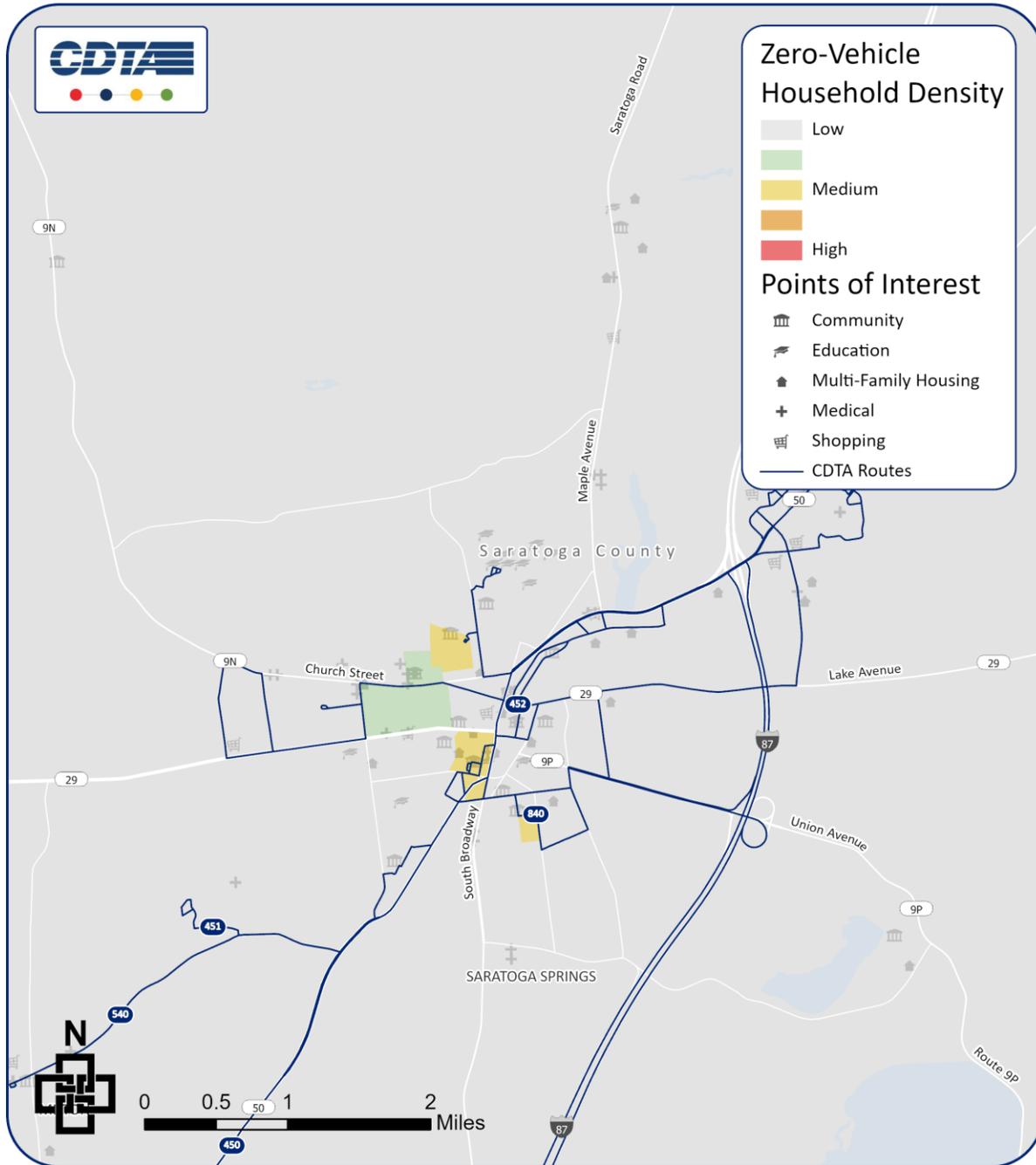
In Schenectady County, there are small pockets of medium to high zero-vehicle household density along Broadway and State Street in downtown Schenectady (**Figure 25**). This area is currently well-served by bus service.

Figure 25: Zero-Vehicle Household Density, Schenectady



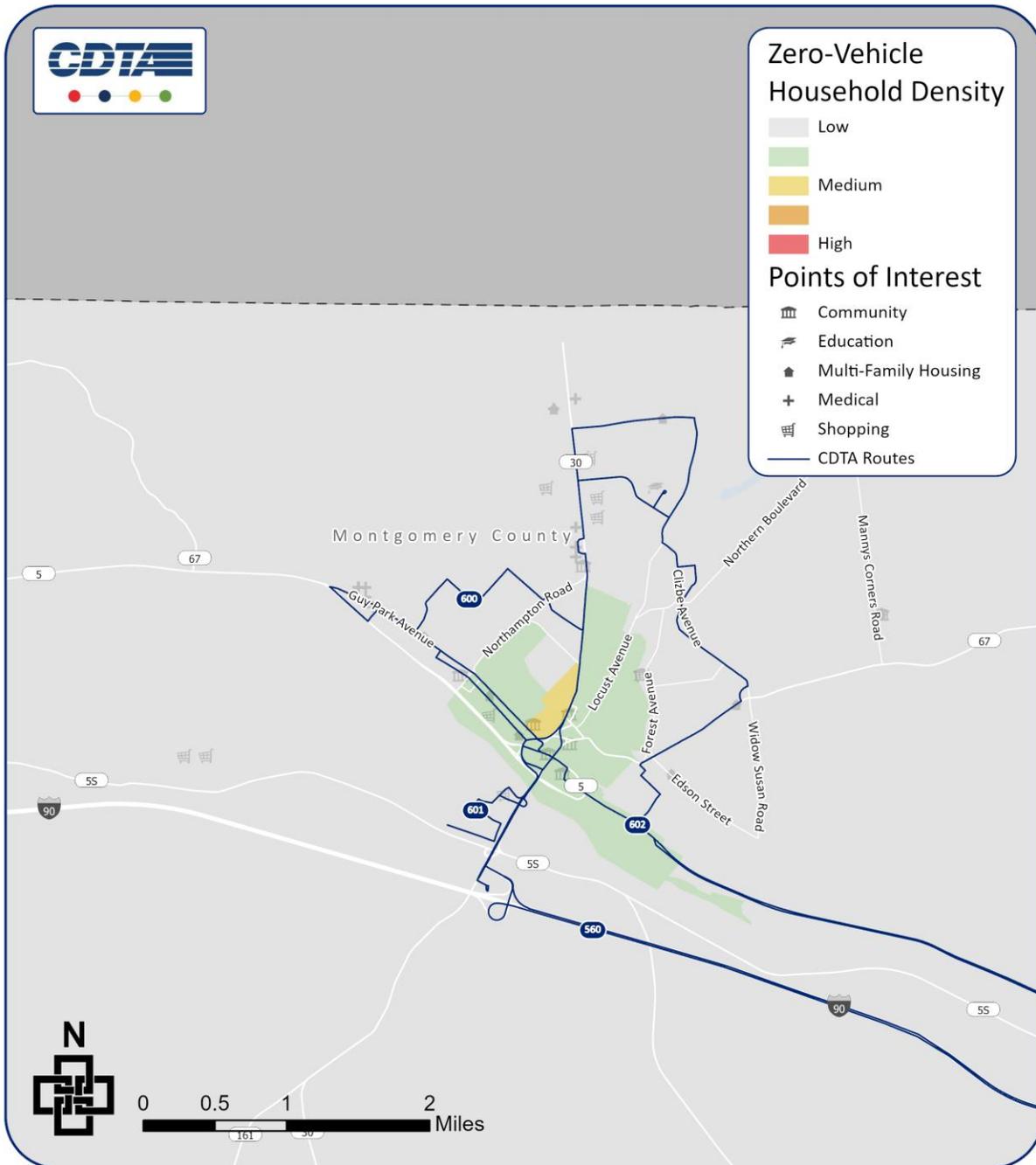
In Saratoga County, there is very little zero-vehicle household density, with only a few pockets along State Street, Washington Street, and Jefferson Street (**Figure 26**). All areas with prominent density are currently served by bus service.

Figure 26: Zero-Vehicle Household Density, Saratoga Springs



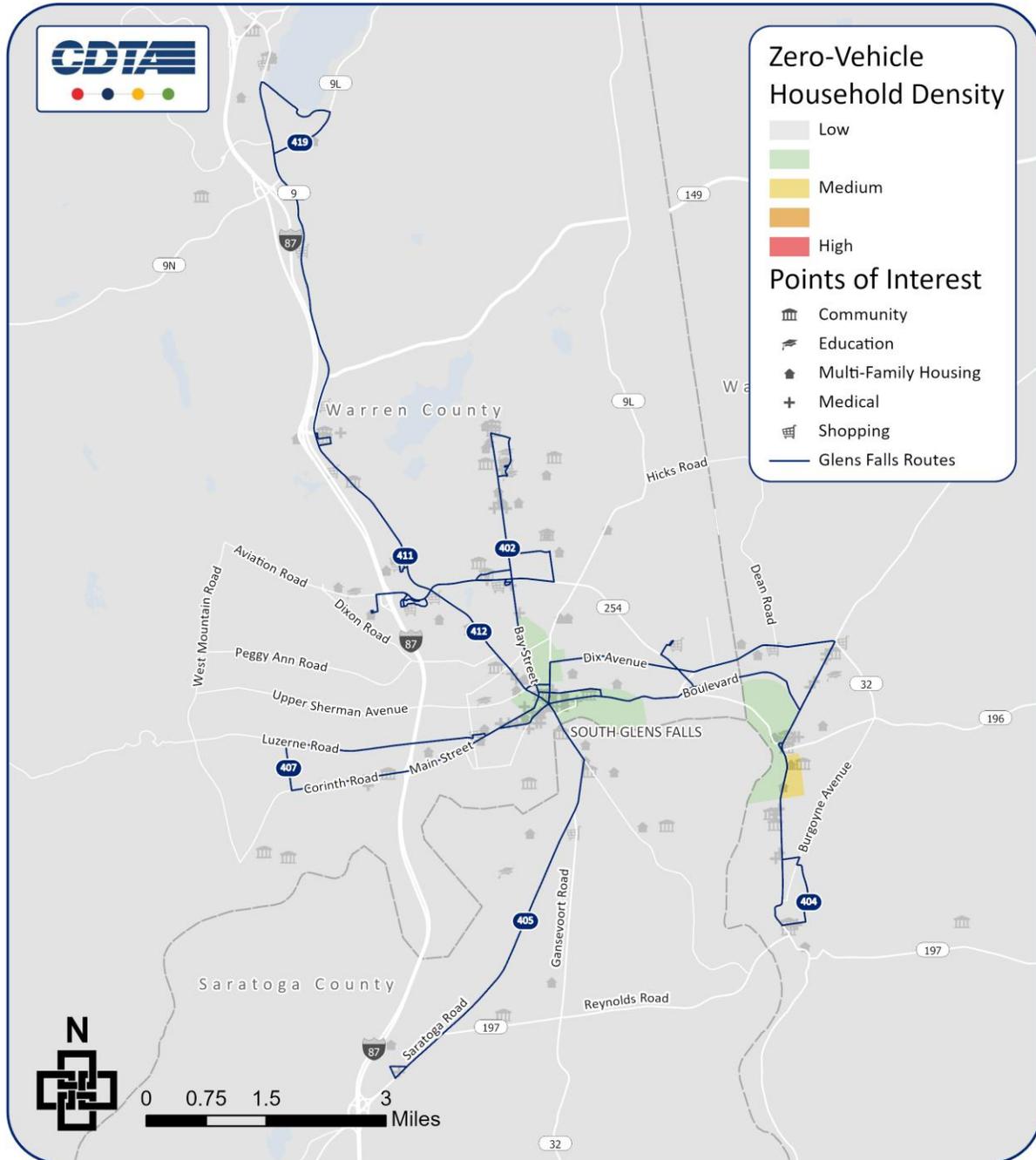
In Amsterdam, zero-vehicle household density is generally very low. However, there is low to medium density along Guy Park Avenue and Market Street, both of which are currently well-served by bus service (**Figure 27**).

Figure 27: Zero-Vehicle Household Density, Amsterdam



In Warren and Washington counties, there is very little zero vehicle density overall. However, there are a few pockets of low to medium zero-vehicle household density along Warren Street in Glens Falls and Main Street in Hudson Falls (**Figure 28**).

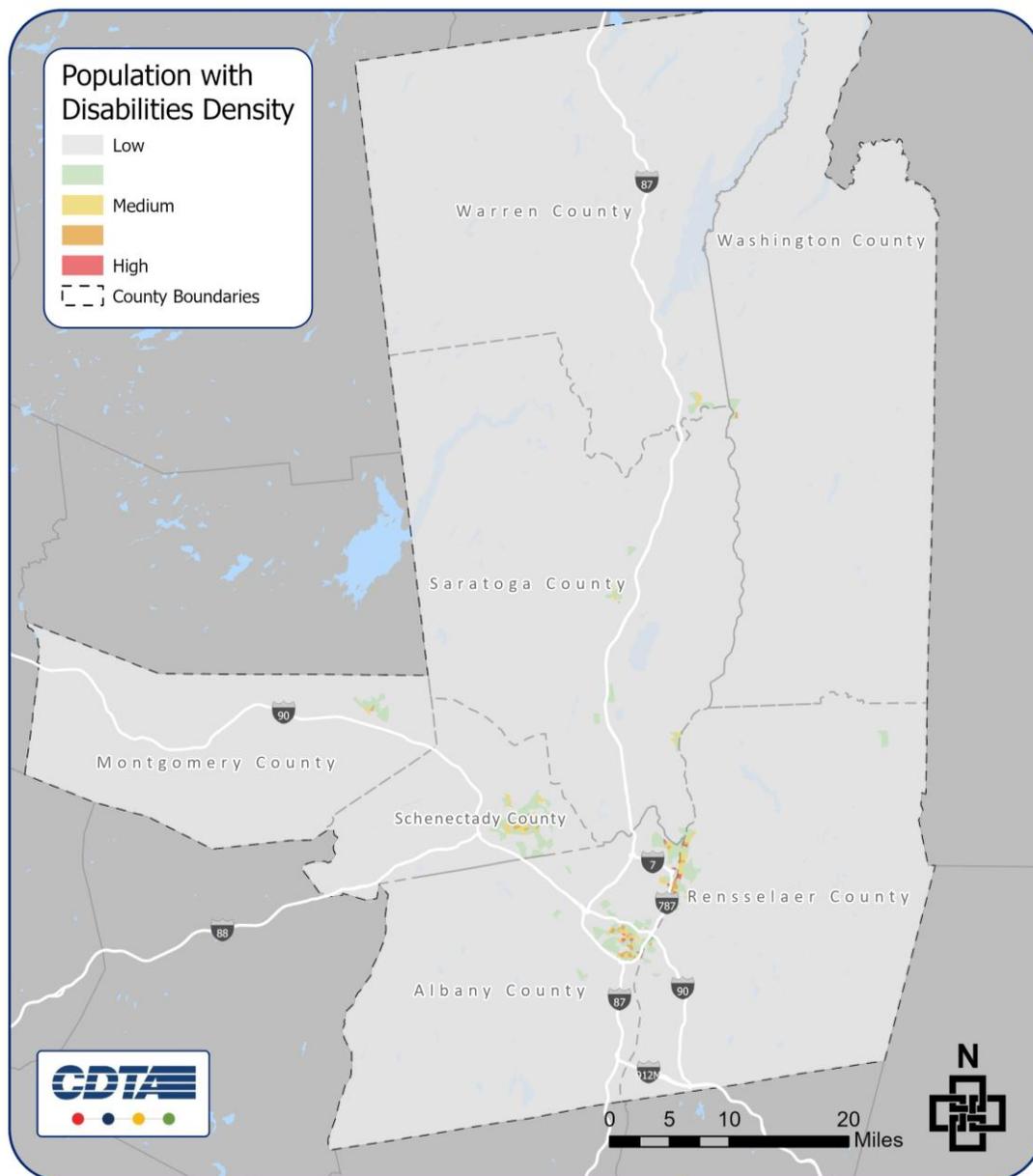
Figure 28: Zero-Vehicle Household Density, Glens Falls



POPULATION WITH DISABILITIES DENSITY

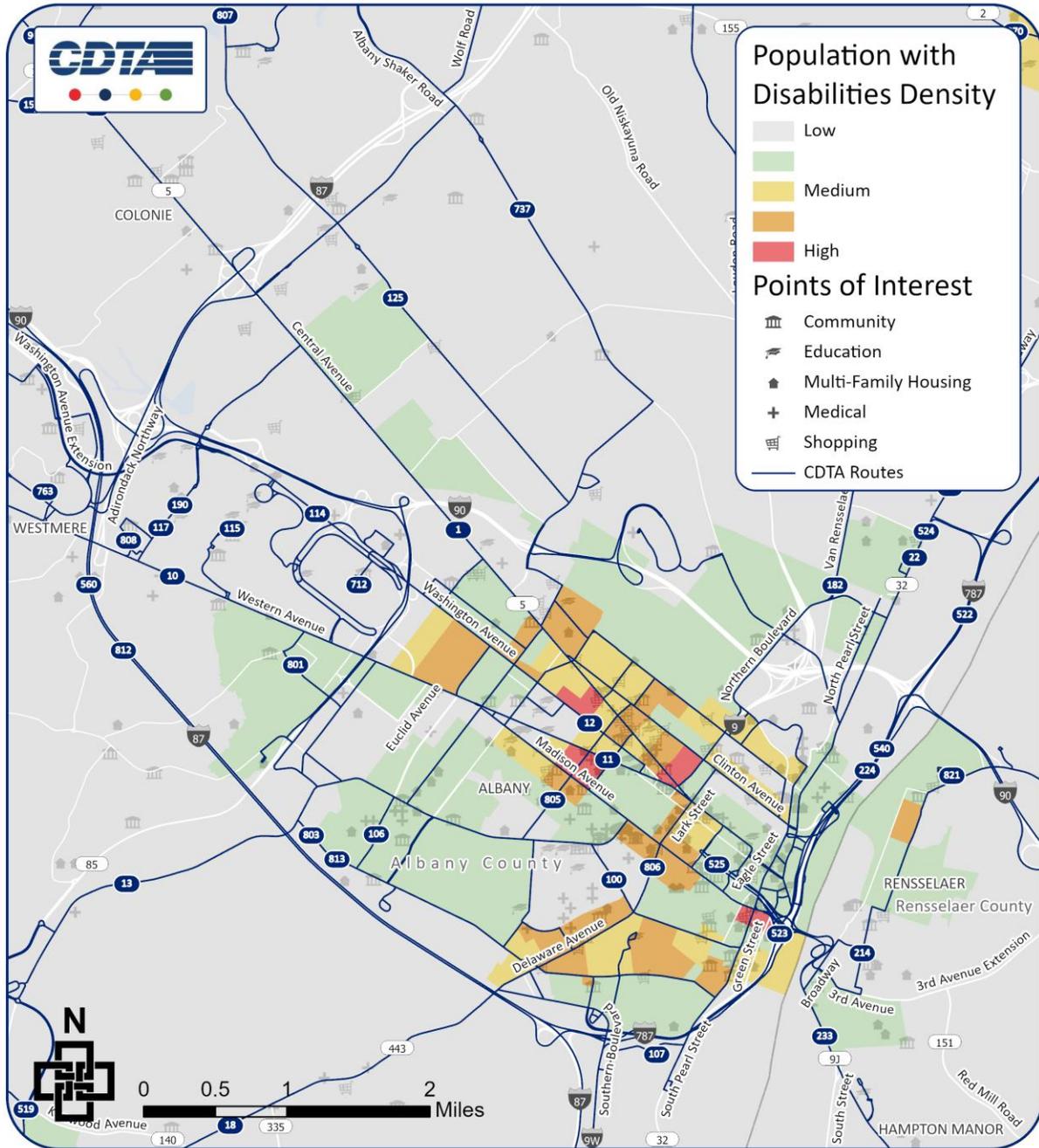
Transit plays an important role in the social inclusion of people with disability. **Figure 29** shows the relative densities of the disabled population for the entire study area. Areas with low density have between 0 and 0.7 people with disabilities per acre. Areas with low to medium density, depicted in green, have between 0.7 and 1.9 people with disabilities per acre. Areas with medium density, depicted in yellow, have between 1.9 and 3.5 people with disabilities per acre. Areas with medium to high density, depicted in orange, have between 3.5 and 6.7 people with disabilities per acre. Lastly, areas with high density, depicted in red, have between 6.7 and 12.1 people with disabilities per acre. The areas with the greatest density of people with disabilities are concentrated in Albany, Troy, and Schenectady.

Figure 29: Population with Disabilities Density, Capital Region



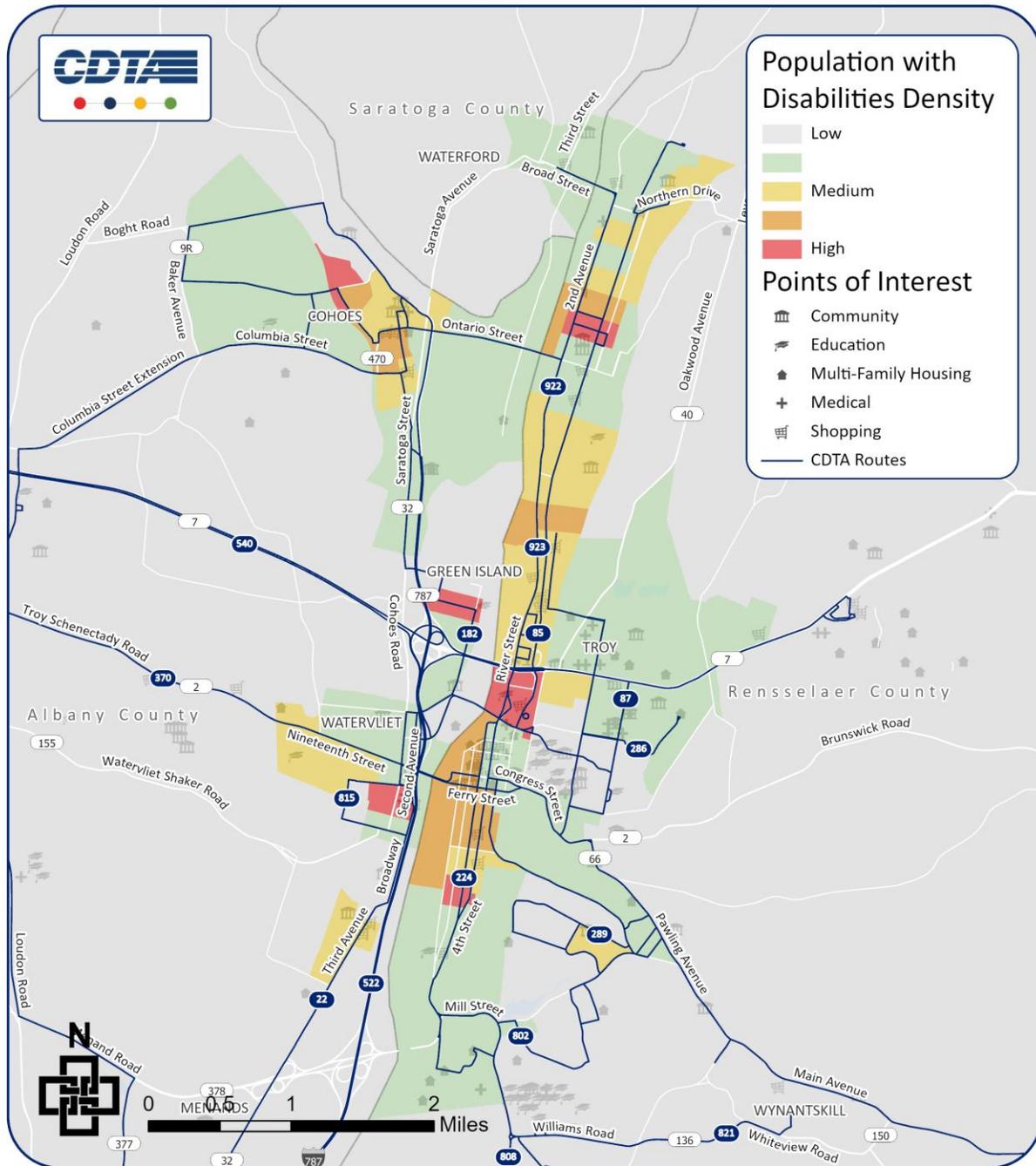
In Albany, the areas with the greatest density of population with disabilities are along Central Avenue, Livingston Avenue, Madison Avenue, and Delaware Avenue (**Figure 30**). These areas are all well-served by current bus service.

Figure 30: Population with Disabilities Density, Albany



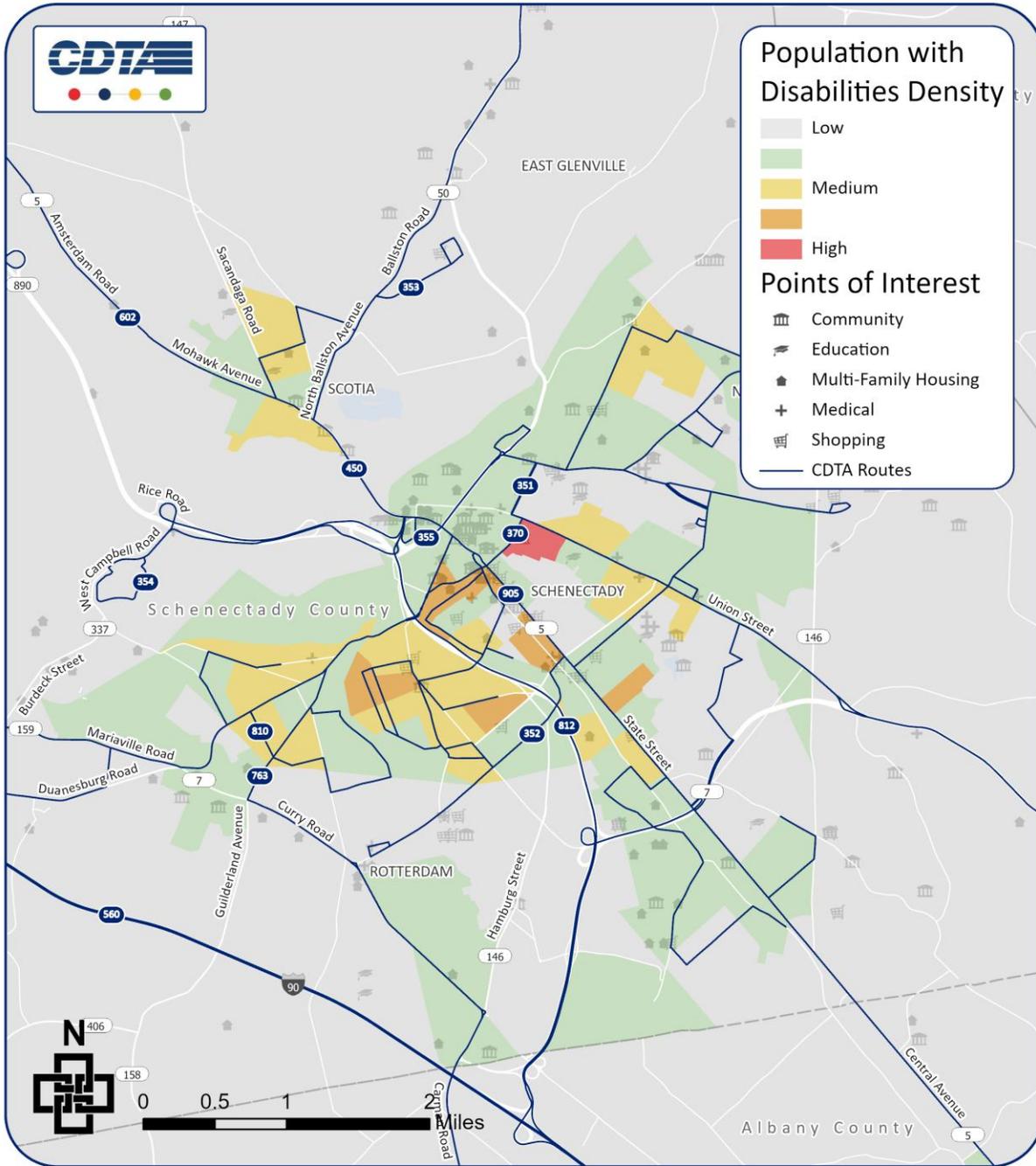
In Troy, the density of population with disabilities is greatest along the U.S. Route 4 corridor extending from Lansingburgh to downtown Troy (**Figure 31**). Additional areas of medium to high density are concentrated in downtown Cohoes and downtown Watervliet.

Figure 31: Population with Disabilities Density, Troy



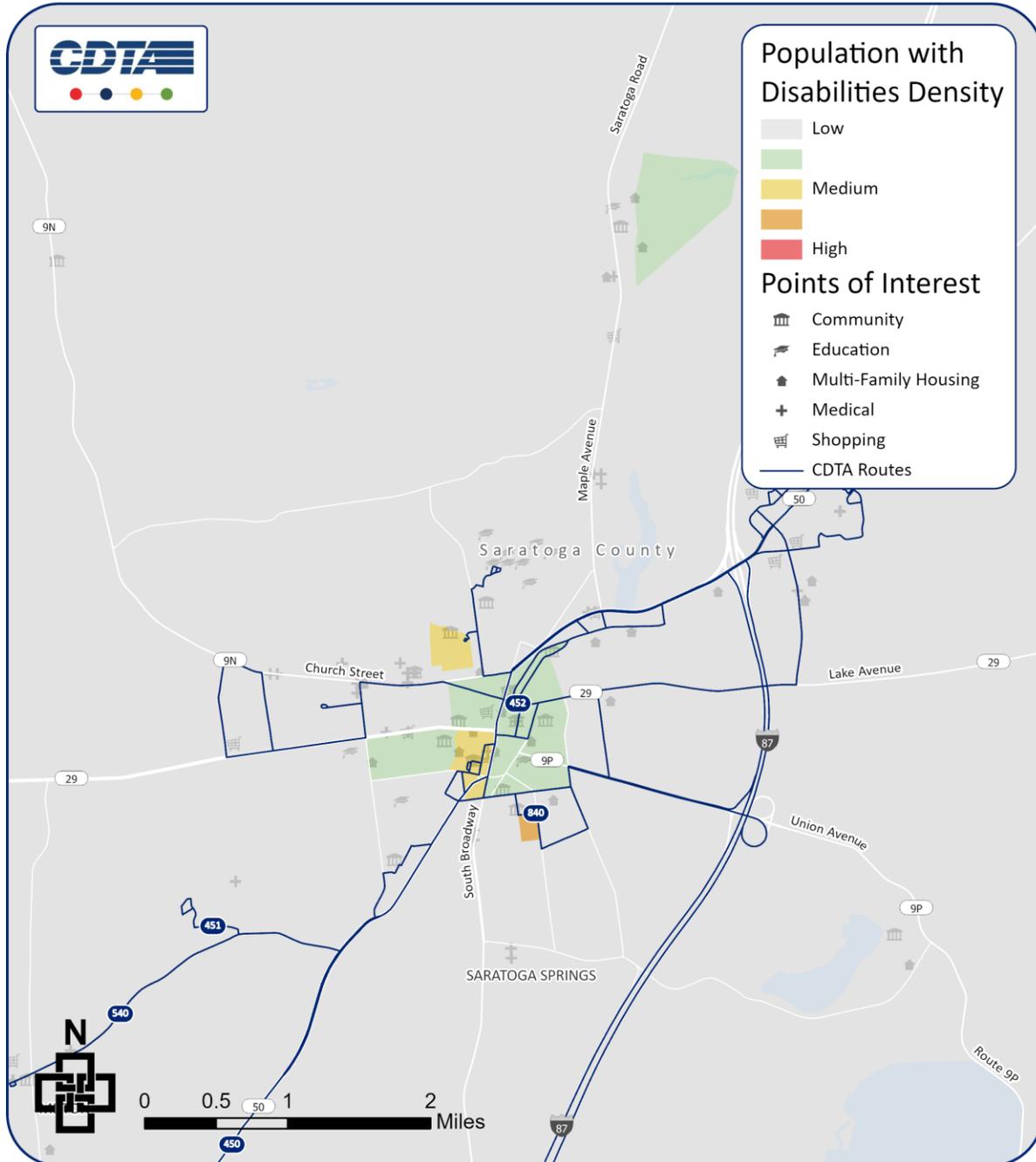
In Schenectady, there are pockets of medium to high density of population with disabilities along Broadway, State Street, and Union Street, with additional pockets of medium density in Scotia and Niskayuna (**Figure 32**).

Figure 32: Population with Disabilities Density, Schenectady



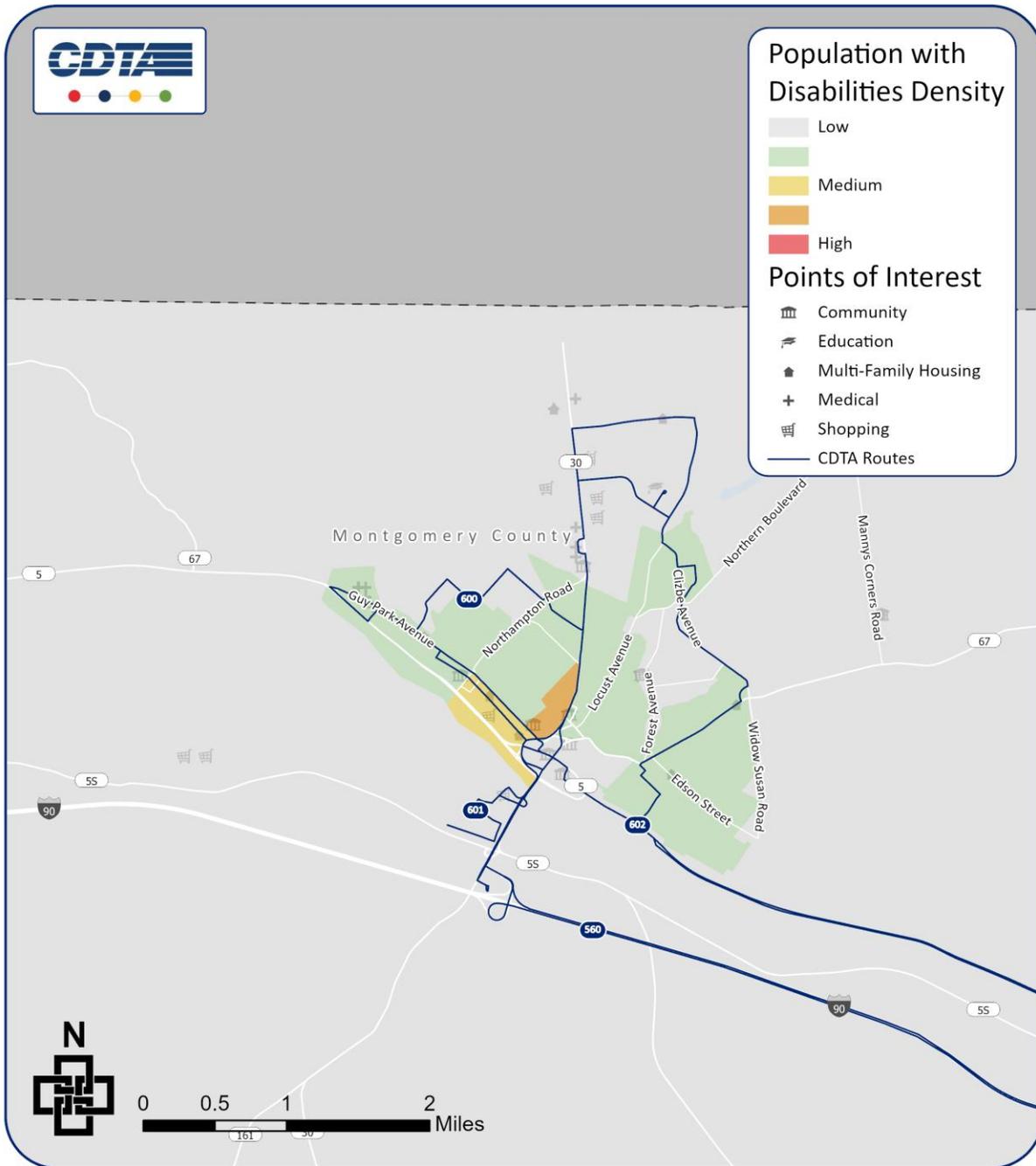
In Saratoga County, there are pockets of medium density of population with disabilities along Broadway, Clinton Street, and Jefferson Street in Saratoga Springs (Figure 33).

Figure 33: Population with Disabilities Density, Saratoga Springs



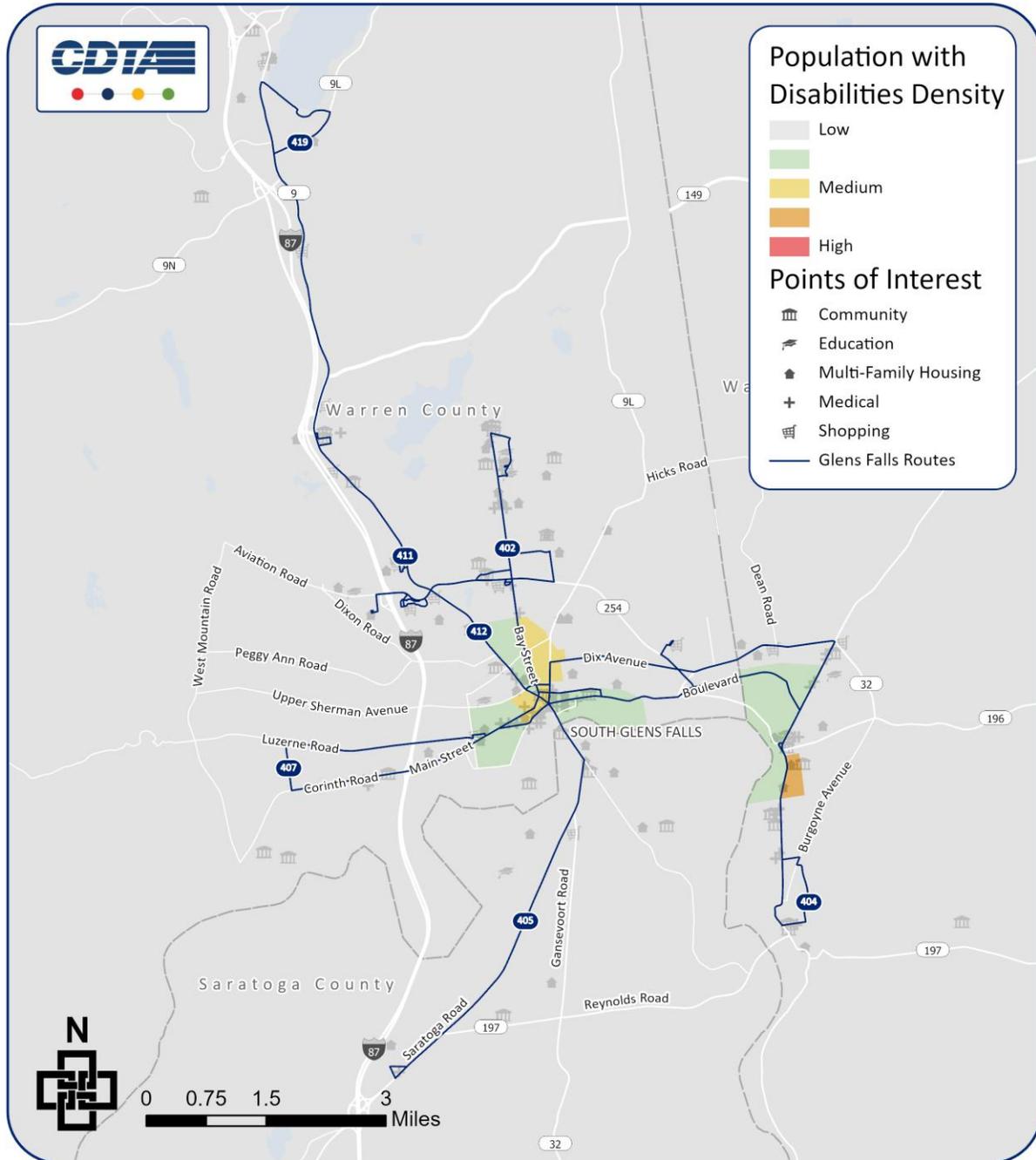
In Montgomery County, there is very little density of population with disabilities, with only a few pockets of low density along Guy Park Avenue, which is currently served by existing bus service (**Figure 34**).

Figure 34: Population with Disabilities Density, Amsterdam



In Warren and Washington counties, there is very little density of population with disabilities, with only a few pockets of low density along Broad Street and Bay Street in Glens Falls and Main Street in Hudson Falls (**Figure 35**).

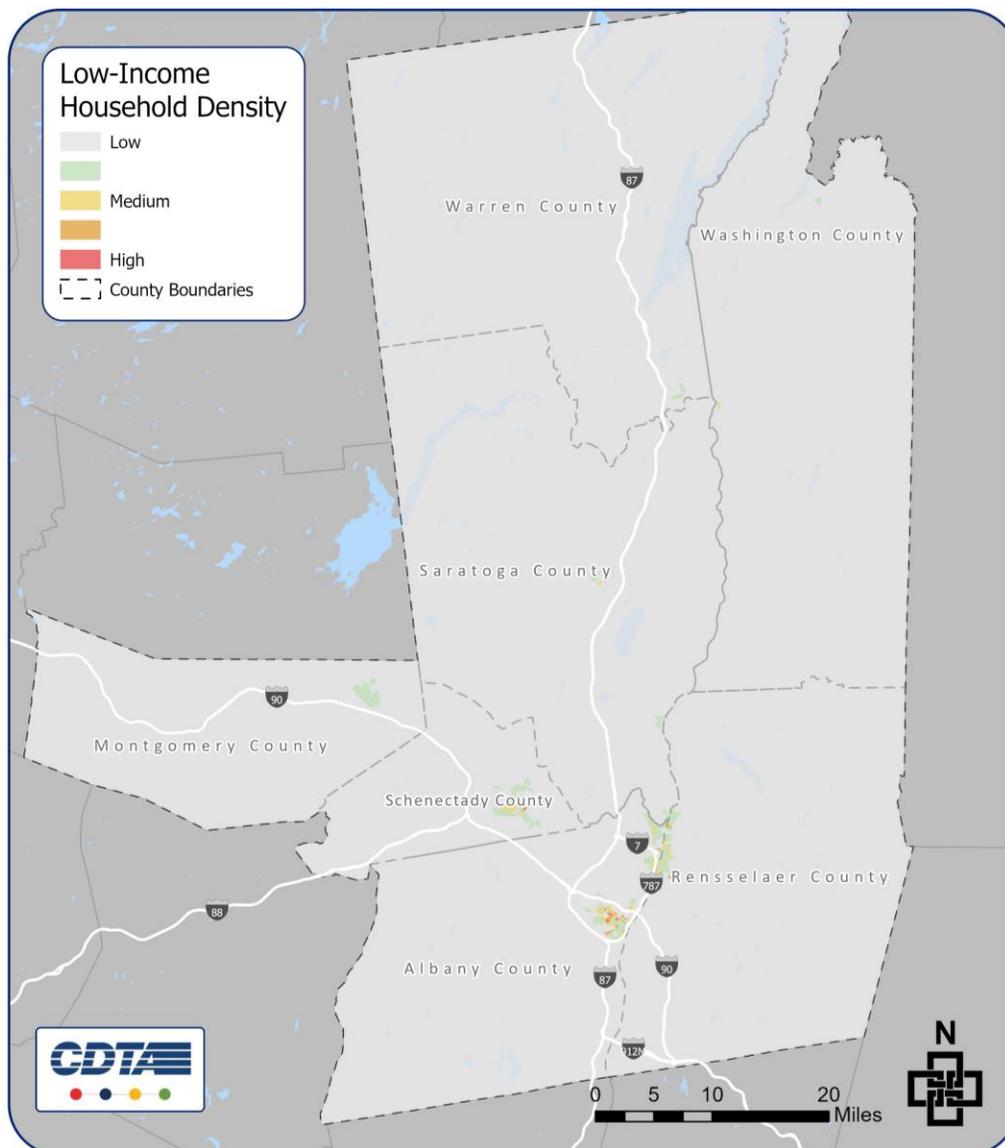
Figure 35: Population with Disabilities Density, Glens Falls



LOW-INCOME POPULATION DENSITY

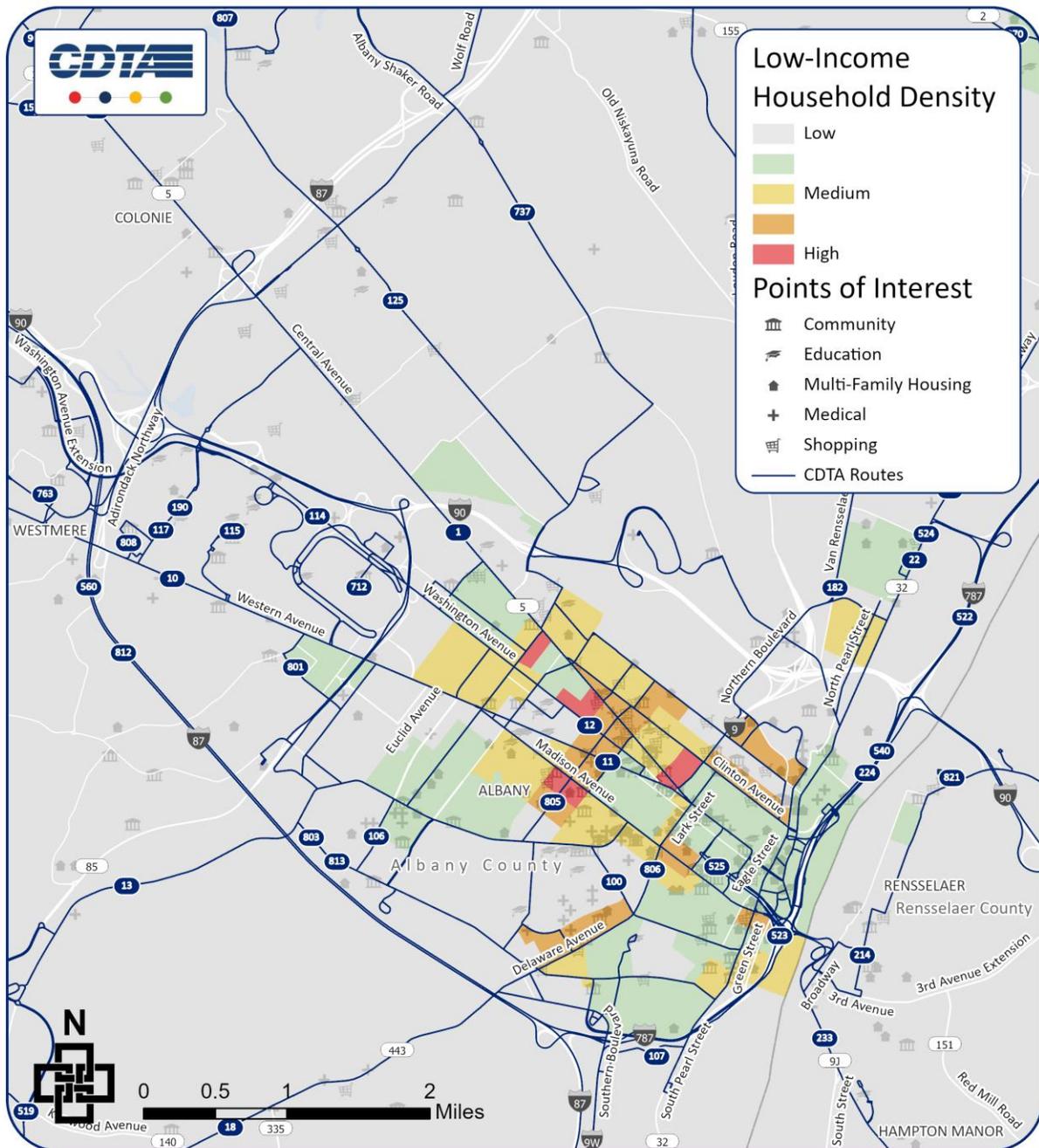
Due to lower costs of transit compared to other mobility options, low-income users are more likely to rely on public transportation. Therefore, provision of transit service to such populations promotes equity. **Figure 36** shows the spatial distribution of the density of low-income population. Areas with low density have between 0 and 1.8 low-income households per acre. Areas with low to medium density, depicted in green, have between 1.8 and 6.1 low-income households per acre. Areas with medium density, depicted in yellow, have between 6.1 and 13.0 low-income households per acre. Areas with medium to high density, depicted in orange, have between 13.0 and 21.2 low-income households per acre. Lastly, areas with high density, depicted in red, have between 21.2 and 35.6 low-income households per acre. The areas with the greatest density of low-income households are concentrated in Albany, Troy, and Schenectady, with smaller pockets in Saratoga Springs, Amsterdam, and Glens Falls.

Figure 36: Low-Income Population Density, Capital Region



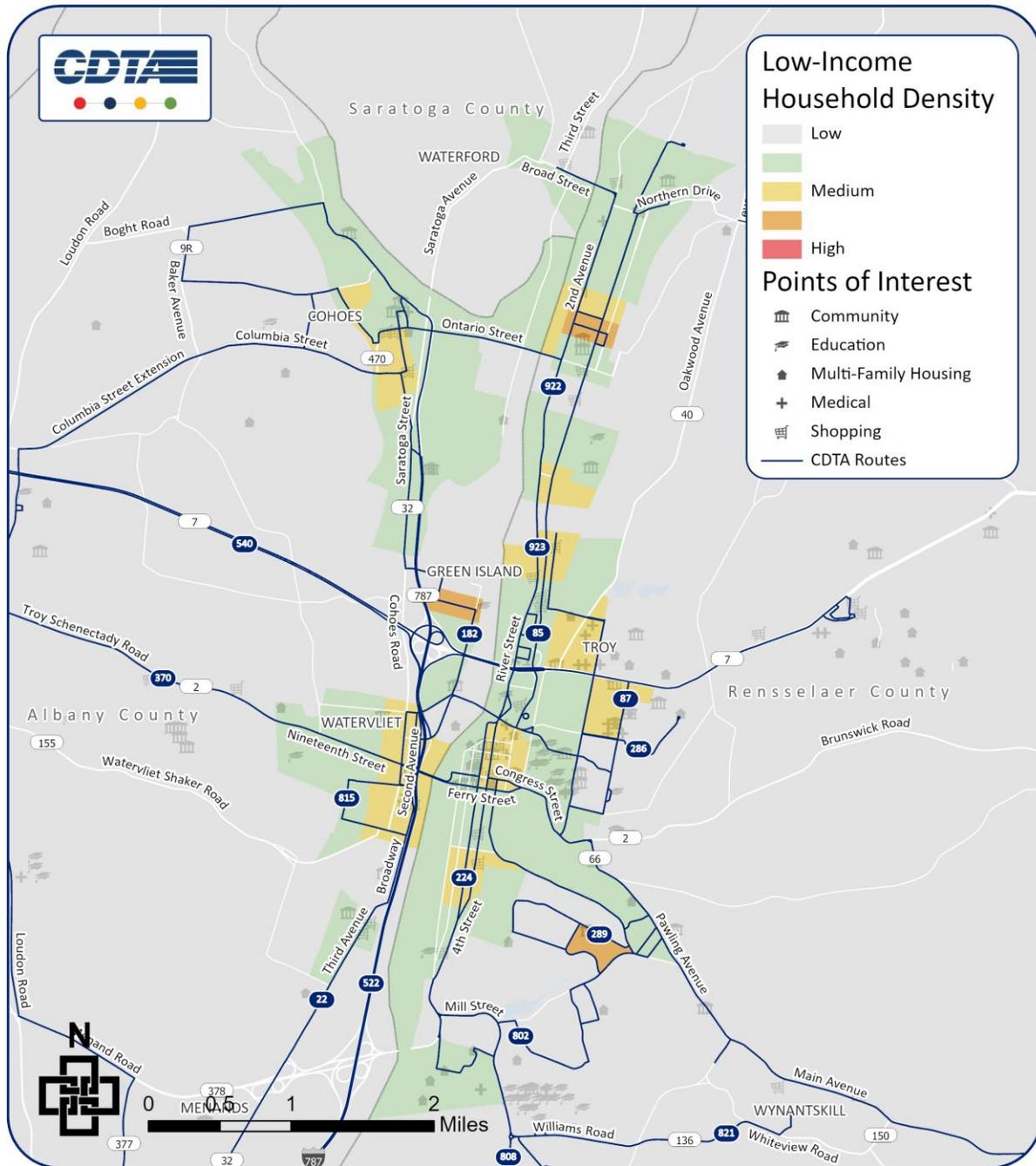
In Albany, the areas with the greatest density of low-income population are concentrated along Clinton Avenue, Madison Avenue, and Washington Avenue (**Figure 37**).

Figure 37: Low-Income Population Density, Albany



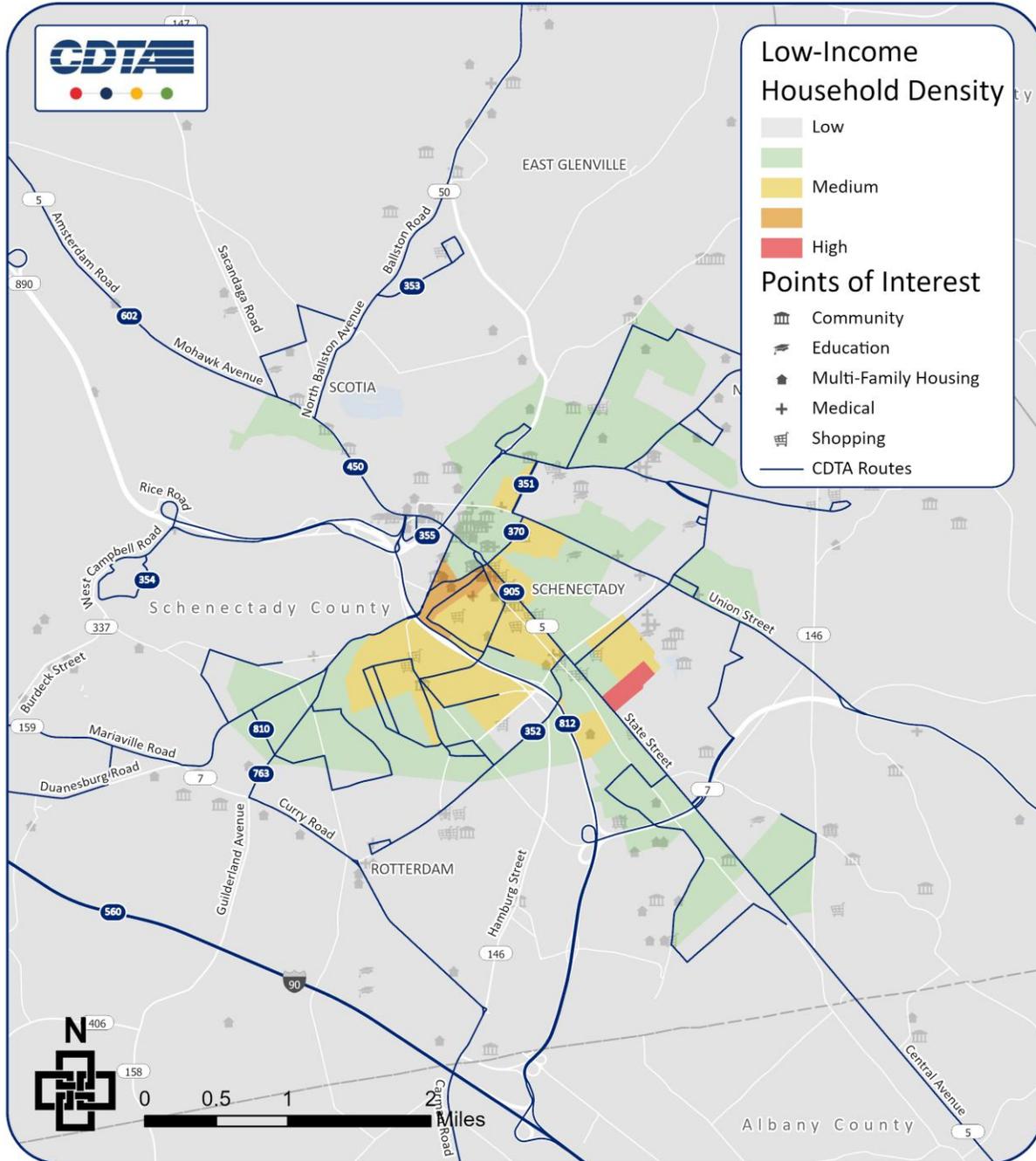
In Troy, there are pockets of medium low-income population density throughout the U.S. Route 4 corridor as well as areas of medium density in Cohoes and Watervliet (**Figure 38**). All low-income areas are currently well-served by existing bus service.

Figure 38: Low-Income Population Density, Troy



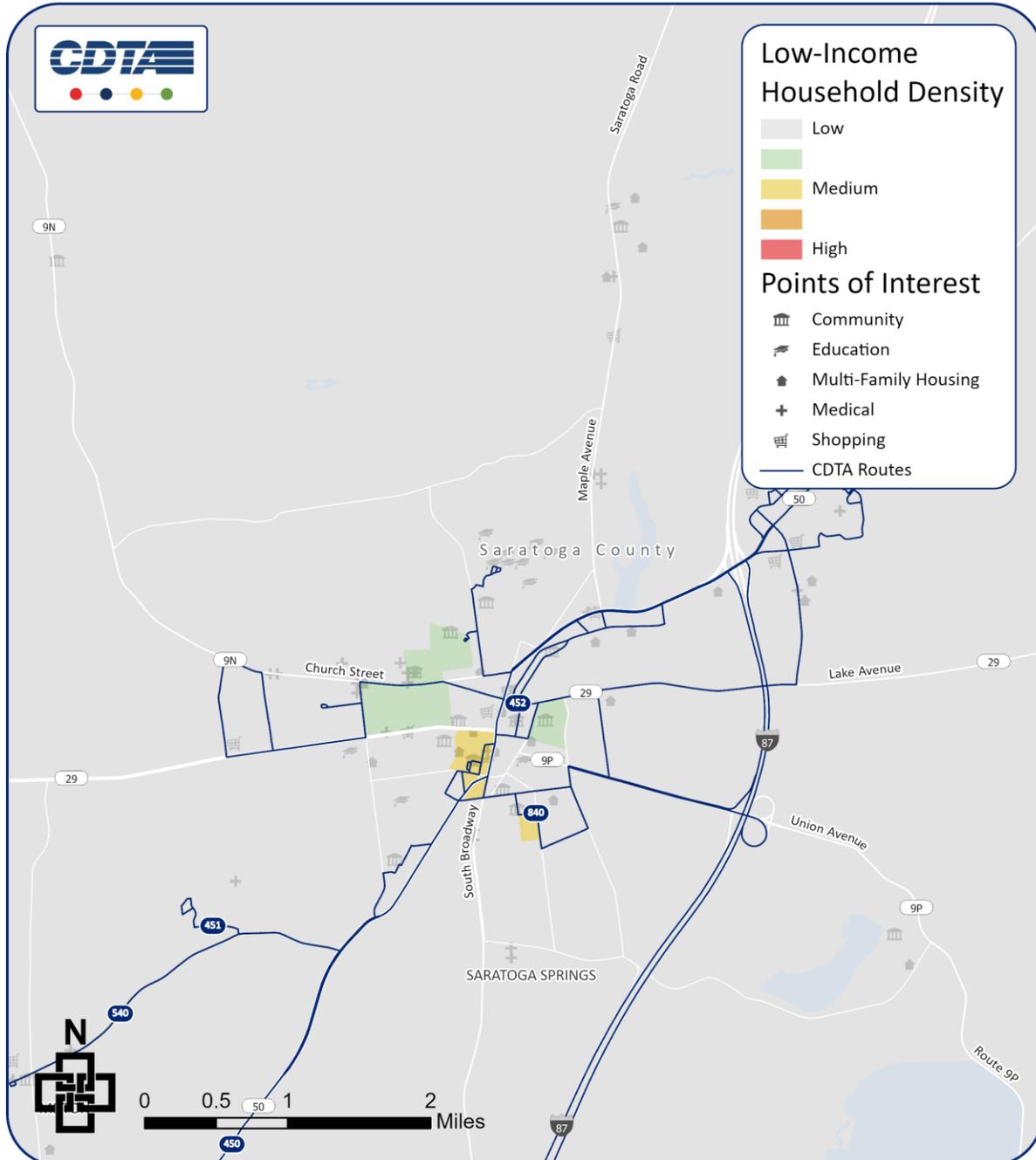
In Schenectady County, there are areas of medium to high low-income population density along Broadway, State Street, and I-890 (**Figure 39**).

Figure 39: Low-Income Population Density, Schenectady



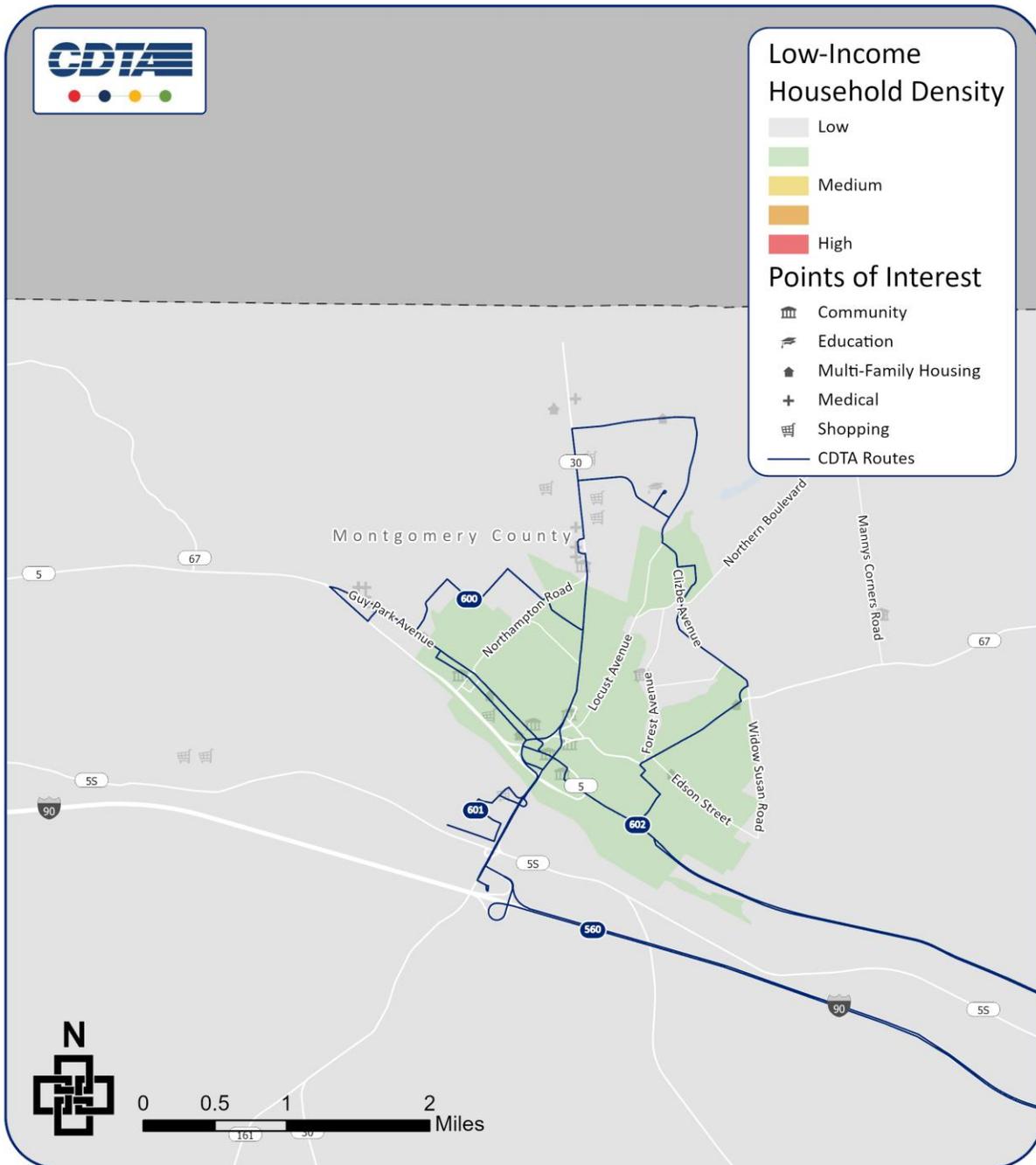
In Saratoga County, areas of low-income population density are limited to small pockets along Church Street and Broadway in Saratoga Springs (**Figure 40**).

Figure 40: Low-Income Population Density, Saratoga Springs



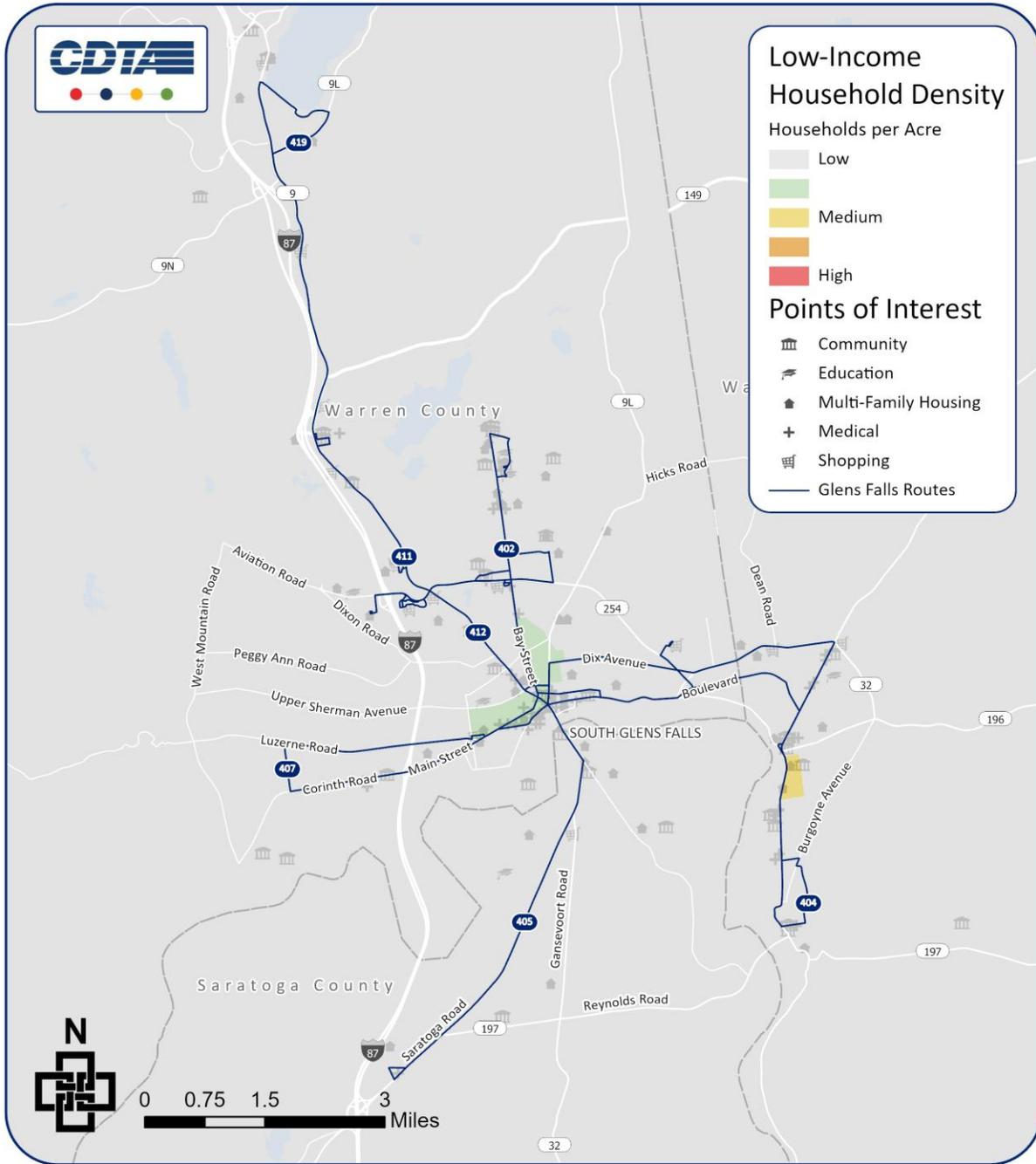
In Montgomery County, areas with the greatest low-income population density are concentrated in Amsterdam, with medium density along Guy Park Avenue and Market Street (Figure 41).

Figure 41: Low-Income Population Density, Amsterdam



There are few low-income areas in Warren and Washington counties, with the only small pockets of low to medium density located along Broad Street and Bay Street in Glens Falls and along Main Street in Hudson Falls (**Figure 42**).

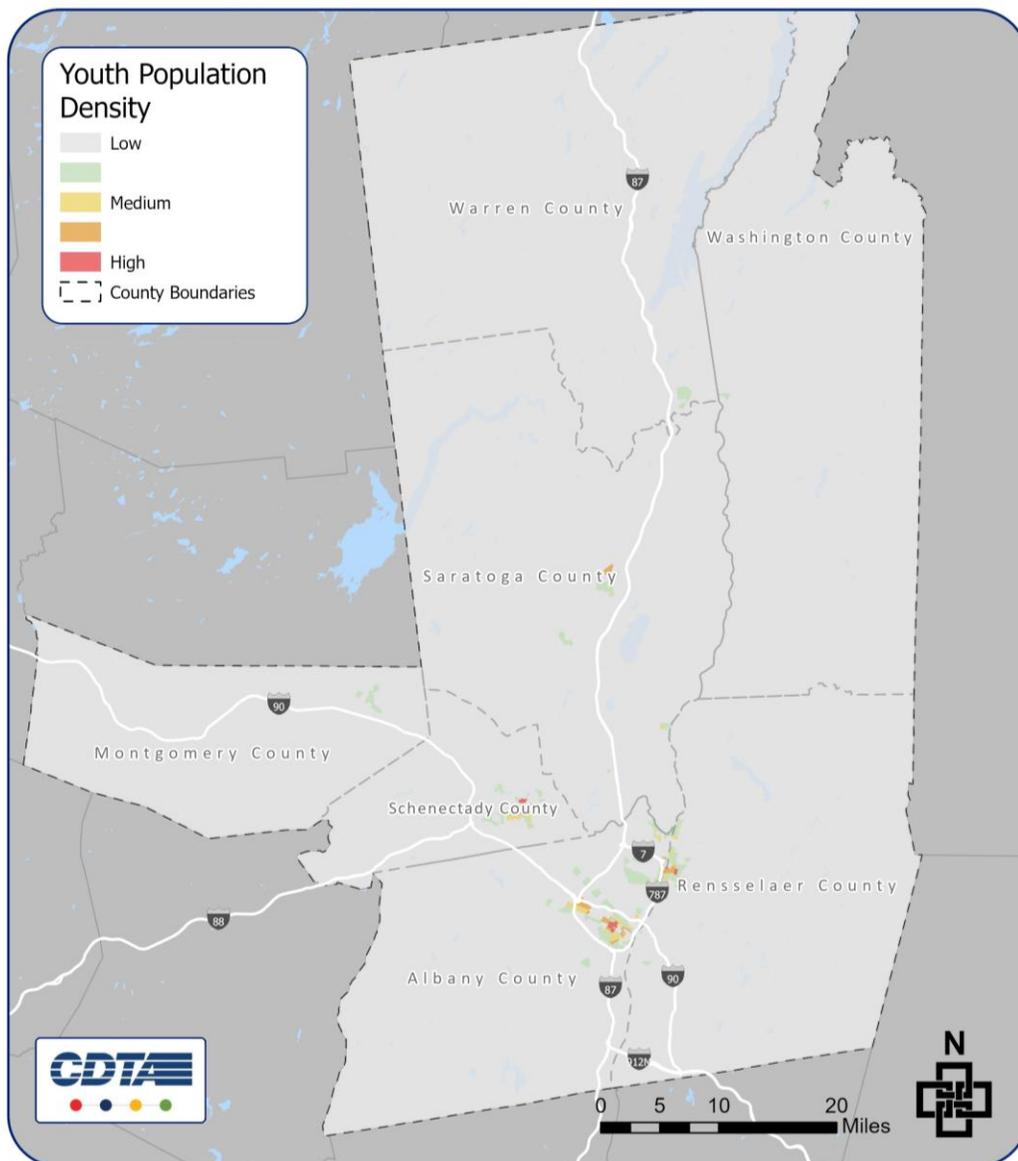
Figure 42: Low-Income Population Density, Glens Falls



YOUTH POPULATION

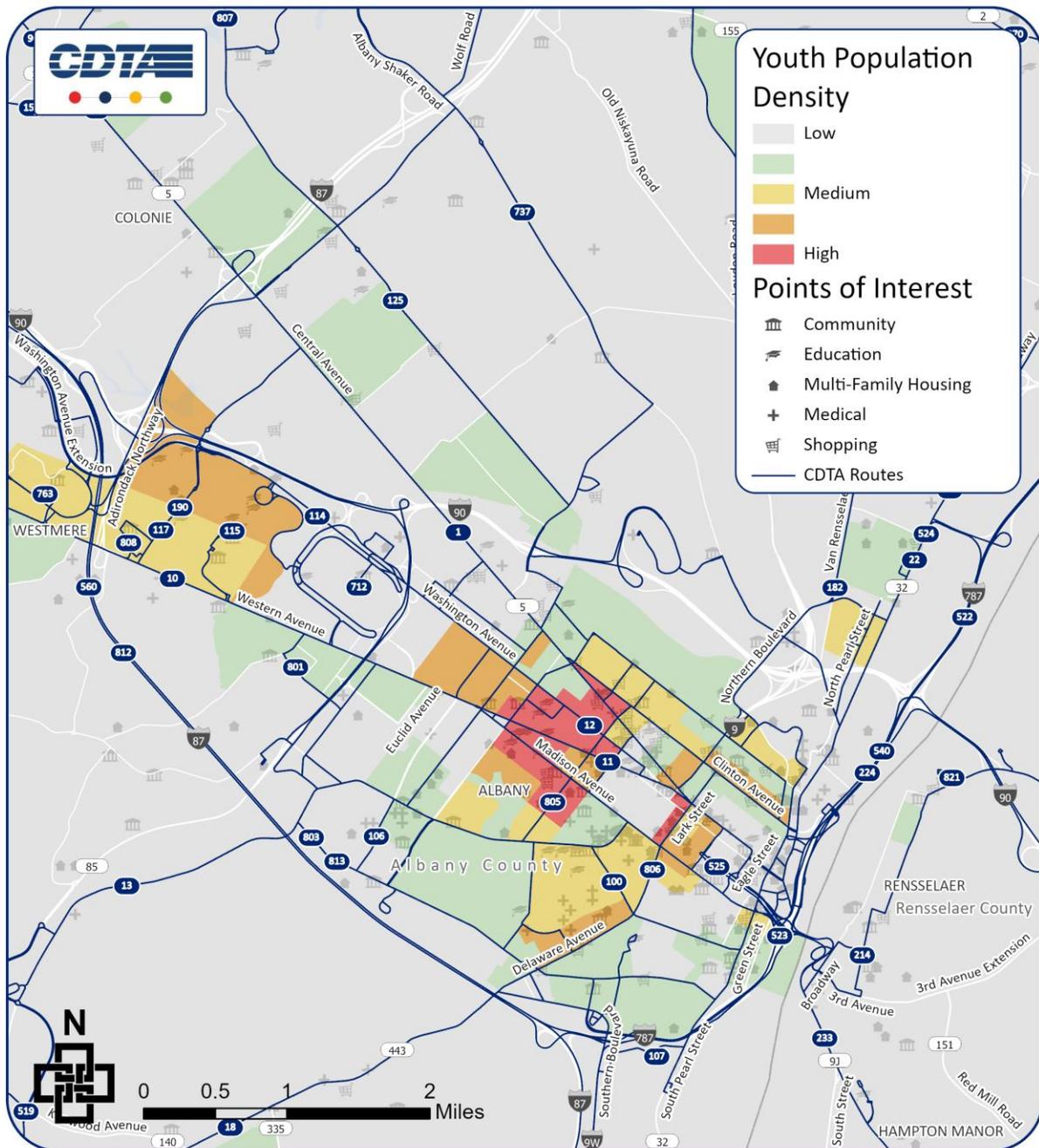
As trends have shown youth and young adults putting off car-ownership until later in life, this demographic group also has a high propensity for transit use. **Figure 43** shows the youth population density in the service area, defined as people aged 15 through 24. Areas with low density have between 0 and 1.0 youth individuals per acre. Areas with low to medium density, depicted in green, have between 1.0 and 2.8 youth individuals per acre. Areas with medium density, depicted in yellow, have between 2.8 and 5.7 youth individuals per acre. Areas with medium to high density, depicted in orange, have between 5.7 and 11.2 youth individuals per acre. Lastly, areas with high density, depicted in red, have between 11.2 and 22.2 youth individuals per acre. The areas with the greatest youth population density are concentrated in Albany, Troy, Schenectady, and Saratoga Springs, with smaller pockets in Amsterdam and Glens Falls.

Figure 43: Youth Population Density, Capital Region



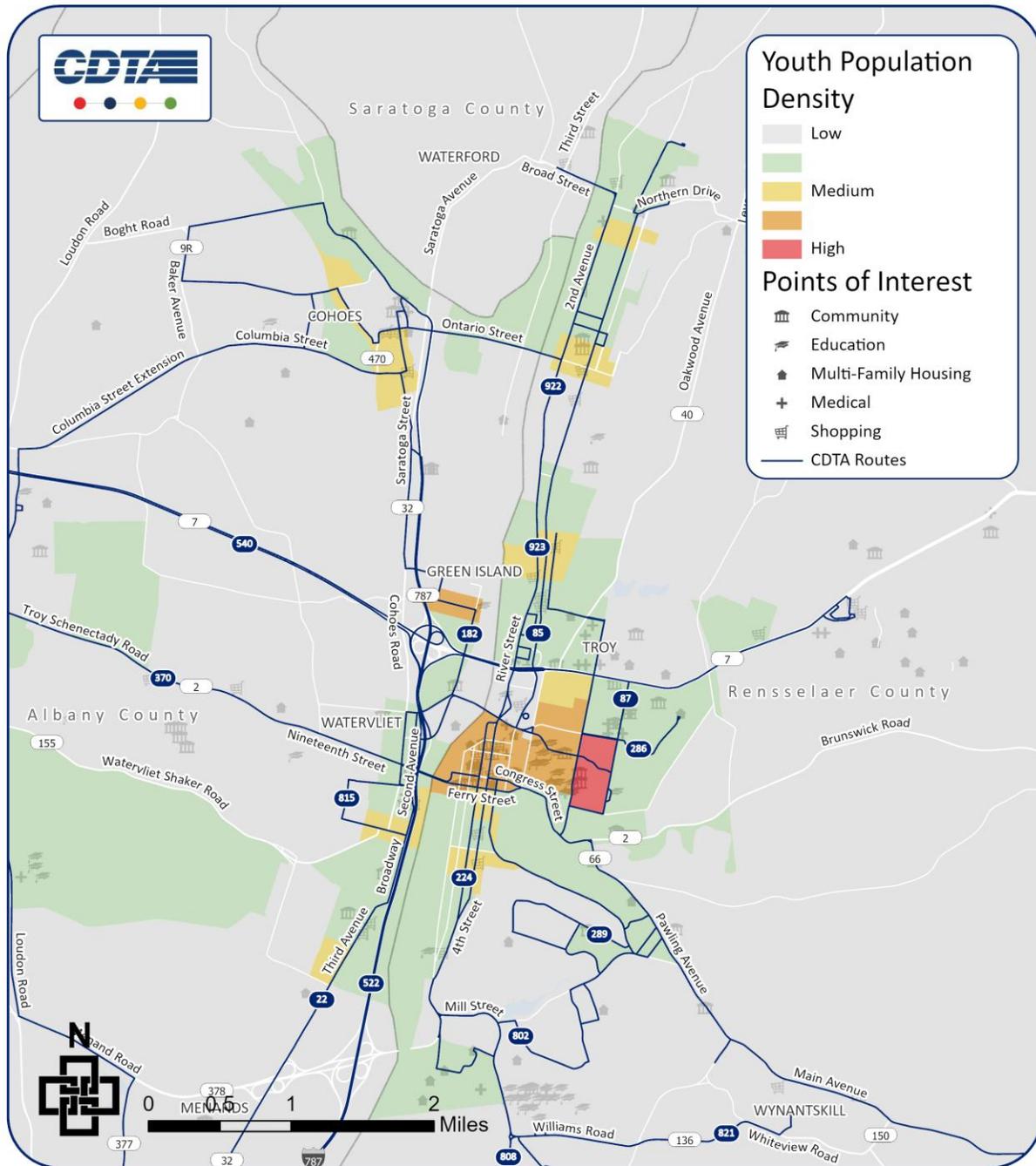
In Albany, the areas with the greatest youth population density are concentrated along Clinton Avenue, Madison Avenue, and Western Avenue from downtown Albany to Westmere (Figure 44).

Figure 44: Youth Population Density, Albany



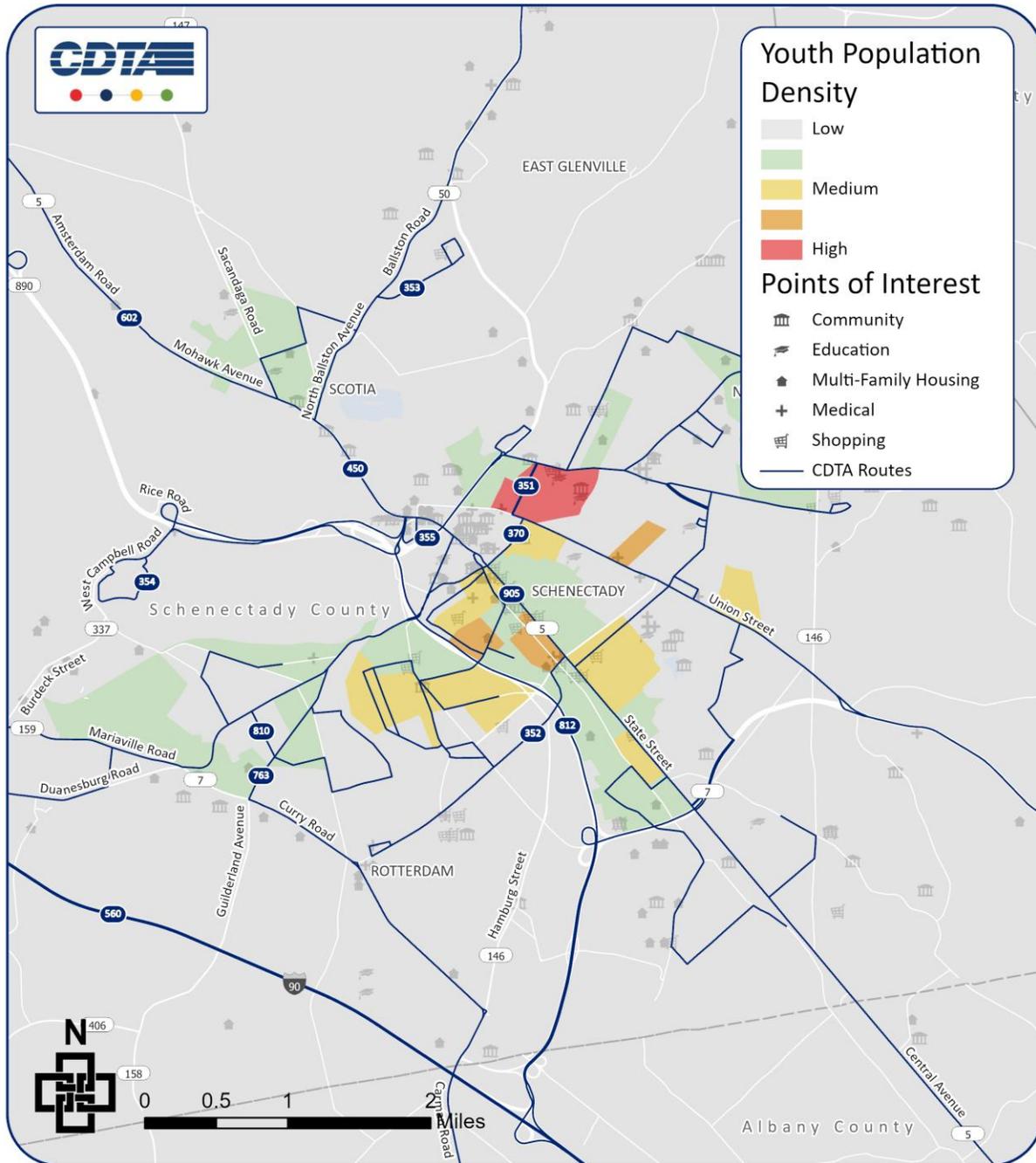
In Troy, the areas with the greatest youth population density are concentrated in the downtown area near RPI, with smaller pockets of medium density in Lansingburgh, Cohoes, and Watervliet (**Figure 45**).

Figure 45: Youth Population Density, Troy



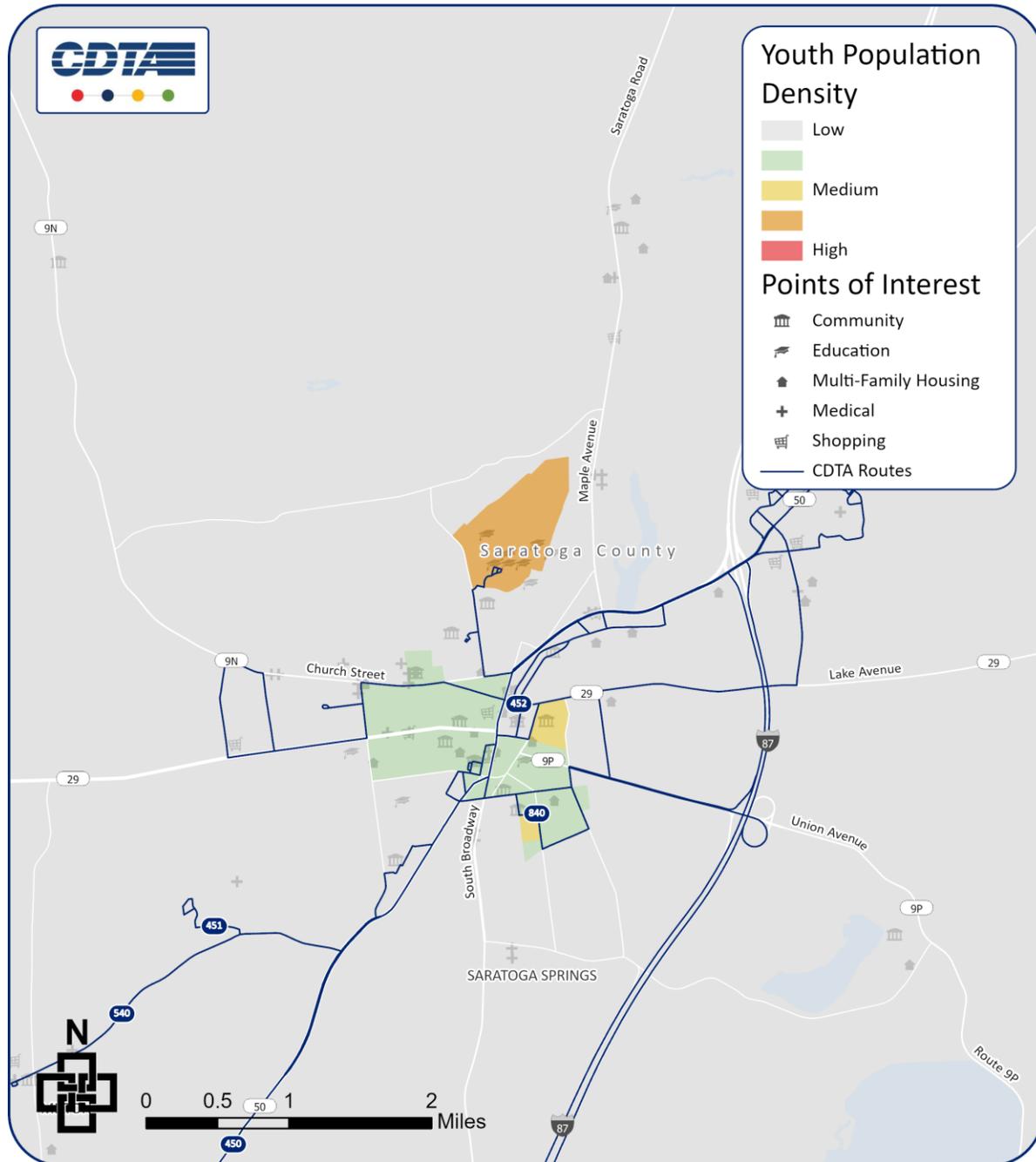
In Schenectady County, the greatest youth population density is concentrated along Union Street near Union College, along State Street, and off I-890 throughout downtown Schenectady (Figure 46).

Figure 46: Youth Population Density, Schenectady



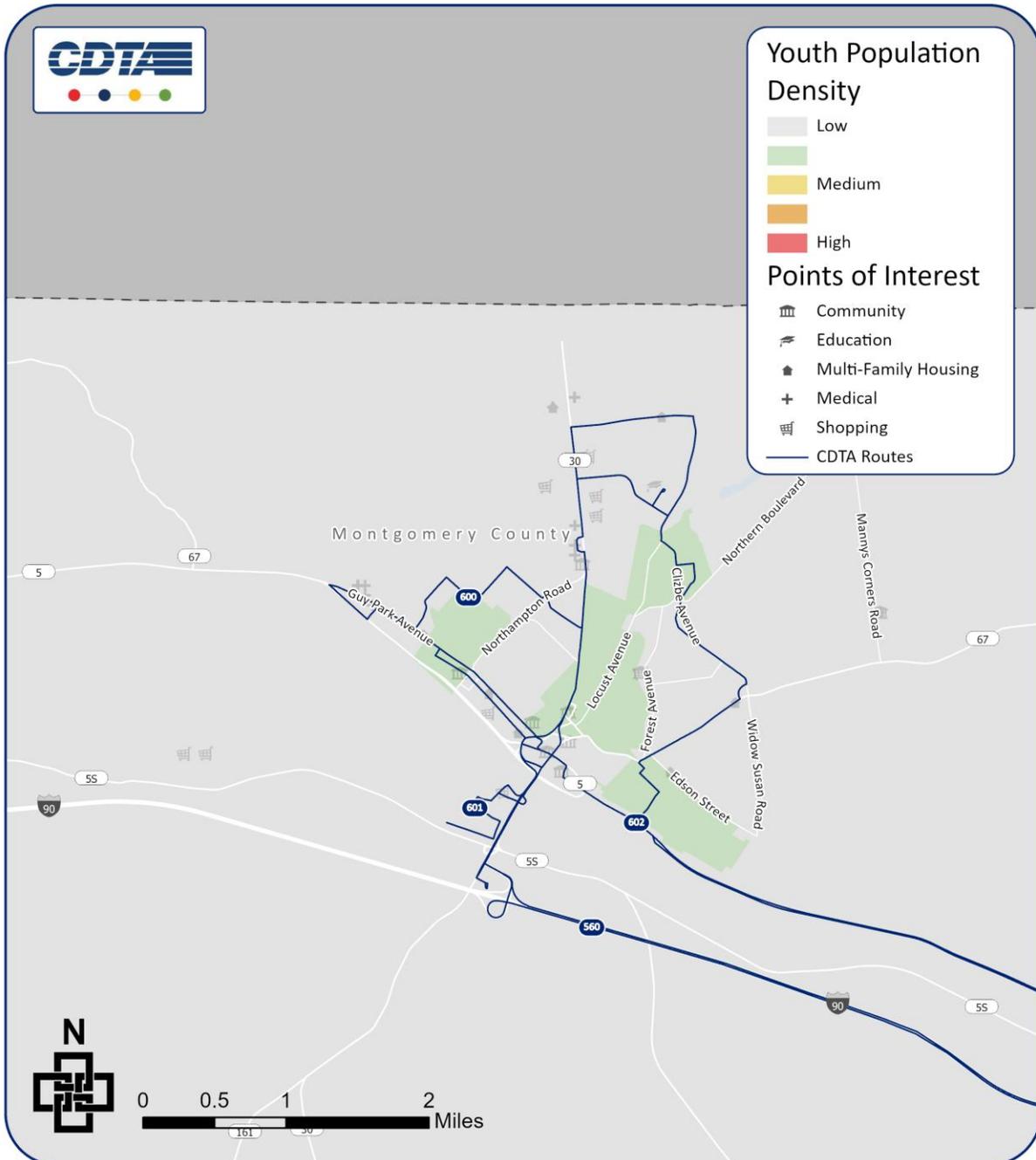
In Saratoga County, the greatest youth population density is located near Skidmore College with additional pockets of medium density on Lake Avenue and Jefferson Street in Saratoga Springs (Figure 47).

Figure 47: Youth Population Density, Saratoga Springs



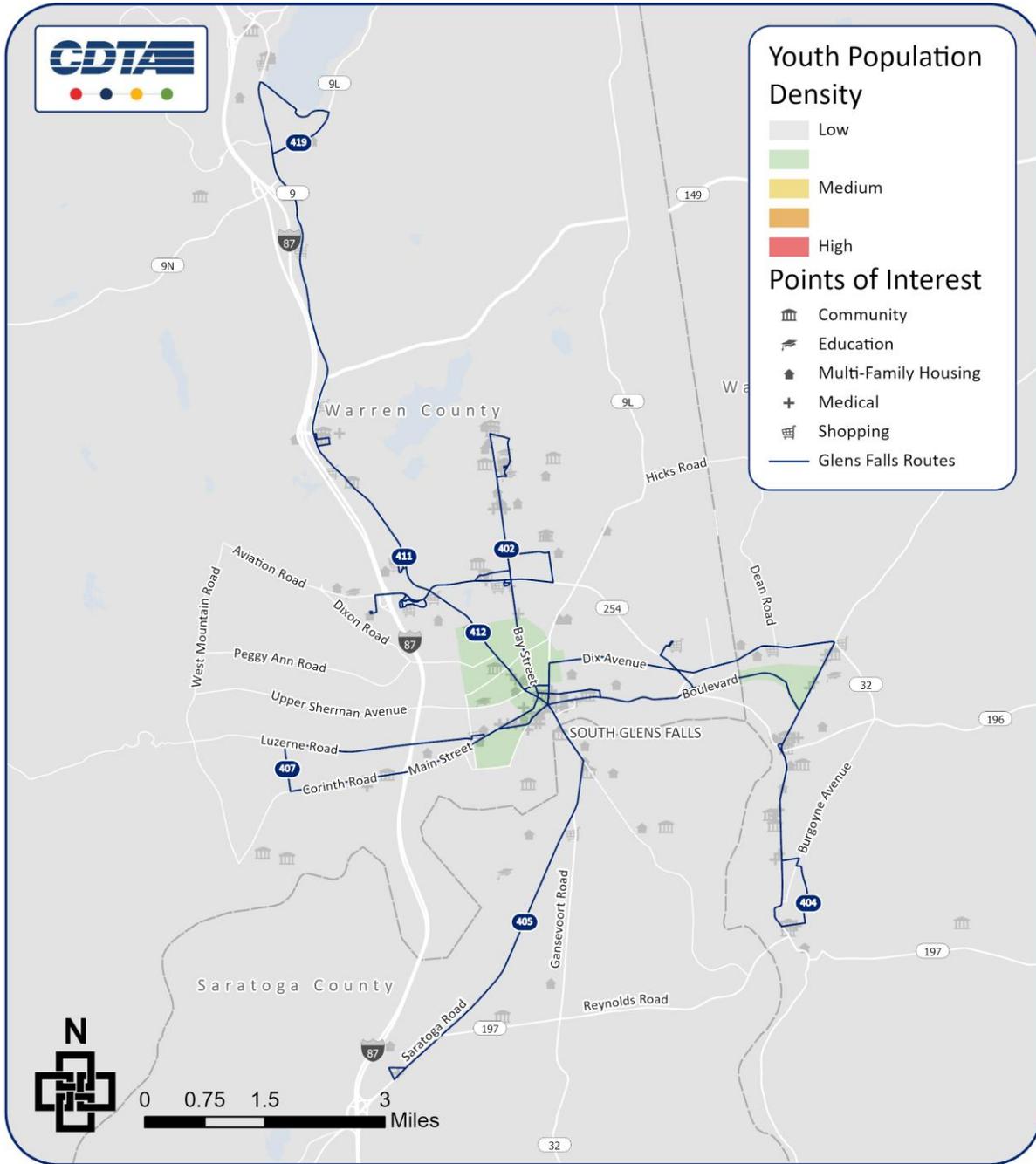
In Montgomery County, the areas with the greatest youth population density are concentrated in Amsterdam, with medium density located along Guy Park Avenue and Market Street (**Figure 48**).

Figure 48: Youth Population Density, Amsterdam



In Warren and Washington counties, the areas with the greatest youth population density are concentrated in Glens Falls and Hudson Falls, with small pockets of medium density along Broad Street and Bay Street in Glens Falls (**Figure 49**).

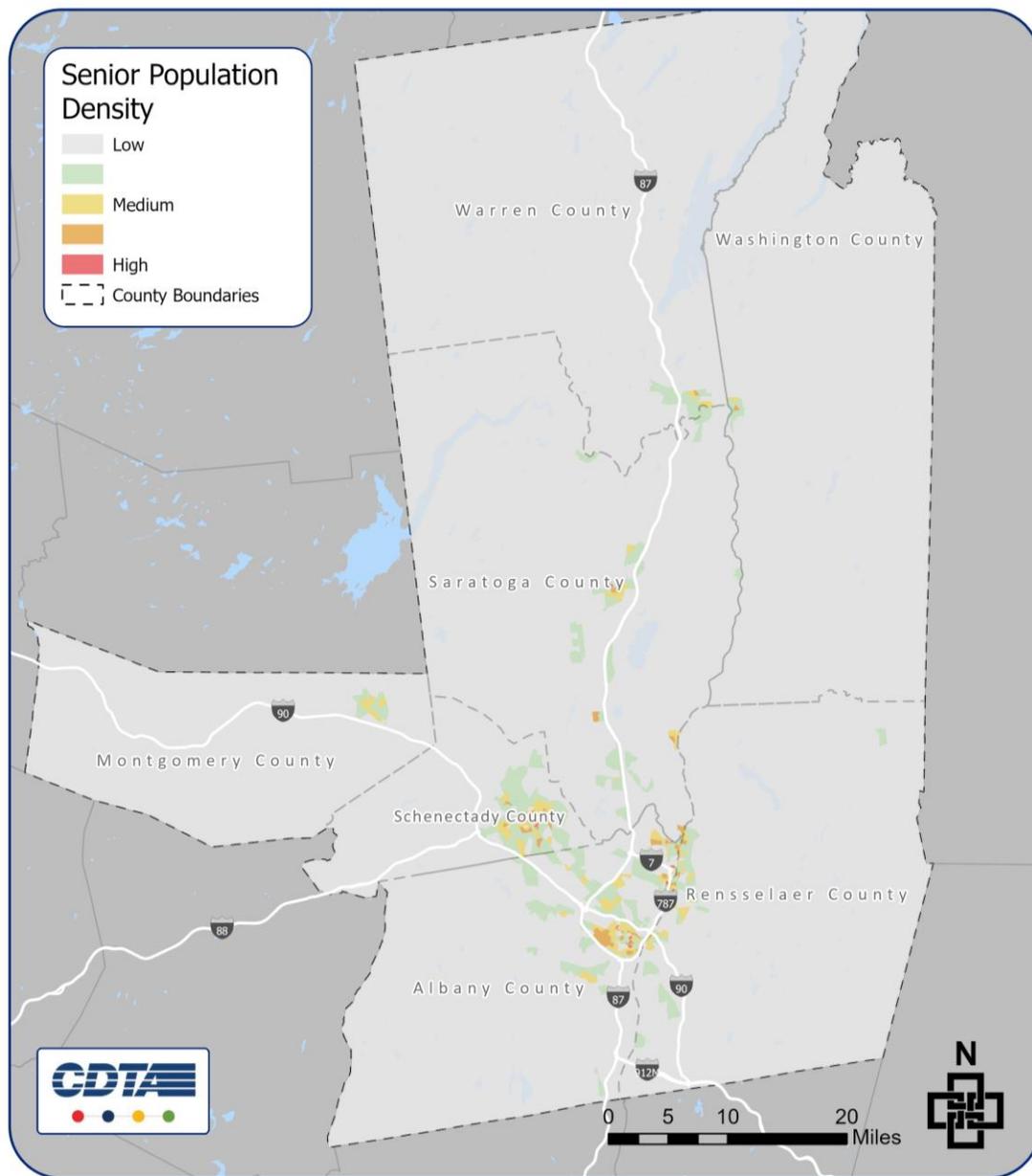
Figure 49: Youth Population Density, Glens Falls



SENIOR POPULATION

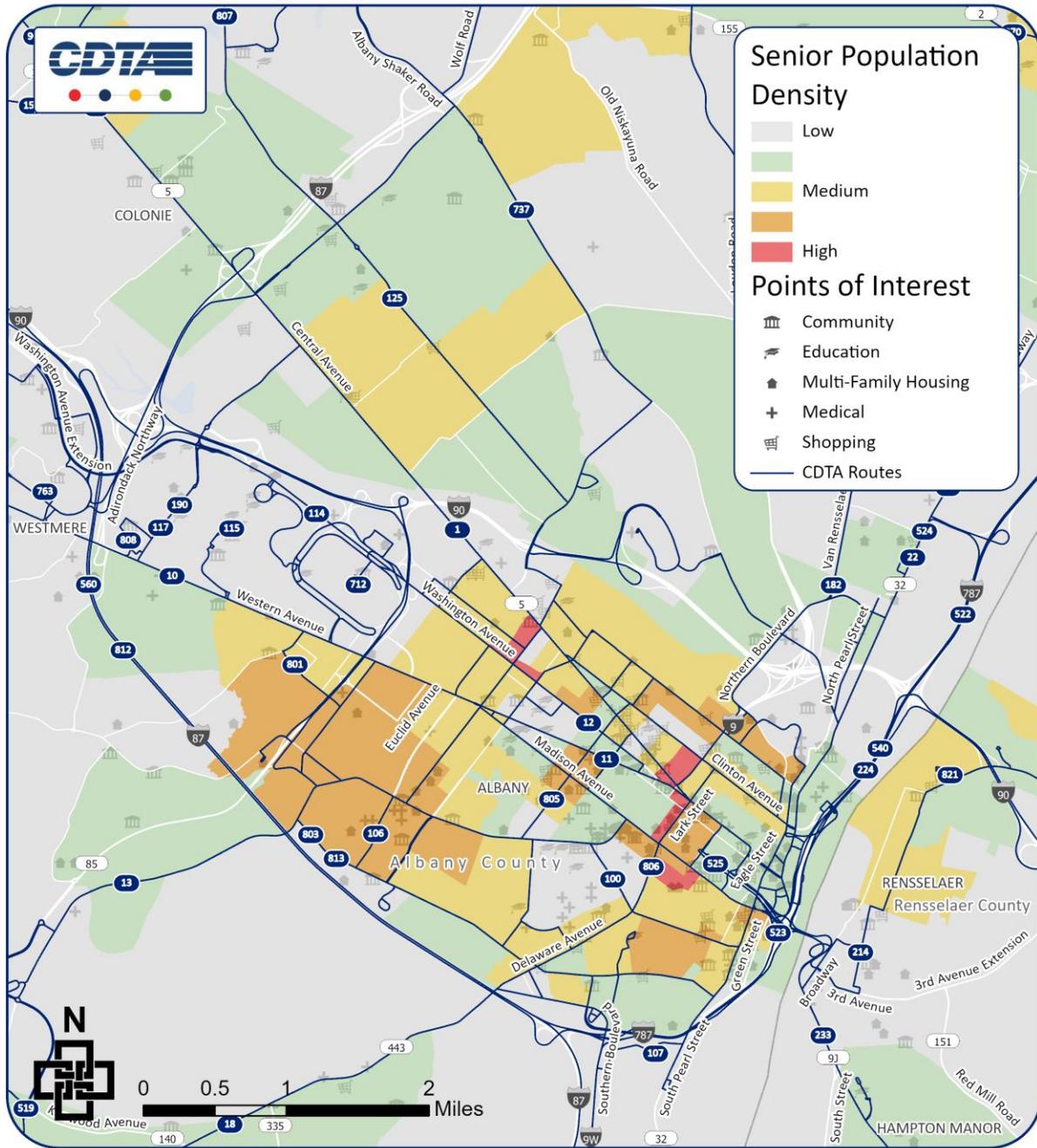
In many communities, seniors, like youth, tend to have a higher propensity for transit use than the general population. **Figure 50** shows the relative densities of seniors in the service area. Areas with low density have between 0 and 0.5 senior individuals per acre. Areas with low to medium density, depicted in green, have between 0.5 and 1.2 senior individuals per acre. Areas with medium density, depicted in yellow, have between 1.2 and 2.4 senior individuals per acre. Areas with medium to high density, depicted in orange, have between 2.4 and 5.2 senior individuals per acre. Lastly, areas with high density, depicted in red, have between 5.2 and 14.8 senior individuals per acre. The areas with the greatest senior population density are concentrated in Albany, Troy, Schenectady, Saratoga Springs, Amsterdam, and Glens Falls.

Figure 50: Senior Population Density, Capital Region



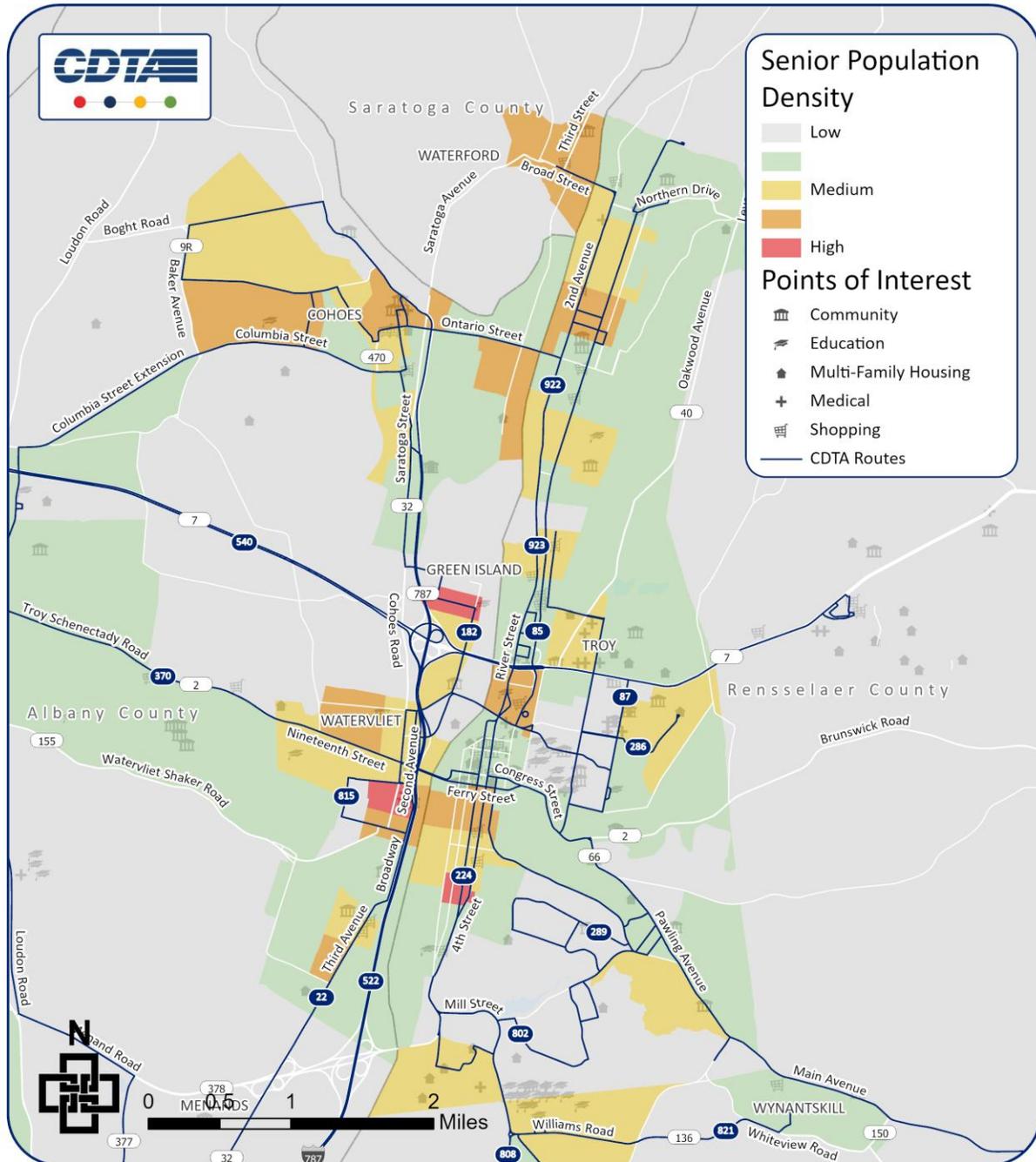
In Albany, the senior population density is greatest along Western Avenue near Buckingham Lake, along Route 9W through downtown Albany, and along Central Avenue near Manning Boulevard (**Figure 51**). The pocket throughout Buckingham Lake is especially notable as the density of senior population is more significant compared to population density as a whole.

Figure 51: Senior Population Density, Albany



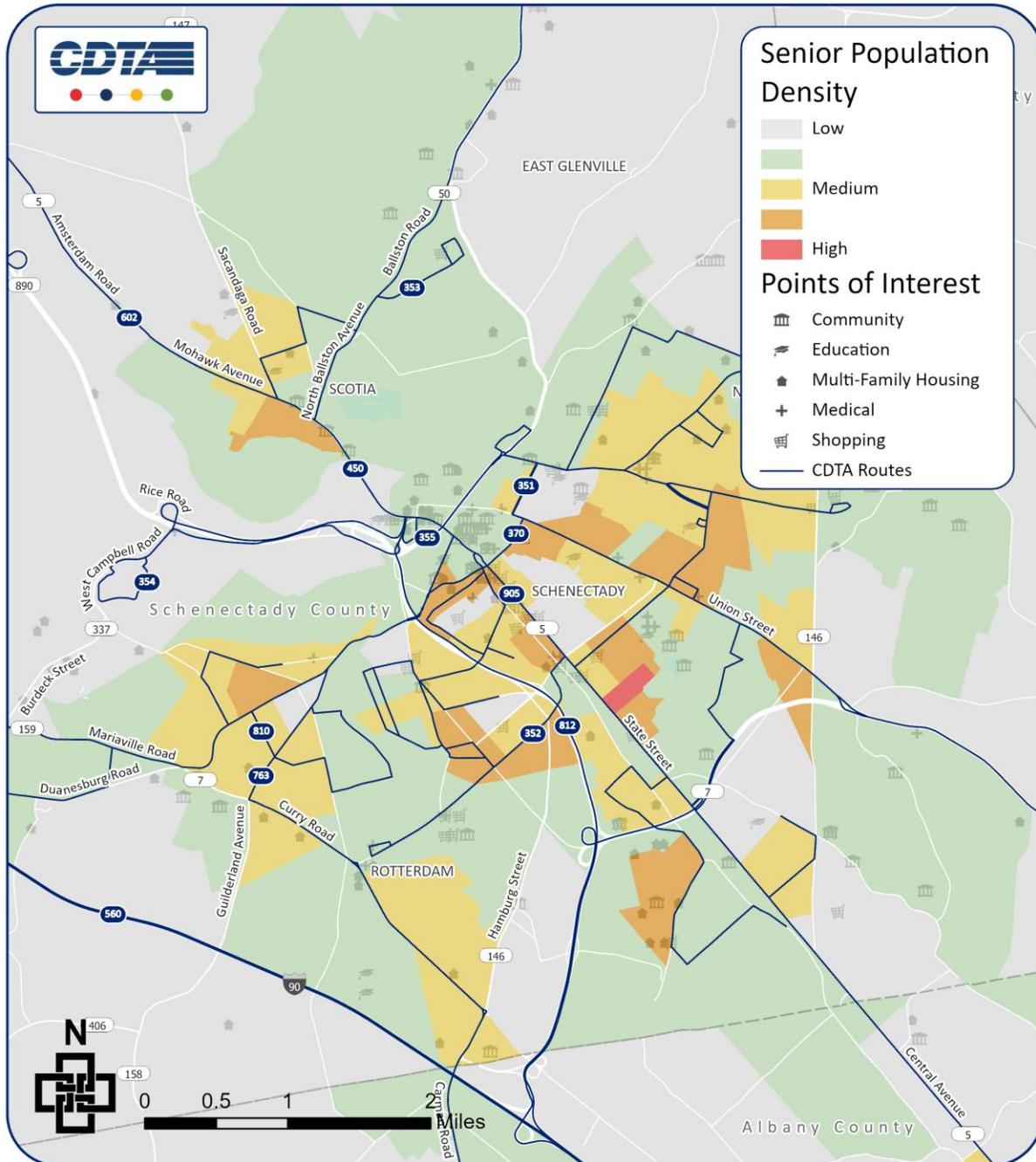
In the Troy area, medium to high senior population density is scattered throughout downtown Troy, Lansingburgh, Waterford, Cohoes, and Watervliet, all of which are currently served by existing bus service (**Figure 52**).

Figure 52: Senior Population Density, Troy



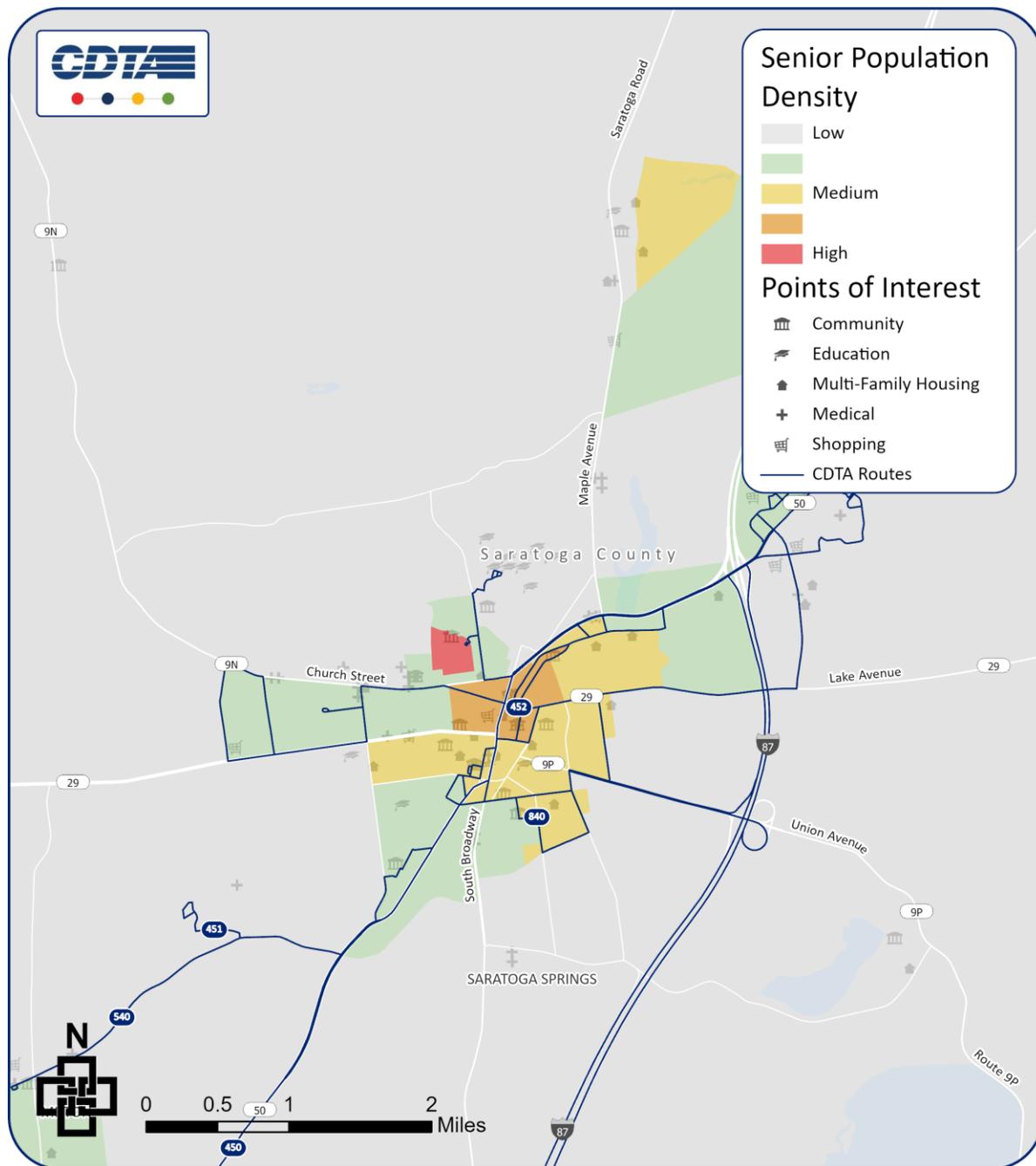
In Schenectady County, areas of medium to high senior population density are scattered throughout Schenectady, Rotterdam, Niskayuna, and Scotia, particularly along State Street, Broadway, and Union Street (**Figure 53**).

Figure 53: Senior Population Density, Schenectady



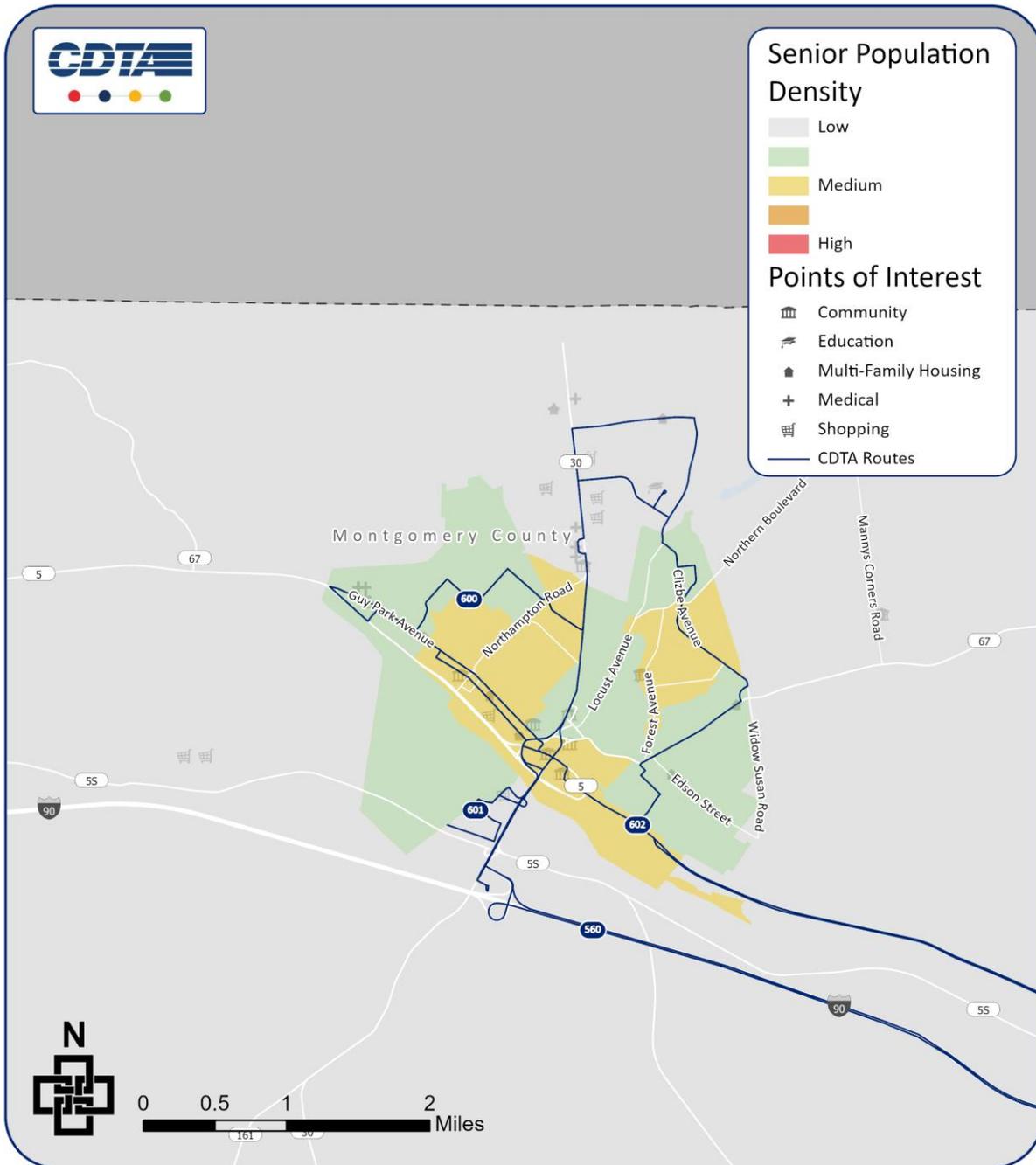
In Saratoga County, the areas with the greatest senior population density are concentrated in Saratoga Springs with pockets of medium to high density located along Clinton Street, Lake Avenue, and Broadway (Figure 54). An additional area of medium density is located up Saratoga Road, which is currently not served by existing bus service.

Figure 54: Senior Population Density, Saratoga Springs



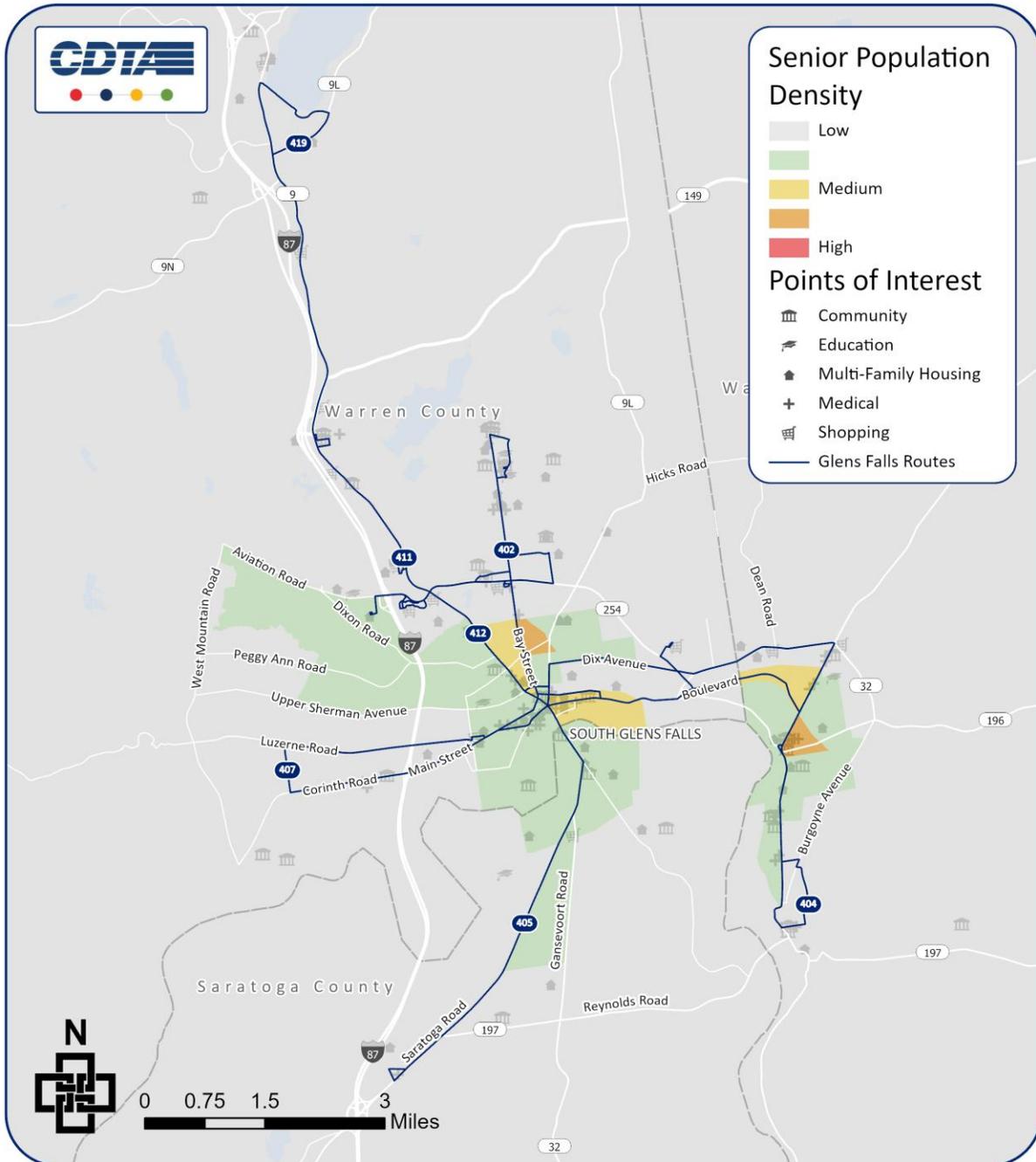
In Montgomery County, the areas with the greatest senior population density are concentrated in Amsterdam, with medium to high density along Guy Park Avenue and Northampton Road (Figure 55).

Figure 55: Senior Population Density, Amsterdam



In Warren and Washington counties, the areas with the greatest senior population density are concentrated in Glens Falls and Hudson Falls, with medium to high density along Broad Street and Bay Street in Glens Falls and along Main Street in Hudson Falls (**Figure 56**).

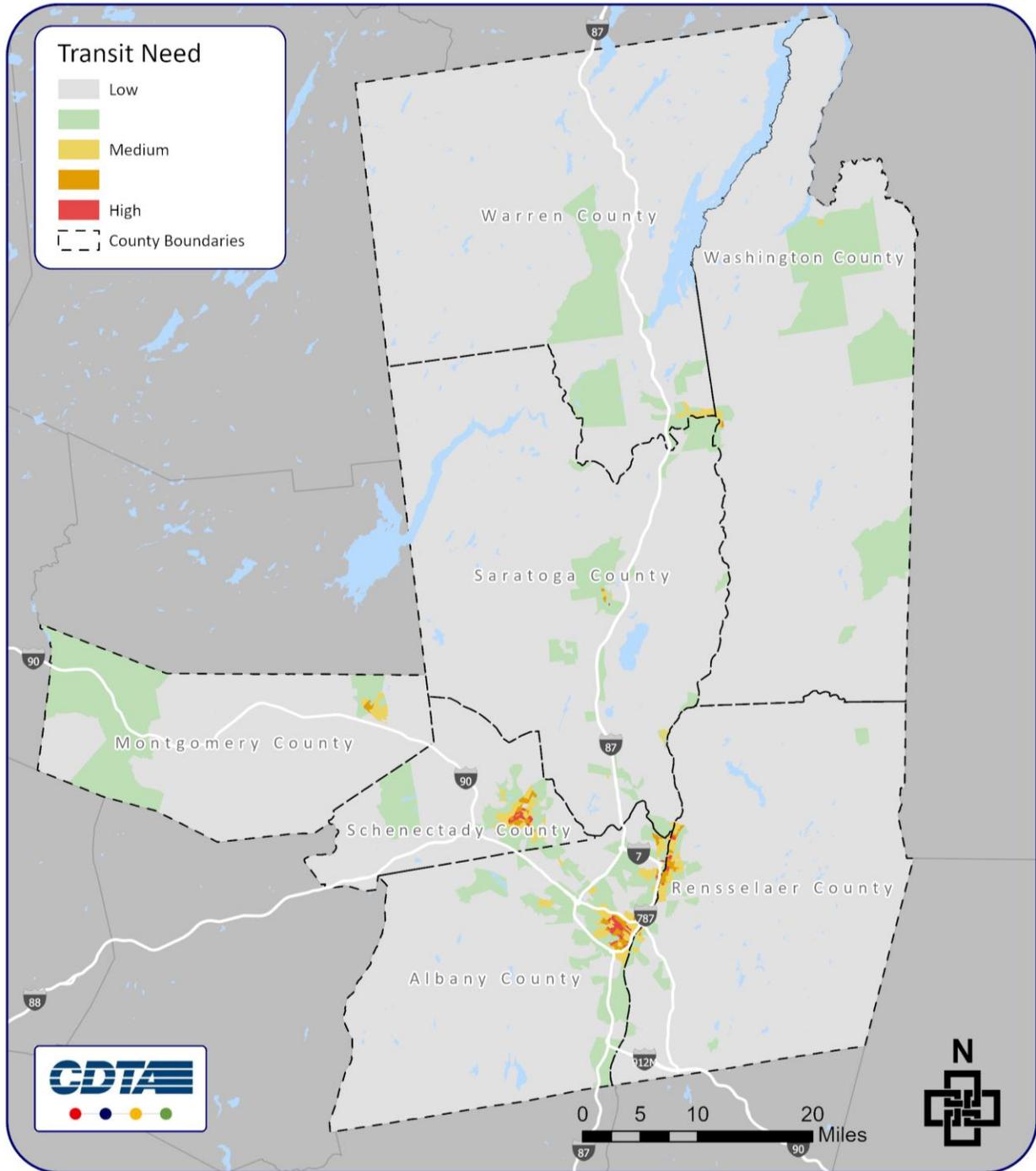
Figure 56: Senior Population Density, Glens Falls



TRANSIT NEED

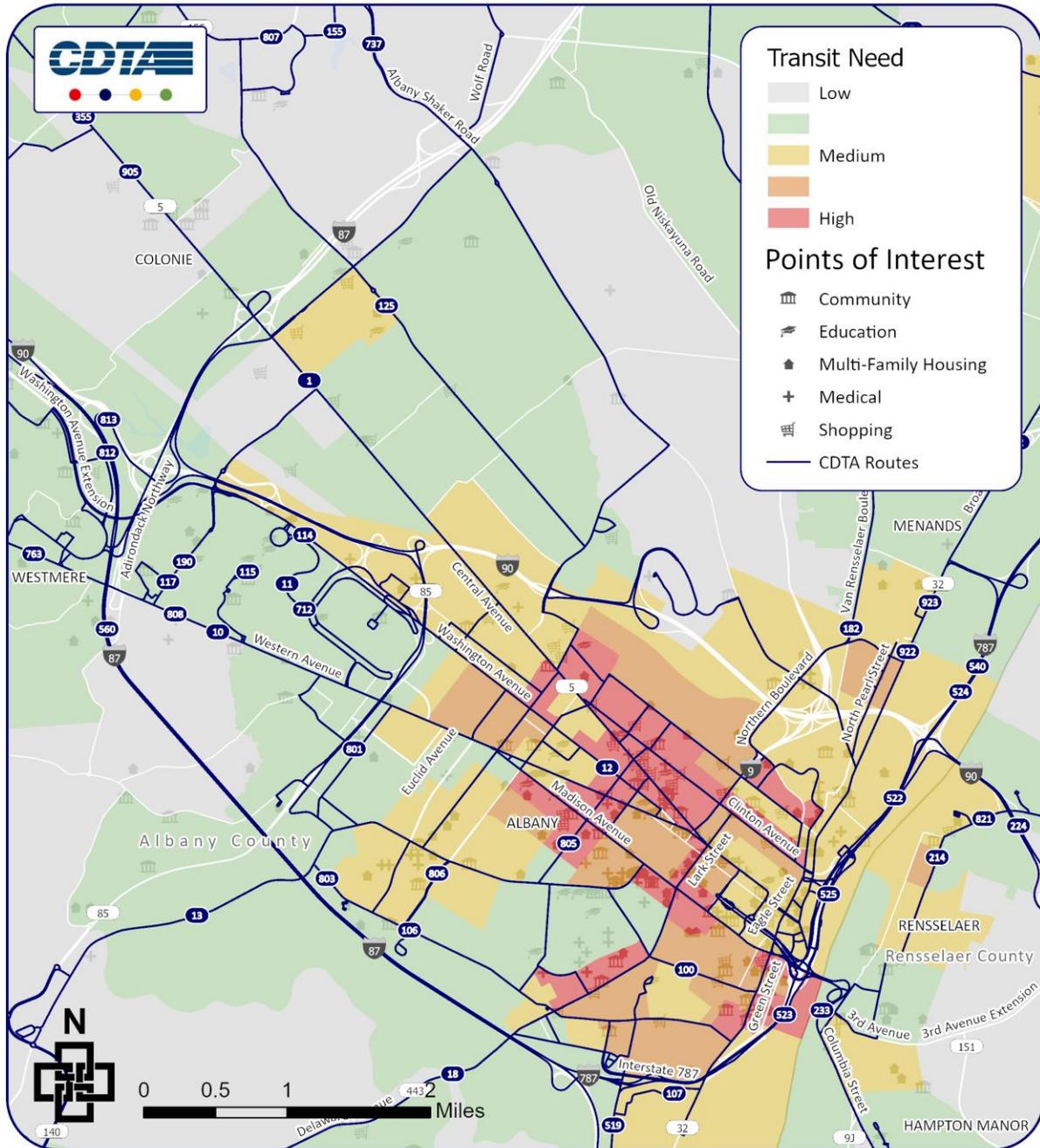
Figure 57 combines the five-preceding demographic-density maps with total population into one composite Transit Need map. The results reveal that the populations most likely to need transit services are spread in and around Albany, Troy, Schenectady, Saratoga Springs, Amsterdam, and Glens Falls.

Figure 57: Transit Need, Capital Region



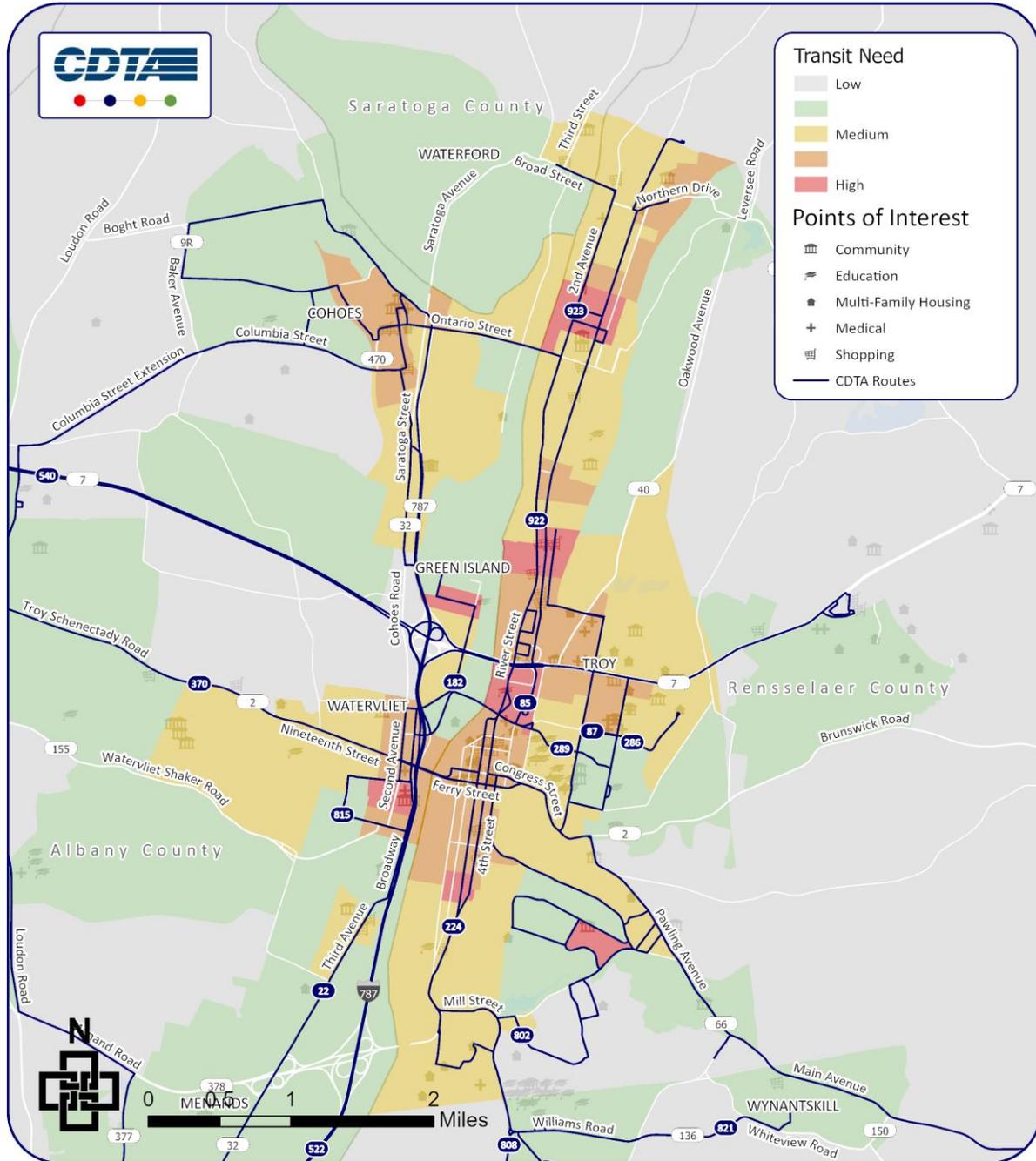
Transit need in Albany is the greatest throughout the downtown area, especially along Clinton Avenue and Madison Avenue (**Figure 58**). Additional pockets of medium need are in Menands and Rensselaer. The areas with the greatest need are all well-served by existing bus service.

Figure 58: Transit Need, Albany



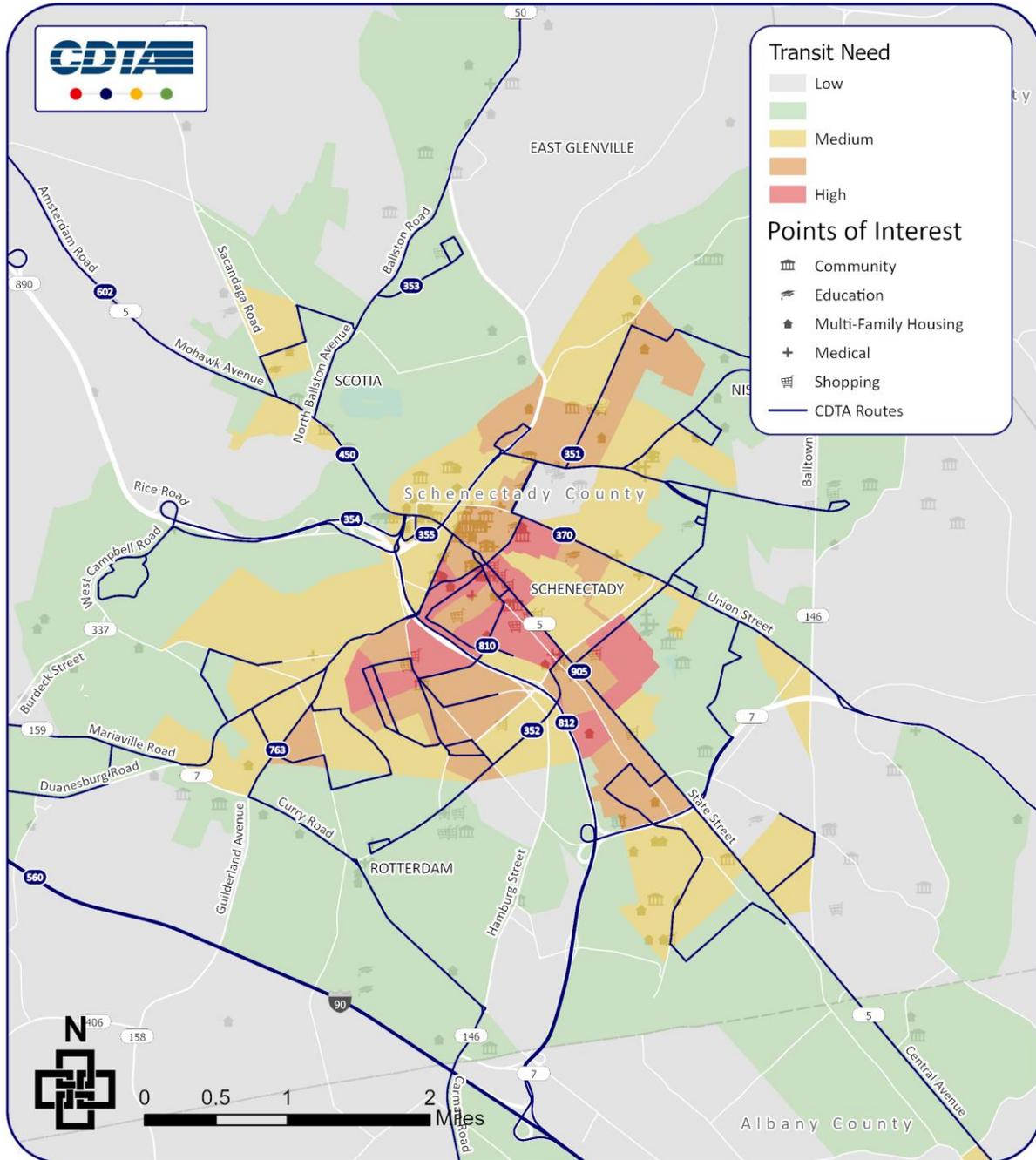
Transit need in Troy is greatest along the U.S. Route 4 corridor, with additional pockets of medium to high need in Cohoes and Watervliet (**Figure 59**).

Figure 59: Transit Need, Troy



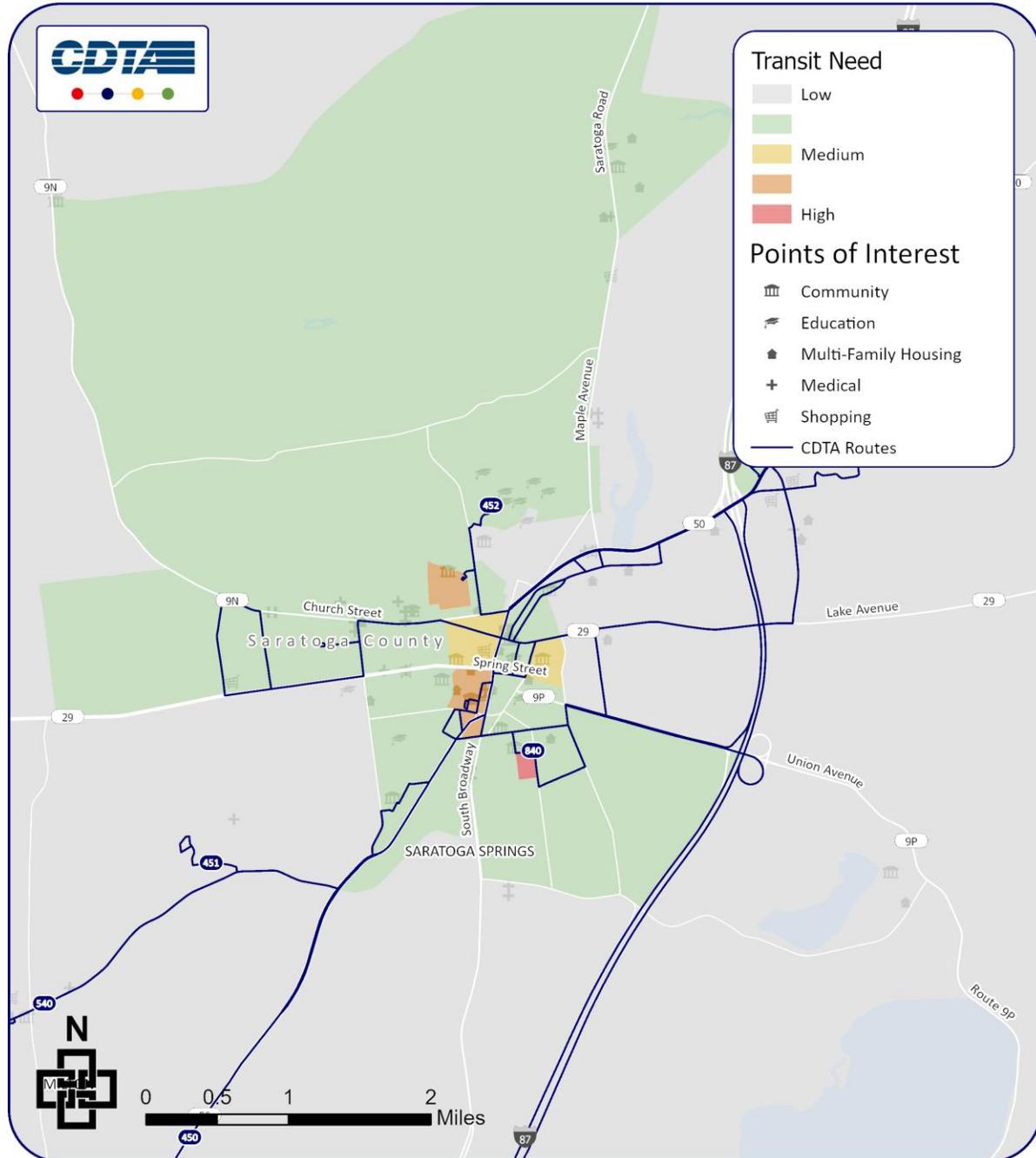
In Schenectady County, areas with the greatest transit need are concentrated along State Street and Broadway in downtown Schenectady, with additional pockets of medium need towards Scotia, Rotterdam, and Niskayuna (**Figure 60**).

Figure 60: Transit Need, Schenectady



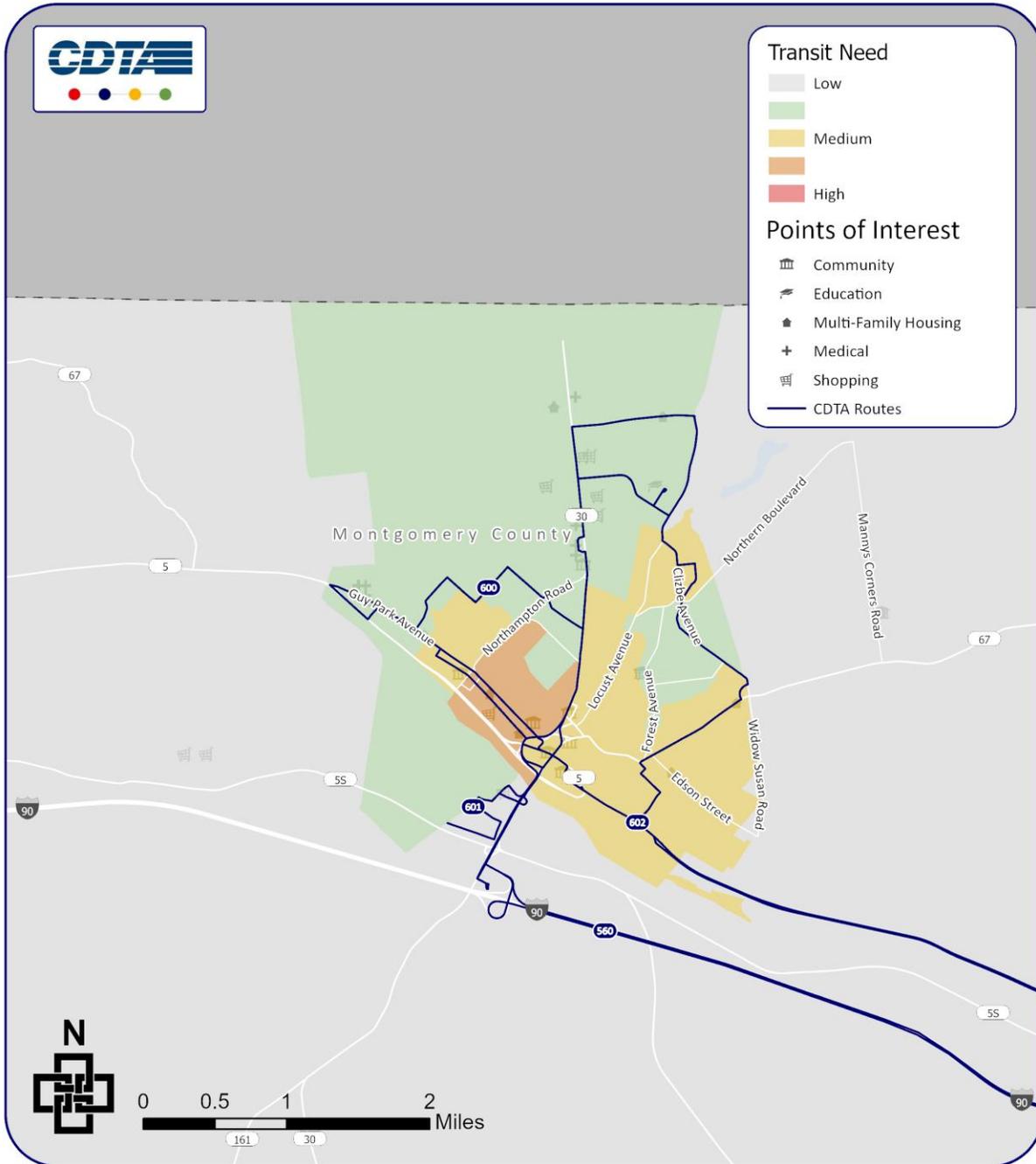
Transit need in Saratoga County is concentrated in Saratoga Springs, with a few pockets of medium need along Clinton Street, Broadway, and Lake Avenue (**Figure 61**).

Figure 61: Transit Need, Saratoga Springs



Transit need in Montgomery County is concentrated in Amsterdam, with medium need located along Market Street and Main Street, which are both currently served by existing bus service (Figure 62).

Figure 62: Transit Need, Amsterdam



Microtransit Suitability

To enhance the transit demand analysis, a microtransit suitability analysis was conducted to assess locations that may have a high suitability for microtransit. The microtransit suitability analysis compares population and jobs per acre to transit need. An ideal microtransit zone has a transit need value of at least “Medium” and a combined density of less than ten people and jobs per acre. Together, these two values indicate that there is some amount of transit need, but density or the road network may not be supportive of fixed-route transit. All areas with low densities of population and jobs per acre and low transit need may not be suitable for microtransit or fixed-route service.

As shown in **Figure 64** through **Figure 70**, areas that are most suitable for microtransit are scattered throughout the region’s core cities, with visible suitability in Albany, Troy, Schenectady, Amsterdam, Saratoga Springs, and Glens Falls. Microtransit suitability is most heavily concentrated throughout Amsterdam. Further exploration into land use, development patterns, and internal travel patterns may help determine additional areas that may be suitable for microtransit service. For example, microtransit service could provide connections between lower-density residential areas and commercial corridors across the region.

Figure 64: Microtransit Suitability, Capital Region

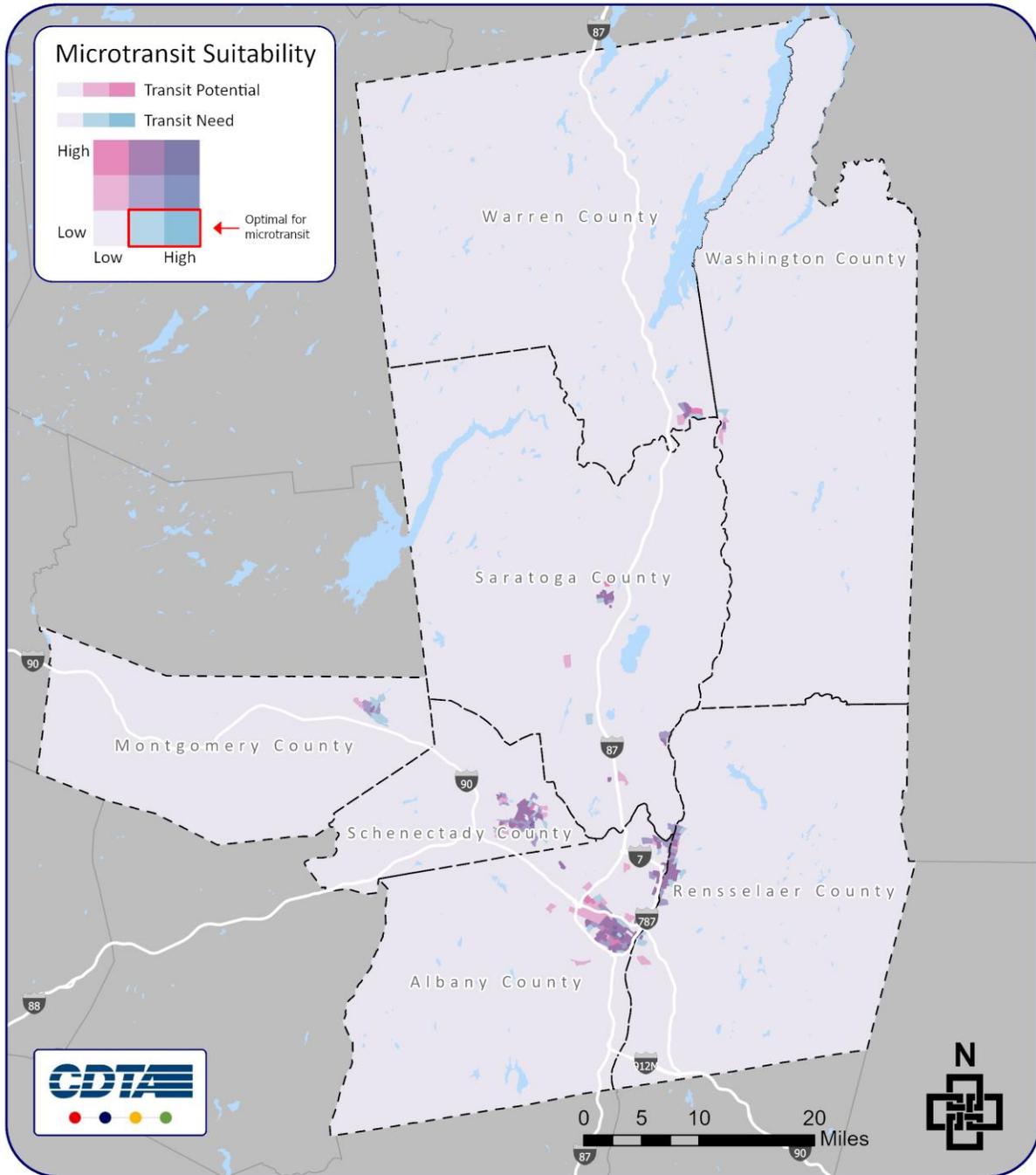


Figure 65: Microtransit Suitability, Albany

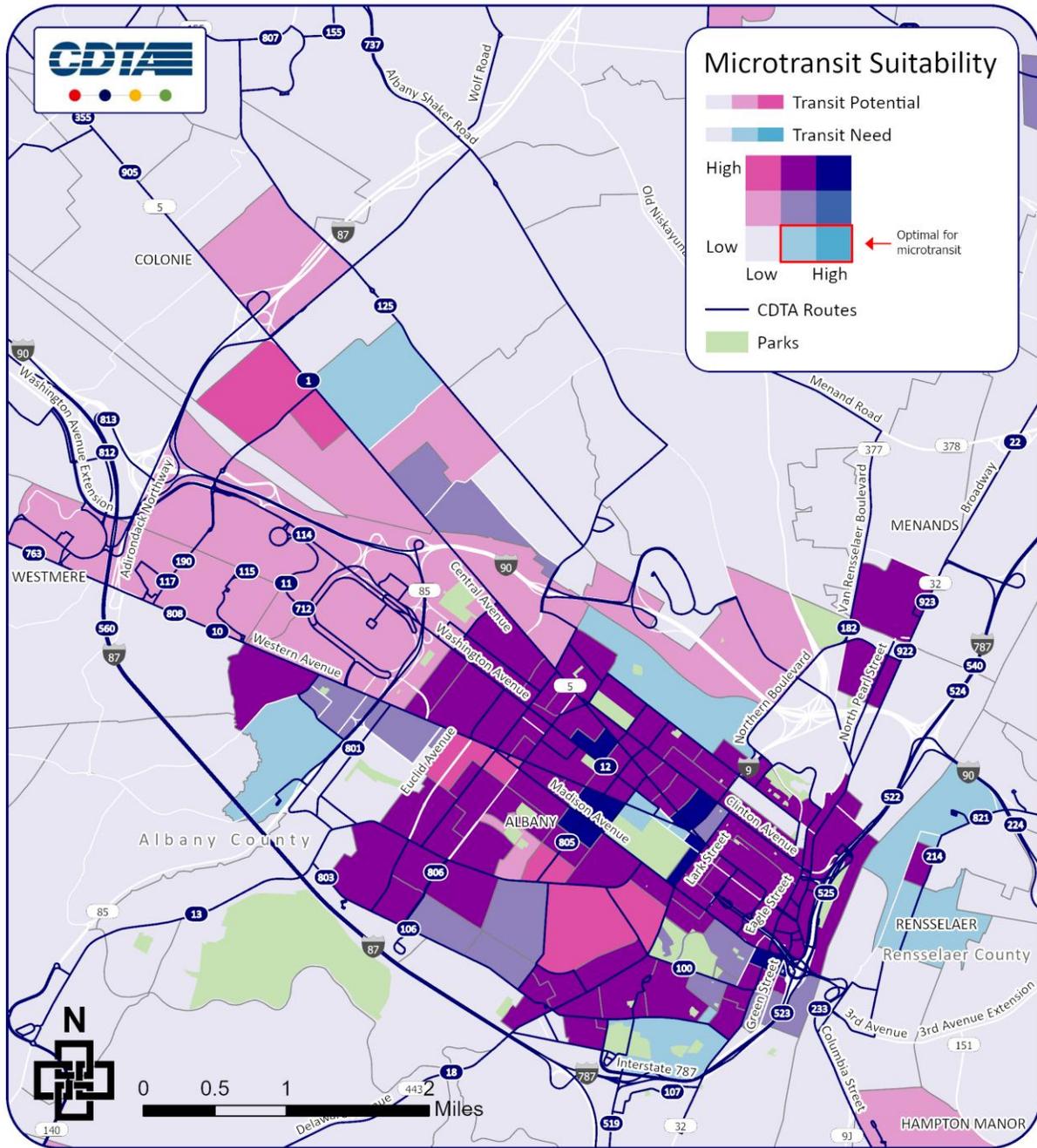


Figure 66: Microtransit Suitability, Troy

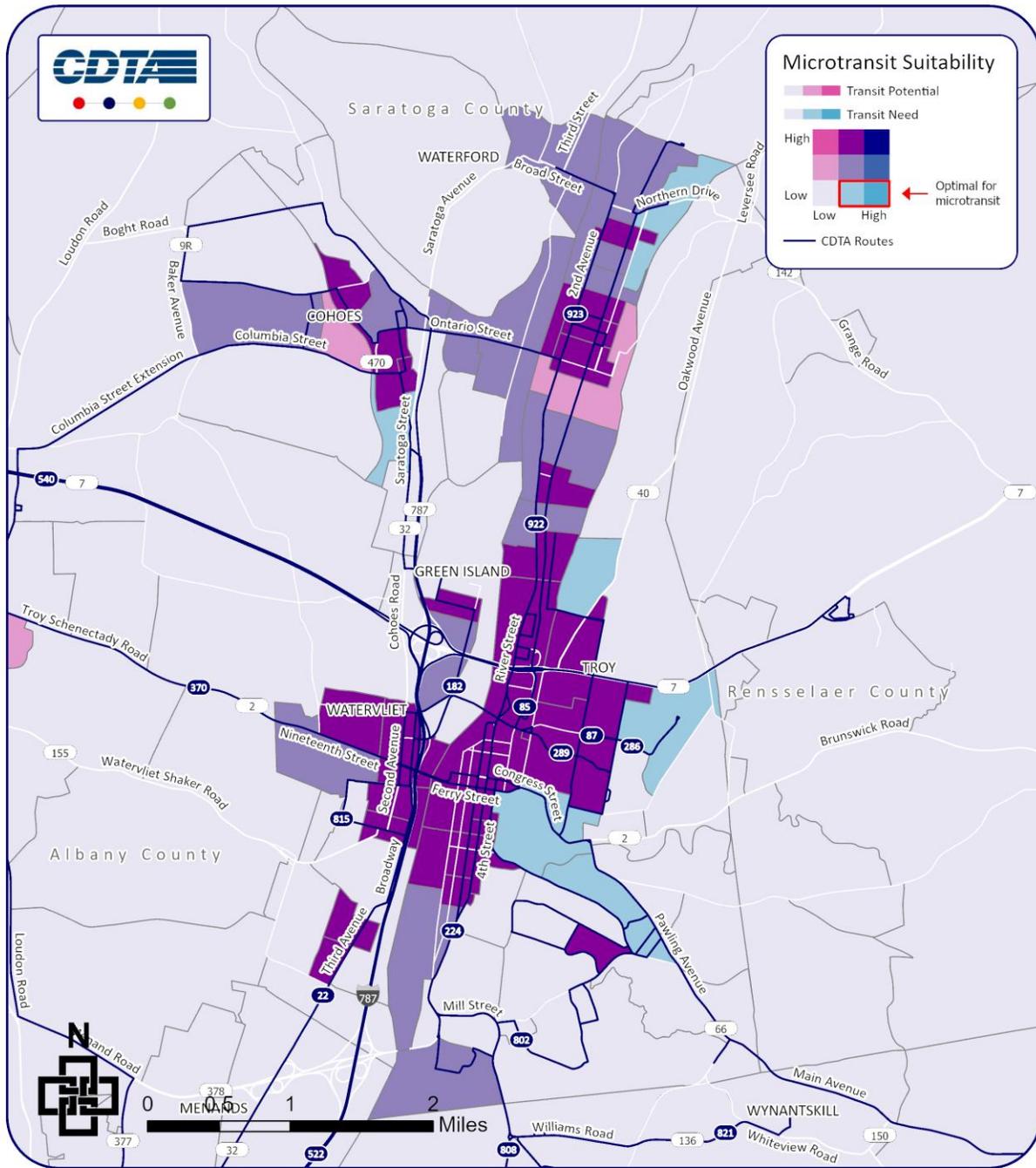


Figure 67: Microtransit Suitability, Schenectady

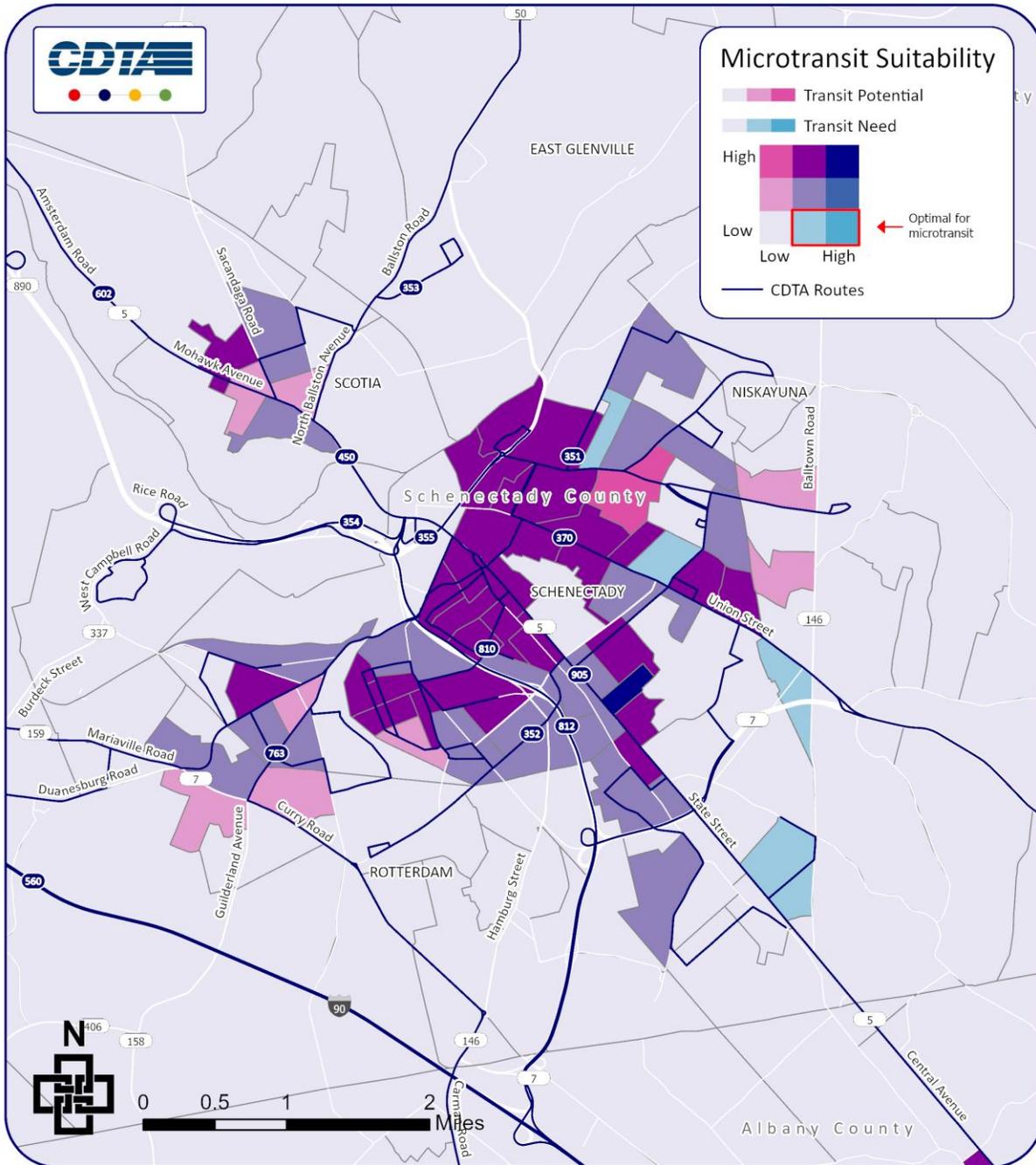


Figure 68: Microtransit Suitability, Saratoga Springs

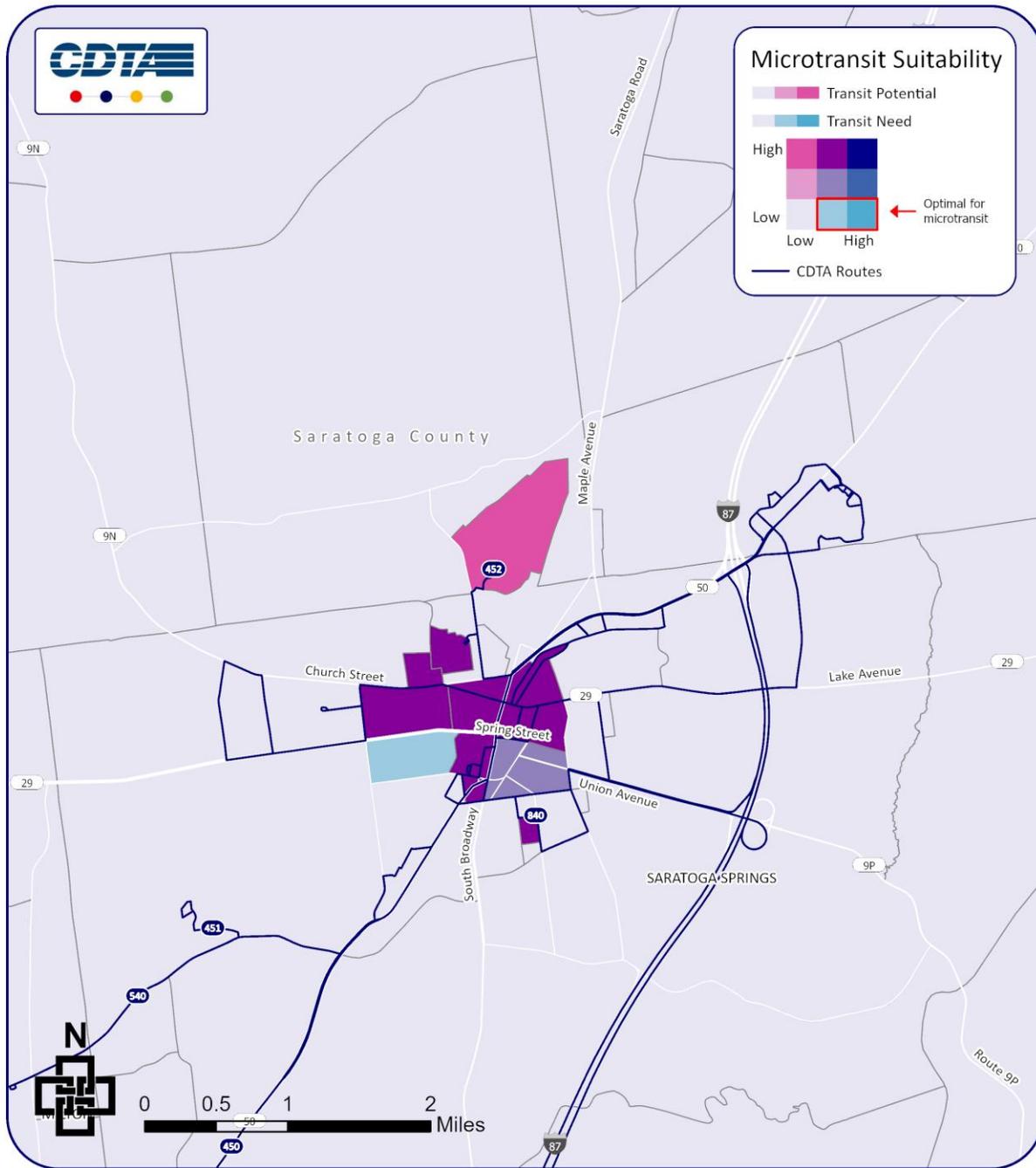


Figure 69: Microtransit Suitability, Amsterdam

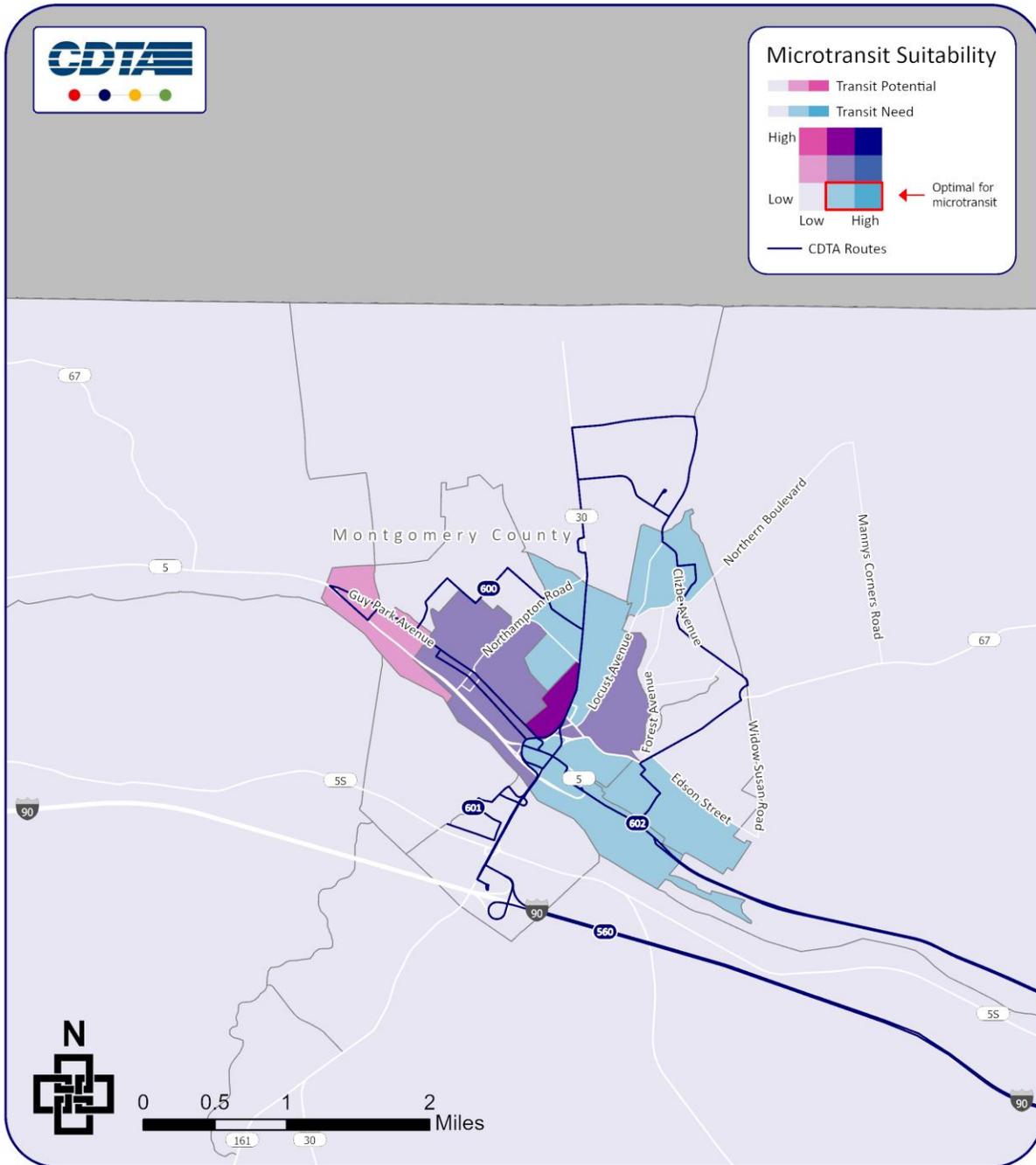
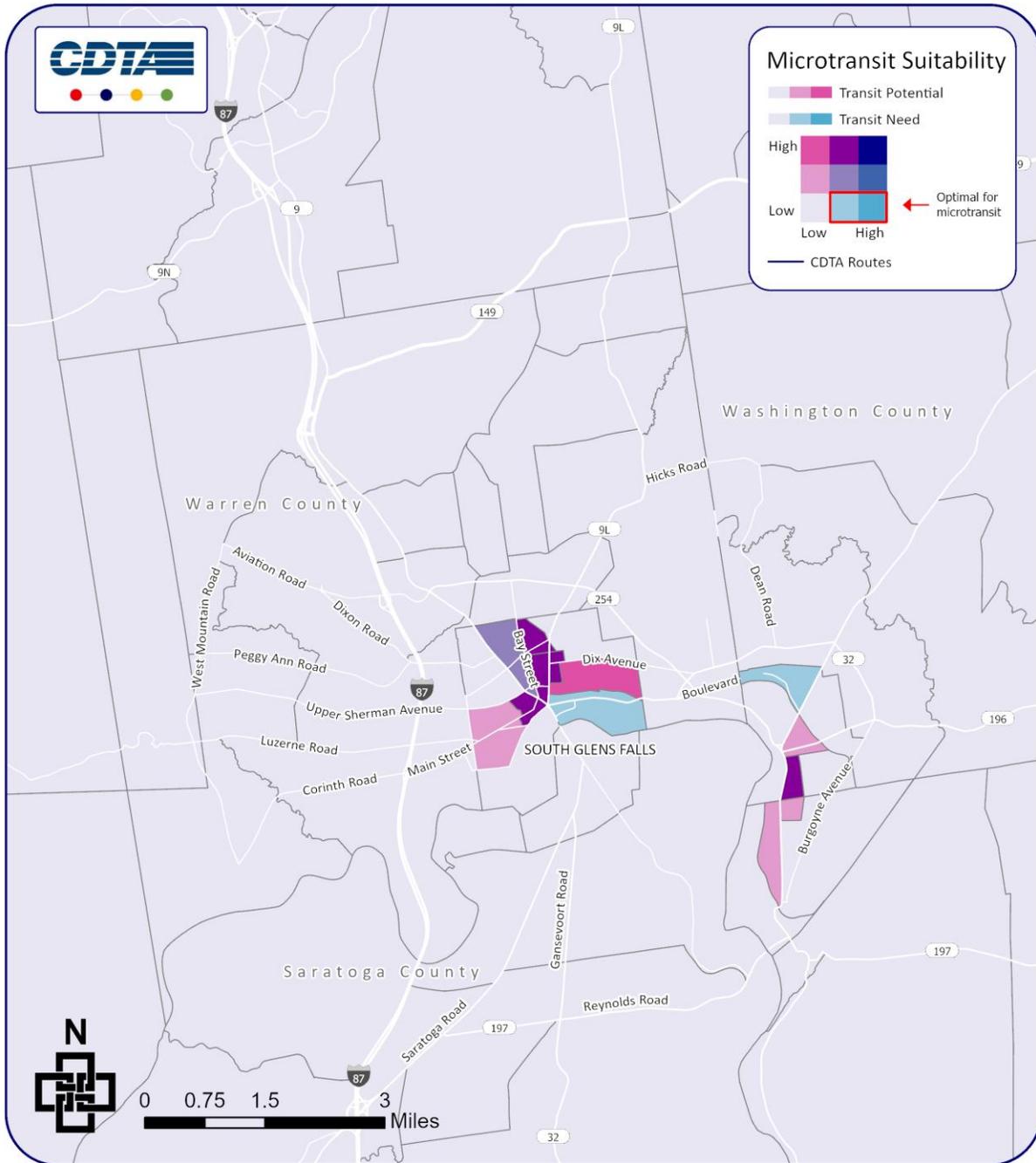


Figure 70: Microtransit Suitability, Glens Falls



Regional Travel Patterns

Transit systems should provide service between destinations that many people want to travel to and should prioritize serving areas where people are particularly likely to use transit. Another way to think about where transit should run is to examine actual travel behavior in the region, regardless of mode. Corridors with a high number of trips may be good candidates for transit service.

Figure 71

Figure 71: Daily Trips, Capital Region shows trips between any two census tracts in the Capital Region using data from Replica. The greatest density of travel occurs in and around the region's currently served markets, including Albany, Amsterdam, Glens Falls, Saratoga Springs, Schenectady, and Troy. It is important to note that the smaller size of census tracts in high density areas dilutes the intensity of trips between two zones compared to low density areas. This may unrealistically portray low density areas as having higher vehicle activity than high density ones.

Most areas with the greatest number of trips are currently well-served by existing bus service. However, I-87 towards Warrensburg and Chestertown is a currently unserved and well-travelled corridor between Glens Falls and northern Warren County. Additionally, there are clusters of trips between Glens Falls and western Washington County, presumably along the U.S. Route 4 corridor. Other areas with clusters of trips that do not currently have bus service include Schuylerville in Saratoga County, Granville in Washington County, and Fort Plain in Montgomery County.

Figure 72 and

Figure 73 provide a closer look of trips in the Albany and Glens Falls areas.

Figure 71: Daily Trips, Capital Region

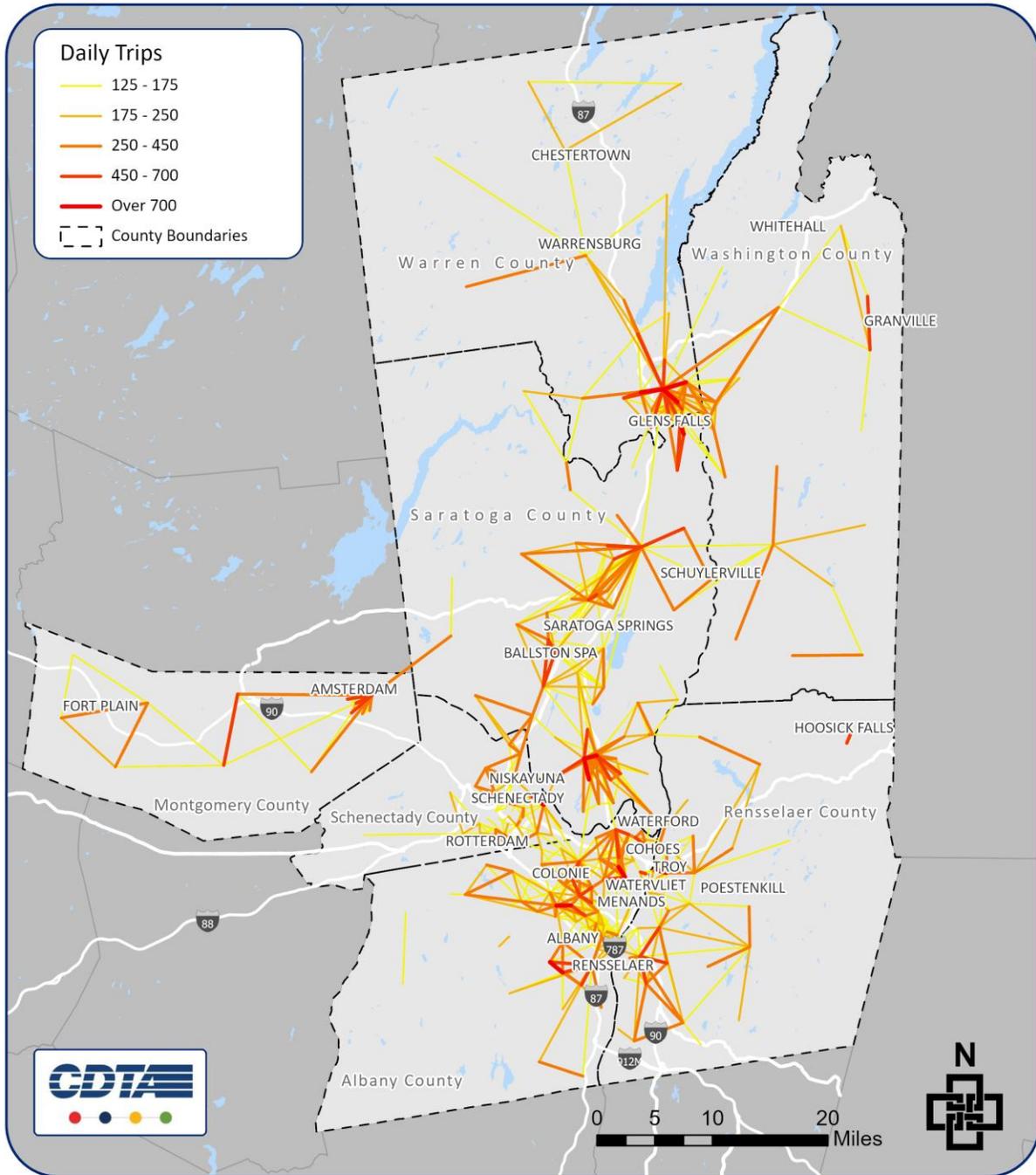


Figure 72: Daily Trips, Albany

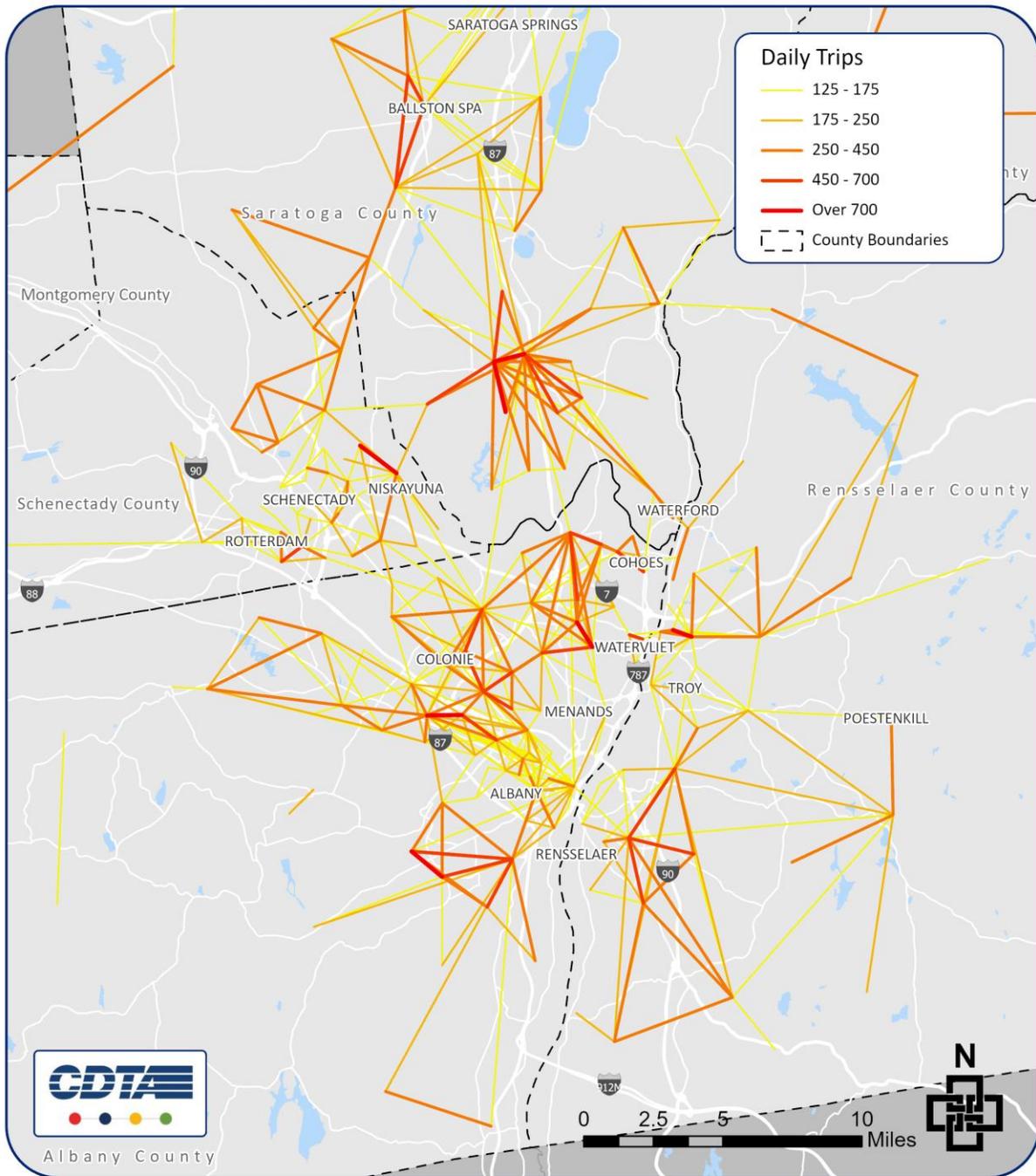
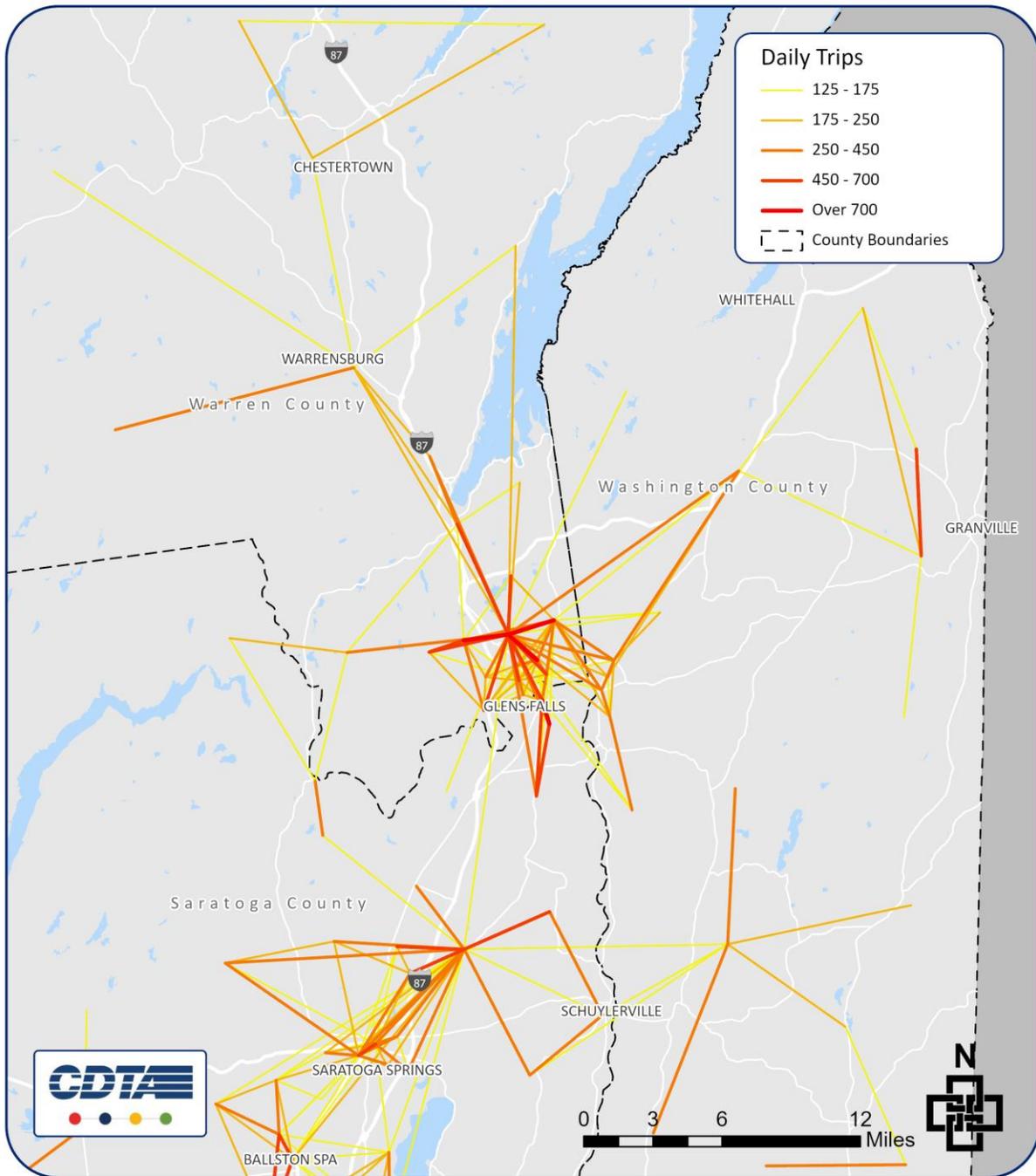


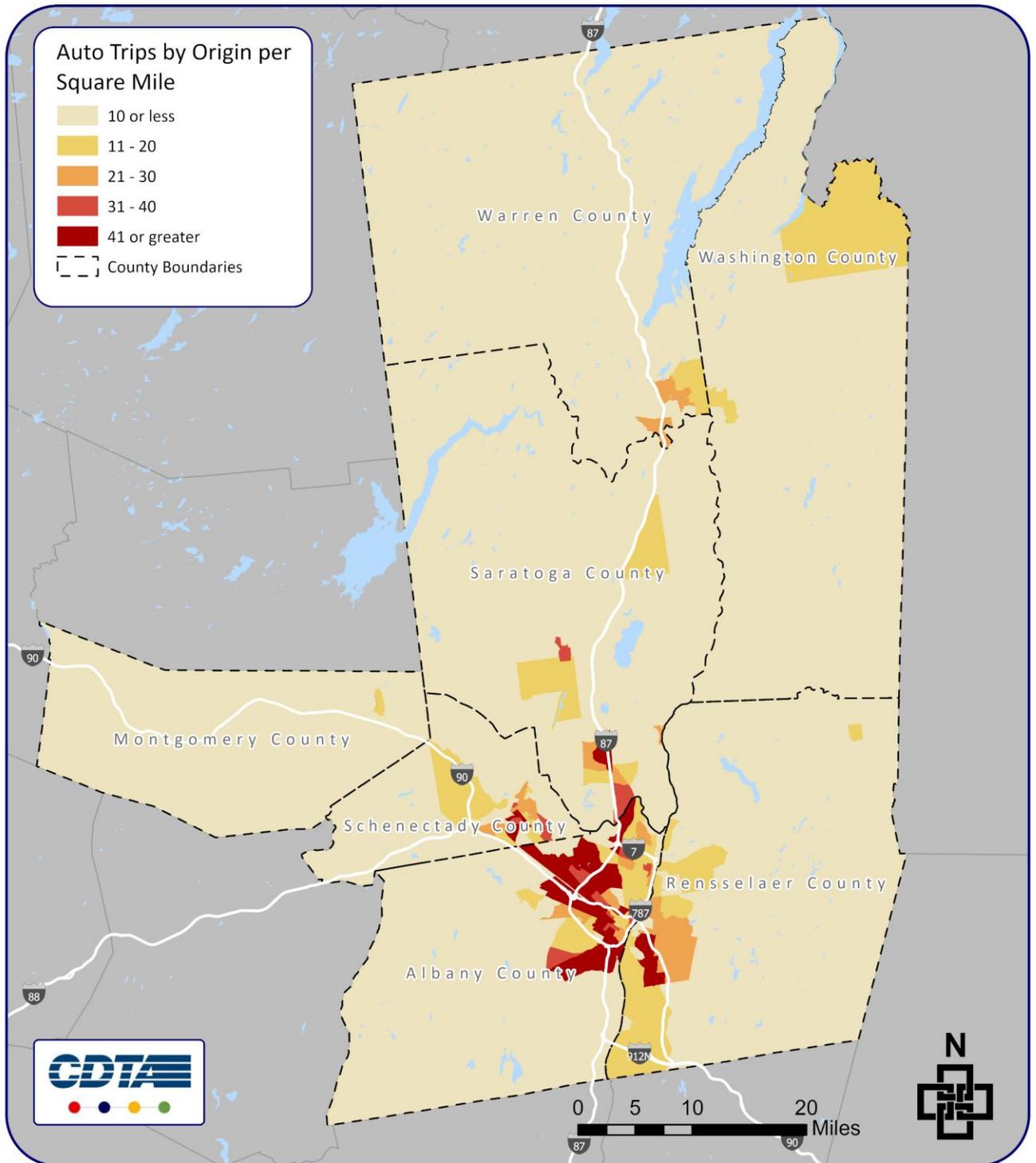
Figure 73: Daily Trips, Glens Falls



AUTOMOBILE TRIPS

Evaluating automobile trip origins among transit-commuters in the Capital Region can provide insight into where DRIVE carshare vehicles should be located. **Figure 74: Daily Automobile Trips, Capital Region** shows the origin of automobile trips among people who typically commute by transit using Replica data. Transit-commuters taking one-off automobile trips start their rides mostly in Delmar, Colonie, and central neighborhoods throughout Albany. Other areas with a high density of automobile trips among transit-commuters include East Greenbush, Rotterdam, Clifton Park, Ballston Spa, and along Loudon Road in Latham. Currently, only Albany's central neighborhoods and Cohoes are served by DRIVE vehicle locations. The large volume of automobile trips made by transit-commuters in other jurisdictions suggests that there may be an opportunity to expand the carshare program to areas such as Colonie, East Greenbush, and Clifton Park, to name a few.

Figure 74: Daily Automobile Trips, Capital Region



BICYCLE TRIPS

Examining bicycle activity among transit-commuters in the Capital Region can help assess whether CDPHP Cycle! stations are serving areas with the greatest trip activity and can identify where there may be opportunities to locate stations near current transit service. **Figure 75: Daily Bicycle Trips, Capital Region** shows the origin of bicycle trips among people who typically commute by transit using Replica data. Most transit-commuters start their bicycle trips in Delmar, Latham, Clifton Park, Glens Falls, Queensbury, and along Albany-Shaker Road in Colonie. While Glens Falls, Queensbury, and Albany-Shaker Road are currently served by CDPHP Cycle! stations, there are not stations accessible from Delmar, Latham, or Clifton Park. As the program looks to grow and improve, these areas should be considered for expansion.

Figure 75: Daily Bicycle Trips, Capital Region

